

ANNUAL REPORT

(APRIL 2018- MARCH 2019)

64TH CONVOCATION ISSUE

24 December 2019

যাদবপুর বিশ্ববিদ্যালয়



JADAVPUR UNIVERSITY
KOLKATA 700032
INDIA

ANNUAL REPORT 2018-19

JADAVPUR UNIVERSITY

KOLKATA 700032

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যাদবপুর বিশ্ববিদ্যালয়

PROFESSOR SURANJAN DAS
VICE-CHANCELLOR
 অধ্যাপক সুরঞ্জন দাস
 উপাচার্য



JADAVPUR UNIVERSITY
KOLKATA-700 032, INDIA

OFFICE OF THE VICE-CHANCELLOR : AUROBINDO BHAVAN ANNEXE

P R E F A C E

The year 2018-2019 marks yet another turning point in Jadavpur University's constant quest for excellence. This Report aptly captures the University's attainments and the national & international recognitions it had received during the last twelve months. The University has been able to sustain its entrenched position in the academic map of India and of the world because of the united efforts of all sections of the University community and its system of cooperative governance. While the University strives for academic excellence, it remains alive to its social obligations to make India a better place to live in, recalling what Aurobindo Ghosh, one of the founding fathers of the National Council of Education Bengal, which was the precursor of our University, had envisioned our institution to be :

“The nucleus of a nation of the new India which is to begin its career after this might and sorrow and trouble, on that day of glory and greatness when India will work for the world.”

On my own behalf & on behalf of the University, I sincerely thank the University Press for publishing the Annual Report within the stipulated time.

Suranjan Das
 24 December

যাদবপুর বিশ্ববিদ্যালয়

DR. PRADIP KUMAR GHOSH
PRO-VICE-CHANCELLOR

ডঃ প্রদীপকুমার ঘোষ
সহ-উপাচার্য



JADAVPUR UNIVERSITY
KOLKATA-700 032, INDIA

OFFICE OF THE PRO-VICE-CHANCELLOR : AUROBINDO BHAVAN ANNEXE

MESSAGE

It gives me immense pleasure that Jadavpur University is going to organize its 64th convocation to confer degrees on the students of different programmes who achieved their academic feat successfully. I do believe that each degree recipient will certainly be able to contribute to the socio-economic development of the country with the knowledge & skills they have acquired from this university and propagate the educational philosophy of this university which we are continuing since inception.

On this solemn occasion we prepare Annual Report (2018-2019) which will be the source of information and will act as an archival document. This will also reflect achievement & progress of the university in the last one year.

Finally, best wishes to each outgoing students & warm congratulation to all university community on this auspicious occasion. I am glad to be associated with the publication of this Annual Report & hope that the practice of publishing that Report will be continued in future.

Pradip Kumar Ghosh
Pro-Vice Chancellor

যাদবপুর বিশ্ববিদ্যালয়

PROF. CHIRANJIB BHATTACHARJEE
 PRO-VICE-CHANCELLOR
 অধ্যাপক চিরঞ্জীব ভট্টাচার্য
 সহ-উপাচার্য



JADAVPUR UNIVERSITY
 KOLKATA-700 032,INDIA

OFFICE OF THE PRO-VICE-CHANCELLOR : AUROBINDO BHAVAN ANNEXE

MESSAGE

It is great to know that we are preparing an Annual Report for Jadavpur University on the occasion of 64th Annual Convocation. As we know that Jadavpur University religiously observes its Annual Convocation on 24th December every year. December 24th has its own significance for 2 major reasons, i) Jadavpur University was founded on December 24, 1955, and ii) 24th December is also the birth date of the founder Vice-Chancellor of Jadavpur University i.e. Prof. Triguna Sen.

As per my understanding and believes, the Annual Report of an institution is always considered as the mirror image of the institutional growth and progress. This report always provides us the information about our achievements, milestones and major accomplishment in various areas during last one year. One of the most important achievements of this year for Jadavpur University is its consistent performance in different National/International ranking framework.

The progress and achievements of an academic institution like ours is the result of hard work and commitment for the excellence by various stakeholders of the university ecosystem. Apart from academic achievements, this report will also provide us the information about various extra-curricular activities of the university.

I would like to thank to everyone whose hard work, dedication and perseverance make it possible to bring such an excellent and accurate Annual Report for the year 2018-19 at Jadavpur University. Undoubtedly, I feel privileged to be associated with the publication of this Annual Report, and Jadavpur University, as a whole.

Prof. Chiranjib Bhattacharjee
 Pro-Vice Chancellor

(APRIL 2018- MARCH 2019)

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JADAVPUR UNIVERSITY
KOLKATA 700032
INDIA

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SPECIAL CONVOCATION
AND THE
63RD ANNUAL CONVOCATION ADDRESS
BY
PROFESSOR SURANJAN DAS*
JADAVPUR UNIVERSITY
24 December 2018

HONOURABLE SHRI KESHARI NATH TRIPATHI, THE CHANCELLOR OF THE UNIVERSITY AND HON'BLE GOVERNOR OF WEST BENGAL; RESPECTED PROFESSOR KAUSHIK BASU, RESPECTED PROFESSOR DIPANKAR CHATTERJI, RESPECTED DR. MAMMEN CHANDY, EMINENT MEMBERS OF THE COURT AND EXECUTIVE COUNCIL, MY DISTINGUISHED DEANS OF FACULTIES, MY ESTEEMED PRO-VICE CHANCELLOR AND REGISTRAR, MY DISTINGUISHED COLLEAGUES, DISTINGUISHED GUESTS AND THE ALUMNI, PROUD PARENTS AND RELATIVES OF GRADUATING STUDENTS, FRIENDS FROM THE MEDIA AND, OF COURSE, MY DEAR STUDENTS

May I, on my personal behalf and on behalf of the University community, sincerely and cordially welcome you to the 63rd Annual Convocation of the country's premier University, which, since it started its journey in 1955, has been able to sustain its continuous quest for excellence? I remain grateful to our Hon'ble Chancellor Shri Keshari Nath Tripathi for kindly consenting to preside over today's programme. Hon'ble Chancellor Sir, as on previous occasions, I put on record my honest debt to you for your constant help in discharging my duties since I assumed office under trying circumstances, and I hope to receive your guidance during the remaining months of my tenure. The University remains extremely grateful to the eminent economist Professor Kaushik Basu for kindly consenting to be today's Chief Guest and deliver the Convocation Address. We eagerly await his Address. We are also indeed happy that the distinguished scientist and an alumnus Professor Dipankar Chatterjee and the leading expert in medical science Dr. Mammen Chandy have agreed to be present among us to accept Honorary Doctorate degrees. By honouring them the University fulfils its obligation to recognize the expertise of leading personalities in their respective fields.

In this year's Convocation Graduate Degrees will be awarded to 854 students in Arts, 1,249 students in Engineering and Technology and 341 students in Science. Post Graduate degrees will be awarded to 673 students in Arts, 444 students in Engineering and Technology and 221 students in Science. 178 candidates will receive their M.Phil Degrees. Ph.D. Degrees will be conferred upon 129 scholars in Arts, 123 scholars in Engineering and Technology, 19 scholars in Pharmacy and 130 scholars in Science. Medals will be presented to students and scholars in recognition of their attainments. On behalf of the University I extend a warm congratulation to the recipients of degrees and prizes after years of intense labour. I congratulate office of the Controller of Examinations and his staff for implementing the examination schedule and publishing the results in time.

I. THE UNIVERSITY'S ACADEMIC ACCOMPLISHMENTS

For any university the annual convocation is "a day on which we turn back and trace our steps to see how we ended up where we are". Accordingly, I take this opportunity to capture the

*Address by the Vice-Chancellor, Jadavpur University.

attainments since the last Convocation of 24 December 2017, of our Institution's 37 Departments, 21 Schools of Interdisciplinary Research and 41 Interdisciplinary Research Centres.

1.1: National and International Recognitions

The 2018 National Institute Ranking Framework (NIRF) of the Government of India has placed Jadavpur University in the 6th place among all Indian Universities, the 13th position amongst all categories of the country's higher education institutes and the second rank among the nation's State Universities.

The Jadavpur University is amongst the eight public institutions, which have been accorded, by the Government of India, the status of Institute of Eminence which will enable us to receive a grant of Rs.1,000 crores for five years and considerable academic autonomy.

The UGC granted the University in March 2018 the Graded Autonomy (Category-I) status.

The Rashtriya Uchchatar Shiksha Abhiyan (RUSA) has identified Jadavpur University to be one of the ten universities of the country, and the only one from West Bengal, to receive a grant of Rs.100 crores under the "Component of Research, Innovation and Quality Improvement" Scheme

The University continues to enjoy the University Grants Commission (UGC) granted University with Potential for Excellence status. Incidentally ours was among the country's first five universities to receive this recognition.

The National Assessment and Accreditation Council awarded Jadavpur University CGPA 3.68 out of 4 with Grade A.

The University has been brought under the second phase of the Department of Science and Technology, Government of India, (DST)-PURSE Scheme, with a total grant of Rs.36.8 crores.

Upon the successful completion of the Phase-II of the World Bank funded Technical Education Quality Improvement Programme (TEQIP), the University has been included in the Phase-III of the Scheme, with a total allocation of Rs. 7 crores. The University has also been allocated an additional sum of Rs. 5 crores as a Centre of Excellence in the area of Phase Transformation and Product Characterization.

The Defence Research and Development Organization, (DRDO) Government of India, has identified Jadavpur University as its leading partner to establish the Jagadish Chandra Bose Centre for Advanced Technology to conduct scientific and applied research in directed areas of advanced defence technology.

In recognition of Jadavpur University's contribution to Cultural and Tagore Studies the Government of India and the Government of West Bengal have jointly sponsored the setting up of the Tagore Cultural Centre in the West Annex Campus. The construction work for the Centre will start soon.

The Government of West Bengal has declared the University as a Centre of Excellence, announced a financial grant of Rs.100 crores and provided us with a piece of land in the New Town area.

The Times Higher Education World University Ranking 2019 has placed our University in the 600-801 rank group.

The Times Higher Education Ranking 2018 accorded Jadavpur University 117th rank under the Emerging Economies University Rankings Category.

The Quacquarelli Symonds (QS) World ranking 2019 has placed the University in the 601-650 group; the QS Asia University ranking and the QS BRICS University ranking have placed Jadavpur University respectively in the 125th and 74th position.

The UGC has recognized the academic excellence of 15 Departments within the ambit of its Special Assistance Programme. Our Geology Department received CAS-VI status; Philosophy and Production Engineering Departments received the CAS-V status; Economics, English and Comparative Literature Departments received CAS-III status; Food Technology & Biochemical Engineering, Sanskrit, International Relations and Chemistry Departments received CAS-II; Pharmacy Department received CAS-I status; Chemical Engineering Department received DRS-III status; Bengali Department received DRS-II status and History and Physics Departments received DSA-I status.

The Economics Department has now the unique distinction of being identified as the Nodal Department for the RUSA programme of upgrading the teaching-learning process in Economics in the country.

I.II Faculty Awards

The expertise of my colleagues has won national and international acknowledgements. The following list is indicative but perhaps not exhaustive.

Professor Ajitava Raychaudhuri, Department of Economics, received the Siksha Ratna award by the Government of West Bengal.

Professor Bhaskar Gupta, Department of Electronics and Telecommunication Engineering, received the life time achievement award by the Institute of Engineers (India), West Bengal.

Professor Amit Konar, Department of Electronics and Telecommunication Engineering, and his team have been identified by The Industrial Internet of Things (IIOT) as a top international research group with a world rank of 6th.

Professor Jayashree Roy of Economics Department has joined the Asian Institute of Technology, Thailand as the Banga bandhu Chair Professor and has been selected as expert for IPCC Assessment Report 6 as Chapter Coordinating Lead Author, 2018-2022.

Professor Samita Sen of School of Women's Studies has joined the Cambridge University as the Vere Harmsworth Professor of Imperial and Naval History.

Professor Pulok Kumar Mukherjee, Department of Pharmaceutical Technology, has been elected Fellow of the National Academy of Sciences, India (NASI) and has received the Reliance Industries Platinum Jubilee Award.

Professor Nitin Chattopadhyay, Department of Chemistry, has been elected Fellow of The National Academy of Sciences, India.

Professor Subratanath Koner, Department of Chemistry, received JSPS Invitational Fellowship Award and visited Kyoto University, Japan.

Dr. Samit Guha, Department of Chemistry, received (DST)-Science and Engineering Research Board (SERB) Early Career Award of Government of India.

Dr. Madhuj Mukherjee, Department of Film Studies, received the Book Award for Excellence in Writing on Cinema at the 19th Mumbai Film Festival for her edited volume *Voices of the Talking Stars : Women of Indian Cinema and Beyond*.

Dr. Manash Ghosh, Department of Film Studies, has been awarded a six-month residential fellowship by the Centre for Chinese Studies, Taipei.

Professor Rup Kumar Barman, History Department, received the 'Dadhi Mohanta Memorial Social Science Research Award 2017' from the Mohun Chandra Mahanta Social Science Research Centre and Cinnamara College, Jorhat.

Dr. Prasanta Kumar Biswas, Department of Food Technology and Biochemical Engineering, received the Bharat Vikas Award from the Institute of Self Reliance, 2018.

Professor Nandadulal Bairagi, Centre for Mathematical Biology and Ecology, has been elected as Sectional President of 106th Indian Science Congress.

Professor Subhadip Basu, Centre for Microprocessor Application for Training, Education and Research, has received DAAD Fellowship from Germany, and the Honorary Research Scientist position at the Department of Electrical and Computer Engineering, University of Iowa, USA.

Professor Sadhan Ghosh of Mechanical Engineering Department has been nominated the Ambassador of the Swachh Mission, Government of Andhra Pradesh.

Dr. Pankaj Kumar Roy, School of Water Resources Engineering, was awarded "Nawab Zain Yar Jung Bahadur Memorial Prize" by the Institute of Engineers, West Bengal.

Dr. K. K. Chattopadhyay, Department of Physics, received the Institute Gold medal–2018 from The Mining, Geological and Metallurgical Institute of India for his research paper "Utilisation of Low Grade Chromite Ore For The Production of Carbon Free Ferrochrome".

Professor Subhash C. Mandal, Department of Pharmaceutical Technology, received the Professor P. C. Datta Memorial Award from the Botanical Society of Bengal.

A short film titled *Daftaripara* produced by the School of Media Communication and Culture under the supervision of Professor Abhijit Roy of Film Studies Department was selected for screening at the Chitpur Local Art Festival, Kolkata.

Professor Niladri Chakraborty of Power Engineering Department is serving as a specialized expert of the Three-Tier Team of the Government of West Bengal to develop the "Futuristic Energy Plan and Energy Action Plan for West Bengal".

Professor A. K. Biswas, Department of Physical Education, acted as Chief time-keeper in the World Longest Water Swimming Competition held in West Bengal.

Professor Sudip Sundar Das of the Physical Education Department was the Chief time-keeper in the World Longest Water Swimming Competition held in West Bengal.

I am happy also to report that the following colleagues of mine have received patents for their innovative exercises.

Professor Biswajit Mukherjee, Centre for Advanced Research in Pharmaceutical Sciences, along with two researchers obtained patent for their work on "Process and Carrier for Targeting Drugs/Diagnostics of Peripheral and Central Nervous System."

Professor Iti Saha Misra, Department of Electronics and Telecommunication Engineering, and another researcher obtained patent for their research work on "Cross-layer Apparatus and Method for Cognitive Radio System."

Professor K. K. Chattopadhyay, Department of Physics, along with two researchers obtained patent for their work on "A nanomaterial including amorphous grapheme and nanofluids involving the same with a base medium having significantly enhanced electrical insulation and thermal conductivity".

Professor Rajat Chakraborty, Department of Chemical Engineering, received Indian patent for his research outcome "A heterogeneous base crystal and a process for the synthesis of fuel grade biodiesel involving the same".

Dr. Shyamal Roy, Department of Chemical Engineering, along with four researchers received patent from the DRDO for their work on “Gamma Radiation Composite and its Preparation thereof”.

I.III: Research Projects

During the period under review my esteemed colleagues received project funding to the tune of Rs. 33 (thirty-three) crores 59 (fifty-nine) lakhs 86 (eighty-six) thousand and 82 (eighty-two) (Rs. 33,59,86,082/-) The following is an indicative list.

LPG Equipment Research Centre, Bangalore has sanctioned Rs. 601, 450/- for a research project on “Development of a High Efficiency Domestic LPG Stove Through Numerical Simulation” under Dr. Amitava Datta.

Indian Council of Social Science Research has sanctioned a grant of Rs. 200,000/- for a project on “Potentiality Assessment of Sericulture as a Climate Resilient Livelihood in Cyclone Affected Areas of Indian Sundarban” under Dr. Subarna Bhattacharyya.

Indian National Science Academy (INSA) has sanctioned a project grant of Rs. 228,000/- to Dr. Rup Kumar Barman to undertake a research on “Practice of Folk medicine of the Rajbanshis of Sub-Himalayan Bengal in Historical Perspective”.

DST has sanctioned a Research Project on “Study of Thermoelectric Magnetocaloric Magnetoresistive and Other Thermo Physical properties of Huesler Alloys” under Dr. Papri Dasgupta to the tune of Rs. 2,720,000/-.

Dr. Rup Kumar Barman has received from the ICSSR Rs. 367,500/ for a project on “The Dwellers of Indo-Bangladeshi Enclaves and their Struggle for survival: A Study on the Indo-Bangladesh Enclave Dwellers from 1947 to 2017”.

DST has approved a grant of Rs. 3,656,000/- for a project on “Novel Solutions Using Innovations on the Proposed LTE A D2D Communication Model for Smart Governance in the 5G Era” under Dr. Bhaskar Sardar.

DALMIA Group Holdings, New Delhi, has sanctioned Rs. 1,950,000/ for a project on “Role of carbonaceous materials and cellulose Nano Fibres-Polymeric Composite for treatment of multiple Pollutants present in Waste Water” under Dr. Papita Das.

Department of Atomic Energy (DAE) has sanctioned project grant of Rs. 2,9767,00/ to Dr. Kunal Roy to work on “Application of QSARs for the Design of PET and SPECT Imaging Agents.”

DST has granted Dr. Ranjana Chowdhury Rs. 7,391,752/ for a research project on “Development of Efficient Biomass Conversion Routes for Biofuel Production and Utilization”.

Council of Scientific and Industrial Research (CSIR) has sanctioned Rs. 990,000/- for a project on “Time Dependent Nonlinear Structure in Plasmas in the Frame Work of Lagrangian Fluid Description” under Dr. Monoranjan Khan.

Space Applications Centre, Department of Space, Government of India, has awarded Dr. Sugata Hazra sum of Rs. 5,70,0000/-for his project on Geospatial Assessment of Mangrove’s Species Discrimination in Indian Sunderbans, their Health and Effect on Environment and Climate Using Airborne Data.”

DST has sanctioned Rs. 13,850,000/ to Dr. Rajib Bandhyopadhyay for a project under the DST-FIST programme.

IFCPAR (CEFIPRA) has sanctioned Rs. 1,29,5000/- for a project entitled “Packmark Development of New Anti-Counter Feit Printing Techniques for Medical Packaging” under Dr. Swati Bandyopadhyay.

Department of Higher Education, Science & Technology and Biotechnology, Government of West Bengal, has sanctioned Rs. 3,000,000/-to Dr. Biswadip Das under the “Project-BOOST Scheme”.

Department of Bio-Technology (DBT) has sanctioned a project on “Development of some Analytical Tools for Analysis of Large-Scale Protein-Protein Interaction Networks” under Dr. Subhadip Basu with an involvement of Rs. 3,395,325/-.

CSIR has sanctioned a research project on “In silico Modeling of Property/Toxicity/Activity of Nano-Materials using Chemometric Tools” to Dr. Kunal Roy to the tune of Rs. 419,167/-.

CSIR sanctioned Rs. 950,000/- for a research project on “Rhodamine Inspired Sulfonamides Structure Chemosensor and Exploration of Their Biomaterial Activity” under Dr. Chittaranjan Sinha.

CSIR has approved Rs. 1,000,000/ for a project on “Metalion Sensors Synthesis Recognitions and Protein Binding Studies” under Dr. Mahammad Ali.

DRDO, Dte of Futuristic Technology, has approved a project on “Development of Indigenous Technologies for Building Secure Software Defined Networks” under Dr. Chandan Mazumdar with a total grant of Rs. 25,520,000/-

DST, Government of West Bengal has sanctioned a R & D project on “Fabrication and Characterization of natural Poly Saccharide Based Bio Erodible Localized Spongy Scaffold: A Potential Role in Augmenting Wound Healing” under Dr. Amallesh Samanta with an involvement of Rs.1,681,800/-.

DST, Government of West Bengal, has sanctioned a project on “Design of Nanocarriers for Sustained Release of Conventional Allergic Drugs.” under Dr. Rajib Dey for a value of Rs. 1,517,000/-.

Department of Space, Government of India, has sanctioned a project on “Design and development of X-band Dual Polarized Antenna” under Dr. Sayan Chatterjee with a financial commitment of Rs. 2,046,000/-.

SERB of DST has sanctioned a project entitled “Structural Properties and Astrophysical Applications of Quantum Fluids” under Dr. Radhaballabh Bhar for a sum of Rs. 3,264,360-.

Indira Gandhi Centre For Atomic Research (IGCAR) has sanctioned a research project on “Generation of Creep-Fatigue Interaction Properties of Alloy 625” to Dr. Pravash Chandra Chakraborty with a total grant of Rs. 46,982,000/-.

IGCAR has awarded a grant of Rs. 45,828,000/- for the project on “Project-Evaluation of Creep Crack Growth (CCG) Behaviour for Alloy 617 forgings” to Dr. Pravash Chandra Chakraborty.

SERB has sanctioned a project on “Vacuum deposition of Fluorinated Zinc Phthalocyanine and Oligo Thiophene Based Plasmonic Tanden Solar Cell” under Dr. Partha Pratim Ray with an allocation of Rs. 4,614,417/-

NMPB, AYUSH, Government of India, has sanctioned a project on “Development of Sensor Probes for Quantification of Active Constituents in *Andrographis Paniculata* and *Piper Nigrum* Using Near Infra Red Spectroscopy (NIRS)” under Dr. Rajib Bandyopadhyay with a total allocation of Rs. 2,727,900/-.

IGCAR has sanctioned a project on “Evaluation of Fracture and Fatigue Crack Growth (FCG) Behaviour Alloy 617 Forging Materials” under Dr. Sanjib Kumar Acharyya having an outlay of Rs. 54,707,000/-.

DST, Government. of West Bengal, has sanctioned a project on “Bioremediation of Poly-Aromatic Hydro-Carbons in the Sunderbans” under Dr. Joydeep Mukherjee with an allocation of Rs. 2,484,020/-.

DST, Government of West Bengal, has sanctioned Rs. 1,055,800/- to Dr. Pankaj Kumar Roy for a project on “Study to Develop Appropriate Methods for Safe Disposal of Arsenic-Rich Sludge”.

DST, Government of West Bengal, has sanctioned Rs. 913,800/- to Dr. Joydeep Mukherjee for a project on “Production of Organic Fertilizer by Utilizing Slaughterhouse Wastes and its Application for the Cultivation of Potato and Vegetables”.

SERB has awarded a grant of Rs.3,795,000/- to Dr. Subrata Sarkar to work on “Synthesis of Bismuth Oxyhalides and its Composites for Enhanced Photocatalytic Activity: A Little Step Towards a Pollution Free Environment”.

DST, Government of West Bengal, has allocated Rs. 400,000/- to Dr. Debajyoti Ghoshal to work on “Synthetic Strategies for the Design of Porous Co-ordination Polymers for Preferred Adsorption of Different Gases”.

SERB has sanctioned Rs. 2,458,000/- for a project on “Experimental Investigation of a Down Draft Biomass Gasifier Using Different Biomass Feedstocks” under Dr. Prokash Chandra Roy.

DST, Government of West Bengal, has sanctioned Rs. 2,599,600/- for a project on “Studies on Chronic Exposure to Arsenic Toxicity through Food Chain and Drinking Water with respect to Rice Grain Contamination in Selected Sites of West Bengal” under Dr. Tarit Roychowdhury.

DST, Government of West Bengal, has awarded a grant of Rs. 1,320,800/- to Dr. Sarbani Ray to work on “Participatory and Real Time Pollution Monitoring System for Smart City”.

DST, Government of West Bengal, has sanctioned Rs. 1,590,800/- for a project on “Cost Effective and Manpower Efficient Real Time Implementation of RFID based Surveillance System for Poultry based Industry in Rural/Urban Region to Solve the Avian Flu under Dr. Subir Kumar Sarkar.

WSSO, PHE, Government of West Bengal has approved Rs. 375,100/- for a project on “Mobility and Mechanism of Fluoride Leachability into the Aquifer of Sonarpur-Rajpur-Baruipur belt of the bank of Adi Ganga in South 24 Parganas District, West Bengal,” under Dr. Tarit Roychowdhury.

DST, Government of West Bengal, is providing Dr. Partha Bhattacharya Rs. 1,256,000/- to work on “Sound Transmission Modelling in Underground Railway System”.

DST, Government of West Bengal, has sanctioned Rs.1,744,000/- for a project on “Fermentative Production of Microbial Asparaginase Enzyme and its Application to High Temperature Processed Foods for Acrylamide Mitigation” under Dr. Sunita Adhikari (Pramanik).

DST, Government of West Bengal, is supporting the project on “Qualitative Assessment of Indian Tea by Developing Specific Electrodes of an Electronic Tongue” undertaken by Dr. Runu Banerjee Roy with a grant of Rs.1,250,800/-.

CSIR has sanctioned Rs.1,171,000/- for a research project on “Synthesis of Oligosaccharides and Glycoconjugates related to Salmonella O-Antigens reference to One-pot Glycosylation Reactions” under Dr. Rina Ghosh.

DRDO has sanctioned Dr. Saswati Mazumdar under JBCAT a sum of Rs. 10,129,000 for a project on “Experimental Studies of Free Space Laser Communication Link for Data and Voice Transmission in Different Atmosphere Conditions”.

Indian Space Research Organization (ISRO) has sanctioned a project on “Identification of Potential Hydrocarbon Bearing Traps in Nagaland using Airborne Radar Imaging and Risat-1 Satellite Data” under Dr. Sugata Hazra with a grant of Rs. 2,300,000/-.

DST has sanctioned a grant of Rs. 902727/ to Dr. Papita Das to work on “Removal of Pharmaceutical Derivatives Present in Waste Water by Advanced Oxidation Integration with Microstructure and Rotating Packed Bed of Grapheme(G)/Go-Metal Nanocomposites”,

Shastri Indo-Canadian Institute has sanctioned a research project on “Application of Membrane Distillation to Reduce the Cost of the Deslignation Component of Polyhydroxybutyrate production by *Haloferax Mediterranei* Utilizing Rice Based Ethanol Industry Waste” under Dr. Joydeep Mukherjee with an allocation of Rs.1,000,000/-.

A sum of Rs. 20,100,000/ has been sanctioned for a project under UGC CAS-V-Production Engineering to be conducted by Dr. Bijan Sarkar.

A project to the tune of Rs. 5,75,0000/- has been sanctioned for a project under DRS-II-Bengali to Dr. Shekhar Samaddar.

SERB has sanctioned Rs. 5,285,013/- for a project on “Realization of Oxide Based Solar Cells: Glass-MO/Cu₂O/ZnO/Al-ZnO/ITO Heterojunction Solar Cell with Improved Performance” under Dr. A. K. Pal.

CSIR has sanctioned Rs. 366,667/- for a project on “Design of Multichannel Receptors for Anions by Taking Profit of Metal-Ligand Interaction” under Dr. Sujoy Baitalik.

SERB has approved Rs. 2,311,000/- to undertake a project on “Development of Electrodes for Electronic Tongue Using Molecular Imprinted Techniques for Detection of Important Chemicals in Medicinal Plants” under Dr. Bipan Tudu.

DRDO has sanctioned for Dr. Amalesh Samanta a sum of Rs. 1,591,798/ to work on “Fabrication and Characterization of Natural Polysaccharide Based Bioerodible Localized Spongy Scaffold: A New Advanced Wound Care Tool”.

SERB has approved Rs. 4,604,000/- for a project on “Molecular Recognition and Sensing at the Lipid Bilayer-Water Interface and Inside the Lipid Membrane” under Dr. Samit Guha.

Department of Higher Education, Science & Technology and Biotechnology, Government of West Bengal has sanctioned Dr. Kaustuv Das a grant of Rs. 621,750/- for a project on “Study of Zinc oxide Thin Films as Gas Sensor under High Relative Humidity”.

Department of Higher Education, Science & Technology and Biotechnology, Government. of West Bengal has granted Dr. Mitali Mondal Rs. 327,600/-for the project on “Study on QGP and its Properties using Correlation and Fluctuation Phenomena in Ultra-Relativistic Heavy Ion Collisions”.

SERB has sanctioned a grant of Rs. 660,000/ for the project on “Birkhoff-James Orthogonality and its Application in the Geometry of Banach Spaces” under Dr. Kallol Pal.

SERB has sanctioned a grant of Rs.660,000/- for a project on “Integral Equation and its Application to the Problems on Interaction of Water Waves with Obstacles Present in Ocean” under Dr. Sudeshna Banerjea.

SERB has sanctioned Rs.660,000/- for a project on “Dynamics Preserving Discretization Technique for Nonlinear System of Differential Equations” under Dr. Nandadulal Bairagi.

SERB has endorsed a grant of Rs. 660,000/- to undertake a project on “Symmetries in Differential Equation and its Application to Classical and Quantum Cosmology” under Dr. Subenoy Chakaborty.

SERB has sanctioned Rs. 2,396,000/ for a project entitled “Indian Social Sensor and Indian Social Media Text Mining System for Topic Detection, Topic Sentiment Analysis and Opinion Summarization” under Dr. Kamal Sarkar.

CSIR has sanctioned Rs. 632,000/ for a project on “Modelling and Analysis of Stochastic HIV Models with Linear and Non-Linear Incidence” under Dr. Nandadulal Bairagi.

SERB has sanctioned Rs. 660,000/- to work on “Mathematical Model Development and Analysis of Bullwhip Effect in Closed-Loop Supply Chain under Uncertainties” under Dr. Bibhas Chandra Giri.

CSIR has approved Rs. 605,510/- for a project on “Development and Analysis of Supply Chain Models Concerning Environmental Sustainability” under Dr. Bibhas Chandra Giri.

SERB has sanctioned Rs. 3,666,276/- for a project on “Solar Energy Driven Hydrogen Generation from Water Using Reduced Graphene Oxide Based Photo-Catalyst and Co-Catalyst” under Dr. Kajari Kargupta.

DST has made available to Dr. Swatilekha Roy a sum of Rs. 2,140,000/- for a project on “WOSA-Investigation of Optical Properties of Metal Nanoparticles Embedded Conducting Polymer”.

DAE has sanctioned a grant of Rs. 3,888,900/- for Dr. Subir Sarkar in connection with his project on “Basin Evolutionary History and Microbial Mat Proliferation: Versus Uranium Mineralization in Badami Group, Karnataka”.

DAE has awarded Dr. Dipak Chandra Pal a grant of Rs. 2,706,250/- for a project on “Sedimentological, Petrological and Geochemical Studies of Quartz Pebble Conglomerate and Associated Rocks in parts of Birtola-Bagiyabahal Area, Sundergarh District, Odisha”.

I.IV: Inter-disciplinary Studies

My colleagues in Schools and Centres under the Faculty of ISLM have demonstrated their capability in pursuing inter-disciplinary research.

The IC-Design and Fabrication Centre is undertaking the following projects:

“Antenna System Design for Proximity Sensor” and “Advanced Materials and Systems (Devices and systems subgroup)” under Professor Bhaskar Gupta.

“Cost Effective and Manpower Efficient Real-Time Implementation of RFID Based Surveillance System for Poultry Based Industry in Rural/Urban Region to Solve the Avian Influenza/Bird Flu Problem”, “Low Power ASIC-VLSI Implementation of Secure and Authentication Algorithms for Defence Application”; “Analytical Modeling and simulations of SOI/SON MOSFETs: a comparative analysis to get better device for next generation integrated circuits” and “Analytical Modeling and simulation based verification for low dimensional devices suitable for Low Power Application” under Professor Subir K. Sarkar.

“Design and Development of X band Dual Polarized Waveguide Slotted Array Antenna” and “Establishment of Special Manpower Development Facility” under Dr. Sayan Chatterjee.

The Condensed Matter Physics Research Centre is working on:

- Fabrication of highly reproducible SERS active substrates through controlled plasmonics and their applications in ultrasensitive chemical and biological sensing”;
- “LAB ON CHIPS for trace detections of arsenic, melamine, heavy ions and in one click diagnostic applications using SERS”;

- “A Study of Anti-Hyperglycemic properties of *Gymnedenia Orchidis* Lindl of orchidaceae Family”;
- “Studies on the influence of ion beam irradiation coupled with gamma irradiation on the behaviour of high melting thermoplastics and polymer nano composites”;
- “Understanding the mechanism of action of homeopathic medicine at the molecular level in nano domains in vivo and in vitro systems”;
- “Studies on the interaction of antimicrobial peptide with phospholipid membranes”;
- “Studies on Heisenberg spin chains with Dzyaloshinskii-Moriya interaction in the presence of fields”;
- “O MeV Li-ion Damage in Fe-Superconductors with Probing by positron Annihilation and Measurement of Bulk Properties and Structure”; “Investigation of heavy surface damage in Ba(Fe,Co)₂As₂ crystals by low energy ion beams”.

The School of Advanced Studies In Industrial Pollution Control Engineering is associated with projects on:

“Process Intensification in concentration of Fruit juices” under Professor A. Bhowal.

“Assessment and modeling on decolourization of textile effluents by sorption coupled with biodegradation in a fluidized bed bioreactor and evaluation of reactor performance”, “Green synthesis of iron nanoparticles from manglicolous fungi of Indian Sunderban and their application in sequestration of heavy metals from contaminated water”, “Removal of pharmaceutical derivatives present in waste water by advanced oxidation integrating with microstructure and rotating packed bed of grapheme (G)/Graphene oxide (GO)/GO-metal nanocomposites” and “Role of carbonaceous materials and cellulose nano-fibres polymeric composite for treatment of multiple pollutants present in waste water” under Professor P Das.

Dr. Piyali Basak of **The School of Bioscience & Engineering** is working on “Strategic Application of Microorganisms for Decontamination of Toxic Compounds with special reference to Azo Dyes in Industrial Waste” and “Evaluation of Moringa Oleifera leaf, flower, fruit extract, and its nano fabricated molecule: a comparative Study on Cancer cell line”.

The School of Cultural Texts and Records remains occupied with its prestigious project on “Two centuries of Indian Print” and has undertaken new exercises on documentation of Cultural Texts and digitisation of paper records.

Under the auspices of **The School of Environmental Studies**

Professor Tarit Roy Chowdhury is working on “Spatial distribution of uranium and associated water quality parameters in drinking and ground water/drinking water of five districts (Nadia, Bardhaman, North Twenty-four Parganas, Kolkata, Howrah) of West Bengal”; “Mobility and mechanism of fluoride leachability into the aquifer of Sonarpur-Rajpur- Baruipur belt of the bank of Adi Ganga in South 24 Parganas district, West Bengal” and “Studies on chronic exposure to arsenic toxicity through food chain and drinking water with respect to rice grain contamination in selected sites of West Bengal and search for mitigation options”.

Dr. Joydeep Mukherjee is undertaking researches on “Production of organic fertilizer by utilizing slaughterhouse wastes and its application for the cultivation of potato and vegetables”

and “Bioremediation of polyaromatic hydrocarbons in the Sundarbans by application of phototrophic biofilms”.

The School of Languages and Linguistics is undertaking a UGC sponsored project on “Study and Research in Indigenous and Endangered Languages in India.

The following projects are being pursued at **The School of Mobile Computing and Communication**:

“Remote Health: A Framework for Health care Services using Mobile and Sensor-Cloud Technologies” by Professor Nandini Mukherjee.

“Designing a Framework for Efficient Computation Off loading” by Dr. Chandreyee Chowdhury.

“Environmental Monitoring: Testbed of Mixed Wireless Sensor Networks”; “Performance based Resource Management and Load balancing in Cloud Environment” by Dr. Sarbani Roy.

Professor Pulak Mukherjee of **The School of Natural Product Studies** is working on “Development of sensor probes for quantification of active constituents in *Andrographis paniculata* and *Piper nigrum* using Near Infrared Spectroscopy”; “Traditional medicines used as anti-infectives and against neurodegenerative Disease”; “Metabolomic study: tools for quality evaluation and validation of Medicinal plants used in Indian systems of medicine”; and “Development and evaluation of ‘Varnya’ formulations from the medicinal plants of Ayurvedic importance”.

In the **School of Nuclear Studies and Applications** Professor Amitava Gupta is pursuing research on “Indigenously Developed Spectroscopic Radiation Portal Monitors for National Security”.

In **The School of Oceanographic Studies**

Professor Sugata Hazra is working on: “Study of Energy Budget and its effect on Carbon fluxes in East Kolkata Wetlands : A Ramsar Site”; “Geospatial assessment of mangrove’s species discrimination in Indian Sundarbans, their health and its effect on environment and climate using airborne hyperspectral (AVIRIS NG) and RISAT-I remote sensing data”; “Identification of Potential Hydrocarbon Bearing Traps in Nagaland Using Airborne Radar Imaging and Risat-1 Satellite Data”, “Vulnerability Assessment of Mangroves and Corals of West Bengal, Odisha and Andaman Islands”; “Bio Optical Studies and Ecological Modelling in case II water of West Bengal Coast towards Hilsa Fishery Forecast”; “Study of Carbon dynamics in Estuarine and near shore waters of Hugli estuary and East Kolkata wetlands”; “Tidal Energy Resource Mapping in Sundarbans Biosphere Area”; “Enhancing adaptive capacity and resilience to climate change of small and marginal farmers in Purulia and Bankura district West Bengal”; “Enhancing quality, access, and governance of undergraduate education in India”; “Tidal energy for village electricity supply in Indian Sundarban biosphere”.

Professor Gautam K. Sen is working on “Study of Tidal Dynamics and Interaction with surge in Sundarban Estuary”.

Dr. Tuhin Ghosh is conducting research on “Deltas, vulnerability and Climate Change: Migration and Adaptation (DECCMA)”

Sri Bijon Kumar Saha is working on a book on “Marine Geology of the Andaman Sea”.

The School of Water Resources Engineering is involved with projects on:

- “Energy Efficient, community-based water and wastewater treatment systems for deployment in India”;

- “Study on Improving Benefit Transfer for Wetland Valuation: Water Environment and Economic Value of Ecosystem Services through People Participation in Bhagirathi-Hooghly Basin”;
- “Study to Develop Appropriate Methods for Safe Disposal of Arsenic-Rich Sludge”;
- “Proof Checking of STP, LS and Sewerage Network for Halisahar & Budge Budge Municipal Town”;
- “Environmental Impact Assessment for the Proposed Elevated Corridor from E.M. By-Pass to New Town”;
- “Feasibility Study of Canopy Walk at Sundarban Wild Animal Park, Jharkhali”;
- “Performance evaluation of Arsenic and Iron Removal Plants (AIRPs)”;
- “Performance Evaluation of seven nos. Sewage Treatment Plant under the control of KMW & SA”;
- “Appraisal of DPR for Renovation, Rehabilitation & Conservation and Lake Front Development of Motijheel in Motihari Nagar Parishad”;
- “Monitoring of Grossly Pollution Industries (GPIs) discharging into the River Ganga and its Tributaries for compliance verification”;
- “Design of Effluent Treatment Plant of Capacity 0.1 MLD for Haringhata Dairy, Mohanpur, Nadia”;
- “Environmental Impact Assessment (EIA) and Environmental Management Plan (EMP) of KMC Project for utilizing KMC land on the eastern side of E.M. Bye-pass opposite Silver Spring Housing Complex”;
- “Faecal Sludge Management: Optimization of Pit Life Extender”;
- “ETP Adequacy Assessment Report”;
- “Appraisal of Sewerage Network of Zone-III of Gangtok town of Sikkim under National River Conservation Plan”;
- “Analysis of sediment transport mechanism in connection to reservoir life and dam safety under “Energy, Environment and Climate Change”;
- “Hydrological Study including Drilling of Boreholes, Pumping Test (Yield and Recuperation tests) for one cement grinding unit at Parbatpur and Digha villages under Nituria block in Purulia district, West Bengal for proposed Clinker Grinding Unit of 5 MTPA and CPP 20 MW”.

Under the auspices of **The School of Women’s Studies** following projects were undertaken:

- “Women and Trafficking in South 24 Parganas”; “Love, Law and Labour: Child Marriage in West Bengal”; “Women’s Studies in West Bengal” by Professor Samita Sen.
- “Bengal Breaks Through: History, Legacy and the Politics of Gender in Indian Dance” by Dr. Aishika Chakraborty.

The Centre for Disability Studies is engaged with the preparation and maintenance of a database of students, scholars, teachers and employees of the university with special needs. This Directory will also contain details of laws implemented for the disabled people and a list of various governmental and non-governmental organizations working for them.

I.V: Faculty Participation in Seminars/Workshops

The University’s faculty members maintain their fruitful presence in national and international seminars. I have immense pleasure to record the following participations in international conferences by my colleagues.

- Dr. Kartick Chandra Mondal, Department of Information Technology, delivered lectures at five Indonesian Universities: the Sabelas Maret University, Surakarta; Institut Teknologi Sepuluh, Surabaya (ITS); Maulana Malik Ibrahim Malang State Islamic University, Malang; Yogyakarta State University and University of Islamic Indonesia.
- Professor Samiran Chattopadhyay, Department of Information Technology, presented a paper at an International Conference at Malabe, Sri Lanka and attended the 2nd physical meeting of g-LINK program there. His presentations won Best Research Paper Awards from the Charotar University of Science and Technology, Gujarat; the International Conference on Computer, Electrical, Communication Engineering (ICCE E 2017) and the International Conference at Malabe, Sri Lanka.
- Dr. Mainak Ghosh, Department of Architecture, delivered invited lecture at the Rangsit University, Bangkok.
- Professor Bhaskar Gupta, Department of Electronics and Telecommunication Engineering, delivered invited lecture on RF MEMS in Tunisia and attended a symposium at Marseille, France.
- Professor Subir Kumar Sarkar, Department of Electronics and Telecommunication Engineering, delivered the Keynote Address and chaired a session in an international conference at KUET, Khulna, Bangladesh and in a workshop of IEEE-Bangladesh Section.
- Dr. Sayan Chatterjee, Department of Electronics and Telecommunication Engineering, attended and chaired a session of a symposium at Marseille, France.
- Professor Iti Saha Misra, Department of Electronics and Telecommunication Engineering, attended a meeting and award ceremony at Globecom Luncheon, Singapore.
- Dr. Pratyusha Rakshit, Department of Electronics and Telecommunication Engineering, presented two papers at the IEEE World Congress, 2017 at Donostia, San Sebastian, Spain.
- Professor Amitava Datta, Department of Power Engineering, presented a paper at 19th International Conference on Thermal Power and Thermal Energy at Singapore.
- Professor Rajib Bandyopadhyay, Department of Instrumentation and Electronics Engineering, delivered invited lecture at ITMO University, St. Petersburg, Russia.
- Dr. Sudipta Dey, Department of Mechanical Engineering, delivered invited lectures at the University of Bologna, Italy and University of Stavanger, Norway, and King's College, London.
- Dr. Paramita Bhattacharjee, Department of Food Technology and Biochemical Engineering, delivered an invited talk at a European Conference at Athens, Greece.
- Dr. Dipankar Halder, Department of Food Technology and Biochemical Engineering, presented a paper at a conference at Munich, Germany.
- Professor Lopamudra Choudhury, Department of Philosophy, presented a paper at Edinburgh, U.K.
- Dr. Barendu Mandal, Department of Bengali, delivered lecture in a seminar at Rajshahi University, Bangladesh.
- Professor Joyashree Roy, Department of Economics, delivered invited talks at Japan, Canada and Germany. She attended IPCC meetings at Nepal, Ethiopia, the USA, the UK, and Switzerland.
- Professor Vivekananda Mukherjee, Department of Economics, was a Visiting Fellow and delivered invited talk at the Technical University, Freiberg, Germany and at a Workshop at Pontresina, Switzerland.
- Professor Abhijit Gupta, Department of English, delivered an invited lecture at the Utrecht University.
- Dr. Kaustav Baksi, Department of English, was an invited discussant at the City University

of New York and University of Connecticut, Storrs. He also delivered invited talk at the University of Connecticut, Storrs.

- Dr. Sutanuka Ghosh, Department of English, attended a seminar at SOAS South Asia Institute, UK and a conference at University of London, UK.
- Professor Shibashis Chatterjee, Department of International Relation, participated at a round table at the ISA Conference at Hong Kong.
- Dr. Manas Ghosh, Department of Film Studies, delivered lectures at the College of Communication Art, Fu Gen Catholic University, Centre for Chinese Studies, Taipei and Taipei National University of the Arts, Taiwan.
- Dr. Madhuja Mukherjee, Department of Film Studies, presented papers at a Conference at Sung Kong Hoe University, Seoul and at Utrecht University, The Netherlands. She also acted as a panel coordinator of the Conference at the Utrecht University, The Netherlands.
- Professor Nupur Dasgupta, Department of History, attended an International Conference at Ludwig-Maximilians-Universität, München.
- Dr. Maroona Murmu, Department of History, delivered lectures at the University of Dhaka, and Jahangirnagar University, Bangladesh.
- Dr. Sridip Chatterjee, Department of Physical Education, presented a paper at the Bangladesh Krira Shikkha Pratishtan (BKSP).
- Dr. Papan Mondal, Department of Physical Education, presented a paper at the BKSP, Bangladesh.
- Dr. Epsita Halder, Department of Comparative Literature, was a discussant at a programme in Brick Lane Circle, London.
- Dr. Debashree Datta Ray, Department of Comparative Literature, delivered invited lectures at the McGill University, Montreal; Concordia University Montreal and University of Witwatersrand, Johannesburg, South Africa. She also presented a paper at the University of Paris.
- Professor Sucheta Bhattacharya, Department of Comparative Literature, presented a paper at the University of Warsaw, Poland.
- Dr. Debjit Dutta, Department of Geography, presented three papers at the NTNU Sustainability Science Conference, 2017 at Norwegian University of Science and Technology, Trondheim, Norway.
- Professor A. K. Pal, Department of Instrumentation Science, delivered an invited talk and chaired a session at an International Conference at Malacca, Malaysia.
- Professor Subratanath Koner, Department of Chemistry, delivered lectures at the Yokohama City University, Kyushu University Campus, Fukuoka, National Institute of Advanced Industrial Science and Technology, Tsukuba of Japan and Zhengzhou University, Henan Province, China.
- Professor Sujoy Baitalik, Department of Chemistry, delivered an invited lecture at an International Symposium at St. Catherine's College, University of Oxford, UK.
- Dr. Paltu Kumar Dhal, Department of Life Science and Biotechnology, delivered invited lectures at the Universitas Padjadjaran (UNPAD), Bandung, Indonesia and Bangkok, Thailand.
- Professor Arindam Bhattacharya, Department of Mathematics, chaired a session at the University of Marseille, France.
- Professor Pratulananda Das, Department of Mathematics, visited Kurt Gold Research Center for Mathematical Logic at Vienna, Austria, University of Gdansk, Poland and delivered invited talk at the Cardinal Stefan Wyszyński University, Warsaw, Poland.

- Professor Bibhas C. Giri, Department of Mathematics, has been awarded a Visiting Scholarship at the Technische Universität Darmstadt, Germany.
- Dr. Joydeep Mukherjee, School of Environmental Studies, presented a paper at the ICBE Asia Conference in Singapore.
- Professor Pulok Kumar Mukherjee, School of Natural Product Studies, delivered invited lectures at the University of Bonn, Germany; University of Dhaka, Bangladesh and University of Free State, South Africa.
- Dr. Monisha Chakraborty, School of Bioscience and Engineering, participated in an international conference at Dublin, Ireland and chaired two of its sessions.
- Dr. Matangini Chattopadhyay, School of Educational Technology and Dr. Hubert P. H. Shun, University of Northumbria, Newcastle Upon Tyne, U.K., have jointly received a research grant of 11,841 British pounds from the Royal Society International Exchanges and the Society for a period of two years.
- Professor Samita Sen, School of Women's Studies, delivered lectures at the Göttingen University, Germany; University of Würzburg, Germany; Rosa Luxemburg Stiftung, Beirut and University of Oxford.
- Dr. Aishika Chakraborty, School of Women's Studies, delivered lectures at Cairo; the Royal Holloway University of London; Tagore Centre, London, and the University of Nottingham.
- Professor Amitava Gupta, School of Nuclear Studies and Application, delivered an invited lecture at the Bangladesh University of Engineering and Technology.
- Professor Swarnendu Sen, School of Nuclear Studies and Application, delivered an invited lecture at the Bangladesh University of Engineering and Technology.
- Professor Biswajit Mukherjee, Centre for Advanced Research in Pharmaceutical Sciences, delivered an invited lecture and chaired a session at the 44th European Radiation Research Congress 2018 at Pécs, Hungary.
- Professor Sadhan K. Ghosh, Centre for Quality Management System, delivered invited lectures/ plenary speech/ keynote address in Tokyo, Japan; Widener University, Philadelphia, USA; Tsinghua University, China and Islam University in Semarang, Indonesia. He acted as consultant for UNCRD and also chaired the meeting of Consortium of Researchers in International Collaboration in Maryland, USA and attended 3R Forum on Asia Pacific organized by UNCRD and Government of Australia at Adelaide.
- Professor Nandadulal Bairagi, Centre for Mathematical Biology and Ecology, delivered an invited talk at an International Conference at the Russian Academy of Sciences, Moscow.
- Professor Priti Kumar Roy, Centre for Mathematical Biology and Ecology, delivered invited talks at Harbin Institute of Technology, China; Beijing University of Civil and Architecture; Beijing Institute of Technology; Anyang, China; Xinyang City, China; Xinyang Shi, China; Peter the Great St. Petersburg Polytechnic University, Russia; and Lomonosov Moscow State University, Russia.
- Dr. Sayantan Dasgupta, Centre for Translation of Indian Literatures (CENTIL), delivered invited talk and presentations at a Workshop at the University of Anglia, UK.
- Professor Subhadip Basu, Centre for Microprocessor Application for Training, Education and Research, delivered an invited lecture at the Hannover Medical School, Germany.

- Professor Kaushik Bandyopadhyay, Department of Construction Engineering, participated in an International Conference and a Workshop in Seoul, Korea.
- Professor Amita Chatterjee, School of Cognitive Science, presented a paper at the University of Taipei, Taiwan and delivered a lecture in a conference at the University of Salzburg. She has collaborative work with Stephen P. Stich, Rutgers, USA.
- Professor Lopamudra Choudhury, School of Cognitive Science, has collaborative work with the University of Brighton.
- Professor Sudipta De of Mechanical Engineering Department and Mr. Deb A. Mukherjee, Senior Vice-President of the Bengal Chamber of Commerce and Industries, made presentations before an International workshop at the Stavanger University on ‘Energy Transition Opportunities and Challenges in Germany, India and Norway’. They also addressed the Stavanger Chamber of Commerce and Industry on business cooperation between India and Norway.
- Dr. Susmita Ghosh, Computer Science and Engineering Department, delivered invited lectures at University of Stavanger, Norway and Yonsei University, South Korea.
- Professor Ujjwal Moulik, Computer Science and Engineering Department, delivered invited lectures at Istanbul University and Istanbul Technical University.
- Dr. Subhasish Das and Dr. Rajib Das, School of Water Resources Engineering, attended The International Association for Hydro-Environment Engineering and Research (IAHR) World Congress at Kuala Lumpur, Malaysia.
- Professor Papita Das, Department of Chemical Engineering, attended an International Conference at Dubai, UAE.
- Professor Kunal Roy, Department of Pharmaceutical Technology, delivered on invited lecture and chaired a session at a Conference in Hungary and delivered on invited lecture at Dhaka, Bangladesh.
- Dr. Parthasarathy Satvaya, School of Illumination Science, Engineering & Design, attended the 8th Lux Pacifica, 2018 in Tokyo, Japan.
- Dr. Subhadip Basu, Computer Science and Engineering Department, delivered on invited lecture at the Hannover Medical School, Germany.
- Professor Tuhin Ghosh, School of Oceanographic Studies, attended an International Conference at Makuhari, Tokyo, Japan; American Geophysical Union (AGU) Fall meeting at San Francisco, USA; the International Expert Forum on ‘Mainstreaming Resilience and Disaster Risk Reduction in Education’ at AIT-Thailand; the Tenth Global Studies Conference and Global Studies Research Network at National University of Singapore; the General Assembly 2018 of the European Geosciences Union at Vienna, Austria; and the 11th GEOSS Asia-Pacific Symposium in Kyoto, Japan. He also delivered the Keynote Address in the 2nd International Conference on Challenges in Social Science Research (CSSR 2018) at Bangkok, Thailand.
- Prof. Sugata Hazra, School of Oceanographic Studies, visited the University of Edinburgh for the UKIERI DST project meeting on ‘Tidal Energy in Sundarbans’ and attended a discussion on joint research with BUET and the University of Southampton at Dhaka, Bangladesh in February 2018.
- A joint paper by Sudeshna Dasgupta, Smita Sadhu and T. K. Ghoshal on ‘A Modified Active Anti-Disturbance Control for a Nonlinear CSTR Model, ASME Dynamic Systems and Control Conference (DSCC-2018)’ was presented at a seminar organised by the American Society of Mechanical Engineers at Atlanta, Georgia, USA from 30 September to 3 October 2018.

I.VI: Seminars/Workshops in the University

My esteemed colleagues regularly organized seminars and workshops to disseminate their own research and develop interactions with their counterparts both within and outside the country. Since the last Convocation 96 such programmes were held in the University, of which 15 were international, 17 national and 62 local. The Chemical Engineering Department, Physical Education Department, Sociology Department, Mechanical Engineering Department, Mathematics Department, Film Studies Department, Centre for Canadian Studies, Centre for Disability Studies, Library and Information Science Department, English Department, International Relations Department and Education Department were among those which organized such international academic meets. I am also happy to report that due to the initiatives of my colleagues the University has been able to start a two-year M.Sc. course in Geography and a two-year M.Phil. programme in Library and Information Science.

I.VI: Research Publications by the Faculty

The Research findings of our faculty colleagues have been adequately reflected in high quality publications. As per the SCOPUS data the H-Index of science and technology publications of my colleagues is 137. During the period under consideration, my colleagues published 138 books and 2,639 papers published in journals/ seminar or conference proceedings.

I am conscious that my esteemed colleagues have to undertake their academic exercises under the constraints of physical space and financial restrictions. However, the completion of the construction of Technology Bhavan, vertical extension of the 5th & 6th floors of Subarna Jayanti Bhavan, the vertical extension of the 4th floor of Nazrul Bhavan, the vertical extension of 2nd floor of the Life Science & Bio-Technology building and the vertical extension of the Civil Engineering Annex building should address the issue of inadequate space for the Departments. At the same time the RUSA grants, the proposed Rs.100 crore grant from the West Bengal Government and the expected Rs.1,000/- crore grant under the Institute of Eminence Scheme should boost the research activities of my colleagues.

II. HUMAN RESOURCE DEVELOPMENT CENTRE (HRDC)

Under the able guidance of its Director, the UGC sponsored Human Resource Development Centre has been fulfilling its mandate. During the academic session 2017-18, it conducted 18 programmes—0/4 Orientation Programmes, 10 Refresher Courses, 1 Special Winter School and 3 Short Term Courses. On January 20, 2018, the Centre launched its own website, the first of its kind among all the HRDCs in West Bengal. Besides of providing all the necessary information on different programmes organized by the Centre, the website contains a feedback link which can be used by the participants in HRDC courses and other stakeholders to provide their valued suggestions for strengthening the Centre.

III: UNIVERSITY PUBLICATIONS

The University Press (Publication) section has created its own niche in the publication world through its impressive publication record. It has published the following seven titles during 2017-18:

1. Sukanta Chaudhuri, *Chandalika: Prakritir Abhisar*
2. H. Dutt, *Lieut. Suresh Biswas: His Life and Adventures*
3. INCOM 2018: *Proceedings of First International Conference on Mechanical Engineering*
4. Samir Saha, *Samaj, bijnan o Hald one*
5. Rui Zink, *Sesher sedin*
6. E-Learning and Higher Education in India and Italy: Research, Study and Analysis.

7. A new edition of the brochure for Jadavpur University

There are nine more titles in the pipeline which will be published during 2018-19. The unit has a backlist of 31 publications. I express the University's gratitude to the Director of the Press (Publications) division for his dedication.

IV: THE UNIVERSITY LIBRARY

The intellectual quest of the University community is ably nurtured by a Library System comprising the Central Library, Salt Lake Campus Library, Departmental Libraries and the Libraries attached with different Schools and Centres as well as the Centre for Digital Library and Documentation. Recently a braille section has been added to the Main Library which we propose to enrich with the RUSA grant. The collection of the Central Library along with the Departmental Libraries is impressive: about 6,82,683 titles, 82,154 bound volumes of journals, 9792 theses, 8631 dissertations, 3000 standards and 37,000 of non-book materials like reports, pamphlets, maps and micro-forms. Besides, the Salt Lake Campus Library houses about 34,982 books. The University has access to 7292 Online journals through e-Shodh Sindhu (INFLIBNET). Between April 2017 and March 2018 itself, the collections at the Central Library and the Salt Lake Library were enriched by 28143 and 1877 titles respectively. During this period approximately 2062 additional e-books (online in perpetual mode) were also made available to the readers. It also needs to be mentioned that a considerable part of the Library's collection consists of gifts by Srinath Das, Hemchandra Dasgupta, Hemendraprasad Ghosh, Triguna Sen, Gopal Sen, Taraknath Das and Sudhindranath Datta. A new library portal was inaugurated on 20 March 2018, which will facilitate easy browsing of the library's electronic resources, I acknowledge the adroitness with which my library colleagues are constantly upgrading the library service.

Our library staff is also involved with endeavours to improve the teaching-learning process in Library Science. The Library organized the Seventh Internship Programme of Bachelor of Library Science students and First Internship Programme of Master of Library Science students. My librarian colleagues also participated in seminars and workshops. Ms. Shrabani Majumdar and Dr. Swaguna Datta of the University Library presented a paper entitled "Mapping women's voices in India: an analysis" in the 11th International CALIBER 2017 on "Re-envisioning role of libraries: Transforming scholarly communication", organized from 2 to 4 August 2018 by the INFLIBNET Centre, Gujarat, in collaboration with Anna University, Chennai. Ms. Shrabani Majumdar and Dr. Swaguna Datta from the University Library spoke on "Online legal reference sources for women in India" at an international seminar on "Rejuvenating public library services through digital reference sources" organized by the University's Library and Information Science on 22 and 23 February 2018.

V: STUDENT EXCELLENCE

I remain proud of our students. They excel in studies; they shine in extra-curricular and co-curricular activities; they do not hesitate to raise critical questions on happenings outside the campus.

In the 2018 Graduate Aptitude Test in Engineering (GATE) Arnab Adhikary secured the first All India Rank in Electronics & Communication Engineering and Chandrashis Mazumdar won the 9th All India Position in Computer Science & Information Technology. At the same time, the students take advantage of University Clubs and Societies which provide opportunities to remain involved with co-curricular and extra-curricular activities. The Jadavpur University Youth Parliament Team was the Runner-Up at the 2017-2018 National Level Youth Parliament Competition conducted under the auspices of the Ministry of Parliamentary Affairs, Government of India, New Delhi. The University's Debating Society hosted the annual Model United Nations Conference from 29 to 31 March 2018. About 700 delegates, not only from within the country but also from Bangladesh

and Nepal, joined the programme. In the run-up to the event, our Debating Society organised Model United Nations (MUN) workshops in 15 educational institutions like Techno India, Loreto College, Dolna Day School, St. Lawrence High School, Our Lady Queen of the Missions School, Salt Lake, The Heritage School, Ashok Hall, The Future Foundation School and Apeejay School. The event had 8 Committees which debated issues ranging from gender equality to land degradation, from India's annual budgetary allocation for education to intricacies in the functioning of the Security Council. The event was supervised by an illustrious Executive Board comprising the best debaters in the South Asian MUN circuit. Ujan Natic, (U.G.-III, Department of International Relations) was adjudged the Best Speaker at the State-Level Youth Parliament Competition held on 11 and 12 September 2018. He received the Silver Medal in the State Level Inter-University Debate Competition on "Gandhian Philosophy" held at the Raj Bhavan on 2 October 2018. Representing West Bengal at the National Level Youth Parliament Competition in New Delhi on 15 and 16 November 2018, Ujan again became the Best Speaker.

Our students have performed exceedingly well in Sports and Games. Subhankar Pramanick, a UG-II student of the Dept. of International Relations, JU received 'Khel Samman Award' presented by Hon'ble Chief Minister of West Bengal Smt. Mamata Banerjee with Rs.50,000/- cash under Khelashree for his excellent performance in shooting on 24th January 2018 at the Netaji Indoor Stadium. In East Zone Inter-University Badminton (Women) Tournament 2017-18, our team comprising of Sayani Paul of PG-I (Economics), Saheli Paul of PG-II (Philosophy) and Smaranika Singh of UG-II (History) got 3rd position. Our Chess team comprising of Arpan Das of UG-I (Philosophy), Kaustuv Kundu of UG-I (Geological Sciences), Raunak Mondal of UG-I (Geography), Satya Sekhar Mitra of UG-I (Philosophy), Aditya Chowdhury of UG-II (Computer Science & Engineering) and Sayan Mazumdar of UG-II (Chemical Engineering) became Runners Up in East Zone Inter-University Chess (Men) Championship 2017-18 and secured 4th position in All India Inter-Zonal Inter-University Chess (Men) Championship 2017-18. Our team of Somali Sarkar of PG-II (International Relations), Sangita Mistri of PG-I (Economics) and Brototi Nandan of UG-I (Sociology) secured 4th position in East Zone Inter-University Table Tennis (Women) Tournament 2017-18 and reached the quarter final of All India Inter-Zonal Inter-University Table Tennis (Women) Tournament 2017-18. Our team comprising of Shreyaa Brahmachari of PG-I (Chemistry), Shramana Saha of UG-I (English), Sweta Brahmachari of UG-II (International Relations) and Semanti Choudhury of PG-II (Economics) ensured Gold Medal in 2k.m. Fours and Bronze in 500 m. Fours in the All India Inter-University Rowing (Women) Championship 2017-18 and got 7th position in 2k.m. Fours in the World University Rowing (Women) Championship 2018 held at Shanghai, China. They also got Gold medal in Fours in 3rd BRC Inter-College Rowing Championship 2018. Shramana Saha of UG-I (English) got Gold medal and Sweta Brahmachari of UG-II (International Relations) got Silver medal in Indoor Rowing in 3rd BRC Inter-College Rowing Championship 2018. Both Shreyaa Brahmachari of PG-I (Chemistry) and Shramana Saha of UG-I (English) got Gold medals in 2nd Interstate Challengers Sprint National Rowing Championship 2017 and Sweta Brahmachari of UG-II (International Relations) got Bronze medal in 75th Amateur Rowing Association of East (ARAE) FEARA Regatta Madras-2017. Our American football team comprising of Subhodip Chatterje (UG-IV Civil Engineering), Milind Khatiwada (UG-III Civil Engineering), Poritosh Saini (UG-IV Computer Science & Engineering), Anup Lepcha (UG-IV Electrical Engineering), Kunsang Bhutia (UG-III International Relations), Rigsum Tamang (UG-III International Relations), Dudh Kumar Malik (BP.Ed I), Niang Yolmo (UG-III International Relations), Samir Roy (UG-III Civil Engineering) and Amit Manhas (UG-IV Computer Science & Engineering) got 3rd position in All India Inter-University American Football (Flag Version Men) Championship 2017-18. Debangana Ghosh of UG-I (Philosophy) got 1st Position in 56th Senior Artistic Gymnastics National Championship 2018 and represented West Bengal. In RFYS Inter-College Athletics Meet 2017, Ayan Dhara of BP.Ed-I got Silver Medal in Long Jump (Men) and Bronze Medal in Triple Jump (Men); Mousumi Hazra of BP.Ed-I got Silver Medal in Long Jump (Women); Babli Pal of BP.Ed-I got Bronze Medal in High Jump (Women); Debdas Sardar, Sanjay Saren, and Buddhadeb Sarkar of BP. Ed-I and Sougata Patra of BP.Ed-II received

Silver Medal in 4x100m Relay Race (Men); Ashis Bose, Prodip Mondal, Rahul Swarnakar of BP.Ed-I and Bibek Ghosh of BP.Ed-II won Silver Medal in 4x100m Relay Race (Men); Mousumi Hazra, Babli Pal, Krishna Mandal of BP.Ed-I and Lakshmipriya Senapati of BP.Ed-II received Silver Medal in 4x100m Relay Race (Women). Ashish Bose, Suddhadeb Gharui, Rahul Swarnakar of BP.Ed-I and Bibek Ghosh of BP.Ed-II secured 4th position in 4x400m Relay Race (Men) in the RYFS National Athletics Championship 2017. The University Men's Chess Team became the champion in the 2018-19 East Zone Inter-University Chess Men's Championship. Shristi Basu of UG-I (Sociology) won two Silver Medals in the 50m and 100m Breast stroke Swimming (Women) and Rakhi Podder of UG-I (Mathematics) obtained Bronze Medal in 10m High Board Diving (Women) in the All-India Inter-University Aquatics (Women) Championship 2018-2019. Our Men's and Women's Basketball Teams became Runners-Up respectively in West Bengal Inter-University Basketball (Men) Tournament, 2018 hosted by Jadavpur University in collaboration with West Bengal Basketball Tournament and the State Level Inter-College Basketball (Women) Tournament 2018 organized by Marine Engineering and Research Institute. Our Men's Athletic Team secured 3rd place in 4x400m Relay Race (Men) in the RFYS Inter-College State Athletics Meet 2018.

In cultural competitions too our students continue to win laurels. A 27-member contingent of University students participated at the 33rd AIU Inter-University Youth Festival at Guwahati University and Ranchi University respectively for the Zonals and Nationals. Taishi Nandi won the 1st position at Zonal and 2nd position at National in Light Vocal (solo) event. Arnesh Khatua won the 3rd position both in Zonal and National in Western Instrumental (solo) event. Arunabho Banerjee, Anik Dasgupta and Prattay Das won 4th position in Quiz event at the Zonal level.

The University's Mountaineering and Hiking Club (JUMHC) organised an expedition to Mt. CB 13(6264 m) and successfully reached the summit. The Summit members were Joydev Barui, Siddhartha Biswas, Keshavan and Singh, Satyam Kumar, while the Base Camp members were Prashant Choudhary and Manish Das.

The expertise of the members of the Debating Society is attested to by the following record:

1. Calcutta Medical College Extempore - 3rd prize - Prithwiraj Basu
2. Loreto College Ecolore Debate- Best team - Prithwiraj Basu and Akash Choudhury
3. St Xavier's College Exabyte Debate - Best team - Prithwiraj Basu and Akash Choudhury
4. Shyama Prasad College Spardha - Runners-up speaker against - Prithwiraj Basu
5. Indian Statistical Institute Contrapunto Debate 2018 - Best Speaker - Tannistha Sinha
6. Lions Club International Dare to Debate 2018 - Best Team - Reeswav Chatterjee and Tannistha Sinha
7. Great Britain Debate 2017 - Runners-up team - Tannistha Sinha and Ujaan Ganguly
8. State Bank of India Extempore Debate - Best Speaker - Tannistha Sinha
9. Colloquium'17 Parliamentary Debate organized by Heritage Institute of Technology - Winner - Ujaan Ganguly
10. Best Speaker Award at Chemathlon debate 2018 - Ananda Shankar Laha
11. 3rd position at the Declamation Contest organized by Indian Railways for Vigilance Awareness Week in 2017 - Ananda Shankar Laha
12. KIIT International Model United Nation Conference 2017 - Best Delegation
13. BESC Assembly of Nations 2017 - Best Delegation
14. Ravenshaw University Model United Nations Conference 2017 - Best Delegation
15. IGIT Model United Nations 2018 - Best Delegation

The Jadavpur University Photography Club (JUPC) hosted the 2018 Foundry Photojournalism Workshop. It occasioned 12 simultaneous workshops on photography and its nuances conducted by 12 world famous professional photographers from around the world. The participating students came from different parts of the world along with members of JUPC. The highly successful event won rich acclaim from all photography circuits.

I should underline the fact that our students have sustained their search for excellence despite unsatisfactory infrastructure facilities compared to their counterparts in central and private universities. The University now accommodates 1,314 boy students in 9 hostels, while 587 girl students are provided accommodation in 4 hostels. But this provision is inadequate in terms of the rising demand for hostel accommodation. The hostels too require urgent renovations. Internet connection is available in students' hostels and Wi-Fi facility is provided in seminar rooms and departmental and administrative offices. But this resource needs to be strengthened. The campus also requires to be made physically-challenged friendly. I am sure the University should be able to address such infrastructure issues with the Rs. 100 crore RUSA grant, of which Rs. 41 crores have already been released. I may mention that the University has already initiated the process of constructing new student union offices out of its own resources.

The University administration also seeks to safeguard the academic interests of our students by providing them with financial support. During the period under consideration, full free studentships were extended to 751 students and 237 students were provided with half free studentships. Out of 988 total beneficiaries 598 students belong to the SC/ST/OBC/PH/Minority community. Under the Earn While You Learn Scheme around 50 students received financial assistance.

VI: THE ALUMNI SUPPORT

Our alumni have been the institution's best ambassadors and most loyal supporters. I am happy to record the continuing help the University receives from the Alumni Association to ensure the implementation of the principles of equity and justice in respect of the student community. During the academic year 2018-19, the Alumni Association provided financial assistance to the tune of Rs. 48 lakhs to 525 students. A Global Jadavpur University Alumni Foundation is in the process of being registered in the USA to arrange financial assistance to our students going overseas for further studies. The Association is also preparing a plan to network with local industries to help our students in securing employment. The University looks forward to receiving further help and guidance from its alumni and the National Council of Education to safeguard its onward march towards new heights of excellence. In this connection it needs to be mentioned that without the financial support of the Alumni Association, the Alumni Chapters and individual alumnae, it would not have been possible for the University to raise the Rs. one crore application fee for the status of Institution of Eminence. We remain grateful to our ex-students for this support.

VII: THE UNIVERSITY AND INDIA'S PARTICIPATION IN THE INTERNATIONALISATION OF HIGHER EDUCATION

The University has emerged as a crucial participant in India's response to the internalization of higher education. During the period under consideration, the University signed 46 MOUs with national and international Universities/Institutes/Research Organizations for academic collaboration as well as faculty and student exchanges. Of these 10, were international and 33 were national. A delegation from the University of Exeter led by its Vice-Chancellor, visited the University on 14 November and we hope to sustain existing collaborations and develop new areas of cooperation with this leading British university. My colleagues are also engaged with high quality international research collaborations, and I take this opportunity of recording the following instances:

- Professor Subir Kumar Sarkar, Department of Electronics and Telecommunication Engineering is collaborating with Professor Supriyo Bandyopadhyay of Virginia Commonwealth University, USA.
- Professor Iti Saha Misra, Department of Electronics and Telecommunication Engineering, is continuing her collaborative exercises with Professor Ramjee Prasad of Aarhus University, Herning, Denmark.
- Professor Amit Konar, Department of Electronics and Telecommunication Engineering, has collaborated with Professor Atulya K. Nagar of Liverpool Hope University; with Professor Anca L. Ralescu of University of Cincinnati and with Professor Anna Lekova of the Bulgarian Academy of Science. He has been selected as visiting Professor of Liverpool Hope University and has been appointed as the Editor-in-Chief, along with Professor Witold Pedrycz of University of Alberta, Canada of the Springer Opening International Book Series on Cognitive Intelligence and Robotics for the period April 2017 to March 2019.
- Professor A.S. Chowdhury, Department of Electronics and Telecommunication Engineering, is collaborating on research projects with Professor Xiaoyi Jiang of University of Münster, Germany; with Professor Alexandre Falco of University of Campinas, Brazil; with Professor Mohan Kankanhalli of National University of Singapore; and with Professor Michael Wilkinson of University of Groningen, the Netherlands.
- Dr. Amrita Saha, Department of Chemistry, collaborated with Dr. Antonio Frontera of Universitat de les Illes Balears, Spain for research exercises.
- Dr. Partha Roy, Department of Chemistry, has research collaborations with Dr. Corrado Rizzoli of Università degli Studi di Parma, Italy and with Dr. Antonio Frontera of Universitat de les Illes Balears, Spain.
- Professor Samaresh Bhattacharya, Department of Chemistry, has collaborated with Professor Michael G. Richmond of University of North Texas, USA.
- Professor Ranjan Ganguly, Department of Power Engineering, visited the University of Illinois at Chicago for a research collaboration and is acting as Adjunct Associate Professor at the University of Illinois at Chicago.
- Professor Paromita Chakravarti, Department of English, has collaborative research programs with Dr. Edgar Garcia of the University of Chicago and with Dr. Patricia Bloem of Grand Valley State University.
- Professor Chittaranjan Sinha, Department of Chemistry, has developed research collaborations with Professor Elena Lopez-Torres of Universidad Autonoma de Madrid, Spain; with Professor E. Garibba of Università di Sassari, Italy; and with Professor Takasiro Akitsu of Tokyo Institute of Science, Japan.
- Professor Tuhin Ghosh, School of Oceanographic Studies, was invited to act as Lead Author for *Chapter 4: Sea Level Rise and Implications for Low Lying Islands, Coasts and Communities* of the IPCC Special Report on the Ocean and Cryosphere in a Changing Climate.
- Dr. Gupinath Bhandari, Civil Engineering Department, is a member of the collaborative Erasmus Mundus E+ Programme with Technical University of Iasi, Romania.
- Professor Pulok Kumar Mukherjee, Department of Pharmaceutical Technology, has collaborative research projects with the University of Bonn, Germany and University of Free State, South Africa.
- Professor Kunal Roy, Department of Pharmaceutical Technology, has a collaborative research project with the Jackson State University, USA.

- Professor Sadhan K. Ghosh, Centre for Quality Management System, has received Horizon 2020 Research Projects from the European Commission (July 2018 – June 2022).
- Professor Sudipta De of Mechanical Engineering Department acted as the Indian Coordinator of two ongoing projects with the University of Stavanger, Norway–Indo-Norwegian Cooperation Program (between Norway and India) and UTFORSK Program (between Norway and BRICS Countries and Japan). The Bengal Chamber of Commerce and Industry (BCCI) is the Indian Industry Partner of this UTFORSK Program.
- Dr. Sujit Kumar Mondal, School of Media Communication and Culture, was selected by the Tokyo University of Foreign Studies as a Visiting Professor.
- Dr. Subhadip Basu, Computer Science and Engineering Department, has received DAAD Fellowship from Germany, Research award from the UGC and Honorary Research Scientist position from University of Iowa, USA.
- Dr. Debtosh Bhattacharjee, Computer Science and Engineering Department, has a collaborative research project with Universidade de Evora, Portugal.
- The University hosted the prestigious Falling Walls Lab India in April 2018 in cooperation with DAAD and the German House for Research and Innovation.
- The University remains an enthusiastic participant in Erasmus Mundey and Erasmus + Programmes.
- The Centre for the Study of Religion and Society of the University has completed the Global Project on Religion among Young People in collaboration with Professor Peter Nynas, Department of Religious Studies, University of Abo Academy, Finland.
- The Global Change Programme of the University, established to undertake interdisciplinary and comprehensive study of global change and related issues like climate change, has won international recognition and have provided research inputs to the Intergovernmental Panel on Climate Change (IPCC), Millennium Assessment Report (2005), Stern Review Report (2006) and Global Energy Assessment of IIASA (International Institute for Applied Systems Analysis).
- Jadavpur University became the first Indian University among 69 SYLFF (The Ryoichi Sasakawa Young Leaders Fellowship Fund) institutions across 44 countries to earn the SYLFF status and receive an endowment of one million US dollars from the Nippon Foundation. The JU-SYLFF programme provides unique opportunities for students in Social Sciences and Humanities as fellowships are awarded to postgraduate students whose works focus on the broad themes: Tradition, Social Change and Sustainable Development and adopt a Holistic Approach, that is, any issue or problem relevant to contemporary Indian Society. It is one of the highest valued scholarships in India.

VIII: THE UNIVERSITY-INDUSTRY LINKAGE

Our University continues to provide the major stimulus for University-Industry Partnership Programme in West Bengal. Jadavpur University's performance in this realm received due cognizance from the 2018 National Ranking Framework of the Government of India. Our earnings in 2017-2018 through testing and consultancy services to public and private sectors were to the tune of Rs. 21.6 crores, registering a 38.28% rise from the previous year. The Cell could establish tie-ups with about 159 industries/organisations like the Tata Steel, Airport Authority of India, Haldia Dock, Kolkata Port, Simplex, Bajaj Electricals, L & T, Kolkata Municipal Corporation, West Bengal Housing Infrastructure Development Corporation, Kolkata Municipal Development Authority, Calcutta Electricity Supply Corporation, Shapoorji Pallonji, and the Calcutta Zoo. The Regional Centre, National Afforestation & Eco-Development Board of the Ministry of Environment, Forests & Climate Change, Government of India located in the University has been registered as one of the 25 Business Incubators by the Government of India's Ministry of

Small and Micro Enterprises (MSME) to promote innovative ideas and young entrepreneurs and currently 5 such ideas are being implemented. I also compliment my students for initiating the Entrepreneurship Cell in the University. We propose to strengthen the Cell with the help of the fund allotted for this purpose under the RUSA.

Another index to the success of the University-Industry Partnership Programme is the impressive campus recruitment figure. 641 under graduate students of Engineering and Technology faculty, 100 post graduate students from Engineering and Technology faculty, 62 students from Faculty of Arts and 10 students from the Faculty of Science received employments through campus recruitment. The major recruiters were Adobe, Airtel, Amazon, Bajaj Auto, Bennett Coleman Group, Bridge2i, Cairn India, Capgemini, CDOT, CESC, CGI, Daikin, DE Shaw, Deutsche Bank, Fluor Daniel, GE Digital, Goldman Sachs, Haldia Petrochemicals, Hexagon, Honeywell, HPCL, BSBC, Hyundai, Infosys, Ipsos, LnT, Linde, M N Dastur, Maruti, Mentor Graphics, Microsoft, Mu Sigma, PWC, Reve Systems, Reliance, Rockwell Automation, Sales Force, Samsung, Sankalp Semiconductor, SAP Labs, Shell, Siemens, Synopsis, Tata Metaliks, TCS, Texas Instruments, TIL, Tower Research, Vedanta, Wipro, Young Optics, ZS Associates, Cummins, Evalueserve, HSBC, IEM, Maruti Suzuki, Mercedes-Benz R & D, Mondelez India Foods, Philips Lighting, PWC, Qualcomm, Stellar Value Chain Solutions, Techno India University, Vehere, Young Optics. I put on record the University's appreciation of the hard work of the Special Officer and student volunteers of the Placement Cell which has guaranteed the success of campus recruitment.

IX: THE UNIVERSITY AND THE COMMUNITY

Universities, as has been aptly remarked, “do not exist in a vacuum; they are very much a part of the society”. Our University community remains conscious of this university-society symbiotic relationship and seeks to fulfil the institution's obligations to the broader sections of civil society through a variety of activities.

The University's Department of Adult, Continuing Education and Extension conducted sewing and tailoring courses for rural underprivileged women, basic sewing course for street children and short-term courses on Desktop publishing, Database management, Office management, Web designing & publishing and Caregivers course for persons with special needs. Four short videos created by the ‘Youth Community Reporters’ project of the School of Media, Communication and Culture have been widely distributed and exhibited by the UNICEF across West Bengal for awareness generation among children and youth.

The University's unit of the National Service Scheme (NSS) earnestly pursues the Scheme's motto of ‘NOT ME BUT YOU’ by generating a sustainable sensitivity among the student-volunteers towards broader sections of the society, especially the underprivileged and the challenged. The following are the major attainments of the University's NSS unit since the last Convocation:

- Two NSS volunteers—Surajit Sarkar (Department of Physical Education MP.ED-I) and Tinni Mondal (Sociology, UG-I) were selected for Republic day Camp, Red Road, Kolkata from 5 to 27 January, 2018.
- Ranajit Jana (Department of Education, B.ED), Mr. Shyamapada Manna (Sanskrit, PG-I), Subhadra Dutta (Sanskrit, PG-I), participated in the National Youth Festival Camp organized at Goutam Buddha University, Noida, Delhi from 12 to 16 January, 2017.
- NSS Programme Officers from Jadavpur University — Dr. Debdas Mandal (Department of Sanskrit), Dr. Atanu Saha (School of Languages and Linguistics), Dr. Rita Basu (Institute of Business Management) — participated the Training of Trainers Programme on Youth Health at RGNID, Tamil Nadu, from 27 February to 1 March, 2018.
- NSS student volunteers—Ranajit Jana (Department of Education), Nazbul Gazi (Department of Philosophy), Madhabi Mondal (Department of Sanskrit), Shradha Rai (Department of Sociology)

and Samip Sinchuri (Department of Sociology)—received NSS Award from the Government of West Bengal.

- The University's NSS unit organized Pulse Polio Immunization Programme, Check-up Awareness Camps, awareness workshops on science, environment and public health, distributed clothes and education kits to the needy.
- Under Swachh Bharat Abhiyan, science awareness cleaning and beautification programmes were organized in Jadavpur University and colleges and schools in and around Kolkata.
- The NSS unit's Science Talent Search Programme attracted the participation of more than 800 school level students.
- Elocution programme on Patriotism and Nation Building held at Mrinmoyee Madhusudhan Hall, Bidhan Chandra Vidyathi Bhavan, Jadavpur University Main Campus on 3 January 2018, attracted considerable enthusiasm.
- The National Youth Day was celebrated at Gandhi Bhavan, Jadavpur University Main Campus, on 30 January 2018.
- The NSS unit organised blood donation camp along with voluntary organ donation programme was held on 9 February 2018 in Jadavpur University Main Campus. 106 (76 males and 30 females) donated blood.
- Jadavpur University's NSS volunteers joined the University of Burdwan's State Integration Programme on 16 February 2018.
- The University's NSS volunteers visited "Model Village" at Arapanch, Sonarpur, South 24 Parganas, on 10 March, 2018.
- The University's NSS unit held a Value Education workshop at the Civil Engineering Department on 29 March 2018.
- Throughout the year the NSS unit arranged outreach activities to promote social awareness for healthy living among children and the underprivileged.
- Bulletin boards were displayed at the initiative of the NSS unit on following themes like gender sensitivity, World Down Syndrome Day, World Autism Day.
- The units of J.D. Birla Institute and the Institute of Business Management also organized activities in tune with NSS objectives.

The NSS unit deserves to be sincerely applauded for efficiently coordinating these programmes.

X: UNIVERSITY GOVERNANCE

I put on record the dedication, sincerity and diligence of the Pro Vice-Chancellor, the Registrar, the Deans of Faculties, the Joint Registrars, the Finance Officer and his colleagues, the Development Officer, the Dean of Students, the Faculty Secretaries, the Director of Youth Welfare, Director of Physical Instruction, Research Officer, Documentation Officer, University Engineers, Scientific Officer, Publication Officer as well as all sections of employees without which the University would not have been able to create its niche in the academic map of the country and the world. Dr. Snehamanju Basu is our new Registrar and we are sure she will prove herself to be an effective anchor of the university administration. Meanwhile, the term of Dr. A.S. Verma as Pro-Vice-Chancellor ended on 14 December 2018. We appreciate the services he rendered in the realm of University administration.

The University has successfully introduced an in-house e-governance system – Jadavpur University Management System, although much needs to be done to improve our IT system, including the website. To underline the university's commitment to administrative transparency and societal responsibility, I also propose to suggest the introduction of online registration of grievance from civil society and the university's time-bound response. During the period under consideration, we have recruited 81 employees and 02 officers. Due to some unavoidable reasons, the process of fresh recruitment to teaching posts were impeded. But we have now initiated action to fill-up vacancies in faculty positions in a time-bound manner. The completion of a new Technology Bhavan and the construction of additional floors in the existing buildings will hopefully address the issue of space constraints of academic departments.

XI: UNIVERSITY FINANCE

Jadavpur University shares the distress of other state universities of insufficient UGC funding, although our financial situation in the realm of development grants is poised to significantly improve due to RUSA funding and the anticipated support under the scheme of Institution of Eminence. But as of 2017-2018, out of the University's annual receipts of Rs. 241.90 crores, the state government's contribution represented 82.28%, while that of the UGC's a paltry 2.34%. It goes to the credit of the University for being able to generate on its own a sum of Rs.15.76 crores, representing 6.51% of the institution's total receipts for the year 2017-2018. Undoubtedly, the State Government's support has been crucial in enriching the profile of the University. I record the University's gratitude for the state government's assistance, and the University looks forward to receiving the same in future.

I congratulate the Finance Office for organizing the financial resources in the best interests of the University.

Pie Chart Showing Revenue Receipts 2017-18 (Recurring)

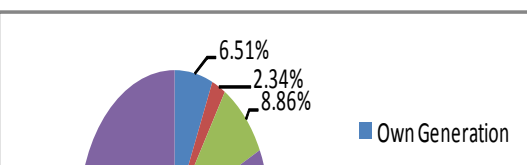
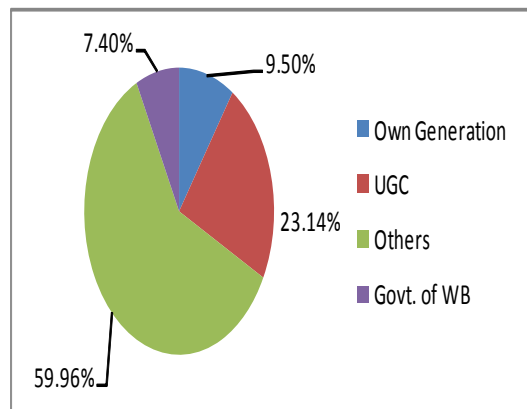
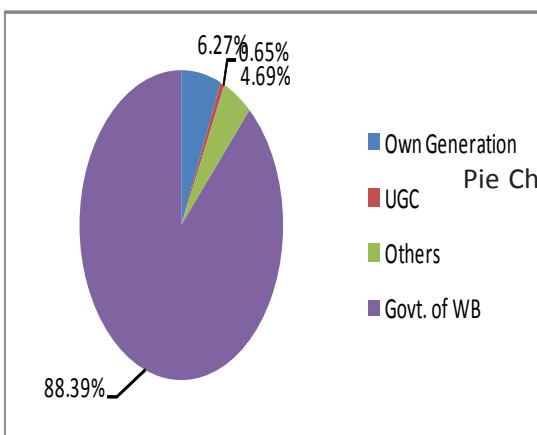
Description	Rs in Crore	Percentage %
Own Generation	14.02	6.27
UGC	1.44	0.65
Others	10.49	4.69
Govt.of WB	197.68	88.39
Total	223.64	100.00

Pie Chart Showing Capital Receipts 2017-18 (Non-Recurring)

Description	Rs in Crore	Percentage %
Own Generation	1.73	9.50
UGC	4.23	23.14
Others	10.95	59.96
Govt.of WB	1.35	7.40
Total	18.26	100.00

Pie Chart Showing Total University Receipts 2017-18

Description	Rs in Crore	Percentage %
Own Generation	15.76	6.51
UGC	5.67	2.34
Others	21.44	8.86
Govt.of WB	199.03	82.28
Total	241.90	100.00



XII. THE UNIVERSITY AND THE CHALLENGES OF INDIA'S HIGHER EDUCATION.

India's higher education system- the second largest in the world with 864 universities, 40,000 colleges, 11,669 stand-alone institutions, about 36 million students and 1.4 million faculty members— has witnessed in recent years a paradigmatic shift from a preeminently state subsidized and regulated structure to a system increasingly driven by market considerations and neo-liberal values. This has raised serious concerns, some of which I take this opportunity to share with you. For instance, there has been a significant entry of the private sector into the higher education scenario, so much so that today at least 60% of students are aspiring for higher education within the ambit of private institutions. But has this significant growth of the private sector in our higher education been in tune with the principles of equity and access? Certainly, some of the private institutions are emerging as world class institutions. But are they accessible to broader sections of society? Again, the current pace of university reform seems to be determined by the race for ranking, and it is indeed a matter of pride that our University has been successful in this context. But commentators fear that this process, which makes each institution compete with its counterparts on 'similar standards', runs the risk of creating "institutional homogeneity", thus impeding the elements of diversity and creativity which make university life challenging and exciting. Are we thus sure that the reforms now being discussed to introduce systemic changes in university curricula and governance pattern will ensure that the university remains, what the sociologist Altilo Boron described as : "the centre of critical thought the centre for tolerance of the ideas being discussed, of dialogue, of debate". Of course, universities should be sites for nourishing free thought and dissent. Tagore himself advised students:

নিজে চিন্তা করিবে, নিজে সম্মান করিবে, নিজে কাজ করিবে।

But surely dissent needs to be expressed in a democratic spirit, without vitiating a healthy culture of protest and violating the democratic rights of others.

Hon'ble Chancellor, Sir, the time has thus come when we need to raise a fundamental question: is higher education meant to merely produce 'employable' students or to create inclusive and critical citizens, capable of raising such issues relating to our nation-building process as: (a) How do we balance the demands of economic growth and environmental security? (b) How do we link the developments in Indian science and technology with distributive justice, to avoid such distortions as our country being one of the top manufacturers and exporters of vaccines in the world, but with only 62% of her children aged 12 to 23 months having received in 2015-16 the eight basic vaccines; especially when that ratio for Sri Lanka is more than 78%, for Nepal 78%, for Bangladesh more than 84% and for the Maldives 93% (Ali Mehdi, 'Human Capital is the Key', *Times of India*, Kolkata, 16/10/18)? (c) How do we guarantee that the Information Technology Revolution that is being promoted will not cause cubicalization of knowledge or create a new digital divide in our society? (d) How can India deal with a situation where job creation has not kept pace with the growth of the GDP? (e) How do we make the Gross Enrolment Ratio in higher education reach at least the world average of 32% and address the distortions of class, caste, gender and religion within our education system? How do we address the remarkable regional disparities in the spread of higher education in our country, as evident from the Gross Enrolment Ratio varying from 56% in Chandigarh to 47% in Tamil Nadu and 14% in Bihar? (f) How do we guarantee that the proposed reforms in higher education remain in tune with the federal principle of our body polity and do not endanger the pluralistic nature of our society? (g) How do we remove the dichotomies between the central and state universities? (h) Why is it that after seven decades of independence not even 1% of our GDP is spent on higher education, and, according to a recent study of the National Science and Technology Management Information System, only 0.69% of the country's GDP is utilized for Research, Development, when the ratio for South Korea is 4.29%,

for Israel 4.10%, for Japan 3.58%, for the USA 2.73%, for China 2.05%, for Brazil 1.24%, for Russia 1.19% and for South Africa 0.73%? (i) Why have we not been able to attain significant breakthroughs in agricultural sciences, although agriculture continues to provide livelihoods to the majority of our population? (j) Why have we failed to attract any sizeable donation from captains of Indian industry to institutions of higher learning in their country while they have given more than US\$ 1.2 billion to American universities? (k) How do we address the dicotomy of, what a recent OXFAM survey indicates, 1% of the richest in our country cornering 73% of the nation's wealth?

To enable its students and community to deliberate on such issues, the universities in India need to promote education, in the words of Noam Chomsky, "as enlightenment" and not "as indoctrination", where there is no disjunction between the pursuit of science and technology and that of humanities and social sciences, where Massive Online Open Courseware does not become an alternative to, but remains complementary to, face-to-face interaction between the teachers and the taught, where massification of higher education does not entail any compromise with quality, where industry-institute partnerships are driven by 'social entrepreneurship' that aims to use entrepreneurial principles and processes for the solution of pressing social problems, where the teaching-learning processes is mediated by empathy, compassion and training in critical enquiry. We need to impart an education which, according to Gurudev Rabindranath Tagore "does not merely give us information but makes our life in harmony with all existence", one which for Mahatma Gandhi would correspond to the surrounding circumstances and ensure "a proper and harmonious combination of body, heart and soul", which for Vivekananda would not mean "filling the mind with a lot of facts ... (but be an) instrument ... (of) getting complete mastery of ... own mind", the "perfection in man", which for Sarvepalli Radhakrishnan would cause "initiation into a higher life, initiation into a world which transcends the world of Space and Time". I am here also reminded of what Jawaharlal Nehru said in his Maulana Azad Memorial Lecture of February 1959:

In the tumult and confusion of our time, we stand facing both ways, forward to the future and backwards to the past, being pulled in both directions. How can we resolve this conflict and evolve a structure for living which fulfils our material needs and, at the same time, sustains our mind and spirit? What new ideals or old ideals varied and adapted to the new world can we place before our people, and how can we galvanize the people into wakefulness and action?

I am confident that Jadavpur University, drawing upon its rich nationalist and democratic legacy, will be able to address such critical issues of nation-building, fulfilling the faith that Gurudev Tagore had reposed in the students of the Bengal National College and School, the precursor of the present Jadavpur University:

তাই আজ আমি ছাত্রদিগকে অনুরোধ করিতেছি, এই বিদ্যালয়ের প্রাণকে অনুভব করো, সমস্ত বাঙালি জাতির প্রাণের সঙ্গে এই বিদ্যালয়ের যে প্রাণের যোগ হইয়াছে তাহা নিজের অন্তঃকরণের মধ্যে উপলব্ধি করো, ইহাকে কোনোদিন একটা ইস্কুলমাত্র বলিয়া ভ্রম করিয়ো না। তোমাদের উপরে এই একটি মহৎ দায়িত্ব রহিল। স্বদেশের একটি পরম ধনের রক্ষণভার আজ তোমাদের উপরে যতটা পরিমাণে ন্যস্ত হইল, তোমাদিগকে একান্ত ভক্তির সহিত, নম্রতার সহিত তাহা বুঝিয়া লইতে হইবে।

Sri Aurobindo, who was directly associated with the process that culminated in the establishment of this institution, had aptly envisaged:

But few are those who tread the sunlit path;
Only pure in soul can walk in light.

Surely, our University community eminently qualifies to be at the forefront of the journey that can make India a better place to live in.

It is particularly comforting for me to find that as my present term comes to an end, our University, strengthened by its recent national and international recognitions for excellence, is poised, in the words of a distinguished colleague of mine, to build "bridges to the future". Hon'ble Chancellor Sir, colleagues and students, as I look back from the vantage point of the remaining few months

of my term of office, I feel that, although I did my best to serve the cause of the University, I might not have been always successful, nor did I perhaps satisfy all sections of the University community. But I draw solace from a pertinent remark of J.K. Rowling:

It is impossible to live without failing at something, unless you live so cautiously that you might as well not have lived at all—in which case, you fail by default.

I wish the future administration of the University every success and look forward to the University attaining new heights of excellence. It is, however, a matter of deep regret that sections of the media often tend to undermine the extraordinary attainments of our University and highlight momentary tensions within the University community.

Hon'ble Chancellor Sir, let me once again warmly and heartily congratulate, on my own behalf and on behalf of the University, my dear students who will be receiving today their hard-earned and well-deserved degrees. My dear students, “graduation is not the end; it's the beginning”, since you will now be treading hitherto untrodden paths. But I am certain that, fortified with the knowledge and training you have received from this premier institution, you will be able to confront the manifold challenges you will face as you enter the societal mainstream, remembering the advice of Albert Einstein:

Imagination is more important than knowledge. Imagination is the language of the soul. Pay attention to your imagination and you will discover all you need to be fulfilled.

I am sure our students, wherever they remain and whichever profession they join, will uphold the cause of their University and repay their debt to society, recalling the advice of the Father of the Nation:

Carefully watch your thoughts, for they become your words. Manage and watch your words, for they will become your actions. Consider and judge your actions, for they have become your habits. Acknowledge and watch your habits, for they shall become your values. Understand and embrace your values, for they become your destiny.

Thank you all. I wish you a very happy and peaceful 2019.

24 December 2018

Suranjan Das.
Vice-Chancellor



SECTION A
[As on 31.03.2019]

ADMINISTRATIVE PROFILE

GENERAL INFORMATION OF JADAVPUR UNIVERSITY

Jadavpur University has a long and distinguished heritage. The years 1905-06 are memorable in the history of Bengal and indeed in that of India. The attempt by the Government to partition Bengal led to a countrywide agitation and an intense nationalist movement which, though political at the outset, had important economic and cultural implications. The economic aspect of the movement found expression in the production and use of *swadeshi* goods. The cultural impact was felt in the regeneration of Indian art and music, but most of all in a reaction against the prevalent system of education and the devising of an alternative planned entirely on national lines and directed towards serving the national interest.

It was in this way that the National Council of Education, Bengal, was started in 1906 'to impart education—literary and scientific as well as technical and professional—on national lines and exclusively under national control, not in opposition to, but standing apart from the existing system of primary, secondary and collegiate education, attaching special importance to a knowledge of the country, its literature, history and philosophy, and designed to incorporate the best oriental ideals of life and thought, the best assimilable ideals of the West and inspire students with the genuine love for and desire to serve the country.'

The foundation of the National Council of Education, Bengal, was made possible by the munificence of three generous donors, Raja Subodh Chandra Vasu Mallik, Brojendra Kishore Roy Chowdhury of Gouripur and Maharaja Surya Kanta Acharyya Chowdhury Bahadur of Mymensingh. The first President of the National Council of Education was Sir Rash Behari Ghose, and in its early days, nearly all notable figures of the time were associated with it – some of whom, such as Rabindranath Tagore and Aurobindo Ghosh, later won international recognition.

In 1906, the year of the foundation of the National Council of Education, Bengal, another association was set up known as the Society for the Promotion of Technical Education in Bengal, also under the presidentship of Sir Rash Behari Ghose, with the aim of imparting scientific and technical education to the people of India to further industrial progress. Under the auspices of this Society, the Bengal Technical Institution (later known as the College of Engineering and Technology, Bengal) was started, financed mainly by Sir Taraknath Palit. In 1910, the Society for the Promotion of Technical Education in Bengal was amalgamated with the National Council of Education, Bengal.

The National Council of Education, Bengal, started with courses in Arts, Science and Technology courses, but finding the public demand for the latter more insistent, the Council came to devote almost all its resources to technical education through its College of Engineering and Technology.

In 1921, the Council had the good fortune to receive a donation of about 13 lakhs of rupees under the will of Sir Rash Behari Ghose. This bequest enabled the Council in 1924 to construct a number of buildings and workshops on its present site at Jadavpur. Besides the donations and endowments of the founders mentioned above, the Council also received a sum of about 10 lakh rupees as donations from various other persons. The present site itself is a gift of the Corporation of Calcutta, which leased out 64 acres of land to the Council at a nominal rent.

At the time of Independence in 1947, the College of Engineering and Technology, Bengal, was virtually functioning as a university. In view of this fact, and in order that the degree of the National Council of Education, Bengal, might receive statutory recognition, the Government of West Bengal with the concurrence of the Government of India enacted the necessary legislation for the establishment of a University at Jadavpur under the name of JADAVPUR UNIVERSITY, which started life on 24 December 1955.

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A new Jadavpur University Act was passed in 1981. It aimed ‘to reconstitute the Jadavpur University to enable it to function more efficiently as a University encouraging and providing for instruction, teaching, training and research in various branches of learning and courses of study, promoting advancement and dissemination of knowledge and learning, and extending higher education to meet the growing needs of society and to make the constitution of various authorities or bodies of the University more democratic, consistent with the objectives of the National Council of Education, Bengal and the Dawn Society.’

FOUNDERS

We recall with pride and gratitude the names of the great men who conceived of, established and nurtured the National Council of Education, Bengal, the precursor to the University.

- Tarak Nath Palit (1831-1914)
- Sir Gooroodas Banerji (1844-1918)
- Sir Rash Behari Ghose (1845-1921)
- Basanta Kumar Basu (1850-1935)
- Surya Kanta Acharyya Chowdhury (1851-1908)
- Gopal Chandra Sinha (1852-1926)
- Haradayal Nag (1853-1942)
- Byomkesh Chakravarti (1855-1929)
- Promatho Nath Bose (1855-1935)
- Sir Ashutosh Chaudhury (1860-1924)
- Acharya Prafulla Chandra Roy (1861-1944)
- Acharya Satish Chandra Mukhopadhyay (1865-1948)
- Satyananda Basu (1866-1948)
- Hirendranath Dutta (1868-1942)
- Sakharam Ganesh Deuskar (1869-1912)
- Aurobindo Ghosh (1872-1950)
- Abdul Rasul (1872-1917)
- Brojendra Kishore Roy Chowdhury (1874-1957)
- Raja Subodh Chandra Vasu Mallik (1879-1920)
- Bidhan Chandra Roy (1882-1962)
- Benoy Kumar Sarkar (1887-1949)

CHANCELLORS/PRESIDENTS

- Bidhan Chandra Roy (24.12.1955-1.7.1962)
- Triguna Sen (2.7.1962-24.10.1962)
- Satish Chandra Bhattacharyya (4.6.1967-24.12.1967)
- Arun Kumar Mukherjee (25.12.1967-6.12.1969)
- Triguna Sen (7.12.1969-25.4.1970)
- Sudhir Chandra Chakraborty (10.4.1971-20.12.1971)

STATE GOVERNORS AS CHANCELLORS (EX-OFFICIO)

- Anthony Lancelot Dias (21.12.1971-5.11.1977)
- Sankar Prasad Mitra (10.9.1974-5.10.1974);
[officiated during absence on leave of Anthony Lancelot Dias]
- Tribhuban Narayan Singh (6.11.1977-11.9.1981)
- Bhairab Dutta Pande (12.9.1981-9.10.1983)

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- Anant Prasad Sharma (10.10.1983-15.8.1984)
- Satish Chandra (Officiating, 16.8.1984-30.9.1984)
- Uma Sankar Dikshit (1.10.1984-12.8.1986)
- Saiyid Nurul Hasan (12.8.1986-1.3.1989)
- T. V. Rajeswar (3.3.1989-6.2.1990)
- Saiyid Nurul Hasan (7.2.1990-13.7.1993)
- K. V. Raghunath Reddy (14.7.1993-23.2.1998)
- A. R. Kidwai (24.2.1998-18.5.1999)
- Shyamal Kumar Sen (Officiating, 22.5.1999-3.12.1999)
- Viren J. Shah (4.12.1999-13.12.2004)
- Gopal Krishna Gandhi (14.12.2004-14.12.2009)
- Devanand Konwar (Officiating, 14.12.2009-24.01.2010)
- M. K. Narayanan (24.01.2010-30.06.2014)
- D.Y. Patil (03.07.2014-17.07.2014)
- Keshari Nath Tripathi (24.07.2014-29.07.2019)
- Jagdeep Dhankar (30.07.2019-Continuing)

VICE CHANCELLORS

- Triguna Sen (24.12.1955-31.7.1966, Rector/Vice Chancellor)
- Hem Chandra Guha (1.8.1966-31.7.1970)
- Gopal Chandra Sen (Officiating, 1.8.1970-30.12.1970)
- Anil Kumar Majumdar (1.1.1971-15.8.1971)
- Arabinda Nath Basu (16.8.1971-20.11.1979)
- Manindra Mohan Chakrabarty (21.11.1979-31.8.1985)
- Santosh Kumar Sarkar (1.9.1985-28.2.1986)
- Sankar Kumar Sen (1.3.1986-12.4.1991)
- Ajit Kumar Pal (Officiating, 13.4.1991-5.8.1991)
- Pratip Kumar Mukherjee (6.8.1991-31.12.1993)
- Subodh Chandra Som (31.12.1993-29.6.1998)
- Ashok Nath Basu (29.6.1998-29.06.2006)
- Shyamal Kanti Sanyal (30.06.06-14.10.2007)
- Pradip Narayan Ghosh (15.10.07-14.04.2012)
- Abhijit Chakrabarti (15.04.2012-31.07.2012)
- Souvik Bhattacharyya (1.08.2012-27.10.2013)
- Abhijit Chakrabarti (28.10.2013 : for 6 months
(28.04.2014 : for 6 months
(10.10.2014 - 18.01.2015)
- Ashish S. Verma (Officiating, 19.01.2015 - 15.07.2015)
- Suranjan Das (16.07.2015 - Continuing)

REGISTRARS

- P. C. V. Mallik (1955-30.6.73)
- A. K. Gupta (1.7.73-1.6.88)
- B. Banerjea (26.8.88-31.10.97)
- R. Bandyopadhyay (27.12.97-31.08.2008)
- S. C. Chakraborty (Officiating, 1.09.2008-19.01.2009)
- P. K. Ghosh (20.01.2009-31.08.2017)
- P. P. Lahiri (Officiating, w.e.f. 01.09.2017 - for 6 months)
- Professor Chiranjib Bhattacharjee (Acting, w.e.f. 05.03.2018 for 6 months & w.e.f. 19.09.2018)
- Dr. Pradip Kr. Ghosh (Acting, w.e.f. 05.09.2018)
- Dr. Snehamanju Basu (w.e.f. 05.11.2018)

THE CAMPUS

The University stands on 60 acres of land on 188 Raja Subodh Chandra Mallik Road at Jadavpur in South Kolkata (apart from its new 7.6 acre adjacent new campus). It is 8 km by rail from Sealdah Station, 15 km by road from Howrah Station, 25 km by road from Netaji Subhas Chandra Bose International Airport, and 3 km by road from the Metro Railway Terminus at Tollygunge. The campus is close to Jadavpur Railway Station, and is approachable by public transport from all parts of Kolkata.

Various other research and academic institutions have grown up around the University, creating a belt of scientific and academic activity. Among these centres are the Indian Institute of Chemical Biology, the Central Glass and Ceramic Research Institute (both CSIR laboratories), the Indian Association for the Cultivation of Science, the academic complex of the National Council of Education, Bengal, the Regional Institute of Printing Technology, the Acharya P. C. Ray Polytechnic, and other organizations of repute. The campus itself houses the Department of Electronics Accredited Computer Courses (DOEACC) Centre and the headquarters of the Indian Institute of Chemical Engineers.

SECOND CAMPUS

The rapid growth of the University created a demand for more space. The Government of West Bengal granted the University 21.3 acres of land at Block IB, Plot No.8, Bidhan Nagar (Salt Lake City), Kolkata 700 098, 13 km away from the main campus at Jadavpur. Here, the University plans to promote an area of 5 lakh sq ft in the form of a building complex to accommodate various departments, as well as an administrative office, seminar halls, staff quarters etc. A library, hostel and computer centre have already come up at the site. At present, the following departments function from the second campus: Construction Engineering, Information Technology, Instrumentation Engineering, Power Engineering and Printing Engineering. The campus has a well-equipped gymnasium and a cricket ground that hosts state-level tournaments. The Eastern Regional Office of the UGC and the Inter-University Consortium for Atomic Energy are also located on this campus.

WEST ANNEX CAMPUS

National Instruments Limited (NIL) was a Central Public Sector Enterprise under the Ministry of Heavy Industries and Public Enterprises, Govt. of India. NIL was engaged in the field of sophisticated Optical, Opto-Mechanical and Opto-Electronics Instruments manufacturing and maintenance and in the year 1992 it was referred to BIFR (Board of Industrial and Financial Reconstruction) under section 15(1) of the Sick Industrial Companies Act, 1985 as a sick industry.

The Jadavpur University and the University of Calcutta expressed interest in taking over the assets, liabilities and manpower of NIL for further expansion of their academic activities. Government of West Bengal decided in favour of Jadavpur University in view of close proximity of its main campus to NIL.

A meeting of all the stakeholders of the company, the representatives of the Govt. of India, Govt. of West Bengal, Regional Provident Fund Commissioner, Jadavpur University and workers/officers Union/ Association was held on 24.06.2005 to consider the proposal of taking over assets, liabilities and manpower of NIL.

BIFR, based on the draft scheme submitted by the operating agent, the State Bank of India, and an affidavit submitted by the Jadavpur University, prepared a scheme for revival of the sick company, the NIL, which included transfer of assets and liabilities of NIL along with transfer of existing employees with effect from 01.04.2007 in favour of Jadavpur University for utilization of the company's infrastructure for R&D purpose of the JU and the Board approved the said scheme on 04.08.2008.

Accordingly, NIL was transferred to Jadavpur University by an agreement made between NIL and the JU on the basis of the direction of BIFR, G.O.I and Govt. of West Bengal on and from 01.01.2009.

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The erstwhile NIL campus is now the third campus of the JU and is known as West Annex Campus of the University.

Jadavpur University with its strong research culture and experienced faculty has been associated with DRDO since 1970s. Notable contributions are in Control, Guidance, Fault Tolerance of Missile Systems and Information Security. A Multi-Institute Collaborative Directed Basic Research facility will be created as “Jagadish Chandra Bose Centre for Advanced Technology : A DRDO-JU Initiative” (JCBCAT) with generous funding from DRDO. This joint venture is envisioned to emerge as a centre of excellence in conducting scientific and applied research in directed areas of advanced technology for defence. The Centre will be located in part of the West Annex Campus (erstwhile National Instruments Ltd. Campus) of the University. The JCBCAT will involve all the universities, IITs and NITs and research institutes of the region as well as ISI and IISER as participating institutions.

The University has many plans for expansion in the new campus. For example, setting up a Business Incubator, an Institute of Management Studies, Tagore Research Centre etc. Classes of few of the new courses are already going on in the campus and few other new plans are still in the pipeline.

JURISDICTION

The local limits of jurisdiction of the University extend to a radius of three and a half kilometres from the place where the University has its administrative nucleus.

Further, statutory provisions have been made so that any college or institution situated beyond the statutory area may also apply to the University for affiliation or recognition of any course or courses of study leading to a degree, diploma or certificate. The University may, subject to such conditions and restrictions as it may, with the approval of the State Government, think fit to impose, affiliate to itself, or recognize the course or courses of study conducted by, such college or institution, and admit the latter to all privileges of the University.

The colleges and institutions currently affiliated to the University are: Institute of Business Management under the control of National Council of Education, Bengal, and J.D. Birla Institute of Home Science, Kolkata. Further, the following institutions have been recognized as those at which research may be conducted leading to the Ph.D. degree of the University: Saha Institute of Nuclear Physics; School of Tropical Medicine, Kolkata; VECC (Bhabha Atomic Research Centre), Kolkata; Indian Association for Cultivation of Science, Kolkata; Indian Institute of Chemical Biology; Central Glass and Ceramic Research Institute; Bose Institute; Indian Statistical Institute, Kolkata; Jute Technological Research Laboratory; Chittaranjan National Cancer Research Centre; S.N. Bose National Centre for Basic Sciences; All India Institute of Hygiene and Public Health.

EMBLEM

The University adopted for its seal and emblem a design of three lamps encircled in lotus petals, executed under the direction of Nandalal Bose (1883-1966). The lamp represents knowledge, while the three flames are emblematic of intellectual training, integration of emotion, and imagination and spiritual development. The petals in the periphery represent philosophy, the fine arts and culture.

FEATURES

Jadavpur University is primarily a unitary teaching and research university, grouped into the three facilities of Arts, Science, and Engineering and Technology. It also has statutory authority to affiliate other institutions. All authority is vested in one body, the Court of the University which has four main advisory Councils: the Executive Council and the three Faculty Councils for Postgraduate and Undergraduate Studies. Advisory Committees under the authority of the Court include the Boards of Studies, the Finance Committee, the Working Committee, the Planning and Development Committee, and such other authorities as may be established under the statutes.

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The Court functions on broad-based democratic principles and norms. It comprises representatives of University teachers, officers, non-teaching staff, students, research scholars, registered graduates and affiliated colleges. It also has one member each from the registered trade unions, primary school teachers' association and secondary school teachers' association within the territorial jurisdiction of the University. Besides these, the Court has ex-officio members from the senior ranks of Central and State Government bodies and institutions; three representatives of donors; and four elected members from the National Council of Education, Bengal, in addition to the President of the Council.

The University has three Faculties: Arts, Science, and Engineering and Technology with 35 departments under them: 12 in Arts, 17 in Engineering and Technology, and 6 in Science. Some of these departments have contributed to the development of new disciplines in the country, such as Chemical Engineering, Comparative Literature, International Relations, Film Studies and Production Engineering. The University has also evolved an interdisciplinary and interfaculty system of Schools devoted primarily to research but in some instances offering taught courses; as well as a number of Centres for research, primarily within a given discipline but branching outwards towards interdisciplinary work.

In 2001, the University Grants Commission declared Jadavpur University as one of five leading 'universities with potential for excellence'. An exceptional number of departments have been identified by the UGC as Departments of Special Assistance and Centres of Advanced Studies, or for its COSIST programme. Recently, the Department of Science and Technology, Government of India, has identified a number of departments for its FIST programme. Besides, a number of projects are granted every year by the CSIR, the MHRD, the DST, the DBT, the DOD, the ICMR, the ICSSR and other funding agencies. An index of such research activities is the increasing participation by teachers of the University in national and international conferences, not to mention the increasing number of conferences hosted every year at Jadavpur.

These awards and honours are at least in part the result of some notable features of the internal organization of the University:

- (i) a close relationship between teacher and taught, with a joint Student-Teacher Committee in each department;
- (ii) close links with ex-students;
- (iii) lively extra-curricular activities;
- (iv) a tutorial system.

This unitary University is in spirit and intention, though not in actual fact, a residential institution, and as such lays emphasis on the development of corporate life among the students. Students are expected to participate in co-curricular activities to realize their potentials, enrich their personality, and further the ends of corporate life.

What we want here is not merely to give you a little information, not merely to open to you careers for earning a livelihood, but to build up sons for the motherland to work and to suffer for her. That is why we started this College and that is the work to which I want you to devote yourselves in future. What has been insufficiently and imperfectly begun by us, it is for you to complete and lead to perfection.

[From the speech by Aurobindo Ghosh delivered on 22 August, 1907 before the students and teachers of Bengal National College.]

VISION AND MISSION

VISION

The National Council of Education, Bengal, was established in 1906 in the wake of the nationalist movement. It was led by intellectuals, statesmen and the middle-class intelligentsia, and its aim was to cultivate the best of global learning and technology in order to build a self-reliant industrial base for India. Bengal Technical Institute was among the educational institutions founded by NCE, Bengal. Its mission was to impart training to Indian students in the appropriate technology so that the country could produce indigenous consumable materials. This Institute, later renamed College of Engineering and Technology, was in turn converted to Jadavpur University in 1955. The founders believed that the Technology Faculty could not sustain itself without active Faculties of the Basic Sciences and the Humanities. While playing a vital role in technical education in the country, the University may be said to rest on three pillars - Technology, Science and Arts. Jadavpur University is at present an internationally recognised premier university of the country. It is an urban university with a global perspective and is dedicated to creating leaders who will fashion a more humane and just world. Following in the footsteps of its predecessor, the University not only engages itself in teaching and research of international quality, but also provides societal services for the benefit of rural and urban populations. The programmes are directed towards achieving excellence in education and extending the benefits of improved technology to the society as a whole. The faculty members are encouraged to add value to the courses so that students can secure employment or attempt entrepreneurship. Extension programmes and several other courses provide opportunities for the drop-outs at different levels to continue their education. The objective is that they should be able to earn a living and derive the impersonal pleasure of learning at the same time. The University also contributes in evolving modes of digital distance education as part of the National Mission on Education.

MISSION

- The University wishes to grow further as a diverse and socially responsible learning community, providing a high quality of scholarship and equal opportunity for all. The University's core values include a commitment to:
- The highest standards of excellence in teaching, research, creative expression and service to the community;
- Advanced learning as a humanising social practice rather than as a competitive exercise;
- Regarding the production and dissemination of knowledge as inseparable goals;
- Upholding the principle that the culture of reason and learning is indivisible from a concern for the world beyond the campus;
- Maintaining principles of democratic governance and intellectual and institutional freedom;
- Abiding by principles that do not discriminate on the basis of religion, race, caste, gender and economic status.

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COURSES OFFERED

A. FACULTY OF ARTS

- 1 M.Philosophy in Library & Information Science
- 1 Master of Philosophy in Bengali
- 2 Master of Philosophy in Comparative Literature
- 3 Master of Philosophy in Economics
- 4 Master of Philosophy in English
- 5 Master of Philosophy in History
- 6 Master of Philosophy in International Relations
- 7 Master of Philosophy in Sanskrit
- 8 Master of Philosophy in Sociology
- 9 Master of Philosophy in Education
- 10 Master of Philosophy in Philosophy

- 1 Master of Arts in Bengali
- 2 Master of Arts in Comparative Literature
- 3 Master of Arts in Economics
- 4 Master of Arts in English
- 5 Master of Arts in Film Studies
- 6 Master of Arts in History
- 7 Master of Arts in Political Science with International Relations
- 8 Master of Arts in Philosophy
- 9 Master of Arts in Sanskrit
- 10 Master of Arts in Sociology
- 11 Master of Arts in Education
- 12 Master of Library & Information Science
- 13 Master of Library & Information Science (Digital Library)
- 14 Master of Physical Education
- 15 Master of Arts in Linguistics

- 1 Bachelor of Arts in Bengali
- 2 Bachelor of Arts in Comparative Literature
- 3 Bachelor of Arts in Economics
- 4 Bachelor of Arts in English
- 5 Bachelor of Arts in History

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- 6 Bachelor of Arts in Philosophy
- 7 Bachelor of Arts in Political Science
- 8 Bachelor of Arts in Sanskrit
- 9 Bachelor of Library & Information Science
- 10 Bachelor of Physical Education
- 11 Bachelor of Commerce (J.D. Birla Institute)
- 12 Bachelor of Education
- 13 Bachelor of Arts in Sociology

OTHER COURSES (OFFERED BY THE DEPARTMENTS/CENTRES/SCHOOLS)

- 1 Department of International Relations : One year Diploma Course in Human Rights and Duties Education
- 2 Department of Sociology :
 - a) First degree-level course in Applied Sociology,
 - b) PG Diploma course in Society, Religion and Social Work.
- 3 Bhasacharya Suniti Kumar Chatterji Centre for Language Studies : One year certificate course on Voice Training and Speech Production.
- 4 Centre for Counselling Services and Studies in Self- Development :
 - a) UGC - Sponsored 3 year Career Oriented Certificate course on Stress Management,
 - b) 2 year PG Diploma course in Counselling and Stress Management
- 5 Centre for Translation of Indian Literatures (CENTIL) :
 - a) One year Certificate course in Translation as a Skill.
- 6 Centre for Yoga :
 - a) Post-graduate Diploma in Yoga
- 7 School of Languages and Linguistics :
PG-Diploma course on Introduction to Linguistics
- 8 ICPR Centre for Buddhist Studies
Certificate course in Buddhist Studies recommended by ICPR

B. FACULTY OF ENGG. & TECH.

Post-Graduate Courses

1. Master of Architecture
2. Master of Chemical Engineering
3. Master of Bioprocess Engineering
4. Master of Civil Engineering
5. Master of Computer Science & Engineering
6. Master of Electrical Engineering

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7. Master of Illumination Engineering
8. Master of Control System Engineering
9. Master of Electronics & Tele-Communication Engineering
10. Master of Food Technology & Biochemical Engineering
11. Master of Software Engineering
12. Master of Instrumentation & Electronics Engineering
13. Master of Mechanical Engineering
14. Master of Automobile Engineering
15. Master of Metallurgical Engineering
16. Master of Material Engineering
17. Master of Pharmacy
18. Master of Clinical Pharmacy & Pharmacy Practice
19. Master of Production Engineering
20. Master of Power Engineering
21. Master of Printing Engineering & Graphic Communication
22. Master of Computer Technology
23. Master of VLSI Design & Microelectronics Technology
24. Master of Intelligent Automation & Robotics
25. Master of Construction Engineering

Under-Graduate Courses

1. Bachelor of Architecture
2. Bachelor of Chemical Engineering
3. Bachelor of Civil Engineering
4. Bachelor of Construction Engineering
5. Bachelor of Electrical Engineering
6. Bachelor of Electronics & Tele-Communication Engineering
7. Bachelor of Food Technology & Biochemical Engineering
8. Bachelor of Information Technology
9. Bachelor of Instrumentation & Electronics Engineering
10. Bachelor of Mechanical Engineering
11. Bachelor of Computer Science Engineering
12. Bachelor of Metallurgical Engineering
13. Bachelor of Pharmaceutical Technology
14. Bachelor of Power Engineering
15. Bachelor of Printing Engineering
16. Bachelor of Production Engineering
17. Master of Computer Application
18. Bachelor of Civil Engineering (5-Year Evening Courses)
19. Bachelor of Electrical Engineering (5-Year Evening Courses)
20. Bachelor of Mechanical Engineering (5-Year Evening Courses)

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OTHER COURSES (OFFERED BY THE CENTRES)

- 1 Centre for Computer Aided Design :
 - a) One year P.G. Diploma in applied GIS and Remote Sensing,
 - b) One year Diploma in Multimedia and Animation,
 - c) Auto CAD with AutoLisp,
 - d) Structural Analysis and Design,
 - e) Advanced 3D Modelling.
- 2 Centre for Welding Technology :
 - a) Certificate course in Welding Inspection and Testing,
 - b) Training course for Welders (MMAW/TIG/Pipe Welding) / Supervisors,
 - c) Six Module-based Post-Diploma course for Engineers.

C. FACULTY OF SCIENCE

Post-Graduate Courses

- 1 Master of Philosophy in Oceanography and Coastal Management (See under Faculty of ISLM)
- 2 Master of Science in Applied Geology
- 3 Master of Science in Biotechnology
- 4 Master of Science in Chemistry (Day & Evening) 2-year Day Course/3 year Evening Course
- 5 Master of Science in Electronics Sc.
- 6 Master of Science in Composite Home Sc. (Human Development, J.D. Birla Inst.)
- 7 Master of Science in Home Sc. (Resource Management, J.D. Birla Inst.)
- 8 Master of Science in Home Sc. (Textiles and Clothing, J.D. Birla Inst.)
- 9 Master of Science in Home Sc. (Food and Nutrition, J.D. Birla Inst.)
- 10 Master of Science in Mathematics (Day & Evening) 2-year Day Course/3 year Evening Course
- 11 Master of Science in Physics (Day & Evening) 2-year Day Course/3 year Evening Course
- 12 Master of Science in Instrumentation Science
- 13 Master of Science in Geography Science

Under-graduate Courses

- 1 Bachelor of Science in Chemistry
- 2 Bachelor of Science in Geological Sciences
- 3 Bachelor of Science in Geography
- 4 Bachelor of Science in Home Sc. (J.D. Birla Inst.)
- 5 Bachelor of Science in Food Science & Nutrition Management (J.D. Birla Inst.)
- 6 Bachelor of Science in Textile Science, Clothing & Fashion Studies (J.D. Birla Inst.)
- 7 Bachelor of Science in Interior Designing (J.D. Birla Inst.)
- 8 Bachelor of Science in Human Development (J.D. Birla Inst.)
- 9 Bachelor of Science in Mathematics
- 10 Bachelor of Science in Physics

Other Courses (Offered by the Departments/Centres)

- 1 Department of Physics : Post-M.Sc. Diploma in Medical Physics

COURSES (OFFERED BY INTERDISCIPLINARY SCHOOLS)

- 1 School of Cultural Texts and Records :
 - a) Post-Graduate Certificate course in Editing and Publishing.
 - b) PG Diploma course in Digital Humanities and Cultural Informatics.
- 2 School of Languages :
 - a) M.Phil and M.A. in Linguistics.
 - b) Certificate courses in Bengali, French, German, Italian, Korean, Portuguese, Spanish, Hindi, Functional Communicative English, Japanese.
 - c) Diploma courses in Bengali, French, German, Italian, Portuguese, Spanish, Hindi, Japanese, Sanskrit.
 - d) Advanced Diploma Courses in Bengali, Sanskrit, Portuguese, French, Japanese.
 - e) Certificate Course in Linguistics.
- 3 School of Women's Studies :
 - a) M. Phil in Women's Studies.
- 4 School of Bioscience and Engg. : Master of Engineering in Biomedical Engg.
- 5 School of Education Technology :
 - a) Master in Multimedia Development,
 - b) M. Tech. in IT (Courseware Engg.)
- 6 Multimedia Digital Distance Education Mode
 - a) PG Diploma in Multimedia and Web Technology.
 - b) PG Diploma in Risk Management and Financial Engg.
- 7 Distance Mode
 - a) M.A. in Environment and Development Distance Mode.
- 8 School of Energy Studies :
 - a) M. Tech. in Energy Science and Technology.
- 9 School of Material Science and Nanotechnology :
 - a) M.Tech. in Nanoscience and Technology.
- 10 School of Mobile Computing and Communication :
 - a) M. Tech in Distributed and Mobile Computing.
- 11 School of Nuclear Studies and Application :
 - a) Master of Engineering in Nuclear Engineering.
- 12 School of Water Resources Engg. :
 - a) Master of Engineering in Water Resources and Hydraulic Engg.

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- 13 School of Environmental Studies :
- a) M.Tech in Environmental Bio-Technology.
 - b) Post-graduate Diploma in Environmental Management and Regulations.
- 14 School of Oceanographic Studies :
- a) M. Phil in Oceanography and Coastal Management.
 - b) PG Diploma in Remote Sensing.

D. FACULTY OF INTERDISCIPLINARY STUDIES. LAW MANAGEMENT

M.E. / M. Tech Courses under FISLM:

Sl. No.	Name of the Schools	ME/M. Tech Courses
1	School of Bioscience & Engineering	Biomedical Engg. & Sc.
2	School of Education Technology	IT (Courseware Engg.) Multimedia Development
3	School of Energy Studies	Energy Science & Tech.
4	School of Environmental Studies	Environmental Biotechnology
5	School of Illumination Science, Engg. & Design	Illumination Technology & Design (6-Semester)
6	School of Laser Sc. & Engg.	Laser Technology
7	School of Material Science & Nano Technology	Nano Science & Tech.
8	School of Mobile Computing & Communication	Distributed & Mobile Computing
9	School of Nuclear Studies and Application	Nuclear Studies and Applications
10	School of Water Resources Engg.	Water Resources & Hydraulic Engg.(4-Semester) Water Resources &Hydraulic Engineering (6-Semester)

M.Phil Courses under FISLM

Sl. No.	Name of the Schools
1	School of Cognitive Science
2	School of Languages & Linguistics
3	School of Oceanographic Studies
4	School of Women's Studies

PhD Courses under FISLM

Sl. No.	Name of the Schools
1	School of Advanced Studies on Industrial Pollution Control Engg.
2	School of Automotive Engineering
3	School of Bioscience & Engineering
4	School of Cognitive Science
5	School of Cultural Texts & Records
6	School of Education Technology

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- 7 School of Energy Studies
- 8 School of Environmental Radiation and Archaeological Sciences
- 9 School of Environmental Studies
- 10 School of Illumination Science, Engg. & Design
- 11 School of International Relations and Strategic Studies
- 12 School of Laser Sc. & Engg.
- 13 School of Languages & Linguistics
- 14 School of Material Science & Nano Technology
- 15 School of Media, Communication & Culture
- 16 School of Mobile Computing & Communication
- 17 School of Natural Product Studies
- 18 School of Nuclear Studies and Application
- 19 School of Oceanographic Studies
- 20 School of Water Resources Engg.
- 21 School of Women's Studies
- 22 Dept. of Adult Continuing Education & Extension

M.A. Courses under FISLM:

Sl. No.	Name of the Schools
----------------	----------------------------

- | | |
|---|---|
| 1 | Dept. of Adult Continuing Education & Extension |
|---|---|

M.A. Courses

M.A. in Journalism & Mass-Communication

1 Year Post Graduate Diploma Courses under FISLM

Sl. No.	Name of the Schools
----------------	----------------------------

- | | |
|---|---|
| 1 | School of Oceanographic Studies |
| 2 | Dept. of Adult Continuing Education & Extension |

Courses

Post Graduate Diploma in Remote Sensing & GIS

Post Graduate Diploma in Mass-Communication

Diploma Courses under FISLM

Sl. No.	Name of the Schools
----------------	----------------------------

- | | |
|---|---------------------------------|
| 1 | School of Environmental Studies |
|---|---------------------------------|

Courses

Diploma in Industrial Safety and Environmental Management

UNIVERSITY OFFICERS
[AS ON 31.10.2019]

1. Professor Suranjan Das	: Vice-Chancellor (16.07.2015 - Continuing)
2. Dr. Pradip Kr. Ghosh	: Pro Vice-Chancellor (19.08.2017 - Continuing)
3. Professor Chiranjib Bhattacharjee	: Pro Vice-Chancellor
4. Professor Subhasis Biswas	: Dean, Faculty of Arts
5. Professor Sadhan Kumar Ghosh	: Dean, Faculty of Engineering and Technology
6. Professor Subrata Nath Koner	: Dean, Faculty of Science
7. Professor Pankaj Kumar Roy	: Dean, Faculty of ISLM
8. Dr. Snehamanju Basu	: Registrar (05.11.2018-Continuing)
9. Dr. Partha Pratim Lahiri (On Lien)	: Joint Registrar (Admin)
10. Dr. Sanjay Gopal Sarkar	: Joint Registrar (Academic)
11. Dr. Kaniska Sarkar	: Asst. Registrar Sr. Scale
12. Dr. Ujjwal Kumar Mondal	: Asst. Registrar (Sr. Scale)
13. Sri Pranab Kumar Gayen	: Deputy Registrar
14. Sri Gour Krishna Pattanayak	: Finance Officer
15. Sri Debasish Pal (On Lien)	: Deputy Finance Officer (On Lien)
16. Sri Depanjan Ray Chaudhuri	: Audit Officer, Selection Grade
17. Sri Shiladitya Chatterjee (On Lien)	: Accounts Officer, Sr. Scale
18. Atikur Rahaman	: Accounts Officer
19. Dr. Satyaki Bhattacharyya	: Controller of Examinations
20. Smt. Chandrani Dam	: Asst. Controller of Examinations
21. Sri Indrajit Banerjee	: Secretary, Faculty of Arts
22. Dr. Bholanath Karmakar	: Principal Secretary, Faculty of Engineering and Technology
23. Dr. Atiskumar Chattopadhyay	: Principal Secretary, Faculty of Science
24. Sri Siddhartha Bhattacharyya	: Secretary, Faculty of Interdisciplinary Studies, Law & Management
25. Dr. Shrabana Ghosh	: Chief Librarian (Officiating)
26. Sri Sanku Bilas Roy	: Librarian (Salt Lake Campus)
27. Sri Samit Pahari	: Information Scientist, Selection Grade
28. Dr. Rajat Ray	: Dean of Students
29. Dr. Bappa Mullick	: Sr. Director of Youth Welfare
30. Dr. Debabrata Saha	: Principal Development Officer
31. Prof. Gopinath Bhandari	: Chief University Engineer (Look after)
32. Sri Dinabandhu Tripathi	: Asst. Engineer (Civil)
33. Dr. Badal Sarkar	: Asst. Engineer (Electrical) Selection Grade
34. Dr. Aparup Konar	: Director of Physical Instruction, Sr. Scale
35. Dr. Nandini De (Bandyopadhyay)	: Documentation Officer
36. Sri Pranab Roy	: Scientific Officer, Sr. Scale
37. Ms Samita Bhattacharya	: OSD, Placement & Training (Contractual)
38. Sri Indranil Mukherjee	: OSD, Admission & System Operation (Contractual)
39. Sri Shyamal Bose	: OSD, System Administrator (Contractual)

MEMBERS OF THE COURT
(As on 1st November, 2019)

It is notified information of all concerned that in terms of the **West Bengal University Laws (Amendment) Act, 2011** , the **University Court** is formed with following members .

1. **Chancellor**
Sri Jagdeep Dhankar,
Hon'ble Governor of West Bengal
&
Chancellor, Jadavpur University
Raj Bhavan,
Kolkata-700 062.
2. **Vice-Chancellor**
Professor Suranjan Das
Vice-Chancellor
Jadavpur University
Kolkata-700 032.
3. **Pro-Vice-Chancellor**
Dr. Pradip Kr. Ghosh
Pro-Vice-Chancellor
Jadavpur University
Kolkata-700 032.
- 3(a). **Pro-Vice-Chancellor**
Prof. Chiranjib Bhattacharjee
Pro-Vice-Chancellor
Jadavpur University
Kolkata-700 032
4. **Dean, Faculty of Arts**
Prof. Subhasis Biswas
Jadavpur University
Kolkata-700 032.
5. **Dean, Faculty of Engg. & Technology**
Prof. Sadhan Kumar Ghosh
Jadavpur University
Kolkata-700 032.
6. **Dean, Faculty of Science**
Prof. Subrata Nath Koner
Jadavpur University
Kolkata-700 032.

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7. **Dean, Faculty of Interdisciplinary Studies, Law & Mangement**
Prof. Pankaj Kumar Roy
Jadavpur University
Kolkata-700 032.
8. **Sri Manish Jain, IAS**
Principal Secretary,
Higher Education Department
Government of West Bengal
CS Branch
Bikash Bhavan
Salt Lake City
Kolkata-700 091.
9. **Financial Advisor**
Sri Bidyut Kumar Nandy
Higher Education Dept.
Government of West Bengal
Bikash Bhavan
Salt Lake City
Kolkata-700 091.
10. **Chairman of State Council of Higher Education**
Prof. Soma Bandyopadhyay
Vice-Chancellor
West Bengal Teachers Training, Education
Planing and Administration
25/2 & 25/3, Ballygunge Circular Road
Kolkata-700 019
11. **President**
Smt. Mahua Das
West Bengal Council of Higher Secondary Education
9/2, Block – DJ, Sector-II
Salt Lake, Kolkata-700 091.
12. **President**
Prof. Sk. Abu Taher Kamruddin
West Bengal Board of Madrasa Education
'Begum Rokeya Bhavan'
19, Haji Md. Mohsin Square
Kolkata-700 016.
13. **President**
Prof. Dr. Kalyanmoy Ganguly
West Bengal Board of Secondary Education
DJ-8, Sector-III
Nivedita Bhawan
Salt Lake, Kolkata.
14. **Prof. Sabyasachi Basu Ray Chaudhury**
Vice-Chancellor,
Rabindra Bharati University
Kolkata-700 050

15. **Prof. A. K. Ray, Director**
JIS Institute of Advanced Studies & Research
Arch Waterfront Building
17th Floor, (Near RDB More, Nalban)
Section-5, Salt Lake
16. **Prof. Anil Sukla**
Deputy Secretary
NCTE, HQS, Wing II Hans Bhawan
1, Bahadurshah Zafar Marg
New Delhi-110002

REPERESNTATIVES OF THE DEPARTMENTS

17. **Adult Continuing Education & Extension**
Prof. Partha Sarathi Chakraborty, [Head]
Jadavpur University
Kolkata-700 032.
18. **Architecture**
Dr. Debashish Das [Head]
Jadavpur University
Kolkata-700 032.
19. **Chemical Engg.**
Prof. Debashis Roy [Head]
Jadavpur University
Kolkata-700 032.
20. **Civil Engg.**
Prof. Dipankar Chakraborty [Head]
Jadavpur University
Kolkata-700 032.
21. **Computer Sc. & Engg.**
Prof. Mahantapas Kundu [Head]
Jadavpur University
Kolkata-700 032.
22. **Construction Engg.**
Prof. Debasish Bandyopadhyay [Head]
Jadavpur University
Kolkata-700 032.
23. **Electrical Engg.**
Prof. Kesab Bhattacharyya, [Head]
Jadavpur University
Kolkata-700 032.
24. **Electronics & Telecommunication Engg.**
Prof. Sheli Sinha Chaudhury, [Head]
Jadavpur University
Kolkata-700 032.
25. **Food Tech. & Bio-Chemical Engg.**
Dr. Dipankar Halder [Head]
Jadavpur University
Kolkata-700 032.

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26. **Information Technology**
Prof. Uttam Kumar Roy [Head]
Jadavpur University
Kolkata-700 032.
27. **Instrumentation & Electronics Engg.**
Prof. Runu Banerjee [Head]
Jadavpur University
Kolkata-700 032.
28. **Mechanical Engg.**
Prof. Goutam Majumdar [Head]
Jadavpur University
Kolkata-700 032.
29. **Metallurgical & Material Engg.**
Prof. Akshay Kumar Pramanick [Head]
Jadavpur University
Kolkata-700 032.
30. **Pharmaceutical Technology**
Prof. Pulak K. Mukherjee [Head]
Jadavpur University
Kolkata-700 032.
31. **Power Engg.**
Prof. Amitava Datta [Head]
Jadavpur University
Kolkata-700 032.
32. **Printing Engg.**
Dr. Soumen Basak [Head]
Jadavpur University
Kolkata-700 032.
33. **Production Engg.**
Dr. Biplab Ranjan Sarkar [Head]
Jadavpur University
Kolkata-700 032.

FACULTY COUNCIL OF ARTS

REPERESNTATIVES OF THE DEPARTMENTS

34. **Bengali**
Prof. Barendu Mondal [Head]
Jadavpur University
Kolkata-700 032.
35. **Comparative Literature**
Prof. Sayantan Dasgupta [Head]
Jadavpur University
Kolkata-700 032.

36. **Economics**
Prof. Malabika Roy [Head]
Jadavpur University
Kolkata-700 032.
37. **Education**
Dr. Bishnupada Nanda [Head]
Jadavpur University
Kolkata-700 032.
38. **English**
Prof. Nandini Saha [Head]
Jadavpur University
Kolkata-700 032.
39. **Film Studies**
Prof. Madhuja Mukherjee [Head]
Jadavpur University
Kolkata-700 032.
40. **History**
Prof. Rup Kumar Barman [Head]
Jadavpur University
Kolkata-700 032.
41. **International Relations**
Prof. Om Prakash Misra [Head]
Jadavpur University
Kolkata-700 032.
42. **Library & Information Science**
Prof. Subarna Kumar Das [Head]
Jadavpur University
Kolkata-700 032.
43. **Philosophy**
Prof. Proyash Sarkar [Head]
Jadavpur University
Kolkata-700 032.
44. **Physical Education**
Prof. Sanjib Mridha [Head]
Jadavpur University
Kolkata-700 032.
45. **Sanskrit**
Dr. Ashok Kumar Mahata [Head]
Jadavpur University
Kolkata-700 032.
46. **Sociology**
Dr. Piyali Sur [Head]
Jadavpur University
Kolkata-700 032.

FACULTY COUNCIL OF SCIENCE
REPERESENTATIVES OF THE DEPARTMENTS

47. **Chemistry**
Prof. Chitta Ranjan Sinha [Head]
Jadavpur University
Kolkata-700 032.
48. **Geography**
Dr. Lakshmi Sivaramakrishnan [Head]
Jadavpur University
Kolkata-700 032.
49. **Geological Sciences**
Dr. Sanjay Sanyal [Head]
Jadavpur University
Kolkata-700 032.
50. **Instrumentation Science**
Dr. Anup Kumar Ghosh [Head]
Jadavpur University
Kolkata-700 032.
51. **Life Science & Bio-Tech.**
Dr. Biswadip Das [Head]
Jadavpur University
Kolkata-700 032.
52. **Mathematics**
Prof. Shamik Ghosh [Head]
Jadavpur University
Kolkata-700 032.
53. **Physics**
Prof. Debasish Lohar [Head]
Jadavpur University
Kolkata-700 032.
54. **Vacant**
Five teachers elected by the teachers
of the Departments under the
Faculty Council for Post Graduate and
Under Graduate Studies in
Engineering and Technology from
amongst themselves as may be
prescribed by Statutes
55. **Vacant**
Five teachers elected by the teachers
of the Departments under the Faculty Council
for Post Graduate and Under Graduate
Studies in Arts from amongst themselves
as may be prescribed by Statutes
56. **Vacant**
Five teachers elected by the teachers
of the Departments under the Faculty Council
for Post Graduate and Under Graduate Studies
in Science from amongst themselves as may
be prescribed by Statutes

57. **Vacant**
One representative of the
Officers of the University.
58. **Vacant**
One representative of
Non-teaching Employees
59. **Representative: National Council of Education, Bengal**
Sri Himendu Biswas
National Council of Education, Bengal
Jadavpur University
Kolkata-700 032.

NOMINATED MEMBERS

60. **Prof. Bimal Roy**
Head of R.C. Bose Centre for Cryptology and Security
Indian Statistical Institute,
201, B.T. Road,
Kolkata-700 108.
61. **Prof. Bikash Sinha**
Emeritus INSA Scholar
1/AF, Bidhannagar
Kolkata -700064
62. **Prof. H Devaraj**
UGC BSR Scientist
Dr. A. L.Mudaliar Centre for Basic Science Development
University of Madras
63. **Prof. Goverdhan Mehta**
National Research Professor &
Jubilant - Bhartia Chair Professor
Hyderabad University,
Hyderabad-500 046
64. **Prof. M.C. Chattapadhyay**
Retired Professor of Chemistry
Allahabad University
264-A, Allenganj,
Allahabad-211002

NON-MEMBER SECRETARY

65. **Dr. Snehamanju Basu**
Registrar
Jadavpur University
Kolkata-700 032.

SPECIAL INVITEE

66. **Vacant**
Any official of Expert in
any field or eminent
educationist, whom the
University may require
for advice , consultation
or assistance, may be
invited to attend the meeting

MEMBERS OF THE EXECUTIVE COUNCIL
(As on 1st November, 2019)

1. **Vice-Chancellor [Ex-Officio Member]**
Professor Suranjan Das
Jadavpur University
2. **Pro-Vice-Chancellor [Ex-Officio Member]**
Dr. Pradip Kumar Ghosh
Jadavpur University
- 2(a). **The Pro-Vice-Chancellor [Ex-Officio Member]**
Prof. Chiranjib Bhattacharjee,
Jadavpur University
Kolkata-700 032
3. **Additional Chief Secretary**
Higher Education Department
Government of West Bengal
Bikash Bhavan, 6th Floor, Salt Lake
Kolkata-700 091
4. **Financial Advisor**
Sri Bidyut Kumar Nandy,
Government of West Bengal
Higher Education Dept.
Bikash Bhavan ,
Salt Lake
Kolkata-700 091
5. **Prof. Soma Bandyopadhyay**
Vice-Chancellor
West Bengal Teacher's Training, Education
Planing and administration
25/2 & 25/3, Ballygunge Circular Road,
Kolkata-700 019
6. **Prof. Subhasis Biswas**
Dean, Faculty Council of Arts
Jadavpur University
Kolkata-700 032
7. **Prof. Sadhan Kr. Ghosh**
Dean, Faculty Council of Engg. & Technology
Jadavpur University
Kolkata-700 032
8. **Prof. Subrata Nath Koner,**
Dean, Faculty Council of Science
Jadavpur University
Kolkata-700 032
9. **Prof. Pankaj Kumar Roy,**
Dean, Faculty Council of Interdisciplinary Studies, Law & Management
Jadavpur University
Kolkata-700 032
10. **Prof. Bishnupada Nanda, Head**
Dept. of Education,
Jadavpur University
Kolkata-700 032

11. **Prof. Keshab Bhattacharya, Head
Dept. of Electrical Engg.**
Jadavpur University
Kolkata-700 032
12. **Prof. Sheli Sinha Chaudhuri, Head
Dept. of Electrical Engineering**
Jadavpur University
Kolkata-700 032
13. **Prof. Nandini Saha, Head
Dept. of English**
Jadavpur University
Kolkata-700 032
14. **Dr. Madhuja Mukherjee, Associate Prof., Head
Dept. of Flim Studies**
Jadavpur University
Kolkata-700 032
15. **Dr. Dipankar Halder, Associate Prof., Head
Dept. of Food Technology and Biochemical Engg.**
Jadavpur University
Kolkata-700 032
16. **Prof. Sivaramakrishnan, Head
Dept. of Geography**
Jadavpur University
Kolkata-700 032
17. **Prof. Sanjay Sanyal, Head
Dept. of Geological Sciences**
Jadavpur University
Salt Lake Campus
18. **Prof. Rup Kumar Barman, Head
Dept. of History**
Jadavpur University
Salt Lake Campus
Kolkata
19. **Prof. Uttam Kumar Roy, Head
Dept. of Information Technology**
Jadavpur University
Kolkata-700 032
20. **Prof. Runu Banerjee, Head
Instrumentation & Electronics Engg.**
Jadavpur University
Kolkata-700 032
21. **Dr. Anup Kumar Ghosh, Head
Instrumentation Science**
Jadavpur University
Kolkata-700 032.

** Tenure of Membership in Executive Council for members belongs to S.L. No. 11 to 22 is one year for each department.

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22. **Vacant**
Three teachers, of whom at least one shall be Professor, elected by the teachers of the Department under the Faculty Council for Post-Graduate and Under-Graduate Studies in Engg. & Tech. from amongst themselves.
23. **Vacant**
Three teachers, of whom at least one shall be Professor, elected by the teachers of the Department under the Faculty Council for Post-Graduate and Under-Graduate Studies in Arts from amongst themselves.
24. **Vacant**
Three teachers, of whom at least one shall be Professor, elected by the teachers of the Department under the Faculty Council for Post-Graduate and Under-Graduate Studies in Science from amongst themselves.
25. **Vacant**
One Teacher not below the rank of Associate Professor, elected by the teachers of the Schools under the Faculty Council of Interdisciplinary Studies Law & Management from amongst themselves.

Nominated Members (Chancellor's Nominee)

26. **Prof. Suva Sankar Sarkar**
Vice-Chancellor,
Netaji Subhas Open University, DD-26, Sector-1,
Salt Lake City
Kolkata-700 064
27. **Prof. Narendra Kumar Singh Gaur,**
Ex-Professor of Physics
Allahabad University
Former Minister of Higher Education,
15/3 Stanley Road, Tashkhand Marg,
Civil Line,
Allahabad-211 001
28. **Dr. Snehamanju Basu**
Registrar
Jadavpur University
Kolkata-700 032.
29. **Sri G. K. Pattanayak**
Finance Officer
Jadavpur University
Kolkata-700 032.

DAY CARE CENTRE

Int. : 2457-2950

Coordinator : Prof. Nilanjana Gupta

Jadavpur University Day Care Centre (JUDCC) began its operations on 1 September, 2011. The additional space of the Centre adjacent to its current premises on the ground floor of Multi-Storey building, inaugurated in 2017, has helped the Centre take in a number of new wards in 2018-19.

Children aged between one and twelve stay at the centre. Teachers, non-teaching staff, research scholars and students of Jadavpur University can register their wards at JUDCC. There are 10 wards registered as 'regular' and 6 wards using the Centre on casual basis. Some of the children come from their schools and some from home. They engage in games as well as various creative activities daily.

Round the year, the Day Care Centre organizes various programmes including recitation, singing, painting, dance, plays, story-reading, creative writing and sports. The Centre celebrated Rabindra Jayanti and Nazrul Jayanti on 15 June, 2018. The children rehearsed for this programme enthusiastically and put up performances that were enjoyed by all. The Annual Sports was organized on 8 December, 2018.

CENTRAL LIBRARY

Phone : + 91-33-2414-6866 / 6460

+ 91-33-2335-6578 (SL Campus)

Int. : 2457-2522

Int. : 6109 / 6110 (SL Campus)

Chief Librarian : Dr. Shrabana Ghosh (Officiating)

E-mail : chieflibrarian@jadavpuruniversity.in

The University Library System comprises the Central Library, Salt Lake Campus Library, Departmental Libraries and the Libraries attached with different Schools and Centres for higher studies; along with Centre for Digital Library and Documentation.

The Central Library of Jadavpur University is housed in the three-storied building on Jadavpur Campus. Its shelving space and working space is about 36,000 sq. ft. (approx.) and is extended by the new construction of four-storied building Annex Building (each floor 5500sq. ft). There are more than 14 service units/sections in Central Library to run the total library system. The Check counter, Membership Registration, Circulation Section, Book Dispatch Section, General Reading Room, Bound Volume Section (mezzanine floor) are located in the ground floor of the Old Building. The first floor has the BKSO Section, Old and Rare Section, Serials Section, Binding Section, Office of the Chief Librarian and the Xerox Section. The second floor has the Cataloguing Section, Reference Section, Labeling Section and the Librarian's room. The ground floor of the Annex Building houses the Bound Volume Journals. The Centre for Digital Library and Documentation including the Learning Resource Center is operational in the first floor of the Annex building; the 2nd floor has the Bound Volume Journals (Science & Bengali) and the 3rd floor houses the Theses Section. The Central Library has eight reading rooms, carrels, and an alcove for bound volume journals. The total sitting arrangement is near about 800 readers at a time.

There is a separate library building on the Second Campus at Salt Lake. The total floor area of the library is near about 6,940 sq. ft. (approx.) in ground floor. The first floor of the library building is completed

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with same floor area of ground floor. The total sitting arrangements in the reading rooms for the readers are 80 seats; 5 for faculty members and 75 for student members at a time respectively.

Most of the Departments in the main campus have Departmental Libraries. Reading and borrowing facilities in the appropriate manner are given in the Departmental Libraries to the faculty members and students, scholars of the Department. All the computers in the campus are connected through LAN and are IP address authenticated so that all e-resources can be accessed from all the computers.

On Salt Lake Campus, there are 5 (five) Departments, 1 (one) School and 1 (one) Centre (Nuclear Engineering) in Power Engineering Dept. under the Faculty of Engineering and Technology of the University. There is an Academic Staff College (UGC). There are no department libraries at Salt Lake Campus. But the Academic Staff College and Centre for Mobile Computing and Communication each has separate library. All Faculty Members, Students, Research Scholars, Officers and Non-Teaching staff members enjoy library service facilities from only one Campus Library. Since 1989, all Library Administrative and library functions are systematically organized and done by Salt Lake Campus Library following the integrated and uniform library rules, under the Jadavpur University library system, separately.

Centre for Digital Library and Documentation:

The Centre for Digital Library and Documentation has been established in November 2003 in the first floor of the new Annex Building of Central Library under the Potential for Excellence Program-I of UGC. The Digital Library has a Learning Resource Centre (LRC) with 60 Nos. of terminals, 4 Nos. of servers and one reading room for users. The Digital Library Data Management Software *D-space* has been installed & now it is in operation. The digital resources are made available to the users through the Library Portal. All the facilities of Digital Library are available on the Salt Lake Campus Library which is linked with the Central Library. There are two servers for managing the Digital Library connectivity & 16 terminals for Learning Resource Centre for students.

Accessible Library:

The **Accessible Library for Persons with Disabilities** was inaugurated on 5th September 2018 at the ground floor of the Jadavpur University Central Library. The Accessible Library has five staff members and the number of users is about 45.

About 42 number of audio books were prepared for the students. They also access e-books from Sugam Pustakalaya, Bookshare and Jstor. The Accessible Library uses Jaws Professional, NVDA, MAGIC 14, OPEN BOOK 9, Read (Braille) softwares to access the e-resources.

The Accessible Library has purchased 35 Braille books from Lalbihari Shah Braille Academia and 14 Braille books from Ramakrishna Mission Blind Boys' Academy, Narendrapur. All these purchased books are being processed and uploaded in the Jadavpur University OPAC. Apart from that 18 volumes of Rabindra Rachanabali in Braille were presented to this Library by the Society for the Visually Handicapped. The Accessible Library has about 1000 old audio books.

Library Collection:

The total collection of Central Library along with the Departmental Libraries is about **6,85,043 (approx.)** volumes of books, **4813** e-books in perpetual mode, **122** Braille books, **82,154** bound volumes of journals, **8688 (hardcopy)** theses, **8631** dissertations and **3047** CDs of theses and dissertations **3000** standards & **37,000** items of non-book materials such as reports, pamphlets, maps and micro-forms. In addition to that, Salt Lake Campus Library has about **35,203 (approx.)** volumes of books.

The total number of books added during April 2018 to March 2019 were **2360** in Central Library and **221** in Salt Lake Campus Library. The total number of e-books (online in perpetual mode) added during this period was **1734** (approx.).

The total number of theses accessioned and catalogued was **932**. The total number of theses uploaded in Sodhganga is **370**.

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The total number of journals subscribed by Central Library in **Print** is **304** , **Online** is **5704** and **Print + Online** is **29** and **Online** databases is **20**. The total number of journals subscribed by Salt lake Campus Library in **Print** is **49**, **Online** is **11** and **Print +Online** is **10**. In addition to the subscribed journals, the University has access to **6430** (approx.) **Online** journals and **4** databases from **eSodhSindhu (INFLIBNET)**.

The total number of books catalogued was **6299** (approx.), **3930** (approx.) books were labeled and **3327** (approx.) books were dispatched to the different Departments.

The total number of books issued was **20945** (approx.) and returned was **18850** (approx.).

The number of users visited General Reading Room and Reference Section were **16900** (approx.) and **4161** (approx.) respectively. About **217** users visited the Bound Volume Journal Section.

The total number of users in Centre for Digital Library and Documentation was **3847** (approx.); the services provided to users through pendrive/CD was **604**.

The total number of Library Members in Central Library is about **10,500**. Approx. **3976** members were added during 2018-19.

The **Libsys7 web version** software is used for library automation. Databases of books, journals and theses etc. are created and being updated. The Web-OPAC facilities are available for searching the databases. The databases are also available through the Library portal on the internet. Facilities for searching Databases and Internet are also available to all users in the different floors of Central Library and also through all network enabled computers in both the campuses.

A considerable part of the Library's collection consists of gifts from individuals and institutions, the largest book donation having been from Sri Uday Kumar Das, Kumar S. C. Nandy of Cossimbazar, NCE Bengal, the British Council, USIS, Asia Foundation, the late A. K. Chanda, Srinath Das, Hemchandra Dasgupta, Hemendraprasad Ghosh, Prof. Triguna Sen, Prof. Gopal Sen, Taraknath Das, Sudhindranath Datta and others. The gift collections contain a good stock of old materials valuable for research in the Humanities and Social Sciences. The in-house preservation and conservation work of about **275** books have been done.

Library Activities:

Eighth Internship Programme of BLISC students and Second Internship Programme of MLISC students:

A six month training of the BLISC passed students under the Eighth Internship Programme (July-January) was organised in the different Sections of Central Library and Departmental Libraries. A six month training of the MLISC passed students under the Second Internship Programme (September-February) was organised in the different Sections of Central Library and Departmental Libraries.

Amita Ray Chowdhury Memorial Lecture

The Amita Ray Chowdhury Memorial Lecture was organised by Central Library on 9th August at 3.00p.m.in the K.P. Basu Memorial hall. The lecture was delivered by the eminent writer (recipient of *Ananda Purashkar*) by Sri Ramkumar Mukhopadhyay and also by Prof. Bijaypada Mukhopadhyay, Ex-Head of Department, Dept. of Library and Information Science.

Inauguration of Accessible Library for Persons with Disabilities:

The Accessible Library for Persons with Disabilities was inaugurated on 5th September 2018 at the ground floor of the Jadavpur University Central Library to provide services to the students with disabilities.

Seminar/Workshop/Symposium Attended:

Ms.Shrabani Majumdar and Dr.Swaguna Datta presented a paper on "Pride and Prejudice": Women's Reflection in Three Decades : A study of changes in DDC in the National Seminar on recent trends in Knowledge Organization", 8-9 February 2019, organised by Department of Library and Information Science, Jadavpur University.

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Dr. Swaguna Datta and Ms. Shrabani Majumdar presented a paper on “Representation of Marginal People in Academic Sphere” in the Sixth International Conference of Asian Special Libraries (ICoASL 2019) on Libraries and Librarianship in Digital Plus Era, 14-16 February, 2019, New Delhi, organised by the Special Libraries Association Asian Chapter in collaboration with Institute of Economic Growth, Ambedkar University Delhi and Society for Library Professionals.

Mr. Debashish Mukherjee presented a paper on “Digital Granthagar Parisheba: Prosonga Jadavpur Viswavidyalaya” in the 53rd Bengal Library Conference organized by Bengal Library Association, Kolkata in collaboration with Nistarini Women’s College, Purulia.. 22-23 September, 2018.

Mr. Debashish Mukherjee and Prof. Udayan Bhattacharya presented a paper on “Internship in LIS Education: a Case Study of Jadavpur University” in the 28th IASLIC National Seminar held at Viswabharati, Shantiniketan. 27-29 November, 2018.

Mr. Debashish Mukherjee participated and presented a paper on “Knowledge Organization in Old and Rare Section of Jadavpur University, Central Library” in NS-RTKO held at Jadavpur University, 9-10 February, 2019.

Mr. Sanjoy Guha, Mr. Ashim Kumar Dutta presented a paper entitled “ Granthagar Porisebay Projuktir Proyog: Jadavpur Visyavidyalayer Kendriya Granthagarer Membership/Registration Bivager Bhumiker Ekti Samikshya” in the 53rd Bengal Library Conference organized by Bengal Library Association, Kolkata in collaboration with Nistarini Women’s College, Purulia. 22-23 September, 2018.

Mr. Sanjoy Guha, Mr. Ashim Kumar Dutta & Ms. Priyanka Roychowdhury participated and presented a paper on “Implementation of KOHA in Libraries” in the two-day International Conference on KOHA, organized by Bengal Library Association, Kolkata and Ramkrishna Mission Vidyamandir, Belur Math, 23-24 February, 2019.

Mr. Debashish Mukherjee participated in the two-day International Conference on KOHA, organized by Bengal Library Association, Kolkata and Ramkrishna Mission Vidyamandir, Belur Math, 23-24 February, 2019.

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MEMORANDUM OF UNDERSTANDING

(April 2018 to March 2019)

Sl. No.	MoU/MoA Between	Date of Execution/ Duration	Contact Person(s)/ Address	Scope of Work
G-1	INDIAN INSTITUTE OF CEREBRAL PALSY (IICP) & JU	03.04.2018	Head of DACEE,	8 weeks certificates course in 'DATABASE MANAGEMENT'.
G-2	INDIAN INSTITUTE OF CEREBRAL PALSY (IICP) & JU	03.04.2018	Head of DACEE,	24 weeks certificates course in 'DESKTOP PUBLISHING'.
G-3	NATIONAL DIGITAL LIBRARY OF INDIA (NDLI) & JU	06.04.2018,	Objective is to integrate existing digitized and digital contents across educational and cultural institutions/bodies under NDLI.	
G-4	BHABHA ATOMIC RESEARCH CENTRE (BARC) & JU	12.04.2018	Dr. Koushik Ghosh Mechanical Engg.	First extension of BARC funded project: 'Experimental investigation and code benchmarking for condensation induced water hammer pertaining to reactor safety system'.
G-5	SETU PRAKASANI & JU	16.04.2018,	Prof. Shibashis Chatterjee Director School of International Relations and Strategic studies.	Publishing a book entitled " <i>Refugee and Terror : A case study of Germany</i> "
G-6	NEERI & JU	24.04.2018	Prof. Parimal Karmakar Head, Dept. of Life Science and Biotechnology to promote academic and research cooperation in the areas of Joint Conference/Workshop/Courses, Sharing of Facilities, Project Work of Students, Ph.D Registration etc.	
G-7	ORIENT BLACKSWAN PRIVATE LIMITED & JU	18.05.2018,	Prof. Samantak Das Dept. of Comparative Literature Coordinator, CAS III, initiative of producing a series of books on Comparative Literary Studies.	
G-8	WEST BENGAL RENEWABLE ENERGY DEVELOPMENT AGENCY (WBREDA) & JU	22.05.2018	Roof top solar PV power plant of nominal PV Array capacity of 50 kWp at Jadavpur University Handover-Takeover Note.	
G-9	TATA STEEL LIMITED & JU	30.05.2018,	Prof. Achintya Mukhopadhyay Mechanical Engineering Department, Determination of heat transfer and phase transformation of hot-rolled steel in run-out table: Mathematical modelling and laboratory scale experiments.	
F-10	CHINA PHARMACEUTICAL UNIVERSITY (CPU) & JU	31-05-2018,	Prof. Suranjan Das V.C., Develop academic and educational cooperation and provide the framework for a partnership arrangements.	
G-11	CHITTARANJAN NATIONAL CANCER INSTITUTE (CNCI) & JU	04-06-2018,	5 years, Prof. Argha Deb Dept. of Physics Post M.Sc. Diploma Course in Medical Physics.	
G-12	ATOMIC MINERALS DIRECTORATE FOR EXPLORATION AND RESEARCH (AMD) & JU	04-06-2018,	5 years, Subrata Karmakar Head Dept. of Geological Sciences Parties agree to create to long term partnership in Research, Education and Training including undertaking of collaborative research.	
P-13	MAHA BODHI BOOK AGENCY & JU	04-06-2018,	Prof. Gangadhar Kar Dept. of Philosophy Publishing a book entitled <i>Maha Jiboner Antarale</i> in Bengali by Dr. Gangadhar Kar	
G-14	NETAJI SUBHAS CHANDRA BOSE CANCER RESEARCH INSTITUTE & JU	07-06-2018,	5 YEARS Enrollment for Ph.D. program	
G-15	DEED BETWEEN MR. ASHOKE KUMAR SEHGAL & JU	12-06-2018,	S.G.S. Jt. Registrar Deed for 'Late Sita Ram Sehgal and Late Rani Sehgal Memorial Scholarship Fund'	
G-16	THE STRATEGY ACADEMY CENTRE FOR ADVANCED STUDIES (TSACAS) & JU	22-06-2018	3 years (from 31st Jan, 2018) Matangini Chattopadhyay Director School of Education Technology PGDME course	
G-17	The University Grants Commission (UGC) & JU	19-07-2018	Dr. Rashmi Das Recharge Programme	
F-18	FU ZEN CATHOLIC UNIVERSITY, TAIWAN & JU	18-07-2018	15 years Prof. Sadhan Kr. Ghosh Mech. Engg. Faculty, Students and Researchers exchange programme	
G-19	NATIONAL INSTITUTE OF TECHNOLOGY (NIT), SIKKIM & JU	13-08-2018	5 years Prof. Argha Deb Dept. of Physics Collaborative Research Programme between researchers working in the field of studies on Geochemical/Geophysical Precursors for earthquakes.	
P-20	D.K. PRINTWORLD PVT. LTD. & JU	16-08-2018	Proyash Sarkar Prof. & Deputy Coordinator, CAS Dept. of Philosophy Publication of one manuscript (<i>The Valmiki Ramayana as Epic and Dharmasastra</i> , author : Robert Goldman)	

- G-21 **BHABHA ATOMIC RESEARCH CENTRE (BARC) & JU** 28-08-2018, Sandip Das, Project title “Critical Flow Behavior Study of Water at PHWR Condition for Flow through Cracked Pipes under Bending Moment”.
- G-22 **Jadavpur University & M/S. Gharana Caterer** 28-08-2018 6 Months Dr. Chiranjib Bhattacharjee, Registrar, JU To allocate rooms on receipt of information from the Administrative Dept. of University either verbally or written.
- G-23 **DBT & JU** 30-08-2018 1 yr 3 months, Arunima Sengupta Dept. of Lifescience and Biotechnology AMPK, FOXO and NFATc3 transcription factor function in regulation of cardiomyocyte proliferation.
- G-24 **ENDOWMENT DEED BETWEEN BISWAJIT GHOSH & JU** 05-09-2018 S.G.S. Jt. Registrar Endowment deed Prof. S. Deb Memorial Fund.
- G-25 **INDIAN INSTITUTE OF TECHNOLOGY (IIT), ROORKEE & JU** 10-09-2018, 3 years Prof. Debashis Das Dept. of Architecture Implementation of the project entitled “Zero Peak Energy Building Design for India - (ZED-i)
- G-26 **CENTRAL INSTITUTE OF TECHNOLOGY, KOKRAJHAR & JU** 14-09-2018, 5 years Prof. Rajib Bandyopadhyay Dept. Instrumentation and Electronics Engineering Promote the collaboration on academic and research activities in the areas of mutual interest.
- G-27 **DBT & JU** 20-09-2018 3 yers Prof. Subhadip Basu Dept. of CSE Development of some analytical tools for analysis of large-scale protein-protein interaction networks.
- G-28 **GURU NANAK INSTITUTE OF TECHNOLOGY (GNIT) & JU** 27-09-2018, 1 year, Dr. P. Venkateswaran Head, Dept of Electronics & Tele-Communication Engg. One year certificate course in VLSI Design & Microelectronics Technology.
- F-29 **UNIVERSITY OF DELLA CALABRIA (ITALY) & JU**, 03-10-2018, 5 years, Prof. Chirajib Bhattacharjee Dept. of Chemical Engg. promote mutual understanding and academic, cultural, scientific and personal exchange.
- G-30 **TATA CONSULTANCY SERVICES LIMITED (TCS) & JU** 11-10-2018, 7 years, Prof. Ratna Ghosh Dept. of IEE to further develop their work on human bio-potentials to cater to certain disadvantaged classes of society.
- G-31 **DBT & JU** 11-10-2018, 1 year, Assistant Prof. Subarna Bhattacharyya School of Environmental Studies In-situ monitoring of fungal spore from indoor air to protect biodeterioration of museum object and manuscript using Foldscope Microscope.
- G-32 **GEOLOGICAL SURVEY OF INDIA (GSI) & JU** 11-10-2018 March, 2020 Prof. Sugata Hazra School of Oceanographic Studies Collaboration work i.r.o 36th IGC Traverse in Sundarban Delta-reg.
- G-33 **Confederation of Indian Industries (CII) & Jadavpur University**, 30-10-2018, 3 years Sept. 2021, Prof. Gautam Majumder Dept. of Mechanical Engineering. To provide a platform for Indian Industry with special focus on MSMEs to enhance their knowledge and awareness about industrial safety by interacting with the academic system as well as the benchmark organizations in industrial safety.
- G-34 **DBT & JU** 12-11-2018, 3 years, Prof. Parimal Karmakar Head Dept. of Life Science and Biotechnology Development of polyherbal based functional biopolymer hydrogel for delivery of novel healing agents in excisional and burn wounds.
- F-35 **THE UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANIZATION (UNESCO) & JU** 26-11-2018, 30th October 2019, Dr. Paltu Kumar Dhal Dept. of Life Science and Biotechnology Indigenous microorganisms (IMO's) - based technology for bioremediation of phosphogypsum generated from phosphoric acid plants in India.
- G-36 **WEST BENGAL COMMISSION FOR PROTECTION OF CHILD RIGHTS (WBCPCR) & JU** 26-11-2018, 30th April 2019, Nandita Banerjee Dhawan Assistant Professor School of Women's Studies, Dip Sick Assessment on Impact of Domestic Violence on Children.
- F-37 **GOETHE-INSTITUTE & JU** 13-12-2018, Prof. Sucheta Bhattacharya Dept. of Comparative Lit. Academic Cultural collaboration relating to research on borders.
- F-38 **KHULNA UNIVERSITY OF ENGINEERING AND TECHNOLOGY (KUET) & JU** 13-12-2018, 5 years Dr. Atanu Saha School of Languages and Linguistics Parties declare to undertake scholarly co-operation in the fields of scientific research and develop academic contacts between faculty members of both institutions.
- F-39 **UNIVERSITY OF BARCELONA & JU** 13-12-2018, Prof. Amitava Datta Dept. of Power Engg. ERASMUS PLUS PROGRAM.

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- G-40 **GAS TURBINE RESEARCH ESTABLISHMENT (GTRE) & JU** 13-12-2018, Prof. Pravash Chandra Chakraborti Metallurgical and Material Engg. To study the ratcheting and ratcheting fatigue interaction of Ti-6Al-4V alloy under different heat treated conditions as per the Test Matrix.
- G-41 **CARING MINDS & JU** 19-12-2018 March, 2024 Mukti Pada Sinha, Manojit Mondal One year course entitled “Diploma in Psychological Counselling” 27-12-2018 March, 2024 Mukti Pada Sinha Manojit Mondal Six Month Course entitled “Certificate Course in Psychotherapy”.
- G-42 **UGC & JU** 10.01.2019 Reshmi Das, UGC, Assistant Professor Faculty Recharge Programme
- F-43 **SILESIA UNIVERSITY OF TECHNOLOGY & JU** 08.02.2019 2 yrs Prof. Suranjan Das V.C. Explore collaborative activity.
- F-44 **UNIVERSITY OF CALIFORNIA, BERKELEY, USA & JU** 08.02.2019, 1 yr, Dr. Pradip Kr. Ghosh Pro-V.C. to promote cooperative research and to facilitate the international exchange of ideas, the development of new knowledge, and to enhance global research acumen through these hubs.
- F-45 **THE UNIVERSITY OF SOUTH FLORIDA, USA & JU** 08.02.2019, 1 yr, Dr. Pradip Kr. Ghosh Pro-V.C. to promote cooperative research and to facilitate the international exchange of ideas, the development of new knowledge, and to enhance global research acumen through these hubs.
- G-46 **Jadavpur University & National Remote Sensing Centre, ISRO, Dept. of Space, Govt. of India** 08.02.2019, 2 yrs. Dr. Sugata Hazra, School of Oceanographic Studies, JU Amendment to MoU Study of energy budget and its effect on carbon fluxes in East Kolkata Wetlands–A Ramsar Site.
- G-47 **JCBCAT (DRDO) & JU** 13.02.2019, 2 years, Prof. Sarmistha Neogy CSE Development of High Speed MANET for Intelligent Collaboration.
- G-48 **JCBCAT (DRDO) & JU** 13.02.2019, 2 years 3 months, Prof. Dipten Mishra Director, School of LASER Science and Engg. Estimation of LASER Damage Threshold Parameters for Moving CFRP Panels Subjected to LASER Irradiation and Wind Load
- G-49 **BENGAL INSTITUTE OF PHARMACEUTICAL SCIENCES (BIPS) & JU** 15.02.2019, 4 years Dr. Moulisha Biswas Asst. Prof. BIPS 4 years Bachelor of Pharmacy (Ayurveda) (B. Pharm-Ayur) Degree Course
- G-50 **MINISTRY OF NEW & RENEWABLE ENERGY(MNRE) & JU** 25.02.2019, Research Section One time grant-in-aid support for upgrading Lab and Library facilities for Renewable Energy Education.
- F-51 **THE UNIVERSITY OF NEWCASTLE & JU** 25.02.2019 23.02.2019 to 22.02.2024, Dr. Tuhin Ghosh School of Oceanographic Studies UKRI GCRF Living Deltas Hub COLLABORATION AGREEMENT.
- G-52 **PACHHUNGA UNIVERSITY COLLEGE & JU** 08.03.2019, 3 years, Prof. Argha Deb Dept. of Physics For conducting research on soil-radon precursor of earthquake.
- G-53 **NIELIT & JU** 08.03.2019, 3 years, Sekhar Ghosh Project Exucutive Joint implementation of job-oriented certificate courses.
- G-54 **ENDOWMENT DEED BETWEEN MRS. SURAIYA GUPTA & JU** 14.03.2019, S.G.S. Jt. Registrar Shri Indrajit Gupta Memorial Scholarship.
- G-55 **HYATT Regency & Jadavpur University** 14.03.2019, S.G.S. Jt. Registrar Special Corporate Rate Offer
- F-56 **THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, BERKELEY & JU** 16.03.2019, 5 years Pro V.C. Cooperative agreement.

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OFFICE OF THE CONTROLLER OF EXAMINATIONS

Phone : + 91- 33 - 2414-6003/6004

Int. : 2457-2220

Controller of Examinations : Dr. Satyaki Bhattacharyya

E-mail : contollerexam@jadavpuruniversity.in

Major Achievement (1/4/2018-31/3/2019)

- Integrated Examination Management Module connecting all stakeholders of Examination process like students, faculties, staff, Exam Administrative Officer implemented through Jadavpur University Management system.
- Almost 6000 students, more than 500 faculty members of Engineering, Arts, Science, ISLM including guest faculties, JU exam office staff (30 nos.) and officers have been brought into the system.
- Online marks uploading and result processing through automated hierarchical authorization system developed for JU Examinations.
- Various students' services like improved version of online grade card, student exam form fill-up, process of online provisional certificate developed.

OFFICE OF THE DEAN OF STUDENTS

Phone : + 91- 33 - 2414-6188

Int. : 2457-2279/2386

Dean of Students : Dr. Rajat Ray

E-mail : deanstudents@jadavpuruniversity.in

HOSTELS

Jadavpur University is not a residential university. However, we try our best to provide accommodation to needy students from areas outside Kolkata or from other parts of the country.

No. of Hostels : (for Main Campus)	Total No
• Boys Hostel (UG) – 04 Nos.	675 Boarders
• Boys Hostel (PG) – 03 Nos.	225 Boarders
• Boys Hostel (RS cum PG) – 01 No.	30 Boarders
• G.C. Sen Memorial Chhatrabas– 01 No. (Boys'Hostel) (Physical Education)	99 Boarders
• Women Hostel – 03 No.	540 Boarders
(for Salt Lake Campus)	
• Salt Lake Campus Hostel (Boys) – 01 No.	285 Boarders
• Salt Lake Campus Hostel (Girls) – 01 No.	47 Boarders

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Name of the Hostel Superintendent as on 31/3/2018

Hostel	Superintendent
• A-1 Block Main Hostel	Sri. Tapan Jana
• A-2 Block Main Hostel	Sri. Tapan Jana
• B Block	Sri. Dipayan Datta
• C & D Block	Sri. Dipayan Datta
• New Block Hostel	Sri. Goutam Mukherjee
• Old P.G. Hostel	Sri. Goutam Mukherjee
• New P.G. cum R. S. Hostel	Prof. Subarna Kr. Das/Dr. Tapan Ray
• New Boys Hostel	Dr. Tapan Ray
• G. C. Sen Memorial Hostel	Prof. Sridip Chatterjee/ Dr. Tapan Ray(Officiating)
• Women Hostel -1	Smt. Aparna Kar Chowdhury
• Women Hostel –	Smt. Gulsenara Khatun
• Women Hostel – 3	Smt. Keya Roy
• Salt Lake Campus Hostel (Boys)	Sri. Shibsankar Bhunia
• Salt Lake Campus Hostel (Girls)	Smt. Ashima Das
• Prof. Runu Bannerjee(Ray) (Part-Time)	

FACILITIES AVAILABLE AT EACH HOSTEL:

- T.T. Room, # Common Room, # Canteen, # Magazine & Newspapers, # Play Ground, # Television, # Visitors Room, # Security Arrangement, # Telephone, # Internet (Partial), # K.M.C. Drinking Water # Water Cooler cum Purifier .
- **L.P.G. as Cooking Fuel at hostel-kitchens:**

All the kitchens of the Jadavpur University Hostels have been equipped with Liquid Petroleum Gas (on subsidized rate) as cooking-fuel. So the cooking at the hostel has become very easy, instantaneous, hygienic, controlled with less time/effect in respect to earlier system (coal).

****Number of students applied for hostels and students allotted hostel seats in the year 2018-2019**

U. G. (FRESHERS)

Category	Applied	Allotted
Boys	310	254
Girls	260	93

U. G. (NON-FRESHERS)

Category	Applied	Allotted
Boys	29	29
Girls	40	22

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P. G. (EXTERNAL)

Category	Applied	Allotted
Boys	125	68
Girls	90	49

P. G. (INTERNAL)

Category	Applied	Allotted
Boys	35	35
Girls	46	46

CONCESSION IN FEES:

The concession in fees, in terms of full and half-free studentship, are awarded to needy students of the day – courses as well as evening courses (except Engg. evening students) on the recommendation of the University constituted Committee. After due notification by the Dean of Students, application forms, are issued at the beginning of the session, from the Office of the Dean of Students.

- Following no. of students have been granted free-studentship in due year 2018-2019.

STATEMENT ON FREESHIP FOR THE SESSION 2018-2019

FACULTY OF ARTS

Sl. No.	Department	Total Applicants	Full Free	Half Free	Total No. of Beneficiaries
1.	Bengali	145	72	42	114
2.	Comparative Literature	02	nil	nil	nil
3.	Economics	01	01	nil	01
4.	Education	130	34	60	94
5.	English	01	01	nil	01
6.	Film Studies	01	01	nil	nil
7.	History	80	46	04	50
8.	International Relations	38	34	nil	34
9.	Library & Info. Science	18	08	04	12
10.	Philosophy	124	53	35	88
11.	Physical Education	112	13	44	57
12.	Sanskrit	194	69	42	111
13.	Sociology	17	15	nil	15
14.	Linguistics	02	02	nil	02

FACULTY OF SCIENCE

15.	Chemistry	35	24	02	26
16.	Geography	07	01	nil	01
17.	Geological Sciences	15	14	nil	14
18.	Instrumentation Science	02	02	nil	02
19.	Life Science & Bio-Tech. Engg.	06	06	nil	06
20.	Mathematics	45	28	nil	28
21.	Physics	47	44	02	46

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FACULTY OF ENGINEERING & TECHNOLOGY

22.	ACEE: Journalism & Mass Communication	18	05	10	15
23.	Architecture	01	nil	nil	nil
24.	Chemical Engineering	40	34	nil	34
25.	Civil Engineering	69	47	05	52
26.	Computer Science & Engg.	25	17	06	23
27.	Electrical Engineering	46	39	02	41
28.	Electronics & Tele-Comm. Engg.	21	13	nil	13
29.	Food Tech. & Bio-Chemical Engg.	21	19	nil	19
30.	Mechanical Engineering	74	35	21	56
31.	Met. & Mat. Engineering	25	19	nil	19
32.	Pharmaceutical Technology	59	26	31	57
33.	Production Engineering	14	11	01	12
34.	Construction Engineering	23	12	06	18
35.	Information Technology	45	11	23	34
36.	Instrumentation & Electronics Engg.	25	11	12	23
37.	Power Engineering	26	17	06	23
38.	Printing Engineering	25	14	09	23
Total		1579	798	367	1165

Free-Studentship Allotment –

General Students	SC	ST	OBC+	Minorities	PD
427	345	48		323	22

Grand Total= **1165**

• FINANCIAL ASSISTANCE:

One time Financial Assistance has been given from University's Fund to the needy students for their continuity and effective study at Jadavpur University.

31(Thirty One) students received Financial Assistance @**Rs. 2,000/-**(Rupees Two Thousand only) each.

72 (Seventy Two) students received Financial Assistance @**Rs. 3,000/-**(Rupees Three Thousand only) each.

64 (Sixty Four) students received Financial Assistance @**Rs.5,000/-**(Rupees Five Thousand) each.

15 (Fifteen) students received Financial Assistance @**Rs.8,000/-**(Rupees Eight Thousand only) each.

- In addition to granting Free-ship and awarding Endowment Scholarship / Other Scholarship, few students were financially helped by the University for the Continuity of their study as special cases.

ANTI-RAGGING ACTIVITIES

Jadavpur University has accepted all the directions / guidelines issued by Hon'ble Supreme Court of India and regulatory bodies to eradicate ragging in the university campuses. Jadavpur University is working intensively from the very beginning of issue of such directions in the year 1998. Following activities (in brief) were taken up in the year 2018-19 to stop ragging in the campuses –

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Actions taken for prevention of ragging in the year 2018-2019

1. The Anti-Ragging Committee and Anti-Ragging Squad have been re-constituted as per the latest circular of the UGC on the title “UGC Regulation on Curbing the Menace of Ragging in Higher Educational Institutions, 2009.”
2. There are thirty-seven Departmental Anti-Ragging Volunteer Teams, fourteen Hostel Anti-Ragging Volunteer Teams and two Common Area Anti-Ragging Volunteer Teams covering both the campuses.
3. The first Anti-ragging Committee meeting with the members of newly constituted body held on 28-03-2018, for taking actions for the year 2018-19.
4. The second Anti-ragging Committee meeting with the Heads of all the departments under Faculty of Engineering and Technology was held on 22-06-2018, for taking appropriate Anti-Ragging measures as per the direction of the UGC and AICTE
5. Anti-Ragging Committee Meeting was organized inside the hostel premises on **16-07-2018** at 04:00 P.M. in the Office of the C&D Block, Jadavpur University Main Hostel with the Hostel Anti-Ragging Volunteer Teams.
6. First phase of Anti-Ragging Posters & Banners have been displayed in the third week of July, 2018 to create awareness among the university community.
7. Issuance of ‘UGC Regulations on Curbing the Menace of Ragging in Higher Educational Institutions, 2009’ in the form of booklet, to all the Head of the Departments was made on June, 2018.
8. Issue of ‘UGC Regulations on Curbing the Menace of Ragging in Higher Educational Institutions, 2009’ in the form of booklet, to all the first year students (2018-19) of the University was made at the time of admission.
9. Circular has been issued by the Registrar of the University on 05-07-2018 about the constitution of the Anti-Ragging Committee 2018-19 with the names of the Anti-Ragging Committee members and their telephone numbers, wherein the responsibility and accountability of the university community towards curbing the menace of ragging was stated.
10. Circular has been issued by the Registrar of the University on 13/16-07-2018 about the constitution of the Anti-Ragging Volunteer Team Members with the names for Departments, Hostels and Common Area, wherein the responsibility and accountability of the university community towards curbing the menace of ragging was stated.
11. Circular has been issued by the Registrar of the University on 18-07-2018 about the constitution of the Anti-Ragging Squad 2018-19 with the names and Mobile Numbers of the Members was stated.
12. Anti-ragging undertakings by the newly admitted students were done accordingly.
13. The notice of Anti-Ragging Committee, Anti-Ragging Squad and Anti-Ragging Volunteer Teams for the year 2018-19 have been uploaded in the university website.
14. All the first year Engineering Students were addressed about the Anti-Ragging measures of the University by the Dean of Students during first day of Induction Programme of the fresher.
15. Salt Lake Campus Anti-Ragging Committee Meeting with the Hostel Anti-Ragging Volunteer Team was organized on 31-07-2018 in the Committee Room, Salt Lake Campus.
16. Meeting of the Anti-Ragging Volunteer Team (Common Area) of Salt Lake Campus was held on 10.08.2018 at the Administration Office, Salt Lake Campus.
17. Anti-Ragging Undertaking taken during the admission in the Jadavpur University Hostels.

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18. The first Anti-ragging Squad meeting with the members of newly constituted body held on **20-08-2018**, for taking actions for the year 2018-19.
19. Anti-Ragging Squad 2018-19, subsequently held meeting on the following dates:
04-09-2018; 06-09-2018; 28-09-2018; 19-12-2018 and **21-01-2019**.
20. The Anti-Ragging Committee held meetings, to discuss and resolute on various ragging issues on the following dates:
24-08-2018; 29-08-2018 and **28-01-2019**.

OFFICE OF THE DIRECTOR OF PHYSICAL INSTRUCTION SPORTS BOARD

Int : 2457-2309

Director of Physical Instruction (Sr. Scale) : Dr. Aparup Konar
E-mail : dir.phy.ins@jadavpuruniversity.in

East Zone Level:

SL.	Name of the Competition	Sports Event	Position	Name of the Players	Present Class
1	East Zone Inter-University Chess (M) Championship	Chess (Men)	Champion	Arpan Das Kaustav Kundu Bodhisatya Pal Debankan Dhara Aditya Chowdhury Sayan Mazumdar	BA-II (Philo) BSc-I (Geo.Sc) BE-III(Electrical Engg) BE-I (Chemical Engg) BE-III (Com.Sc.Engg) BE-III(Chemical Engg)
2	East Zone Inter-University Badminton (W) Tournament 2018-19	Badminton (Women)	Lost in 1st Round		
3	East Zone Inter-University Basketball (M) Tournament 2018-19	Basketball (Men)	Lost in 2nd Round		
4	East Zone Inter-University Basketball (W) Tournament 2018-19	Basketball (Women)	Lost in Quarter Final		
5	East Zone Inter-University Cricket (M) Tournament 2018-19	Cricket (Men)	Lost in 2nd Round		
6	East Zone Inter-University Football (M) Tournament 2018-19	Football (Men)	Lost in 1st Round		
7	East Zone Inter-University Kho-Kho (M) Tournament 2018-19	Kho-Kho (Men)	Lost in 2nd Round		

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- | | | | |
|----|--|--------------------|-------------------------------------|
| 8 | East Zone Inter-University Kho-Kho (W) Tournament 2018-19 | Kho-Kho (Women) | Participation |
| 9 | East Zone Inter-University Table Tennis (M) Tournament 2018-19 | Table Tennis (Men) | Lost in 2nd Round |
| 10 | East Zone Inter-University Volleyball (M) Tournament 2018-19 | Volleyball (Men) | Participation |

Inter Zonal Level:

- 1 Inter-Zonal Inter-University Chess (M) Championship 2018-19, Chess (Men) **8th Position** Arpan Das Kaustuv Kundu Bodhisatya Pal Debankan Dhara Aditya Chowdhury Sayan Mazumdar B A - II (Philosophy) BSc-I (Geo.Sc) BE-III (Electrical Engg.) BE-I (Chemical Engg) BE-III (Com.Sc.Engg) BE-III (Chemical Engg)

All India Level:

- 1 All India Inter-University Rowing (W) Championship 2018-19, Rowing (Women) **2 Gold Medals (500m & 2k.m Fours) 2 Gold Medals (500m & 2k.m Pairs)** Shreyaa Brahmachari Shramana Saha Sweta Brahmachari Semanti Choudhury Shramana Saha Sweta Brahmachari, MSc-II (Chemistry) BA-II (English) BA-II (I.R) Linguistics-I (German) BA-II (English) BA-II (I.R)
- 2 All India Inter-University Aquatics (W) Championship 2018-19 Swimming (Women) **2 Silver Medal (50mt & 100 mt Breast Stroke)** Miss Srishti Basu BA-I (Sociology)
- 3 All India Inter-University Aquatics (W) Championship 2018-19 Diving (Women) **1 Bronze Medal (10m High Board Diving)** Miss Rakhi Podder BSc-I (Math)
- 4 All India Inter-University Grappling (W) Championship 2018-19 Grappling (Women) **2 Bronze Medal (Gi & NoGi:Below-62 Kg.)** Miss Aparna Das BE-III (Architecture)
- 5 All India Inter-University American Football (Men: Tackle Version) Championship 2018-19 American Football (Men) **3rd Position (Tackle Version)** Paritosh Saini Subhodip Chatterjee Jagatpati Gaorain Amit Manhas Mutasim Farooq Fanso Bhutia Samir Roy Joydeep Nandi Nazbul Gazi Swawat Singh Milind Khatiwada Tshering.N. Sherpa Koushik Mondal Subhasish Murmu Nunglyen R. Lepcha Ankit Kumar Dinchin Tamang Indranil Roy Hasan Raza Ansari Nikhilendu Saha Soumik Sengupta Kartick Paul Goutam Mondal Jayana Biswas Gyazin Lama BE-III (C.S.E) BE-III(Civil Engg.) Linguistics-I (French) BE -II (C.S.E) BE - I (C.S.E) BE -IV (Chem. Engg.) BA-II (C.L) BE -I (E.T.C.E) MA- I (Film Study) BE -I (C.S.E) MA-I (CL) BA-III (I.R) M.P.Ed- IB.P.Ed- IIBA-II (Philosophy) BE-II (F.T.B.E) BA-II (English) MA-II (Mass Comm.) BE -III (Elect. Engg.) B.P.Ed- II MA- I (C.L) M.P.Ed- I M.P.Ed- I M.P.Ed- I BA-II (Economics)
- 6 All India Inter-University American Football (Men: Flag Version) Championship 2018-19 American Football (Men) **4th Position** Prashanta Hembrom of UG-II (BPEd) received **Best Defender Prize** in Flag version & Milind Khatiwada of PG-I (CL) ensured **Best Defender Prize** in Tackle version in American Football (Men).
- 7 All India Inter-University American Football (Women: Tackle Version) Championship 2018-19 American Football (Women) **Participation**
- 8 All India Inter-University Aquatics (M) Championship 2018-19 Aquatics (Men) **Participation**
- 9 All India Inter-University Athletics (M) Championship 2018-19 Athletics (Men) **Participation**

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- 10 All India Inter-University Gymnastics (M&W) Championship 2018-19 Gymnastics (Men & Women) **Participation**
- 11 All India Inter-University Karate (M) Championship 2018-19 Karate (Men) **Participation**
- 12 All India Inter-University Taekwondo (M &W) Championship 2018-19 Taekwondo (Men & Women) **Participation**
- 13 All India Inter-University Wrestling(M) Championship 2018-19 Wrestling (Men) **Participation**
- 14 All India Inter-University Yoga (M & W) Championship 2018-19 Yoga (Men & Women) **Participation**

Sports Achievements & Participation other than Inter University Competition for the session 2018-19:

National and International Level:

SL Name of the Competition/Sports Event/Position/Name of the Players/Present Class

- 1 Khelo India Youth Games 2019, Table Tennis (Women) **2 Gold medals** in Table Tennis (U-21 yrs girls Singles & Doubles) Surbhi Patwari BA-I (Economics)
- 2 Khelo India Youth Games 2019, Swimming (Women) **Bronze medal** in Swimming (4x100m Freestyle Relay) Shristi Basu BA-I (Sociology)
- 3 International Sports Championship 2019, Karate (Men) **Two Gold medals** in Karate (kata & kumite - open) Rohan Ganguly BA-I(History)

State Inter-University / Inter-College Level:

- 1 4th BRC Inter-College Rowing Championship 2018, Rowing (Women) **Gold Medal Silver Medal (Indoor Rowing) Silver Medal (Fours)** Shramana Saha Sweta Brahmachari Shreyaa Brahmachari Shramana Saha Sweta Brahmachari Semanti Choudhury, BA-II (English) BA-II (I.R) MSc-II (Chemistry) BA-II (English) BA-II (I.R) Linguistics-I (German)
- 2 W.B. 1st Inter-University Basketball (M&W) Tournament 2018 Basketball (Men) **Runners Up**
- 3 State Level Inter-College Basketball (W) Tournament 2018, Basketball (Women) **Runners Up**
- 4 RFYS Inter-College Athletics Meet 2018, Athletics (Men) **3rd Position (4x400m Relay Race)**
- 5 7th State Ball Badminton Championship 2019, Ball Badminton (Men & Women) **Women: 3rd Position Men: 4th Position** Mintu Sardar of MPed-II has been awarded the “**Star of Bengal**” of Men Team
- 6 State Super Cup Mixed Ball Badminton Competition 2019, Ball Badminton (Mixed) **3rd Position**
- 7 Ajoy Ghosh Memorial Trophy Cricket (M) Tournament 2018-19 Cricket (Men) **Won a league match**
- 8 Inter-University T-20 Cricket (M) Tournament 2018-19, Cricket (Men) **Lost in Semi Final**
- 9 CAB Combined University Cricket (M) Tournament 2018-19 Cricket (Men) **Seven (7) JU Cricket players namely Turja Chowdhury, Krishna Kumar, Rohon Sarkar, Indranil Mondal, Soham Sarkar, Abhranil Bhattacharjee and Prayas Choshal** were selected to represent in different Combined University teams (Blue & Yellow) to participate in the said Tournament. **Rohon Sarkar** who represented Combined University Blue team became the ‘Man of the Match’ in one match

Organized Professional Sports Programmes for the Session 2018-19:

1. **West Bengal Youth Chess Championship 2018** hosted by Jadavpur University Sports Board

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under the aegis of Bengal Chess Association was held on & from 14th to 17th June, 2018 at 9.00 a.m. to 6.00 p.m. at the IT Seminar Halls (2nd& 3rd floor) in SMCC Building of Jadavpur University Salt Lake Second Campus.

2. **West Bengal 1st Inter-University Basketball (M&W) Tournament 2018** hosted by Jadavpur University Sports Board under the aegis of West Bengal Basketball Association was held on & from 18th to 20th September, 2018 at 2.00 p.m. at the University Basketball Court, Main Campus.
3. **State Super Cup Mixed Ball Badminton Competition 2019** hosted by Jadavpur University Sports Board in collaboration with West Bengal Ball Badminton Association held on 16th February, 2019 at Small Game Area, Main campus, JU where 3 top best State Championship teams took part along with a JU mixed team.
4. **International Sports Championship 2019** hosted by Jadavpur University Sports Board in association with Purba Medinipur Haldia Karate Games and Sports Association approved by Karate Association of India, recognized by Govt. of India (MYAS), affiliated by Indian Olympic Association, World Karate Federation, Asian Karate Federation, Commonwealth Karate Federation and South Asian Karate Do Federation held from 5-6 Jan, 2019 held at Open Air Theater, JU Main Campus.
5. **WUKF Asia Inter-Continental Karate Championship-2019** hosted by Jadavpur University in association with Bengal Sports Karate Association affiliated to Nehru Yuva Kendra-South Kolkata under the care of Ministry of Youth Affairs and Sports, Govt. of India held from 18-20 January, 2019 at Open Air Theater, JU Main Campus.
6. **One day Football Festival** hosted by Jadavpur University Sports Board in collaboration with Sony Liv supported by Comcraft Advertising & Marketing Pvt. Ltd. under the promotion of FIFA World Cup 2018 on 28th June, 2018 at 10.00 am at the University Playground, Main Campus

Co-curricular Activities for the Session 2018-19:

Karate Coaching Programme: Karate coaching programme successfully conducted under the aegis of Sports Board of Jadavpur University twice in a week every Tuesday & Thursday at OAT, JU Main Campus from 5.30 pm to 7.30 pm under supervision of Karate Instructor and Lady Karate Instructor for all the students including girls of JU with the aim to promote self-defense activity in the university.

Multi-Gym & Fitness Training Centre: Multi-Gym & Fitness Training programme with Weight & Power Lifting organized efficiently every Monday to Friday from 6.30 am to 9.30 am for girls and from 4.30 pm to 7.30 pm for boys in the Gymnasium at Main Campus under the guidance of Gym Trainer and Lady Gym Trainer for the development and promotion of health & sports performance for all the students including girls of JU.

OFFICE OF THE DIRECTOR OF YOUTH WELFARE

INT : 2457- 2247

Sr. Director of Youth Welfare : Dr. Bappa Mullick

diryw@admin.jdvu.ac.in

OFFICE OF THE DIRECTOR OF YOUTH WELFARE

Jadavpur University students did well in the co-curricular areas in the year 2018-19. There was a steady growth in students' participations at various levels, including students clubs / societies, intra-murals, extra-murals etc. wherein they demonstrated their zeal for participation in cultural, literary, artistic and adventure

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sports' activities. Students also exhibited their competence, coordination and enthusiasm in organizing of major events independently and while assisting the university. It was heartening to see the camaraderie and understanding amongst the members of various clubs in organizing of events, assisting in finding sponsors, and in sharing of rooms for their sessions. The Science Club, JUMHC, JUPC, QFDS, Film Society, Music Club, Drama Club, Art & Literary Society, Painting Club and Chess Club attracted huge memberships, with overwhelming participation from the new entrants. Outreach activities of the Office were also well attended by the members of various clubs and JU students in general.

Details of major participations, achievements and events:

- A contingent of Jadavpur University students participated at the **34th AIU Inter-University Youth Festival** at Mithila University and Chandigarh University for the Zonals and Nationals respectively. Taishi Nandi won the 1st position at Zonal and 2nd position at National in Light Vocal (Solo) event. Animesh Tamang won the 1st position in Western Vocal (Solo) event in Zonal and 3rd position in National. Swarnenu Mondal won 1st position in Classical Instrument (Non-Percussion) in Zonal and 3rd position in National. Madhumay Roy won 1st position in Western Instrument (Solo) event in Zonal.

34th AIU INTER-UNIV. YOUTH FEST (ZONAL) AT L. N. Mithila University, January 3-7, 2019 c

Merit list

- Bietri Pathak, I.R. – 2nd in COLLAGE ART.
- Animesh Tamang, Chem. Engg. – 1st in WESTERN – VOCAL (Solo)

- Swarnenu Mondal, Geog. Sci. – 1st in CLASSICAL INSTR. (Non-Percussion)
- Souvick Chakroborty, Eng. – 1st in CLASSICAL INSTR. (Percussion)
- Madhumay Roy, Geog. Sci. – 1st in WESTERN INSTRUMENTAL (Solo)

34th NATIONAL AIU YOUTH FEST (NATIONAL) VENUE – Chandigarh University, Chandigarh, February 1-5, 2019

Merit list

- Madhumay Roy, Geog. Sci. – 4th in WESTERN INSTRUMENTAL (Solo)
- Bietri Pathak, I.R. – 3rd in COLLAGE ART.
- Animesh Tamang, Chem. Engg. – 3rd in WESTERN – VOCAL (Solo)
- Swarnenu Mondal, Geog. Sci. – 3rd in CLASSICAL INSTR. (Non-Percussion)
- Souvick Chakroborty, Eng. – 2nd in CLASSICAL INSTR. (Percussion)

12th AIU SOUTH ASIAN UNIVERSITIES FESTIVAL (SAUFEST) 2018-19

Taishi Nandi, a student of Computer Literature Department, represented Indian Universities contingent at the 12th AIU South Asian Universities Festival (2018-19) in Light Vocal event at Pt. Ravi Shankar Shukla University, Raipur, Chhattisgarh.

J.U Students Club/ Societies Activities

- **J.U Photographic Club (JUPC)**

Jadavpur University Photographic Club provided students with photographs of their degree receiving moments on Annual Convocation Day, like the previous years.

JUPC organized Basic Training Course on photography for the Fresher's on 5th September 2018. This training session was for 5 weeks. Theory classes were held every week and the practical classes were held at Victoria Memorial, Rabindra Sarovar, Alipore Zoo, Gourdaha village, Kumartuli, Princep Ghat, Mallick Ghat, North Kolkata as well as different villages. This training session saw a huge turnout.

Post completion of Basic Training Session, a photography quiz on November 15th, where enthusiastic fresher's fought through several rounds of exciting questions from identifying the photographer to guessing the correct exposure settings.

- **J.U Painting Club (JUPnC)**

Jadavpur University Painting Club organized PICTURESQUE which included a series of fine arts events like cartooning, collage making and rangoli, poster making, mehendi art, on spot painting, charcoal art, hand/ face painting, junk art as well as clay modelling and graffiti. All event were held on the OPT Hall from September 3rd to 7th, 2018. The event was held only for Fresher's. PICTURESQUE succeeded to keep alive the passion for the art of the Fresher's.

After the success of PICTURESQUE J.U. Painting Club organized a craft workshop for the members of the club as well as for the students of J.U. With the help of the Sr. D.Y.W. Painting Club had contacted Ms. Sudipta Das, one of the renowned craftsman in the town. She teach to make lamp shades and various Origamis. It was organized on 4th October 2018, at the OPT Hall.

Another workshop on doodling named "Let's Doodle" was conducted by the club in collaboration with the Camlin and Last Page Doodle on January 18th, 2019. For the workshop Camlin and Last Page Doodle had provided J.U. Painting Club with all the necessary amenities required for the workshop. It was a resourceful workshop for the people who loves to scribble on the papers. Doodling channelize these scribble to take the form of an art.

The next venture for this year was organizing an international college Art Carnival named AURORA under the guidance of the Sr. D.YW. Camlin sponsored this programmer. AURORA was a two day art carnival comprising of various workshops, inter college painting competition and an exhibition. People from different college had submitted their painting to exhibit in the exhibition. The competitions of AURORA organized on 14th & 15th March 2019, while the exhibition took place in the Science-Arts More at J.U.Wasim Kapoor, one of the most eminent artists of India, had come to inaugurate the programme. The event for the inter-college competition included poster making, on spot painting, mehendi, worst painting, tattoo art and doodling.

The first college fest for the year 2018-19, was RHAPSODY 2018, organised by Medical College Kolkata. Bijetri Pathak & Devatra Pathak had won the **third** place in Quilling.

The 2nd inter college fest of this year was the XAVOTSAV 2019, organised by St. Xavier's College Kolkata. The list of achievers:

- Charcoal sketching- **2nd** Place, Neerajana Deb.
- T shirt painting - **2nd** Place, Ankita Paul.
- Dry Rangoli - **1st** Place, Jyoti Sarkar, Riddhi Mahaldar.
- Face Painting - **2nd** Place, Neerajana Deb, Jyoti Sarkar.
- Paper Quilling - **3rd** Place, Shreya Girl, Sampriti Dasgupta.
- Comic Strip making - **2nd** Place, Sampriti Dasgupta.
- Tattoo Art - **2nd** Place, Sagarika Dad, Bijetri Pathak.

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The next was KLADIEOSCOPE, organized by Lady Brabourne College. Devatra Pathak stood **3rd** in Poster making.

INVICTUS'19 is an inter college fest organized by the J.D. Birla College, Kolkata. There, Devatra Pathak stood **2nd** in the Doodling competition.

ANAKHRONOS 2019 is an inter college fest organized by Techno India (Mains), Salt Lake Campus. The Achievers of that fest includes:

- Doodling - **1st** Place, Devatra Pathak
- Tattoo Art - **2nd** Place, Bijetri Pathak
- Painting - **3rd** Place, Bijetri Pathak

Bijetri Pathak had stood **2nd** in the Collage making in East-Zone of Youth Festival organized by the Ministry of Sports and Youth Welfare, Govt. of India and Association of Indian University in 2018 and got qualified for the Nationals. In the National Youth Festival she stood **3rd** in Collage Making.

- **J.U. Mountaineering & Hiking Club (JUMHC):**

In July 2018, JUMHC organized **Mt. CB-13 Expedition (6264 meters)**. 4 student members were a part of this expedition along with 2 senior pass out members made their full efforts to climb, and reached the summit point on 13 July, 2018 at 12: 35 PM.

Also during June 2018, 2 students of Jadavpur University completed **Basic Mountaineering Course** from **ABVIMAS Manali**.

JUMHC conducted 3 Rock Climbing practices at Susuniahills (1) and Mathaburuhills (2) during the calendar year.

JUMHC conducted its 43rd Rock climbing course at Mathaburu Hills during January, 2019.

- **J.U. Science Club:**

Jadavpur University Science Club had organized the following events in the academic year 2017-18.

1. TechKnow Cradle '18
2. Some Like It Correct '18
3. IMAGINEER v. 4
4. Srijan '19 Robotics events
5. Jontro Tontro '19

The aim of TechKnow Cradle is to inspire school students to think out of the box and delve a little bit more into the applications and practical aspects of Science which is very limited in Indian schools.

TechKnow Cradle '18 was held on 14th and 15th of July, 2018 at OPT Hall, from 9:00 am to 5:30 pm. A total of 103 students attended the workshop from schools all over the city.

The programme was initiated with a brief keynote speech by Dr. Bappa Mullick, the Director of Youth Welfare, Jadavpur University. Many hands on experiments pertaining to the basic science subjects viz. Physics and Chemistry, which were relatable to Class 8 and 9, were demonstrated as well as hands on sessions were conducted for most of them.

The workshop was an immense success. We received very positive feedback from the participants. They put forward various suggestions on the topics for future workshops, which we have been seriously considering to conduct if possible in the near future.

SOME LIKE IT CORRECT, an inter-college biz-tech quiz, was organized for only the freshmen of the year 2017, across all disciplines. It was an independent event organized by JUSC as a part of the Freshers' Welcome, held by the Jadavpur University Clubs and Societies. It took place on 7th September, 2017 at TEQIP-208.

The event was a grand success. All the participants commended the high standard of the quiz, and were equally delighted by taking part. We saw an amazing turnout from freshmen of neighboring colleges in the city, which clearly marks the good reach of our social media presence. The hall of TEQIP-208 was full house.

IMAGINEER is the trademark workshop of **Jontro Tontro**, the official Tech-Fest of Jadavpur University Science Club (JUSC). It was first organised in 2016 and it is being held for the third consecutive time owing to the overwhelming response. The workshop aims at promoting the ideas of image processing which finds applications in various cutting edge technologies, ranging from detection of cancerous cells in medical scans to self-driving cars. The theoretical concepts are carefully woven with the hands on session in MATLAB to give the participants an immersive experience of this wonderful topic. The workshop was held on 26th and 27th of January, 2018 at TEQIP-208. Although it was specially designed for the freshmen, the workshop was open to all enthusiasts.

A total of 44 students and academic professionals attended the workshop. 35 of them were from Jadavpur University, 6 from Techno India Salt Lake, 1 from AMITY University, 1 from IEM and 1 from Heritage Institute of Technology. The overall participation has increased notably from last year.

The workshop was a great success. We got very good feedback from the participants. They put forward various suggestions on the topics for future workshops.

SRIJAN '19, the annual technical fest organized by Jadavpur students, is an open event for all the students pursuing a college degree. This year it was a collaborated event with all the Jadavpur University Clubs and Societies. It took place between 16th to 18th February, 2018 at the Jadavpur University Salt lake Campus.

The fest consisted of, over 20 events which covered all disciplines of science and arts. Alongside these events JUSC organized 4 robotics events namely, Highway to hell (Manual bot obstacle race), Blitzkrieg Ball (A traditional robotics soccer event), Homecoming (Autonomous line follower) and Maze Runner (Autonomous Maze Solver). There was a participation of over 200 teams of 3-5 members each, throughout the 4 events offered by JUSC. After tough prelims for two days, top 10 teams were shortlisted in each event to fight for the prize. After some rigorous competition, two teams emerged victorious in corresponding events.

The event was a grand success. All the participants commended a high standard of robotics, and were equally delighted by taking part. We saw amazing display of robot making and control by participants across Bengal which clearly marks the development of robotics clubs throughout the colleges like IIT Kharagpur, NIT Durgapur, IEM, UEM, AOT, Heritage just to name a few. The participants supported all the teams and abided by the rules of the competition making it a grand success.

- **J.U. Quiz Forum:**

Enquiry, the quiz forum of Jadavpur University, is one of the most active quiz clubs in the city. Under the guidance of the Director of Youth Welfare, and with the assistance of the Office of the Director of Youth Welfare, the club conducts sessions, an annual quiz festival, and the biggest inter-college fresher's quiz competition in eastern India.

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Enquiry also organizes quiz sessions regularly and is among the very few clubs to regularly conduct quiz sessions in the city. The sessions are informal, uncompetitive in nature, and they do not have prizes. In the last 8 months, Enquiry has organized 6 sessions, which has had an average footfall of 20 college or university level quizzers from across the city. Some of those sessions were also attended by school students and some were attended by quizzers from outside the city who were in Kolkata during the time. All sessions were extremely well received by the attendees. The quizmasters at these sessions have been a mix of students from various disciplines. Quizzes have been general themed but also on more specialized topics such as music, movies, literature, entertainment, unusual goods and services.

The annual inter-college fresher's quiz organized by Enquiry is one of the most competitive fresher's quizzes in the country. The past edition was probably the biggest in the history of the event and saw the participation of 42 teams from various colleges and universities across eastern India. The prelims were held on 5th October, 2018, and the finals were held on 9th October, 2018. The prelims had 30 questions from which the top eight scoring teams qualified to the final round. The quizmasters were Baneswar Sarker, Balagopal Menon, Pratyoy Das, Ananyo Brahma, Baidik Chandra, Arunava Banerjee, Ishan Palit, Tuba Waqar and Aqib Khan, all of whom were students of the university and were recognized as some of the most prolific quizzers of Enquiry.

At the end of the finals, a team from Presidency University comprising Srijon Sen, Shuvam Sarkar, and Sujoy Banerjee emerged as the champions. National University of Juridical Sciences came second, followed by Medical College, Kolkata.

Perhaps the biggest college quiz festival in this part of the country, the 15th edition of "QRIOSITY" was held on 22nd and 23rd September, at Gandhi Bhavan, Jadavpur University. The two day festival was attended by around 20 school students, almost 100 college or university students below the age of 25, and over 70 working professionals. Boasting of six quizzes over the two days, the event was a remarkable success, praised by many. It was also attended by members of the Karnataka Quizzing Association, Mumbai Quiz Circuit, and Delhi Quizzing Circle.

The first quiz was an U-25 General quiz and was hosted by Titash Banerjee, Arpan Guha, Kunal Mandal, the latter two being former students of this very institution. The second quiz was an open written quiz on etymology and origins and was hosted by Sumantra Sarathi Datta and Reesoom Pal, the latter being a PhD scholar at the Jadavpur University school of cultural texts and records. The third and final quiz of the day was the much awaited Open General Quiz for the Subhankar Nag Memorial Trophy. Hosted by the then project director of FIFA U-17 World Cup, Joy Bhattachariya, who is also as alumnus of this institution, the quiz is one of the most popular open quizzes in traditional format in this part of the country.

The second day began with another U-25 quiz on movies, comics, video games, TV shows, science fiction and fantasy. It was hosted by current or recent Enquiry members – Ananyo Brahma, Balagopal Menon, Saswata Acharya, Ishan Palit, Arunava Banerjee, and Rushati Mukherjee. The second quiz of the day was an open written one on our beloved City of Joy, Kolkata, by Sarbajit Mitra, a much respected and well known quizzier in the Calcutta Quizzing Fraternity. Qriosity 2018 ended with another edition of the open audio-visual quiz (which was extremely well-received in the previous edition). Hosted by Prithwish Datta and Debanjan Bose, the sophomore edition improved upon the first one.

Prizes at Qriosity 2018 were sponsored by Redwolf, Vivel, Good Old Books, The Pool Café, Bohemian, and Samosa Time.

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List of Achievements in 2018-2019

1. **FIRST** – 40th Argus Open Quiz, Bengal Quiz Foundation
2. **FIRST** – A Beautiful Mind 2019, General Quiz at Indian Institute of Social Welfare and Business Management
3. **FIRST** – Biztech Quiz 2019, Springfest, IIT Kharagpur
4. **FIRST** – Dublin Wager, Open Quiz at IISER Kolkata
5. **FIRST** – General Quiz at Bitotsav 2019, Birla Institute of Technology, Mesra
6. **FIRST** – General Quiz at Ensemble – Valhalla, College Quiz at XLRI Jamshedpur
7. **FIRST** – General Quiz at Instruo 2018, IEST Shibpur
8. **FIRST** – GenQuiz Khan II, College Quiz at KIIT Bhubaneswar
9. **FIRST** – Koutuholi 2019, General Quiz organized by Department of Pharmaceutical Technology, Jadavpur University
10. **FIRST** – Mary Bucknell Trophy 2019, Springfest, IIT Kharagpur
11. **FIRST** – MASALA Quiz 2019 at Future Institute of Engineering and Management, Sonarpur
12. **FIRST** – Open Bollywood Quiz, Siliguri Quiz Festival 2019
13. **FIRST** – Open MELAS Quiz, Q-Carnival 2019, KPC Medical College and Hospital, Kolkata
14. **FIRST** – Quizzard 2019, Institute of Engineering and Management, Kolkata
15. **FIRST** – Quizzard, Quiz on World Politics and Current Affairs, International Relations Scholastic Conclave 2019, Department of International Relations, Jadavpur University
16. **FIRST** – Ranajay Karlekar Memorial Inter-college Quiz 2019, Department of English, JU
17. **FIRST** – Ranajay Karlekar Memorial Open Quiz 2019, Department of English, Jadavpur University
18. **FIRST** – Showbiz, the open movie quiz
19. **FIRST** – SpEnt Quiz at Ensemble – Valhalla, College Quiz at XLRI Jamshedpur
20. **FIRST** – Sports and Entertainment Quiz 2019, Springfest, IIT Kharagpur
21. **FIRST** – Sports Quiz, Xavotsav 2019, St. Xavier's College, Kolkata
22. **SECOND** – College Quiz at Kolkata Quiz Festival 2019
23. **SECOND** – Does Gray Matter, 2018, IPGMER College quiz
24. **SECOND** – Entertainment Quiz 2019 at Integration, Indian Statistical Institute, Kolkata
25. **SECOND** – Filmistaan 2019, Film Quiz at Heritage Utsav 2019, Heritage Institute of Technology,
Kolkata
26. **SECOND** – General Open Quiz at Bansberia
27. **SECOND** – Idiot Box, TV show Quiz, Eclectica 2019, Techno India Salt Lake
28. **SECOND** – Open General Quiz, Q-Carnival 2019, KPC Medical College and Hospital, Kolkata
29. **SECOND** - Open MELA Quiz, Siliguri Quiz Festival 2019
30. **SECOND** – Prahelika 2019, General Quiz at Integration, Indian Statistical Institute, Kolkata

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31. **SECOND** – QuizmatQuonnection, Scottish Church College Quiz
32. **SECOND** – Sudhish Chandra Ghosh Dastidar Memorial Quiz, Naihati
33. **THIRD** – Bollywood Open Quiz, BOLLYMIND OPEN QUIZ
34. **THIRD** – Dollars Ex Machina, Open Science-Biz-Tech Quiz, QvicQvid 2019, Presidency University, Kolkata
35. **THIRD** – ExaByte 2019, St. Xavier's College, Kolkata
36. **THIRD** – General Quiz at Kaleidoscope, Lady Brabourne College, Kolkata
37. **THIRD** – Loreto Shield Quiz 2018, Loreto College, Kolkata
38. **THIRD** - Open General Quiz, Siliguri Quiz Festival 2019
39. **THIRD** - Open Sports Quiz, Siliguri Quiz Festival 2019
40. **THIRD** – Show me the Monet, Open Entertainment-Arts-Sports Quiz, QvicQvid 2019, Presidency University, Kolkata
41. **THIRD** – Space Quiz 2018, IIT Kharagpur

Jadavpur University Chess Club

- JU Chess Club conducted regular sessions of chess almost on a daily basis throughout the year. The total membership of the club increased manifold.
- There was a training session for chess enthusiasts hosted by the JU Chess Club in January 2019 which was attended by 30 students.
- JU Chess Club organized intra-university chess tournament during the month of January, 2019, with a participation of 40 students. The tournament was held up at OPT Seminar Hall, AC Canteen Building.

Jadavpur University Art and Literary Society (ALS)

In 2018 the JU Journal, the subsidiary of The Jadavpur University Arts and Literary society took a bold step of bringing together various clubs and societies of JU in an attempt to bring together the students of this vast university who barely know anyone beyond their own department.

J.U. Music Club:

Musical concerts Annual Convocation and Prof. G.C Sen Memorial Ceremony Student-participants of J.U, led by Music Club, took part at the Annual Convocation and Prof. G.C. Sen Memorial Ceremony on 24th December 2018 and 30th December 2018, respectively. The participants were Antara, Ranjini, Soutik, Saptak Mondal; Student of English Department, Srijan; Student of Bengali Department, Sukriti Dey, Swarnendu Mondal, Ivey Adak; Staff, Student of Bengali Department, Rudra Sabarno Dutta, Pralay Banerjee; Staff of DYW. Office.

J.U. Music Club Dance Division:

Like previous year, *Ibtida'19* was successfully held on a larger and better scale. It comprised of a total of 9 events, namely Safarnama (Eastern group dance), Lalkaar (Street play), Numaish (Fashion show), Noor (Duet vocals), Taabir (Duet dance), Kaaynaat (Stage play), Raqs (Western group dance), Atish (Band performance), Takraar (Rap battle). The judges for the events were acclaimed artists in their respective fields and they were as follows: Rounaq (Cizzy) for Rap Battle; Paloma Majumder and Abhishek Das Gupta for Band Performance; Raj Shaw and Dev Narayan Gupta for Western Group Dance; Anushka Laha, Abhijeet Bhattacharya and Trina Saha for Fashion Show; Sakti Sankar Samanta, Sajal Chakrabarty and Saikat Ghosh for Stage Play; Roshmi Bandyapadhyay and Soma Roy for Eastern Group Dance ; Rudrangshu Chakrabarti, Saswati Sinha and Rohit Mukherjee for

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Street Play; Shayeri Das and Paloma Majumder for Duet Vocals; Sangram Mukherjee for Duet Dance. Many colleges participated in the event competition and the following colleges bagged the winning title:

Western Group Dance – 1st: Jadavpur University

Eastern Group Dance – 1st: Jadavpur University

Street Play-3rd: Jadavpur University

Duet Vocals-2nd: Jadavpur University

Stage Play-2nd: Jadavpur University

Duet Dance-2nd: Jadavpur University

Fashion Show-2nd: Jadavpur University

Best College-Jadavpur University

Ibtida'19 also comprised of a guest performance on the 2nd and last day of the event and those who performed were artist expertise in the field of music and they were as follows: Srinjay Banerjee (Guitarist); Arka Chakraborty (Pianist/Keyboardist); Aniruddh Saha (Drummer); Anandi Bhattacharya (Vocalist); John Paul (Bassist). The guest performance was highly applauded and appreciated by the audience. Alongside with this there were showcase performances by the judges of respective events like by Raj Shaw and Dev Narayan Gupta, they performed a western piece; Sangram Mukherjee, he performed contemporary dance with his unique style of fusion; Cizzy presented his piece of rap composition.

The average footfall of Ibtida'19 was 10,000 and students from different colleges came to witness this year's 2nd edition of the event. The two day event was successfully conducted with massive turnout and participation by different colleges.

Jadavpur University Mountaineering and Hiking Club

In the spirit of connecting the new students which doesn't limit itself to just the main campus, the Mountaineering and Hiking Club of JU organized a rock climbing competition for fresher's at the artificial rock climbing wall situated at the Salt Lake Campus, "Rise".

Jadavpur University Drama Club

JUDC had its successful first inter departmental drama event, **Natyabhabna** on September 2018. The event witness participation from department of Chemistry, Math, English, CL, Economics, IR, Sociology and a cross department team to represent the whole of Engineering.

Other Activities/Responsibilities towards promotion and welfare of students

Best All-Round Graduates and Post-Graduate awards 2017

The processing and selection for the recipients of the Annual Best All-Round Graduates and Post-Graduate awards 2018 was carried out by the office. Following are the award winners:

The list of Best All-Round Graduate and Post-Graduate awardees for the year 2018

Best All-Round Graduate Award for the year 2018–

1. Prativa Moyee Gold Centered Silver Medal for the *Best All-Round Female Graduate (including all the Faculties)*: **Sreetama Basu, Political Science**
2. Alumni Association Gold Centered Silver Medal for the *Best All-Round Graduate combining all the three faculties*: **Avishek Chanda, Political Science**
3. Purna Chandra Laha Silver Medal for the *Best All-Round Graduate including all the faculties*: **Avishek Chanda, Political Science,**

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4. Prafulla Kanti Banerjee Silver Medal to be given to the *Best All-Round Graduate from the remaining two faculties*: **Debapriya Basu, Electrical Engineering**
 5. Monibala Roy Gold Centered Silver Medal to awarded to the *Best All-Round Girl Graduate* of the Engg. & Tech. Faculty only: **Debapriya Basu, Electrical Engineering**
 6. Dipak Kumar Choudhury Memorial Gold Centered Silver Medal for the *Best All-round Graduate combining all the three Faculties*: **Avishek Chanda, Political Science**
- Best All-Round Post-graduate Award for the Year 2018-**
1. B. D. Mukherjee Memorial Gold Centered Silver Medal for *Best All-Round Post Graduate Award* : None

• **Personal Accident-cum-Medical Insurance for students of Jadavpur University**

Below is the list of students who got the claimed amount for the session 2018-19

1. Bandhana Bhanja - 25,000/-
2. Liton Mallick - 2646/-
3. Krishnandu Hait - 13,311/-

OFFICE OF THE FINANCE DEPARTMENT

Phone : + 91- 33 - 2414-6799

Int. : 2457-2278

Finance Officer : Sri Gour Krishna Pattanayak

E-mail : fo@jadavpuruniversity.in

fooffice@jadavpuruniversity.in

Total approved officers Post in Finance deptt. is four [the Audit Officer is not under Finance deptt., it's a post directly reporting to Vice Chancellor.] In the year 2018-19, in few months, the FO was the lone officer in Finance deptt.

The present status of vacancies and persons in position are as follows:

Posts	Nos.	In position or not	From when vacant	Remarks
Finance Officer	1	Yes	-	-
Dy. Finance Officer	1	No	Person is on lien since 11 October 2017, extended upto October 2020	Audit officer is looking after as additional charge to help us
Accounts Officer-I	1	Yes	Vacancy created on August 2017 filled up on 25 January 2019	No officer was available in vacancy period
Accounts Officer-II	1	No	Person is on lien since 29 November 2018 and extended upto May 2020	One retired officer from AG-West Bengal is appointed as OSD since 12 March 2019
Total	4	2	-	-

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Total University Receipts during 2018-19 is as follows:

University Annual Receipt for the Year 2018-19 [Both the Capital & Revenue]

Particulars	Amount [Rs.]
State Government	2,375,421,963
University Grants Commission	172,724,156
Other Central Government Department	345,823,466
Consultancy/ Technical Fees [Gross]	376,599,365
Donations	6,400,000
Tuition Fees	46,773,502
Other Fees	37,473,497
Interests	26,747,158
Sale of Application Form	491,693
Other Income	2,072,919
Total	3,390,527,719

Other than RUSA, TEQIP& PURSE grants, maintained separately. Total receipt during the year 2018-19 is Rs.....

During the year, since last Convocation, we had completed two Annual Accounts (2016-17 & 2017-18), where target date of completion of the Annual Accounts 2018-19 is December 2019. As planned, the Annual Accounts for the year 2019-20 will be completed by 31st May 2020 and this cycle will be followed henceforth in coming years.

Re-orientation of accounting and accounts finalization process has been done to ease the process of compilation & completion. Now the payments done by BT/NEFT are linked to a software through which all the payees are being intimated about the release of payment.

All receipts are being done through software and students collections are linked to SBI on line payments, this will be strengthened further with completion of linking full Students' database with SBI, for instant dues calculation and updation of all payments instantly.

Process are on for on-line verification of status of bill payments & files in Finance department, which will be launched by March 2020, if everything goes right. None have to meet anybody in Finance for follow-up of his/her case.

SC/ST Cell

INT: 2457- 2580/2632

Sr. Asst. Registrar & Member Secretary : Dr. Kaniska Sarkar

(JU Main Campus)

Scheduled Caste and Scheduled Tribes have been identified as the two most backward groups of Indian Society. They include all such castes, races or tribes which have been declared as scheduled castes and scheduled tribes by the Constitution of India under the provisions of Article 341 & 342.

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Jadavpur University has established a SC/ST Cell in 2007 for the benefit of the University students and employees belonging to SC/ST community. Its function is also to help the students and employees belonging to SC/ST categories to integrate with the mainstream of the University community and to remove difficulties which they may be experiencing. The cell was constituted as a measure for strengthening the implementation machinery for planning, evaluation and monitoring of the policies of the Govt. of India as well as Govt. of West Bengal in the field of higher education and also the programmes of the University Grants Commission with the objective to improve the lifestyle of SC/ST candidates and to lift up them to the general level as compared to the other communities. The cell is monitoring the reservation policies a laid down time to time by the Govt. of West Bengal. It also provides information on fellowship and other activates to the SC/ST candidates. The SC/ST Cell has taken up problems of the SC/ST students and employees with the university authorities and has solved some of them amicably. The cell has been a user friendly counsellor to all SC/ST employees and students. The cell is collecting and furnishing statistical date and other information which the Govt. Of India and UGC as well as other agencies like MHRD, SC/ST welfare and National Commission for SC/ST may seek pertaining to the welfare of the SC/STs allied matters. This cell also replies to the Parliamentary questions on reservation from Loksabha and RajyaSabha in different time.

This year the University has reconstituted the administrative committee comprising the following persons for the purpose of monitoring the cell smoothly: -

Prof. Suranjan Das, Hon'ble Vice Chancellor, JU	CHAIRMAN.
Prof. Subarna Kumar Das,	Dept. of Lib. & Inf. Sc., Liaison Officer.
Prof. Debasish Lohar,	Dept. of Physics.
Prof. Priti Kumar Roy,	Dept. of Mathematics.
Prof. SanjibMridha,	Dept. of Physical Education.
Prof. Papita Das,	Dept. of Chemical Engg.
Prof.Sudhanbindu Roy,	Dept. of ETCE.
Dr. Prokash Ch. Roy,	Dept. of Mechanical Engg.
Dr. Ratan Mondal,	School of Energy Studies.
Dr. Kaniska Sarkar,	Member Secretary.

This year the Cell organised the following free coaching for the University students.

- 1) SOFT SKILL DEVELOPMENT AND PDP INCLUDING COMMUNICATIVE ENGLISH.
- 2) COACHING FOR UGC NET PAPER – I.

Details program -

SL. NO.	YEAR	TYPE OF TRAINING	TYPE OF PARTICIPANTS (FACULTIES, STUDENTS, STAFF ETC.)	TOTAL
1	2019	COACHING FOR SOFT SKILL DEVELOPMENT AND PDP INCLUDING COMMUNICATIVE ENGLISH.	STUDENTS (Faculty of Science, Faculty of Arts & FISLM)	75 (Approx.)
2	2019	COACHING FOR UGC NET PAPER – I.	STUDENTS (Faculty of Science, Faculty of Arts & FISLM)	400 (Approx.)

Hon'ble Vice Chancellor suggested constituting a committee with at least one external expert to

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look after and implement the reservation policy especially in student admission and recruitment of staffs of the University. Thus the committee is reconstituted with following panel of members:

1. External expert member
2. Prof. Debasish Lohar, Dept. of Physics, Faculty of science
3. Prof. Sanjib Mridha, Dept. of Physical Education, Faculty of Arts
4. Dr. Prokash Ch Roy, Dept. of Mechanical Engg. FET
5. Dr. Ratan Mandal, School of Energy Studies, Faculty of ISLM
6. Dr. Kaniska Sarkar, Asst. Registrar. (Convener)

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NEW PROJECTS
April 2018 - March 2019

SI No.	Funding Agency	Title	Co-Ordinator	Starting Date	Cost	Status
1.	CSIR	Synthesis of Oligosaccharides and Glycoconjugates Related To Salmonella O/antigen With Special Reference To One/Pot Glycosylation Reactions	Rina Ghosh	1/4/2018	1171000	R
2.	CSIR	Development and Analysis....sustainability	Bibhas Chandra Giri	1/4/2018	1816530	R
3.	CSIR	Modelling and Analysis.....Nonlinear incidence	Nandadulal Bairagi	1/4/2018	1896000	R
4.	CSIR	Design of Multichannel Receptors for Anions by Taking Profit of Metal/Ligand Interaction	Sujoy Baitalik	1/5/2018	366667	R
5.	CSIR	Chiral Induction into Metal/Organic Frameworks for Heterogeneous Asymmetric Catalysis	Subrata Nath Koner	1/5/2018	525000	R
6.	CSIR	Studies on electrokinetic effect from photovoltaic system	Biswajit Ghosh	1/9/2018	1476000	R
7.	CSIR	Fabrication of Highly..... Biological Sensing	Joydeep Chowdhury	1/5/2018	1523417	C
8.	DAE	Basin evolutionary history and microbial mat proliferation Karnataka	Subir Sarkar	18/05/2018	3649950	R
9.	DAE	Sedimentological, Petro-mineralogical and geochemical.... eastern India	Dipak Ch. Pal	18/05/2018	2517625	R
10.	DBT	In situ monitoring of fungal..... using foldscope microscope	Subarna Bhattacharyya	11/4/2018	800000	R
11.	DBT	Development of Polyherbal based functional biopolymer.....excision and burn wound	Parimal Karmakar	1/10/2018	3519000	R
12.	DST	Fabrication and Characterization of natural Polysaccharide Based Bioerodible Localised Spongy Scaffold A Potential Role in Augmenting Wound Healing	Amallesh Samanta	20/04/2018	1681800	R
13.	DST	Investigation of optical properties of metal nanoparticles embedded conducting polymer	Swatilekha Roy	22/05/2018	2140000	R
14.	DST	Synthesis of Drug (Herbal Values) Entrapped Nano Material to Treat Cancer Disease and Other Disease Causing Organisms	Mahua Ghosh	29/05/2018	1598800	R
15.	DST	Study to Develop Appropriate Methods for Safe Disposal of Arsenic/Rich Sludge	Pankaj Kumar Roy	1/6/2018	1055800	R
16.	DST	Design of nano carriers for sustained release of conventional analgesic drugs	Rajib De	5/6/2018	1517000	R
17.	DST	Dynamics Preserving Discretization.....Equations	Nandadulal Bairagi	13/06/2018	660000	R
18.	DST	Mathematical model development.....under uncertainties	Bibhas Chandra Giri	13/06/2018	660000	R

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SI No.	Funding Agency	Title	Co-Ordinator	Starting Date	Cost	Status
19.	DST	Birkhoff/James orthogonality and its application in the geometry of Banach spaces	Kallol Paul	25/06/2018	660000	R
20.	DST	Integral equation and its application to the problems on interaction of water waves with obstacles present in ocean	Sudeshna Banerjee	25/06/2018	660000	R
21.	DST	Studies on chronic exposure to arsenic toxicity through food chain and drinking water with respect to rice grain contamination in selected sites of West Bengal and search for mitigation options	Tarit Roychowdhury	26/06/2018	2599600	R
22.	DST	Study on QGP and its....properties..... ion collisions	Mitali Mondal	29/06/2018	327600	R
23.	DST	Fermentative Production of Microbial Asparaginase Enzyme and its Application to high Temperature Processed Foods For Acrylamide Mitigation	Sunita Adhikari	2/7/2018	1744000	R
24.	DST	Study of Zinc Oxide.... high relative humidity	Kaustuv Das	3/7/2018	621750	R
25.	DST	Molecular Recognition and Sensing at the Lipid Bilayer/Water Interface and Inside the Lipid Membrane	Samit Guha	6/7/2018	4604000	R
26.	DST	Design, Development and Control of a Light.....Computation	Ranjit Kr Barai	12/7/2018	4785945	R
27.	DST	Medicinal plants of Cucurbitaceae family....Therapeutic Evaluation	Pulak Kr. Mukherjee	24/07/2018	5090800	R
28.	DST	Study on optoelectronic properties of mixed halide hybrid perovskite material synthesized by mechanochemical method	Sachindra Nath Das	30/07/2018	765300	R
29.	DST	Development of Functional bio polymer..... chronic wound	Parimal Karmakar	7/8/2018	1499800	R
30.	DST	Production of organic fertilizer by utilizing slaughterhouse wastes and its application for the cultivation of potato and vegetables	Joydeep Mukherjee	13/08/2018	2299600	R
31.	DST	Symmetries in Differential Equation and Its Application to Classical and quantum Cosmology	Subenoy Chakraborty	25/08/2018	660000	R
32.	DST	Solar energy driven Green Hydrogen Generation from Water using Reduced Graphene Oxide based Photo/catalyst and Co/catalyst	Kajari Kargupta	15/09/2018	4396800	R
33.	DST	Realization of Oxide based Solar with improved	A. K. Pal	9/10/2018	10279523	R
34.	DST	LAB ON CHIPS for trace detections of arsenic melamine heavy ions and in one click diagnostic applications using SERS	Joydeep Chowdhury	11/10/2018	1357880	R
35.	DST	Design of entangled dynamic metal organic frameworks for hydrogen storage property	Debajyoti Ghoshal	25/10/2018	4479200	R

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Sl No.	Funding Agency	Title	Co-Ordinator	Starting Date	Cost	Status
36.	DST	Profiling indoor air borne plant extracts	Subarna Bhattacharyya	1/11/2018	1199800	R
37.	DST	Perpendicularly polarized spin transport in semiconductors: An investigation using Electrical spin injection and detection	Bharati Tudu	27/11/2018	4019180	R
38.	DST	Integration of data mining in biodiversity application to forest diversity	Moumita Ghosh	4/1/2019	1710000	R
39.	DST	Petrologic, OS isotopic..... implications for chemical..... mineralization	Sisir Kanti Mondal	1/2/2019	7129425	R
40.	DST	Estimation of errors in the measurement of mass from gravitational wave (cw) data	Sangita Chatterjee	2/2/2019	1419000	R
41.	DST	Unusual Catalyst..... to most promising Synthetic	Arunabha Thakur	4/2/2019	240000	R
42.	DST	Spatially explicit estimation of wetland carbon stocks in the Contai/Baleshwar Coastal Streatch, India by integrating elemental analysis and Geospatial Technologies	Debajit Datta	26/11/2018	3033800	C
43.	DST	Development of Industrial Open Source.....Development	Debas Kumar Das	13/12/2018	2368996	C
44.	DST	Moving beyond the folds.....with nanoparticles through SERS	Joydeep Chowdhury	12/2/2019	6090560	C
45.	DST	Endophytic Bacterial Community of Rice Root..... for Higher Rice Production	Paltu Kumar Dhal	27/02/2019	3819000	C
46.	DST	Synthesis of new and Platinum..... Biological activity	Tapan Kr Mondal	6/3/2019	1798500	C
47.	DST	Size selective carbon quantum dots and its application to luminiscence and solar cell	Dr Sourav Sarkar	11/3/2019	4489000	C
48.	DST	Automatic generation of deep learning	Nibaran Das	18/03/2019	2693500	C
49.	DST	Tailoring of electrical and magnetic in reduced graphene oxide	Ruma Ray	19/03/2019	511998	C
50.	DST	Synthesis of graphene oxide coated natural waste materials and its application for simultaneous treatment of wastewater containing fluoride and chromium: Reactor performance in batch,fluidized bed and membrane reactor	Papita Das	22/03/2019	3738000	C
51.	DST	Systematic study of molluscs and other benthic faunal diversity.....transition in Kutch, Western India	Sunipa Mondal	26/03/2019	1281000	C
52.	DST	Waste water remediation: novel usenanocomposites	Sukhen Das	30/03/2019	2401500	C
53.	DRDO	Development of High Speed MAAANET for Intelligent Collaboration	Sarmistha Neogy	14/03/2019	6435650	C
54.	DRDO	Estimation of Laser..... wind loads	Dipten Mishra	14/03/2019	4520304	C
55.	UNES	Indigenous microorganism based technology for... plants in India	Paltu Kumar Dhal	30/11/2018	2018625	R

[Status "R" indicates Running]

[Status "C" indicates Current]

SECTION A
[As on 31.03.2019]

ANNEXURE I

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FACULTY PROFILE

(As on 31.03.2019)

ARTS & ISLM

SL.	Department	Name	Present Desg.
1	Bengali	Dr. Sekhar Kumar Samaddar	Professor
2	Bengali	Dr. Sampa Chaudhuri	Professor
3	Bengali	Dr. Ananya Baruya	Professor
4	Bengali	Smt. Sutapa Sengupta	Associate Professor
5	Bengali	Sri Saswata Bhattacharya	Assistant Professor
6	Bengali	Abdul Kafi	Assistant Professor
7	Bengali	Dr. Barendu Mandal	Associate Professor
8	Bengali	Dr. Rajayeswar Sinha	Associate Professor
9	Bengali	Dr. Joydeep Ghosh	Assistant Professor
10	Bengali	Dr. Payel Basu	Assistant Professor
11	Comparative Literature	Dr. Ipshita Chanda	Professor
12	Comparative Literature	Dr. Suchorita Chattopadhyay	Professor
13	Comparative Literature	Dr. Kavita Panjabi	Professor
14	Comparative Literature	Dr. Kunal Chattopadhyay	Professor
15	Comparative Literature	Dr. Samantak Das	Professor
16	Comparative Literature	Dr. Sucheta Bhattacharya	Professor
17	Comparative Literature	Sri Aveek Majumder	Assistant Professor
18	Comparative Literature	Dr. Sujit Kr. Mandal	Associate Professor
19	Comparative Literature	Dr. Sayantan Dasgupta	Associate Professor
20	Comparative Literature	Dr. Debashree Datta Ray	Associate Professor
21	Comparative Literature	Smt. Epsita Halder	Assistant Professor
22	Comparative Literature	Dr. Parthasarathi Bhaumik	Associate Professor
23	Comparative Literature	Dr. Sumit Kumar Barua	Assistant Professor
24	Economics	Dr. Ajitava Raychaudhuri	Professor
25	Economics	Dr. Joyashree Roy	Professor
26	Economics	Dr. Rajat Acharyya	Professor
27	Economics	Dr. Ambar Nath Ghosh	Professor
28	Economics	Dr. Siddhartha Mitra	Professor
29	Economics	Dr. Malabika Roy	Professor
30	Economics	Dr. Arpita Ghose (nee Dhar)	Professor
31	Economics	Dr. Jugaratan Barman	Associate Professor
32	Economics	Dr. Saikat Sinha Roy	Professor
33	Economics	Dr. Vivekananda Mukherjee	Professor
34	Economics	Dr. Sushil Kr. Haldar	Professor
35	Economics	Dr. Amit Kundu	Professor
36	Economics	Dr. Tanmoyee Banerjee Chatterjee	Professor
37	Economics	Dr. Swapnendu Bandyopadhyay	Professor
38	Economics	Smt. Soma Mondal	Assistant Professor
39	Economics	Dr. Sanmitra Ghosh	Associate Professor
40	Economics	Dr. Vikas Dixit	Assistant Professor
41	Economics	Dr. Bidisha Chakraborty	Assistant Professor
42	Economics	Dr. Poulomi Roy	Assistant Professor

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SL.	Department	Name	Present	Desg.
43	Economics	Dr. Simontini Das	Assistant	Professor
44	Economics	Dr. Rilina Basu (Banerjee)	Assistant	Professor
45	English	Dr. Nilanjana Gupta	Professor	
46	English	Dr. Prodosh Bhattacharya	Professor	
47	English	Dr. Santanu Biswas	Professor	
48	English	Dr. Chandreyee Niyogi	Professor	
49	English	Dr. Abhijit Gupta	Professor	
50	English	Dr. Paromita Chakravarti	Professor	
51	English	Dr. Nandini Saha	Professor	
52	English	Dr. Rimi Barnali Chatterjee	Professor	
53	English	Dr. Nilanjana Deb	Associate	Professor
54	English	Dr. Saswati Halder	Associate	Professor
55	English	Dr. Monojit Mondal	Professor	
56	English	Dr. Rafat Ali	Associate	Professor
57	English	Dr. Sonia Sahoo	Professor	
58	English	Dr. Sutanuka Ghosh	Assistant	Professor
59	English	Dr. Ramit Samaddar	Assistant	Professor
60	English	Dr. Abhishek Sarkar	Assistant	Professor
61	English	Dr. Kaustav Bakshi	Assistant	Professor
62	English	Sri Ishan Chakraborty	Assistant	Professor
63	English	Dr. Doyeeta Majumder	Assistant	Professor
64	Education	Dr. Bishnupada Nanda	Professor	
65	Education	Dr. Muktipada Sinha	Associate	Professor
66	Education	Sri Debashis Mirdha	Assistant	Professor
67	Education	Dr. Lalit Lalitav Mohakud	Assistant	Professor
68	Education	Dr. Prokash Biswas	Associate	Professor
69	Film Studies	Dr. Moinak Biswas	Professor	
70	Film Studies	Dr. Abhijit Roy	Professor	
71	Film Studies	Dr. Madhuja Mukherjee	Associate	Professor
72	Film Studies	Sri Anindya Sengupta	Assistant	Professor
73	Film Studies	Dr. Shradhanjali Tamang	Assistant	Professor
74	Film Studies	Sri Arijeet Mandal	Assistant	Professor
75	History	Dr. Ranjan Chakrabarti	Professor	
76	History	Dr. Mahua Sarkar	Professor	
77	History	Dr. Anuradha Roy	Professor	
78	History	Dr. Nupur Dasgupta	Professor	
79	History	Dr. Kaushik Roy	Professor	
80	History	Dr. Sudeshna Banerjee	Associate	Professor
81	History	Dr. Subhashis Biswas	Professor	
82	History	Dr. Rup Kumar Barman	Professor	
83	History	Dr. Suchetana Chattopadhyay	Associate	Professor
84	History	Dr. Maroona Murmu	Associate	Professor
85	History	Sri Samir Das	Assistant	Professor
86	History	Dr. Tilottoma Mukherjee	Associate	Professor
87	History	Dr. Chandrani Banerjee Mukherjee	Assistant	Professor
88	History	Dr. Samarpita Mitra	Assistant	Professor
89	History	Dr. Debajit Dutta	Assistant	Professor
90	History	Dr. Utsa Ray	Assistant	Professor

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SL.	Department	Name	Present Desg.
91	International Relations	Sri Om Prakash Mishra	Professor
92	International Relations	Dr. Sumita Sen	Professor
93	International Relations	Dr. Partha Pratim Basu	Professor
94	International Relations	Dr. Anindya Jyoti Majumdar	Professor
95	International Relations	Dr. Shibashis Chatterjee	Professor
96	International Relations	Mrs. Rochona Das Poddar	Associate Professor
97	International Relations	Dr. Kanak Chandra Sarkar	Professor
98	International Relations	Dr. Kakoli Sengupta	Associate Professor
99	International Relations	Dr. Imankalyan Lahiri	Assistant Professor
100	International Relations	Dr. Herken Neadan Toppo	Associate Professor
101	International Relations	Dr. Bijaya Kr. Das	Assistant Professor
102	International Relations	Dr. Kaushik Sen	Assistant Professor
103	International Relations	Dr. Bhagaban Behera	Assistant Professor
104	International Relations	Sri Arup Bhattacharyya	Assistant Professor
105	International Relations	Sri Subhajit Naskar	Assistant Professor
106	International Relations	Smt. Urbi Das	Assistant Professor
107	International Relations	Dr. Sukanya Ray	Assistant Professor
108	International Relations	Sk. Abdul Matin	Assistant Professor
109	International Relations	Dr. Kamaran M.K Mondal	Associate Professor
110	Library and Information Science	Dr. Sunil Kumar Chatterjee	Professor
111	Library and Information Science	Dr. Udayan Bhattacharjya	Professor
112	Library and Information Science	Dr. Goutam Maity	Professor
113	Library and Information Science	Dr. Subarna Kr. Das	Professor
114	Library and Information Science	Dr. Tarun Kumar Mondal	Assistant Professor
115	School of Languages	Dr. Atanu Saha	Assistant Professor
116	School of Languages	Dr. Samir Karmakar	Assistant Professor
117	Philosophy	Dr. Rupa Bandyopadhyay	Professor
118	Philosophy	Dr. Madhumita Chattopadhyay	Professor
119	Philosophy	Dr. Sadhan Chakraborti	Professor
120	Philosophy	Dr. Soumitra Basu	Professor
121	Philosophy	Dr. Gangadhar Kar	Professor
122	Philosophy	Dr. Atashee Chatterjee (Sinha)	Professor
123	Philosophy	Dr. Lopamudra Choudhury	Professor
124	Philosophy	Dr. Proyash Sarkar	Professor
125	Philosophy	Dr. Sashi Nungla	Professor
126	Philosophy	Dr. Aparajita Mukhopadhyay	Professor
127	Philosophy	Dr. Jhuma Chakraborty	Professor
128	Philosophy	Dr. Dipayan Pattanayak	Professor
129	Philosophy	Dr. Maushumi Guha	Professor
130	Philosophy	Shri Arun Mahata	Associate Professor
131	Philosophy	Dr. Maitreyee Datta	Associate Professor
132	Philosophy	Dr. Preetam Ghoshal	Associate Professor
133	Philosophy	Mrs. Rubai Saha	Assistant Professor
134	Philosophy	Dr. Gopi Nath Mondal	Assistant Professor
135	Philosophy	Dr. Samar Kumar Mondal	Professor
136	Philosophy	Smt. Gargi Goswami	Assistant Professor
137	Philosophy	Dr. Madhucchanda Sen	Professor
138	Philosophy	Dr. Tamoghna Sarkar	Assistant Professor

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SL.	Department	Name	Present Desg.
139	Physical Education	Dr. Sudip Sundar Das	Professor
140	Physical Education	Dr. Ashoke Kumar Biswas	Professor
141	Physical Education	Dr. Gopal Chandra Saha	Professor
142	Physical Education	Dr. Sanjib Mridha	Professor
143	Physical Education	Dr. Asish Paul	Associate Professor
144	Physical Education	Dr. Atanu Ghosh	Assistant Professor
145	Physical Education	Dr. Papan Mondal	Assistant Professor
146	Physical Education	Dr. Sridip Chatterjee	Assistant Professor
147	Sanskrit	Dr. Debarchana Sarkar	Professor
148	Sanskrit	Dr. Piyali Praharaj	Professor
149	Sanskrit	Dr. Tapan Sankar Bhattacharya	Professor
150	Sanskrit	Dr. Ashok Kumar Mahata	Associate Professor
151	Sanskrit	Dr. Shiuli (Ghosh) Basu	Associate Professor
152	Sanskrit	Dr. Kakali Ghosh	Associate Professor
153	Sanskrit	Dr. Debdas Mandal	Assistant Professor
154	Sanskrit	Dr. Chinmay Mandal	Assistant Professor
155	Sociology	Dr. Dalia Chakraborty	Professor
156	Sociology	Dr. Amites Mukhopadhyay	Professor
157	Sociology	Smt. Nutan Marian Tigga	Assistant Professor
158	Sociology	Dr. Piyali Sur	Associate Professor
159	School of Womens Studies	Dr. Samita Sen	Professor
160	School of Womens Studies	Dr. Aishika Chakraborty	Professor
161	School of Womens Studies	Dr. Nandita (Banerjee) Dhawan	Assistant Professor
162	School of Cognitive Science	Dr. Amrita Basu	Assistant Professor

ENGINEERING & TECHNOLOGY

SL	Dept.	Name	Designation
1	Adult, Continuing Education and Extension	Dr. Tandra Mitra	Professor
2	Adult, Continuing Education and Extension	Dr. Partha Sarathi Chakraborty	Professor
3	Adult, Continuing Education and Extension	Sri Santwan Chattopadhyay	Associate Professor
4	Architecture Engineering	Dr. Shubhrajit Das	Professor
5	Architecture	Dr. Jayita Guha Niyogi	Professor
6	Architecture	Dr. Tapas Kumar Bhattacharyya	Professor
7	Architecture	Dr. Shivashish Bose	Professor
8	Architecture	Dr. Madhumita Roy	Professor
9	Architecture	Dr. Sanjib Nag	Professor
10	Architecture	Dr. Smt. Suchandra Bardhan	Professor
11	Architecture	Dr. Debashish Das	Associate Professor
12	Architecture	Ms Sanghamitra Sarkar	Assistant Professor
13	Architecture	Dr. Mainak Ghosh	Associate Professor
14	Architecture	Ms. Dechen Donka Bhutia	Assistant Professor
15	Architecture	Mr. Tanmoy Datta	Assistant Professor
16	Chemical Engineering	Dr. Ranjana Chowdhury	Professor
17	Chemical Engineering	Dr. Chiranjib Bhattacharjee	Professor
18	Chemical Engineering	Dr. Kajari Kar Gupta	Professor

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SL	Dept.	Name	Designation
19	Chemical Engineering	Dr. Avijit Bhowal	Professor
20	Chemical Engineering	Dr. Prasanta Kumar Banerjee	Associate Professor
21	Chemical Engineering	Dr. Debashis Roy	Professor
22	Chemical Engineering	Dr. Ujjaini Sarkar	Professor
23	Chemical Engineering	Dr. Chanchal Mondal	Associate Professor
24	Chemical Engineering	Dr. Rajat Chakraborty	Professor
25	Chemical Engineering	Dr. Papita Das (Saha)	Professor
26	Chemical Engineering	Dr. Mehabub Rahaman	Assistant Professor
27	Chemical Engineering	Dr. Ratna Dutta	Assistant Professor
28	Chemical Engineering	Dr. Parama Ghoshal	Assistant Professor
29	Chemical Engineering	Dr. Shyamal Roy	Assistant Professor
30	Chemical Engineering	Dr. Sudeshna Saha	Assistant Professor
31	Chemical Engineering	Ms. Sujata Sardar	Assistant Professor
32	Civil Engineering	Dr. Somnath Ghosh	Professor
33	Civil Engineering	Dr. Somnath Mukherjee	Professor
34	Civil Engineering	Sri Shibnath Chakrabarty	Professor
35	Civil Engineering	Dr. Arup Guha Neogi	Professor
36	Civil Engineering	Dr. Ramendu Bikash Sahu	Professor
37	Civil Engineering	Dr. Dipankar Chakraborty	Professor
38	Civil Engineering	Dr. Sibapriya Mukherjee	Professor
39	Civil Engineering	Dr. Saroj Mondal	Professor
40	Civil Engineering	Dr. Partha Bhattacharya	Professor
41	Civil Engineering	Dr. Anupam Deb Sarkar	Associate Professor
42	Civil Engineering	Dr. Amit Dutta	Professor
43	Civil Engineering	Dr. Gupinath Bhandari	Associate Professor
44	Civil Engineering	Sri. Pritam Aitch	Associate Professor
45	Civil Engineering	Dr. Sumit Kr. Biswas	Associate Professor
46	Civil Engineering	Dr. Subhasish Roy Choudhury	Assistant Professor
47	Civil Engineering	Dr. Tumpa Hazra	Associate Professor
48	Civil Engineering	Dr. Sreyashi Das (nee Pal)	Assistant Professor
49	Civil Engineering	Dr. Kalyan Kr. Mondal	Associate Professor
50	Civil Engineering	Sri. Amit Shiuly	Assistant Professor
51	Civil Engineering	Sri Santosh Kr. Das	Assistant Professor
52	Civil Engineering	Sri Narayan Roy	Assistant Professor
53	Computer Science and Engineering	Dr. Mita Nasipuri	Professor
54	Computer Science and Engineering	Dr. Atal Chaudhuri	Professor
55	Computer Science and Engineering	Dr. Mahantapas Kundu	Professor
56	Computer Science and Engineering	Dr. Anupam Sinha	Professor
57	Computer Science and Engineering	Dr. Nandini Mukhopadhyay	Professor
58	Computer Science and Engineering	Dr. Chandan Majumdar	Professor
59	Computer Science and Engineering	Dr. Sivaji Bandyopadhyay	Professor
60	Computer Science and Engineering	Dr. Ujjwal Maulik	Professor
61	Computer Science and Engineering	Dr. Chitrita Chaudhuri (Nee Pal)	Associate Professor
62	Computer Science and Engineering	Dr. Nirmalya Chowdhury	Professor
63	Computer Science and Engineering	Dr. Sarmistha Neogy	Professor
64	Computer Science and Engineering	Dr. Susmita Ghosh (Nee De)	Professor
65	Computer Science and Engineering	Dr. Sanjoy Kumar Saha	Professor

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SL	Dept.	Name	Designation
66	Computer Science and Engineering	Dr. Jamuna Kanta Singh	Professor
67	Computer Science and Engineering	Dr. Kamal Sarkar	Professor
68	Computer Science and Engineering	Dr. Debotosh Bhattacharjee	Professor
69	Computer Science and Engineering	Dr. Diganta Saha	Professor
70	Computer Science and Engineering	Dr. Mridul Sankar Barik	Assistant Professor
71	Computer Science and Engineering	Dr. Subhadip Basu	Professor
72	Computer Science and Engineering	Dr. Sarbani Roy	Associate Professor
73	Computer Science and Engineering	Dr. Ram Sarkar	Assistant Professor
74	Computer Science and Engineering	Dr. Chandreyee Chowdhury	Assistant Professor
75	Computer Science and Engineering	Sri Nibaran Das	Associate Professor
76	Computer Science and Engineering	Dr. Chintan Kumar Mandal	Assistant Professor
77	Computer Science and Engineering	Dr. Sudip Kumar Naskar	Assistant Professor
78	Computer Science and Engineering	Dr. Dipankar Das	Assistant Professor
79	Computer Science and Engineering	Dr. Anasua Sarkar	Assistant Professor
80	Construction Engineering	Dr. Subhajit Saraswati	Professor
81	Construction Engineering	Dr. Partha Pratim Biswas	Professor
82	Construction Engineering	Dr. Debasish Bandyopadhyay	Professor
83	Construction Engineering	Dr. Gokul Ch. Mondal	Associate Professor
84	Construction Engineering	Dr. Kaushik Bandyopadhyay	Professor
85	Construction Engineering	Dr. Partha Ghosh	Associate Professor
86	Construction Engineering	Dr. Sayan Nandi	Assistant Professor
87	Construction Engineering	Dr. Manoj Kumar Sahis	Assistant Professor
88	Electrical Engineering	Dr. Subrata Paul	Professor
89	Electrical Engineering	Dr. Swapan Kumar Goswami	Professor
90	Electrical Engineering	Dr. Sugata Munshi	Professor
91	Electrical Engineering	Dr. Kesab Bhattacharya	Professor
92	Electrical Engineering	Dr. Sivaji Chakravorti	Professor
93	Electrical Engineering	Dr. (Mrs.) Suparna Kar Choudhury	Professor
94	Electrical Engineering	Dr. Mrs. Smita Sadhu (Ghosh)	Professor
95	Electrical Engineering	Dr. Abhijit Mukherjee	Professor
96	Electrical Engineering	Dr. (Mrs.) Saswati Mazumdar	Professor
97	Electrical Engineering	Dr. (Mrs.) Mita Dutta	Professor
98	Electrical Engineering	Dr. Palash Kumar Kundu	Associate Professor
99	Electrical Engineering	Dr. Madhubanti Maitra	Professor
100	Electrical Engineering	Dr. Arabinda Das	Professor
101	Electrical Engineering	Dr. Ranjit Kr. Barai	Professor
102	Electrical Engineering	Dr. Amitava Chatterjee	Professor
103	Electrical Engineering	Sri Madhab Roy	Associate Professor
104	Electrical Engineering	Dr. Biswanath Roy	Professor
105	Electrical Engineering	Dr. Nikhil Mondal	Associate Professor
106	Electrical Engineering	Dr. Debashis Chatterjee	Professor
107	Electrical Engineering	Dr. Biswajit Bhattacharyya	Associate Professor
108	Electrical Engineering	Dr. Gautam Sarkar	Assistant Professor
109	Electrical Engineering	Dr. Smt. Sunita Halder (nee Dey)	Professor
110	Electrical Engineering	Dr. Sovan Dalai	Associate Professor
111	Electrical Engineering	Dr. Biswendu Chatterjee	Associate Professor
112	Electrical Engineering	Dr. Arindam Kumar Sil	Assistant Professor

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SL	Dept.	Name	Designation
113	Electrical Engineering	Dr. Susanta Ray	Assistant Professor
114	Electrical Engineering	Dr. Debangsu Dey	Assistant Professor
115	Electrical Engineering	Dr. Suddhasatwa Chakraborty	Assistant Professor
116	Electrical Engineering	Dr. Ayan Kumar Tudu	Assistant Professor
117	Electrical Engineering	Ms. Madhumita Mandal	Assistant Professor
118	Electrical Engineering	Dr. (Ms.) Sudipta Debnath	Professor
119	Electrical Engineering	Sri Dipten Maity	Assistant Professor
120	Electrical Engineering	Dr. Sayantan Chakraborty	Assistant Professor
121	Electrical Engineering	Sri Mihir Hembram	Assistant Professor
122	Electrical Engineering	Sri Arpan Kumar Pradhan	Assistant Professor
123	Electronics and Telecommunication Engg.	Dr. Subir Kumar Sarkar	Professor
124	Electronics and Telecommunication Engg.	Dr. Iti Saha Misra	Professor
125	Electronics and Telecommunication Engg.	Dr. Bhaskar Gupta	Professor
126	Electronics and Telecommunication Engg.	Dr. Amit Konar	Professor
127	Electronics and Telecommunication Engg.	Dr. Mrinal Kanti Naskar	Professor
128	Electronics and Telecommunication Engg.	Dr. Chayanika Bose (Majumder)	Professor
129	Electronics and Telecommunication Engg.	Dr. Palanikndavar Venkateswaran	Professor
130	Electronics and Telecommunication Engg.	Dr. Sheli Murmu (Sinha Chaudhuri)	Professor
131	Electronics and Telecommunication Engg.	Dr. Ananda Shankar Chowdhury	Professor
132	Electronics and Telecommunication Engg.	Dr. Manotosh Biswas	Associate Professor
133	Electronics and Telecommunication Engg.	Dr. Sudhabindu Ray	Associate Professor
134	Electronics and Telecommunication Engg.	Smt. Sudipta Chattopadhyay	Associate Professor
135	Electronics and Telecommunication Engg.	Dr. Sayan Chatterjee	Associate Professor
136	Electronics and Telecommunication Engg.	Dr. Chandrima Mondal	Assistant Professor
137	Electronics and Telecommunication Engg.	Sri Nirmoy Modak	Assistant Professor
138	Electronics and Telecommunication Engg.	Smt. Pratyusha Rakshit	Assistant Professor
139	Electronics and Telecommunication Engg.	Dr. Jaydeb Bhaumik	Associate Professor
140	Food Technology and Biochemical Engg.	Dr. (Ms.) Runu Chakraborty	Professor
141	Food Technology and Biochemical Engg.	Dr. Uma Ghosh	Professor
142	Food Technology and Biochemical Engg.	Dr. Paramita Bhattacharjee	Associate Professor
143	Food Technology and Biochemical Engg.	Dr. Dipankar Halder	Associate Professor
144	Food Technology and Biochemical Engg.	Dr. Prasanta Kumar Biswas	Associate Professor
145	Food Technology and Biochemical Engg.	Dr. Debabrata Bera	Assistant Professor
146	Food Technology and Biochemical Engg.	Dr. Sunita Adhikary (nee Pramanik)	Associate Professor
147	Information Technology	Dr. Samiran Chattopadhyay	Professor
148	Information Technology	Dr. Parama Bhaumik	Associate Professor
149	Information Technology	Dr. Bibhas Ch. Dhara	Professor
150	Information Technology	Dr. Uttam Kumar Roy	Assistant Professor
151	Information Technology	Dr. Bhaskar Sardar	Associate Professor
152	Information Technology	Dr. Kartick Chandra Mondal	Assistant Professor
153	Information Technology	Tohida Rehman	Assistant Professor
154	Instrumentation and Electronics Engg.	Dr. Sankar Narayan Patra	Assistant Professor
155	Instrumentation and Electronics Engg.	Dr. Bivas Dam	Professor
156	Instrumentation and Electronics Engg.	Dr. Subhankar Bandyopadhyay	Professor
157	Instrumentation and Electronics Engg.	Dr. Ardhendu Ghosal	Professor
158	Instrumentation and Electronics Engg.	Dr. Rajib Bandyopadhyay	Professor
159	Instrumentation and Electronics Engg.	Dr. Kalyan Majumdar	Associate Professor

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SL	Dept.	Name	Designation
160	Instrumentation and Electronics Engg.	Dr. Bhaswati Goswami	Professor
161	Instrumentation and Electronics Engg.	Dr. Kumardeb Banerjee	Professor
162	Instrumentation and Electronics Engg.	Dr. Rajanikanta Mudi	Professor
163	Instrumentation and Electronics Engg.	Dr. Ratna Ghosh	Professor
164	Instrumentation and Electronics Engg.	Dr. Bipan Tudu	Professor
165	Instrumentation and Electronics Engg.	Dr. (Ms.) Runu Banerjee	Professor
166	Instrumentation and Electronics Engg.	Dr. Prolay Sharma	Assistant Professor
167	Instrumentation and Electronics Engg.	Mr. Abhijit Chandra	Assistant Professor
168	Instrumentation and Electronics Engg.	Ms. Shyamali Mitra	Assistant Professor
169	Mechanical Engineering	Dr. Goutam Majumder	Professor
170	Mechanical Engineering	Dr. Goutam Pohit	Professor
171	Mechanical Engineering	Dr. Sumanta Neogi	Professor
172	Mechanical Engineering	Dr. Dipankar Sanyal	Professor
173	Mechanical Engineering	Dr. Swarnendu Sen	Professor
174	Mechanical Engineering	Dr. Sudipta De	Professor
175	Mechanical Engineering	Dr. Achintya Mukhopadhyay	Professor
176	Mechanical Engineering	Dr. Prasanta Sahoo	Professor
177	Mechanical Engineering	Dr. Sadhan Kr. Ghosh	Professor
178	Mechanical Engineering	Dr. Goutam Sutradhar	Professor
179	Mechanical Engineering	Dr. Buddhadev Oraon	Professor
180	Mechanical Engineering	Dr. Asish Bandyopadhyay	Professor
181	Mechanical Engineering	Dr. Prabir Kumar De	Professor
182	Mechanical Engineering	Dr. Dipak Laha	Professor
183	Mechanical Engineering	Sri Ranajit Kumar Chakraborti	Associate Professor
184	Mechanical Engineering	Dr. Abhijit Mukhopadhyay	Associate Professor
185	Mechanical Engineering	Dr. Amit Karmakar	Associate Professor
186	Mechanical Engineering	Dr. Snehmoy Majumder	Professor
187	Mechanical Engineering	Dr. Rajat Shubra Sen	Professor
188	Mechanical Engineering	Dr. Sanjib Acharyya	Professor
189	Mechanical Engineering	Dr. Debasish Roy	Professor
190	Mechanical Engineering	Dr. Arunava Chanda	Professor
191	Mechanical Engineering	Dr. Somnath Bhattacharjee	Associate Professor
192	Mechanical Engineering	Dr. Titas Nandi	Professor
193	Mechanical Engineering	Dr. Balaram Kundu	Professor
194	Mechanical Engineering	Dr. Arghya Nandi	Professor
195	Mechanical Engineering	Dr. Koushik Ghosh	Professor
196	Mechanical Engineering	Sri Goutam Nandi	Associate Professor
197	Mechanical Engineering	Dr. Tarun Kanti Naskar	Professor
198	Mechanical Engineering	Dr. Kashinath Saha	Associate Professor
199	Mechanical Engineering	Dr. Snehangshu Mandal	Associate Professor
200	Mechanical Engineering	Dr. Himadri Chattopadhyay	Professor
201	Mechanical Engineering	Dr. Dulal Krishna Mandal	Associate Professor
202	Mechanical Engineering	Dr. Saikat Mookherjee	Professor
203	Mechanical Engineering	Dr. Samar Chandra Mandal	Professor
204	Mechanical Engineering	Dr. Debabrata Nag	Associate Professor
205	Mechanical Engineering	Dr. Abhijit Chanda	Professor
206	Mechanical Engineering	Dr. Subhas Chandra Panja	Professor

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SL	Dept.	Name	Designation
207	Mechanical Engineering	Sri Susenjit Sarkar	Professor
208	Mechanical Engineering	Dr. Nirmal Kumar Manna	Associate Professor
209	Mechanical Engineering	Dr. Rana Saha	Professor
210	Mechanical Engineering	Sri Nipu Modak	Associate Professor
211	Mechanical Engineering	Dr. Debabrata Das	Associate Professor
212	Mechanical Engineering	Dr. Dipten Misra	Assistant Professor
213	Mechanical Engineering	Dr. Sandip Das	Assistant Professor
214	Mechanical Engineering	Dr Tapan Kr. Barman	Associate Professor
215	Mechanical Engineering	Dr. Sudip Simlandi	Associate Professor
216	Mechanical Engineering	Dr. Prokash Chandra Roy	Associate Professor
217	Mechanical Engineering	Mr. Pranibesh Mandal	Assistant Professor
218	Mechanical Engineering	Sri Siddhartha Patra	Assistant Professor
219	Mechanical Engineering	Dr. Suman Kalyan Das	Assistant Professor
220	Mechanical Engineering	Dr. Anirban Mitra	Assistant Professor
221	Mechanical Engineering	Dr. Anindya Sundar Das	Assistant Professor
222	Mechanical Engineering	Sri Sourav Sarkar	Assistant Professor
223	Mechanical Engineering	Dr. Shouvik Ghosh	Assistant Professor
224	Mechanical Engineering	Sri Hareram Lohar	Assistant Professor
225	Mechanical Engineering	Dr. Tanmoy Bandyopadhyay	Assistant Professor
226	Mechanical Engineering	Mr. Nabendu Ghosh	Assistant Professor
227	Mechanical Engineering	Mr. Suman Nihar	Assistant Professor
228	Mechanical Engineering	Mr. Priyankar Datta	Assistant Professor
229	Mechanical Engineering	Dr. Sandip Sarkar	Associate Professor
230	Mechanical Engineering	Mr. Abhishek Mandal	Assistant Professor
231	Metallurgical and Material Engineering	Dr. Subir Pal	Professor
232	Metallurgical and Material Engineering	Dr. Pravash Chandra Chakraborti	Professor
233	Metallurgical and Material Engineering	Dr. Akshay K. Pramanick	Professor
234	Metallurgical and Material Engineering	Dr. Rajib Dey	Professor
235	Metallurgical and Material Engineering	Dr. Sathi Banerjee (Nee Mallick)	Assistant Professor
236	Metallurgical and Material Engineering	Dr. Amrita Kundu	Associate Professor
237	Metallurgical and Material Engineering	Smt. Shilabati Hembram	Assistant Professor
238	Metallurgical and Material Engineering	MD. Basiruddin Sk	Assistant Professor
239	Pharmaceutical Technology	Dr. Tanmoy Bera	Professor
240	Pharmaceutical Technology	Dr. Tarun Jha	Professor
241	Pharmaceutical Technology	Dr. Lakshmi Kanta Ghosh	Professor
242	Pharmaceutical Technology	Dr. Tapan Kumar Maity	Professor
243	Pharmaceutical Technology	Dr. Mrs. Jasmina Khanam	Professor
244	Pharmaceutical Technology	Dr. Amalesh Samanta	Professor
245	Pharmaceutical Technology	Dr. Pulok Kr. Mukherjee	Professor
246	Pharmaceutical Technology	Dr. Kunal Roy	Professor
247	Pharmaceutical Technology	Dr. Sanmoy Karmakar	Professor
248	Pharmaceutical Technology	Dr. Biswajit Mukherjee	Professor
249	Pharmaceutical Technology	Dr. Subhash Chandra Mondal	Professor
250	Pharmaceutical Technology	Dr. Pallab Kanti Halder	Associate Professor
251	Pharmaceutical Technology	Dr. Saikat Dewanjee	Assistant Professor
252	Pharmaceutical Technology	Dr. Ketousetuo Kuotsu	Assistant Professor
253	Power Engineering	Dr. Bireswar Majumdar	Professor

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SL	Dept.	Name	Designation
254	Power Engineering	Dr. Niladri Chakraborty	Professor
255	Power Engineering	Dr. Amitava Datta	Professor
256	Power Engineering	Dr. Amitava Gupta	Professor
257	Power Engineering	Dr. Apurba Kumar Santra	Professor
258	Power Engineering	Dr. Mousumi Basu	Professor
259	Power Engineering	Dr. Kamal Krishna Mondal	Professor
260	Power Engineering	Dr. Ranjan Ganguly	Professor
261	Power Engineering	Dr. Gargi Konar	Assistant Professor
262	Power Engineering	Dr. Debashis Palit	Assistant Professor
263	Power Engineering	Sri Bhimsen Tudu	Assistant Professor
264	Power Engineering	Sri Subrata Mondal	Assistant Professor
265	Power Engineering	Dr. Nirmalendu Biswas	Assistant Professor
266	Printing Engineering	Dr. Arun Kiran Pal	Professor
267	Printing Engineering	Dr. Swati Bandyopadhyay	Associate Professor
268	Printing Engineering	Dr. Kanai Ch. Paul	Professor
269	Printing Engineering	Dr. Pradip Kundu	Assistant Professor
270	Printing Engineering	Sri Soumen Basak	Associate Professor
271	Printing Engineering	Dr. Arpitam Chatterjee	Assistant Professor
272	Printing Engineering	Smt. Shilpi Naskar	Assistant Professor
273	Printing Engineering	Ms. Mahasweta Mandal	Assistant Professor
274	Production Engineering	Dr. Bijan Sarkar	Professor
275	Production Engineering	Dr. Bijoy Bhattacharyya	Professor
276	Production Engineering	Dr. Shankar Chakraborty	Professor
277	Production Engineering	Dr. Biswanath Doloi	Professor
278	Production Engineering	Dr. Souren Mitra	Professor
279	Production Engineering	Dr. Debmalya Banerjee	Professor
280	Production Engineering	Dr. Arunansu Sekhar Kuar	Professor
281	Production Engineering	Sri Subir Kr. Debnath	Associate Professor
282	Production Engineering	Dr. Ajoy Kumar Dutta	Professor
283	Production Engineering	Dr. Soumya Sarkar	Professor
284	Production Engineering	Sri Biplab Ranjan Sarkar	Associate Professor
285	School of Bio-Science and Engineering	Dr. Monisha Chakraborty	Associate Professor
286	School of Bio-Science and Engineering	Dr. Piyali Basak	Assistant Professor
287	School of Education Technology	Dr. Smt. Matangini Chatopadhyay	Professor
288	School of Education Technology	Dr. Ranjan Parekh	Associate Professor
289	School of Energy Studies	Dr. Tushar Jash	Associate Professor
290	School of Energy Studies	Dr. Ratan Mondal	Associate Professor
291	School of Illumination Science, Engg. and Design	Dr. Kamalika Ghosh	Assistant Professor
292	School of Illumination Science, Engg. and Design	Parthasarathi Satvaya	Assistant Professor
293	School of Material Science and Nanotechnology	Dr. Chandan Kumar Ghosh	Assistant Professor
294	School of Material Science and Nanotechnology	Sri Sourav Sarkar	Assistant Professor
295	School of Mobile Computing and Communication	Smt. Arpita Sarkar	Assistant Professor
296	School of Mobile Computing and Communication	Dr. Punyasha Chatterjee	Assistant Professor
297	School of Water Resource Engineering	Dr. Asis Majumder	Professor
298	School of Water Resource Engineering	Mr. Subhasish Das	Assistant Professor
299	School of Water Resource Engineering	Dr. Pankaj Kumar Roy	Professor

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SCIENCE

Sl. No.	Department	Name of the Faculty Members	Present Designation
1	Chemistry	Dr. Ambikesh Mahapatra	Professor
2	Chemistry	Dr. Chittaranjan Sinha	Professor
3	Chemistry	Dr. Kalyan Kumar Das	Professor
4	Chemistry	Dr. Mahammad Ali	Professor
5	Chemistry	Dr. Nitin Kumar Chattopadhyay	Professor
6	Chemistry	Dr. Rina Ghosh	Professor
7	Chemistry	Dr. Samaresh Bhattacharya	Professor
8	Chemistry	Dr. Subrata Mukhopadhyay	Professor
9	Chemistry	Dr. Swapan Kumar Bhattacharya	Professor
10	Chemistry	Dr. Biplab Bhattacharjee	Associate Professor
11	Chemistry	Dr. Gourhari Maiti	Professor
12	Chemistry	Dr. Jnan Prakash Naskar	Professor
13	Chemistry	Dr. Kajal Krishna Rajak	Professor
14	Chemistry	Dr. Kausikisankar Pramanik	Professor
15	Chemistry	Dr. Pradip Kr. Mahapatra	Associate Professor
16	Chemistry	Dr. Sanjay Bhar	Professor
17	Chemistry	Dr. Subrata Nath Koner	Professor
18	Chemistry	Dr. Sujay Baitalik	Professor
19	Chemistry	Dr. Soumen Ghosh	Professor
20	Chemistry	Dr. Umasish Jana	Associate Professor
21	Chemistry	Dr. Umesh Chandra Halder	Professor
22	Chemistry	Dr. Chandan Kumar Mondal	Professor
23	Chemistry	Dr. Arup Gayen	Assistant Professor
24	Chemistry	Dr. Suman Das	Associate Professor
25	Chemistry	Dr. Partha Pratim Parui	Assistant Professor
26	Chemistry	Dr. Tanurima Bhaumik	Assistant Professor
27	Chemistry	Dr. Saubhik Haldar	Assistant Professor
28	Chemistry	Dr. Debajyoti Ghoshal	Assistant Professor
29	Chemistry	Dr. Saurabh Das	Professor
30	Chemistry	Dr. Partha Ray	Associate Professor
31	Chemistry	Dr. Shouvik Chattopadhyay	Assistant Professor
32	Chemistry	Dr. Amrita Saha	Assistant Professor
33	Chemistry	Dr. Tapan Kumar Mondal	Associate Professor
34	Chemistry	Dr. Bhibhuti Bhusan Show	Assistant Professor
35	Chemistry	Dr. Arunabha Thakur	Assistant Professor
36	Chemistry	Dr. Amit Saha	Assistant Professor
37	Chemistry	Dr. Samit Guha	Assistant Professor
38	Chemistry	Dr. Mohabul Alam Mondal	Assistant Professor
39	Chemistry	Dr. Partha Mahata	Assistant Professor
40	Chemistry	Dr. Manas Kumar Panda	Assistant Professor
41	Chemistry	Dr. Asamanjoy Bhunia	Assistant Professor
42	Chemistry	Sri Satyadeep Waiba	Assistant Professor
43	Physics	Dr. Argha Deb	Professor
44	Physics	Dr. Ajay Kumar Ghosh	Professor
45	Physics	Dr. Asim Kumar Ghosh	Professor

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Sl. No.	Department	Name of the Faculty Members	Present Designation
46	Physics	Dr. Avijit Mukherjee	Associate Professor
47	Physics	Dr. Basudev Ghosh	Professor
48	Physics	Dr. Brajadulal Chattopadhyay	Professor
49	Physics	Dr. Debasish Biswas	Professor
50	Physics	Dr. Debasish Lohar	Professor
51	Physics	Dr. Kalyan Kr. Chattopadhyay	Professor
52	Physics	Dr. Ruma Ray	Professor
53	Physics	Dr. Subhankar Ray	Associate Professor
54	Physics	Dr. Sukhen Das	Professor
55	Physics	Dr. Sulava Bhattacharyya	Associate Professor
56	Physics	Dr. Tapas Kr. Ballabh	Associate Professor
57	Physics	Dr. Nabin Baran Manik	Professor
58	Physics	Dr. Dhruva Banerjee	Assistant Professor
59	Physics	Dr. Dipankar Mandal	Assistant Professor
60	Physics	Dr. Puspendu Sahu	Associate Professor
61	Physics	Dr. Subrata Sarkar	Assistant Professor
62	Physics	Mr. Abiral Tamang	Assistant Professor
63	Physics	Dr. Sk. Saiyad Ali	Assistant Professor
64	Physics	Dr. Bharati Tudu	Assistant Professor
65	Physics	Dr. Subhadipta Mukhopadhyay	Associate Professor
66	Physics	Dr. Jayoti Das	Associate Professor
67	Physics	Dr. Pabitra Kumar Paul	Associate Professor
68	Physics	Dr. Partha Pratim Ray	Associate Professor
69	Physics	Dr. Sanjoy Kumar	Associate Professor
70	Physics	Dr. Sarmistha Mandal	Assistant Professor
71	Physics	Dr. Sanat Karmakar	Associate Professor
72	Physics	Dr. Joydeep Chowdhury	Associate Professor
73	Physics	Dr. Abhijit Samanta	Assistant Professor
74	Physics	Dr. Saikat Kumar Seth	Assistant Professor
75	Physics	Dr. Mitali Mondal	Associate Professor
76	Physics	Sri Soumen Mondal	Assistant Professor
77	Mathematics	Dr. Ashis Kr. Sarkar	Professor
78	Mathematics	Dr. Sudeshna Banerjea	Professor
79	Mathematics	Dr. Prabir Kumar Kundu	Professor
80	Mathematics	Dr. Prakash Chandra Mali	Professor
81	Mathematics	Dr. Shamik Ghosh	Professor
82	Mathematics	Dr. Subenoy Chakraborty	Professor
83	Mathematics	Dr. Abhijit Lahiri	Professor
84	Mathematics	Dr. Anup Bandyopadhyay	Professor
85	Mathematics	Dr. Arindam Bhattacharyya	Professor
86	Mathematics	Dr. Bibhas Ch. Giri	Professor
87	Mathematics	Dr. Dipak Kr. Kesh	Professor
88	Mathematics	Dr. Farook Rahaman	Professor
89	Mathematics	Dr. Kallol Paul	Professor
90	Mathematics	Dr. Nandadulal Bairagi	Professor
91	Mathematics	Dr. Narayan Chandra Majee	Associate Professor
92	Mathematics	Dr. Pratulananda Das	Professor

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Sl. No.	Department	Name of the Faculty Members	Present Designation
93	Mathematics	Dr. Priti Kumar Roy	Professor
94	Mathematics	Dr. Sagnik Sinha	Professor
95	Mathematics	Dr. Subhas Ch. Mondal	Professor
96	Mathematics	Dr. Sujit Kumar Sardar	Professor
97	Mathematics	Dr. Swapna Debnath	Professor
98	Mathematics	Sri. Buddhadeb Sau	Professor
99	Mathematics	Dr. Manasi Mandal	Assistant Professor
100	Mathematics	Dr. Sukhendu Kar	Associate Professor
101	Mathematics	Dr. Nilanjana Mahata	Associate Professor
102	Mathematics	Sri Santosh Biswas	Assistant Professor
103	Mathematics	Dr. Alaka Das	Professor
104	Mathematics	Dr. Gopal Chandra Shit	Associate Professor
105	Geological Science	Dr. Nibir Mondal	Professor
106	Geological Science	Dr. Pulak Sengupta	Professor
107	Geological Science	Dr. Subir Mukhopadhyay	Professor
108	Geological Science	Dr. Dipak Ch Pal	Professor
109	Geological Science	Dr. Sanjoy Sanyal	Professor
110	Geological Science	Dr. Sisir Kanti Mondal	Professor
111	Geological Science	Dr. Subir Sarkar	Professor
112	Geological Science	Dr. Subrata Karmakar	Professor
113	Geological Science	Dr. Supriya Mondal	Associate Professor
114	Geological Science	Dr. Anupam Ghosh	Assistant Professor
115	Geological Science	Dr. Sadhana M. Chatterjee	Assistant Professor
116	Geological Science	Dr. Susanta Kr. Samanta	Professor
117	Geological Science	Dr. Babar Ali Shah	Assistant Professor
118	Geological Science	Dr. Sunipa Mandal	Assistant Professor
119	Geological Science	Dr. Tridib Kumar Mondal	Assistant Professor
120	Geological Science	Dr. Susanta Chaudhuri	Assistant Professor
121	Geological Science	Dr. Soumik Mukhopadhyay	Assistant Professor
122	Life Science and Bio-Technology	Dr. Ratan Gachhui	Professor
123	Life Science and Bio-Technology	Dr. Parimal Karmakar	Professor
124	Life Science and Bio-Technology	Dr. Biswadip Das	Professor
125	Life Science and Bio-Technology	Dr. Paltu Kumar Dhal	Assistant Professor
126	Instrumentaion Science	Dr. Anup Kumar Ghosh	Associate Professor
127	Instrumentaion Science	Dr. Sachindranath Das	Assistant Professor
128	Geography	Dr. Lakshmi Shivaramakrishnan	Professor
129	Geography	Dr. Debajit Dutta	Assistant Professor
130	Geography	Dr. Arijit Majumder	Assistant Professor
131	School of Oceanographic Studies	Dr. Sugata Hazra	Professor
132	School of Oceanographic Studies	Dr. Tuhin Ghosh	Associate Professor
133	School of Oceanographic Studies	Dr. Abhra Ghosh	Assistant Professor
134	School of Oceanographic Studies	Dr. Rahi Soren	Assistant Professor
135	School of Environmental Studies	Dr. Joydeep Mukherjee	Associate Professor
136	School of Environmental Studies	Dr. Tarit Roy Chowdhury	Associate Professor

JADAVPUR UNIVERSITY
STUDENT PROFILE
TOTAL STUDENT OF THE UNIVERSITY 2018-19 (CATEGORY-WISE)

FACULTY	Total no. of students (Category wise)																Minority*						Foreign*		Other State*		
	Total Student	General		S/C		S/T		OBC-A		OBC-B		Sports/ QIP		PD		TOTAL		Muslims		Christians		Others		M	F	M	F
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F				
FACULTY OF ARTS	4170	902	1593	486	495	94	99	123	78	89	130	6	15	44	16	1744	2426	50	47	2	2	7	13	19	17	100	167
FACULTY OF ENGG	5858	3226	466	1048	155	217	37	306	12	237	19	41	7	78	7	5155	703	195	5	0	0	24	6	32	18	998	100
FACULTY OF ISLM	532	240	141	56	38	4	3	7	11	13	12	0	0	6	1	329	203	11	5	0	0	0	0	2	3	35	23
FACULTY OF SCIENCE	1549	661	311	224	100	35	15	68	19	69	23	6	7	10	1	1073	476	77	19	0	2	6	3	3	3	39	28
TOTAL	12109	5029	2511	1814	788	350	154	504	120	408	184	53	29	138	25	8301	3808	333	76	2	4	37	22	56	41	1172	318

* NOTE :- The figures appearing in Minority, Foreign and Other State categories are already included in the total column.

* NOTE :- No Third Gender has been admitted in the session 2018-19.

JADAVPUR UNIVERSITY
FACULTY OF ARTS
Session : 2018-19

ARTS	Courses	Total no. of students (Category wise)																Minority*						Foreign*		Other State*		
		Total Student	General		S/C		S/T		OBC-A		OBC-B		Sports/		PD		TOTAL		Muslims		Christians		Others		M	F	M	F
			M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F						
Bengali	UG	199	31	82	18	27	3	7	4	11	4	5	0	2	4	1	64	135	7	7	0	0	0	0	0	0	0	0
Bengali	PG	145	21	60	17	26	3	2	4	3	1	5	0	0	1	2	47	98	0	1	0	0	0	0	1	0	1	8
Bengali	M.Phil	37	11	8	4	4	1	1	3	1	0	2	0	0	2	0	21	16	1	0	0	0	0	0	0	0	0	0
Bengali	PG (EVE.)	113	32	35	16	13	1	2	4	3	2	3	0	0	2	0	57	56	2	6	0	0	0	0	0	0	1	1
Comparative Literature	UG	199	42	83	23	20	5	2	5	2	6	9	2	0	0	0	83	116	5	2	0	0	1	2	0	1	6	3
Comparative Literature	PG	116	27	61	11	10	0	3	0	0	2	2	0	0	0	0	40	76	0	0	0	0	0	0	2	1	4	18
Comparative Literature	M.Phil	37	4	15	3	5	2	0	0	4	1	1	0	0	0	2	10	27	0	2	0	0	0	0	0	0	1	0
Economics	UG	237	50	94	20	39	4	5	2	1	7	13	1	0	0	1	84	153	1	1	0	0	1	2	1	3	6	9
Economics	PG	99	30	52	4	9	1	0	0	0	2	1	0	0	0	0	37	62	1	0	0	0	0	0	0	0	2	12
Economics	M.Phil	11	4	5	0	1	0	0	1	0	0	0	0	0	0	0	5	6	0	0	0	0	0	0	1	0	1	0

English	UG	205	36	82	16	26	7	6	4	7	7	8	0	2	2	2	72	133	2	8	0	1	2	2	0	1	2	1
English	PG	139	23	67	8	21	2	5	2	4	1	3	0	0	2	1	38	101	0	0	0	0	0	0	1	1	7	18
English	M.Phil	38	13	10	0	8	0	1	2	1	2	0	0	0	1	0	18	20	0	0	0	0	0	0	0	3	0	4
Philosophy	UG	210	59	60	24	25	6	5	9	6	4	5	1	3	1	2	104	106	7	3	0	0	0	0	1	1	4	4
Philosophy	PG	124	19	52	24	12	2	2	4	0	4	3	0	0	1	1	54	70	1	0	0	0	0	0	2	1	8	14
Philosophy	M.Phil	37	7	14	6	1	0	1	3	1	2	0	0	0	2	0	20	17	0	0	0	0	0	0	0	0	0	0
Sanskrit	UG	172	35	69	16	30	0	6	1	2	4	7	0	2	0	0	56	116	2	0	0	0	0	0	0	0	0	0
Sanskrit	PG	134	20	32	27	32	2	2	4	0	3	12	0	0	0	0	56	78	0	0	0	0	0	0	0	0	15	24
Sanskrit	M.Phil	28	5	6	7	2	2	0	2	1	1	0	0	0	1	1	18	10	0	1	0	0	0	0	0	0	0	0
Sanskrit	PG (EVE.)	104	24	44	14	10	3	1	2	1	4	1	0	0	0	0	47	57	0	0	0	0	0	0	0	0	0	2
International Relations	UG	210	47	75	23	23	8	4	10	3	3	7	1	2	4	0	96	114	6	4	1	0	3	1	2	3	4	6
International Relations	PG	139	33	57	12	16	1	7	6	2	1	3	0	0	1	0	54	85	1	1	0	0	0	1	2	1	14	13
International Relations	M.Phil	41	8	14	6	5	0	2	3	1	0	2	0	0	0	0	17	24	0	1	0	0	0	0	0	0	1	1
History	UG	200	45	71	28	17	5	5	7	7	3	7	1	1	2	1	91	109	2	7	0	0	0	0	1	1	6	0
History	PG	116	27	49	14	8	2	2	1	3	0	6	0	0	4	0	48	68	0	1	0	0	0	0	0	0	4	9
History	M.Phil	38	8	11	7	1	2	1	4	0	1	1	0	0	2	0	24	14	0	0	0	0	0	0	0	0	1	1
History	PG (EVE.)	95	34	20	18	10	4	0	6	0	3	0	0	0	0	0	65	30	1	0	0	0	0	0	0	0	1	0
Sociology	UG	134	11	75	3	18	0	8	4	5	3	4	0	2	0	1	21	113	1	1	0	0	0	2	1	0	1	3
Sociology	PG	84	13	41	5	12	2	3	2	3	1	1	0	0	1	0	24	60	1	1	1	1	0	1	0	0	1	2
Sociology	M.Phil	31	4	15	2	3	0	1	0	1	1	4	0	0	0	0	7	24	0	0	0	0	0	1	0	0	1	1
Education	UG	186	44	84	16	25	6	4	0	0	0	0	0	0	7	0	73	113	2	0	0	0	0	1	0	0	2	2
Education	PG	112	14	52	18	7	3	4	5	0	2	3	0	0	4	0	46	66	0	0	0	0	0	0	0	0	0	3
Education	M.Phil	38	10	11	6	2	2	0	3	1	1	1	0	0	0	1	22	16	2	0	0	0	0	0	0	0	0	1
Lib. & Inf. Science	UG	56	11	19	6	8	2	1	3	2	1	3	0	0	0	0	23	33	0	0	0	0	0	0	0	0	0	1
Lib. & Inf. Science	PG	19	2	9	4	1	0	0	1	0	0	2	0	0	0	0	7	12	0	0	0	0	0	0	0	0	0	0
Lib. & Inf. Science (Digital Library)	PG	34	8	15	4	3	2	0	0	0	1	1	0	0	0	0	15	19	1	0	0	0	0	0	0	0	0	0
Lib. & Inf. Science	M.Phil	9	1	4	2	0	0	0	0	0	1	1	0	0	0	0	4	5	0	0	0	0	0	0	0	0	0	1
Film Studies	PG	73	38	19	6	3	0	1	0	0	4	1	0	1	0	0	48	25	0	0	0	0	0	0	4	0	5	2
Physical Education	UG	95	14	9	34	7	8	3	11	2	5	2	0	0	0	0	72	23	0	0	0	0	0	0	0	0	0	0
Yoga Therapy	PG	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Physical Education	PG	75	37	12	13	5	3	2	1	0	1	1	0	0	0	0	55	20	4	0	0	0	0	0	0	0	1	3
Total		4170	902	1593	486	495	94	99	123	78	89	130	6	15	44	16	1744	2426	50	47	2	2	7	13	19	17	100	167

* NOTE :- The figures appearing in Minority, Foreign and Other State categories are already included in the total column. * NOTE :- No Third Gender has been admitted in the session 2018-19.

Printing Engineering	PG	12	9	2	1	0	0	0	0	0	0	0	0	0	0	0	10	2	0	0	0	0	0	0	0	0	1	1	
Production Engineering	UG	197	111	8	38	5	7	1	12	0	9	1	0	0	4	0	182	15	2	0	0	0	0	0	0	3	1	41	4
Production Engineering	PG	24	19	0	3	1	1	0	0	0	0	0	0	0	0	0	23	1	0	0	0	0	0	0	0	0	3	0	
Total		5858	3226	466	1048	155	217	37	306	12	237	19	41	7	78	7	5155	703	195	5	0	0	24	6	32	18	998	100	

* NOTE :- The figures appearing in Minority, Foreign and Other State are already included in the total column.

* NOTE :- No Third Gender has been admitted in the session 2018-19.

PHYSICS	UG	207	77	35	36	14	11	2	11	5	10	2	1	2	1	0	147	60	14	3	0	0	3	0	0	1	2	2	
PHYSICS	PG	91	43	15	14	6	3	0	4	1	3	1	0	0	1	0	68	23	5	1	0	0	1	0	0	0	9	1	
PHYSICS	PG (EVE.)	64	32	17	7	2	0	0	2	0	3	0	0	0	1	0	45	19	4	0	0	0	0	0	0	0	2	1	
Medical Physics	PG Diploma	11	7	1	1	0	0	0	1	0	1	0	0	0	0	0	10	1	1	0	0	0	0	0	0	0	0	0	
LIFE SCIENCE & BIO TECH.	PG	48	19	17	2	4	0	0	1	1	2	2	0	0	0	0	24	24	0	0	0	0	0	0	0	1	0	1	0
ELECTRONICS SC.	PG	32	17	4	4	2	0	0	0	1	4	0	0	0	0	0	25	7	2	1	0	0	0	0	0	0	2	1	
Instrumentation Science	PG	26	17	8	1	0	0	0	0	0	0	0	0	0	0	0	18	8	0	0	0	0	0	0	0	0	1	0	
Total		1549	661	311	224	100	35	15	68	19	69	23	6	7	10	1	1073	476	77	19	0	2	6	3	3	3	39	28	

* NOTE :- The figures appearing in Minority, Foreign and Other State categories are already included in the total column.

* NOTE :- No Third Gender has been admitted in the session 2018-19.

SECTION B

[ACADEMIC REPORT. 1.04.2018 TO 31.03.2019]

FACULTY COUNCIL OF ARTS

D E P A R T M E N T S

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BENGALI

Phone : +91-33-2414-6267
Int. : 2457-2232/2124
H.O.D : Prof. Sekhar Kr. Samaddar
Prof. Barendu Mondal (w.e.f. 21.06.2018)
E-mail : hod.bengali@jadavpuruniversity.in

Professor Sekhar Kumar Samaddar

Publication

1. Theatarer Satya O Girishchandrer Abedan, 2nd March, 2019, Desh fortnightly, Suman Sengupta (ed).
2. Theatre O Cinema Sankriti Bitorko, a book review article, 2nd September, 2019 Desh fortnightly, Suman Sengupta(ed).
3. Sisir kumar: Samayer Shristi Umnesh Porbo, September 2019, Sisir Katha, An Anthology of articles on Sisir kumar Bhaduri, Minerva Natyasanskriti Charcha Kendra Publication, Bratya Basu(ed.)
4. JeLekha Amrityu Likhe Jete Chai, September 2019, Purba Paschim Annual Magazine, Debsankar Mukherji(ed)
5. Bandhu O Shikhak Salil Bandyopadhyay, Sept 2019, Bohurupe, 132, Prabhat Kumar Das(Ed.)

Lecture Delivered:

1. Moulik Natakher Khoje, Sayak lecture Series, 4th May 2019, Jabannada Sabhagriha.
2. Pathebipathe Bangla Natya Samalochona, a Seminar organized by Machar Manush, in association with Ministry of Culture, Govt of India, 18th August, 2019, Bangla Academi Sabhagriha.
3. Androzene in Bengali Theatre, a Seminar organized by Dumdum Sabdomugdho, 22 August, 2019, Tapas Sen Sabhakakha, Tapan Theatre.
4. From Play to production:own journey, ownthoughts, interactive session with Sri Santanu Basu, faculty, NSD, New Delhi, 14th September 2019, a National Seminar organized by Minerva Natyasanskriti Charcha Kendra, Minerva Theatre.

Research Projects

- 1) Engaged in the research on
 - i) Evolution of Acting in Bengali Theatre, under DRS Program Phase II, Dept of Bengali, Jadavpur University.
 - ii) Gambhira, a theatrical folk form under DRS Program Phase II, Dept of Bengali, Jadavpur University.
- 2) Engaged with the research work on “Question of Indianity in Modern Indian Theatre”, Under Rusa 2.0, Jadavpur University.

Other Activities

1. Working as an external member of DRS Committee of West Bengal State University, Barasat and attended meeting on 25th September 2019.
2. Working as a member of advisory committee of Paschimbanga Natya Academi, Dept of Information & Culture, Govt. of West Bengal, and functioning as chairman of two subcommittees there: i) Publication subcommittee ii) Tripti Mitra Sabhagriha.
3. Working as a member of working committee of Minerva

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Natyasanskriti Charcha Kendra, Minerva Theatre.

Dr. Barendu Mandal

Publication:

- ১। ‘অমিয়ভূষণ স্বাতন্ত্র্যের সন্ধানে পুনর্বার’, মূল গ্রন্থ-কোচবিহার: সাহিত্য ও ইতিহাস, সম্পা. -দেবায়ন চৌধুরী, মধুরিমা চৌধুরী, ছোঁয়া, কলকাতা, জানুয়ারি ২০১৯, পৃষ্ঠা ১৮৪-২০৯ [ISBN- 978-81-937006-1-3]
- ২। ‘ছিটমহলের গল্প পাঠের ভূমিকা’ মূল গ্রন্থ-ছিটমহলের গল্প, সম্পা.-বরেন্দু মণ্ডল, সোপান, কলকাতা, ৩১ জুলাই ২০১৮, পৃষ্ঠা.-, [ISBN- 978-93-82433-91-0]
- ৩। ‘সম্পাদনা প্রসঙ্গে’, মূল গ্রন্থ-নারীবিষয়: সেলিনা হোসেন, সম্পা.-বরেন্দু মণ্ডল, অভিযান, কলকাতা, জানুয়ারি ২০১৯, পৃষ্ঠা, ৫-৯, [ISBN- 978-93-88815-08-06]
- ৪। ‘মাষ্টারমশাই সন্তোষ বর্মণ ও তাঁর চিন্তাসূত্র’, মূলগ্রন্থ-সন্তোষ বর্মণ: স্বাক্ষর ও স্মরণ, সন্তোষ বর্মণ স্মৃতি সংসদ, জানুয়ারি ২০১৯।

Books edited

- ১। ছিটমহলের গল্প সোপান, কলকাতা, ৩১ জুলাই ২০১৮, [ISBN- 978-93-82433-91-0]
- ২। প্রবন্ধ সংগ্রহ: পার্থপ্রতিম বন্দ্যোপাধ্যায়, এবং মুশায়েরা, কলকাতা, নভেম্বর ২০১৮, [ISBN- 978-93-85119-97-]
- ৩। নারীবিষয়: সেলিনা হোসেন, অভিযান, কলকাতা, জানুয়ারি ২০১৯, পৃষ্ঠা. ৫-৯, ISBN- 978-93-88815-08-06

Lecture Delivered:

- ১। মুক্তিযুদ্ধের সাহিত্য ও সমর-সাহিত্য (War- Literature) : একটি তুলনামূলক পাঠ, মূল আলোচনা ‘বাংলাদেশে মুক্তিযুদ্ধ : শিল্প, সাহিত্য ও সংস্কৃতির অর্জন’, দ্বি-দিবসীয় আন্তর্জাতিক আলোচনাচক্র, ৬ এপ্রিল ২০১৮, রাজশাহী বিশ্ববিদ্যালয়, বাংলাদেশ।
- ২। স্মৃতি থেকে ইতিহাসের পুনর্নির্মাণ: প্রসঙ্গ সুন্দরবন, আয়োজক-দক্ষিণের সাঁকো পত্রিকা, জীবনানন্দ সভাঘর, কলকাতা, ২২ ফেব্রুয়ারী ২০১৯।
- ৩। বাংলা সাহিত্যে সুন্দরবন (সুন্দরচর্চা বক্তব্য), আয়োজক-শুধু সুন্দরবন চর্চা ও তেপান্তরের স্বপ্ন, গগনেন্দ্র শিল্পপ্রদর্শনশালা, কলকাতা, ২৩ ফেব্রুয়ারি ২০১৯।
- ৪। সমকালীন পূর্ববঙ্গ ও আবু মনসুর আহমদের কথাসাহিত্য, আন্তর্জাতিক আলোচনাচক্র, নেতাজী সুভাষ মুক্ত বিশ্ববিদ্যালয়, কলকাতা, ২১ এপ্রিল ২০১৯।
- ৫। ভাষা আন্দোলনের দুই পক্ষ –Indian Institute of Engineering Science and Technology, Shibpur, 21 Feb 2019।

Abdul Kafi

Publication:

স্মৃতি, পরিচিতি আর সময়ের স্বাদ: শরদিন্দুর ইতিহাস আশ্রয়, ‘দেশ’, জুন ২০১৮
জানার অসুখ, বাংলা বিভাগীয় পত্রিকা, আগস্ট ২০১৮

Lecture Delivered:

আমাদের আধুনিকতা ও দেশভাগের স্মৃতি, রবীন্দ্রভারতী বিশ্ববিদ্যালয়, জাতীয় আলোচনা চক্র ১২ মার্চ ২০১৯
উনিশ ও বিশ শতকের বাংলার সাহিত্য-সংস্কৃতি এবং আধুনিকতার নানা মাত্রা, বাংলা বিভাগ, যাদবপুর বিশ্ববিদ্যালয়

Dr. Rajyeswar Sinha

Invited talk/seminar/workshop

- 1.Resource person in a workshop on ‘দ্বিতীয় ভাষাশিক্ষা ও বাংলাভাষা’, organised by BSKCCL, School of

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Languages and Linguistics,ju,january 2019

2. Invited talk on ‘আন্তর্জাতিক মাতৃভাষা দিবস ও বাংলা ভাষার ভবিষ্যৎ’, Bijoygarh Jyotish Roy college, 21st February, 2019।

Publication

উনিশ শতকের রামার বই ও বাঙালির আত্মপরিচয় অনুসন্ধান, বাংলা বিভাগীয় পত্রিকা, যাদবপুর বিশ্ব বিদ্যালয়, ফেব্রুয়ারি ২০১৯

Projects

‘আত্মপরিচয়ের খোঁজ ও মুসলমান বাঙালি সম্পাদিত পত্র-পত্রিকা (১৮৬২-১৯২০)’, DRS-SAP, phase II, Department of Bengali,J.U

Dr. Joydeep Ghosh

Publication

1. ‘Lokamata O Antare Gobhir Badha’, Antarjatic Pathshala, March 2018
2. ‘Abanindranather Jorasanko, Rabikar Jorasanko’, Rabindrabhabna, June 2018.
3. ‘Granthanirman O Rabindranath’, Bangla Bibhagiya Ptarika, Department of Bengali, JU, October 2018.
4. ‘Bikalpa Goyendar Utthan :Prasanga Narayan Sanyaler Kanta Series’, Dipan, April 2018

Dr. Payal Basu

Publication:

1. *Bangla Ganer Biswayan, Ebong Sayok*, ISSN- 2349-1981, Oct, 2018
2. Ujagor, Jagodish Gupttasankhy, ‘Aajkal’,17 June 2018

Seminar:

Translation Workshop (A Journey through popular culture)-Resource person & Speaker, Heramba Chandra College, 5-6 Oct 2018

Area of Research Activity

Thrust Area: ‘Aspects of Modernities : Literary and Cultural Experiences of 19th and 20th Century Bengal.’ Supported by DRS-SAP Phase II.

Seminar Organized by Department

1. International Seminar of Research Scholars, September 2018.
2. UGC SAP-DRS funded Seminar on ‘Ouponibeshik Banglay Hindu Musalman Samparka’, January 2019
3. International Seminar on ‘Bangladeshe Bangla Bhasha O sahitya Charchar Gatiprakriti’, February 2019.
4. UGC SAP-DRS funded Seminar on ‘Adhunikatar Nana Matra : Unish Bish Shataker Bangla Sahityer Abhignata’, March 2019

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COMPARATIVE LITERATURE

Phone : +91-33-2414-6690
Int. : 2457-2223
H.O.D. : Prof. Samantak Das
Prof. Sayantan Dasgupta (w.e.f. 12.02.2019)
E-mail : hod@complit.jdvu.ac.in
hod.comp.lit@jadavpuruniversity.in

1. A. Courses Offered:

Name of the Course	Duration	No of Students Enrolled
B.A (Honours)	3 years; 6 semesters	212
B.A (ED/GE)	Semesters 1, 2, 3, 4	63
M.A.	2 years; 4 semesters	117
MPhil	2 years; 4 semesters	28 (14 each in the
1 st and 2 nd year)	PhD Course Work	11
Registered for PhD		32
Certificate Course in Translation	6 months	30

1. B. Number of Faculty Members:

Permanent: Sanctioned posts: 15 (2 Professor; 3 Associate Professor; 10 Assistant Professor)

In position: 11 (5 Professor; 4 Associate Professor; 2 Assistant Professor)

On lien: 1 (Professor)

Vacant: 3 (1 Professor; 1 Associate Professor; 1 Assistant Professor; of these 2 posts have been advertised, 1 each of Assoc Prof and Asst Prof, and 1 Professor's post has very recently been vacated by Ipshita Chanda)

Guest Faculty: 0

2. A. Area of Research Activities: (Broad Areas)

Areas identified by Board of Studies (BOS) and External Experts for research under the Centre of Advanced Study (CAS) Phase III are:

(a) *Comparative Literature: Texts, Contexts, Methods*

- Issues and aspects related to Comparative Literature pedagogy specifically keeping in mind the Indian context.
- With the recent considerable growth of Comparative Literature Departments, as well as Centres and Schools: A demand is growing for text material for core courses on 'Comparative Literature: Definition, Scope, History,' which will be sought to be met.

(b) *Inter-literary Transactions: Indian and Asian Contexts*

- In today's globalized world, there is an ever greater need to find the right balance between opening the doors to the world and understanding Indian literatures in their multiplicity, and the interconnections within India and among Asian languages, literatures and cultures, without shutting the doors on non-Asian language literatures.

(c) *Interactions between Literature and other Knowledge Systems*

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- issues related to orality, oral history,
- testimonial literature,
- the storytelling tradition,
- performance.

2. B. Major Research Project:

(Departmental/Individual, Name of the Project/Funding Agency)

Parthasarathi Bhaumik

- Individual Project, 'Jibanananda Das Papers', RUSA 2.0, UGC.

Kavita Panjabi

(Departmental/Individual, Name of the Project/Funding Agency)

- "Interfaces between Central Asian & Indian Literatures & Cultures – Through the Lens of Indian Balti Villages", Principal Investigator: Kavita Panjabi. Funding Agency: RUSA 2.0 Jadavpur University.

Sayantana Dasgupta

- Project Anuvad (UGC UPE 2: CR & SS)
- Ongoing RUSA 2.0 Project- Redefining Indian Literature: Archiving and Translating Indigenous and Marginalised Traditions
- Project Assistant Recruited: 1
- Ongoing RUSA 2.0 Project- Academic Social Responsibility and the United Nations Sustainable Development Goals (Department of Comparative Literature)
- Project Assistant Recruited: 2

Sumit Kumar Barua

(Departmental/Individual, Name of the Project/Funding Agency)

- "Reception of Theravada Buddhist Tradition in Bengal in late 19th and early 20th century", CAS, Phase – III, Department of Comparative Literature, Jadavpur University.

Debashree Dattaray

- Locating Indigeneity in the Global South: Revival, Conservation, Sustainability, RUSA 2.0 Scheme, Department of Comparative Literature, Jadavpur University, 2019 - 2020.
- A Comparative Study of Karbi and Chakma Narrative Traditions, UGC CAS Phase III Project, Department of Comparative Literature, Jadavpur University, 2016 – 2021
- Locating Indigeneity: Creation Songs from India, Canada, New Zealand and Australia, UGC CAS Phase III Project, Department of Comparative Literature, Jadavpur University, 2016 – 2021
- Comparative Literature and Digital Humanities, UGC CAS Phase III Project, Department of Comparative Literature, Jadavpur University, 2016 – 2021
- Comparative Literature: A Journey of Journals in India and the World, UGC CAS Phase III Project, Department of Comparative Literature, Jadavpur University, 2016 – 2021

Suchorita Chattopadhyay

- Locating Indigeneity in the Global South: Revival, Conservation, Sustainability, RUSA 2.0 Scheme, Department of Comparative Literature, Jadavpur University, 2019–2020.

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- Locating Indigeneity: Creation Songs from India, Canada, New Zealand and Australia, UGC CAS Phase III Project, Department of Comparative Literature, Jadavpur University, 2016 – 2021
- Comparative Literature: A Journey of Journals in India and the World, UGC CAS Phase III Project, Department of Comparative Literature, Jadavpur University, 2016 – 2021
- Comparative Literature : Texts, Contexts, Concepts, CAS Phase III project. 2016 -2021

3. A. Invited Lectures Delivered/Sessions Chaired:

(Name of the Teacher, Type of Participants, Name of the Seminar / Conference etc. Place, Duration)

Suchorita Chattopadhyay

- Chaired a session at the XIV CLAI Biennial International Conference on Studying South Asian Narratives through Pluralist and Dialogic Frames (March 11-14, 2019), Maulana Azad National Urdu University (MANUU) Hyderabad; Panel on Multilingualism and South Asian Narrative Tradition, March 12, 2019.
- Resource Person for Coast Salish Creation Songs, International Workshop on “Locating Indigeneity: Creation Songs from India, Canada, New Zealand and Australia” organized by the Centre for Advanced Study (Phase III), Department of Comparative Literature, Jadavpur University, 25 – 26 September, 2018.
- Chaired a session in “Transitions in Policy, Resilience and Identity: New Challenges in Indo-Canadian Studies”, organized by Centre for Canadian Studies Jadavpur University in collaboration with Shastri Indo-Canadian Institute at Jadavpur University Kolkata on 6–7–8 February 2019.

Parthasarathi Bhaumik

- Parthasarathi Bhaumik, Invited talk, ‘Research in the British Library’, ‘Chevening Explores’, Knowledge Centre, British Library, London, 23 May 2018, 1 hour.
- Parthasarathi Bhaumik, Invited talk, ‘Partition of Bengal (1905): Tracing Popular Reactions in the British Library Holdings’, Staff Talk, Panizzi Room, British Library, London, 3 August 2018, 1 hour.
- Parthasarathi Bhaumik, Invited talk, ‘Archives and E-Learning’, ‘MOOCS and E-Learning: Issues, Prospects, and Problems’, SCTR, Jadavpur University, Kolkata, 17 January 2019, 1 hour 30 mins.
- Parthasarathi Bhaumik, Chaired a session, International seminar on ‘Cultural Exchanges through Narratives: On Folkloristics Overview, Rabindranath Tagore Centre, ICCR, Kolkata, Conference Room, 16 March, 2019, 2 hours.

Kunal Chattopadhyay

- Kunal Chattopadhyay–‘Teaching Roman History’–State Level teacher training workshop on *Aspects of Teaching Early History: From Pre-History to the Decline of Rome*, 10th August 2018, organised by Department of History, West Bengal State University and Department of History, RKSM Vivekananda Vidyabhavan, at the Muktiprana Sabhagriha, RKSM Vivekananda Vidyabhavan.
- Chaired a session at the XIV CLAI Biennial International Conference on Studying South Asian Narratives through Pluralist and Dialogic Frames (March 11-14, 2019), Maulana Azad National Urdu University (MANUU) Hyderabad; Panel on Multilingualism and South Asian Narrative Tradition, March 12, 2019.

Kavita Panjabi

- Delivered a Special Lecture entitled “Stories/Histories of Calcutta: Baffling Paradoxes Indefatigable Citizenry” at the International Forum on Megacities, organized by I7, Institute of Critical Studies and The National School of History and Anthropology (ENAH) in Mexico City, September 10th-12th, 2018.

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- Delivered a Talk entitled “Indian Modernity” at Ashoka University, Delhi on 29th Oct 2018
- Delivered the Keynote Address at the National Seminar entitled ‘The Movement of ‘our’ Times: New Frameworks for Studying Women’s Movements’ organized by the Krantijyoti Savitribai Phule Women’s Studies Centre, SPPU, Pune on 14th and 15th November 2018.
- Chaired the XIX Sukhalata Rao Memorial Lecture “Beyond Epistemic Anxiety and Towards a Politics of Radical Justice” delivered by Dr. V. Geetha at J.U. on 27th November 2018.
- Delivered a Plenary Talk entitled “A Unique Grace” at the International Seminar on Migration and Displacement: Global Perspectives on Issues And Challenges, organized by Behala College at Jadavpur University on 10-11 January 2019.
- Moderated 2 Sessions at the Apeejay Kolkata Literary Festival: “Crossing the Line: Perspectives on the ‘Me Too’ Crisis” on 19th January 2019 and “Ishwar Allah Tero Naam: Gandhi’s Secularism” on 20th January 2019.
- Made a Presentation on Saadat Hasan Manto at the session “Manto and Dylan Thomas: Tracing the chaos and creativity of the writings” at the Kolkata Literary Meet, Jan 26th, 2019.
- Chaired a Panel entitled “Bridging the Gap” at the Jadavpur University Women’s Conclave organized by the Departments of International Relations, Sociology & English at J.U. on 6th March 2019.
- Delivered a Special Lecture on “Multiculturalism & Gender Equality” at the Seminar on “Gender Equality: Issues and Challenges” organized by the J.D. Birla Institute on Tuesday, 23rd April 2019 at the Vidya Mandir Auditorium, Kolkata.

Sayantan Dasgupta

- “Cross-cultural Connections” in the XIV CLAI Biennial International Conference on “Studying South Asian Narratives through Pluralist and Dialogic Frames”, organized by the Comparative Literature Association of India at Maulana Azad National Urdu University, Hyderabad, March 11-14, 2019.
- Chaired a session in the XIV CLAI Biennial International Conference on “Studying South Asian Narratives through Pluralist and Dialogic Frames”, organized by the Comparative Literature Association of India at Maulana Azad National Urdu University, Hyderabad, March 11-14, 2019.
- Invited Speaker at National Seminar on “Translation and Pedagogy”, Department of English, Jamia Millia Islamia, New Delhi, March 1, 2019.
- “Kolkata: A City of Translators”, talk at round table discussion on *City of Translators*, Sahitya Akademi and TOLEDO, Kolkata, November 9, 2018.
- “Abhivyakti” programme on “Translation: Challenges in Maintaining the Essence of the Original”, Guwahati, June 23, 2018.

Epsita Halder

- “*Karbala trembles with the sound of lament: A reading of the sonic-visual aspects of Shia mourning*”, presented at the Department of Music, King’s College London, to the postgraduate seminar on Music in Muslim Cultures, 25 March 2019.
- “Allah/Ishwar: Translating the Qur’an into Bangla,” as a part of the South Asia Series Research Series, at the British Library, London, 30 July 2018.
- Chaired a session on Religion and Postcoloniality, at SOAS South Asia Institute Annual PhD conference on ‘Approaching South Asia’ on 28 June 2019.

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- “Lamenting Online: Social media and the Shia religiosity in Kolkata, West Bengal,” at South Asia Studies, School of Oriental and African Studies, University of London, 6 June 2018.

Debashree Dattaray

- Resource Person for Anishinaabe Creation Songs, International Workshop on “Locating Indigeneity: Creation Songs from India, Canada, New Zealand and Australia” organized by the Centre for Advanced Study (Phase III), Department of Comparative Literature, Jadavpur University, 25 – 26 September, 2018.

Sumit Kumar Barua

- Presented a paper on “Bharate Bauddha Sanskritir Pratigrohane “Bodhisattva” Ambedkarer Avadan” in a One day National Seminar titled “Ambedkar’s Vision on Social Justice – Buddhist Perspective”, organized by Santiniketan Ambedkar Buddhist Welfare Mission in collaboration with Department of Indo-Tibetan Studies, Visva-Bharati, Santiniketan on 14 April, 2018
- Invited to deliver a lecture on “Bengal Renaissance and the Buddhist Revival Movement in India” in the International Seminar titled “Buddhism in shaping India-Japan Relations”, organized by JSPS India-Japan Bilateral Research Project with ICHR, India at Research Institute for Languages and Cultures of Asia and Africa, Tokyo University of Foreign Studies (TUFS), 2 July 2018.

3. B. Seminar/Workshop/Conference/Symposium Attended:

(Name of the Teacher, Name of the Paper Presented, Name of the Seminar, Place, Duration)

Kunal Chattopadhyay

- Presented a paper titled স্টালিন ও অক্টোবর বিপ্লব : একটি দলিল ভিত্তিক আলোচনা at the 35th Annual Conference of the Paschim Banga Itihas Samsad, Cooch Behar Panchanan Barma University, 24-26 January, 2019.
- Presented a paper titled ‘Dialogues Across Medium and Language: Prem Chand and Bhagwati Charan Panigrahi filmed by Mrinal Sen’, on March 13, 2019, at the XIV CLAI Biennial International Conference on *Studying South Asian Narratives through Pluralist and Dialogic Frames* (March 11-14, 2019), Maulana Azad National Urdu University (MANUU) Hyderabad;

Debashree Dattaray

- Presented a paper on “Intersectionality and the Politics of Location: (En)gendering Resilience in Indigenous Canadian and Dalit women’s Narratives” at the 40th Annual Conference of the Association for Canadian Studies in German-speaking Countries entitled “Intersectionality: Theories, Policies, Practices” at Grainau, Germany on February 14 – 17, 2019.
- Presented a paper entitled “Textualising Oral Traditions: Institutional and Cultural Practices in Karbi Anglong, Assam” at the International Conference on “Literary Circulations in South Asia: Producing, Translating, Preserving Texts” organized by the DELI project and IFP at the French Institute of Pondicherry, 21 – 22 August, 2018.
- Presented a paper entitled “Traditional Knowledge and Community Well – Being: Environmental Sustainability in North East India and Canada at the International Conference on “Engaging India and Canada: Challenges of Sustainable Development Goals” organized by the Shastri Indo-Canadian Institute on June 8 – 9, 2018.

Sumit Kumar Barua

- 4 February 2019, participated in the International Conference on “Bangladeshe Bangla Bhasha O Sahitya-charchar Gati-Prakriti” organized by Department of Bengali, Jadavpur University, Kolkata.

Epsita Halder

- “Bangla Qur’an in the Marketplace: A Paratextual Reading”, at an international conference on ‘Technologies of print in South & Southeast Asia: the social history of modes of production’, organized by The Royal Asiatic Society, London and University of Reading, UK, on 26 March 2019.
- “The Garden and the Fire: Hereafter in the Bengal Muslim religious imagination (late 19th–early 20th century)”, at an international conference on ‘Islam and Print in South Asia’, organized by the British Library, London, 28 September 2018.
- “Are There Shia Counterpublics Online in Kolkata?: Looking Beyond the Deliberation-versus-Disciplinary Framework,” at a workshop on ‘Critical Approaches to Social Sciences and Humanities Research’, School of Oriental and African Studies, 28 June 2018.

3. C. Seminar/Workshop/Conference/Symposium Organized:

(Name of the Teacher, Name of the Paper Presented, if any, Name of the Seminar, Place, Duration)

Suchorita Chattopadhyay

- Joint Coordinator, “Transitions in Policy, Resilience and Identity: New Challenges in Indo-Canadian Studies”, organized by Centre for Canadian Studies Jadavpur University in collaboration with Shastri Indo-Canadian Institute at Jadavpur University Kolkata on 6 – 7 – 8 February 2019.
- Joint Coordinator, International Workshop on “ Locating Indigeneity: Creation Songs from India, Canada, New Zealand and Australia” organized by the Centre for Advanced Study (Phase III), Department of Comparative Literature, Jadavpur University, 25 – 26 September, 2018.

Parthasarathi Bhaumik

- Parthasarathi Bhaumik, International Seminar cum Exhibition on ‘New Cities: Imagining and Imaging the Global Cities in India’, 14-17 February 2019, Nandalal Bose Gallery, Rabindranath Tagore Centre, ICCR, Kolkata, 4 days.

Kavita Panjabi

- ‘Nation, Identity and Creative Expression : A Dialogue with Voices Unexplored’, Co-ordinator: Kavita Panjabi, Centre for Studies in Latin American Literatures and Cultures, 2019 (CSLALC), Department of Comparative Literature, Jadavpur University – held on 01/03/2019.

Debashree Dattaray

- Joint Coordinator, “Transitions in Policy, Resilience and Identity: New Challenges in Indo-Canadian Studies”, organized by Centre for Canadian Studies Jadavpur University in collaboration with Shastri Indo-Canadian Institute at Jadavpur University Kolkata on 6 – 7 – 8 February 2019.
- Joint Coordinator, International Workshop on “Locating Indigeneity: Creation Songs from India, Canada, New Zealand and Australia” organized by the Centre for Advanced Study (Phase III), Department of Comparative Literature, Jadavpur University, 25 – 26 September, 2018.

Sayantana Dasgupta

- Two-day international workshop on the theme ‘Academic Social Responsibility’ on July 26 and July 27, 2018 in collaboration with University of East Anglia.
- One-day Symposium on ‘Literary Translation: Problems, Poetics and Politics’ organized by CENTIL as part of project Anuvad, UGC-UPE 2: CR&SS, Jadavpur University in collaboration with Sahitya Akademi, September 24, 2018.
- One-day Translation Symposium on ‘Cities of Translators: Berlin-Kolkata’ under Project Anuvad, UGC-UPE 2: CR&SS, Jadavpur University in collaboration with TOLEDO, November 12, 2018.

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- One-day Translation Workshop on ‘Writings from the Sunderbans I’, organized by CENTIL as part of project Anuvad, UGC-UPE 2: CR&SS, Jadavpur University, December 20, 2018.
- One-day Translation Workshop on ‘Writings from the Sunderbans II’, organized by CENTIL as part of project Anuvad, UGC-UPE 2: CR&SS, Jadavpur University, January 3, 2019.
- One-day Translation Workshop on ‘Writings from the Sunderbans III’, organized by CENTIL as part of project Anuvad, UGC-UPE 2: CR&SS, Jadavpur University, February 1, 2019
- One-day workshop on ASR across Borders: Formulating a ‘New Humanities’ Pedagogy’ organized by CENTIL in collaboration with the Humanities in India Program (India Dialogue), University of East Anglia in Jadavpur University on June 13, 2019.

3. E. Orientation Courses/Refresher Courses Organized:

Kavita Panjabi

- Delivered a Talk on Oral History and Methodology at the Two Week Course on Feminist Research Methodology supported by Indian Council of Social Science Research- Eastern Regional Unit, from 2nd April to 13th April, 2018.
- Delivered a Talk entitled “Gender and Communalism – Intersectionality” at the short-term gender sensitisation course entitled “Interpreting Gender at Its Intersections” organised by School of Women’s Studies in collaboration with UGC-HRDC from 27 November to 3 December, 2018.

4. A. Books/Monographs etc. Published:

Kunal Chattopadhyay

- Kunal Chattopadhyay and Debarati Chakrabarty (Eds) – *Palaver V*, Jadavpur University, 2018.

Parthasarathi Bhaumik

- Parthasarathi Bhaumik, *Case Studies*, British Library, <https://www.bl.uk/case-studies/parthasarathi-bhaumik>, 17 September 2018.
- Parthasarathi Bhaumik, ‘ওরহান পামুক : নোবেল বক্তৃতা (অনুবাদ)’, *নোবেল বক্তৃতা সংকলন*, সম্পাদনাঃ দীপ ঘোষ, একলব্য পাবলিকেশন, জানুয়ারি ২০১৯.

Kavita Panjabi

- “Between ‘Honour’ and Justice: Rendering the Law Ineffective”. In Eds Urvashi Butalia and Laxmi Murthy: *Breaching the Citadel: The India Papers* 1. Zubaan Series on Sexual Violence and Impunity in South Asia. N.Delhi: Zubaan & International Development Research Centre, 2018, pp. 1-33.

Debashree Dattaray

- Joint Editor with Sarita Sharma. *Ecocriticism and Environment: Rethinking Literature and Culture* (Primus Books, New Delhi, 2018 – ISBN 9789386552754

Sumit Kumar Barua

- Edited Book: *Sishu Kishor Patrika: Prasanga Bauddhasanskriti*, Dey’s Publishing & Centre of Advanced Study, Phase III, Department of Comparative Literature, Kolkata: March 2019, ISBN-978-93-88923-41-5.

4. B. Articles Published in Journals: (Including National/International & Peer-reviewed Journals) (Name of the Teacher, Name of the Articles, Name of the Journal, Date of Publication, Volume)

Kunal Chattopadhyay

- ভারতীয় সাহিত্যে সাম্যবাদী প্রভাবে উর্দু সাহিত্যের ভূমিকাঃ আঙ্গারে ও তার উত্তরাধিকার published in *Itihas Anusandhan-33*, Annual Proceedings volume of the Conferences of the Pascim Banga Itihas Samsad.

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Parthasarathi Bhaumik

- Parthasarathi Bhaumik, 'Bengal Almanac and Knowing the Unfamiliar: the Personal Guide-Books for the *East India Company Men in Bengal*', *Jadavpur Journal of Comparative Literature*, Volume 55. 2019.

Epsita Halder

- "Reclaiming the Sacred: Bengal Muslim Community's Quest for a *Jatiya* Identity (1880s – 1940s)", in Sipra Mukherjee (ed) *Language of Religion: Exploring the Politics of the Sacred*, Routledge, August 2018.
- "From Mourning to Martyrology: Karbala narratives in late 19th – early 20th century Bengal", in Ipsita Chanda (ed) *Emotion, Expression and Aesthetics*, Sahitya Akademi (India), July 2018.

Sayantan Dasgupta

- "Bharatiyo Ingreji Sahityo: Sahityer Itihasnaki, Itihaser Sahityo" by Sayantan Dasgupta, *Parikatha, Sahityo o Songoskriti Bishoyok Potrika*, May 2018.
- "Rethinking Indian Literature, Reinventing Comparative Literature" by Sayantan Dasgupta in *Indian Literature 306*, New Delhi: Sahitya Akademi, July-August 2018, pp. 220-223.
- "Engaging with the Oral: Translating Lepcha and Tamang Traditions" by Sayantan Dasgupta and Shradhanjali Tamang in Anvita Abbi ed., *Route to Oral Literature*. New Delhi: Sahitya Akademi, 2018, pp. 91-102.

Debashree Dattaray

- "The Forgotten Women of Tebhagha: A Tale of Affect and Resilience". Book Review of *Unclaimed Harvest: An Oral History of the Tebhagha Women's Movement* by Kavita Panjabi. Foreword by V. Geetha (New Delhi: Zubaan, 2017) in *Litcrit: An Indian Response to Literature* (Issue 85, Volume 44, Number 1, June 2018, ISSN 0970 - 8049), pp 196 – 199.
- Book Review of *Survivance, Sovereignty, and Story: Teaching American Indian Rhetorics*. Edited by Lisa King, Rose Gubele, and Joyce Rain Anderson. 2015. Utah State University Press. 240 pages. ISBN: 978-0-87421-995-1 (soft cover) in *Journal of Folklore Research Reviews*. May 2018. ISSN 1543-0413.
- Book Review of Rajelakshmy: *A Path and Many Shadows & Twelve Stories*. Transl. R.K. Jayasree, 2016 & Bani Basu: *Gandharvi*. Transl. Jayita Sengupta, 2017, N. Delhi: Orient BlackSwan in *Jadavpur Journal of Comparative Literature*, Vol. 54, 2017-2018, 125-130 pp ISSN 048-1143.

Sumit Kumar Barua

- "Prajnalok Mahasthavira Anudita *Theragâtha*: Bangalir Buddhacharcha O Jibancharchar Akar", *Prajnalok Smarak Samkhya*, Bhikkhu Sumanapal (ed.), Prajnalog Vihar, Bali Belur Bauddha Samity, p. 61-65, November 2018.
- "Nandita Mishra Chakrabartyr Upanyash Jivak: Ardhamrita Samaye Praner Barta", *Ebong Mushayera*, Naree Ouponyashik Issue, 25 Year, 2nd& 3rd Issue, Subal Samanta (ed.), p. 114-136, July-September & October-December 2018, ISSN- 0976-9307.
- "Subodh Ghosher Drishtite Gandhi", *Galpamela*, Annual Issue, Arindam Goswami (ed.), p. 112-131, December 2018, UGC Journal No: 4455, ISSN No: 2393-9311.
- "Understanding the Buddhist notion of *Sukha* (happiness) with reference to Theravada Buddhism", *Journal of the Department of Pali*, Volume: XXI, University of Calcutta, Saswati Mutsuddy (ed.), pp.149-158, 2018, ISSN No: 0971-0655.

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- “Bauddha Silpakala, Sthapatya, Bhaskarya o Nandantattwa: Prasanga Samayikpatra”. Bauddha Puratattwa, 1st Year, 1st Issue, *Buddhist Cultural Research Society*, Asish Barua (ed.), p. 7-46, January 2019.
- “Mahasweta Devir Chotogolpa ‘Sangrakkhan’: Aranyaka Nimnabarger Khandachitra”, ‘Bangla Sahitye Nimnabarga – 1’, Somay Tomake, Issue 21, Shankari Das (ed.), pp. 143-162, Januray 2019, ISSN 2231-5802.
- “Narayan Sanyaler ‘Oitihasi Kathasahitya’-er Swarup o Anandaswarupinee: Bauddhayuger Punornirman”, *Deepan*, N. Julfikar (ed.), p. 91-123, 2019, ISSN 0975-4237.
- “Role of Brahmo scholars to promoting Buddhist Culture in Colonial Bengal: A Brief Outline” (with Mriduchhanda Chattopadhyay Barua), Bodhi Rashmi, Binoysree Bhikkhu (ed.), pp. 77-79, 2018-19.
- “Mujtaba Alir Galpe Abangali-Bideshee Charitra: Alochayar Barnamala” *Bangla Sahitye Abangali Charitra*, Dey Publications, Dutta, Rajdeep & Burman, Swapan (ed), pp. 278-298, July 2018, ISBN978-93-81679-24-1.

5. Collaborative Programmes:

Sayantan Dasgupta

- The centre collaborated with the University of East Anglia to organize a workshop on ‘Academic Social Responsibility’ on July 26 and July 27, 2018.
- The centre collaborated with Sahitya Akademi to organize a one-day symposium on ‘Literary Translation: Problems, Poetics and Politics’ on September 24, 2018.
- The centre collaborated with the University of Toledo, to organize a translation symposium titled ‘Cities of Translators: Berlin-Kolkata’ on November 12, 2018.
- The centre collaborated with the Humanities in India Program (India Dialogue), University of East Anglia to organize a workshop titled ‘Academic Social Responsibility across Borders: Formulating a ‘New Humanities’ Pedagogy’ on June 13, 2019.

6. Major Achievements:

Sayantan Dasgupta

- Sayantan Dasgupta became member of the Advisory Board (English) of Central Sahitya Akademi, New Delhi.
- Sayantan Dasgupta was appointed Joint Director, School of Media, Communication and Culture, Jadavpur University.
- Sayantan Dasgupta was appointed Member, Steering Committee, Humanities in India programme, University of East Anglia.

Epsita Halder

- Charles Wallace India Trust Fellow at the School of Oriental and African Studies (May-June-July 2018).

Debashree Dattaray

- **Fulbright Nehru Alumni Award 2018 – 2019** for a Project entitled “Empowerment and Resilience: A Two Day Seminar on Karbi Women Weavers in the Urban Space in Karbi Anglong,” March 2019.

Parthasarathi Bhaumik

- British Library – Chevening Fellowship, September 2017-September 2018.

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ECONOMICS

Phone : + 91-33-2414-6328
Int. : 2457-2226
H.O.D. : Prof. Malabika Roy
E-mail : hod@economics.jdvu.ac.in
hod.economics@jadavpuruniversity.in

Prof. Ambar Nath Ghosh

Publication in Edited Books:

“Capitalism, Crisis and the Common Man” Economics, Management and Sustainability: Essays in Honour of Anup Sinha, *Springer, 2018* (September)

Conference Presentation: 39th Annual Conference of Bangiya Arthaniti Parishad, Delivered S.N.Sen Memorial Lecture 9 – 10 March, 2019.

Prof. Amit Kundu

Publications in Journals:

1. Impact of National Rural Employment Guarantee Scheme on Crop Diversification in West Bengal Agriculture”, *Agricultural Situation in India* (A journal published by the Directorate of Economics and Statistics’, Ministry of Agriculture and Farmer’s Welfare) Vol LXXIV January, 2018 No.10, pp. 16-24 (published in April 2018).
2. “Learning outcomes in Elementary Education in Rural India: An Inter-state Comparison” *Journal of Rural Development* Vol. 38, No.1 January-March 2019, pp. 30-54.
3. “Gender Parity Index in Primary Education in Rural India”, *Turkish Economic Review* Vol.6 No. 2 , 2019, pp.104-125.
4. “Gender Wage Gap In the Agricultural Labour Market of India” *Journal of Economics and Political Economy* Vol.6 No.2, 2019, 122-142.
5. “Factors Influencing Yield Rate in West Bengal Agriculture” *Productivity*, Vol.60, No.2 July-September 2019, pp. 204-213.
6. “Push and (or) Pull? Drivers of Labour Force Participation in Indian Agriculture” *Indian Journal of Labour Economics*, Vol.62, No.3, 2019, pp.413-430.

Prof. Arpita Ghose

Publication in Journal:

1. “Is there Improvement in Total Factor Productivity Growth of the Indian Pharmaceutical Industry after TRIPS agreement? Evidence from Biennial Malmquist Index,” (co-authored with D.Pal and C.Chakrabarty) *Central European Review of Economics and Management* Vol. 2, No. 3, 53-77, September 2018.

Publication in Edited Books:

1. “Incidence of Specific or Employment Tax in Non-Walrasian Fixed Price Model with Efficiency Wage” (co-authored with S.Roy).
2. “Is there any decline in growth of rice production in Indian Agriculture in Post liberalization era: Evidence from Multiple Structural Break (co-authored with D.Pal and C.Chakrabarty) The

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Globalisation Conundrum-Dark Clouds behind the Silver Lining, G. Chakrabarty , and C. Sen (ed) Springer, Singapore, 2019.

Conference Presentation:

1. “Total Factor Productivity Growth of Elementary Education in India and its Determinants” *16th International Conference on Data Envelopment Analysis (DEA2018)* held at Jiangnan University, China. October 25-28, 2018. Thrust area: Social Sector and Regional Development.
2. “Total Factor Productivity Growth of Elementary Education in India” *55th Annual Conference of the Indian Econometric Society*, organized by Mumbai School of Economics and National Institute of securities Market Mumbai. 8-10 January, 2019, Thrust Area: Social Sector and Regional Development.
3. “Efficiency of Health Care System” Workshop on Advanced Tools and Techniques for Analysis of Demographic and Health Statistics, organized by population studies unit, Indian Statistical Institute Kolkata. 18th to 20th March, 2019 Thrust Area: Social Sector and Regional Development.
4. Delivered Key note paper on “Challenges to Indian Industry”, *39th Annual Conference of Bangiya Arthaniti Parishad*, March 9-10, 2019.

Other Activities:

1. Chaired a session on “Socio Economics and Economics of Conflict” 28th Annual Conference Contemporary issues on Development Economics, organized by Department of Economics, Jadavpur University.
2. Chaired a session on International Trade 55th Annual Conference of the Indian Econometric Society, organized by Mumbai School of Economics and National Institute of securities Market Mumbai 8-10 January, 2019.
3. Chaired a session on “*Macro Economic issues and Finance*” 57th Conference on Contemporary issues on Development Economics, organized by Department of Economics Rabindra Bharati University. 13th-14th March 2019.
4. Chair the Economics Session (Health, Agriculture and Welfare Economics) International Conference on “Emerging Socio-Economic Trends and Business Strategy” organized by SB&M, Kolkata & IEA at, ISB&M Kolkata Riverside Campus, Budge Budge, Kolkata. 18th & 19th January, 2019.

5. Phd Thesis Awarded:

Thesis Title : Education and Gender Bias. (single supervision), Name of the Scholar Soma Mandal, awarded in 2018.

Dr. Bidisha Chackraborty

Publications in Journals:

1. “A Study on Happiness and Related Factors among Indian College Students”, *Journal of Quantitative Economics*, (2019), 17: 215-236 ISSN 0971-1554 (print version) (with Souparno Maji et. al) Non Thrust area.
2. Low level equilibrium trap, unemployment, efficiency of education system, child labour and human capital formation, *Journal of Economics*(2018)125:69-95 (with Kamalika Chakraborty) Non Thrust Area.
3. Service good as an intermediate input and optimal government policy in an endogenous growth model, *South Asian Journal of Macroeconomics and Public Finance* (2019) 8(1), 57-91, ISSN: 22779787 (with Senjuti Gupta and Tanmoyee Banerjee). Thrust Area: Public Policy.
4. Is Public-private partnership an optimal mode of provision of infrastructure? *Journal of Economic*

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Development, March 2019 issue (Vol. 44, No. 1) 97-123, ISSN 0254-8372 (with Aman Bara Appolinus)
Thrust Area: Public Policy.

CONFERENCE PRESENTATION

- Presented the paper “Difference in Preferences, Learning by Doing Effects and Impact of Domestic Policies on Child Labour” at IIM, Kolkata in Conference on New Directions in Economic Theory and Empirical Economics held on 17-18 August, 2018.

Participation in Short Term Course

- Participated in UGC Sponsored Short term Course entitled “Stress Management & Counselling” from 3rd January, 2019 to 9th January 2019, organized by UGC-Human Resource Development Centre, Jadavpur University.

ORGANIZATION OF SEMINAR/CONFERENCE/REFRESHER COURSE

- Organized (jointly with Professor Sushil Kumar Haldar and Dr. Poulomi Roy) a National Level Seminar on Social and Regional Development in India on 13th March, 2019 under CAS Programme.
- Coordinated the refresher course on “Quantitative Techniques in Economics: Methods and Application in Micro-Econometrics” held during 12th November, 2018 to 5 th December, 2018 at Department of Economics, Jadavpur University.

PhD Student

Senjuti Gupta (PhD degree awarded April 2018; jointly with Prof. Tanmoyee Banerjee)

Dr. Rilina Basu (Banerjee)

Publications in Journals:

- “Openness, Inflation and Output under Alternative Monetary Policies: A Structuralist Approach” *Foreign Trade Review* Vol. 54(2), May 2019 75-90. Thrust Area: Public Policy.
- “Macroeconomics of Demonetisation: A short period equilibrium”, *Trade and Development Review* Vol. 11, Issue 1-2, 28-54, 2018 Pp: 28-54, Thrust Area: Finance and Public Policy.
- “Financial Structure and Macroeconomic Performance in Asian Countries: A Principal Component Analysis” *Asian Journal of Research in Business Economics and Management* 8(5), 2018 pp: 1-14. Thrust Area: Finance.

Projects/ Consultancy Done:

Change in pattern of intergenerational educational mobility and its determinants among different socio-ethnic and demographic groups: A case study of selected districts of South Bengal, Funded by CAS, Department of Economics, Jadavpur University. Thrust Area: Social Sector.

Conference Organised/Attended

- Organized 2-day 28th International conference on Contemporary Issues in Development Economics, Organised by Department of Economics, Jadavpur University.
- Presented paper titled “Macroeconomics of Demonetisation: A Short period equilibrium” 3rd Development Economics Conference organised by University of Lincoln, 17th – 19th June, 2019.

Dr. Poulomi Roy

Publications in Journals:

- “Socio-economic Determinants of Multidimensional Poverty in Rural West Bengal: A House hold Level Analysis”, *Journal of Quantitative Economics* DOI 10.1007/s40953-018-0137-4.

Project Work Done:

1. “Assessing the impact of 2017 GST reform on poverty in India” Planning and development unit, Jadavpur University, Rs. 1,00,000/-.
2. “Time poverty Women wellbeing and Intra-household Gender Gap: A time use survey on West Bengal”, CAS, Department of Economics, Jadavpur University.
3. Change in pattern of intergenerational educational mobility and it’s determinants among different socio-ethnic and demographic groups: A case study of selected districts of South Bengal, CAS, Department of Economics, Jadavpur University.

Conference Organised and Paper presented:

1. “Social and Regional Development in India- Some Emerging Policy Issues, organised by CAS, Department of Economics, Jadavpur University.

Prof. Saikat Sinha Roy:

Articles in Edited books

1. ‘SDG 10 - A Probe into the Factors Underlying Differences in Inequality: Evidence at the Sub-National Level in India’, Ch. 7 in S. Chaturvedi et al. (eds.), *2030 Agenda and India: Moving from Quantity to Quality: Exploring Convergence and Transcendence*, Singapore: Springer. (with Rudra Prosad Roy) forthcoming.
2. ‘Exchange Rate Pass-through to Sectoral Import Prices in an Emerging Market Economy: An Indian Evidence’, in S. Bandyopadhyay and M. Datta (eds.), *Opportunities and Challenges in Development: Essays for Sarmila Banerjee*, Singapore: Springer. (with Pradyut Kumar Pyne). 2019.

Conference Organised/Attended

1. Delivered the keynote address and presented a paper on “State-level Export Performance: Competitiveness, Determinants and Policy Implications” at the Plenary Session, 51st Annual Conference of Orissa Economics Association, held at Kendrapara Autonomous College, Kendrapara, Odissa, on 09 February 2019.
2. Speaker on “State-level Export Performance: Policy Priorities for West Bengal” at the Round Table Discussion on Economic Profile of West Bengal: Learning Lessons from Asia organized by the Department of South and Southeast Asian Studies, Calcutta University, Kolkata on 21 February 2019.
3. Delivered a lecture as invited speaker on “Foreign Assistance and the Risk of Sovereignty” at the ICHR, New Delhi, sponsored National Seminar on Nation, Nationalism and Beyond: Issues and Challenges organized by the Social Science Forum, BhairabGanguly College, Kolkata, during 12-13 April 2019.
4. Presented a paper on “SEZ related data issues: India” at the Workshop on Special Economic Zones: A force for good to reduce inequality organized by the Kiel Centre for Globalization, Institute for World Economy (IfW), Kiel, Germany, during 29-30 April 2019.
5. Delivered 3 lectures on “Time Series Analysis and Applications of Time Series Techniques in Trade Modelling using E-views” at the Fourth RIS-EXIM Bank Summer School on International Trade Theory and Practices at the Research and Information System for Developing Countries (RIS), New Delhi, during 12-13 June 2019.
6. Academic Visitor, Public Policy Group, Indian Institute of Management Bangalore (for academic collaboration under RUSA 2.0) during 22-26 July 2019.
7. Presented a paper on “Services Trade and Choice of Industries: Studying Intergenerational Mobility of Indian workers” at the Seminar EconTalk organized by Economic & Social Science Group, Indian Institute of Management Bangalore on 25 July 2019.

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8. Visiting Professor, Symbiosis School of Economics, Symbiosis International University, Pune (taught a part of the optional course on Open Economy Macroeconomics) during 16-19 September 2019.
9. Presented a paper on “The political economy of the world trading system, WTO and beyond” at the National Seminar on The Political Economy of International Trade organized by Symbiosis School of Economics, Symbiosis International University, Pune, on 16 September 2019.
10. Organized a Workshop on ‘Macroeconomic Modelling using DSGE’ at the Department of Economics, Jadavpur University, Kolkata, under RUSA 2.0 during 23-27 September 2019.

Dr. Sanmitra Ghosh:

Project Work done:

1. “Reputation Formation with Decisiveness: Evidence from Dictator Games”, Funded by CAS, Department of Economics, Jadavpur University. Rs. 1,25,000/=.

Prof. Siddhartha Mitra

Publications in Journals:

1. “The Impact of Poverty on the Environment: Surprising Findings from the Indian Case”, (co-authored) *International Journal of Economics and Finance* Vol. 10 No. 11, 2018, Thrust Area: Resource and Environment.
2. “Thorny Roses: A Peep into the Robotised Economic Future” (co-authored), *Universal Review* Volume 7, Issue XI, pp. 103-108, 2018. Thrust Area: Public Policy.
3. “A Neoclassical Approach to Behavioral Economics”, *International Journal of Economics, Business, and Management Studies*, Vol. 6, No. 1, pp.1-18, 2019..

Any Other Information

1. “A Holistic Approach to Sustainable Development Based on First Principles”, Keynote address in UGC, SAP (DRS-I) Supported Two-Day International Seminar organised by Department of Economics, Vidyasagar University on Sustainable Development of Backward Regions with Special Reference to Issues of Resource Management in West Bengal, March 27, 2019. Thrust Area: Resource and Environment.
2. Seminar on the Impact of Poverty on the Environment: Surprising Findings from the Indian Case at Institute of Development Studies, Kolkata, February 15, 2019. Thrust Area: Resource and Environment.
3. Presentation of Paper on “Thorny Roses: A Peep into the Robotised Economic Future”, in the 3rd International Conference on Recent Research and Innovations in Social Science, Humanities (ICRRISH-2018), Osmania University, November 4, 2018. Thrust Area: Public Policy.
4. Invited Lectures in Workshop on Regulatory Impact Analysis for Telecom Regulatory Authority of India, April 16 and 17, 2018 (organized by National Institute of Public Finance and Policy in collaboration with CUTS International). Keynote Address. Thrust Area: Public Policy.

Conference Organised:

“Contemporary Issues in Development Economics” 28th Annual Conference of the Department of Economics (Jointly convened with Dr. Rilina Basu). _

Dr. Simintini Das

Publications in Journals:

1. “Does Casualization Increase the Job Opportunity to the Workers or Impoverish Them? An Evidence from Indian-Organized Manufacturing Sector”, *South Asia Economic Journal*: 19(1) 86–107, 2018. Thrust Area: Social Sector and Regional Development.

Projects Done:

1. “Women Empowerment and its Impact on Child Health and Child Education among Slum Dwellers of Kolkata”, Funded by CAS, Department of Economics, Jadavpur University.
2. “State-level Exports: An Alternate Exploration using ASI Unit Level Data”, Funded by Planning and Development Unit, Department of Economics, Jadavpur University.

Other Activities:

1. “International Trade and Trade Barriers for the Exporters (A Case Study from West Bengal)”, Invited Lecture at IIFT, Kolkata December 2018.
2. “State-level Export Database (Importance in Regional Studies)”, Panel Discussion, Celebration of 12th Statistics Day, Bureau of Applied Economics and Statistics, Paschim Medinipore.
3. Organised “One-Day National Research Scholars Seminar in Economics”, Department of Economics, Jadavpur University March 2019.

Prof. Sushil Kumar Halder

Publications in Journals:

1. “Socio-economic Determinants of Multidimensional Poverty in Rural West Bengal: A Household Level Analysis” *Journal of Quantitative Economics*, 17(3), 603-622, September, 2018. Thrust Area: *Social Sector and Regional Development*.
2. “Social sector development and inclusive growth in India—An empirical analysis” *Indian Journal of Regional Science* 49(2), 1-14, 2017. Thrust Area: Social Sector and Regional Development
3. “Impact of riverbank erosion: A case study”, (Joint Paper): *Australasian Journal of Disaster and Trauma Studies* 21(2), 2017, PP. 73-81.
4. “Information technology and profitability: evidence from Indian banking sector”, *International Journal of Emerging Markets*: 13(5), 1070-87.

Conference Presentation:

1. Multidimensional Human Deprivation in India at Sub-National Level: Does Club Convergence Exist? Exploring NFHS (I-IV) Data”, National Seminar on ‘Addressing the Problem of Inter-State and Inter-District Disparity of India’ organized by ADRI, Patna on Oct, 01, 2018. Thrust Area: Social Sector and Regional Development
2. “Application of Principal Component and Cluster Analysis”, Refresher Course in Economics: organized by Department of Economics, JU., 30.11.2018 & 01.12.2018
3. Invited lecture on “Social Convergence: Measurement Issues” One-Day Workshop on “Application of Techniques in the area of Social Sector”, on 7-th February, 2019 at Department of Economics, RBU, Kolkata; 7th Feb, 2019
4. Invited Lecture on: ‘Measuring Inequality-Different Approaches’ Workshop on ‘Advanced Tools and Tech. for Analysis of Demo. & Health Stat. & Applications of Computer Software’ Organized by PSU, ISI :18-20 March, 2019
5. ‘Health Outcomes and Economic Development in India: Some Emerging Policy Issues’ on 26.3.19, 12 noon at South Calcutta Girls’ College.

Other achievements:

1. One Day Conference on “Social and Regional Development in India-Some Emerging Policy Issues” CAS, Dept. of Econ. J.U, Kolkata-13th March, 2019.

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2. Session Chaired in Two-Day Seminar on “Contemporary Issues on Development Economics” during March 13-14, 2019 organized by the Dept. of Economics, RBU on March 14, 2019.

Prof. Swapnendu Banerjee

Publications in Journals:

1. *Technology licensing and innovation—A correction on two-part tariff analysis*. (with Yuanzu Lu and Sougata Poddar). *Economics Letters (Elsevier)*, Oct 2019, Vol-183, Article 108591.
2. *‘To sell or not to sell’: Licensing versus Selling by an Outside Innovator*. (with Sougata Poddar). *Economic Modelling (Elsevier)*, 2019, Vol-76, Pages: 293-304.
3. *Incentive conscious agents and moral Hazard* (with Oindrila Dey). *Indian Economic Review (Springer)*, 2019, Vol-54, Pages-149-169.
4. *Women on Top’ and/or ‘Economic Progress’: What affects actual and reported crime against women? –An Analysis of Socio-Economic Factors in India*, *Trade and Development Review*, Vol. 11, Issue 1-2, 2018, Pages: 55 – 94.

In Edited Volumes:

1. *Game theory: strategy design in conflict situations*, in Rajat Acharyya eds. *Research Methodology for Social Sciences* (Routledge, London and New York), Pages: 91-110.

Seminar Presentations:

1. Invited Seminar at IIM Bangalore, May 2019.
2. Presented the paper “*Optimal Incentive Contracts with a Spiteful Principal*”, at the Frontiers of Theoretical and Empirical Economics Conference, IIM Calcutta, August 2018.
3. Presented the paper “*Other Regarding Principal and Moral Hazard with Multiple Agents*”, at the International Public Policy Conference, CSSSC, January 2019.

Dr. Vikash Dixit:

Project work:

1. “*Role of Government in Financing Human Development: a Comparative Study of Meghalaya and West Bengal*”, CAS, Economics, JU: Rs.50,000 Thrust Area: Social Sector

Conference Presentation:

1. “*Revisiting the Export-Growth Nexus for India: an Empirical Exercise*”, 6th IIFT Conference on Empirical Issues in International Trade and Finance December 13-14, 2018.

Prof. Vivekananda Mukherjee

Publications:

1. *Threshold Effect of Bank-specific Determinants of Non-performing Assets: ‘An Application to Indian Banking’*, (with Samaresh Bardhan and Rajesh Sharma), *Journal of Emerging Market Finance*, 18 (1), S1–S34, 2019.
2. *‘Capital Endowment and Race to the Bottom in a Federation’* (with Moumita Chel), *Indian Growth and Development Review*, 12(1), 66-82, 2019.
3. *‘Globalization, Inequality and Economic Policy’* (with Udo Broll and Alexander Kemnitz), *Economics and Business Review*, 5(19), No.1, 3 – 11, 2019.
4. *‘On General and Specific Transfers for Child Support in Divorce’*, (with Tilak Sanyal), *Journal of Quantitative Economics*, 17, 197-213, 2019.
5. *‘Incidence of Corruption on Formal and Informal Sector: Is There Any Symmetry?’* (with Aparajita Roy), *Journal of Economic Development*, 44 (3), 79–99, 2019.

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6. 'Lobbying and Bribery' (with Amrita Kamalini Bhattacharya), *Studies in Microeconomics*, DOI:10.1177/2321022219827397, 2019.
7. 'Seeking Rent in the Informal Sector', (with Sugata Marjit, Biswajit Mondal and Saibal Kar), *Annals of Public and Cooperative Economics*, DOI:10.1111/apce.12253, 2019.

Papers published in Edited Volumes:

'Red Tape, Corruption and ICT' (with Poulomi Bhattacharya) in D. Maiti, C. Fulvio and M. Arne (ed.) *Digitization and Development: Issues for India and Beyond*, Springer, Singapore, 2019.

Project Done or Ongoing:

1. "District Human Development Report, Purba Medinipur District, West Bengal 'Govt. of West Bengal Rs. 10,00,000/-
2. Creating a Market for Indian Refined Gold' India Gold Policy Centre@IIM, Ahmedabad, Funded by World Gold Council Rs. 12,75,000
3. Ancillary Benefits of Climate Policy Activities and their Assessment by Different Agents: A Consideration on the basis of the Clean Development Mechanism (CDM), funded by University Grant Commission, India and DAAD, Germany (ongoing)

Other Activities:

- (a) Visiting positions

Technical University, Freiburg, Germany

Institute of Social Science, Erasmus University, The Hague, Netherlands

UNU-Maastricht, Netherlands

University of Gourbanga, Malda

Centre for Urban Economic Studies, University of Calcutta

Indian Institute of Foreign Trade, Kolkata

- (b) M.Phil./Ph.D. submitted/awarded (details)

'Competition among Regional Governments and Financing of Local Public Goods' by Moumita Chel, 2018 (awarded)

- (c) Any other achievement:

1. "Chaired a session on Political Economy" Conference on contemporary Issues in Development Economics, December 2018
2. Presented paper titled "Enrolment in School and Higher Education: Role of Public Policy" Conference organized by Centre for Training and Research in Public Finance and Policy
3. Chaired a session on Annual Conference of Centre for Urban Economic Studies, Calcutta University

Prof. Tanmoyee Banerjee (Chatterjee):

Publications in Journals:

1. *A Theoretical Analysis Of Product Versioning In The Context Of Commercial Piracy* (Coauthored with Paulomi Das) *Economic Annals* Volume 63 Issue No. 219 Pages 115-135, 2019
2. "An Economic Analysis of the Determinants of Pattern of Institutional Borrowing in India (Coauthored with Moumita Poddar and Ajitava Raychaudhuri) *Journal of Social and Economic Development* 21(1), 54-92, 2019
3. *Service Good as an Intermediate Input and Optimal Government Policy in an Endogenous*

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Growth Model (Coauthored with Senjuti Gupta and Bidisha Chakraborty) *South Asian Journal of Macroeconomics and Public Finance* <https://doi.org/10.1177/2277978719837043> 2019

Project Work done:

1. *Time Poverty Women well-being and Intra-household Gender Gap: A time use survey on West Bengal* (Jointly with Poulomi Roy) Funded by CAS, Department of Economics, Jadavpur University, 1,25,000/- Thrust Area: Social sector and regional Development.

Other activities:

1. PhD awarded to Senjuti Gupta. Thesis title: "Service Sector, Government Policy And Endogenous Growth Model". Co Supervisor: Bidisha Chakraborty

EDUCATION

Int. : 2457-2882
H.O.D. : Prof. Bishnupada Nanda
E-mail : education.ju@gmail.com
hod.education@jadavpuruniversity.in

1. A. COURSES OFFERED:

<i>Sl. No.</i>	<i>Offered Course</i>	<i>Duration</i>	<i>Intake Capacity</i>
1	B.Ed.	2 years	100
2	M.A. in Education	2 years	68
3	M.Phil. in Education	2 years	19
4	Ph.D. in Education	-	28

1. B. NUMBER OF FACULTY MEMBERS: 9

- (i) Prof. Bishnupada Nanda, Professor
- (ii) Dr. Muktipada Sinha, Associate Professor
- (iii) Dr. Prokash Biswas, Associate Professor
- (iv) Dr. Debashis Mridha, Asst. Professor
- (v) Dr. Lalit Lalitav Mohakud, Asst. Professor
- (vi) Dr. Maya Gupta, Asst. Professor (Cont.)
- (vii) Smt. Soma Dutta, Asst. Professor (Cont.)
- (viii) Dr. Samir Chattopadhyay, Asst. Professor (Cont.)
- (ix) Smt. Antara Mitra, Asst. Professor (Cont.)

2. A. AREA OF RESEARCH ACTIVITIES:

- Special and Inclusive Education
- Rehabilitation Psychology and Counselling
- Educational Technology

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- Cognitive Psychology
- Creativity
- Buddhism and Mindfulness
- Life-Skill Education
- Educational Philosophy
- Educational Sociology

2. B. MAJOR RESEARCH PROJECT:

Sl. No.	Name of Faculty	Name of Project	Funding Agency
1	Prof. Bishnupada Nanda	“Education, Health, Culture, Religious Belief and Language of Kora Tribal Society- A Cross Sectional Survey”	RUSA 2.0
2	Dr. “Mukti Pada Sinha	Mental Health Problem among School Going Adolescents: A Comparative Study between Three Urban Areas of Bhutan, Bangladesh and India”	RUSA 2.0
3	Dr. Prokash Biswas	“A Study of Sustainable Development for the Education of the Descendants of the Refugees in West Bengal with Special Emphasis on Nadia”, North and South 24 Parganas	RUSA 2.0
4	Smt. Soma Dutta (Principal Investigator) & Dr. Debashis Mridha (Co-Investigator)	Assessment of Ethical Values of Young Children in the Present Scenario: A Way to Develop a Responsible Citizen for the Future “World”	RUSA 2.0
5	Dr. Samir Chattopadhyay	“Changing Scenarios of Bhadu and Tusu: A Study on Festivity of Rarh Bengal”	RUSA 2.0

3. B. SEMINAR/WORKSHOP/CONFERENCE/SYMPOSIUM ATTENDED:

Sl. No.	Name of Faculty	Name of Paper presented	Name of Seminar	Place	Duration
1	Smt. Antara Mitra	“Inner peace, well-being and education through music”, “Peace, Well-being & Education : A Pedagogical Discourse”	organized by Department of Education, Jadavpur University in collaboration with Department of Education, Bhatler College, Dantan& National Service Scheme, Jadavpur University.	Jadavpur University	28 th and 29 th December, 2018 (2 days)
2	Smt. Antara Mitra	“Identifying the essential life skills for independent living with employment prospects of adults with multiple disabilities”, “Present scenario of people with disabilities in Bengal: Society, Education and Literature”			15 and 16 February, 2019 (2 days)
3	Smt. Antara Mitra	“Applications of Brain-based Approach in Teaching-Learning of English Language: A Recent Trend in Teacher Education”	“Globalisation and Paradigm shift in Teacher Education”		31 st March, 2019 (1 day)

3. C. SEMINAR/WORKSHOP/CONFERENCE/SYMPOSIUM ORGANISED:

Sl. No.	Name of Faculty	Name of Paper presented (if any)	Name of Seminar	Place	Duration
1.	Dr. Mukti Pada Sinha	- Conference on ‘Suicide Prevention: Role of Media in Community Awareness’,	Jadavpur University		12.09.2019 (1 day)
2.	Dr. Mukti Pada Sinha	- Workshop / Teacher Awareness Programme on ‘Role of Teachers in Managing ADHD’,	Jadavpur University		23.08.2019 (1 day)

4. B. ARTICLES PUBLISHED IN JOURNALS

Sl. No.	Name of Teacher	Name of Article	Name of Journal	Date of Publication	Volume
1	Prof. Bishnupada Nanda	School Drop-Out of Socially Excluded Adivasis – A Survey,	RENOVA (ISSN: 2454-1710)	2019	5(1)

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- 2 Prof. Bishnupada Nanda : Teachers' Professional Judgement in Education about Parental Involvement of Children with Special Needs, RENOVA (ISSN: 2454-1710) 2019 5(1)
- 3 Smt. Antara Mitra : Applications of Brain-Based Approach in Teaching-Learning of English Language: A Recent Trend in Teacher Education Annals of Education-ISSN: 2455-6726 March 2019 5(1)

ENGLISH

Phone : + 91-33-2414-6681
Fax : 91-33-2413-7903
Int. : 2457-2145/2224
H.O.D. : Prof. Nandini Saha
E-mail : hod@english.jdvu.ac.in
 hod.english@jadavpuruniversity.in

1. A. Courses Offered:

Name of the course	Duration of the Course	Current intake
• BA Honours	3 years, 6 semesters	74 current
• MA	2 years, 4 semesters	74 current
• M Phil	2 years	19 per year
• PhDs registered		144 approx.
• PhD by coursework (new UGC regulations)		104 current

1. B. Number of Faculty Members: Full strength 25. Presently 20 + 2 emeritus professors

2. A. Areas of Research Activities:

The Department of English is a Centre of Advanced Study (CAS) under the UGC's SAP Programme, the only CAS in English in India. It was recognized by the UGC for the status of Departmental Special Assistance (DSA) in 1991 and became a Centre of Advanced Study in 2004. The existence of the Centre was a major factor in the Department gaining another UGC award (ASIHSS, 2006-11) for strengthening infrastructure and research facilities. The Centre's programme of activities is mainly directed at research, but its influence is felt through the Department at all levels, in the University, the region and the country. It received funds from the UGC for equipment and infrastructure, library acquisitions, conferences, visiting faculty, and travel. It engages in **international collaboration** for the purposes of research. It is expected to provide leadership in developing new areas of Indian scholarship and in fostering academic exchange. **The CAS status was renewed in 2010, the second phase extending from 2010 to 2015.** The specified Thrust Area for CAS Programme Phase II (2010-15) was Cultural Transactions.

On 1 June 2015, at the Interface meeting for renewal of the CAS Programme, the UGC recommended upgrading it to CAS Phase III for five years, with funding of Rs 1.28 crore plus emoluments for two project fellows. The overall thrust area would remain **Cultural Transactions**, with the following special research interests:

1. Translation
2. Shakespeare in Bengal
3. Incipient Modernities — India and the World
4. Archiving Local Knowledge Systems
5. World Literature to Indian Film

CAS Phase III began from the 2016-17 financial year for the next five years.

The Second Meeting of the Advisory Committee, UGC-CAS English (Phase III) was held on 27 March 2018 in the Department of English, Jadavpur University.

The Centre of Advanced Study has also been recognized by the Research Councils UK (RCUK) in their report, *Arts and Humanities Research Landscape in India*, as a Centre of Excellence in Research in the Humanities. See: <http://www.rcuk.ac.uk/documents/india/Additionalcentres.pdf> under <http://www.rcuk.ac.uk/international/Offices/OfficeinIndia/landscape/Pages/Arts.aspx>

Brief account of CAS Phase I and CAS Phase II

The broad field identified for research under Phase I (2004-2009) was *Textuality and Culture* with the following “thrust areas”:

- Renaissance Studies
- Nineteenth Century Studies
- Twentieth Century Studies
- Translation Studies

The following areas had additionally been identified as important fields of study:

- Literature and the Other Arts
- History of the Book
- Theatre Studies
- Literature and Psychoanalysis
- Popular Culture
- Medieval English and European Literature

The major objectives set out under the broad field of **Textuality and Culture** were the study of the cultural history of texts and the social, physical and material conditions of literary production, as well as the tasks of documentation, resource collection and archive building in all the specified thrust areas, integrating them into a common programme. This would include extension into wider cultural fields and emerging areas such as: study of non-canonical texts, popular literature and paraliterature, translation studies and cultural history, history of book production, publishing and circulation, study of literature in relation to other arts, textual studies and editorial method, inter-departmental and inter-faculty links in film studies, electronic media, women’s studies, cultural history of texts and study of material culture, the social, physical and material conditions of literary production, documentation, resource collection and archive-building.

In Phase II (2010-2015), the specific thrust area was identified as *Cultural Transactions*. It was understood that the Centre would continue to focus on its areas of strength, but bring them into the frame of the encounters and transactions between cultures that India’s history reflects, resulting from **travel, contact, colonization, migration, scientific and technological advances and exchanges**, leading to **new literary expressions**.

CAS PHASE III THRUST AREA

TEXTUALITY AND CULTURE II: CULTURAL TRANSACTIONS

BROAD FIELD: Textuality and Culture. This includes the study of the cultural history of texts and the social, physical and material conditions of literary production, as well as the tasks of documentation, resource collection and archive building in all the specified thrust areas, integrating them into a common programme. This would include extension into interdisciplinary and emerging areas such as popular literature and paraliterature, translation studies and cultural history, history of book production, publishing and circulation, study of literature in relation to other arts, textual studies, editorial method, digital humanities, cultural history of texts, and study of material culture and the circulation of commodities.

THRUST AREA: Cultural Transactions.

The focus of the CAS III is the following areas:

1. Translation
2. Shakespeare in Bengal
3. Incipient Modernities — India and the World
4. Archiving Local Knowledge Systems
5. World Literature to Indian Film

These would extend the earlier focus on transactions between cultures, resulting from travel, contact, colonization, migration, scientific and technological advances and exchanges, leading to new literary expressions.

The study of English literature in India may itself be regarded as one of the products of these cultural transactions that have taken place in our history. It is important for English departments in India to focus attention on the nature of these cultural transactions, and to understand the far-reaching changes brought about by them, not simply in the context of colonization, but over a very long period of cultural contact across the world, and through migration and travel. The cultural production of texts and their distribution and influence depends on a host of factors, including technological and social changes brought about by contact with other cultures. Moreover, just as commodities and human beings travel, so do ideas.

Objectives:

1. To create a better understanding of intercultural exchanges in the intellectual and material realms, to explore interfaces between literature, arts and sciences, and to open new horizons for the discipline of English studies in India.
2. To extend the study of print culture and textuality pioneered by the Department, create digital and print resources for research, train personnel in archiving and materials collection, and develop web-based programmes.
3. To become a nodal centre for research in the Thrust Area: **CULTURAL TRANSACTIONS.**

Other Centres in the Department:

The Department hosts the **Jadavpur University Society for American Studies**. With support from the Italian Embassy Cultural Centre, New Delhi, and the UGC-ASIHSS Programme, a **Renaissance Resource Centre** was established in the Department in 2009. The Department also houses the **Rabindranath Studies Centre**, established under the UGC Epoch-Making Thinkers Scheme in 2011, and temporarily serves as the office for the **Tagore Cultural Complex** to be constructed with funding from the Ministry of Culture, Government of India, which released the first instalment of Rs 4.5 crores in 2014-15, matched by Rs 1 crore from the Government of West Bengal.

CENTRE FOR VICTORIAN STUDIES: Coordinator: Saswati Halder, Joint Coordinator: Sutanuka Ghosh.

The **Centre for Victorian Studies** was set up in 2010 with the objective of making it a meeting place for fruitful research in the area. The Centre has collaborated with the ‘Victorian Studies Centre’ of the **University of Leicester (UK)**, whose members have expressed a keen interest to work with the faculty of Jadavpur University. The Centre has an interdisciplinary approach to research and has worked in collaboration with the sister departments of the Arts Faculty of Jadavpur University, like Comparative Literature, History and Bengali. We hope to make it function as a nodal centre for all researchers/college teachers working in the area in other colleges and universities of West Bengal as well.

- Special Lecture on “How We Presume To Know: Illegitimacy, Doubt And Certainty In Victorian Realist Fiction” by Dr. Ayelet Ben-Yishai, Senior Lecturer (Associate Professor) and Chair, Department Of English, University Of Haifa.
- Special Lecture on “From Hippodrama To Melodrama: Victorian Popular Theatre” by Dr. Sarika Bose, Chair, Ubcfa Contract Faculty Committee, Ubc Faculty Association, Department Of English, University Of British Columbia.
- The Centre for Victorian Studies collaborated with the Department of English, Diamond Harbour Women’s University for a one-day Symposium on “The World Within I Doubly Prize ...’: Reassessing Emily Bronte at 200”, on 16 November 2018 to celebrate the bicentenary of Emily Bronte’s birth
- *The Confidential Clerk*, broadly concerned with scholarship, new research and a keen understanding of nineteenth century literary history and theory, is an online journal of the Centre which has published its first issue in March 2015. Interdisciplinary, international and innovative, the journal is committed to providing a forum for original and unpublished research papers from students, young researchers and established authors. Articles will not only explore and integrate theories and methods of various fields of inquiry—gender, art, history, music, anthropology, psychology, military studies, urbanism, literary criticism, religious studies, social history, economics, popular culture studies, and the history of science, among others—but also test and open up the very limits of disciplinary boundaries. The fifth issue of *The Confidential Clerk*, is a collection of original and unpublished research papers on “A gauntlet with a gift in’t”: Female Suffrage and the Woman Question in 19th Century Britain”.
- A two day International Conference on “The Brontës and their Contemporaries: Texts and Contexts (1816-1855)”, was organized by the Centre of Advanced Study, Department of English and the Centre for Victorian Studies, Jadavpur University on 13-14 March 2019.

2. B. Major Research Projects: (Departmental)

1. SHAKESPEARE IN BENGAL (UGC CAS ENGLISH)

Report 2018-19:

The “Shakespeare in Bengal” project was started in 2011 under the CAS (Phase II) programme at the Department of English, Jadavpur University to document the various aspects of Shakespeare’s presence in Bengal and within the Bengali-speaking culture. At present, the members of the project are Prof. Nilanjana Gupta (CAS Phase III Co-ordinator), Prof. Paromita Chakravarti (Co-ordinator of the project), Dr. Abhishek Sarkar (Joint Co-ordinator of the project), Dr. Sonia Sahoo, Dr. Doyeeta Majumder, Ms. Shrutakirti Dutta (CAS Fellow) and Mr. Jitamanyu Das (CAS Fellow), and volunteers from amongst the students and research scholars of the Department. The project seeks to assess, organize and archive Bengali engagements with Shakespeare under three distinct but related categories:

- (1) Shakespearean performances on stage and on the screen,
- (2) Translations and Adaptations of Shakespeare, and

(3) Shakespeare Pedagogy

During Phase III of the CAS programme the project team continued their work to collect and archive data related to Shakespeare and Bengal, with particular focus on interviews and performances. A few collaborative ventures were also undertaken by the project, including one with the Folger Shakespeare Library, Washington DC. As part of the agreement with Folger, it was decided that part of the findings and resources accumulated by Shakespeare in Bengal over the last few years will be included in Folger's Global Shakespeares project. This allows for greater visibility and reach for the project as well as the university. Further, funds from the collaboration allowed the project to commission a new website with an individual domain space and state of the art features in place of the original and more rudimentary Wordpress platform.

The project also collaborated with Natyashodh Sansthan, Kolkata and the SCTR, Jadavpur University, to collect and digitize data on Shakespeare performances and adaptations within Bengal.

The items below are the results of these collaborations, to be showcased by Folger and added to the Shakespeare in Bengal project :

- i) A consolidated bibliography which includes the existing bibliography compiled by the project, and supplemented by bibliographical data gleaned from the National Library, and the holdings and catalogues of Jadavpur University, Presidency University, Calcutta University, Sahitya Akademi and Sahitya Parishat. In keeping with Shakespeare in Bengal's original emphasis on performances, we also provided a detailed account of performances of Shakespeare that have taken place in and around Bengal (including performances in English, Bengali, or other Indian languages).
- ii) We transcribed the following three Bengali texts from the Folger holdings: *Bhinisera Banik: The Merchant of Venice*, trans. Manomohana Raya, 1918, *Hyamaleta (Dinmarkira yuvaraja): Hamlet*, trans. Manomohana Raya, 1918, *Susila-Birsimha: Cymbeline*, trans. Satyendranatha Thakura, 1867-8
These books have already been digitized by Folger and are available in the form of a series of jpeg images on their website. We will render them into searchable texts by using Avro in collaboration with SCTR, Jadavpur University.
- iii) In the final phase of the Global Shakespeares project, the Folger Shakespeare Library will curate a digital exhibition, which will be made public in early 2020. We have undertaken to loan some artefacts from the Shakespeare in Bengal project as part of this exhibition. The artefacts to be made available will include: illustrations from various translations of Shakespeare collected during the last seven years, photographs of performances, scanned images of other ephemera—such as performance posters, tickets, handbills, scanned marginalia from books and class-notes, video and audio recordings etc. These items will be watermarked with our University's logo, to ensure ethical use.

An exhibition of items in the Shakespeare in Bengal project is to take place at the Victoria Memorial Hall, Kolkata between the 8th and 15th of November, 2019.

2. BODIES OF DIFFERENCE: PEDAGOGY OF THE MARGINAL IN GLOBAL SOUTH(Funded by JU RUSA 2.0)

Core research group: Prof. Paromita Chakravarti, Dr. Nilanjana Deb, Dr. Kaustav Bakshi, Shri Ishan Chakraborty

Background, Rationale and Objectives:

The humanities departments at Jadavpur University have in recent times, begun to address the sensitization of students to difference in identities, be it differences in gender, sexuality, class, caste, ethnicity or ability. It is felt that this needs to be broadened into a major outreach project of the University extending the urgent and necessary discussions of "bodies of difference" into the larger community of people

at the secondary level of education. This project is the outcome of JU teachers' longstanding concern about the lack of resources for the sensitization of school level students and teachers in West Bengal regarding forms of socio-economic, sexual, gendered and bodily difference.

The project proposes to research and develop resources and facilitate conversations and discussions that will help principals and school teachers to deal constructively with forms of diversity and difference in the classroom in appropriate ways, and enable them to sensitise their students in turn to forms of difference. It will also train students to develop greater sensitivity towards non-normative peers, and allow marginalize students space for self-expression and inclusion into the mainstream.

- 3. NARRATIVES OF FAITH: DEVOTIONAL SONGS AND POETRY IN THE DIVERSE TRADITIONS OF EASTERN REGIONS OF INDIA**(Funded by JU RUSA 2.0). The primary aim of the project is to research, document and eventually archive the innumerable expressions of faith and spirituality in the devotional songs and other forms of poetic expressions that have been preserved in the diverse traditions of the Eastern regions of India in the last hundred years. The regions explored are categorized broadly as a) the Eastern Himalayan region, particularly its foothills in the plains of Bengal, and b) other urban and semi-urban areas in the various districts and small towns of Bengal c) adjoining areas to the above two regions.

The team members of the project are Professor Nilanjana Gupta, Professor Nandini Saha, Professor Sonia Sahoo,(Joint Coordinator), Dr. Rafat Ali, (Coordinator) Dr. Saswati Halder, Dr. Sutanuka Ghosh and Sri. Ramit Samadder. They have been visiting colleges, universities and libraries as well seminaries, monasteries, research institutes and libraries of religious societies and so on, to interview religious scholars, academics, priests, songwriters, poets, shamans, oral performers and NGO activists in the hills of North Bengal and the other districts and towns of Bengal. In addition to the project members there are five Project Fellows– two conversant with the Nepali language - Sri Gyanendra Mani Pradhan and Sri Andronicus Aden- and the other three with Bengali –Sri Ayan Chakraborty, Sri Ayan Ghosh and Sri Gourab Goswami.

- 4. LITERARY ECOLOGY IN NINETEENTH CENTURY BENGAL.**Principal Investigators: Dr. Saswati Halder, Dr. Sutanuka Ghosh.

In this research project we propose to investigate the representation and interpretation of the relationship between humans and the non-human nature in the context of the radical transformations in the physical and ideological landscapes that characterized nineteenth century Bengal. Our study falls under the broad rubric of Studies in the Global South, which has been identified as one of the thrust areas for research conducted under RUSA. This work will add to the ongoing discourses about “sustainable development” by focusing on 19th century Bengal when paradigmatic shifts in the human and non-human relationship began with our subscription to the ‘modern’ ideas of civilization and development and the colonized Indians striving to distinguish themselves from the ‘primitive’ animal and its ‘degraded’ state.

2. C. Individual Projects

Prof. Santanu Biswas

Conservation, Digitization, and Metadata Creation of Rare and Endangered Recordings of Indian Classical Music.” Funded by JU RUSA 2.0

Prof. Abhijit Gupta

1. Principal Investigator, ‘Sustainable Heritage and Policy in Kolkata’, with Liverpool University, March-August 2019.
2. Principal Investigator, ‘Academic Publishing in India: Issues and Challenges’, funded by RUSA 2.0, March 2019-March 2020.

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3. Co-investigator, 'Two Centuries of Indian Print', with the British Library UK, funded by the AHRC and the Newton Fund, 2016-21.

Prof. Paromita Chakravarti

(Co-investigator) "Transcultural Readings: The Bengal Italy Encounter in the 20th Century". Funded by Sapienza University, Rome through the Bando Accordi Internazionale 2017 to facilitate joint research between Sapienza University, Rome and Jadavpur University, Kolkata.

Dr. Sutanuka Ghosh

(Principal Investigator) "Literary Ecology in 19th century Bengal". Funded by the Dept. of English, JU and FSLE (Foundation for the Study of Literature and Environment) India.

Dr. Saswati Halder

(Principal Investigator) "Literary Ecology in 19th century Bengal". Funded by the Dept. of English, JU and FSLE (Foundation for the Study of Literature and Environment) India.

Prof. Manajit Mandal

1. "Special Education & Research on Disability Studies". Funded by UGC-UPE II.
2. "Education & Awareness among Persons with Disability in the Jangalmahal Areas of Bengal: A Survey of Selected Blocks".
3. "Rabijiboni ('Life of Rabindranath') in English: Translation, Transnationalism and Global South".

Dr. Abhishek Sarkar

1. Received a grant of Rs 50,000/- from Jadavpur University for a personal project entitled "Lord Byron in the Bengali Cultural Imaginary, 1830-1920". Project report submitted.
2. 'The First World War and Bengali Self-Representation'. Funded by JU RUSA 2.0

Dr. Doyeeta Majumder

Jibananda Papers (in collaboration with SCTR). Funded by JU RUSA 2.0

3. A. Invited Lectures Delivered/ Sessions Chaired:

Prof. Amlan Dasgupta

1. Lecture on Classical European Literature at Jogamaya Devi College, Kolkata, October 2019.
2. Keynote Address, Workshop on Digital Humanities, Heritage Institute of Technology, 6 March, 2019.
3. Praeparatio: Time and History in Paradise Regained, Second Sarbani Chaudhury Memorial Lecture, Kolkata, 29 May 2019.

Prof. Prodosh Bhattacharya

1. 'Introduction to the Old English Language and its Literature', 1 September 2018 at Krishnanath College, Berhampore.
2. Invited lecture on *The Iliad* at the English Study Centre, 5 October 2018, A. J. C. Bose College.

Prof. Nilanjana Gupta

1. Lecture: "Imnana: The stories of Many Islams in India", Indira Gandhi Centre for National Integration & Dept of Arabic, Visva-Bharati University, Santiniketan, February 2018.
2. Lecture on "Media & Disaster Management," School of Oceanography, Jadavpur University.
3. Lecture on "Women, Minorities & Education," School of Women's Studies, Jadavpur University.
4. Lecture on "Reading Texts," Department of International Relations, Jadavpur University.

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Prof. Santanu Biswas

1. Lecture on 'Psychoanalysis and Mental Health' at Orientation Programme, UGC Human Resource Development Centre, Jadavpur University, August 2018.
2. Lecture on 'The Different Approaches to Mental Health' at Orientation Programme, UGC Human Resource Development Centre, Jadavpur University, August 2019.
3. Lecture on 'Psychoanalysis and Stress Management' at Short Term Course on Stress Management and Counselling, UGC-Human Resource Development Centre, Jadavpur University, January 2019.
4. Lecture on 'Post-Freudian Psychoanalysis' at Short Term Course on Counselling and Stress Management, Centre for Counselling Services and Studies in Self Development, Jadavpur University, September 2019.

Prof. Abhijit Gupta

1. Lecture on 'Two Centuries of Indian Print: Issues and Challenges', Sarsuna College, 25-26 February 2019.
2. Keynote on 'Book History in India: The Nation and the Region', Tezpur University, 11-12 February 2019.
3. Lecture on 'Virgil on the Hugli, or How to Get Your Term Paper Published', Harish-Chandra Research Institute, Allahabad, 16 November 2018.
4. Keynote: 'Two Centuries of Indian Print', IFP, Pondicherry, 21–22 August 2018.
5. Lecture on 'The Serampore Missionaries and the Production of Knowledge', 16 August 2018, Serampore College.

Prof. Nandini Saha

Invited as a Plenary speaker at the National seminar "Rethinking Tribal Identity" organized by the Department of English, Mizoram University, Aizawl between 28–29 March 2019. The Plenary was titled "Tribal Life and Cultural Identity in West Bengal."

Prof. Sonia Sahoo

1. Chaired a session at the Nagamma Reddy Endowment Lecture, 22 June 2018, organized by the School of Languages and Linguistics, Jadavpur University and the Dravidian Linguistics Association.
2. Chaired a session at the International Conference on English Learning and Teaching Skills, 27 July 2018, organized by the Institute of Engineering and Management, Kolkata in collaboration with the Indian Statistical Institute, Kolkata.

Dr. Saswati Halder

1. Chaired the panel entitled 'Emily Bronte: Of Nature, Animals and the Supernatural' at the One-Day Symposium on Reassessing Emily Bronte at 200, Diamond Harbour Women's University, November 2018.
2. Chaired a session titled 'Literature of the Wild' at the International Conference on Ecology and Culture, Department of English and FSLE-India, December 2017.

Dr. Rafat Ali

Chaired a session at the Professor Debabrata Mukherjee Memorial Annual Intra-Departmental Students' Seminar titled "'Time Present and Time Past'": Making and Un-Making Memory,' Department of English, Jadavpur University, 29 March 2019.

Sri Ramit Samaddar

Special Lecture titled 'From Page to Screen: *Wuthering Heights* and Its Cinematic Adaptations' delivered to PG Students of Basanti Devi College, Kolkata on 20 April 2018.

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Dr. Abhishek Sarkar

Chaired a session at the international conference and workshop entitled “Workshops of Horrible Creation: 200 Years of Imagined Humans” organized by the Department of English, Jadavpur University and *Kalpabiswa* e-zine in November 2018.

Dr. Kaustav Bakshi

1. Invited discussant on the panel, ‘Sexing India: Hindutva, LGBTQ Rights, and Global Philanthropy’, at CLAGS, City University of New York on 2 April 2018.
2. Invited to deliver a lecture entitled, ‘Queering the Streets: How the LGBT movement in the US influenced India’ at the American Center and Library, Kolkata on 25 June 2018.

Dr. Doyeeta Majumder

1. Lecture on ‘Equity, Exception, Hermeneutics’ at Law and Poetics in Early Modern England and Beyond, Cambridge University, July 2018.
2. Lecture on ‘Machiavelli and Tyranny’ at Machiavelli in His Times and Ours, University of Delhi, Delhi, October 2018.
3. Public lecture on Petrarch, Department of English, D.U., October 2018.
4. Chaired session at ‘Workshops of Horrible Creation: 200 Years of Imagined Humans’, International Conference of the CAS III programme, Department of English, Jadavpur University, 22–24 November 2018.

Sri Ishan Chakraborty

1. Delivered a lecture on 11 May 2018 on “Roles & Responsibilities of Employer” during a 3-day In-Service Training and Sensitization of key functionaries of Central and State Govt., Local bodies and other Service providers funded by R.C.I., New Delhi. The sensitization programme was organized by the SoE, NSOU held at the Deshbandhu Girls’ College, Kolkata for College & University Teachers under the aegis of RCI.
2. Delivered a lecture on 15 June 2018 on “Inclusive Environment at Work place: Roles & Responsibilities of Employer” during a 3-day In-Service Training and Sensitization of key functionaries of Central and State Govt., Local bodies and other Service providers funded by R.C.I., New Delhi. The sensitization programme was organized by the SoE, NSOU held at the Surendralal Das Teachers’ Training College, Anandanagar Nischinda (Bally), Kolkata for College & University Teachers under the aegis of RCI.
3. Delivered a lecture on 21 June 2018 on “Roles & Responsibilities of Employer” during a 3-day In-Service Training and Sensitization of key functionaries of Central and State Govt., Local bodies and other Service providers funded by R.C.I., New Delhi. The sensitization programme was organized by the SoE, NSOU held at the Netaji Subhas Open University, Kalyani for College & University Teachers under the aegis of RCI.
4. Invited as an Expert Panelist for a discussion on “Nurturing Young Talents, Diversity and the Differently Abled in Academia” on 12 February 2019, which was a part of “Leadership for Academicians Program” (LEAP-2019). This program was initiated by The Ministry of Human Resource Development (MHRD), Government of India and was hosted by The Indian Institute of Science Education and Research (IISER), Kolkata.
5. Invited by the Centre for Translation of Indian Literatures (CENTIL), Department of Comparative Literature, Jadavpur University, Kolkata to deliver lectures for a six-month Certificate Course on “Translation as skill” at Jadavpur University on 13 and 15 February 2019.

B. Seminar/ Workshop/ Conference/ Symposium Attended:

Prof. Abhijit Gupta

‘Intellectual Property and Islamic Printing in 19th-Century Calcutta’, *Islam and Print South Asia Workshop 2*, British Library, 26 October 2018.

Dr. Saswati Halder

1. International Conference on ‘Ecology and Culture’, FSLE-India, Kerala, December 2018.
2. International Conference on ‘Language, Literature and Culture,’ IASE, Pune, December 2018.
3. One-Day Symposium on ‘Reassessing Emily Bronte at 200’, Diamond Harbour Women’s University, November 2018.
4. A two-day International Conference on ‘The Brontës and their Contemporaries: Texts and Contexts (1816–1855)’, Jadavpur University, March 2019.

Dr. Sutanuka Ghosh

1. “The disappearing homes and the emerging nation in Muslim women’s fiction in India and Pakistan,” University of Edinburgh South Asia Seminar Series, UK, February 2019.
2. “Revisiting Rajput (his)stories with Kiran Nagarkar’s *Cuckold*,” Historical Fictions Research Network Conference, Manchester, UK, February 2019.

Sri Ramit Samaddar

Presented a paper entitled ‘*Gadar*’s Sakina and *Pinjar*’s Puro: Women in Two Bollywood Films on the Partition of India’ at the State-Level Seminar on *The Partition of British India: Implication of Mass Dislocations Across Geographies*, organised by the Department of English, Matiaburj College, on 28 April 2018.

Dr. Abhishek Sarkar

1. Presented a paper entitled “Shakespeare’s Ariel and Kalidasa’s *Yaksha*: Navigating Canons in 19th-Century Bengal” at the XIV CLAI Biennial International Conference on “Studying South Asian Narratives through Pluralist and Dialogic Frames” organized by the Comparative Literature Association of India (CLAI) and the Department of English, Maulana Azad National Urdu University, Hyderabad in March 2019.
2. Presented a paper entitled “Sentimental Humanism vs. Biotechnological ‘Dehumanization’ of Third World Bodies: Select Science Fiction of Muhammad Zafar Iqbal” at the international conference and workshop entitled “Workshops of Horrible Creation: 200 Years of Imagined Humans” organized by the Department of English, Jadavpur University and *Kalpabiswa* e-zine in November 2018.

Dr. Kaustav Bakshi

1. Presented a paper entitled, “Public versus private in the discourses of women’s movement in Sri Lanka: The contemporary Sri Lankan English novel and its critique of ‘respectability’” at the 25th European Conference on South Asian Studies (ECSAS 2018) held in Paris from 24 July to 27 July 2018.
2. Presented a paper entitled, “Austen in the era of ‘shopping mall’ cinema in Bombay: Showcasing *Emma* in *Aisha*” in the UGC-CAS-III sponsored state-level seminar on “From ‘the Great Tradition’ to Spin-offs: Re-reading Jane Austen” at the Department of English, Jadavpur University on 27 February 2019.

Dr. Doyeeta Majumder

1. Law and Poetics in Early Modern England and Beyond, Cambridge University, July 2018.

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2. Machiavelli in His Times and Ours, University of Delhi, Delhi, October 2018.
3. 'Workshops of Horrible Creation: 200 Years of Imagined Humans', International Conference of the CAS III programme, Department of English, Jadavpur University, 22–24th November 2018.

Sri Ishan Chakraborty

1. Delivered a presentation on "The Sightless Spectator: 'Crippling' the Relation between Text and Performance" in a Seminar cum Workshop on "The Drama-Theater Relationship: Interpreting Text through Performance" organized by Jadavpur University Society for American Studies (JUSAS) on 1 August 2018.
2. Presented a paper on "Today I Shall See Within: Vision of the Blind Baul in Tagore's Phalguni" in the two-day International Seminar on "Baul, Vaishnava & Rabindranath" organized by the Dept. of Philosophy, Bolpur College, Birbhum, West Bengal on 28 and 29 September 2018.
3. Presented a paper titled "Sightless Spectators: A dialogue between Visual Arts and Visual Disability in India" in the National Conference on Disability, Gender and Violence: Issues and Challenges (organized by Centre for Women's Development Studies and supported by Women's Fund Asia) on 25–26 February 2019 at India Islamic Cultural Center, New Delhi.

C. Seminar/ Workshop/ Conference/ Symposium Organized:

Prof. Abhijit Gupta

Organized 'Workshops of Horrible Creation: 200 Years of Imagined Humans', International Conference of the CAS III programme, Department of English, Jadavpur University, 22–24 November 2018.

Dr. Saswati Halder

Organized a two-day International Conference on 'The Brontës and their Contemporaries: Texts and Contexts (1816–1855)', Jadavpur University, March 2019.

Dr. Sutanuka Ghosh

Organized a CAS-CVS conference on "The Brontes and their Contemporaries: Texts and Contexts," Jadavpur University, 13–14 March 2019.

Sri Ramit Samaddar

Co-convener of One-Day State-Level Seminar titled "From 'the Great Tradition' to Spin-offs: Rereading Jane Austen," organised by the Department of English, Jadavpur University, on 27 February 2019.

Dr. Abhishek Sarkar

Organised and co-ordinated a one-day state-level seminar entitled "From 'the Great Tradition' to Spin-offs: Re-reading Jane Austen" under the Centre of Advanced Study (Phase III), Department of English, on 27 February 2019.

Sri Ishan Chakraborty

Convened a UGC-Sponsored One-Day National Seminar on "Disability and Art: In Search of New Definitions of Access and Effective Participation" organized by the Centre For Disability Studies, Jadavpur University, Kolkata on 18 January 2019.

E. Orientation Courses/ Refresher Courses Organized:

Prof. Amlan Dasgupta

Coordinator, UGC-HRDC, Jadavpur University STC on MOOCS and E-Learning, Issues, Problems and Prospects 15–21 January 2019 (in Collaboration with C-MATER, Dept of CSE, JU (2 Lectures delivered).

4. A. Books/Monographs Published:

Prof . Nilanjana Gupta

1. Coordinating Editor, *English for All*, Macmillan India, Chennai, 1998. Reprinted 13 times, Revised Edition, 2000, 3rd Edition 2018
2. Editor, *Dance Matters Too: Markets, Memories, Identities*, Routledge, New Delhi & London, 2018 (with Pallabi Chakraborty).

Dr. Kaustav Bakshi

1. *Queer Studies: Text, Context, Praxis* (New Delhi: Orient Blackswan, 2019). (co-authored with Rohit K Dasgupta)

Dr. Doyeeta Majumder

1. *Tyranny and Usurpation: The New Prince and the Problem of Lawmaking Violence in Early Modern Drama*, ISBN: 9781786941688, English Association Monograph Series, (Liverpool: University of Liverpool Press, 2019).

B. Articles Published:

Prof. Nilanjana Gupta

1. "Digital Capitalism and Surveillance on Social Networking Sites: A Study of Digital Labour, Security & Privacy for Social Media Users" in *Digital India: Reflections and Practice* Springer, 2018 (with Rianka Ray).
2. "Ganashakti 'The Enormous Pair of Bellows': Tracing the History of the Party Organ" in *West Bengal Under the Left 1977-2011* Levant Books, Kolkata, 2018 & Routledge, London 2019.

Prof. Prodosh Bhattacharya

1. 'Horror, Terror, and the Supernatural in *Wuthering Heights* and *Jane Eyre*' in *The Confidential Clerk*, journal of the Centre for Victorian Studies, Jadavpur University, Vol. 4, September 2018.

Prof. Abhijit Gupta

1. 'Publishing and the History of the Book in South Asia', in Alex Tickell, ed. *The Oxford History of the Novel. Vol 10. The Novel in South and South East Asia since 1945* (Oxford: Oxford University Press, 2019).
2. 'Bhumika', *Siddhartha Ghosh Rachanasamagra I Kalpabigyan* (Kolkata: Kalpabiswa, 2018).
3. '৫ আনার বই দশ টাকায়', *আনন্দবাজার পত্রিকা*, ১০ জুন ২০১৮।
4. 'A Bridge Across Time', book review, *The Telegraph*, 29 June 2018.

Prof. Nandini Saha

1. "Speaking in a Different Voice: Dalit Women Writing in Bengali". Forthcoming in a collection of essays titled *Women Speak Nation*, edited by Panchali Ray. Pub: Routledge, 2019.
2. "History and Memory: Gendering the 'Other' in Jyotirmoyee Devi's *The River Churning* and Amitav Ghosh's *The Shadow Lines*". In *Disrespected Neighbo(u)rs: Cultural Stereotypes in Literature and Film*. edited by Caroline Rosenthal, Laurenz Volkmann and Uwe Zagratzki. Newcastle Upon Tyne NE6 2PA, UK: Cambridge Scholars Publishing, 2018. ISBN (10): 1-5275-0868-4 ISBN (13): 978-1-5275-0868-2.

Dr. Sonia Sahoo

1. 'Ben Jonson's "New Men": The Gulls in *The Alchemist*', *Ravenshaw Journal of Literary and Cultural Studies*, Vol. 9, January 2019, pp. 1-17.

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2. 'Love through the generations', book review, *The Telegraph*, 25 May 2018.
3. 'The strangeness of the familiar', book review, *The Telegraph*, 24 August 2018.
4. 'City of lights', book review, *The Telegraph*, 8 November 2018.

Dr. Saswati Halder

- i. The Clue of Life: Translating Feuerbach in George Eliot's *The Mill on the Floss*, *Rupkatha Journal on Interdisciplinary Studies in Humanities*, Vol. 10, No. 3, 2018.
- ii. Only Community Constitutes Humanity: Feuerbach's Epistemology in *Daniel Deronda*, *Journal of Literature and Cultural Studies*, Mizoram University, Vol. 5, Issue. 1, 2018.
- iii. 'Preservation or Restoration? Ecological Aesthetics in George Eliot and Elizabeth Gaskell' conference proceedings of the International Conference on 'Ecology and Culture', FSLE-India (Forthcoming).

Dr. Rafat Ali

1. Review of *Restating Orientalism : A Critique of Modern Knowledge* by Wael B. Hallaq. *Postcolonial Interventions*. Vol. IV, Issue 1. 2019. <https://postcolonialinterventions.files.wordpress.com/2019/02/4.1reviewali-1.pdf>.

Dr. Sutanuka Ghosh

1. Translation of the short story "Syamantak" by Sharadindu Bandyopadhyay, *Timeless Tales from Bengal: An Anthology of Bangla Children's and Young Adults' Stories*, Niyogi Books, 2018.

Sri Ramit Samaddar

1. 'Charles Reade', in Kevin A. Morrison ed., *Companion to Victorian Popular Fiction* (Jefferson, NC: McFarland, 2018), p. 197. ISBN 978-1-4766-6903-8.

Dr. Abhishek Sarkar

1. "Rosalind and Úakuntalâ among the Ascetics: Reading Gender and Female Sexual Agency in a Bengali Adaptation of *As You Like It*," *Multicultural Shakespeare* [De Gruyter and University of Lødz, Poland], vol. 18, issue 33, pp. 93-114, ISSN (Online) 2300-7605.
2. "The Chapter on George Eliot in *An Unfinished Song* and the Reception of George Eliot in Nineteenth-Century Bengal," *American Notes and Queries*, DOI: 10.1080/0895769X.2019.1573653. ISSN: 0895-769X (Print) 1940-3364 (Online).
3. "Reading Byron in Nineteenth-Century Bengal," *The Byron Journal* [The Byron Society, London and Liverpool University Press] 46 (1, July 2018): 49-62. Online ISSN: 1757-0263.
4. "*Nanda bangshochched* and *Hariraj*: Re configuring Politics and the Private Mind in Two Bengali Adaptations of *Hamlet*," *Literature Compass*, vol. 15, no. 4 (April 2018): 1-14, 10.1111/lic3.12458. Online ISSN: 1741-4113.

Dr. Kaustav Bakshi

1. Rituparno Ghosh, Sartorial Choices and the Queer Bengali Youth', *Styling South Asian Youth Cultures: Fashion, Media, Society*, eds. L. Begum, R. K Dasgupta & Reina Lewis, London and New York: I B Tauris, 2018, pp. 65-85. ISBN 978-1-78453-917-7. (co-authored with Rohit K Dasgupta).

Sri Ishan Chakraborty

1. An article titled "Epical Morality and Ethical Contexts: A Comparative Study of the Mahabharata and Rabindranth Tagore's 'Narakbas'," authored by Ishan Chakraborty, has been published on July 27, 2018 in a seminar proceedings (ISBN:978-93-87800-51-9) titled *Moral and Ethical Issues in The Ramayana and Mahabharata*, edited by Abhijit Mandal et all.

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2. An article titled “The Sightless Spectator: Crippling the Relation between Text and Performance,” authored by Ishan Chakraborty, has been published in November 2018 in a seminar proceedings titled *Theatre Practice: Text & Performance, Interpretation & Experimentation*, edited by Pranab Kumar Mandal.

5. Collaborative Programmes:

Prof. Nilanjana Gupta

1. Curated Multimedia Exhibition at Kolkata Centre for Creativity on “Dance in Kolkata” as part of Pickle Factory Season 1, 2018.
2. Youth Reporters, funded by UNICEF, Rs 24 lakhs, 2018-19.

Prof. Abhijit Gupta

1. Principal Investigator, ‘Sustainable Heritage and Policy in Kolkata’, with Liverpool University, March-August 2019.
2. Principal Investigator, ‘Academic Publishing in India: Issues and Challenges’, funded by RUSA 2.0, March 2019-March 2020.
3. Co-investigator, ‘Two Centuries of Indian Print’, with the British Library UK, funded by the AHRC and the Newton Fund, 2016-21.

Prof. Paromita Chakravarti

1. Co-ordinator. “Shakespeare in Bengal”. With School of Cultural Texts and Records, Jadavpur University, and the Folger Library, Washington, USA.
2. Principal Investigator. “Bodies Of Difference: Pedagogies Of The Marginal in Global South”. Started in Feb, 2019.
3. Co-investigator. “Trans-cultural Readings: The Bengali Italy Encounter in the 20th Century.” Sapienza University, Rome through the Bando Accordi Internazionale 2017, to facilitate joint research between Sapienza University, Rome and Jadavpur University, Kolkata, since 2017.

Dr. Sonia Sahoo

1. Principal Co-Investigator, ‘Narratives of Faith: Devotional Songs and Poetry in the Diverse Traditions of Eastern Regions of India’, funded by RUSA 2.0, March 2019-March 2020.

Dr. Saswati Halder

As the coordinator of the Centre for Victorian Studies, Jadavpur University, collaborated with the Department of English, Diamond Harbour Women’s University to organize a One-Day Symposium on ‘Reassessing Emily Bronte at 200’, November 2018.

Dr. Rafat Ali

1. Principal Co-Investigator, ‘Narratives of Faith: Devotional Songs and Poetry in the Diverse Traditions of Eastern Regions of India’, funded by RUSA 2.0, March 2019-March 2020.

Dr. Abhishek Sarkar

1. Joint co-ordinator of the “Shakespeare in Bengal” project, currently pursued by the Department of English, Jadavpur University in collaboration with the Folger Shakespeare Library, Washington, D.C., USA.

Dr Doyeeta Majumder

1. July 2019-present: Co-ordinator, 'Jibanananda Papers', School of Cultural Records, Jadavpur University
2. January 2019-present: Co-coordinator, 'Shabda Kalpa: A Historical Dictionary of the Bengali Language', School of Cultural Texts and Records, Jadavpur University.
3. December 2017-December 2018: Coordinator, 'Global Shakespeares' project conducted by Folger Shakespeare Library in collaboration with the Dept. of English, Jadavpur University, Kolkata

Dr. Kaustav Bakshi

1. Co-investigator in the RUSA 2.0 funded project, "Bodies of Difference: Pedagogy of the Marginal in the Global South", at the Department of English, Jadavpur University. Project commenced in March 2019.

Sri Ishan Chakraborty

1. Project: "Bodies Of Difference: Pedagogies of the Marginal in Global South." under RUSA 2.0 scheme, in collaboration with Paromita Chakravorty, Nilanjana Deb and Kaustav Bakshi of Department of English, JU.
2. Project: "'Shabdakalpa': A Historical Dictionary of The Bengali Language" under RUSA 2.0 scheme in School of Cultural Texts and Records, Jadavpur University, in collaboration with Parthasarathi Bhaumik (Comp. Lit.), Dr Doyeeta Majumder (English) et al.

6. Major Achievements

Prof. Nilanjana Gupta

Curated Multimedia Exhibition & Seminar at the ICCR Gallery on "New Cities: Imagining & Imaging the Global City in India", February 2019.

Prof. Paromita Chakravarti

International Fellowship by Sapienza University to Rome to facilitate collaborative research on "Transcultural Readings: The Bengal Italy Encounter in the 20th Century". 7th to 30th May, 2019.

Dr. Abhishek Sarkar

Received a grant of Rs 50,000/- from Jadavpur University for a personal project entitled "Lord Byron in the Bengali Cultural Imaginary, 1830-1920". Project report submitted.

Sri Ishan Chakraborty

Ishan Chakraborty was awarded the "Abul Kashem Rahimuddin Samman" for his excellence in the field of elocution and recitation by the "Tathya o Sanskriti Daptar, Pascimbanga Sarkar" (Information & Cultural Affairs Department, Government of West Bengal) on 23rd February 2019 at the inauguration ceremony of the "Kavita Utsav 2019".

Dr. Saswati Halder

1. Coordinator of a six-month certificate course entitled 'Functional and Communicative English', at the School of Languages, Faculty of Arts, Jadavpur University.
2. Editor-in-Chief of the Centre for Victorian Studies' international and interdisciplinary online Journal *The Confidential Clerk*.
3. Coordinator, Centre for Victorian Studies, Jadavpur University.
4. Coordinator, Jadavpur University Society for American Studies.

Dr. Doyeta Majumder

Visiting Fellowship, Delhi University, School of English, October 2018.

FILM STUDIES

Phone : + 91-33-2414-6689
Int. : 2457-2467
Media Lab : 2457-2636
H.O.D. : Dr. Madhuja Mukherjee
E-mail : hod@filmst.jdvu.ac.in
hod.filmstudy@jadavpuruniversity.in

1. A. Courses Offered:

(Name of the Course, Duration of the Course, No. of Students Enrolled)

MA in Film Studies (2 Years; 45 Students each year)

- Undergraduate Extra-Departmental (4 courses over 2 semesters; 40 students in each course)
- PhD Coursework (1 semester every year; 8 Scholars enrolled for July-December coursework, 2018)
- PhD programme (5 scholars registered between (1 April, 2018 – 31 March, 2019))

1. B. Number of Faculty Members: 7 (6 permanent, 2 contractual)

2. A. Area of Research Activities: (Broad Areas)

Name of the teacherSpecialization

Prof. Moinak Biswas : Indian cinema, film theory, cultural theory

Prof. Abhijit Roy : Indian Television, Television Studies, Media Theories

Dr. Madhuja Mukherjee

Film History, Historiography, Indian Cinema, Regional Cinema, Technology and Cinema, Sound Cultures, Film Exhibition, Stardom, Gender and Labour

Anindya Sengupta

Classical Hollywood Cinema, Cinema of Satyajit Ray and Ritwik Ghatak, French New Wave and Film Theory

Dr. Manas Ghosh : Asian Cinema, Iranian Cinema, Latin American Cinema, Non-fiction films

Dr. Subhajit Chatterjee

Film Historiography, Bengali Cinema, Cult and Exploitation Films, Film and Popular Culture, Japanese Cinema

Shradhanjali Tamang

Nepali Cinema: National and Transnational, Ethnographic films on Eastern Himalayas, Oral history and tradition of Eastern Himalayas, Translation

Arijeet Mandal : Film Theory, Film and Philosophy

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2. B. Major Research Projects:

(Departmental/Individual, Name of the Project/Funding Agency)

Madhuja Mukherjee

'Westphalian Wilhelms-University Fellowship' of the University of Münster, for the project titled "Between Technologies, Technique and Regional Industries" funded by Institute of Ethnology, University of Münster, Germany, for the period October 2018 to January 2019.

Department of Film Studies

1. RUSA 2.0 (UPE phase-II, Jadavpur University)

Abhijit Roy, Principal Investigator

Name of the project: 'New Media for Change: Multimedia Stories on Under-reported Issues'; Funding Agency: UGC (UPE phase-II, Jadavpur University).

3. A. Invited Lectures Delivered / Sessions Chaired:

(Name of the Teacher, Type of Participants, name of the Seminar/Conference etc, Place, Duration)

Moinak Biswas

1. C P Padmakumar Memorial Lecture, 'Demands that Bodies Make' organized by C P Padmakumar Foundation, May, 2018, Kanakakunnu Palace, Thiruvananthapuram.
2. Lectures at Workshop on Ritwik Ghatak, 1st session, University of California, Irvine, May, 2018.
3. Lecture on 'Arriving in the City' at Inter-Asia Summer School 2018, organized by Inter-Asia Cultural Studies Society, Jadavpur University, June 21, 2018.
4. Lecture on 'On Some New Themes in Indian Cinema' at Film Appreciation Course organized by Chalachchitra Satabarsha Bhavan, Kolkata, July, 2018.
5. Lecture on 'Time and Reflection in Film', at 70th Orientation Programme, UGC-HRDC, Jadavpur University, September 12, 2018.
6. Lecture on 'Chitra o natya', at 31st Refresher Course on 'Shailibgnan: Tattwe o Prayoge', Department of Bengali, Calcutta University, September 19, 2018.
7. Lecture at Workshop on Ritwik Ghatak, 2nd session, Kolkata, November, 2018.
8. Panelist speaker on *They Shall Not Grow Old* (Peter Jackson, 2018), organized by British Council India and School of Media Communication and Culture, November, 2018, Jadavpur University.
9. Lecture at Workshop on Ritwik Ghatak, 3rd session, Columbia University, New York, December, 2018.
10. Lecture on 'The Elements of Cinema', course in "Management through Film", Indian Institute of Management, Calcutta, December, 2018.
11. Panelist Speaker, Presidential theme panel on 'Textual Transactions in an Era of Global Uniformity', Modern Language Association Convention, Chicago, January, 2019.
12. Lecture on 'The Contemporary', at 'Winter School in Comparative Language and Literature' organized by Department of English, University of Calcutta, January, 2019.
13. Lecture on 'The Culture of the Image', 2nd International Polyphony Photo Festival, organized by Ramakrishna Mission Vidyamandira, Belur Math, January, 2019.
14. Panelist Speaker, 'Remembering Mrinal Sen', organized by the Tata Steel Kolkata Literary Meet, Victorial Memorial Hall, January, 2019.

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15. Conversation with the filmmaker Gautam Ghose, on the inauguration of the Partition Museum, Jadunath Bhavan, February, 2019.
16. Chair, Lecture by Hardik Brata Biswas at workshop on 'Meyeder poth chola: Unish bish sataker Bangla', organized by the Tagore Advanced Research Centre, Lady Brabourne College, Kolkata, March, 2019.
17. Lecture on 'Sharir, parisar, o sampratik Bharatiya chalachchitra', organized by Loghu-Guru, Niketan, Dhaka, Bangladesh, March, 2019.
18. Lecture on 'That which Flows: Across Borders of Fiction and Film', organized by the Centre for Advanced Theory, University of Liberal Arts Bangladesh, Dhaka, March, 2019.
19. Chair, third academic session, at UGC sponsored seminar on 'Understanding Self', organized by the Department of Philosophy, Jadavpur University, H L Roy Auditorium, March, 2019.
20. 4th Ranjabati Sircar Memorial Lecture 'Stillness, Motion, Film: Distant Relations', organized by the School of Women's Studies, Jadavpur Universtiy, Vivekananda Hall, March, 2019.

Abhijit Roy

1. Lecture on 'Voices from the Regions: Does the Vernacular Mass Media have A Specific Character'? presentation at the panel discussion on 'Two Hundred Years of Vernacular Mass Media in India', Bhawanipur Education Society College, Kolkata, 30 April, 2018.
2. Lecture on 'The Beginning: Early Silent Cinema', at Film Appreciation Course organized by Maya Art Space, Kolkata, 7 June, 2018.
3. Lecture on 'Reality TV, Participatory Culture and the Many Locations of Bengal and Bengality', Lecture at Inter-Asia Cultural Studies Summer School organized by the Department of Film Studies, Jadavpur University, in collaboration with Inter-Asia Cultural Studies society, Lingnan University, Hong Kong, and the Centre for the Study of Culture & Society, Bangalore, Jadavpur University. 26 June, 2018.
4. Chaired the lecture on 'Dark spaces: Cave painting, Cinema halls and Visual storytelling' by Dr. Suman Ghosh (College of Liberal Arts, Bath Spa University, UK). Department of Comparative Literature, Jadavpur University, 18 July, 2018.
5. Lecture on 'State and the Inter-Media Context of Radio-Film-TV in Postcolonial India' and 'Televisuality and the 'Live Public' in Post-Liberalization Indian Popular Film', two lectures at the MHRD-sponsored 7-Day Faculty Development Programme on 'Multimodality, Multimediality in Literature, Cinema and the Allied Arts', Ramanujan College, University of Delhi, 6 August, 2018.
6. Lecture on 'Media and the Emergent forms of Publicness in Post-Liberalization India', lecture at the Centre for Culture, Media and Governance, Jamia Millia Islamia, New Delhi, 7 August, 2018.
7. Lecture on 'Media Governance in India: Key Issues in History' and 'Airwaves and the 'Public' in Post-Liberalization India', two lectures at the Special Summer School on Social Studies organized by the Department of Political Science, University of Calcutta, 8 September, 2018.
8. Lecture on 'Bipananbad o televisioner bhasha', at the UGC-sponsored Refresher Course on 'Shailibijnan: Tattwe o prayoge' organized by the Department of Bengali, University of Calcutta, 17 September, 2018.
9. Lecture on 'Television Studies: Key Issues', at the Centre for Journalism and Mass Communication, Visva-Bharati, 30 September, 2018.
10. Lecture on 'Indian Media and Issues in Human Rights', at the UGC-sponsored Refresher Course on 'UN and the Global Perspective of Human Rights', Department of International Relations, Jadavpur University, 16 November, 2018.

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11. Moderated a panel discussion organized by School of Media, Communication and Culture, Jadavpur University, and the British Council, Kolkata, on the occasion of the India premiere of *They Shall not Grow Old* (Director: Peter Jackson, 2018), a film based on restored footage from the Imperial War Museums' collection on the First World War. 20 November, 2018.
12. Participated in the panel discussion on 'Inspired by Shakespeare' organized by the British Council, Kolkata, on the occasion of launch of the Indian edition of the book *Shakespeare in Indian Cinemas: "Local Habitations"* (eds. Poonam Trivedi and Paromita Chakravarti), 24 November, 2018.
13. Lecture on 'Exploring Intersectionality through Indian Media', at the short-term gender sensitization course titled 'Interpreting Gender at its Intersections', organized by the School of Women's Studies in collaboration with UGC-HRDC, Jadavpur University. 30 November, 2018.
14. Moderated a panel discussion on 'Filming the City' at the 4-day exhibition/colloquium on 'New Cities: Imagining and Imaging the Global City in India', organized by the School of Media Communication and Culture, Jadavpur University, supported by UGC-UPE phase-II and Indian Council for Social Science Research, in collaboration with the Indian Council for Cultural Relations. ICCR Nandalal Bose Gallery, Kolkata, 17 February, 2019.
15. Chaired the presentation on 'Politics and Cinema: Revisiting the Nehruvian Times' by Professor Partha S. Ghosh, Senior Fellow, Institute of Social Sciences, New Delhi, Department of International Relations, Jadavpur University, 19 February, 2019.
16. Introduced two films (*Inexstinguishable Fire*, dir: Harun Farocki and *A German Youth*, dir: Jean-Gabriel Périot) at the weeklong event titled '1968 Global Youth Protests: Kolkata and Germany' organized by the Centre of Advanced Study, Phase III, Department of Comparative Literature, Jadavpur University, and the Goethe-Institut/Max Mueller Bhavan, Kolkata. Jadavpur University, 25 and 26 February, 2019.
17. Lecture on 'Media and Politics: Key Approaches', at the UGC-sponsored 6-month certificate course on 'Radio Production', School of Media, Communication and Culture, Jadavpur University, 18 March, 2019.

Madhuja Mukherjee

1. In conversation with Partha Chatterjee (et al): "Is Kolkata a Colonial City?" at *Inter-Asia Cultural Studies Summer School 2018* on the 'Calcutta: City/Contemporaneity', organized by Department of Film Studies, Jadavpur University in association with CSCS, and the Victoria Memorial Hall, Kolkata, June 2018.
2. Lectures on "Bengali Cinema: Studio Era" and "History of Indian Cinema" at Film Appreciation Course, organized by Chalachitra Satabarsha Bhavan, Govt. of West Bengal, July 2018.
3. Lecture on "Cinema, Work, and Women", organized by the Women's Studies Centre, Lady Brabourne College, Kolkata, 8 March, 2019.
4. Talk on "Beyond the Literary: Many Contours of Adaptation" at the Panel titled Towards An Art of Literary Adaptation, organized by the Advanced Research Centre of Indian Writing in English, Lady Brabourne College, Kolkata, 28 March, 2019.

Anindya Sengupta

1. Conducted an interaction with participants on Day 1 at the *International Summer School 2018* titled 'Calcutta: City/Contemporaneity' from June 18-29, 2018 organized by the Inter-Asia Cultural Studies Forum and the Department of Film Studies, J.U. [in collaboration with Lingnan University, Hong Kong, and the Centre for the Study of Culture & Society, Bangalore].

Manas Ghosh

1. 'Bangla Chalacchitra o Sanskriti', Bengali language workshop for the students of Tokyo University, Foreign Studies, Dept. of Bengali, Jadavpur University, 4-16 February, 2019.
1. Lecture on 'Masculinity and Religion Complex in Anand Patwardhan's Film', Indian Institute of Advance Study, Shimla, 20 June, 2018.
2. Lecture on 'Latin American Cinema', Film Appreciation Course, Chalachitra Satabarsha Bhavan, Govt. of WB, 7 July 2018.
3. Lecture on 'Contemporary Asian Cinema: China', Film Appreciation Course, Chalachitra Satabarsha Bhavan, Govt. of WB, 10 July 2018.
4. Lecture on 'Film and Literature: 100 Years of Bolshevik Revolution', Bardhaman Little Magazine Mela, Bardhaman, 24 November 2018.
6. Lecture on 'Abbas Kiatostami's World', Coochbihar Chalachitra Utsav, Coochbihar, 18 January 2019.

Subhajit Chatterjee

1. Invited speaker at a Panel Discussion on 'Towards an Art of Literary Adaptation' organized by the Advanced Research Centre for Indian Writing in English at Lady Brabourne College, Kolkata on March 28, 2019.
2. Invited as resource person to deliver a lecture on 'Japanese Cinema' at the Film Appreciation Course 2019, organized by the Department of Film & Television Production at Satyajit Ray Film & Television institute, Kolkata, on March 27, 2019.
3. Invited lecture presentation on 'From Printed Text to Moving Image: Its Vitality for Regional Cinemas Today' at the 10th Indian Film Festival of Bhubaneswar 2019, organized by the Film Society of Bhubaneswar in collaboration with the Forum for Film Studies and Applied Arts, India, on January 26, 2019.
4. Chaired a session by Firdous Azim on 'Dialogues Between Two Bengals: Urban Culture & Gender' at the *International Summer School 2018* titled 'Calcutta: City/Contemporaneity' from June 18-29, 2018 organized by the Inter-Asia Cultural Studies Forum and the Department of Film Studies, J.U. [in collaboration with Lingnan University, Hong Kong and Centre for the Study of Culture & Society, Bangalore], on June 28, 2018.
5. Invited as resource person to deliver lectures on 'Hollywood Cinema' and 'Indian Popular Cinema' at the Film Appreciation Course 2018 organized by Maya Art Space, Kolkata on June 9 and 13, 2018.

Shradhanjali Tamang

1. Invited for a panel discussion on 'Chandrika', organized by the Department of Nepali Language and Literature, Sikkim Central University, on 5th October 2018.
2. Lecture on 'The Oral traditions in Darjeeling and Sikkim Hills' at Damber Singh College, Tadong, Gangtok, on 6th October 2018.

Arijeet Mandal

1. Chaired a session by Rosinka Chaudhuri on "The City as Poetic Image: Then and Now" at the *International Summer School 2018* titled 'Calcutta: City/Contemporaneity' from June 18- 29, 2018 organized by the Inter-Asia Cultural Studies Forum and the Department of Film Studies, J.U. [in collaboration with Lingnan University, Hong Kong and Centre for the Study of Culture & Society, Bangalore], on June 27, 2018.

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3. B. Seminar/ Workshop/Conference/Symposium Attended:

(Name of the Teacher, name of the Paper Presented, Name of the Seminar, Place, Duration)

Moinak Biswas

1. Paper titled 'Where to Look for Cinema', at seminar on 'Cinema in the Age of New Media, Challenges and Opportunities', organized by the Satyajit Ray Film and Television Institute of India, Kolkata, July, 2018.
2. Paper titled 'That which Flows', Plenary Address at International Conference on 'Region/Nation/Trans-Nation: Literature-Cinema Interface', organized by the Department of Humanities & Social Sciences, Birla Institute of Technology & Science, Pilani, K.K. Birla Goa campus, February, 2019.

Abhijit Roy

1. Moderated a panel discussion on 'Mahabharat in Comics' at the three-day national seminar on 'The Epic of the Moment: Exploring the Narrative Cultures of the Mahâbhârata', organized by the Department of Bengali, Presidency University, in collaboration with North East India Company (Silchar, Assam). Presidency University, 3 April, 2018.
2. 'Music of Satyajit Ray and the aesthetics of *simplicity*', paper presented at the national seminar on 'The Literature of A Century' organized by Prof. Rita Chatopadhyay and Sanskrit Pustak Bhandar, Kolkata, Jadavpur University, 27 April, 2018.

Madhuja Mukherjee

1. Speaker, 2nd Bangladesh Summit, *Forms of Sovereignty: Art, Cinema and Popular Culture*, University of California, Berkeley, February 2019.
Paper: 'Text, Speech, Idiom: Landscape, Language and the meandering flow of river films'.
2. Speaker, Institute Collouium, Institute of Ethnology, Westphalian Wilhelms-University, Münster, Germany, January 2019.
Workshop, 'View of a City: A visual record of Kolkata and the omniscient camera-eye'.
3. Speaker Institute Collouium, Institute of Ethnology, Westphalian Wilhelms-University, Münster, Germany, November 2018.
Talk, 'Little Cinema Cultures: The High and Low End of Contemporary Regional Cinema'
4. Speaker, 25th *European Conference on South Asian Studies*, Centre d'Etudes de l'Inde/Asie du Sud, Paris, July 2018.
Paper: 'Speaking Through Graphic Narratives: The implication of graphic-(re)creations of Nabarun Bhattacharya's novels'.
5. Speaker, *Asia in Motion, Geographies and Genealogies*, Association for Asian Studies in Asia, Ashoka University, Delhi, July 2018.
Paper: 'Image, Text, and Stars: The varying patterns of song-booklets'.
6. Lecture: 'Time Travel Via CCTV: An immersive History of a Place', *Inter-Asia Cultural Studies Summer School 2018* on 'Calcutta: City/Contemporaneity', at the Department of Film Studies, Jadavpur University, Kolkata 29 June, 2018.

Subhajit Chatterjee

1. 'Tradition Under Assault : Obscene and Degraded Images in/of Kolkata's New Cinemas', research presentation at the *International Summer School 2018* titled 'Calcutta: City/Contemporaneity' from

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June 18- 29, 2018, organized by the Inter-Asia Cultural Studies Forum and the Department of Film Studies, J.U. [in collaboration with Lingnan University, Hong Kong and Centre for the Study of Culture & Society, Bangalore], June 22, 2018.

Shradhanjali Tamang

1. Participated in a two-day International Workshop on Academic Social Responsibility organized by the Centre for Translation of Indian Literatures (CENTIL), Jadavpur University, as part of Project 'Anuvad' (UGC UPE Phase II: Cultural Resources and Social Sciences), in collaboration with the Humanities in India Program in University of East Anglia, held at Jadavpur University on 26th and 27th July, 2018.
2. Participated as a resource person in a two day International Workshop on "Locating Indigeneity: Creation Songs from India, Canada, New Zealand and Australia" organized by the Centre for Advanced Study (Phase III), Department of Comparative Literature, Jadavpur University held at Jadavpur University on 25th and 26th September, 2018
3. Presented a paper titled 'Discussing the Oral Nature of Tamba tradition' in a Three-Day National Level Centenary Commemoration Seminar on the Establishment of the Department of Modern Indian Languages at the University of Calcutta, organized by the Department of Comparative Indian Language and Literature, University of Calcutta in Collaboration with the Central Institute of Indian Languages on between 6th to 8th March, 2019.

3. C. Seminar/ Workshop/Conference/Symposium Organized:

(Name of the Teacher, Name of the Paper Presented, if any, Name of the Seminar, Place, Duration)

Moinak Biswas

Co-organizer (with Gayatri Chakravorty-Spivak) of 3 sessions of 'Workshop on Ritwik Ghatak', at the University of California, Irvine (May, 2018), in Kolkata (November, 2018) and at Columbia University, New York (December, 2018).

Madhuja Mukherjee

Coordinator, *Inter-Asia Cultural Studies Summer School 2018* on 'Calcutta: City/Contemporaneity' at the Department of Film Studies, Jadavpur University, Kolkata, June 2018.

4. A. Books/Monographs etc. Published:

(Name of the Teacher, name of the book, Name of the Publisher)

Manas Ghosh

1. "*Chalachchitre Trito Bishwa: Iraner Chhobi*" (*Third World in Cinema: Iran*) Boi-chitra Prakashani, Kolkata (January 2019)
4. **B. Articles Published in Journals:** (Including National/International & Peer-Reviewed Journals)
(Name of the Teacher, Name of the Articles, name of the Journal, date of Publication, Volume)

Madhuja Mukherjee

1. "When was the 'studio era' in Bengal: Transition, transformations and configurations during 1930s" in *Widescreen Journal*, 8.1 (January 2019) [Refereed journal].
2. "Framing the Couple: Intimacy, Hindi Cinema and Film Publicity (1950s-60s)", Visual-essay, *Tasveer Ghar; A Digital Archive of South Asia Visual Popular Culture* (January 2019).
3. "Musing Through Art Practice and Archival Objects" in *Kaurab* (ONLINE) no. 53, September 2018.

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Shradhanjali Tamang

1. “Indigenous History and the Tamba Tradition in Darjeeling and Sikkim Himalayas,” by Shradhanjali Tamang, in Anvita Abbi ed, *Route to Oral Literature*. New Delhi: Sahitya Akademi, 2018, pp. 117-123.
2. “Engaging with the Oral: Translating Lepcha and Tamang Traditions” by Sayantan Dasgupta and Shradhanjali Tamang in Anvita Abbi ed., *Route to Oral Literature*. New Delhi: Sahitya Akademi, 2018, pp. 91-102.
3. “Darjeeling Pahad o Nepali Lokkabya”, by Shradhanjali Tamang, translated by Bhaskar Majumder, in *Parikatha*, Sahityo o Songskriti Bishoyok

5. Collaborative Programmes:

Madhuja Mukherjee curated a film programme titled ‘City of Dread’, comprising a series of experimental/documentary/video essays for WOW.20/Mexico, at Codec – International Festival of Experimental Film & Video, September 2018.

5. Major Achievements:

Madhuja Mukherjee

1. Madhuja Mukherjee’s audio documentary titled *RATAN BAI VS. NEW THEATRES*, (Dual Chanel Sound Project, 2019), was selected at the 15th IAWRT Asian Women’s Film Festival, New Delhi, March 2019.
2. Madhuja Mukherjee taught in the Winter Semester 2018-19 at the Institut für Ethnologie, Westfälische Wilhelms-Universität Münster, Germany.

Manas Ghosh

1. Awarded the UGC-IUC Associateship at the Indian Institute of Advance Study, Shimla, June 2018 on the topic ‘Masculinity and Violence in Anand Patwardhan’s Cinema’.

Anindya Sengupta

1. Course Coordinator of the module ‘Film Appreciation – Language of Cinema’ as part of the SWAYAM MOOC Courses, hosted by EMMRC, Kolkata and Consortium for Educational Communication, New Delhi.

HISTORY

Phone : + 91-33-2414-6962
Int. : 2457-2281
H.O.D. : Prof. Subhasis Biswas
E-mail : hod@history.jdvu.ac.in
 hod.history@jadavpuruniversity.in
Website : www.juhistory.org

1. A. Courses Offered:

Name of the Course	Duration of the Course	Annual Intake
B.A. Honours	3 years, 6 semester	72
M.A.	2 years, 4 semester	65
MA (Evening)	2 years, 4 semester	50
M.Phil	2 years, 4 semester	19
Ph.D (by coursework)	(as per UGC guidelines)	

2. B. Number of Faculty Members:

Sanctioned post – 18

Currently- 16

The department at present has **15** full time faculty members and **1** faculty member is on lien and **2** posts are vacant.

Name: **Mahua Sarkar**

Designation: Professor

Qualification: M.A., Ph.D., (J.U.)

(Currently Pro-Vice-Chancellor, Burdwan University)

Name: **Ranjan Chakrabarty**

Designation: Professor

Qualification: M.A. Ph.D. (J.U.)

(On lien Currently Vice-Chancellor, Vidyasagar University)

Name: **Anuradha Roy**

Designation: Professor

Qualification: M.A. (D.U.), Ph.D. (C.U.)

Name: **Nupur Dasgupta**

Designation: Professor

Qualification: M.A., Ph.D. (J.U.)

Name: **Rup Kumar Barman**

Designation: Professor

Qualification: M.A., Ph.D. (N.B.U.)

Name: **Kaushik Roy**

Designation: Professor

Qualification: M.A., Ph.D. (J.N.U.)

Name: **Subhasis Biswas**

Designation: Professor

Qualification: M.A., Ph.D. (J.U.)

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Name: **Sudeshna Banerjee**

Designation: Associate Professor

Qualification: M.A. (C.U.), Ph.D (SOAS, London)

Name: **Maroona Murmu**

Designation: Associate Professor

Qualification: M.A, M.Phil., Ph.D, (J.N.U.)

Name: **Suchetana Chattopadhyay**

Designation: Associate Professor

Qualification: M.A. (J.U.), Ph.D. (SOAS, London)

Name: **Tilottama Mukherjee**

Designation: Associate Professor

Qualification: M.A., M. Phil. (J.N.U.), Ph.D. (Cambridge)

Name: **Samir Das**

Designation: Assistant Professor

Qualification: M.A.

Name: **Chandrani Banerjee Mukherjee**

Designation: Assistant Professor

Qualification: M.A, Ph.D. (B.H.U.)

Name: **Samarpita Mitra**

Designation: Assistant Professor

Qualification: M.A.(Cal), Ph.D. (Syracuse University)

Name: **Debajit Dutta**

Designation: Assistant Professor

Qualification: M.A., Ph.D. (N.B.U)

Name: **Utsa Ray**

Designation: Assistant Professor

Qualification: M.A. (Cal), Ph.D., (Pennsylvania State University)

2. A. Area of Research Activities:

The Department received the University Grants Commission's prestigious Special Assistance Programme in 2005 for Research on Environmental History. The Programme has been upgraded to DSA-Phase I. This is in effect from 01.04.2015.

Thrust area: **Environmental History**

Related thrust area: **Social History of Science and Technology and Sanitation.**

Coordinator: Prof. Nupur Dasgupta

Deputy Coordinator: Prof. Rup Kumar Barman

Faculty Profiles:

Professors

PROF. MAHUA SARKAR

1. **Name:** Mahua Sarkar
2. **Designation:** Professor

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3. (A) Area of Research Activities: Social and Cultural History of Bengal,
(Broad Areas) History of Science, Medicine and Public Health, Environmental History

4. (A) Invited Lectures Delivered/ Session Chaired: 11

(Name of the Teacher, Type of Participants, Name of the Seminar/Conference etc., Place, Duration)

1. Delivered lecture on “Towards an Alternative Historiography”, UGC-Human Resource Development Centre, The University of Burdwan, 25th July, 2018.
2. Invited as a speaker for “Historian Tapan Roy Chaudhuri Memorial Lecture 2018”, Paschimbanga Anchalik Itihas o Loksanskriti Charcha Kendra, Kolkata, 18th August, 2018.
3. Delivered lecture on “The Idea of Justice and the Calcutta High Court”, 2nd Conference on History of Modern Bengal, The Asiatic Society, Kolkata, 25th August, 2018.
4. Delivered a speech on “NRC, Nationalism and Communalism”, HEPSN Cell, Jadavpur University, 31st August, 2018.
5. Invited to speak in a Two Day Workshop on “Gender and Recent Trends”, Centre for Women’s Studies, University of North Bengal in collaboration with Department of History, Surya Sen Mahavidyalaya, 12-13th September, 2018.
6. Delivered a speech on “Environmental History”, UGC-Human Resource Development Centre, The University of Burdwan, 24th September, 2018.
7. Invited to act as resource person in the ICSSR sponsored National Seminar and delivered lecture on “Tribes of Odisha: Historical Analysis”, Department of History, Panchayat College, Bargarh, Odisha, 29th September, 2018.
8. Delivered a speech on “Methods of History”, Department of History, Aliah University, 4th November, 2018.
9. Invited to act as resource person in the 1st Refresher Course in Research Methodology & Data Analysis for Social Sciences and delivered a speech on “Research Methodology: Environmental Study as an Alternative Tool”, UGC-Human Resource Development Centre, The University of Burdwan, 3rd December, 2018.
10. Delivered lecture on “Relevance of History” organized by the UGC-Human Resource Development Centre, The University of Burdwan on 13th December, 2018.
11. Invited to chair a session and also delivered a lecture on “Pre-colonial Nature in 16th-18th century Bengal” in the UGC sponsored International Seminar on Concept and Canvas of Knowledge: Asian Studies From Pre-Modern to Modern Times, Department of History, Visvabharati University, 22-23 February 2019.

(B) Seminar/Workshop/Conference/Symposium Attended: 1

(Name of the Teacher, Name of the Paper Presented, Name of the Seminar, Place, Duration)

1. Presented a paper on “The United States and India: Moving towards a Partnership on Nature”, the Fulbright Alumni Conference of the Multinational Institute of Education, New York, Florence, Italy, 23rd March, 2019.

5. (A) Books/ Monographs etc. Published: 2

(Name of the Teacher, Name of the Book, Name of the Publisher)

1. Book: *Banglar Byabharjibi*, a booklet published by Anchalik Itihas o Sanskriti, 2018.
2. Edited Volume: *Glimpses of Environmental History*, edited jointly with Subhasis Biswas, Alphabet Books and Manohar, New Delhi, 2018.

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(B) Articles Published in Journals: (Including National/International & Peer-reviewed Journals): 5

(Name of the Teacher, Name of the Articles, Name of the Journal, Date of Publication, Volume)

1. “Disasters and Rivers in Early Colonial Bengal: A Saga of Environmental History”, in Mahua Sarkar and Subhasis Biswas, ed., *Glimpses of Environmental History*, Alphabet Books and Manohar, New Delhi, 2018.
2. Co-authored with Bishwendu Ghosh, “British Colonial Policy, National Education Movement and Jadavpur University: Emergence of a Comprehensive System without Politics”, in Prasanta Mandal and Anjona Chattopadhyay, ed., *Murmurs of History: Essays in Honour of Professor Ranjit Sen*, Progressive Publishers, Kolkata, 2018.
3. “Jangalmaheler Paribesh Itihaser Ghatana O Anchaler Lokagan: Samajjibaner Ekti Jiba Dalil”, in Lakshindar Paloi, ed., *Jangalmahaler Paribesher Itihase Luptapray Lokasamskriti Parampara*, Kolkata, 2018.
4. “Paribesher Itihas o Jhumur Gan”, in Ranjit Sen et.al. *Itihaser Alinde*, Suchintan, Kolkata, 2018.
5. “The Idea of Justice and Evolution of the Calcutta High Court (1862-1915)” in Sabyasachi Bhattacharya, ed., *Comprehensive History of Bengal*, The Asiatic Society and Primus, New Delhi, 2019.
7. **Major Achievements:** Served as the Pro Vice-Chancellor (Academic), The University of Burdwan, till February 2019.

PROF. RANJAN CHAKRABARTI

At present the Vice-Chancellor of Vidyasagar University, Paschim Midnapore

PROF. ANURADHA ROY

1. **Name:** Anuradha Roy
2. **Designation:** Professor
3. **(A) Area of Research Activities:** Intellectual and Cultural History, with special reference to modern India
(Broad Areas)
4. **(A) Invited Lectures Delivered/ Session Chaired:**
(Name of the Teacher, Type of Participants, Name of the Seminar/Conference etc., Place, Duration)
 - a) Talk on “Bronze Age Mesopotamia: State Formation, Religion and Culture” at a workshop for college teachers organized by the Department of History, RKSM Vivekananda Vidyabhavan in collaboration with the Department of History, West Bengal State University on “Aspects of Teaching Early History: From Pre-History to the Decline of Rome”, on 10th August 2018.
 - b) Sabitri Ray Birth Centenary lecture organized by Paschim Banga Bangla Academy in collaboration with Bethune College on 20.2.2019. Topic: “Abeg, Manan, Srijan” (Feeling, intellect, creativity)
 - c) Paper titled “Knowing Society: The problem of translating Western ideas in Indian Context’ at an international seminar on ‘Concept and Canvas of Knowledge: Asian Studies from Pre-modern to Modern Times” organized by the Dept. of History, Visva-Bharati, 22-23 February, 2019.
 - d) Special Lecture as UGC SAP DRS (Phase III) Visiting Fellow under UGC DRS SAP (Phase III) of Dept. of History, Visva-Bharati on 25.02.2019. Topic: “Seeking Freedom through Humour: A study of nationalist literature of 19th century Bengal”.

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- e) Keynote address at a state-level research scholars seminar organized by Department of History, West Bengal State University on “Approaching New Fields: Aspects of Society, Economy and Politics in Indian History” on 26 March 2019. Topic: “Towards Disambiguating the Conceptual Categories used in Modern Indian History”.
- f) Chaired a session on “Religion, Space and Visual Culture” at the International Seminar on Environment, Religion & Culture: Research Methods and Perspectives on Precolonial South Asia Organised by UGC DSA – 1 SAP, Department of History, Jadavpur University in collaboration with Anneliese Maier Research Award of Humboldt Foundation, Bonn & Ludwig Maximilian University, Munich, on 6 February 2019.

5. (A) Books/ Monographs etc. Published:

(Name of the Teacher, Name of the Book, Name of the Publisher)

1. *Itihaser Harek Gero* (Different knots of history), a collection of essays, Anushtup, Kolkata, January 2019

(B) Articles Published in Journals: (Including National/International & Peer-reviewed Journals)

(Name of the Teacher, Name of the Articles, Name of the Journal, Date of Publication, Volume)

1. A review article based on *Anya Ek Renaissance* by Sumita Das, *Arek Rakam*, 2 January 2019 (This is not an academic journal though)

6. **Collaborative Programmes:** Edited a 2-volume book on *Kolkata in space, time and imagination* jointly with Melitta Waligora – a joint research project of Humboldt University and JU – the first volume is to be published shortly.

PROF. NUPUR DASGUPTA

1. **Name** : Nupur Dasgupta

2. **Designation** : Professor

3. **Areas of Research Interest** : Ancient Indian History and Archaeology, History of Science, Technology, Medicine

4. Awards/ Fellowships/Scholarships/Grant/Research Support:

1. Visiting Scholar, Graduate School of Distant Worlds, Ludwig Maximilian University, Munich, April 2018.
2. Visiting Fellow, Department of History, Calcutta University, March 2019.

5. Publications (Books/Edited Books/Articles in Edited Volumes & Journals/ Reviews/ Others):

Articles Published in Edited Volumes and Learned Journals:

1. “The Idea of Sacred in Inscriptions related to Temple and Religious Establishments in Ancient Karnataka”, in K. Mavali Rajan, Remya V.P. and Sarita Khettry, eds., *Facets of Temple Culture*, (Proceedings of ICHR sponsored National Seminar organized by the Department of Ancient Indian History, Culture and Archaeology, Visva Bharati), New Delhi: Kaveri Books, March 2018, pp. 177 – 192.
2. “An Inscription of the Western Chalukya King Vikramaditya VI Tribhuvanamalla”, *Pratna Samiksha*, A Journal of Archaeology, Vol. 9, Nov. 2018, pp. 59 – 68.
3. “Social History of Women in Ancient Times: Emergent Methodological and Historiographical Issues”, in Abdul Momin Chowdhury and Ranabir Chakravarti, eds., *History of Bangladesh: Early Bengal in Regional Perspectives (up to c. 1200 CE)*, Vol. II, Dhaka, General Secretary, Asiatic Society of Bangladesh, Aug. 2018, pp. 91 – 106.

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4. "Jainism", in Abdul Momin Chowdhury and Ranabir Chakravarti, eds., *History of Bangladesh: Early Bengal in Regional Perspectives (up to c. 1200 CE)*, Vol. II, Dhaka, General Secretary, Asiatic Society of Bangladesh, Aug. 2018, pp. 313 – 340.
5. "Sanskrit Literature and Technical Treatises", in Abdul Momin Chowdhury and Ranabir Chakravarti, eds., *History of Bangladesh: Early Bengal in Regional Perspectives (up to c. 1200 CE)*, Vol. II, Dhaka, General Secretary, Asiatic Society of Bangladesh, Aug. 2018, pp. 535 – 590.

6. Papers Presented in Seminars/ Conferences/ Workshops/ Invited Lectures:

International:

1. Presented a paper on "*Prameha* in Ayurvedic Texts: Identification of a Category of Disease" at the International Seminar on "Health, Diseases and Society: History of Medicine in India and Beyond" being organized by The Asiatic Society on 27th and 28th February, 2019.
2. Presented a paper on "Beyond Boundaries: Knowledge Transmissions between South Asia and the Perso-Arabic World", at an international seminar on "Concept and Canvas of Knowledge: Asian Studies from Pre-modern to Modern Times" organized by the Department of History, Visva-Bharati, 22-23rd February, 2019.

State-level

1. Delivered a Talk on "The Neolithic Phase in Human History: Exploring Revolution & Transition" at a workshop for college teachers organized by the Department of History, RKSM Vivekananda Vidyabhavan in collaboration with the Department of History, West Bengal State University on "Aspects of Teaching Early History: From Pre-History to the Decline of Rome", on 10th August 2018.

Sessions Chaired:

International:

1. Chaired a panel on "Religion, Art and Sites of Worship: Networks through and Beyond South Asia" at the International Conference – AAS-in-ASIA 2018, organized under the Association for Asian Studies, Jointly with the Ashoka University, July 5-8, 2018.
2. Chaired a session on "Religion and Ideas at the International Seminar on Environment, Religion and Culture: Research Methods and Perspectives on Precolonial South Asia", organized by the UGC DSA – 1 SAP, Department of History, Jadavpur University in collaboration with the Anneliese Maier Research Award of Humboldt Foundation, Bonn & Ludwig Maximilian University, Munich on 5th and 6th February, 2019.
3. Chaired a session on at the Two-Day International Seminar on "Health, Diseases and Society: History of Medicine in India and Beyond", organized by The Asiatic Society, Kolkata on 27th and 28th February, 2019.

National:

1. Chaired a session at the National Seminar on "Religion and Region in Indian History", organized by The Asiatic Society on 25th and 26th March, 2019.

Seminar Organised:

International:

1. Coordinator of the International Seminar on "Environment, Religion and Culture: Research Methods and Perspectives on Precolonial South Asia", organized by the UGC DSA – 1 SAP, Department of History, Jadavpur University in collaboration with the Anneliese Maier Research Award of Humboldt Foundation, Bonn & Ludwig Maximilian University, Munich on 5th and 6th February, 2019.

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2. Coordinator of the Two-Day International Seminar on “Health, Diseases and Society: History of Medicine in India and Beyond”, organized by The Asiatic Society, Kolkata on 27th and 28th February, 2019.

7. Research Projects:

1. Research Project on “Health, Environment and Culture of Home Remedies in the Nineteenth and Early Twentieth Century Bengali Serial Publications” sponsored by UGC DSA – 1 SAP, Department of History, 2018–19.

RUP KUMAR BARMAN

1. **Name: Dr. Rup Kumar Barman**

2. **Designation: Professor**

3. **(A) Area of Research Activities:** Forced Migration Studies, Dalit Studies and Environmental History

(B) Major Research Project:

1. “Practice of Folk Medicine: A study on the Folk Medicine of the Rajbanshis of Sub-Himalayan Bengal in Historical Perspective”, The Indian National Science Academy (INSA, New Delhi)-Sponsored Project (1st July 2017 to 31st December, 2018).
2. “The Dwellers of India-Bangladeshi Enclaves and their Struggle for Survival: A Study on the Indo-Bangladesh Enclave Dwellers from 1947 to 2017” (Vide ICSSR F.No.- 02/314/SC/2017-18/RP/Minor, dated 29.12.2017) , Project cost: Rs. 3,50,000.00 (February 2018 to 22nd February 2019).

Ongoing Project

1. “Migration, State Policies and Contested Citizenship in South Asia: A Study on India, Bangladesh and Bhutan in the context of Global South”, RUSA 2.0 Project (Jadavpur University February 2019 onwards)

4. **(A) Invited Lectures Delivered/ Session Chaired: 05**

1. Presented a paper titled “Migration in Theoretical Perspective” to the 70th Orientation Course organized by the UGC-HRDC, Jadavpur University, Kolkata, on 16.07.2018.
2. Paper titled “The Quit India Movement in International Perspective” presented to the International Seminar on Revisiting 1947:75 Years of the Quit India Movement , organized by Paschim Bangla Itihas Samsad and Amar Kutir, Amar Kutir , Santiniketan, Birbhum, Dated 4th and 5th August 2019.
3. Chaired a Session in the UGC-DEB-sponsored State Level Seminar on “Adhunik Bangla: Oitesyer Sandhane O Pranta Seemar Kolkata”, Netaji Subhas Open University, September 1, 2018.
4. Presented a paper titled “Refugee Problems in Contemporary South” to the 70th Orientation Course organized by the UGC-HRDC, Jadavpur University, Kolkata, on 05.09.2018.
5. Paper titled “State Policies and Forced Migrations: A Study on the *Lhotshampas* (1953-2015)” presented to the International Conference on “State and Society in South Asia: A Historical Perspective” organized by Department of History, Jagannath University, Dakha, Bangladesh, 15-16 March 2019.
6. Paper titled “Violence-Induced forced migration’ from colonial Bengal to ‘conflict-induced remigration from postcolonial host society’: A Historical Perspective” presented to the International Seminar on “Situating Memories : Political Violence in Colonial and Postcolonial India”, Rabindra Bharati University, Kolkata 700042, Dated 28-29th March 2019.

5. **Publications (Books/ Edited Books/Articles in Edited Volumes & Journals/ Reviews/ Others):**

A. Books

1. *Jatpat, Jati Rajniti O Dalit Pratarka* (Kolkata, Alphabet Books, 2019).

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2. *The Origin and Evolution of the Enclaves of India and Bangladesh: A Historical Study* (New Delhi, Abhijeet Publications, 2019).
3. *Nature, Communities and State: An Environmental History of Bengal and Assam* (New Delhi, Abhijeet Publications, 2019).
4. *Practice of Folk Medicine in Sub-Himalayan Bengal: A Study on the Folk Medicinal Practices of the Rajbanshis in Historical Perspective*, (New Delhi, Abhijeet Publications, 2019).

B. Article Published in Referred Journal

1. "Warfare and Kingdom: A Study on the State Formation in Sub-Himalayan Assam and Bengal (From Fifteenth to Eighteenth Century)", *Uttar Prasanga: An Analytical Bi-lingual Journal on Social Dynamics*, Vol.12, No. 3-4, 2018, (ISSN 2348-2036), pp. 3-20.
2. Rup Kumar Barman: "Right-Left-Right : The Scheduled Castes in the Legislative Assembly Elections in West Bengal from 1952 to 2016", *The Contemporary Voice of Dalit*, Vol. 10, No. 2 (2018), pp.1-16.

PROF. KAUSHIK ROY

1. **Name:** Dr Kaushik Roy
2. **Designation:** Guru Nanak Chair Professor, Department of History, Jadavpur University
3. **(A) Area of Research Activities: Global History of Warfare, Counter-insurgency and State Building** (Broad Areas)
(B)Major Research Project:
(Departmental/Individual, Name of the Project/Funding Agency)
UGC DRS Project: Naval Warfare: A Global Perspective
4. **(B) Articles Published in Journals: (Including National/International & Peer-reviewed Journals)**
(Name of the Teacher, Name of the Articles, Name of the Journal, Date of Publication, Volume)
"From Kut to Mosul: Lessons Learnt by the Indian Army in Mesopotamia, 1914-18", in Robert Johnson and James E. Kitchen (eds.), *The Great War in the Middle East A Clash of Empires* (London/ New York: Routledge, 2019), pp. 143-62.
6. **Collaborative Programmes:** I and Professor Dennis Showalter are editing The Oxford Handbook of Warfare in Asia. Along with Professor Michael Charney, I am editing The Routledge Handbook of Global History of Warfare. I am also editing the volume on Renaissance Warfare in the six volume set to be published by Bloomsbury under the editorship of Prof Dennis Showalter and Prof Kathryn Barbier.
7. **Major Achievements:** Editor of OBO Online Military History Project of Oxford University Press, New York. Editors of *International Area Studies Review* published from SAGE. Editors of Routledge's War and Society in South Asia Series and Wars and Battles of the World Series. Global Fellow of Peace Research Institute Oslo (PRIO), Norway.

Associate Professors

DR. MAROONA MURMU

1. **Name:** Maroona Murmu
2. **Designation:** Associate Professor
3. **(A) Area of Research Activities:**
Socio-cultural History of Modern South Asia, Gender Studies, Caste Question in West Bengal

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(B) Major Research Project: Nil

Ongoing Project : Education amongst Adivasis in Hingalganj Block, Sunderban, North 24 Parganas, West Bengal under RUSA 2.0 Minor Research Project

4. (A) Invited Lectures Delivered/ Session Chaired:

1. Invited speaker for the seminar titled “Poetry, Performance and Publishing: Lalan, Kabir and Voices from the Marginals”, organised by Bird & Backett Cultural Legacy Project, USA and Sadinama Prakashan, India, Indian Association Hall, 27 June, 2018.
2. Presented a paper titled “Silencing the Caste Question in West Bengal” in the International Seminar on “Asia in Motion: Geographies and Genealogies” organized by Association for Asian Studies, Yale University and Ashoka University, 5-8 July, 2018.
3. Presented a paper titled “Assertion of Dalit Women in West Bengal” in the International Seminar on Dalit in India: Socio-cultural and Literary Representations organized by Purnidevi Chowdhury Girls’ College and S.F.S. Mahavidyalaya, Birbhum on 8-9 March, 2019.

5. (A) Seminar/Workshop/Conference/Symposium Organized:

Co-Coordinator of the International Seminar on “Environment, Religion & Culture: Research Methods and Perspectives on Precolonial South Asia” organized by Anneliese Maier Research Award of Humboldt Foundation, Bonn & Ludwig Maximilian University, Munich and Department of History Jadavpur University on 5-6 February, 2019.

6. (A) Articles Published in Journals: (Including National/International & Peer-reviewed Journals)

1. “Inscribing the Self by the Cultural Others: Kailashbashini Debi and Saradasundari Debi”, *Social Trends*, 5 (2018):15-36. ISSN: 2348-6538
2. “Santal Hool: Protirodher Akhyan”, *Neer*, 19-20, (August 2018): 41-49

DR. SUCHETANA CHATTOPADHYAY

1. Name: Dr. Suchetana Chattopadhyay

2. Designation: Associate Professor, Department of History, Jadavpur University

3. (A) Area of Research Activities: (Broad Areas)

Histories of cities, communism, colonial surveillance, workers, Muslim intellectuals, First World War.

4. (A) Invited Lectures Delivered/ Session Chaired:

(Name of the Teacher, Type of Participants, Name of the Seminar/Conference etc., Place, Duration)

1. “They Shall Not Grow Old” (event commemorating the end of the First World War), School of Media, Communication and Culture, JU and British Council, Kolkata, India, 20 November 2018.

(B) Orientation Course/Refresher Course Attended:

(Name of the Teacher, Title of the Course, Duration, Place)

1. One week skill development course on “Digital libraries of the future”, Department of Library and Information Science, Jadavpur University, 24-31 August 2018.

5. (A) Books/ Monographs etc. Published:

(Name of the Teacher, Name of the Book, Name of the Publisher)

1. *Voices of Komagata Maru: Imperial Surveillance and Workers from Punjab in Bengal*, Tulika Publishers, New Delhi, 2018.

(B) Articles Published in Journals: (Including National/International & Peer-reviewed Journals)

(Name of the Teacher, Name of the Articles, Name of the Journal, Date of Publication, Volume)

1. “Workers and Militant Labour Activists from Punjab in Bengal (1921-1934)”, *Socialist Studies/Etudes socialistes* (International Journal/ Special Issue: The Ghadar Movement), ISSN: 1918-2821, Fall 2018, Vol.13 (2), pp.97-113.

DR. TILOTTAMA MUKHERJEE

1. **Name:** Dr Tilottama Mukherjee

2. **Designation:** Associate Professor

3. **Area of Research Activities:**

Medieval Indian History especially eighteenth-century Bengal, early modern economic history

4. **Seminar/Workshop/Conference/Symposium Organized:**

International: Coordinator (with Professor Nupur Dasgupta and Dr Maroona Murmu) of Two-day International Seminar on “Environment, Religion & Culture: Research Methods and Perspectives on Precolonial South Asia”, organised by the UGC DSA – 1 SAP, Department of History, Jadavpur University [In collaboration with Anneliese Maier Research Award of Humboldt Foundation, Bonn & Ludwig Maximilian University, Munich) 5th and 6th February 2019.

Assistant Professors

DR. CHANDRANI BANERJEE MUKHERJEE

1. **Name:** Dr. Chandrani Banerjee Mukherjee

2. **Designation:** Assistant Professor

3. **Areas of Research Interest:** Ancient Indian Social History, Women’s History in Ancient India, Ancient Indian Environmental History

4. **(A) Invited Lectures Delivered/ Session Chaired:**

International:

1. Presented a paper entitled “Nature in its Myriad Forms : Interpreting the Works of Kalidasa and Varahamihira” in the two day international seminar on “Environment, Religion and Culture: Research Methods and Perspectives on Pre Colonial South Asia”, Organised by the UGC DSA-1SAP, Department of History, Jadavpur University in collaboration with Anneliese Maier research Award of Humboldt Foundation ,Bonn and Ludwig Maximillan University, Munich, 5th -6th February, 2019.

(B) Participation/Organization/Resource Person in Seminars:

1. Participated in the National Seminar on “Early India and Cambodia: Exploring Avenues of Linkages”, organized by the Department of Ancient Indian History and Culture, University of Calcutta, 15th March, 2019

(C) Orientation Courses/ Refresher Courses:

1. Attended a week long UGC- HRDC Sponsored Short term course entitled “Management and use of E- Resources in Academic Libraries”, organized by the Department of Library and Information Science, Jadavpur University, 23rd-29th August, 2018.

5. (A) Books/ Monographs etc. Published: N.A.

(Name of the Teacher, Name of the Book, Name of the Publisher)

(B) Articles Published in Journals: (Including National/International & Peer-reviewed Journals):

1. "History, Nature and Culture: Epigraphic Records of the Gahadavalas" in Utkal Historical Research Journal (Platinum Jubilee Publication, Series-V), Vol. XXXI, 2018, pp.36-54.

DR. DEBAJIT DUTTA

1. **Name** : Dr. Debajit Dutta

2. **Designation** : Assistant Professor, Stage- II

3. **Areas of Research Interest:** Monetary History of South Asia, Ancient Indian History

4. **(A) Invited Lectures Delivered/Session Chaired:**

Papers Presented in Seminars/Conferences/Workshops/Invited Lectures : 2

International:

1. "Saivism as the Popular Culture of Northern West Bengal: A Socio-Psychological Study" Paper presented in 25th ECSAS, Paris. July, 2018
2. "Monetization of Medieval North-East Indian Economy: A Review" Paper presented in 15th International Conference organized by Itihas Academy, Dhaka 22nd February, 2019.

Ongoing Research Projects:

1. Major Research Project: "Numismatography of Premodern North-East Indian Princely States: A Study in Historical Perspective" funded by Indian Council of Historical Research. (Ongoing)

5. (A) Books/ Monographs etc. Published: N.A.

(Name of the Teacher, Name of the Book, Name of the Publisher)

DR. UTSA RAY

1. **Name:** Dr. Utsa Ray

2. **Designation:** Assistant Professor

3. **(A) Area of Research Activities:**

(Broad Areas) History of consumption, class formation, Modern South Asia

(B) Major Research Project: Individual, "Rice Production on the Silk Roads", "Meat Production on the Silk Roads", UNESCO.

(Departmental/Individual, Name of the Project /Funding Agency)

INTERNATIONAL RELATIONS

Phone & Fax : + 91-33-2414-6344
Int. : 2457-2059/2229
H.O.D : Prof. Omprakash Mishra
E-mail : professor.mishra@gmail.com
hod.ir@jadavpuruniversity.in

The Department of International Relations was established in 1956 as a result of the efforts of Dr. Prithwish Chakraborty, an eminent Professor from Dacca University, and Professor Triguna Sen, the then Vice-Chancellor of Jadavpur University, to promote the study of international affairs in a holistic manner. The Department is the only one of its kind in Eastern India. It has received UGC funding under three phases of the Department Special Assistance (DSA) programme that started in 1986, which has enabled the Department to build up its infrastructure and hold national and international conferences, student seminars, and enabled the faculty to conduct field trips to facilitate their research activities. The Department also received assistance from the UGC's ASIHSS programme in 2004-5, which further helped in infrastructure building and research pursuits. In 2009, the Department has been upgraded to the status of a Centre for Advanced Study (CAS) by the UGC and is now pursuing its second phase. The Department annually publishes *The Jadavpur Journal of International Relations*, which has been taken over by SAGE Publications since 2014. The Department houses the Centre for Refugee Studies that focuses on refugee, migration, and international displacement issues. The Department also conducts a one year PG Diploma Course (Evening) on Human Rights and Duties Education, the objective of which is to enhance knowledge and understanding of human rights and promote human rights awareness.

1. A. Course Offered:

The Department offers Political Science (Hons.) course at the B.A. level. There are six semesters; and eighteen courses are offered at this level. In addition students have to take up extra-departmental courses (now re-designated as Generic Elective Courses). Following the introduction of CBCS from July 2017, students would also study ability Enhancement courses. At the M.A. level the Department offers degree course on Political Science with International Relations. There are four semesters with fourteen core courses and four optional courses to be chosen from twenty-four optional ones offered.

The Department has a two-year M.Phil Programme in International Relations. The M. Phil. Course has been semesterised from 2010 with course work during the first two semesters including one course on Research Methodology. M.Phil students have to write their dissertations in the third and fourth semesters. Finally, Ph.D Course work, a one-semester and two-course programme, has been introduced in 2010.

Curriculum was last revised in 2016. The CBCS model as per UGC recommendations was adopted at the UG level (and implemented from July 2017). Accordingly, optional courses ('Discipline Specific Elective Courses' of 400 marks) were introduced for the first time for Honours students which included several newly framed courses such as "Democracy, Citizenship, Nationalism", "Governance : Dimensions, Issues and Challenges", "Women, Power and Politics", and "Politics of Globalization". A few new courses (such as "Public Policy and Perspectives of Public Administration" and "Foreign Policy of India") were also added to the Honours (Core) syllabi. In addition, Generic Elective Courses and Ability Enhancement Courses were also incorporated

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as UGC stipulations. Further, a thorough revision and updating of the MA, M.Phil and Ph.D Course work courses is under way.

A one-year P.G. Diploma (Evening) Course Work course on Human Rights and Duties Education had been introduced in 2009-10. It as started with UGC-funding and after five years it was turned into a self-financed course with the intake of 33 at present. There are four Theory Papers; students also have to undertake field visits and write dissertations.

1. B. Number of Faculty Members:

Positions available 25 – Working: 19, Vacant: 6

Professor: 6

Associate Professor: 6

Assistant Professor: 7

Academic Activities of the Department of International Relations (2018-19)

A National Seminar on *Belt and Road Initiative: Perspectives and Challenges* was held on 27 March 2019. The Key-note address was delivered by Sri Harsh Pant, Director Studies and Head, Strategic Studies programme, ORF. Vice Admiral (Rtd) PJ Jacob, Major General (Rtd) Arun Roye delivered special addresses. Among the paper presenters were faculty members of the Department as well as of other Indian Universities and institutions. The seminar gave us an opportunity to exchange our views and disseminate knowledge on the theme of the seminar which was in tune with the thrust area that has been identified for the CAS-II Programme of the Department.

On the occasion of the celebration of the European Union Day, an academic programme was organized by the Department on 22 February 2019 where Tomasz Kozlowski, Ambassador of the EU to India, and Ms. Friederike Tschampa, Head of the Political Delegation of the EU delivered special addresses. Presentations were made by the Head of the Department Prof. Omprakash Mishra and professors from other universities in Kolkata.

A round-table was organized by the Department on Gender and Freedom of Press and Media with British Deputy High Commission on 21 January 2019. On this occasion, Ms. Amy Hawks and Mr. Nicholas Duvivier from the Deputy High Commission interacted with the faculty of the Department.

The Department organized special lecture sessions on different aspects of foreign policy and security. Ambassador SK Lambah, former Convener, National Security Advisory board, delivered a talk on *Relations between India and Pakistan* on 19 September 2018.

Dr. Tenzin Desal and Zamlha Tempa Gyaltsin of Tibetal Policy Institute, Dharamshala, delivered lectures on *History, Memory and Resistance* and *The Tibetan Plateau and its Importance to the Subcontinent* on 4 October 2018.

Sri Anand Sharma, former Minister of State, External Affairs delivered a lecture on *India's foreign policy and International Relations* on 6 December 2018.

Dr. S K Mathur, Fellow, IIM Bangalore and Director, Badruka Institute of Foreign Trade, Hyderabad, delivered a lecture on *International Relations: Global Business and Smart Strategies*, on February 8, 2019.

Sri Partha S. Ghosh, Senior fellow, Institute of Social Sciences, New Delhi, delivered a talk on *Politics and cinema: A Flashback to the Nehruvian Times* on 14 February 2019.

The Department organized the EU Day programme on 22 February 2019

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A visiting team from the Stimson Center, Washington DC, had an interactive session with the faculty and the students on 4 September 2018.

The Department also supported a programme organized by the Jadavpur University Women's Conclave in collaboration with Ashoka University and West Bengal State Legal Service Agency during 6-7 March 2019 focusing on women empowerment.

2. A. Area of Research Activities:

The research objectives outlined in the CAS II programme of the Department include (a) describing and defining variables/factors that would shape India's foreign and security policy responses to the changing global scenario; (b) pinpointing the trends and directions for reformulating and reinventing India's foreign policy under the new conditions of an increasingly interdependent but fragmented, integrated but diversified and networked global society; and (c) identifying the possibilities that might confront India's foreign policy processes in the next ten years. Thus, the aim of the project is to look into the dynamics of India's foreign policy in terms of immediate necessities as well as long term trends in the backdrop of multidimensional structural transformation of the world.

2. B. Major Research Project: (Departmental/Individual, Name of the Project/Funding Agency)

Dr. Imankalyan Lahiri

"Swangsiddha", Against Women Trafficking supported by UNICEF:13 Lakhs

3. A. Invited Lectures Delivered/Sessions Chaired: (Name of the Teacher, Type of Participants, Name of the Seminar / Conference etc. Place, Duration)

Prof. Omprakash Mishra

Delivered Keynote address on "Identity and the Politics of Security, Sovereignty and the Challenges of Global Politics" in the seminar organized by Gujarat National Law University and the Jadavpur Association of International Relations at Gujarat National Law University, Ahmadabad, on September 15, 2019.

Delivered Keynote address on "Act East through Northeast: India's Way to a New Era of Diplomacy" in the conference organized by the Jadavpur Association of International Relations supported by Policy Planning and Research Division, Ministry of External Affairs, Government of India at Dera Natung College, Itanagar, Arunachal Pradesh, on November 15, 2018.

Prof. Partha Pratim Basu

Delivered two lectures on "Foreign Policies of United States and China", Ramakrishna Mission Vidyamandira, Belur, 12 May, 2018.

Delivered four lectures on "Research Methodology", Lady Brabourne College, Kolkata, 12-15 June, 2018.

Chaired a lecture delivered by Prof. Rajat Ganguly, Academic Chair, International Relations and Security Studies, Murdoch University, on "Ethnic Conflict: Concept, Theory and Evidence", organized by the School of International Relations and Strategic Studies, JU on June 22, 2018,

Delivered Foundation day lecture on "Identity and India's Foreign Policy: From Nehru to Modi", Jadavpur Association of International Relations, 21 August, 2018.

Delivered two lectures on "Farmers' Agitations in India" in a Summer Course for College and University Teachers organized by Dept. of Political Science, University of Calcutta, 12 September, 2018

Delivered a lecture on "Bangladesh: Religion, Society and Politics" (in Bengali), National Council of Education, Kolkata, 30 September, 2018.

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Delivered two lectures on “Philosophical Foundations of Human Rights” in Refresher Course, Dept. of International Relations, Jadavpur University, 2 and 20 November, 2018.

Delivered two lectures on “Indian Foreign policy”, Orientation Course, JU HRDC, 3 December, 2018.

Delivered a lecture on “Sivnath Shastri as an Educationist”, at Sadharan Brahma Samaj, Kolkata, 20 January, 2019.

Delivered a lecture on “Discourse Analysis” in Workshop on Research Methodology, Jadavpur Association of International Relations, 7 February, 2019.

Chaired a session in a Conference on “Contours of India’s Act East Policy: Opportunities, Challenges and Future Trends in Indo-ASEAN Partnership”, Kolkata Society for Asian Studies, University of Calcutta, 18 February, 2019.

Delivered two lectures on “Religion and politics in Pakistan and Bangladesh”, Refresher Course, HRDC, Burdwan University, 22 February, 2019.

Prof. Anindya Jyoti Majumdar

Delivered a lecture on “Geopolitics and International Business”, International Institute of Management, Kolkata, July 30 2018

Delivered a couple of lectures on “Global Politics and Human Right”, Refresher Course (JU IR), November 2, 2018,

Delivered a couple of lectures on “Nuclear Deterrence, proliferation and arms control”, JU Orientation Course, December 3, 2018

Delivered a lecture on “Armed Peace and Arms Control”, Ramakrishna Mission Institute of Culture, Kolkata, January 15, 2019

Delivered a lecture on “Security issues: Case Study Method”, Research Method Course (JAIR/SIRSS), February 2019, Security issues: Case Study Method

Delivered a lecture on “Human Rights in IR and Human Duties and Responsibilities”, Human Rights Course (JU IR), 2019

Delivered a lecture on “India-Russia Relations: Issues and Perspectives”, St. Xavier’s College, Kolkata, September 7, 2018,

Delivered a lecture on “Connectivity, Act East and India’s Northeast”, JAIR Conference, Arunachal, November 15, 2018

Delivered a lecture on “India-China Relations”, International Institute of Management, Kolkata, December 28, 2018

Chaired the Inaugural session, Kolkata Society of Asian Studies, “Act East Policy Seminar”, February 18, 2019

Prof. Shibashis Chatterjee

Delivered a couple of lectures on “Post-Marxist Theory” and “India in the Contemporary Multipolar World” at the Department of Political Science at Bankura University on February 21 and 22, 2019.

Chaired a session on “Addressing Migration: Ground Realities of Rohingyas” on April 12, 2019, at the International Relations Scholastic Conclave, organized by the Department of International Relations at Jadavpur University.

Nominated a Visiting Fellow at the Department of Political Science, North Bengal University, West Bengal, under SAP DRS III and delivered one public lecture on “Global Civil Society: A Conceptual Audit” and took class lectures spread over a week from 12.2.2019 to 16.2.2019.

Dr. Kakoli Sengupta

Delivered an Invited Lecture on “The Search for Peace in Kashmir” on 30th March, 2019 during the 7-day Special Camp on ‘Youth for Sustainable and Inclusive Peace’ organized by the National Service Scheme (NSS) unit of Savitri Girls’ College, University of Calcutta.

Delivered an Invited Lecture on 9th March, 2019 on “Women leading Sustainability Development in the World” organized by Rakshak Foundation in collaboration with the US State Department and Vital Voices Global Partnership to commemorate International Women’s Day.

Delivered an Invited Lecture on 30th November, 2018 on “Human Rights Protection” at International Seminar on “Human Rights Protection for Refugees, Asylum-seekers and Internally Displaced Persons- National and International Commitments” at ‘Anweshan’ The International Law Festival organized by the Jyotirmoy School of Law.

Chaired the Ministry of External Affairs Distinguished Panel on 10 April, 2018 featuring Ambassador Suresh K. Goel at the International Relations Scholastic Conclave 2018 organized by the Department of International Relations, Jadavpur University in collaboration with the Netaji Institute for Asian Studies, Kolkata and Jadavpur Association of International Relations.

Chaired the Valedictory Session on featuring US Consul General Mr. Craig L. Hall on 11 April, 2018 at the International Relations Scholastic Conclave 2018 organized by the Department of International Relations, Jadavpur University in collaboration with the Netaji Institute for Asian Studies, Kolkata and Jadavpur Association of International Relations.

Delivered a Lecture on 3rd December, 2018 on “The CEDAW Convention: History, Features and Contemporary Relevance” at the 7-day UGC- HRDC Short Term Course in Gender Sensitization organized by the School of Women’s Studies, Jadavpur University from 27 November – 3 December, 2018.

Delivered Lecture on 8 November, 2018 on the topic “The UN & Women’s Rights” at the Refresher Course on “The UN and Global Perspectives of Human Rights” under the UGC-Human Resource Development Centre of the University organized by the Department of International Relations, Jadavpur University.

Delivered Lecture on 8 November, 2018 on the topic “The UN, Syria & Human Rights” at the Refresher Course on “The UN and Global Perspectives of Human Rights” under the UGC-Human Resource Development Centre of the University organized by the Department of International Relations, Jadavpur University.

Participated at a Panel Discussion on the theme “Adversity to Empowerment” on 3 April, 2018 featuring former women inmates Ivy Woolf Turk and Lovely Adhikari organized by Rakshak Foundation and the Department of International Relations, Jadavpur University PG Diploma Course on Human Rights and Duties Education

Dr. Imankalyan Lahiri

Chaired a Session at the National Seminar on “Identity and the Politics of Security, Sovereignty and Challenges of Global Politics” organized by Gujarat National Law University and JAIR, on 15 and 16 September 2018. At Gujarat National Law University, Ahmedabad.

Delivered a Lecture on “Organized Higher Education in South Asia: Changing Perspectives”, Sarsuna College, Kolkata 26th February, 2019.

Chaired a Session at the Second South Asian Border Studies Conference on “Beyond Boundaries and Borders: South Asian Quest for Peace, Development and Regional Connectivity, “University” of Mumbai 1st and 2nd March, 2019.

Annual Report 2018-19

Chaired a Session at the Webnair organized by Sarsuna College on 25th and 26th February, 2019.
Delivered a Lecture on “*Ekobingsho Shatabdite Bharot Bangladesh Somporko*”, Balubhra R.B. Uchha Vidyalaya and College, Nagaon, Bangladesh, 25th March, 2019.

Dr. Bijaya Kumar Das

Delivered a lecture on “India’s Connectivity to the Middle-East: Challenges” in the National Conference on “Connecting South-East and Middle-East” organized by the Centre for Studies of South and South-East Asian Societies, Kazi Nazrul University, West Bengal, dated 25th July 2019.

Chaired a session on “India’s Security Threats Challenges and Vulnerability” in the National Conference on “Identity and Politics of Security, Sovereignty and Challenges of World Politics”, Organised by Gujrat National Law University in collaboration with JAIR, Dated 15-16 September 2018.

Dr. Herkan Neadan Toppo

Chaired a technical session in International Conference on “India’s Foreign Policy: Continuity and Change” organised by Department of International Relations, Jadavpur University under UGC-CAS II Programme at K.P Basu Memorial Hall, Jadavpur University, 9-10 March, 2018.

Lead Speaker and Chairperson in the technical Session IV in a State Sponsored National Seminar on “Education and Culture” organized by Vivekananda College for Women Barisha, Kolkata, 4-5 April, 2019.

Delivered a lecture on “Human Rights in Latin America” at an interdisciplinary Refresher Course on The “U.N. and the Global Perspectives of Human Rights” (Inter-disciplinary) under the UGC-Human Resource Development Centre of the University during November 1-26, 2018 at the ground floor Seminar Hall, IR Department, PG Arts Building, Jadavpur University, Kolkata, 15 November, 2018.

Dr. Bhagaban Behera

Chaired a session in Two Day National Seminar on “Indo-Centric Parliamentary Democracy in South Asia: Retrospect and Prospect”, organised by Kanchrapara College, 26-27th February 2019

Mr. Abdul Matin

Delivered invited lecture on “The Sachar Committee Report and the Idea of Social Justice: Rethinking Minority Question in West Bengal” at BRAC University, Dhaka 31st July 2019.

Invited for consultative workshop on “Debating Contours of Muslim Marginalization and Exclusion in India” Policy Perspective Foundation, New Delhi, 16-17th August 2018.

Delivered invited lecture on “The Idea of Democracy and Equality” at Alipurduar Mahila College, University of North Bengal, September 2018.

3. B. Seminar/Workshop/Conference/Symposium Attended:

(Name of the Teacher, Name of the Paper Presented, Name of the Seminar, Place, Duration)

Prof. Partha Pratim Basu

Participated as a Panelist at Roundtable on “UN Vision 2030 on Sustainable Development”, Dept. of Political Science, Presidency University, 5 October, 2018.

Presented a Paper on “Bangladesh as a Factor in India’s Act East Policy”, in a Conference titled “Act East through Northeast”, Jadavpur Association of International Relations in collaboration with Dera Natung College, Itanagar, November 16, 2018.

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Presented a Paper on “Rammohun Roy and Secularism in India”, in a Seminar titled “Rammohun Roy and Brahma Samaj Movement”, 128th Brahma Conference, Brahma Sammilani Samaj, Kolkata, 23 November, 2018.

Presented a Paper on “Intellectuals and Politics: From Nehruvian to Post-Nehruvian India”, in a Seminar titled “Redefining the Political”, Dept. of Political Science, University of Calcutta, 13 February, 2019.

Prof. Anindya Jyoti Majumdar

Presented a Paper at Diamond Harbour University, November 22, 2018 on “India in South Asia: A geopolitical narrative”.

Presented a Paper at Pondicherry University, March 05-06, 2019 on “China and South Asia”

Presented a Paper at Amity University, Chhattisgarh, March 28, 2019 on “Cyber-Security”

Prof. Shibashis Chatterjee

Participated at a Roundtable on “India’s Role as an Emerging Power: Challenges, Potentials, and Future Directions” at the ISA Conference, Hong Kong, on June 17, 2018 and presented a paper on “India as a Post-colonial Power”.

Presented a Paper titled “Western/Non-Western IR: Situating the Divergences”, on March 29, 2019 in the 60th International Studies Association Annual Convention “Re-visioning International Studies: Innovation and Progress” at Toronto, Ontario, Canada.

Presented a Paper titled “West Bengal’s Communal Politics: Electoral Politics or Civic Disengagement?” on March 30, 2019 in the 60th International Studies Association Annual Convention: “Re-visioning International Studies: Innovation and Progress” at Toronto, Ontario, Canada.

Presented a Paper titled “IR, History and Post-coloniality: Some Reflections” at a Workshop on “Postcolonial IR: Engaging with Public History in South Asia and Beyond” held on 18 March 2019 at the Department of International Relations, South Asian University, New Delhi.

Presented a Paper titled “IR Theory and Area Studies: Revisiting an Old Debate” at a National Conference on “Status Update on International and Area Studies” held on 13-14 March 2019 at the Academy of International Studies, Jamia Millia Islamia, New Delhi.

Participated at a Panel Discussion on “Past, Present and Future of South Asian Borders: Connectivity and Regional Integration” at the Second South Asian Border Studies Conference on “Beyond Boundaries and Borders: South Asian Quest for Peace, Development and Regional Connectivity” at the Department of Civics and Politics, University of Mumbai, on March 1 and 2, 2019. Presented a paper on “South Asian Borders” on March 2, 2019.

Participated as a Panellist for the panel on “Bridging the Gaps” at the Jadavpur University Women’s Conclave, held on March 6, 2019.

Dr. Bijaya Kumar Das

Presented a Paper on “States-Centrism in International Relations” in one day International Conference on “100 Years of International Relations” jointly organized by Bengal Institute of Political Studies with School of Strategic Studies, Jadavpur University, dated 7th September, 2019.

Presented a Paper on “The Thrust for Good Governance in India: The Challenges Ahead” in one-day international seminar on “Public Administration in the 21st Century: Issues and Challenges”, organized by West Bengal Political Science Association in Collaboration with the Department of Political Science, Mrinalini Dutta Mahavidyapith, on 22nd February, 2019.

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Presented a Paper on “India’s Thrust for Permanent Membership in the Security Council in the United Nation: The Challenges” in the two days National Seminar on “Envisioning India in the Future World Order”, organized by West Bengal Political Science Association in collaboration with St. Paul’s Cathedral Mission College on 30th -31st March, 2019.

Dr. Herkan Neadan Toppo

Presented a Paper on, “Assessment of BRI and the Opportunities of Growth and Expansion in Eurasia” at the one-day national seminar on “Belt and Road Initiative: Perspective and Challenges” organized by the Department of International Relations under the auspices of the UGC-CAS-II Programme of the Department, 27 March 2019.

Presented a Paper on “Status of Education in India: Trends & Reforms” in a State Sponsored National Seminar on “Education and Culture” organized by Vivekananda College for Women Barisha, Kolkata, 4 – 5 April 2018.

Presented a paper on “Russia and Discourse on Eurasian Security in 21st century” in an International Seminar on “Foreign Policy of Eurasian States: Determinants, Objectives and Priorities”, organized by Centre for Russian & Central Asian Studies (CRCAS), School of International Studies, Jawaharlal Nehru universities, New Delhi (India), 18–19 March 2019.

Dr. Bhagaban Behera

Presented a paper on “Role of Education in the Sustainable Development of Water: A case study of India” in the two day international seminar on “Peace, Well-being and Education: A Pedagogical Discourse”, organized by Department of Education, Jadavpur University, Kolkata (28-29 December 2018).

Presented a paper on “India’s Development Assistance and Afghanistan’s Experience of Parliamentary Democracy since fall of Taliban Regime in 2001”, organised by Kanchrapara College, 26-27th February 2019, in Two Day National Seminar on “Indo-Centric Parliamentary Democracy in South Asia: Retrospect and Prospect”

Presented a paper on “Importance of Central Asia: A Chinese Perspective”, in the International Conference on “Ganga to Volga: India’s Connectivity with Inner Asia”, organized by the UGC Area Studies Programme, Centre for Inner Asian Studies, JNU, New Delhi-67, dated 6-7 March 2019.

Presented a paper on “Foreign Policy of Kazakhstan towards China: Issue of Economic and Energy Cooperation” in the international seminar on “Foreign Policy of Eurasian States: Determinants, Objectives and Priorities” on 18-19 March, 2019, Organized by Centre for Russian and Central Asian Studies, School of International Studies, JNU, New Delhi.

Mr. Abdul Matin

Presented a Paper on “In search of Social Justice: The Sachar Committee Report and the Making of a New ‘Muslim’ Civil Society in West Bengal”, National seminar on “Democracy as a Pedagogical Experience”, Department of Political Science, University of Calcutta, 29-30th March 2019.

Presented a Paper on “The Sachar Committee Report: Mapping Bengali Muslims and the New Narratives of Social Justice” in West Bengal, National seminar on “Contemporary Reflexivity on Dalit Questions”, Center for Political Studies, School of Social Sciences, Jawaharlal Nehru University, New Delhi, 19th March 2019.

Presented a Paper on “Nationalism in India: Multiple Readings”, national seminar on “Inclusive Nationalism and the Idea of Social Justice”, Birsa Munda Birth Anniversary Celebration Committee, Jadavpur University, 15th November 2018.

3. C. Seminar/Workshop/Conference/Symposium Organized:

Dr. Imankalyan Lahiri

Organised “Act East through Northeast: India’s Way to a New Era of Diplomacy”, 15th and 16th November, 2018 at Dera Natung College, Arunachal Pradesh, supported by Policy Planning and Research Division, Ministry of External Affairs, Government of India.

Dr. Herkan Neadan Toppo

Joint convener of the one-day national seminar on “Belt and Road Initiative: Perspective and Challenges” organized by the Department of International Relations under the auspices of the UGC-CAS-II Programme of the Department, 27 March, 2019.

Dr. Bhagaban Behera

Coordinator of Ph.D scholars’ Seminar in 2018, Organized by the Department of International Relations. Coordinator of M.Phil scholars’ seminar in the Department of International Relations, 2019.

3. D. Orientation Courses/ Refresher Courses Attended:

Dr. Bhagaban Behera

Attended an Inter-Disciplinary UGC Refresher course on “Disaster Management: Water and Environment Sanitation”, Jadavpur University, Kolkata, 07-01-2019 to 30-01-2019.

Attended a UGC-Short Term Course on “Management and Use of E-Resources in Academic libraries”, Department of Library and Information Science, Jadavpur University, Kolkata, 23-08-2018 to 29-08-2018.

3. E. Orientation Courses/Refresher Courses Organized:

Dr. Bhagaban Behera

UGC Supported The UN and global perspective of Human Rights of IR Dept, from Nov 1-26, 2018

4. A. Books/Monographs etc. Published: (Name of the Teacher, Name of the Book, Name of the Publisher)

Prof. Partha Pratim Basu

Co-edited (with Rakhahari Chatterji), *West Bengal under the Left (1977-2011)*, Kolkata: Levant Press, 2018.

Prof. Anindya Jyoti Majumdar

Co-edited Volume on *Sub-regionalism and Connectivity: The BCIM Corridor*, Setu Publication / KSAS, Kolkata, 2018.

Prof. Shibashis Chatterjee

Authored, *India’s Spatial Imaginations of South Asia: Power, Commerce and Community*, Global Oxford University Press, January 2019.

Dr. Imankalyan Lahiri

Edited Volume on *Indian Foreign Policy in the 21st Century*, ICWA, New Delhi and University of Mumbai, Bharti Publications, New Delhi, 2019 ISBN: 978-93-86608-23-9.

Dr. Herkan Neadan Toppo

Authored, *Changing Perception of NATO in Emerging World Politics*, Readers Service, Kolkata, 2019.

Dr. Bhagaban Behera

Authored, *Changing Dynamics of India’s Foreign Policy: From Look East to be East*, Readers Service, Kolkata, 2018.

4. B. Articles Published in Journals: (Including National/International & Peer-reviewed Journals) (Name of the Teacher, Name of the Articles, Name of the Journal, Date of Publication, Volume)

Prof. Partha Pratim Basu

Authored article on “Agriculture under the Left Front Regime in West Bengal”, in Chatterji and Basu (eds). *West Bengal under the Left (1977-2011)*, Kolkata: Levant Press, 2018.

Co-authored article on “Industry in west Bengal during the Left Front Regime”, in Chatterji and Basu (eds). *West Bengal under the Left (1977-2011)*, Kolkata: Levant Press, 2018.

Co-authored article on “The Left Front in West Bengal: From Movement to Government”, in Chatterji and Basu (eds). *West Bengal under the Left (1977-2011)*, Kolkata: Levant Press, 2018.

Prof. Anindya Jyoti Majumdar

Co-authored (with Shibashis Chatterjee) article on “The Idea of the Indo-Pacific: the Geopolitics of Social Construction”, *Journal on Indian Ocean Studies*, 26(1), April 2018.

Authored article on “The Politics of Connectivity: Geostrategic Perception and Misperception Challenges” in Swaran Singh et.al. (eds.) *Corridors of Engagement*, KW Publishers, New Delhi, 2019.

Prof. Shibashis Chatterjee

Authored article on “The Idea of the Indo-Pacific: The Geopolitics of Social Construction”, *Journal of Indian Ocean Studies* (with Anindya Jyoti Majumdar), Vol. 26, No. 1, April, 2018.

Authored article on “Borders in South Asia: Power, Political Economy and Identity” (With Surya S. Sen), in Raju, A. S. (eds.), *Borders in South Asia States, Communities and People*, Studera Press: New Delhi, 2019, pp. 13-33.

Co-Authored article on “Identifying Levels, Structures and Agency in Post-Cold War Indian Foreign Policy” (With Sreya Maitra), *Revista UNISCI/UNISCI Journal*, No. 49 (Enero/January 2019). Source: <http://www.unisci.es/>

Authored article titled “The Left Front and the Politics of Regionalism in West Bengal” in Rakhahari Chatterji and Partha Pratim Basu Basu (eds). *West Bengal under the Left (1977-2011)*, Kolkata: Levant Press, 2018.

Dr. Imankalyan Lahiri

Authored article on “Empire or Democracy: Contrasting India’s Foreign Policy in Asia”, in Imankalyan Lahiri and Sachin Pardhe Ed. “*Indian Foreign Policy in the 21st Century, ICWA*”, New Delhi and University of Mumbai, Bharti Publications, New Delhi, 2019 ISBN: 978-93-86608-23-9

Authored article on “Indian Diaspora in Malaysia”, *Diplomacy and Beyond*, 2019, ISSN: 25818929

Dr. Herkan Neadan Toppo

Authored article on “Status of Education among Tribal Indigenous People: An Analysis”, *MAGIS – Xaverian Journal of Education*, Vol. vii, January, ISSN 2319-3239, PP. 65-69.

Dr. Sukanya Ray

Authored article on “Sister Nivedita: The Fighter Extraordinary for India, Kolkata: Advaita Ashrama, 2018 (August), [ISBN 978-81-7505-475-2].

Authored article on “Truth Swami Vivekananda Taught the US at Detroit—Lasting Significance of His Teachings”, *Prabuddha Bharata* (Awakened India), August 2018, vol. 123, PP.587-596.

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Mr. Abdul Matin

Authored article on “Maulana Abdul Hamid Khan Bhasani and Pir Abu Bakr Siddique” (2018), in Dev Nath Pathak and HM Sanjeev Kr (eds) *Modern South Asian Thinkers*, Sage Publications, New Delhi.

Authored article on “Identity, religion and development: the changing nature of political mobilizations of Muslims in Post-Sachar West Bengal” (2019), edited by Naender Kumar, Routledge, New Delhi

Authored article on “Socio-religious reform and Sufism in 20th century Bengal: A Study of the role of Pir Abu Bakr of Furfura Sharif, India”, (2018), *South Asian Cultural Studies*, Special Issue, 2018 ISSN: 1749-6764, pp. 25-34.

LIBRARY & INFORMATION SCIENCE

Phone : + 91-33-2414-6145
Int. : 2457-2264
H.O.D : Prof. Udayan Bhattacharya
Prof. Subarna Kumar Das (w.e.f. 20.03.2019)
E-mail : hod@libsc.jdvu.ac.in
hod.libinfsc@jadavpuruniversity.in

Course Offered

BLISc (Day)- 1 year

MLISc-(Day)- 1 year

MLISc (Digital Library)-Evening- 2 years

M. Phill- Day- 2 Years

Ph.D-Programme

PROFESSOR UDAYAN BHATTACHARYA

PAPER PUBLISHED

1. BHATTACHARYA, UDAYAN (with Ashok Pal and T.K. Mondal). 2018. “Treatment of Children in Various Editions of Dewey Decimal Classification”. *Librarian*. 25,1.
2. BHATTACHARYA, UDAYAN (with Ashok Pal and T.K. Mondal). 2018. “Treatment of the Subject Descriptors on Infants in Various Editions of Dewey decimal classification”. 2018. *IASLIC Bulletin*. 63,4.
3. BHATTACHARYA, UDAYAN (with Ashok Pal and T.K. Mondal). 2019. “Juveniles in Dewey decimal classification”. 2019. *Librarian*. 25.2.

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4. BHATTACHARYA, UDAYAN (with Ashok Pal and T.K. Mondal). 2019. "Treatment of Subject Descriptors on Children in Twenty-Three DDC Editions". In National Seminar on "Recent Trends in Knowledge Organization" organized by the Department of Library and Information Science, Jadavpur University, held during February 08-09, 2019.
5. BHATTACHARYA, UDAYAN (with Arindom Sarkar). "An analytical study of the national library websites of Asian countries: through simple Web Impact Factor and online SEO analyser". *Librarian*, 25 (1), 91-102.
6. BHATTACHARYA, UDAYAN (with Arindom Sarkar). "A bibliometric analysis of global research trends on social tagging over the last fifteen years". *Librarian*, 25 (2), 35-41.
7. BHATTACHARYA, UDAYAN (with Arijit Das). 2019. "Research Landscape/Performance of India during 2010-2018: An Exploration through Scopus". *SRELS Journal of Information Management*. 56, 3, p.22-28.
8. BHATTACHARYA, UDAYAN (with Tapan Barui). 2018. "Dedey Decimal Classification and its Number Relocation since inception: An Evaluative Study". *Librarian*.25, 1.
9. BHATTACHARYA, UDAYAN (with Pronobi Porel). 2018. "Rare Books vs. Value of rare Books: Analysis of Viewpoints from Rare Book Specialists". *Librarian*. 25,1

RESOURCE PERSON

1. Acted as resource person in UGC-HRDC Sponsored Short Term Course on "Management and Use of E- Resources in Academic Libraries" held during 23rd August to 29th August, 2018 Organized by Dept. of Library and Information Science & UGC-HRDC, Jadavpur University.
2. Acted as resource person in UGC-HRDC Sponsored Orientation Programme during July-August-November, 2018. Organized by HRDC, Jadavpur University.
3. Acted as resource person in UGC-HRDC Sponsored Refresher Course on Transforming Libraries held during September 4-24, 2018 Organized by Dept. of Library and Information Science University of Calcutta & UGC-HRDC, University of Calcutta.

Ph.D. AWARDED

1. Ashok Pal: Treatment of Children in Various Editions of DDC against Literary Warrant

PROJECT

Principal Investigator

1. RDA Preparedness in West Bengal: A Feasibility Study. A RUSA sanctioned project.

EDITED VOLUMES

1. Digital Reference Tools: A Selective List. 2019. Department of Library & Information Science, Jadavpur University.
2. Recent Trends in Knowledge Organization. Proceedings. National Seminar. 2019.
3. Librarianship in the New Paradigm. A Collection of Articles contributed by Resource Persons of 27th UGC Sponsored Refresher Course in Library & Information Science during 27th August-9th September, 2019.

SESSION CHAIRED

1. National Seminar on "Exploring the Role of Public Library & Information Centers for Sustainable Development", 7-8 March, 2019. Department of Library & Information Science, Rabindra Bharati University.

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Seminar/Conference Organized

1. Acted as organizing secretary of 'National Seminar on Recent Trends in Knowledge Organization' during 8-9 February, 2019

REFRESHER COURSE ORGANIZED

1. Acted as Coordinator of 27th UGC sponsored Refresher Course on "Librarianship in the New Paradigm" during 27th August to 9th September, 2019

PROFESSOR SUNIL KUMAR CHATTERJEE

PAPER PUBLISHED

1. **CHATTERJEE, SUNIL.** "Converting legacy bibliographic data into machine readable format. In National Seminar on Recent Trends in Knowledge Organization (NS-RTKO) held at Department of Library & Information Science, Jadavpur University during 8th-9th February, 2019. ISBN 978-81-929886-2-7
2. **CHATTERJEE, SUNIL.** "Assessment of Digital Reference Tools websites related to Tourism Information using webometrics and Qualitative Analysis", *SRELS Journal of Information Management* vol.56(1), February 2019, p.26-31
1. Acted as resource person in UGC- HRD Sponsored 27th Refresher Course on "Librarianship in the New Paradigm" during 27th August to 9th September, 2019 Organized by Dept. of Library and Information Science Jadavpur University & UGC-HRDC, Jadavpur University.
2. Acted as Joint Organizing Secretary of "National Seminar on Recent Trends in Knowledge Organization" during 8-9 February, 2019 organised by Dept. of Library and Information Science, Jadavpur University, RRRLF and RUSA 2.0.
3. Participated in 11th International Science Conference at Gandhi Bhavan, Jadavpur University during 21-22 November, 2018 organised by World Science Congress and Dept. of Library and Information Science, Jadavpur University.
4. Acted as Resource person in "National Seminar on Recent Trends in Knowledge Organization" during 8-9 February, 2019" organised by Dept. of Library and Information Science, Jadavpur University, RRRLF and RUSA 2.0.

PROFESSOR GOUTAM MAITY

1. Acted as resource person in UGC-HRD Sponsored 27th Refresher Course on "Librarianship in the New Paradigm" during 27th August to 9th September, 2019 Organized by Dept. of Library and Information Science Jadavpur University & UGC-HRDC, Jadavpur University.
2. Participated in 11th International Science Conference at Gandhi Bhavan, Jadavpur University during 21-22 November, 2018 organised by World Science Congress and Dept. of Library and Information Science Jadavpur University.
3. Acted as Resource person in "National Seminar on Recent Trends in Knowledge Organization" during 8-9 February, 2019 organised by Dept. of Library and Information Science, Jadavpur University, RRRLF and RUSA 2.0.
4. Acted as Resource person in UGC-HRDC Sponsored Short Term Course on "Management and Use of E-Resources in Academic Libraries" held during 23rd August to 29th August, 2018 Organized by Dept. of Library and Information Science & UGC-HRDC, Jadavpur University.
5. Acted as resource person in UGC-HRDC Sponsored Refresher Course on "Transforming Libraries held during September 4-24, 2018 Organized by Dept. of Library and Information Science" University of Calcutta & UGC-HRDC, University of Calcutta.

PROFESSOR SUBARNA KUMAR DAS

PAPER PUBLISHED

1. **Das, Subarna Kumar (with Samiksha Subba).** “Evaluation of the Use of College Library Resources and Services by the Undergraduate Students in Darjeeling District of West Bengal”. *Indian Journal of Information Sources and Services*.ISSN: 2231-6094 Vol. 9 No.2, 2019, pp. 10-15
2. **Das, Subarna Kumar (with Samiksha Subba).** “ICT infrastructure in College Libraries of Darjeeling District of West Bengal, India: A Survey”. *International Journal of Research in Social Sciences* Vol. 9 Issue 1, January 2019, ISSN: 2249-2496 Impact Factor: 7.081
3. **Das, Subarna Kumar (with Mohit Banerjee).** “Review and Analysis of Existing Document Management System in Indian Electronic Industries for Designing a New Model” *International Journal of Research in Social Sciences* Vol. 9 Issue 3, March 2019, ISSN: 2249-2496 Impact Factor: 7.081
4. **Das, Subarna Kumar (With Moutusi Basak).** “Mapping of Earth Science Research in West Bengal: A bibliometric study”. *Indian journal of information Sources and Services*, Vol.8, No.2, Jul-Sep, 2018.
5. **Das, Subarna Kumar (with Monaj Tudu).** “Information needs of a disadvantaged Community in Mayurbhanj District, Odisha: A Case Study on Lodha at Sansasole Village”. Vol. 25, No.2, January 2019, ISSN: 0972-3978, pp. 18-28
6. **Das, Subarna Kumar (with Sudip Bhattacharjee, Sucheta Bhattacharjee).** “Status of Public Libraries at Tripura: A Study from Historical to Modern Times”. Vol. 25, No.2, January 2019, ISSN: 0972-3978, pp. 53-61
7. **Das, Subarna Kumar (with Amiya Pramanik).** “Disaster Management for College Libraries of West Bengal: A Study”. Vol. 25, No.1, November 2018, ISSN: 0972-3978, pp. 135-144
8. **Das, Subarna Kumar (with Monaj Tudu).** “Expanding Horizon of Information Service to the disadvantaged: A Study on Birhor Community at Bersa Village under Balarampur Block of Purulia District”. April 2019
9. **Das, Subarna Kumar** “Cognitive Behavior Therapy and Academic Library Community. In Librarianship in New Paradigm”. Kolkata: DLIS, JU & UGC-HRDC-JU pp. 117-126, September 2019.
10. **Das, Subarna Kumar (with Narendra Bhattacharya).** *Open Access Scholarly Journals of Music: a study on DOAJ for the users of electronic environment.* pp. 314-327, 2019.
11. **Das, Subarna Kumar (with Sayani Dutta).** “Users Attitude towards Online Information Resources of Centre for Digital Library and Documentation, Jadavpur University: An Analytical Study”. New Delhi : 64th ILA Conference Proceedings, 2019
12. **Das, Subarna Kumar (with Priyanka Roychoudhury).**Use Of Electronic Journals At IIT Libraries: Review And Analysis. Published in the Proceedings of *National Seminar on Public Library and Digital Divide: Opportunities and Challenges* scheduled on 22-23 February 2019 organised by the Sambalpur Public Library, Sambalpur in collaboration with Odisha State Open University, Sambalpur.

Ph.D Awarded (2019)

1. “Designing a Model Document Management System for Electronic Industries in India” by Mohit Banerjee
2. “A Quantitative Study of Ph.D Thesis in Earth Sciences Accepted by Universities of West Bengal” by Moutusi Basak

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3. “Assessment of the Status of Library Services in the Colleges of Darjeeling District of West Bengal” by Samiksha Subba

M. Phill Awarded (2019)

1. **Mousumi Biswas:** Behavioural Problems Among The School Going Children: A Study on Urban Area of Hooghly District (Dept. of Education, Jadavpur University)
2. **Partha Das.** Depression Among The SC and ST Students at Higher Secondary Level in Jalpaiguri District (Dept. of Education, Jadavpur University)
3. **Avishek Khanra.** Relationship between Self-Esteem and Academic Achievement among the Students at Higher Education level in Paschim Medinipur District. (Dept. of Education, Jadavpur University)

Resource Person

1. Acted as resource person in UGC-HRDC Sponsored Short Term Course on “Management and Use of E- Resources in Academic Libraries” held during 23rd August to 29th August, 2018 Organized by Dept. of Library and Information Science & UGC-HRDC, Jadavpur University.
2. Acted as Co-ordinator in UGC-HRDC Sponsored Short Term Course on “Management and Use of E- Resources in Academic Libraries” held during 23rd August to 29th August, 2018 Organized by Dept. of Library and Information Science & UGC-HRDC, Jadavpur University.
3. Acted as resource person in UGC- HRDC Sponsored Refresher Course on “Transforming Libraries” held during September 4-24, 2018 Organized by Dept. of Library and Information Science University of Calcutta & UGC-HRDC, University of Calcutta.
4. Acted as resource person in UGC-HRD Sponsored 27th Refresher Course on “Librarianship in the New Paradigm” during 27th August to 9th September, 2019 Organized by Dept. of Library and Information Science Jadavpur University & UGC-HRDC, Jadavpur University.
5. Acted as Joint Organizing Secretary of “National Seminar on Recent Trends in Knowledge Organization” during 8-9 February, 2019 organised by Dept. of Library and Information Science, Jadavpur University, RRRLF and RUSA 2.0.
6. Acted as President in Indian Social Science and Humanities Congress organized by Paschim Bangha Anchalik Itihas O Lokhasanskriti Charcha Kendra in collaboration with Dept. of Library and Information Science, Jadavpur University during 7-8 September, 2019.
7. Acted as resource person in Indian Social Science and Humanities Congress organized by Paschim Bangha Anchalik Itihas O Lokhasanskriti Charcha Kendra during 7-8 September, 2019.
8. Acted as resource person in International Conference on “Rejuvenating Libraries in Modern Societies” on 18th Feb, 2019 organised by Babasaheb Bhimrao Ambedkar University, Lucknow and Special Libraries Association.
9. Acted as resource person in National Seminar on “Science and Awareness for a Sustainable Society” organized By Bijoygarh Jyotish Roy College and Kalyani Foundation For Media science and Community Research on 1st March, 2019.
10. Acted As resource person in 38th Murshidabad District Book Fair, 12th January, 2019 organised by RRRLF and Directorate of Library Services, Govt. of West Bengal.
11. Acted as resource person in International Seminar on “Peace, Well being and Education: A Pedagogical Discourse” during 28-29 December, 2018 organized by Dept. of Education and Dantan College.

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12. Acted As resource person in the seminar of Public Library Day of Alipurduar District on 31st August, 2019 organised by LLA, RRRLF and Directorate of Library Services, Govt. of West Bengal.
13. Acted As resource person in the seminar of Public Library Day of Coochbehar District on 31st August, 2019 organised by LLA, RRRLF and Directorate of Library Services, Govt. of West Bengal.
14. Acted as Joint Organising Secretary 11th International Science Conference at Gandhi Bhavan, Jadavpur University during 21-22 November, 2018 organised by World Science Congress and Dept. of Library and Information Science, Jadavpur University.
15. Acted as resource person in 11th International Science Conference at Gandhi Bhavan, Jadavpur University during 21-22 November, 2018 organised by World Science Congress and Dept. of Library and Information Science, Jadavpur University.
16. Acted as resource person in “National Seminar on Recent Trends in Knowledge Organization” during 8-9 February, 2019 organised by Dept. of Library and Information Science, Jadavpur University, RRRLF and RUSA 2.0.
17. Acted as resource person in PLANNER 2018 organised by Tripura University and INFLIBNET during 15-17 November, 2018.
18. Acted as resource person in National Seminar on “Librarianship in Digital environment: Pedagogy”, Ethics and Cohesion organised by Dept. of Library and Information Science, Vidyasagar University during 28-29 March, 2019.
19. Acted as resource person in UGC-HRD Sponsored Short Term Course on “A Happy Teacher can change the world” during 19 Feb-25 Feb, 2019 Organized by Dept. of Education, Jadavpur University & UGC-HRDC, Jadavpur University.

Principal Investigator

1. Preparing Annotated Index of hundred years old temples of Murshidabad and Nadia District (RUSA 2.0) (Individual Major Research Project)
2. LIS Learn: Designing and Development of Blended Learning System for LIS Domain (Departmental Support towards Upgradation in Research)

EDITED VOLUME

Recent Trends on Library, Information and Society

Published by Paschim Banga Anchalik Itihas O Lokhsanskriti Charcha Kendra, September, 2019.

Dr. TARUN KUMAR MONDAL

1. Participated in the 8th International Science Conference held at Jadavpur University, Kolkata during 21st to 23rd November, 2018.
2. Participated in the International Conference on Koha and Chaired a session in the Conference organized by BLA & RKM Vidyamandira during 23-24 February 2019.
3. Delivered “Phanibhusan Roy Smarak Baktrita” on “Suchikaroner Bhabishyat” organized by Bengal Library Association, Kolkata on 8th March 2019.

Books:

Bhattacharya, U. & Mondal, T. K. (Eds.) (2019). *Digital reference tools: A selective list*. Kolkata: Dept. of Library & Information Science, Jadavpur University. ISBN 978-81-929886-3-4

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Articles:

Ghosh, P., & Mondal, T. K. (2018). How to write articles in Wikipedia: A tutorial. *Librarian*, 25(1), 24-36.

Ghosh, P., & Mondal, T. K. (2019). Wikipedia as an educational aid for library and information science: An analysis. *ICSI Journal of Library and Information Science*, 1(2), 89-96.

Pal, A., Mondal, T. K. & Bhattacharya (2018). Treatment of children in various editions of Dewey Decimal Classification, *Librarian*, 25(1), 59-68.

Pal, A., Mondal, T. K. & Bhattacharya (2018). Treatment of the subject descriptors on infants in various editions of Dewey Decimal Classification. *IASLIC Bulletin*, 63(4), 215-227.

Pal, A., Mondal, T. K. & Bhattacharya (2019). Juveniles in Dewey Decimal Classification, *Librarian*, 25(2), 7-17.

Conference / Seminar Papers:

1. Ghosh, P., & Mondal, T. K. (2018). Library and Wikipedia collaboration becomes the new paradigm of library services. In S.Chakraborty (Ed.), *World Library & Information Congress 2018 : Satellite Session(Pre-Conference, IFLA.CU : "International Conference on Transforming the Society: Libraries as the Torch-bearer of Change"* (pp. 220-227). Kolkata: Dept. of Library & Information Science, University of Calcutta. ISBN 978-81-937429-1-4
2. Pal, A., Mondal, T. K. & Bhattacharya, U. (2019). Treatment of subject descriptors on children in twenty three DDC editions. In "National Seminar on Recent Trends in Knowledge Organization (NS-RTKO) held at Department of Library & Information Science", *Jadavpur University during 8th-9th February, 2019*. ISBN 978-81-929886-2-7

PHILOSOPHY

Phone & Fax : +91-33-2414-6044
Int. : 2457-2358
H.O.D. : Prof. Atashee Chatterjee Sinha
Dr. Proyash Sarkar (w.e.f. 02.11.2018)
E-mail : hod@phil.jdvu.ac.in
hod.philosophy@jadavpuruniversity.in

1. A) Courses Offered:

Name of the course	Duration of the Course	Total no of Students (2018-19)
B.A	3 Years	193
M.A	2 Years	122
M.Phil	2 Years	19
Ph.D	5 Years	Awarded = 08 Submitted = 03 Ongoing = 74

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B) Number of Faculty Members :

Faculty Name	Membership (INSA/BHATNAGAR/BIRLA)	Specialization/Specific Areas of expertise
Proyash Sarkar Professor Jadavpur University	HOD	Epistemology – Indian Ph.D. and Western, Gender and Caste Issues
Rup Bandyopadhyay Professor Ph.D., Jadavpur University		Indian Philosophy, Logic
Madhumita Chattopadhyay Professor Ph.D., Jadavpur University		Logic (Western), Buddhist Philosophy Indian Ethics, Comparative Religion
Sadhan Chakraborti Professor Ph.D., Jadavpur University	On Lien	Philosophy of Logic Philosophy of Language Philosophy of Psychotherapy
Soumitra Basu		Philosophy of Psychology, Philosophy of Language, Philosophy of Education, Applied Philosophy
Gangadhar Kar Professor Ph.D., Rabindra Bharati University		Nyaya (Navya and Pracina), Vaisesika, Yoga, Samkhya, Mimamsa, Vyakarana
Atashee Chatterjee Sinha Professor Ph.D. Jadavpur University		Ethics, Feminist philosophy, Moral psychology
Jhuma Chakraborty Professor Ph.D., Jadavpur University		Philosophy of Language and Mind with special reference to Chomsky, Social and Political Philosophy
Lopamudra Choudhury Professor Ph.D., Rajasthan University, Jaipur		Mathematical Logic, Philosophy of Cognition, Environmental Ethics, Natural Language Processing
Sashinungla Professor Ph.D., NEHU, Shillong		Environmental Philosophy, Tribal philosophy and culture
Aparajita Mukherjee Professor Ph.D., Jadavpur University		Ethics, Social and Political Philosophy, Logic
Madhucchanda Sen Professor Ph.D. Jadavpur University		Philosophy of Mind, Philosophy of Language, Epistemology
Samar Kumar Mondal Professor Ph.D., Visva-Bharati		Logic, Phenomenology, Western Metaphysics
Dipayan Pattanayak Associate Professor Ph.D. Burdwan University		Indian Epistemology (Nyaya- Vaisesika), Classical Indian Philosophy

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<p>Maushumi Guha Associate Professor Ph.D, Jadavpur University</p> <p>Arun Mahata Associate Professor M.Phil. Burdwan University</p> <p>Maitreyee Datta Associate Professor Ph.D., Jadavpur University</p> <p>Preetam Ghoshal Associate Professor Ph.D, Jadavpur University</p> <p>Gopi Nath Mondal Assistant Professor Ph.D. University of Milan, Italy</p> <p>Rubai Saha Assistant Professor M.A., Jadavpur University</p> <p>Gargi Goswami Assistant Professor Ph.D, Jadavpur University</p> <p>Tamoghna Sarkar Assistant Professor Ph.D, Jadavpur University</p>	<p>Philosophy of Cognition and Cognitive Science, Analytic Philosophy of Mind, Studies in Folk Psychology and Developmental Cognition</p> <p>Existentialism, Social and Political Philosophy</p> <p>Metaphysics (Indian and Western), Space-Time, Buddhism</p> <p>Vedanta, Indian Philosophy, Mimamsa</p> <p>Indian Philosophy - Nyaya</p> <p>Indian Philosophy, Ethics, Comparative Religion</p> <p>Ethics, Social and Political Philosophy, Feminist Philosophy</p> <p>Philosophical Logic, Metaphysics, Analytic Philosophy, Nyaya</p>
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2. A) Area of Research Activities : Mind, Reality and Value

B) Major Research Project :

Name of the Project	Departmental/Individual	Funding Agency
Feminism and Philosophy	Group	CAS
Mind and Embodiment	Group	CAS
Situating Contemporary Indian Thinkers In The Context of Man, World and Morality	Group	CAS
Ethics and Cultur: Some Contemporary Indian Reflections Vol.III	Group	CAS
Development of Buddhist Logic and its application to metaphysics and epistemology	Prof. Madhumita Chattopadhyay	CAS
The contribution of Āryadeva in the development of Mādhyamika thought.	Prof. Madhumita Chattopadhyay	CAS
“Prāmāṇyavādasamīkṣā”	Prof. Rupa Bandyopadhyay	CAS
Nil Akasher Niche	Prof. Gangadhar Kar	CAS
Philosophy and the Body	Prof. Atashee Chatterjee Sinha	CAS
Issues in Indian Epistemology	Prof. Proyash Sarkar	CAS
Moral Responsibility: Some	Prof. Aparajita Mukhopadhyay	CAS

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Understanding Being and the Phenomenon of Being	Dr. Samar Kr. Mondal	CAS
Exploring the Philosophical Thought of Ramendrasundar Trivedi	Dr. Dipayan Pattanayak	CAS
Empirical Methods in the Philosophy of Mind: A Metaphilosophical Study	Dr. Maushumi Guha	CAS
Time, Temporal Passage and Their Cognitive Impenetrability	Dr. Maitreyee Datta	CAS
Sri Ramakrishna: An Epitome of Indian Values	Rubai Saha	CAS
Traditional Culture and Gender Relations	Dr. Gargi Goswami	CAS
Contextualism in The Epistemic Tradition	Dr. Gopinath Mondal	CAS
Reflexivity of Consciousness and Subjectivity	Prof. Madhumita Chattopadhyay & Prof. Madhucchanda Sen	CAS
Revisiting Stoic logic from the perspective of Contemporary Logic	Lopamudra Choudhury and Sanjukta Basu	CAS
<i>Prācīna Bhāratara Daṇḍanīti</i> (edited)	Proyash Sarkar and Preetam Ghoshal	CAS
<i>Advaitasiddhi</i> with <i>Vālabodhinī</i>	Rupa Bandyopadhyay and Preetam Ghoshal	CAS
<i>“Bhāratīya Darśanaśāstrera Vicārarīti</i>	Rupa Bandyopadhyay and Preetam Ghoshal	CAS

3.(A) and (B) and (C) Invited Lectures Delivered/ Sessions Chaired and Seminar/Workshop/ Conference/Symposium Attended/Organized:

Proyash Sarkar

Present Designation: Head and Professor

Seminars/symposiums/conferences/workshops organized/ attended (in the form of participation/ paper presentation/ chairing sessions):

1. 8 & 12 March 2018, acted as a resource person at a workshop on “Kantian Epistemology, Metaphysics and Ethics” at Ramakrishna Mission Vidyamandir, Belur Math.
2. 26 & 27 November 2018, delivered two special lectures on “The Gandhi-Ambedkar Debate on the Dalit Issue” at the UGC-DRS, the Department of Philosophy, North Bengal University.
3. 13 & 14 February 2019, delivered six special lectures two each on “Feminist Epistemology and the Philosophy of Science”, “Belief and Its Role in Epistemology”, and “Kant’s Theory of Knowledge” at the Department of Philosophy, Kazi Nazrul University, Asansol.
4. 1 March 2019, delivered a talk on ‘Gandhi and the Dalit’ at a National seminar on “Gandhi: The Person And His Philosophy” to be organized by the Indian Psychoanalytical Society, Kolkata.

Rupa Bandyopadhyay

Present Designation: Professor

Seminars/symposiums/conferences/workshops organized/ attended (in the form of participation/ paper presentation/ chairing sessions):

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Invited Lectures:

1. Delivered an invited lecture on *Vedānta* at the Ramakrishna Mission Institute of Culture, Golpark on 27.06.2018.
2. Invited to deliver lectures on “The Philosophy of Michael Dummett” and “The Philosophy of Donald Davidson” as a Visiting Faculty by Kaji Nazrul University, Asansol in March, 2019.

Seminar Presentations:

1. Invited to present a paper on “*Svataḥprāmāṇyavāda*” in a National Seminar by Kaji Nazrul University, Asansol on 07.03.2019.

Madhumita Chattopadhyay

Present Designation: Professor

Seminars/symposiums/conferences/workshops organized/ attended (in the form of participation/ paper presentation/ chairing sessions):

International:

1. Presented a paper on “The Logic of Interrogations: An Alternative Approach from the Pāli Buddhist Sources” in an International Hetuvidya conference organized by Guangzhou University, Guangzhou, China on 1st and 2nd September 2018.

National:

1. Presented a paper on “Discussion of Atoms in Buddhist Philosophy” in a National Seminar on “” organized by the Tibet House, Delhi on 1st and 2nd December 2018.
2. Presented a paper on “Doctrine of *Pratītyasamutpāda*: Its Different Perspectives” in a National Seminar on “” organized by Central Institute of Tibetan Studies, Sarnath on 17th – 19th December 2018.
3. Presented a paper on “Is there a one among the many? Buddhist View Reconsidered” in a National Seminar on “Identity and Difference” organized by the Department of Philosophy, University of Pune on 14th –16th February 2019.
4. Presented a paper on “Importance of *Kathāvatthu* in the Debate Tradition of Early Buddhism” in a National Seminar on “Vādaividhi” organized by the ICPR, Lucknow on 26th –27th February 2019.
5. Delivered the keynote address in a National Seminar on “Wittgenstein and Buddhism: Culture and Value” organized by the Department of Philosophy, Acarya Nagarjuna University, Guntur on 16th –18th March 2019.

Workshop

6. Organized a Seven Day Workshop on “Buddhist Epistemology” for University and College Teachers from 18th to 25th June 2018 on behalf of the ICPR Center for Buddhist Studies.
7. Delivered Two lectures on the topics “ Logic o *Kathāvatthu*” and “Notion of Time in the *Kathāvatthu*” in the Workshop on “*Kathāvatthu*” organized by the Indian Council for Philosophical Research, Lucknow on 11th and 12th September 2018.

Soumitra Basu

Present Designation: Professor

Seminars/symposiums/conferences/workshops organized/attended (in the form of participation/ paper presentation/chairing sessions):

- Delivered an extension lecture on “Krishnamurti’s Philosophy” at the Department of Philosophy, SKB University, Purulia on 19th September 2018.

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- Delivered an invited lecture on “Childhood Protection and Mental Health” organized by NCC unit of S S Jalan College, Kolkata on 9.10.2018.
- Delivered an invited lecture on “Samparka O tar Bhagan: Ekti Monodarsanik Paryalocana” at P C Mahalanavis College, Kolkata on 10.10.2018.
- Delivered a lecture entitled “Religious Intolerance and the Prospect of Inter Religious Dialogue” in the International Seminar on “Language, Religion and Culture” organized by University of Gour Banga during 21-22 January, 2018.
- Chaired a session in the International Seminar on “Language, Religion and Culture” organized by University of Gour Banga during 21-22 January, 2018.
- Delivered two lectures on “Basic Skills in Counselling for College Teachers” in the Orientation Course organized by HRDC, JU on 4th Jan 2019.
- Delivered two lectures on “Political Ethics” in the Refresher Course on “Social and Political Philosophy: Indian and Western” organized by Department of Philosophy, Jadavpur University in December, 2018.
- Chaired a session in a “National Seminar on ‘Gandhi, the Person and his Philosophy’” organized by the Psychoanalytic Society of Calcutta on 2nd march, 2019
- Conducted a workshop as resource person on “Couple Counselling” in NCE Bengal in March, 2019.
- Worked as a resource person in the workshop on “Stress and its Management” in Midnapore College on 27th Feb, 2019

Gangadhar Kar

Present Designation: Professor

Seminars/symposiums/conferences/workshops organized/ attended (in the form of participation/ paper presentation/ chairing sessions):

1. Delivered a lecture on “*Navya-Nyaya*” in the National Workshop on “*Navya Nyaya*” held at Ramakrishna Mission Vivekananda University on 18.8.2017.
2. Presented a Book Review in the International Seminar on “150th Birth Anniversary of Sister Nivedita The-Then Perspectives and Present Perspectives in India, A comparison” organized by the Department of Education, JU with ‘Byanjanbarna Foundation, Kolkata’ held on 27.10.2017
3. Delivered a lecture in the State Level Seminar held at Sri Sitaram Vaidik Adarsha Sanskrit Mahavidyalaya on 9.11.2018
4. Delivered a lecture titled on “*Shabdik O Naiyayiker drishtite Shabda: Ekti Samiksha*” on the occasion of World Philosophy Day held on 18th December, 2018 at University of Gour Banga, Malda.

Atashee Chatterjee Sinha

Present Designation: Professor, Department of Philosophy

Seminars/symposiums/conferences/workshops organized/attended (in the form of participation/ paper presentation/ chairing sessions):

Paper Presentation:

1. Delivered two lectures (90 minutes each) on “Tarabai Shinde: a Socio-feminist Perspective” in the Refresher Course on “Social and Political philosophy” organized by Department of Philosophy, Jadavpur University, on 8th December 2018.

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2. Delivered two lectures (90 minutes each) on “Ethics: Theory and Practice” in the 71th Orientation Programme for the teachers and librarians of universities and colleges, organized by the UGC-HRDC, JU, on 10th December, 2018 at Salt Lake Campus, Jadavpur University, Kolkata.
3. Presented a paper on “Philosophy of Man and Environment” in a periodical lecture sponsored by ICPR on 16th February, 2019 organised by Sammilani Mahavidyalaya, Kolkata.
4. Delivered two lectures (90 minutes each) on “Intersectionality and its relevance in Women’s Studies” in the 21 day Winter School on “Recent Themes in Women’s Studies: Relevance of a Multidisciplinary Approach” organized by the Women’s Studies Centre, Vidyasagar University on 23rd February 2019.

Seminar Organized/to be Organized:

National seminar organized by the Centre of Advanced Study in Philosophy, Jadavpur University held on 15-16th March 2019 on “Human Emotion and its role in Morality: Indian and Western Perspectives” (Joint coordinator with Professor Aparajita Mukhopadhyay).

Jhuma Chakraborty

Present Designation: Professor

Seminars/symposiums/conferences/workshops organized/ attended (in the form of participation/ paper presentation/ chairing sessions):

- Delivered a lecture in one day State level Seminar on “Gender Inequality and Socio-Economic empowerment of Women” on 3rd April 2018. Organised by the Department of Philosophy and Economics, of Lal Baba College.
- Delivered a lecture in one day State level Seminar on “Feminism and Care”, organized by the Department of Philosophy of Prabhu Jogotbondhu College on 5th Sep, 2018.
- Delivered two lectures on “Hegel’s view of State” in the Refresher course on “Social Political Philosophy: Indian and Western” organised by the Department of Philosophy, Jadavpur University held in Dec 2018.
- Delivered a lecture in one day State level Seminar on “Moral Conflicts and Dilemmas” organized by the Department of Philosophy of Scottish Church College on 29th Jan ,2018.
- Delivered a lecture on two day National Seminar on “Self and the Life world” on 1st and 2nd March 2019, organized by the Department of Sociology, North Bengal University.
- Participated as an official commentator on a paper presented by Sibaji Pratim Basu, in a National Seminar on “Gandhi the Person and his Philosophy” organized by the Psychoanalytic Society of Calcutta on 2nd March 2019.
- Worked as a co-ordinator in the Refresher course on “Social Political Philosophy : Indian and Western” organised by the Department of Philosophy, Jadavpur University held from 28th Nov -18th Dec 2018.

Lopamudra Choudhury

Present Designation: Professor

Seminars/symposiums/conferences/workshops organized/ attended (in the form of participation/ paper presentation/ chairing sessions):

1. Presented a paper entitled “Some important notions in the background of completeness proof for Venn-I”, jointly with Reetu Bhattacharjee and Mihir Kumar Chakraborty, in the 19th annual seminar on Logic and its Applications, CLC, 13th-15th Oct 2017.

Invited talks

Special lectures

1. Delivered two lectures on “*Reasoning with Diagrams*”, Orientation Program, Academic Staff College, Jadavpur University, Salt Lake Campus. June 2017.
2. Delivered a talk on “*Reasoning with Diagrams and Absence*” at the Department of Philosophy, NBU, December 2017
3. Paper presentation (accepted for presentation)
 - a. “An Extension of Venn-diagram System” by Reetu Bhattacharjee, Mihir Kr. Chakraborty and Lopamudra Choudhury, ICRTMS March 2018, Agartala, India.
 - b. “A survey and Evaluation of Diagrams for Navya Nyaya”, Jim Burton, Lopamudra Choudhury and Mihir Chakraborty, Edinburgh, UK June 2018.

Sashinungla

Present Designation: Professor

Seminar/Workshop Presentations:

- Delivered two lectures “Tribal Epistemology and Metaphysics – Conceptual and Methodological Concerns” at the ICPR National Workshop, 16th – 22 April 2018 on “Understanding Tribal Thought”, Indira Gandhi National Tribal University, Amarkantak, M.P.
- Presented a paper “Reconsidering Ethics of Shame – A Feminist Account” at the International Conference on “Terrors of Injustice: Gender Violence and Ethics of Shame”, Utrecht University, Netherlands, October 4–5, 2018.

Session Chaired:

- Chaired a session “Shame and Exposure” at the International Conference on “Terrors of Injustice: Gender Violence and Ethics of Shame”, Utrecht University, Netherlands, October 4–5, 2018.

Aparajita Mukhopadhyay

Present Designation: Professor

Seminars/symposiums/conferences/workshops organized/ attended (in the form of participation/ paper presentation/ chairing sessions):

1. Presented a paper on “Value of Life” in a National Seminar on “Education and Culture” organized by the Department of Philosophy, Vivekananda College for Women, Kolkata on 4th & 5th April 2018
2. Going to organize with Prof. Atashee Chatterjee Sinha a National Seminar on “Human emotions and their role in morality: Indian and Western perspective” on 15th and 16th March 2019
3. Delivered lecture on “*Capability Approach: Interpretation of Amartya Sen*” in a refresher course on “Social Philosophy: Indian and Western” organized by the Department of Philosophy, Jadavpur University during the period 28th November to 18th December 2018.

Madhucchanda Sen

Present Designation: Professor

Seminars/symposiums/conferences/workshops organized/ attended (in the form of participation/ paper presentation/ chairing sessions):

1. Resource Person at 3 day National Workshop on “Semantics and Logic of Truth” at University of Mumbai, 24th to 26th September 2018.

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2. Presented A Paper on “Counterperspectives–A Creative Engagement with Tradition at World Philosophy Day Seminar at Rabindra Bharati on 4th December 2018.
3. Resource Person at a Workshop under a Project Partnership between French Research Centre in Social Sciences and French Institute in Pondicherry to be Held in Pondicherry on 7th and 8th March 2019.

Samar Kumar Mondal

Present Designation: Professor

International/National/ State level Seminar/Workshop Organized:

Title of the Course/Nature of the course(Workshop/Refreshers/Others/Sponsoring/
FundingAgency/Duration(state also attended/organized)/Host/ Organizing Institute

Management of Stress of Adolescents, One week Workshop RKSMVV 4th May - 11th May, 2018, CCSSS, J.U. & RKSMVV.

Faculty Development Programme, One day Seminar, CPE fund, UGC 10th Dec. 2018, Midnapore College

Dr. Dipayan Pattanayak

Present Designation: Associate Professor

Seminars /symposiums/ conferences/ workshops organized/ attended (in the form of participation/
paper presentation/ chairing session):

1. Participated One Week National Workshop on Manikāṇa during 4th October to 10nd October, 2017, organized by the Indian Council of Philosophical Research, Academic Centre, Lucknow.
2. Acted as a Coordinator for conducting ICPR Sponsored One Day State Level Seminar to commemorate World Philosophy Day entitled “Comparative and Critical Study of the Philosophical Systems” organized by the Department of Philosophy, Jadavpur University, on 18th November, 2017.
3. Acted as a Coordinator for conducting “Prof. Pranab Kumar Sen Memorial Award Distribution Ceremony” organized by the Department of Philosophy, Jadavpur University, on 18th November, 2017.
4. Presented a Paper entitled “Eternal Peace and Harmony: A Re-examination of Upanisadic View” in UGC Sponsored International Seminar on “Eternal India : Harmony and Peace” organized by the Department of Philosophy, Bijoy Krishna Girl’s College, Howrah, West Bengal on 10th and 11th January, 2018.
5. Acted as a resource person in the State level seminar on “Philosophy of Language: Indian and Western” organized by the department of Philosophy, Bankura University on 15th January, 2018.
6. Acted as a chair person in the International Seminar on “*Shilpa-Sahitya-Sanskriti: Prachya O Pratichyer Bhabnay*” organized by the Department of Bengali and I.Q.A.C., Sabang Sajanikanta Mahavidyalaya, Sabang, Paschim Medinipur on 19th January, 2018.
7. Acted as a resource person in the State level seminar on 6th February, 2018, organized by A.K.P.C. Mahavidyalaya, Bengai, Hooghly.

Maushumi Guha

Present Designation: Associate Professor

Seminars/symposiums/conferences/workshops organized/ attended (in the form of participation/
paper presentation/ chairing sessions):

1. Presented a paper titled, “(Meta) philosophical Banter ~ Mary Midgley’s *What is Philosophy*

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For?” at a seminar on “Philosophy: Now and Then” organised by the Department of Philosophy, Jadavpur University to commemorate World Philosophy Day on 21st December 2018.

2. Presented a paper titled, “The meaningfulness of other minds ~ Charity and its discontents” at a seminar to commemorate World Philosophy Day organised by the Department of Philosophy, University of Gour Banga, Malda, on 18th December 2018.
3. Delivered Lectures on “Contemporary Philosophy of Mind to a group of *Jaina Samanis*” who are teachers of the Jaina Vishva Bharati at Ladnun, Rajasthan.

Arun Mahata

Present Designation: Associate Professor

Attended Course: i. Seven days workshop on “Buddhist Epistemology”, Organized by ICPR Centre for Buddhist Studies, Department of Philosophy, Jadavpur University from 18th to 25th June, 2018.

- ii. One day State Level Seminar on “Philosophy : Then and Now”, Organized by Department of Philosophy, Jadavpur University from 21st December, 2018.

Maitreyee Datta

Present Designation: Associate Professor

Seminars/symposiums/conferences/workshops organized/ attended (in the form of participation/ paper presentation/ chairing sessions):

1. Presented a paper jointly with Dr. Sugata Nandi, Assistant Professor of History, West Bengal State University titled “Idyll of Idleness: Time Discipline and Resistance in Colonial India” at the International Conference on “The Social Life of Time: Power, Discrimination and Transformation” held at the Edinburgh University, Edinburgh, UK on 5-7 June, 2018.
2. Acted as a resource person and delivered lectures on *Nyāyabindu* in the workshop on “Buddhist Epistemology” organized by ICPR Center for Buddhist Philosophy, Department of Philosophy, Jadavpur University, Kolkata from June, 2018
3. Presented a paper titled “Is three time argument of Nagarjuna an adequate one?” at the 14th *Hetuvidyā* conference held at the Institute of Logic and Cognition, Sun Yat-Sen University, Guangzhou, China on 15-16 September, 2018.
4. Presented a paper entitled “Classical Indian Dialectics Used to Refute the Reality of Tense in *Mūlamadhyamakakārikā* and *Khandanakhandakhādyā*,” to attend at the ULB-KUIS Joint Conference entitled “Asian Philosophical Texts” organized by the Research Centre for East Asian Studies (EASt) at the Université libre de Bruxelles (ULB) on October 25–27 2018.
5. Presented a paper titled “J. L. Mehta’s Notion of *Comparative Philosophy*: Some Observations” in the ICPR sponsored seminar on World Philosophy Day, organized by Department of Philosophy, Rabindra Bharati University, on 4.12.2018.
6. Chaired a session in the state level seminar organized for the World Philosophy Day celebration at Department of Philosophy, Jadavpur University, December, 2018.
7. Presented a paper in the National Seminar on “Self and the Life-World” organized by the Department of Sociology, North Bengal University, 1.3.2019-2.3.2019.

Preetam Ghoshal

Present Designation: Associate Professor

Seminars/symposiums/conferences/workshops organized/ attended (in the form of participation/ paper presentation/ chairing sessions):

A) Organized

1. PK Sen Memorial Lecture, Date 21.12.2018

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2. One Day State Level Seminar on the occasion of World Philosophy Day, Theme : Philosophy, Then & Now, Date 21.12.2018

B) Participated

Seven day Workshop on Buddhist Epistemology, Date 18/6/18-27/6/18

Ms. Rubai Saha

Present Designation: Assistant Professor

Seminars/symposiums/conferences/workshops organized/ attended (in the form of participation/ paper presentation/ chairing sessions):

- 1) Organization of Seminar:- Acted as the coordinator of the “Thirty Fifth Annual Sri Aurobindo Memorial Lecture” (under the auspices of the Centre for Sri Aurobindo Studies, Department of Philosophy, Jadavpur University) held on 30th August, 2018.
- 2) Participation in Seminar/Workshop:-
 - A) Participated in the Study Camp on “Indian Scriptures in the Light of Sri Aurobindo” organized by Sri Aurobindo Foundation for Indian Culture (SAFIC), Sri Aurobindo Society, Puducherry from 6th to 12th May, 2018 at Madhuban Campsite, Ramgarh, Uttarakhand.
 - B) Attended the Study Camp on the Vedas (*Vedaprabodha*) at Sri Aurobindo Society, Puducherry organized by Sri Aurobindo Foundation for Indian Culture (SAFIC) from 6th to 10th of August, 2018.
 - C) Attended the Seven Day Workshop on “Buddhist Epistemology” from 18th to 25th June, 2018 (excluding Sunday) organized by the ICPR Center for Buddhist Studies, Department of Philosophy, Jadavpur University.
 - D) Participated in the One Day State Level Seminar entitled “Philosophy: Then and Now” held on the occasion of World Philosophy Day on 21st December, 2018 at the Department of Philosophy, Jadavpur University.

Gargi Goswami

Present Designation: Assistant Professor

Seminars/symposiums/conferences/workshops organized/ attended (in the form of participation/ paper presentation/ chairing sessions):

Seminar Organized:

A one day State Level Seminar titled “Philosophy: Then and Now” on the occasion of World Philosophy Day on 21.12.2018 along with Dr. Preetam Ghoshal.

Paper Presentations:

- “History Of Utilitarianism with Emphasis on Mill” held on 18.04.2018 at Rani Birla Girls’ College.
- “Culture, Religion and Gender Rights : Is there a Meeting Point?” in International Seminar on “Language, Religion and Culture: Indian and Western Perspectives’ held on 21st -22nd January, 2019 by University of Gour Banga, Malda.
- Going to present a paper titled “Care of Self : A study from Foucault’s Perspective” in the National Seminar on “Self and the Life-World” organized by the Department of Sociology, North Bengal University, 1st and 2nd March 2019.
- Delivered a lecture titled “Caste and Marriage” in the Refresher Course organized by UGC-HRDC and Department of Philosophy, JU on December, 2018.
- Going to deliver a lecture titled “The Nature of Dharma in Ramayana: Understanding Matilal’s Perspective” in a two day International Seminar on “Hinduism and Buddhism in South East Asia

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(with special reference to Ramayana)” organized by Sanskrit Studies Centre and Department of Oriental Languages, Silpakorn University, Bangkok, during 2nd and 3rd March, 2019.

Tamoghna Sarkar

Present Designation: Assistant Professor

Joint coordinator of the International Seminar on “Understanding Self” organized by the Department of Philosophy, Jadavpur University on 26th & 27th March, 2019.

3. (D) and (E) Orientation/Refresher Courses Attended/Organized

Gargi Goswami

Refresher Courses (Attended/ Organized):

Organised a three week UGC sponsored refresher course from 28.11.2018 to 18.12.2018 on “Social and Political Philosophy: Indian and Western” at Department of Philosophy, Jadavpur University

Gopi Nath Mondal

Refresher Courses (Attended/ Organized):

Attended a Refresher Course organized by HRDC Jadavpur University, Kolkata.

Maitreyee Datta

Refresher Courses (Attended/ Organized):

Organized a UGC sponsored refresher course on “Social and Political Philosophy: Indian and Western” with Dr. Jhuma Chakravarty and Dr. Gargi Goswami from 28.11.2018 to 18.12.2018.

4.A. Books/Monographs etc. Published:

Proyash Sarkar

A. Book chapters

1. “Ambedkar on the Emancipation of the Untouchables” in an anthology on *Caste, Marginalization and Emancipation: A Socio-Philosophical Perspective* to be published by Santhigiri Institute of Culture & Human Development, Thiruvananthapuram.
2. ‘*Vijnane narivad*’, in *Aloconacakra*.

Madhumita Chattopadhyay

Contributed a chapter on “Introduction to Buddhist Logic” to the *Handbook of Indian Logic*, ed by Sundar Sarukkai, published from Springer in 2018.

Gangadhar Kar

“*Mahajibaner Antarale*” published under CAS Programme in Philosophy Phase V in collaboration with Mahabodhi.

Rupa Bandyopadhyay

Contributed a chapter in the Proceedings of the International Conference organized by the Ramakrishna Mission Institute of Culture to commemorate the 150th Birth Anniversary of Sister Nivedita.

Atashee Chatterjee Sinha

1. “Tarabai Shinde: Questioning caste hierarchy and gender bias in nineteenth century India” in an anthology *Ethics and Culture: Volume 3*, to be published under UGC CAS phase V from the Department of Philosophy, Jadavpur University.

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2. “*Naribadi Adhividya: Kichubhabna, Kichuprasna*” (Bengali) to be published by Alachana Chakra, Kolkata, special journal volume in Feminist Theory.

Lopamudra Choudhury

Working towards the second edition of the *Dictionary of Philosophy* (English to Bangla).

Sashinungla

Book chapters:

- “India’s Foreign Policy and Domestic Compulsions: Theorizing the Margins of Exclusion”, in *The Interface of Domestic and International Factors in India’s Foreign Policy*, Sage Publications, eds., Johannes Dragsbaek Schmidt and Shantanu Chakrabati.

Aparajita Mukhopadhyay

Book chapters “Moral Dilemma: A Threat to Objectivity?” in an anthology on *Logic, Ethics and Epics: Homage to Late Professor B.K. Motilal*.

Dr. Dipayan Pattanayak

Book chapters:

“*Why Does a Human Being Act unto Others: A Study of Ramendrasundar’s Position*”, Interrogating the ‘Self’, Levant Books, Kolkata, 2017, (ISBN: 978-93-84106-92-8), Page- 88-94.

Maushumi Guha

1. Book chapters: “Simulation and Meditation” in *Essays in Honour of Amita Chatterjee*, ed. by MadhucchandaSen, Kuntala Bhattacharya and Smita Sirker.

Ms. Rubai Saha

An article entitled ‘Values in Sri Ramakrishna’s Message to the World’ is going to be published in the anthology *Ethics and Culture*, Vol. 3 under the Value group publication within March, 2019 to be edited by Prof. Aparajita Mukhopadhyay and Dr. Gargi Goswami.

Gargi Goswami

A chapter titled, “Bal Gangadhar Tilak’s rationalisation of Violence through the Interpretation of the Gita in *Ethics and Culture: Volume III* edited by Aparajita Mukhopadhyay and Gargi Goswami.

4.(B) Articles published in Journals:

Madhumita Chattopadhyay

1. “Locating Early Buddhist Logic in Pāli Literature” in the APA Newsletter, October 2018.
2. “*Nāgārjuna* on Word-Object Relationship” (forthcoming) in the Journal *Anveṣana* published by the Department of Buddhist Studies, University of Kelaniya, Sri Lanka in 2019
3. “*Dharmakīrti* on the *svasaṃvedana* character of *pramāṇa*”(forthcoming) accepted for publication in the Journal of the Department of Philosophy, Rajshahi University, Rajshahi, Bangladesh

Soumitra Basu

An article entitled “Susil Kumar Maitrer Darsan Chinta: ekti Paryalocana” to be published in the Centenary Volume Publication of Serampore College, West Bengal.

Atashee Chatterjee Sinha

1. “Understanding Moral Development from a care perspective: new directions to moral maturity” in a special edition of ICPR journal on Feminist Philosophy.

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2. Journal paper reviewed: Journal of Indian Council of Philosophical Research ICPR-D-18-00040, Title: Metaphysical Ground of Ethics on January 2019.

Jhuma Chakraborty

- Article entitled “Evolving Self: a story through Feminist Lens” to be published in the journal *Social Trends: Journal of the Department of Sociology Vol 6*, published by the University of North Bengal.
- An article entitled on “Mohanty on Religiosity” to be published in the book entitled *Ethics and Culture* eds. Aparajita Mukhopadhyay and Gargi Goswami, Jadavpur University.

Lopamudra Choudhury

“Venn diagram with Names of Individuals and their Absence: a Non-Classical Diagram Logic”, Reetu Bhattacharjee, Mihir Kr. Chakraborty and Lopamudra Choudhury, in *Logica Universalis*, Springer International Publishing AG, part of Springer Nature <https://doi.org/10.1007/s11787-018-0186-7>

Sashinungla

- “Feminist theory, Politics of Sovereignty and Epistemic Injustice”, *Journal of Indian Philosophical Research*
- “Thinking, Looking and Acting: Beyond East and Southeast to the ‘Other Asia’”, *Third World Quarterly*

Aparajita Mukhopadhyay

“Moral Reason: A Debate Between Externalism and Internalism”, *Jadavpur Journal of Philosophy*, Vol. 27, No. 1, 2017 -18, ISSN 0975-6833, pp 101 -114

Samar Kumar Mondal

“বাংলার জীবন জিজ্ঞাসা : উনিশ শতকের বাংলা ও বাঙালীর জীবন ফিরে দেখা” Vol. – I, 2018

Environment and Sustainable Development: An Exploration from Jainism, The Jainism and The Jaina Culture in Eastern India The volume, bearing ISBN no, will be brought out by Kavery publisher, New Delhi

“বিবেকানন্দের চিন্তায় প্রায়োগিক বেদান্ত” : *Jadavpur Journal of Philosophy* ISSN: 0975-6833 2018-19, Vol-28, Issue-II.

Dr. Dipayan Pattanayak

“Banglar Darshan o Sahitye Vedanter Prabhav”, *Published in Relevance of Indian Philosophy in the 21st Century*, Published by TheDepartment of Philosophy, Netaji Mahavidyalaya, Arambagh, Hooghly, West Bengal, 2017, ISBN - 978-93-5291-076-2, Page No- 1-5.

Preetam Ghoshal

‘Avidyalesa’, *Darsana Viksa*, ISSN : 0975-6833, vol -27/2, 2017-18.

Gargi Goswami

“In pursuance of the problem of Personal Identity” in *Conscientia*, Vol 4 , 2018.

Tamoghna Sarkar

- (i) National: “Identity, Individuality and Indiscernibility: an Essay in Analytic Ontology”, *Journal of Indian Council of Philosophical Research*, Vol. 35.1, 2018, pp. 15-33.

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- (ii) International: (A) “Evaluating Classical Identity and Its Alternatives”, *Philosophy Pathways*, Issue 224, 2018 (August), pp. 1-6.
- (iii) “Editor’s Note and Introduction”, *Philosophy Pathways*, Issue 227, 2018 (November), pp. 1-4.

5. Collaborative Programmes:

Serving for outside user Departments in (Nos. & hrs.):

- i. Hands-on or technical training to university/college teachers:
 - The teachers of the Department associated with the ICPR Centre for Buddhist Studies are offering courses in which teachers and students from other colleges and Universities participate (No. of such participants is 15)
 - The teachers of the Department who work on Feminist Studies offer courses on Feminism in which teachers from colleges and Universities outside Jadavpur participate alongwith the teachers of Jadavpur University. (No. of such participants is 15)
 - The ICPR Centre for Buddhist Studies organized a workshop on Buddhist Logic for College and University teachers. (No. of such participants is 40)
 - Prof. Madhumita Chattopadhyay and Dr. Maushumi Guha have delivered lectures on various topics to the nuns, who are part of teaching faculty of Jaina Viswavidyalaya, Ladnun (No. of such participants is 30)
- ii. **Collaborative (international):**
 - Dr. Madhucchanda Sen is a Faculty Co-ordinator of the project E-Qual of European Union. She has also designed courses for Critical Thinking under the Erasmus Mundas Programme.
- iii. **Teaching to neighbouring institutions:** Faculty members have been involved in teaching at various levels in various Universities and Colleges many teachers of the department are involved in teaching at other institutions like Calcutta University, Rabindra Bharati University, University of Burdwan, Visva Bharati, Shantiniketan, Kazi Nazrul University, Sido-Kanho University, Purulia, Gourbanga Viswavidyalaya, Malda, West Bengal State University, Barasat, Presidency University, North Bengal University, Kalyani University (Krishnanagar Government College), Vidyasagar University, Diamond Harbour University.
- iv. **Visiting Teachers to Foreign University:**
 - Professor Madhumita Chattopadhyay presented a paper on “The Logic of Interrogations: An Alternative Approach from the Pāli Buddhist Sources” at the 14th *Hetuvidyā* conference held at the Institute of Logic and Cognition, Sun Yat-Sen University, Guangzhou, China on 15-16 September, 2018.
 - Professor Sashinungla presented a paper “Reconsidering Ethics of Shame – A Feminist Account” at the International Conference on “Terrors of Injustice: Gender Violence and Ethics of Shame”, Utrecht University, Netherlands, October 4–5, 2018.
 - Dr. Maitreyee Datta presented a paper jointly with Dr. Sugata Nandi, Assistant Professor of History, West Bengal State University titled “Idyll of Idleness: Time Discipline and Resistance in Colonial India” at the International Conference on “The Social Life of Time: Power, Discrimination and Transformation” held at the Edinburgh University, Edinburgh, UK on 5-7 June, 2018.
 - Dr. Maitreyee Datta presented a paper titled “Is three time argument of Nagarjuna an adequate one?” at the 14th *Hetuvidyā* conference held at the Institute of Logic and Cognition, Sun Yat-Sen University, Guangzhou, China on 15-16 September, 2018.

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- Dr. Maitreyee Datta presented a paper entitled “Classical Indian Dialectics Used to Refute the Reality of Tense in *Mūlamadhyamakārikā* and *Khandanakhandakhādyā*,” to attend at the ULB-KUIS Joint Conference entitled “Asian Philosophical Texts” organized by the Research Centre for East Asian Studies (EASt) at the Université libre de Bruxelles (ULB) on October 25–27, 2018.
- Dr. Gargi Goswami is going to deliver a lecture titled “The Nature of Dharma in Ramayana: Understanding Matilal’s Perspective” in a two day International Seminar on “Hinduism and Buddhism in South East Asia (with special reference to Ramayana)” organized by Sanskrit Studies Centre and Department of Oriental Languages, Silpakorn University, Bangkok, during 2nd and 3rd March, 2019.
- Dr. Madhucchanda Sen is a Faculty Co-ordinator of the project E-Qual of European Union. She has also designed courses for Critical Thinking under the Erasmus Mundas Programme.

6. Major Achievements:

- a. **Teaching:** We use highly evolved teaching methods that include use of ICT as well as one-to-one personal interactions during and after class hours.

b. Curriculum Last Revised & Significant Changes:

New Syllabus for the UG and PG levels has been introduced in the year 2016. Hence no alteration in the existing syllabus is mentioned here.

- The syllabi for the UG and PG level under the semester system, which has been revised rigorously, has been implemented from the academic session 2016-2017. The basic objective of the revision has been to make the syllabi updated, and comprehensive so that the students can start with a broad outline and then proceed on to a detailed study on the topic.
- In the syllabus for M.Phil and Ph.D coursework, special emphasis is given on research methodology: Indian and Western. Teachers, while offering optional courses, focus on contemporary research areas, such as Reflection on Searle’s Rediscovery of mind, Noam Chomsky, Bimal Krishna Matilal, Ontology of P.F. Strawson, Philosophy of Arindam Chakraborty, Feminist perspectives on power, sceptical tradition of India, Moral Responsibility, Metaphysics of Sri Ramakrishna’s Philosophy and so on, at both the M.Phil and Ph.D levels. At all levels emphasis is given on learning and research rather than forced teaching and enabling students to learn how to write research articles.
- UG in Philosophy has introduced the Choice Based Credit system from the academic session 2017-18. Under CBCS our department offers the following Courses:
 - 14 CORE COURSES, 6 credits each, Theory-5 Tutorial-1
 - 02 Skill Enhancement Courses (SEC) 4 credits each
 - 1 SEC course to be taken in semester 3 (from two options) and 1 SEC course to be taken in semester 4 (This course has various options)
 - 02 Ability Enhancement Compulsory Courses (AECC), i.e. Environmental Studies (EVS) 4 credits
 - Communicative English/Hindi/Modern Indian Language 4 credits
 - These two courses are offered centrally by the faculty
 - 04 Discipline-Specific Electives (DSE) 6 credits each, Theory-5 Tutorial-1
 - 02 DSE courses are in Semester 5 (both courses have options) and 2 DSE courses are in Semester 6 (both courses have options)
 - 04 Generic Elective (GE) courses 6 credits each.

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One who takes Core Course & DSE in a particular discipline/subject cannot take GE course in the same discipline/ subject

TOTAL COURSES = 26

1 credit = 1(hour) class

Total Marks for Honours is 1000 (14 core courses, 4 DSE & 2 SEC)

Total Marks for GE is 200 (4 GE courses)

Total Marks for SEC is 100 (2 SEC courses)

c. Examination reforms last made with special features:

The University has introduced an online Portal named JUMS (Jadavpur University Management System) for allotment of subjects to teachers, allotment of examiners, for uploading of marks of both internal and semester evaluations as well as publication of results. In 2017-18, this online system has been introduced for UG 1st Semester and PG 1st Semester only. The students are also given admission and admit cards through individual online portals.

With the introduction of the semester system at the M.Phil level, the examination/evaluation system has undergone a major change. Besides an end-semester examination for 30 marks per module, 20 marks have been set aside for continuous assessment in the form of presentations or class tests.

In case of Ph.D coursework, 50 marks is allotted to Research Methodology and 50 marks for a project which a candidate has to submit and evaluation is done by the departmental teachers on the basis of her/his written submission and a viva-voce examination in the presence of the Head of the Department and the examiners.

d. Teaching lab./equip./new facilities created:

The Department has received 10 desktops, 1 printer (for UG & PG students) under RUSA scheme (Rastriya Ucha Siksha Aviyan). This is mainly for utilisation by students.

PHYSICAL EDUCATION

Phone : +91-33-2413-6786

Int. : 2457-2486

H.O.D. : Dr. Gopal Ch. Saha

Dr. Sanjib Mridha (w.e.f. 03.01.2019)

E-mail : hod@phed.jduv.ac.in

hod.ph.ed@jadavpuruniversity.in

1. A. Courses Offered: B.P.Ed. (Intake-50+50), M.P.Ed. (Intake-40+40) & Ph.D.

1. B. Number of Faculty Members: Nine (09)

2. A. Area of Research Activities: Yoga, Sports Psychology, Sports Physiology, Biomechanics, Sports Anthropometry, Sports Training, Sports Management.

3. A. Invited Lectures Delivered/Sessions Chaired:

- 1) **Prof. Sanjib Mridha:** Plenary Lecture & Session Chaired on “NAAC National Conference on Yoga Accreditation for Higher Education Programmes , S-VYASA, 6th March 2019, Delegate. World Yoga Day-2018: Yoga for Health and Wellness in the 21st Century, Yunan Technology and Business University, China, 21.06.2018. Plenary Lecture on “Futuristic Trends in Health, Phy. Edn. & Sports (Topic; Psychosocial Aspect of Sports Performance)”, Sports Department, Mizoram University, 14-15, February 2019. Plenary Lecture on “Multidimensional Approach for Academic Accomplishment of Physical Education as a True Profession”- Resource Person, Mugberia Gangadhar Mahavidyalaya, West Bengal, 13-14 July 2018.
- 2) **Dr. Papan Mondal:** Session Chaired in International Seminar on “Multidimensional Approach for Academic Accomplishment of Physical Education as a True Profession”, Mugberia Gangadhar Mahavidyalaya, Purba Mednipur, West Bengal, India, 13th and 14th July, 2018.
- 3) **Dr. Atanu Ghosh:** Guest Lecture on NET Preparatory Class, University of Burdwan.
- 4) **Prof. Gopal Chandra Saha:** Invited Speaker of Managing and Promoting Sports Events, NSHM School of Business & Management Studies, Durgapur, WB, 17th August, 2018.

3. B. Seminar/Workshop/Conference/Symposium Attended:

- 1) **Prof. Sanjib Mridha:** International Seminar on “Multidimensional Approach for Academic Accomplishment of Physical Edn. as a True Profession”, A study on physique and physical fitness somatotypes of 20-25 years college male students (38), M. Gangadhar Mahavidyalaya, W.B., 13-14 July, 2018. National Conference on “Including the Excluded: A Spectrum of Emerging Changes in Education, Adaptive Physical Education: Problems and potentials” (2), NSOU, Kolkata and Rehabilitation Council of India, 23 – 24 February, 2019.
- 2) **Dr. Papan Mondal:** National Seminar on “Yoga for Holistic Health, Biomechanical Analysis of Suryanamskar”, Dept. of Yogic Art and Science, Visva- Bharati, 17th June, 2018. International Seminar on “Multidimensional Approach for Academic Accomplishment of Physical Education as a True Profession”, Kinematic Factors and Spike Height of Male and Female Volleyball Players, Mugberia Gangadhar Mahavidyalaya, Purba Mednipur, West Bengal, India, 13th and 14th July, 2018.

3. C. Seminar/Workshop/Conference/Symposium Organized:

- 1) **Prof. Sanjib Mridha:** Organizer of the workshop on review of B.P.Ed and M.P.Ed Curriculum (NCTE regulations, 2014), Dept. of Physical Education, Jadavpur University, 19th March, 2019.
- 2) **Dr. Atanu Ghosh:** Convener of the Workshop on review of B.P.Ed. and M.P.Ed. curriculum (NCTE regulations, 2014), Department of Physical Education, Jadavpur University, Kolkata-32, 19th March, 2019.
- 3) **Dr. Papan Mondal:** Participant and member of the organizing committee of the workshop on review of B.P.Ed and M.P.Ed Curriculum (NCTE regulations, 2014), Department of Physical Education, Jadavpur University, Kolkata-32, 19th March, 2019.
- 4) **Dr. Asish Paul:** Participant and member of the organizing committee of the workshop on review of B.P.Ed. and M.P.Ed. curriculum (NCTE regulations, 2014), Dept. of Physical Education, Jadavpur University, 19th March, 2019.

3. D. Orientation Courses/ Refresher Courses Attended:

- 1) **Prof. Sanjib Mridha:** Orientation course on “Stress Management of Psychological Management, NPTEL Online Course(MHRD, Govt. of India) IIT, Kharagpur, August-Sept. 2018”, Educational Leadership, Academic Administration.

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- 2) **Dr. Asish Paul:** Orientation course on “Management and use of E-resources in Academic Libraries”, Department of Library and Information Science, August 23rd – 29th, 2018.
- 3) **Prof. Gopal Chandra Saha:** Refresher Course on “Yoga: Health, Fitness, Wellness & First Aid (ID): Health: A Life Long Activity”, “Wellness for Greater Community”, Fitness: Lets know all about Fitness”, “Wellness for Better Life”, Resource Person, UGC-Human Resource Development Centre, Guru Ghasidas University, Bilaspur, Chattisgarh, 19th & 20th June, 2019.

4. A. Articles Published in Journals:

- 1) **Prof. Sanjib Mridha:** Article published on “Participation of Indian Women in Olympic Track & Field Sprint Events *Prachesta- Ind. J.of Phy. Edn. & Ex. Sc.* on March, 2019, volume: 5(1): 131-136.
- 2) **Dr. Papan Mondal:** Article published on “Kinematic Factors and Spike Height of Male and Female Volleyball Players” *Indian Journal of Health Nutrition and Physical Education* on July, 2018, Vol-VI.
- 3) **Dr. Atanu Ghosh:** Article published on “A study on anxiety depression and coping strategies between Odisha and Manipur male softball players” and “A study on anxiety depression and coping strategies between Odisha and Manipur female softball players” on *International Journal of Physiology, Nutrition and Physical education* on Jul-Dec,2018, Vol-03
- 4) **Dr. Asish Paul:** Article published on “Sports- The Medium of Social Responsibility Services: A Case Study of Central Coal Fields Limited (CCL)” *International Research Journal of Management and Commerce* on May, 2019, Vol. 4, no. 5. “A study on effect of selected *Physical Training programme on accuracy of intellectually disabled school boys*”, the *International Journal of Adapted Physical Education and Yoga* on Oct. 2018, Vol-03, No.- 12. “A study on relationship between vital capacity and selected physiological variables of University level male and female students”, *the International Research Journal of Management and Commerce* Oct. 2018, Vol-08, No.- 10. “Comparative analysis of body composition and physical dimension of female students belonging to different professional institutions and Comparative analysis of anthropometric measures and cardiorespiratory endurance among hill and plain area adolescent girls”, the *International Journal of Physiology, Nutrition and Physical Education* on Jan. 2019, Vol-04, no.- 1.
- 5) **Prof. Gopal Chandra Saha:** Article published on “Relationship of Speed with Foot Length Leg Length and Stride Length Of State level sprinters”, *International Journal of Physiology, Nutrition and Physical Education*, Volume 3, Issue 2, 2018,pp:439-441, ISSN No-2456-0057,Impact Factor(RJIF): 5.43, UGC Journal No.:44404. “A Comparative Study on Eysenck Personality Traits among Physical Education Students General Education Students and Otherly Aabled Students”, *RENOVA, A peer-reviewed Interdisciplinary Journal of Research and Innovation in Education, Rehabilitation and Psychological Counselling*, Volume 5, No 1, March 2019, pp:81-90, ISSN No-2454-1710.
6. **Major Achievements:** Organised an Workshop on Review of B.P.Ed and M.P.Ed Curriculum (NCTE regulations, 2014) on 19.03.2019.

Section III

Annexure (Administrative)

Officers of the University: NA

University Bodies : NA

Teachers : 9

Research Scholars Awarded : Ph.D – one (1)

SANSKRIT

Phone & Fax : +91-(0)33-2414-6115
Int. : 2457 2086/2254
H.O.D. : Prof. Tapan Sankar Bhattacharya
Dr. Ashok Kumar Mahata (w.e.f. 05.03.2019)
E-mail : hod@sanskrit.jdvu.ac.in
hod.sanskrit@jadavpuruniversity.in

Brief History of the Department

Founded in August 1956, with Prof. Gaurinath Sastri, the celebrated Principal of the Govt. Sanskrit College, Calcutta as the Teacher-in-charge (1956-1958) and then Prof. Sadananda Bhaduri (who later donated his collection of books to the Departmental library) as its first Head of the Department (1958-1961), Jadavpur University's Department of Sanskrit, with its day and evening sections, started flourishing with a bang during the tenure of Prof. Ramaranjan Mukherji, who, twice pivot of the Department for a long time (1961-1970, 1971-1972), took an active interest in its multiple activities till his last days. After a brief spell of joint Headship of Prof. Sitanath Goswami and Prof. Gopikamohan Bhattacharya in 1970, the former singly headed this Department twice (1970-1971, 1973-1980) for another long period, after which the Headship became rotational. The subsequent Heads were Prof. Ms. Sukumari Bhattacharji (the first woman to lead the Department, in 1981), Dr. Nirmalkanti Basu (1981-1983), Prof. Bhabani Prasad Bhattacharya (the first teacher to occupy the chair twice and the only teacher to complete his/her tenures since the introduction of rotatory Headship, in 1983-1985), Prof. Rabisankar Banerji (1985-1987), Prof. Nandita Bandyopadhyay (1987-1989), Dr. Himansu Narayan Chakravarti (1989-1991), Prof. Manabendu Banerjee (1991-1993), Prof. Bijoya Goswami (1993-1995), Prof. Sarbani Ganguli (1995-1997), Prof. Bhabaniprasad Bhattacharya (1997-1999), Dr. Abhijit Ghosh (1999-2001), Prof. Pradyot Kumar Datta (2001-2003), Prof. Lalita Sengupta (2003-2005), Prof. Rita Chattopadhyay (2005-2006), Prof. Ms. Debarchana Sarkar (2006-2008), Prof. Tapan Sankar Bhattacharyya (2008-2010), Prof. Piyali Prahara (2010), Prof. Bijoya Goswami (2010), Prof. Rita Chattopadhyay (2011), Prof. Lalita Sengupta (2011-2012), Dr. Abhijit Ghosh (2012-2013), Prof. Tapan Sankar Bhattacharyya (2013-2019) and the present Head being Dr. Ashok Kumar Mahata (2019-till now). As well as such stalwarts as among others the illustrious Prof. Sushil Kumar De, Dr. Kunja Gobinda Goswami, Prof. Prabodh Chandra Lahiri, Prof. Bishnupada Bhattacharya, Prof. Hemanta Gangopadhyay, Prof. Sanjukta Gupta and Dr. Chinmayi Chatterjee, luminaries like Mahamahopadhyay Srijib Nyayatirtha and noted traditional scholars like Pandits Dinesh Chandra Sastri, Bidhubhushan Tarkatirtha, Bhutesh Chandra Smrititirtha, Narmada Kumar Tarkatirtha and Ms. Durgabati Bandyopadhyay were also associated with this Department, in some way or other.

The Department earned in 1989 the University Grants Commission-recognized then rare distinction of Department of Special Assistance, with Prof. Rabisankar Banerji as its Coordinator for a life time, subsequently led by Prof. Manabendu Banerjee (acting) and Prof. Bijoya Goswami. Since 1997, it has had also a University-funded Centre for Indology, being first coordinated by Prof. Manabendu Banerjee, then by Prof. Nandita Bandyopadhyay (Joint Coordinator Prof. Debarchana Sarkar), then by Prof. Debarchana Sarkar and now by Prof. Tapan Sankar Bhattacharyya. Above everything else, after the Sanskrit Department of the University of Poona in the late 1960s, this Department became the second Centre of Advanced Study in Sanskrit in India in 2005, chiefly through the all-out tireless efforts of Prof. Ramaranjan Mukherji, Prof. Bijoya Goswami was its

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Coordinator (Joint Coordinator Prof. Lalita Sengupta) during its first phase, and the second phase of CAS-Sanskrit has been started on April 2013. And Prof. Debarchana Sarkar was the coordinator and the Joint Coordinator was Prof. Tapan Sankar Bhattacharyya. Twice, in 1969 and 1997, the Department hosted the prestigious All-India Oriental Conference (Local Secretaries: resp. R. R. Mukherji and R. S. Banerji). Since 1996-1997, it has been regularly organising Refresher Courses in collaboration with the UGC and the Academic Staff College of the University in umpteen thrust areas of Indology for university and college teachers from various parts of the country, with many Indian and foreign scholars of international repute acting as resource persons. It has also organised many successful national and international conferences, seminars as well as workshops on manifold Indological, especially Sanskrit-oriented topics. The UGC-sponsored Assistance for Strengthening of Infrastructure for Humanities and Social Sciences programme started in the Department since 2005, with the Head of the Department as its Coordinator, ex officio. The Department has printed and reprinted numerous scholarly works, and its research organ *Anvikṣā* has been a regular publication since 1966 (till date in all 40 volumes, often divided into two parts, its two recent past issues edited resp. by Prof. Rita Chattopadhyay and Prof. Lalita Sengupta being humble tributes to the hallowed memories of the Department's chief architect late Professor Padmashri Mahamahopadhyay Ramaranjan Mukherji, M.A., Ph.D., D.Litt. and the entire Department's beloved teacher, late lamented motherly and sisterly Prof. Nandita Bandyopadhyay, M.A., Ph.D., D.Litt.). Prof. Tapan Sankar Bhattacharyya also awarded the rare degree, D.Litt. in the year of 2012, from the Burdwan University. Prof. Rita Chattopadhyay, after superannuation, has been elected for Emeritus Fellowship of Jadavpur University in 2016.

The quality of teaching-learning methodologies followed by the Department is amply reflected by the fact, inter alia, that in last five years no less than 100 of its ex-students were selected by the West Bengal College Service Commission and Public Service Commission for Lectureship in colleges under various state universities. And, this Department has started attracting foreign students for quite a few years: Prof. Rita Chattopadhyay taught the Diploma and Advanced Diploma Courses to a German and a South Korean student in the recent past, and Dr. Abhijit Ghosh taught M.A., B.A. Honours & Extra-Departmental courses in 2007 and M.A. & B.A. Honours courses in 2008 to students from the Faculty of Oriental Studies of the La Sapienza University in Rome who opted for Sanskrit courses, subsequent to the signing of a Memorandum of Understanding on student exchange program between the Jadavpur and the La Sapienza Universities.

In short, the Department, offering no less than 9 courses, continues to thrive with 08+04 teachers, some 500 students in its two sections and an excellent departmental library, of which the Librarian for long till her retirement was Dr. Shyamali Basu, now succeeded by Ms. Shruti Mallick, B.Sc., B.Lib-Sc., friend extraordinary for the library-users.

1. A Courses Offered: 3

- B.A. Honours: 3-year under-graduate degree course, 6 semesters, intake 60 (total no. of students in 3-year classes at present: 200 approx.)
- B.A. Extra-Departmental: intake 50 (total no. of students in 2-year classes at present: 50 approx.)
- M.A. (Day): 2-year post-graduate degree course, 4 semesters, intake 80 (total no. of students in 2-year classes at present: 160 approx.)
- M.A. (Evening): 2-year post-graduate degree course, 4 semesters, intake 70 (total no. of students in 2-year classes at present: 140 approx.)
- PG-II Group: Day course comprises of six Groups or Special Papers, namely *Kāvya*, *Vedānta*, *Dharmaśāstra*, *Naya Vaiśeṣika*, Epigraphy, and *Veda*. For Evening course, Groups are *Naya Vaiśeṣika*, Epigraphy, and *Veda*.

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- CBCS method has been implemented for the students.
- M.Phil.: 2 years, intake 17
- Ph.D.: Many students attached with individual teachers. Number of Ph.D. Scholars – approx. 25, out of which approx. 16 are JRF, Rajib Gandhi Fellowship holders, Moulana Ajad Fellowship holders, State Fellowship and RUSA Fellowship holders.
- Certificate Course: 1 year, Language Studies, intake 20
- Diploma Course: 1 year, Language Studies, intake 20
- Advanced Diploma Course: 2 years, intake 10

(Note: the number of students at present in the last three courses is not known since these Courses fall under the Language Studies Centre)

1. B. Number of Faculty Members (2018 – 2019):

8 whole-time teachers and 4 guest faculty and part-time lecturers (day and evening sections).

Prof. Rita Chattopadhyay, after superannuation, has been elected as Emeritus Professor of Jadavpur University. Dr. Ashok Kumar Mahata has taken charges of Head of the Department from Prof. Tapan Sankar Bhattacharyya during this period.

Whole-time teachers: names, degrees etc. and areas of interest

(Master degrees of the teachers are in Sanskrit, unless otherwise specified, and Ph.D. and M.Phil. degrees are in Arts.

Abbreviations: BU = University of Burdwan, CU = University of Calcutta, JU = Jadavpur University, PU = University of Poona, RBhU = RabindraBharati University, Kolkata, VBh = Visvabharati [University], Santiniketan)

Professors 4

DEBARCHANA SARKAR, M.A. (CU), Ph.D. (CU)

Diploma in Pali (CU) & German (School of Languages, JU)

Area of Interest: Ancient Indian History, Epigraphy & Palaeography, Arthaśāstra, Classical Sanskrit Literature

PIYALI PRAHARAJ, M.A. (CU), M.Phil. (CU), Ph.D. (JU)

Area of Interest: Smṛti Literature, *Arthaśāstra*

TAPAN SANKAR BHATTACHARYYA, M.A. (JU), Ph.D. (JU), D.Litt. (BU)

Kāvya-Vyākaraṇa-Tarkatśārtha, *Vyākaraṇcārya*

Formerly of the Calcutta Campus of Rashtriya Sanskrit Sansthan, New Delhi

Recipient of ‘Vyāsaśrī’ National Award (2016) – Maharshi Vyasadev National Research Institute, Vedavyas, Rourkela – 4, Odisha

Area of Interest: *Pāṇinian* System of Sanskrit Grammar, *Nāyaya-Vaiśeṣika* Philosophy

ASSOCIATE PROFESSORS

ASHOK KUMAR MAHATA, M.A. (JU), Ph.D. (JU)

Area of Interest: Vedic Studies; Tribal Language, Literature and Culture and Religion

KAKALI GHOSH, M.A. (CU), Ph.D. (CU)

Area of Interest: Vedānta, Sanskrit Bddhist Literature, Pāṇinian and non-Pāṇinian Grammar, Palaeography, Manuscriptology

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SHIULI BASU, M.A. (VBh), Ph.D. (VBh)

Area of Interest: Classical Sanskrit Literature & Literary Criticism

ASSISTANT PROFESSORS

DEBDAS MANDAL, M.A. (JU), B.Ed., Ph.D. (JU)

Area of Interest: Smṛti Literature, *Arthaśāstra*, *Nītiśāstra*, Sanskrit Literature & Ancient Indian History, Epigraphy

CHINMAY MANDAL, M.A. (JU), Ph.D. (JU)

Area of Interest: *Nyāya-Vaiśeṣika* Philosophy, Pnini System of Sanskrit Grammar

Guest lecturers and part-timers (day and evening sections)

Guest lecturers: Dr. Nandini Bhowmik (Epigraphy), Dr. Monidipa Das (Kvya); Part-timers: Prof. Nabanarayan Bandyopadhyay (Veda), Dr. Rajat Sanyal (Epigraphy).

Office staff

The office staff of the Department includes Pradip Chowdhury, H.S., Senior Peon, Biswajit Snapui, Senior Assistant, and Jugal Kishor Dolui, Peon, all of whom have by now identified themselves with the Department. Shyamal Roy, Senior Assistant, and Anil Sarkar, Peon, superannuated from the Department during 2018 to 2019. The Librarian of the Departmental Library Sruti Mallick always cooperates heartily with the teachers and students. The lovable library assistant is Nimai Sardar, caring for the students as far as practicable.

2. Broad Areas of Research Activities:

- I. Vedic Studies
- II. Grammar and Indian Linguistics
- III. Indian Philosophical Systems
- IV. Literature, Literary Criticism, Drama and Dramaturgy
- V. Smṛti Literature
- VI. Epigraphy and Manuscriptology

Ongoing Joint Research Projects:

Translation work of “*Chinnaṃbhaṭṭa’s Tarkabhāṣāprakāśikā* (Commentary on *Tarkabhāṣā* of *Keśavamiśra*)” under the project of Departmental support towards Upgradation in Research of RUSA 2.0 grant (Research Thrust Area: Translational Research), Jadavpur University.

Ongoing Individual Research Projects:

Ashok Kumar Mahata:

Ongoing Translation work of *Caraṇavyūkhasūtra* under RUSA 2.0 grant (Research Thrust Area: Translational Research), Jadavpur University.

Minor Research Project on “Comparative Study of Mythology, Ritual and Culture in the Adivasi Traditions and Sanskrit Scriptures” under RUSA 2.0 grant (Research Thrust Area: Studies in the Global South), Jadavpur University.

Kakali Ghosh:

Ongoing RUSA 2.0 sponsored Major Research Project on “Reflections on VEDNTA Unearthing the Concepts of Physics to Peer into the Core of Consciousness” since 12/03/2019.

Shiuli Basu:

Ongoing Translation work of *Candrāloka* under RUSA 2.0 grant (Research Thrust Area: Translational Research), Jadavpur University.

Debdas Mandal:

Ongoing Translation work of *Nītivyākyaṃṛtam* under RUSA 2.0 grant (Research Thrust Area: Translational Research), Jadavpur University.

Chinmay Mandal:

Translation work of Varttika's of *Siddhāntakaumudī* upto *kārakānta-prakaraṇa* under RUSA 2.0 grant (Research Thrust Area: Translational Research), Jadavpur University.

3. A. Invited Lectures Delivered/ Papers Presented in Refresher or Orientation or Summer Courses/ Seminars/ Workshops/ Conferences/ Symposia/ Colloquia & c.:

Debarchana Sarkar:

Delivered lecture on "Indian Epigraphy: A General Survey" at Asha Gupta Memorial Lecture, organised by Jogamaya Devi College on 02.04.2018.

Delivered lecture on "*Rūpakathy Prāptavayaskatā O Prāptamanaskatā: Kendrabindute Ṭhākurmār Jhuli*" at the Seminar on Gleanings from Indian Literature and Culture: A Holistic Approach, organised by Dept. of Sanskrit, J.U. on 31.01.2019.

Invited Lecture - Solo Speaker: Delivered lecture on "How to read and interpret Sanskrit Texts" at Sanskrit Sahitya Parishat on 24.02.2019.

Special Lecture - Solo Speaker: Delivered lecture on "Literary Analysis of Select Early and Early-mediaeval Sanskrit Epigraphical Texts: A Special Emphasis on Metrics and Figures of Speech" at Basanti Devi College on 11.03.2019.

Speaker - Spoke on Palaeography, Epigraphy and Manuscriptology: Mutual Relationship at 5-day Workshop on "Studies of Manuscripta in different perspectives", organised by The Asiatic Society, Kolkata from 04.03.2019.

Delivered Introductory Lecture & Analytical Lecture at two-day workshop-cum-seminar on "Epigraphical Study in India" organised by Sri Ramakrishna Sarada Vidya Mahapitha, Kamarpokur on 15.03.2019 & 16.03.2019.

Tapan Sankar Bhattacharyya:

Delivered a lecture as a Resource Person in a two day National Seminar on "Gleanings from the Indian Literature & Culture: A Holistic Approach" organised by Department of Sanskrit, Jadavpur University on 31st January & 1st February, 2019.

Delivered a lecture as a Resource Person as a keynote speaker in a two day National Seminar on "Epigraphical Study in India" organised by Dept. of Sanskrit, Sri Ramkrishna Sarada Vidyamahapitha in collaboration with Dept. of Sanskrit, Burdwan University on 15th & 16th March, 2019.

Delivered a lecture as a Resource Person in a two day National Seminar on "Indological Studies in Nadia" organised by The Asiatic Society in collaboration with Bharati Chatuspathi Sanskrit Mahavidyalaya, Nabadwip on 7th & 8th February, 2019.

Delivered a lecture as a Resource Person in UGC-Sponsored Refresher Course on "Life & culture as revealed in Pāṇinian sūtras" organised by Human Resource Development Centre (HRDC), Jadavpur University on 30st August, 2018.

Ashok Kumar Mahata:

Paper presented on "Non-Aryan Culture in the Vedic Literature" in the Refresher Course entitled "Indian Life and Culture Revealed in Ancient and Early Mediaeval Literature" held on and from 27.08.2018 to 15.09.2018.

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Paper presented on “Position of Niṣāda in the Group of Five People in Vedic Tradition” in the National Seminar on “Gleanings from Indian Literature and Culture: A Holistic Approach” organised by the Department of Sanskrit, Jadavpur University on January 31 and February 01, 2019.

Kakali Ghosh:

Invited speech on “Animation of *Prāṇa* in Human Embryo: Unveiling the Scientific Paradigm” in National Conference on “Indian Science: History & Historiography” organised by the Department of History, Sikkim University in association with Bhartiya Itihas Sankalan & Vijnana Bharati from 1st to 3rd August 2018.

Keynote Address in a State level Seminar on “Revisiting Vedanta: in the light of Harmony and Synthesis”, organised by Kaliyaganj College in collaboration with University of Gour Banga on 20th November 2018.

Taken classes as Guest Faculty at Lady Brabourne College: Bengali PG II during the session July 2018-December 2018.

Shiuli Basu:

Delivered invited lecture at UGC sponsored Refresher Course organised by UGC HRDC, Jadavpur University and Department of Sanskrit, Jadavpur University entitled “Indian Life and Culture Revealed in Ancient and Early Mediaeval Literature” held on and from 27.08.2018 to 15.09.2018.

Debdas Mandal:

4.04.2018 - 05.04.2018: Acted as a Lead Speaker in the Technical Session IV in the State Govt. Sponsored National Seminar on Education and Culture organised by Vivekananda College for Women, Barisha, Kolkata, 700008.

11.09.2018: Delivered lecture on “*Dvidhībhāva: Eti ki sudhu rājanīti na ekaprakara jivana saṃskṛiti*” in the UGC-Human Resource Development Center sponsored Refresher Course (27. 08. 2018 – 15.09.2018) organised by the Department of Sanskrit, J.U.

30.12.2018: Delivered a memorial academic lecture on “*Arimardana pāla: Ekati Sāmpratika Paryavekṣṇa*” at the Sanskrit Sahitya Parisat, Kolkata.

01.02.2019: Delivered lecture on “*Bhārāṭīya Saṃskṛtir Aitihya Anveṣṇa o Vartamān Saṃkat*” in the National Seminar organised by the Department of Sanskrit, J.U.

01.03.2019: Delivered lecture on “*Caritra Gathane Saṃkṛta Sāhitya o Swamijir Matadarsa*” in the State Level Seminar Jointly organised by the Akhil Bharat Vivekananda Siksha Parisad & Department of Sanskrit, J.U.

Chinmay Mandal:

01.03.2019: Delivered invited lecture on “New India by Swami Vivekānanda’s Man-Making Education”, organised by the Department of Sanskrit, JU in collaboration with Akhil Bharat Vivekananda Siksha Parishad, Kolkata.

3. B. Sessions Chaired in Seminars/ Workshops/ Conferences/ Symposia/ Colloquia/ Refresher Courses etc.:

Debarchana Sarkar:

Chaired a session of the two day National Seminar entitled: “Gleanings from Indian Literature and Culture: A Holistic Approach” organised by Department of Sanskrit Jadavpur University on 01.02.2019.

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Chaired a session at State Sanskrit Conference, organised by Sanskrit Sahitya Parishad on 24.03.2019.

Chaired the session of DRC History J.U. Public Lecture by Prof. Ranabir Chakravarti at J.U. held on 26.03.2019.

Tapan Sankar Bhattacharyya:

Attend as a Chairperson in one day National Seminar on “New India by Swami Vivekananda’s Man making Education” organised by the Dept. of Sanskrit, Jadavpur University in collaboration with Akhil Bharat Vivekananda Siksha Parisad, Kolkata on 1st March 2019.

Ashok Kumar Mahata:

Acted as a Chairperson in a Session of Paper Presentation in the seminar “Gleanings from Indian Literature and Culture: A Holistic Approach” organised by the Department of Sanskrit, Jadavpur University on January 31 and February 01, 2019.

Shiuli Basu:

Chaired a Session in the National Seminar on “Gleanings from Indian Literature and Culture: A Holistic Approach” organised by Department of Sanskrit, Jadavpur University on January 31 and February 01, 2019.

Debadas Mandal:

Chaired a Session in the National Seminar on “Gleanings from Indian Literature and Culture: A Holistic Approach” organised by Department of Sanskrit, Jadavpur University on January 31 and February 01, 2019.

Chinmay Mandal:

01.02.2019: Session chaired of the two day National Seminar entitled: “Gleanings from Indian Literature and Culture: A Holistic Approach”.

3. C. Seminars/ Workshops/ Conferences/ Symposia/ Colloquia & c. Arranged/ Coordinated/ Conducted/ Convened:

Debarchana Sarkar:

As Coordinator organised a Workshop on “Indian Epigraphy and Palaeography” under CAS-Sanskrit Phase II, held on 26-29 Dec 2018 & 5-7 January 2019.

Ashok Kumar Mahata:

Acted as a Coordinator in the National Seminar on “Gleanings from Indian Literature and Culture: A Holistic Approach” organised by the Department of Sanskrit, Jadavpur University on January 31 and February 01, 2019.

Kakali Ghosh:

Convened the National Level Workshop on “Yoga-Vedānta Renaissance” organised by the Department of Sanskrit, Jadavpur University from 24th to 29th September 2018.

Shiuli Basu:

Acted as Joint Coordinator in the National Seminar on “Gleanings from Indian Literature and Culture: A Holistic Approach” organised by Department of Sanskrit, Jadavpur University on January 31 and February 01, 2019.

Conducted an Educational Tour along with Dr. Ashok Kumar Mahata and Dr. Debdas Mandal to Buddha Gaya, Nalanda & Rajgir etc. for PG II Students of Department of Sanskrit, Jadavpur University from 14.03.2019 to 17.03.2019.

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Debdas Mandal:

07.02.2019: Successfully Coordinated Departmental Sanskrit Day Celebration of Department of Sanskrit, J.U.

14.03.2019 – 17.03.2019: Conducted an Educational Tour along with Dr. Ashok Kumar Mahata and Dr. Shiuli Basu to Buddha Gaya, Nalanda & Rajgir etc. of PG II Students of The Department of Sanskrit, Jadavpur University.

3. D. Orientation or Refresher or Summer Courses/ Seminars/ Workshops/ Colloquia Attended as Observer & Hearer:

Ashok Kumar Mahata:

Attended the Workshop on “Buddhist Epistemology” organised by ICPR Center for Buddhist Studies and Department of Philosophy, Jadavpur University from 18.06.2018 to 25.06.2018.

Attended the seven day workshop on “Indian Epigraphy and Palaeography” under the auspices of CAS–Sanskrit (Phase-II) held from 26.12.2018 to 29.12.2018 and 03.01.2019 to 05.01.2019, at the Department of Sanskrit, Jadavpur University.

Shiuli Basu:

Attended the State Level Seminar on “Mahamahopadhyaya Srijiva Nyayatirtha” organised by Sanskrit Sahitya Parisat, Kolkata on 27.01.2019.

Debdas Mandal:

27.01.2019: Attended the State Level Seminar on “Mahamahopadhyaya Srijiva Nyayatirtha” Organised by Sanskrit Sahitya Parisat, Kolkata.

Chinmay Mandal:

18.06.2018-25.06.2018: Attended the Seven Day Workshop on “Buddhist Epistemology”, organised by ICPR Centre for Buddhist Studies, Department of Philosophy, Jadavpur University.

15.01.2018-02.08.2018: Attended the course on “Manuscriptology and Palaeography”, conducted by the Department of Adult, Continuing Education and Extension, Jadavpur University.

27.08.2018-15.09.2018: Participated the Refresher Courses on “Indian Life & Culture Revealed in Ancient & Early Mediaeval Literature”, conducted by the Department of Sanskrit and HRDC, Jadavpur University, Kolkata.

31.01.2019-01.02.2019: Attended the two-day National Seminar on “Gleanings from Indian Literature and Culture: A Holistic Approach”, organised by the Department of Sanskrit, Jadavpur University.

07-08.02.2019: Participated the two-day Seminar on “Indological Studies in Nadia”, organised by The Asiatic Society, Kolkata in collaboration with Bharati Chatuspathi Sanskrit Mahavidyalaya, Nabadwip.

3. E. Orientation or Refresher or Summer Courses/ Seminars/ Workshops/ Colloquia Organised:

Ashok Kumar Mahata:

Acted as a Coordinator of UGC sponsored Refresher Course organised by UGC HRDC, Jadavpur University and Department of Sanskrit, Jadavpur University entitled “Indian Life and Culture Revealed in Ancient and Early Mediaeval Literature” held on and from 27.08.2018 to 15.09.2018.

Debdas Mandal:

27.08.2018 – 15.09.2018: Coordinated a UGC-Human Resource Development Center sponsored

Refresher Course on “Indian Life & Culture Revealed in Ancient and Early Mediaeval Literature” organised by the Department of Sanskrit, J.U.

4. A. Books, Monographs, Reports etc., Published/ Forthcoming/ Submitted/ Completed:
Debarchana Sarkar:

ভারতীয় অভিলেখ ও প্রত্নলিপি : একটি সংক্ষিপ্ত সমীক্ষা Jointly authored with Dr. Arpita Tripathy and Smt Sulagna Pradhan. Published by Pashchimbanga Rajya Pustak Parshat. 2019 [ISBN 978-81-247-0774-6]

Tapan Sankar Bhattacharyya:

Published a book entitled: “*Samāsaprakaraṇam*” of *Vaiyākaraṇasiddhantakaumudī*, Part - I, Published by Trailokyanātha Catuspāmthī, Kolkata, September, 2018.

Kakali Ghosh:

Contributed as Co-author to the book titled *Quintessence of Yoga* published by Lonavla, Pune: Kaivalyadhama, December 2018 (ISBN 978-81934518-92).

4. B. Articles Published in Journals, etc.:

Tapan Sankar Bhattacharyya:

“*Yogavedāntayoḥ Navajāgaraṇam*” in *Anvikṣā*, Research Journal of the Department of Sanskrit, Jadavpur University, ISSN: 0587-1646, Vol. XL, Part – I, January, 2019.

“*Pāṇinīyaprasthāne Prātipadikāṛthavicārah*” in *Anvikṣā*, Research Journal of the Department of Sanskrit, Jadavpur University, ISSN: 0587-1646, Vol. XL, Part – III, March, 2019.

“*Vyākaraṇasya darśanatvapratiṣādanam*” in “Vedṅgas Language, Religion, Philosophy and Science”, Collection of Research Articles, ISBN: 978-93-87800-36-6, Sanskrit Pustak Bhandar, Kolkata, May, 2018.

Ashok Kumar Mahata:

Research article entitled “Etymological Explanation of the Names of Some Deities Mentioned in the Upanisads” published in *Anvikṣa*, Vol. XL, Part I, the research journal of the Department of Sanskrit, Jadavpur University in January, 2019.

Kakali Ghosh:

“Pulsation of *Prāṇa* in Human Embryo: A Scientific Inquiry”, in *Anvikṣā*, Research Journal of the Department of Sanskrit, Vol. XL. Gen. Ed. Tapan Sankar Bhattacharyya. Kolkata: Jadavpur University, March 2019 (ISSN: 0587-1646). Pp. 35-39.

Shiuli Basu:

“*Kavikālidāsam dṛśyakāvyē chandavimarśa: ekti samīkṣā*” – in *Vedāṅgas: Language, Religion, Philosophy and Science* (Collection of Research Articles), May 2018, ISBN: 978-93-87800-36-6.

“The term ‘*sambhāvanā*’ explained in *utpreksāalamkāra* by Rhetoricians with special reference to Nyaya Philosophy” – in *Ritaayani*, a U.G.C. Approved (Journal No. 40947) Refereed Research Journal of Sanskrit, Vol. XIV, December 2018. ISSN: 2278 – 0688.

“Ethics and Morality behind the Concept of *Ztam* as Reflected in the *Ṛgveda*” – in *Anvikṣā*, Research Journal of the Department of Sanskrit, J.U., Vol. XL, Part-II, February 2019. ISSN: 0587-1646.

“Revisiting Classical Sanskrit Literature with Special Reference to Poverty” – in *Anvikṣā*,

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Research Journal of the Department of Sanskrit, J.U., Vol. XL, Part-III, March 2019. ISSN: 0587-1646.

“*Prācīnabhāratīya nāṭyatatve aucityaprasaṅgaḥ: ekā samīkṣā*” –in *Sodhanidhi*, Peer-Reviewed Annual Research Journal of the Department of Sanskrit, University of Gour Banga, Vol. 3, March 2019, ISBN: 978-93-84721-34-3.

Debdas Mandal:

বিচার ব্যবস্থায় প্রমাণ প্রসঙ্গ : আখ্যান সাহিত্যিক ভিত্তিক পর্যবেক্ষণ (*Vichār vyavasthāya pramāṇa prasamga: Aākhyaṇasāhityabhittika Paryavekṣṇa*) in *Anvikṣā*, Research Journal (ISSN: 0587-1646) of the Department of Sanskrit, Vol.XL, January, 2019.

সামাজিক মূল্যবোধ: নীতিসাহিত্যের পাতা থেকে (*Sāmājika Mūlyabodha: Nītisāhityer Pāta Theke*) in *Anvikṣā*, Research Journal (ISSN: 0587-1646) of the Department of Sanskrit, Vol.XL, March, 2019.

গোভিলগৃহসূত্রের আলোকে সংস্কার সমীক্ষা (*Gobhilagr̥hasūtr̥er āloke saṁskār samīkṣā*) a book chapter of *Vedāṅgas: Language, Religion, Philosophy and Science (a collection of Research Articles)*. Edited by Prof. Tapan Sankar Bhattacharyya and published by Sanskrit Pustak Bhandar, May 2018.

Smṛtiśāstre pāpasya swrupam a book chapter of *From the Vedas to the smṛti: Influence of Vedic Literature on smṛti śāstra and its congeniality in modern age* (a collection of Research Articles). Edited by Smriti Sarkar, published by Department of Sanskrit, Gobardanga Hindu College.

Chinmay Mandal:

Mūlyabodhavikāṣe Saṁskṛtasya Māhātmyam in *Ṛātyaṇī*, UGC approved Journal, Vol-XIII, April, 2018 (ISSN: 2278-0688).

Vedāṅanicaye śikṣā: bhāṣāgathaner nimitta ekṭi āvaśyika śāstra a book chapter of *Vedāṅgas: Language, Religion, Philosophy and Science (a collection of Research Articles)*. Edited by Prof. Tapan Sankar Bhattacharyya and published by Sanskrit Pustak Bhandar, May 2018.

Śatakatrāye prativiṁbitā jīvanasaṁskṛtikathā – ekā samīkṣā in *Anvikṣā*, a UGC approved refereed Research Journal of the Department of Sanskrit, J.U., Vol. XL(Part-II), January 2019 (ISSN: 0587-1646).

Sāṁkhyanāye guṇatrayasya svarūpam jagatsṛṣṭmau teṣāmutpayogitvañca – eko vimarśaḥ in *Anvikṣā*, a UGC approved refereed Research Journal of the Department of Sanskrit, J.U., Vol. XL (Part-III), March 2019 (ISSN: 0587-1646).

5. Research Guidance:

Debarchana Sarkar:

Candidates awarded Ph.D. – 4

Candidates awarded M.Phil. – 1

Piyali Praharaj:

Candidates awarded M.Phil. – 2

Tapan Sankar Bhattacharyya:

Candidates awarded Ph.D. – 4

Candidates awarded M.Phil. – 4

Ashok Kumar Mahata:

Candidates awarded M.Phil. – 2

Kakali Ghosh:

Candidates awarded Ph.D. – 2

Shiuli Basu:

Candidates awarded M.Phil. – 2

Debdas Mandal:

Candidates awarded M.Phil. – 1

Chinmay Mandal:

Candidates awarded M.Phil. – 1

6. Major Achievements:

Leaderships in Academic Bodies:-

Debarchana Sarkar:

Coordinator, Centre for Indology, JU

Nominated member of Doctorate Committee JU & Departmental Ph.D. Committee of Sanskrit, Tripura University.

Principal Investigator, UGC-UPE II Project on “Critical Edition on Sanskrit Scientific and Philosophical Manuscripts”. Several texts from manuscripts are being edited.

Member, BOS (PG & UG), Board of Moderators: Universities of Calcutta (UG), Burdwan (UG), School of Vedic Studies (PG Diploma).

Appointed supervisor of James Prinsep Fellow Smt. Minakshi Banerjee by the Asiatic Society, Kolkata.

Acted as an external member of RAC-s in the Department of Sanskrit, Rabindra Bharati University.

Tapan Sankar Bhattacharyya:

Head of the Department of Sanskrit, Jadavpur University for further period of two years with effect from 04.03.2017 to 04.03.2019.

Guest Lecturer in the P.G level in the Department of Sanskrit, Ramakrishna Mission Vidyamandira, Belur Math, from January 2018 to till now.

Member of Board of Studies in the P.G level in the Department of Sanskrit, Vidyasagar University.

Member of Board of Studies in the U.G level in the Department of Sanskrit, Vidyasagar University.

Member of Board of Studies in the P.G level in the Department of Sanskrit, Midnapore College (Autonomous).

Member of Board of Studies in the U.G level in the Department of Sanskrit, Midnapore College (Autonomous).

Member of the RAC committee in the Department of Sanskrit, University of Calcutta.

Member of the RAC committee in the Department of Sanskrit, Rabindra Bharati University.

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Member of Board of Studies in the M.A level in the Department of Sanskrit, Diamond Harbour Women University.

Member of Board of Studies in the P.G level in the Department of Sanskrit, Ramakrishna Mission Vidyamandira, Belur Math.

Member of the RAC committee in the Department of Sanskrit, Ramakrishna Mission Vidyamandira, Belur Math.

Member of Board of Studies in the integrated M.A level in the Department of Sanskrit, Ramakrishna Mission Vivekanada University.

Member of the RAC committee in the Department of Sanskrit, Ramakrishna Mission Vivekanada University.

Member of Board of Studies in the U.G level in the Department of Sanskrit, West Bengal State University.

Life Member, The Asiatic Society, Kolkata.

Programme Officer of NSS, Jadavpur University Unit.

Co-ordinator, Center for Indology, Department of Sanskrit, Jadavpur University.

Deputy Co-ordinator, Center for Advance Study (CAS), Department of Sanskrit, Jadavpur University.

Ashok Kumar Mahata:

Member of UG Board of Studies in West Bengal State University.

Life member: Pashchimbanga Itihas Samsad.

Debdas Mandal:

Departmental Coordinator of the P.G Evening Courses in the Department of Sanskrit, J.U., 2019-2020.

Programme Officer, National Service Scheme, Jadavpur University.

Chinmay Mandal:

Anti-Ragging Volunteer Team Members Departmental, Hostel and Common Area for the session 2018-19.

7. Highlights:

Departmental:-

UGC sponsored Refresher Course organised by UGC HRDC, Jadavpur University and Department of Sanskrit, Jadavpur University entitled "Indian Life and Culture Revealed in Ancient and Early Mediaeval Literature" held on and from 27.08.2018 to 15.09.2018.

Sanskrit Day Celebration programme on 07th February, 2019 at Department of Sanskrit, Jadavpur University.

Educational Tour to Buddha Gaya, Nalanda & Rajgir etc. for PG II Students of Department of Sanskrit, Jadavpur University from 14.03.2019 to 17.03.2019.

Workshop on "Indian Epigraphy and Palaeography" under CAS-Sanskrit Phase II, held on 26-29 December 2018 & 5-7 January 2019.

National Seminar on "Gleanings from Indian Literature and Culture: A Holistic Approach" organised by Department of Sanskrit, Jadavpur University on January 31 and February 01, 2019.

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National Level Workshop on “Yoga-Vednta Renaissance” organised by Department of Sanskrit, Jadavpur University from 24th to 29th September 2018.

Computer Lab is established for the Department.

Departmental Re-union has been organised for this year also.

Departmental Student Aid Fund is created to provide books for needy students.

RUSA 2.0 grant (Research Thrust Area: Translational Research), received under the project of Departmental support.

Admission test is introduced for Honours Degree admission.

SOCIOLOGY

Phone : +91-33-2414-6058

Int. : 2457-2555

H.O.D. : Prof. Dalia Chakrabarti

Dr. Piyali Sur (w.e.f. 14.03.2019)

E-mail : hod@social.jdvu.ac.in

hod.sociology@jadavpuruniversity.in

1. A. Courses Offered:

a. Ph.D

b. M.Phil

Duration: 2 years, 4 Semesters

No. of Students Enrolled- 19

c. M.A.

Duration: 2 years, 4 Semesters

No. of Students Intake- 43

d. B.A. Hons.

Duration: 3 years, 6 Semesters

No. of Students Intake- 52

e. 2 GE courses at UG level (under CBCS scheme)

No. of Students Enrolled- 40

f. A compulsory Sociology course at UG level for all Departments under Faculty of Engineering and Technology.

g. One-year PG Diploma Course in “Society, Religion and Social Work”, under Centre for the Study of Religion and Society: Intake 40

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1. B. Number of Faculty Members: 4 Guest Faculty: 16

Dr. Piyali Sur

Associate Professor and Head, Department of Sociology Jadavpur University

2. A. Area of Research Activities: *Childhood studies, Gender Studies, Sociology of Crime and Deviance*

2. B. Major Research Project :

(Departmental/Individual, Name of the Project/Funding Agency)

1. 2019-March 2020: Principal Investigator (PI) JU-RUSA 2.0 Major Research Support Grants entitled “Parents reflecting on risk to body and sexuality of adolescent girls: Growing up in a neoliberal consumer culture of global south”.

3. A. Invited Lectures Delivered/Sessions Chaired:

(Name of the Teacher, Type of Participants, Name of the Seminar/Conference etc. Place, Duration)

1. Invited Lecture in a Two Day National Seminar organized by Loreto College on “Child Sexual Abuse: An Integrative Cross-Functional Approach at the Seminar technical session Child Sexual Abuse: Issues and Problems”, 1st March 2019
2. Invited lecture delivered on “Gender and Digital Technology: Re-engineering Lives” 7-day UGC-HRDC Short Term Course in Gender Sensitization organized by School of Women’s Studies, Jadavpur University, 27 November – 3 December 2018.
3. Invited lecture delivered on “Alternatives to Marriage” organized by Legal Aid Services West Bengal in a counselling course affiliated to University of Calcutta.
4. Chaired a session in the “International Conference on Social Change and Challenges in the era of Globalization” organized by Department of Sociology, Ranchi University on 27th – 29th September 2018.
5. Chaired a session in the Research Committee 24 (Sociology of Childhood and Youth) of Indian Sociological Society at the 44th All India Sociological Conference held at St. Philomena’s College (Autonomous), Mysuru, 27th-29th December, 2018.

3. C. Seminar/Workshop/Conference/Symposium Organized:

(Name of the Teacher, Name of the Paper Presented, if any, Name of the Seminar, Place, Duration)

1. Organized a One-day National seminar cum Interactive Workshop on 19th April 2018 at Jadavpur University, Kolkata on the theme “Childhood at Risk: Social and Legal Reality.”
2. Organized a One-day workshop on “Know Violence in Childhood: A Global Learning Initiative” on 19th November 2018.

4. A. Books/Monographs etc. Published :

(Name of the Teacher, Name of the Book, Name of the Publisher)

Chapters in Edited Books:

Piyali Sur, (2018) “Safety and Risk: Women Negotiating Fear of Crime in Urban Spaces of Kolkata” (in Ruby Sain (ed) “Contemporary Social Problems in India.” Vol. II, Readers Service, Kolkata, pp. 39-57, ISBN: 978-93-82623-71-7.

Piyali Sur(2019) “Trust, Risk and Danger: Narratives of Women’s Agency and Victimhood in Kolkata in Prabhat Kumar Singh and Amit Bhowmick (eds.) *Women’s Journey towards Empowerment: Issues and Challenges*, Delton Publishing House, New Delhi. ISBN: 978-93-87631-20-5

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Piyali Sur (2019) "Feminist Activism on Social Media: Changing form of Protest in a Digital Era in India" in Amit Bhowmick and Elias Olukorede Wahab (eds.) "*Empowering Women: A Global Urgency*", Delton Publishing House, New Delhi. ISBN: 978-93-87631-20-5

4. B. Articles Published in Journals: (Including National/International & Peer-reviewed Journals)

(Name of the Teacher, Name of the Articles, Name of the Journal, Date of Publication, Volume)

Piyali Sur, 'Risk, Agency and Victimhood in Neoliberal Times: Women's Negotiation and Management of Danger in the Urban City Of Kolkata', Fusion, 2018

Dr. Amites Mukhopadhyay, Professor, Sociology, JU.

2. A. Area of Research Activities :

(Broad Areas)

3. A. Invited Lectures Delivered/Sessions Chaired:

(Name of the Teacher, Type of Participants, Name of the Seminar / Conference etc. Place, Duration)

Invited Lectures: (Amites Mukhopadhyay)

1. Participants: College and University Teachers

Seminar: *Orientation Programme*

Place: UGC-HRDC Jadavpur University (July 2018)

Duration: Two Hours on *Qualitative Methods in Social Sciences*

2. Participants: Professional Colleagues and Doctoral candidates

Symposium: *Cross Border Entanglements in Eastern South Asia* as part of Annual South Asia Conference

Place: University of Wisconsin, Madison, USA (October, 2018)

Duration: 45 minutes on *Forested Borders, Fluid Movements: Imagining and Negotiating Borders in the Indian Sundarbans* (QA for 15 minutes)

3. Participants: College and University Teachers

Seminar: *Orientation Programme*

Place: UGC-HRDC Jadavpur University (November 2018)

Duration: Two Hours on *Rethinking Methods in Social Sciences*

4. Participants: Professional colleagues, graduate students postgraduate research students

Seminar: *Walls of a nation: People, culture, memories and experiences*

Place: Department of Sociology, Gour Banga University, Malda, West Bengal (February 2019)

Duration: 30 minutes on *Watery Landscape, Fluid Movements: Imagining Border* (QA for 10 minutes).

5. Participants: Professional colleagues and graduate students

Seminar: *Excellence in higher education: Emerging concerns and the road ahead*

Place: Patna Women's College (Autonomous) (February 2019)

Duration: 30 minutes on *Pedagogy and critical thinking: Instituting higher education* (QA for 10 minutes)

3. B. Seminar/Workshop/Conference/Symposium Attended:

(Name of the Teacher, Name of the Paper Presented, Name of the Seminar, Place, Duration)

Seminar/conference Attended: (Amites Mukhopadhyay)

- 1. Paper presented:** Finite Border, Infinite Practices: Everyday Lives at the Borders' Edge
Seminar: 44th All India Sociological Conference as part of the Research Committee 28 *Sociology of Everyday Life*.
Place: St Philomena College (Autonomous), Mysuru, Karnataka
Duration: 27-29 December 2018.
- 2. Paper presented:** Beyond the lifeworld and system: Rethinking the binary.
Seminar: *Self and the Lifeworld*
Place: department of Sociology, North Bengal University.
Duration: 1-2 March 2019.
- 3. Paper presented:** From objects (material objects/material culture) in Anthropological studies to objects in Everyday studies: Methodological implications for objects in everyday studies.
Seminar: *Artefacts in everyday life*
Place: National Institute of Science Education and Research, Bhubaneswar, Odisha.
Duration: 23-24 March, 2019.

4. A. Books/Monographs etc. Published :

(Name of the Teacher, Name of the Book, Name of the Publisher)

Chapter in edited volume

Mukhopadhyay, A. 2018. "The schism between teaching theory and doing method: The practice of Sociology" in M. Chaudhuri and M. Thakur eds. *Doing Theory: Locations, Hierarchies and Disjunctions*. New Delhi: Orient Blackswan.

Dr. Dalia Chakrabarti

Professor, Department of Sociology, Jadavpur University

- 1. A. Area of Research Activities:** Cities, Culture, Visuals
- 2. B. Research Projects:**

(Departmental/Individual, Name of the Project/Funding Agency)

Principal Investigator of Research Project titled "Block Bazaars of New Town: An Ethnographic Exploration", RUSA 2.0. Jadavpur University

Principal Investigator of research area The Inedible: Visuals and Food Anxiety, under Departmental Research Project titled "Cultures of Consumption: A Study in a Metropolis", RUSA 2.0. Jadavpur University.

3. A. Invited Lectures Delivered / Sessions Chaired:

(Name of the Teacher, Type of Participants, name of the Seminar/Conference etc, Place, Duration)

Invited lecture delivered on "Visual Sociology", UGC-HRDC Orientation Programme, Jadavpur University, 11.07.18.

Invited lecture delivered on "Communication Skill", Electrical Engineering Department, Jadavpur University, 17.08.18.

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Invited lecture delivered on “Science and Sociology” , Department of Sociology, Shri Shikshaytan College, Kolkata, 28.09.2018.

Invited lecture delivered on “Philosophy in Sociology”, UGC-HRDC Refresher Course on “Social and Political Philosophy: Indian and Western”, Department of Philosophy, Jadavpur University, 11.12.18.

Invited lecture delivered on “Post-modernism”, Bhawanipore Education Society College, Kolkata, 29.01.19.

Invited lecture delivered on “Women’s Empowerment”, Women’s Cell, Tarakeshwar Degree College, 20.03.19 .

3. C. Seminar/ Workshop/Conference/Symposium Organized:

(Name of the Teacher, Name of the Paper Presented, if any, Name of the Seminar, Place, Duration)

Organized International Seminar on “Ways of Reading the Highway”, jointly with Department of History and School of International Relations and Strategic Studies, Jadavpur University.13.02.19.

Nutan Marian Tigga

Assistant Professor, Department of Sociology Jadavpur University

2. A. Area of Research Activities : Sports

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SECTION B

[ACADEMIC REPORT. 1.04.2018 TO 31.03.2019]

FACULTY COUNCIL OF ENGG. & TECH.

D E P A R T M E N T S

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ARCHITECTURE

Phone : + 91-33-2414-6667
Int. : 2457-2624
H.O.D. : Prof. Sanjib Nag
E-mail : hodarchitecture@jadavpuruniversity.in

1. A. Courses offered:

Name of the course	Duration of course	No. of Students enrolled
Bachelor of Architecture	5 Years	40
Master of Architecture (Urban Design)	2 Years	08

1. B. Number of Faculty Members: 12

2. A. Area of Research Activities:

- i. **Prof. Dr. Shubhrajit Das:** Architecture Theory, Criticism and Pedagogy
- ii. **Prof. Tapas Kumar Bhattacharya:** Biomorphic architecture, Building construction & Building services
- iii. **Prof. Dr. Jayita Guha Niyogi:** Town and Regional Planning, Transportation Planning Integrated Land use and Traffic System
- iv. **Prof. Dr. Shivashish Bose:** Theory of Architecture & Urban Design; Architectural Design for Thermal Comfort & Energy Efficiency; Architectural & Urban Conservation; Urban Hydrology, Environmental Planning; Sustainable Development
- v. **Prof. Dr. Madhumita Roy:** Energy Efficient Architecture
- vi. **Prof. Dr. Suchandra Bardhan:** Buildings and climate change & sustainability; Historic, regional & urban landscapes
- vii. **Prof. Dr. Sanjib Nag:** Architecture, Urban Housing, Urban Design and Related Urban Transformations, Urban Developments
- viii. **Dr. Debashish Das:** Urban Building Microclimate, Urban Climate Mapping, Urban Human-Biometeorology, Outdoor Thermal comfort, Building Science and Smart City planning
- ix. **Dr. Mainak Ghosh:** Urban Studies, Environmental Perception and behavior, Culture and Community
- x. **Ms. Sanghamitra Sarkar:** Urban Design and related Developments
- xi. **Ms. Dechen Donka Bhutia:** Urban conservation, Building construction, etc
- xii. **Mr. Tanmoy Datta :** Urban Design and allied aspects

2. B. Major Research Project: (Departmental/Individual –Name of the Project –Funding Agency)

Prof. Dr. Jayita Guha Niyogi –Preparation of a Noise Pollution Map for East Kolkata – Prioritizing Landscaping as a Passive Control Measure –DST PURSE Phase II

Prof. Dr. Suchandra Bardhan –‘Geoinformatics led Inquiries into Tourism Development in the Indian Sundarban...’ –WB DSTBT

Dr. Sanjib Nag –Applying an Urban Design Methodology To Study Urban Development, Due To The Impact Of MRTS –DST PURSE Phase II

Dr. Debashish Das –“Human-Biometeorological approach in Urban Planning Studies in warm-humid climates” –DST PURSE Phase-II

3. A. Invited Lectures delivered/(Session Chaired):

Name of the Teacher –Type of Participants –Name of the Seminar/Conference –Place –Duration
Prof. Dr. Suchandra Bardhan –Students of B. Landscape Architecture –Special lecture session organized by the Students Society of Landscape Architecture (SSLA), University Of Moratuwa (UoM), Sri Lanka. –Sumanadasa building, University Of Moratuwa –30th June 2018.

Prof. Dr. Suchandra Bardhan –Students of Architecture and Landscape Architecture –Invited Mentor for the SEARCH Workshop 2018 on ‘Landscape Urbanism’ organized by SEARCH & IIT-Kgp.’s School of

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Infrastructure Design–IIT Kolkata Centre. –21st-27th December 2018.

Prof. Dr. Sanjib Nag –Interior Designers, Architects & Engineers –Smart Cities & Future Resilience: Green Adaptations & Sustainable Designs –Trinity Towers, Kolkata –22.06.2018

Prof. Dr. Sanjib Nag–Architecture Faculty & Architecture Students –Architecture Design To Urban Design: A Methodological Approach –NIT, Rourkela –19.11.2018

Prof. Dr. Sanjib Nag –Architecture Faculty & Architecture Students –Architecture Thesis : A Methodological Approach –TIU, Kolkata –07.02.2019

Dr Debashish Das –Faculty Members from all Departments –Invited Lecture at UGC sponsored Refresher course, Civil Eng. Dept, JU “Green Buildings to Green cities-Existing scenarios and Future challenges” Civil Eng. Dept, JU –12th Jan, 2018

Dr Debashish Das –Civil Engineers and Civil Contractors –Invited Lecture at World Bank sponsored Training Workshop on TOT for Creating Resource Pool for Training of Contractors on “Rural Green Building Concepts”–School of Water Resources, Jadavpur University –11th Sept, 2018

Dr Debashish Das –Civil Engineers and Civil Contractors –Invited Lecture at World Bank sponsored Training Workshop on TOT for Creating Resource Pool for Training of Contractors on “Greening Rural Development through Green Building Concepts”–School of Water Resources, Jadavpur University –13th Sept, 2018

Dr Debashish Das –Civil Engineers and Civil Contractors –Invited Lecture at World Bank sponsored Training Workshop on TOT for Creating Resource Pool for Training of Contractors on “Understanding the Dimensions of Green Buildings and Infrastructure Developments in Rural Planning”–School of Water Resources, Jadavpur University –10th Dec, 2018

Dr Debashish Das –Civil Engineers and Civil Contractors –Invited Lecture at World Bank sponsored Training Workshop on TOT for Creating Resource Pool for Training of Contractors on “Application of Green Buildings and Green Infrastructure concepts in Rural Development Works”–School of Water Resources, Jadavpur University –13th Dec, 2018

Dr Debashish Das –Faculty Members from all Departments & Research Scholars –Invited Lecture at UGC sponsored Refresher course, titled “Disaster Management: Water and Environmental Sanitation”. Paper titled “Green Buildings and Green Cities for Urban Resilience and Sustainable Development”–School of Water Resources, Jadavpur University–9th Jan, 2019

Dr. Mainak Ghosh –Interdisciplinary Students and Professionals–Mentored “Landscape Urbanism, SEARCH Workshop”–IIT Kharagpur Kolkata Campus –21 – 27 Dec 2018

Dr. Mainak Ghosh –Students of Architecture and Interior Design – Mentored “Design and Creative Thinking Workshop” Manipal University, Jaipur –6 - 12 Feb 2019

3. B. Seminar/Workshop/Conference/Symposium Attended : (Name of the Teacher –Name of the Paper Presented –Name of the Seminar/Conference –Place–Duration)

Prof. Dr. Jayita Guha Niyogi –Attended workshop on “Green Cities Mission: Opportunities and agenda for action” organized by West Bengal Regional Chapter, ITPI in collaboration with Centre for Science and Environment (CSE) –Hotel Hindusthan International, Kolkata –10th March, 2018

Prof. Dr. Jayita Guha Niyogi (Co-author) –Addressing Informal Public Transport Vehicle Problem in Kolkata –Third National Conference on Recent advances in traffic Engineering, Rate 2018 –SVNIT, Surat, Gujarat 11-12 August 2018

Prof. Dr. Jayita Guha Niyogi(Co-author) –Integration of Transit Modes for Sustainable Urban Mobility with reference to Kolkata –Workshop on “Green Cities Mission: A Dialogue on Urban Sustainability” organized by West Bengal Regional Chapter, ITPI in collaboration with Centre for Science and Environment

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(CSE) –Bengal Chamber of Commerce –8th December, 2018

Prof. Dr. Suchandra Bardhan –Attended as the only Indian participant from ARCASIA member countries –International workshop on ‘Digital Pedagogy for Architectural Education & Practice’ –Università Guglielmo Marconi, Rome, Italy –One week- 8th to 12th October 2018

Prof. Dr. Suchandra Bardhan –Attended International Seminar on ‘BIM Inside & Out’, organized by Graphisoft, Hungary & REPL, India –Hotel Taj Gateway, Kolkata –26th October 2018

Prof. Dr. Suchandra Bardhan –Attended One Day International Workshop on ‘Health Monitoring & Rehabilitation of Structures’ organised by Centre for Disaster Preparedness & Management, JU–Jadavpur University –7th December, 2018

Prof. Dr. Suchandra Bardhan –Invited delegate– MEA Workshop on the Heritage Zoning of Kolkata for the Creation Museum. of a Management Plan–Indian Museum–20th December 2018

Prof. Dr. Sanjib Nag –Conference Attended –All India People Technology Congress –NITTTR,Kolkata –16 & 17.02.2019

Dr Debashish Das –Aspects of Greening Rural Development in India-An overview of the challenges and its role in sustainable development –2 Days International Seminar on “ Rural Development in India:Contemporary Reflection”–Rabindra Bharati University–26th -27th April,2018

Dr Debashish Das–Conservation in Kumartuli, North Kolkata-Case for Thermal Comfort and Well Being of the Artisans –International Conference on Urban Conservation–ICCR,Kolkata –26th-28th Nov,2018

Dr Debashish Das–Attended–2 Days Training programme on new practices for cement Finished Construction by treated Bamboo, participated–FOSET,Kolkata North Dum Dum Municipality–9th & 10th June,2018

Dr Debashish Das–Attended–International Seminar on ‘BIM Inside & Out’, organized by Graphisoft, Hungary & REPL, India–Hotel Taj Gateway, Kolkata–26th October 2018

Dr Debashish Das–Attended –One day International Workshop on “Health monitoring & Rehabilitation of Structures”–Centre for Disaster Preparedness & Management, Jadavpur University–7th Dec,2018

Dr. Mainak Ghosh–Attended –EdTech 2018 Conference –The Gateway Hotel, Kolkata –22 Nov 2018

Dr. Mainak Ghosh (co-presenter orally presented)–Water and Creative Livelihood: Conservation of Heritage in Deltic Bengal–International Conference on Urban Conservation–ICCR, Kolkata –26 – 28 Nov. 2018

Dr. Mainak Ghosh–Attended–Plastic Wastes to Wealth International Seminar, organized by Indian Plastics Federation–Eco Park Exhibition Ground, Kolkata–2 Dec 2018

Dr. Mainak Ghosh (co-presenter orally presented)–Sustainability in Architecture & Planning: Consumption and Behavior–SPATE, International Seminar on Sustainability in Architecture, Planning, Engineering and Technology , 2019–Amity University, Jaipur–31 Jan – 1 Feb 2019

Dr. Mainak Ghosh (co-presenter orally presented) –Sustainability in Traditional Concepts of Architecture and Planning Planning, Engineering and Technology , 2019–SPATE, International Seminar on Sustainability in Architecture, –Amity University,Jaipur –31 Jan – 1 Feb 2019

Dr. Mainak Ghosh (co-presenter presented)–Traditional Architecture and Rural Tourism (Poster) The World Bamboo Workshop 2019, by World Bamboo Organization, USA.–Manipur–4 – 8 Feb 2019

Sanghamitra Sarkar –Participant–Workshop on “Introduction to Energy Conservation Building Code” – Indian Institute of Engineering, Science and Technology, Shibpur–6th-10th February, 2019.

Sanghamitra Sarkar–Exploring transformation of Commercial Centres and process of Urban Development in a city: Defining important aspects of Research work –12th All India People’s Technology Congress. Kolkata–16th-17th February, 2019

3. C. Seminar/Workshop/Conference/Symposium Organized: (Name of the Teacher–Name of the Paper presented–Name of the Seminar/ Conference/Workshop–Place–Duration)

Prof. Jayita Guha Niyogi & Prof. Suchandra Bardhan–Joint Coordinator –One-week Workshop on ‘Application of Quantitative Techniques in Spatial Planning’ –Dept. of Architecture, JU–21st – 28th December 2018

Prof. Dr. Sanjib Nag–Workshop Organized–“Sustainability Sensitizing”–JU, Kolkata–09 & 10.07.2018

Dr Debashish Das–Convenor–One Day Awareness & Training Programme on Energy Conservation Building Code–Dept. of Architecture, Jadavpur University–April 24th,2018

Dr Debashish Das–Joint Coordinator–Sustainability Sensitizing Workshop–Jadavpur University, Kolkata – 9 – 10 Jul 2018

Dr Debashish Das–Convenor –One day National Seminar on Heritage: A nations pride,–Jadavpur University, Kolkata –22nd Nov,2018

Dr Debashish Das–Workshop Convenor –One day Workshop on “Green City Mission: Opportunities and agenda for action”–HHI, Kolkata –8th Dec,2018

Dr Debashish Das–Convenor –One week Workshop on ‘Application of Quantitative Techniques in Spatial Planning’–Dept. of Architecture, JU–21st – 28th December 2018

Dr. Mainak Ghosh–Joint Coordinator–Sustainability Sensitizing Workshop–Jadavpur University, Kolkata – 9 – 10 Jul 2018

Dr. Mainak Ghosh–Organized –Urbanism 2050 by Prof. Anne Feenstra Jadavpur University, Kolkata – 30 Oct 2018

Dr. Mainak Ghosh–Organized–VERV Industry Academic initiative with Aludecor–Jadavpur University, Kolkata– 20 Nov 2018

Dr. Mainak Ghosh–Coordinator –Indiplas’18 International Event –Eco Park Exhibition Ground, Kolkata. – 30 Nov – 3 Dec 2018

3. D. Orientation Courses/Refresher courses Attended: (Name of the Teacher–Title of the Course –Duration–Place)

Prof. Dr. Suchandra Bardhan –PG Certificate Course on “City and Metropolitan Planning” by M. Urban Planning Dept., SPA, N.D.–15-week- August to December 2018 –SWAYAM-MOOC

4. A. Books/Monographs etc. Published: (Name of the Teacher –Name of the Book/ Monograph etc.–Name of the Publisher)

Prof. Dr. Suchandra Bardhan (Co-author)–Chapter titled ‘Embodied Water of Construction and Its Significance in Sustainable Development: Case Study of A Single Family Residential House in Pune, India’, *Annual Technical Volume of Architectural Engg. Division Board*, 2018, ISBN: 978-81-936149-2-1, pp. 45-49.–The Institution of Engineers (India)

Prof. Dr. Suchandra Bardhan (Co-author)–Chapter titled ‘Interpreting Jeanneret’s Vision for Gandhi Bhawan’ in the book *Gandhi Bhawan: Documenting and Conserving Modern Heritage of India*, 2019, ISBN: 978-93-85360-53-4, pp. 60-79.–Mapin Publishing, India

Dr. Mainak Ghosh (Chapter Co-author)– ‘Material Culture and Sustainability: Traditional versus modern in a Case of Northeast of India’, for *The Encyclopedia of Renewable and Sustainable Materials* (ISBN 9780128035818)–Elsevier

Dr. Mainak Ghosh (Chapter Co-author)– ‘Traditional Crafts as Materials in Placemaking: Application and Sustainability in Aesthetic Transformation of Geometry of Urban Public Spaces’, for *The Encyclopedia of Renewable and Sustainable Materials* (ISBN 9780128035818)–Elsevier

4. B. Articles Published in Journals, Proceedings and Magazines :(Name of the Teacher –Name of the Articles –Name of the Journal –Date of Publication –Volume)

Prof. Dr. Jayita Guha Niyogi(Co-author) –Planning approaches towards sustainable urban mobility –Available at SSRN: <https://ssrn.com/abstract=3334408> or <http://dx.doi.org/10.2139/ssrn.3334408> (Elsevier) –June 15, 2018

Prof. Dr. Suchandra Bardhan (Co-author)–An Assessment of Floristic Diversity in Urban Forestry –*The Indian Forester Journal*, ISSN: 0019-4816 (Print), 2321-094X (Online) –April 2018 –144 (4) : 354-362

Prof. Dr. Suchandra Bardhan (Co-author)–Personalization and its Relation to the Perception of Safety: A Case in Residential Apartments –*Journal of Civil Engineering and Environmental Technology*, Print ISSN (2349-8404) Online ISSN: (2349-879X)–April-June, 2018 –5 (4) : 186-191

Prof. Dr. Suchandra Bardhan (Co-author)–Mitigation of Indirect GHG Emission through Wastewater Treatment in Wetlands, Case study- East Kolkata Wetlands, India–*Proceeding of the 4th Annual International Conference on Urban Planning and Property Development*, Singapore, Print ISSN: 2425-0112, online ISSN: 2425-0201.–October 2018–Vol. 4, pp.72-75

Prof. Dr. Suchandra Bardhan (Co-author)–Studies on flood vulnerability assessment of Kolkata under a changing climate: A Quantitative Inferential Approach–*SPANDREL*, ISSN: 2231-4601–December 2018 – Issue 13, Spring 2017, pp. 03-13.

Prof. Dr. Suchandra Bardhan (Co-author)–Reinstating Nature in a City with the help of Biodiversity Indicators: A Framework for a Resilient Kolkata,–*Urban India*, ISSN no. 0970-9045–July- December 2018 –38 (II): 115-135.

Prof. Dr. Suchandra Bardhan (Co-author)–Socio-Ecological Urban Systems: Planning For Resilience –*Journal of Indian Institute of Architects*, ISSN 0019-4913–January 2019 –84(1): 31-36.

Prof. Dr. Suchandra Bardhan (Co-author)–A Theoretical Perspective of Designing for Safe Urban Public Place: Learnings from the Social and Urban Theorists –*International Journal of Advanced Research in Engineering and Technology*, ISSN print: 0976-6480/ ISSN Online: 0976-6499 –March-April 2019 – 10(2): 381-388.

Prof. Dr. Suchandra Bardhan (First author)–Tree composition mapping and environmental role of small natural areas in dense urban setting: Case study of Jadavpur University campus in India –*The Indian Forester Journal*, ISSN: 0019-4816 (Print), 2321-094X (Online)–March 2019–145 (3) : 227-233

Prof. Dr. Sanjib Nag (Supervisor)–Convention Center Complex, At New Town, West Bengal–*Journal Of Indian Institute Of Architects*–May 2018–Vol. 83, Issue 04, Pages 29 - 38

Prof. Dr. Sanjib Nag (Co-Author)–Water Front Dev. – Reconnecting City With River : Case Study Of Kolkata –*Journal Of Indian Institute Of Architects* –July 2018 –Vol. 83, Issue 06, Pages 33-40

Prof. Dr. Sanjib Nag (Co -Author)–Exploring Transformation Of Commercial Centers & Process of Urban Development In A City : Establishing Relevance Of Research Work –*Journal Of Indian Institute Of Engineers* –September 2018 –Vol. 02, Pages 33 - 38

Prof. Dr. Sanjib Nag (Co-Author)–Mass Rapid Transit System Related Urban Development Of Existing Core Areas Of A City : Establishing Relevance Of Research Work–*Journal Of Research In Infrastructure Designing* –December 2018–Vol. 02, Issue 02, Pages 01 - 05

Prof. Dr. Sanjib Nag (Contributor) –Career Guide : Architecture Sambad Pratidin–December 2018 Pages 01 - 04

Prof. Dr. Sanjib Nag (Co-Author)–Exploring Transformation Of Commercial Centers & Process of Urban Development In A City: Defining Important Aspects Of Research Work –*Journal of FOSET* –February 2019–Vol. XXI, Issue 03, Pages 39 - 40

Dr Debashish Das–Source-Sink Dynamics (SoSiD) As a Tool for Carbon Conscious Landuse Planning –

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Indian Journal of Landscape Systems and Ecological Studies,–June,2018–Vol. 41, No. 1,

Sanghamitra Sarkar–Waterfront Development- Reconnecting City with River: Case Study of Kolkata –
Journal of the Indian Institute of Architects–July 2018–Volume 83, Issue 6

Sanghamitra Sarkar–Exploring transformation of Commercial Centres and process of Urban Development
in a City: Relevance of Research –*Annual Technical Volume, Institute of Engineers*. –December 2018 –
Volume II

6. Major Achievements:

A. Prof. Dr. Jayita Guha Niyogi

1. Acted as external member of the Doctoral Scrutiny Committee for Pre-Registration and Pre-submission of PhD thesis viva-voce of Research Scholars at Department of Architecture, NIT, Patna.
2. Acted as Paper-setter for a number of examinations for different Architectural Institutes and Institute of Engineers, India.
3. Acted as a subject expert member of the Board of Studies meeting for finalizing the syllabus of B. Plan and M. Plan, at Department of Architecture and Planning, CET, Bhubaneswar.
4. Acted as external member of the Doctoral Scrutiny Committee for PhD thesis of Research Scholar at Dept of Architecture, T & R P, IEST, Shibpur.
5. Acted as a judge in the Preliminary Screening and Final Competition of Inter School Elocution Contest on “Need of Urban Planning to Mitigate Air Pollution” in a National workshop on the same Theme on 13th July, Saturday, 2019 at the Rotary Sadan, Kolkata jointly with the Dept. of Architecture & Regional Planning, IIT, Kharagpur and West Bengal Regional Chapter of the Institute of Town Planners, India.
6. Acted as Joint Coordinator of One-week National Workshop on “Application of Quantitative Techniques in Spatial Planning” organized by Centre for Human Settlement Planning, Department of Architecture, Jadavpur University, 21st to 28th December, 2018.

B. Prof. Dr. Suchandra Bardhan

1. Member of the Advisory Committee for the ‘Restoration of the House of Sister Nivedita’ at Bosepara Lane, Kolkata.
2. India-Sri Lanka Foundation Visiting Academic at Bachelor of Landscape Architecture program at Dept. of Architecture, University of Moratuwa, Sri Lanka, June – July, 2018.
3. Recipient of AICTE Travel Grant for attending workshop on ‘Digital pedagogy for Architectural Education and Practice’ at Università Guglielmo Marconi, Rome, Italy in October 2018.

C. Prof. Dr. Sanjib Nag

1. Prof. Dr. Sanjib Nag is a Member, Doctoral Committee, Dept. of Arch. T&RP, IEST, Shibpur, since 2013.
2. Prof. Dr. Sanjib Nag is a Member, Inspection Committee, Council of Architecture, India, since 2015.
3. Prof. Dr. Sanjib Nag is a Member, Doctoral Committee, School Of Ecology, Infrastructure & Human Settlement Management, IEST, Shibpur, since 2017.
4. Prof. Dr. Sanjib Nag is a Member, Selection Committee, Public Service Commission, Govt. of W. Bengal, since 2017.
5. Prof. Dr. Sanjib Nag is a Member, Technical Expert Committee, Department of Fire & Emergency Services, Govt. of W. Bengal, since 2017.
6. Prof. Dr. Sanjib Nag is a Jury, National Student Award Competition, INSDAG, Kolkata, since 2017.
7. Prof. Dr. Sanjib Nag is a Member, Board of Studies, School of Architecture, Techno India University, Salt Lake City, since 2018.
8. Prof. Dr. Sanjib Nag served as an External Examiner, Dept. of Arch. T&RP, IEST, Shibpur, in May & December 2018.

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9. Prof. Dr. Sanjib Nag served as an External Examiner, School of Arch., Techno India University, Salt Lake City, in June & December 2018.

D. Dr Debashish Das

1. Convener of the Workshop Sub-Committee of Institute of Town Planners, India, West Bengal Chapter, 2018-19
2. Visiting Faculty for M.Tech in Illumination Technology & Design (Evening) Course in the School of Illumination Science Engg. & Design, 2018-19
3. Superintendent of Examiner, The Indian Institute Of Architects, For AIIA Course, since 2018-19.

E. Dr. Mainak Ghosh

1. Participated on invitation several times as expert on live television program entitled Pradhan Matri Awas Yojana, of Prasar Bharati, Doordarshan (2018 – 19).
2. Has been invited as external examiner at the final Jury review of the 8th Semester Architectural Project at IEST Shibpur on 8 May 2018.
3. Has been invited as examiner for viva-voce examination of subject Architectural Design Studio V, Semester 5, at Amity School of Architecture and Planning, Kolkata on 19 Nov 2018.
4. Has been invited several times as examiner for conducting different examinations at J. D. Birla Institute, Kolkata (2018 – 19).
5. Has been invited as jury and curriculum revision/advice at The Design Village at Noida, an international, interdisciplinary and industry-centric design institute, on 23 – 24 May 2018.
6. UG thesis project based research work for Suchi Priyadarshani, under supervision of Dr. Mainak Ghosh, has received award for zonal round first position in Anveshan (Mar 2019), National student research convention and awards.

F. Mrs. Sanghamitra Sarkar

1. Mrs. Sanghamitra Sarkar acted as Reporting Centre Official for West Bengal Joint Entrance counselling 2018-19.
2. Mrs. Sanghamitra Sarkar has co-ordinated an Invited Lecture by Dr. Anita Sinha on “Ghats on the Ganga in Varanasi: A Sustainable Design Approach” at the Department of Architecture, Jadavpur University in November 2019.
3. Mrs. Sanghamitra Sarkar has prepared a document for the Directorate of Mass Education Extension, Government of West Bengal.
4. Mrs. Sanghamitra Sarkar has prepared a project document for the Haldia Dock Complex, Kolkata Port Trust.

G. Ms. Dechen Donka Bhutia

1. Examination Invigilator for WBJEE 2018-2019
2. RC Official for WBJEE 2018-2019
3. External Examiner for Viva Voce of Building Construction V in Amity University, Kolkata.

H. Mr. Tanmoy Datta

1. I, Mr. Tanmoy Datta acted as Teacher Volunteers for the Convocation on allotted, 24.12.2018 at Jadavpur University.

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CHEMICAL ENGINEERING

Phone : + 91-33-2414-6378

Int. : 2457-2246

H.O.D. : Prof Kajari Kargupta

Dr. Debashis Roy (w.e.f. 21.07.2018)

E-mail : hodchemical@jadavpuruniversity.in

1. A. Courses Offered:

Name of the Course	Duration of Course	Intake Capacity
B.E. in Chemical Engg.	4 Years	116
M.E. in Chemical Engg.	2 Years	19
M.E. in Bioprocess Engg.	2 Years	10

1. B. Number of Faculty Members:

Sanctioned post – 19

Currently – 17

2. B. Major Research Projects:

Departmental/Individual

Project Title: “Development of efficient biomass conversion routes for biofuel production and utilization

Funding Agency: DST sponsored INNO-INDIGO Project CONVER-B (in collaboration with University of Eastern Finland and Helmholtz Centre for Environmental Research (UFZ) , Germany). (2018 – 21)”

Principal Investigator: **Prof. R Chowdhury**

Project Title: “Development of novel electrofloatation/ electrocoagulation enhanced membrane module for oily wastewater treatment”

Funding Agency: DST – TSDP (2016 -18)

Principal Investigator: **Prof. C. Bhattacharjee**

Project Title: “Centre for Technological Excellence in Water Purification (CTEWP)”

Funding agency: DST sponsored Water Innovation Centre (WIC) project (2019-24)

Principal Investigator: **Prof. C. Bhattacharjee**

Project Title: “Process Intensification in concentration of Fruit juices”

Funding Agency: University Grants Commission (2015 - 18)

Principal Investigator: **Prof A. Bhowal**

Project Title: Utilizing natural resources, Carbondioxide and waste heat towards sustainable development (2019-2020)

Funding Agency: RUSA 2.0 (Department Project)

Investigators: **Prof. R Chowdhury, Prof A Bhowal (Coordinator), Prof K Kargupta, Prof P Das**

Project Title: “Solar Energy driven Green Hydrogen Generation from Water using Reduced Graphene Oxide based Photo-catalyst and Co-catalyst”. (2018-2021)

Funding Agency: DST-SERB

Principal Investigator: **Prof. K. Kargupta**

Project Title: “Development of high performance low cost integrated hydrogen generation-fuel cell system for remote application”. (2018-2019)

Funding Agency : RUSA 2.0 Faculty Project

Principal Investigator: **Prof. K. Kargupta**

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Project Title: “Solar Energy driven Green Hydrogen Generation from Water using Reduced Graphene Oxide based Photo-catalyst and Co-catalyst”. (2018-2021)

Funding Agency: DST-SERB

Principal Investigator: **Prof. K. Kargupta**

Project Title: “EcoLodge - Efficient production of Butyl-Butyrate from Lignocellulose derived Sugars

Funding Agency: DST (India)-RCN (Norway), (2015-2018)”

Principal Investigator: **Prof. U Sarkar**

Project Title: “Biorefining *Crotalaria juncea* (Sunn-Hemp): Prospects of utilizing waste glycerol for the production of Succinic Acid”.

Funding Agency: UGC (2015-18)

Principal Investigator: **Prof. U Sarkar**

Project Title: “ISRO-AT-CTM: Atmospheric Trace gases-Chemistry, Transport and Modelling”

Funding Agency: ISRO-GBP/-ATCTM, (2009-2019)

Principal Investigator: **Prof. U Sarkar**

Project Title: “Intensification and Optimization of Conversion of Bio-Glycerol into Value-added Products using Electromagnetically Irradiated Reactor through Novel Protocols”

Funding Agency: **UGC (2015-18),**

Principal Investigator: **Prof. R. Chakraborty**

Project Title: “Sustainable production of platform chemicals and fuel additives from lignocellulosic agro-industry wastes”

Funding Agency: Department of Science & Technology and Biotechnology; Government of West Bengal (2019-2022)

Principal Investigator: **Prof. R. Chakraborty**

Project Title: “Development of Novel Multi-functional Hybrid Materials for Applications in Sustainable Catalytic Conversions and Energy Storage Devices”

Funding Agency: RUSA 2.0; “Departmental Support Towards Upgradation in Research” [Advanced Materials Research] (2019-2020)

Principal Investigator: **Prof. R. Chakraborty**

Project Title: “Sustainable Production of Drop-in Bio-Fuels through Energy-efficient Conversion of Agro-wastes”

Funding Agency: RUSA 2.0; Major Research Support; (2019-2020)

Principal Investigator: **Prof. R. Chakraborty**

Project Title: “Synthesis of Graphene oxide coated natural waste materials and its application for simultaneous treatment of wastewater containing fluoride and chromium: Reactor performance in batch, fluidized bed and membrane reactor”,

Funding Agency: SERB DST sponsored (2019-2022)

Principal Investigator: **Prof P Das**

Project Title: “Green synthesis of iron nanoparticles from manglicolous fungi of Indian Sunderban and their application in sequestration of heavy metals from contaminated water”

Funding Agency: DBT sponsored project (in collaboration with University of Calcutta and National Institute of Technology – Rourkella). (2016 -19)

Principal Investigator: **Prof. P Das**

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Project Title: “Removal of pharmaceutical derivatives present in waste water by advanced oxidation integrating with microstructure and rotating packed bed of grapheme (G)/Graphene oxide (GO)/GO-metal nanocomposites”

Funding Agency: DST (2017-2020i)

Principal Investigator: **Prof. P Das**

Project Title: “Role of carbonaceous materials and cellulose nano-fibres polymeric composite for treatment of multiple pollutants present in wastewater”

Funding Agency: Dalmia Holdings group limited (2018 -2021)

Principal Investigator: **Prof. C Bhattacharjee, Prof A Bhowal, Prof P Das**

Project Title: “Sustainable development of value added products from Food waste Materials and its Application”

Funding Agency: RUSA II Faculty Project

Principal Investigator: **Prof. P Das**

Project Title: “Zeolite-based Low-cost Hybrid Membrane Photo-Bioreactor System for Treating and Recycling of High Strength Industrial Wastewater”

Funding Agency: IMPRINT - II (2018-2021)

Project Investigator: **Prof P Das (CO-PI)**

Project Title: “Treatment of contaminated drinking water using hybrid low-cost process Funding Agency: DBT sponsored INNO-INDIGO Project HyWATER (in collaboration with University of Porto, Portugal and Technical University of Munich (TUM) , Germany)”. (2015 – 18)

Principal Investigator: **Dr. MehabubRahaman**

Project Title: “Metal Nanoparticle Tailored Activated Carbon Prepared From Waste Towards Heavy Metal Removal from Waste Solution”

Funding Agency : RUSA 2.0, Major Research Support, Faculty Project (2019-20)

Principal Investigator: **Dr. S. Bose**

Project Title: “Graphene-based polymer nanocomposite for multifunctional application especially as supercapacitor electrode”

Funding Agency :UGC (2014-19)

Principal Investigator: **Dr. S. Bose**

Project Title: “Environmentally benign amine functionalized solid sorbent for fast and reversible CO₂ capture from air: Kinetics of temperature-vacuum swing adsorption/desorption system”. (2017-2020)

Funding Agency: DST-SERB

Investigator: **Dr. S. Saha**

Project Title: “A novel organic nanoparticle based aerogel production from lignocellulosic material with super adsorption capabilities. (2016-2019)”

Funding Agency: DST –SERB (Young Scientist)

Investigators: **Dr. S. Saha**

3. A. Invited Lectures Delivered/Sessions Chaired:

(Name of the Teacher, Type of Participants, Name of the Seminar / Conference etc. place, Duration)

2019

1. **C. Bhattacharjee**, Invited lecture on “Advanced Technologies for Waste Water Treatment Leading to Sustainable Developments: A Case Study on Dairy Waste” In 106th Science Congress, Lovely Professional University, Phagwara, Punjab, India, 2019.

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2. **C. Bhattacharjee**, Invited lecture on “Energy Conservation and management” organized by Shilpa Bichitra, an esteemed Industry & Commerce Oriented English Journal, Jadavpur University, Kolkata, 2019.
3. **C. Bhattacharjee**, Invited lecture on “Concept & Technology of Selfless Service for Nation Building” In Two Day Workshop organized by Vivekananda Institute of Environment and Management, Kolkata, Kolkata, 2019.
4. **C. Bhattacharjee**, Invited lecture on “Membrane Technology and its inter-disciplinary Applications” during Inter-disciplinary refresher course on “Emerging Trends in Mechanical Engineering with Inter-Disciplinary Application” in the Department of Mechanical Engineering, Jadavpur University, January 2019.
5. **C. Bhattacharjee**, Keynote Speaker in 3rd International Conference on Biotechnology & Biological Sciences: BIOSPECTRUM 2019, In Department of Biotechnology, University of Engineering & Management, Kolkata. 2019.
6. **C. Bhattacharjee**, Keynote speaker for Workshop entitled “Membranes for Water management and Waste to Resources with Special Focus on NextGen Membrane Technology”, at CSIR-Central Glass and Ceramic Research Institute, Kolkata, 2019.
7. **C. Bhattacharjee**, Keynote speaker in “National Conference on Environmental Sustainability, Water Resource and Management” at Narula Institute of Technology, 2019.

2018

1. **C. Bhattacharjee**, Invited lecture on “Glocalization -The Game-Changer of Modern Business as the Chief Guest to Comercio Conclave 2018” – Inter College Business Convention hosted by J.D. Birla Institute, 2018.
2. **C. Bhattacharjee**, Invited lecture on “Industry-Academia Interaction to meet the challenges in Process Industries for Sustainable Development”; at NIT Agartala. Chief Guest in the 2 Days TEQIP III sponsored Workshop Programme on “Industry-Academia Interaction to meet the challenges in Process Industries for Sustainable Development” at NIT Agartala, 2018.
3. **C. Bhattacharjee**, Invited lecture on “Recent Trends in Chemical Engineering and Biotechnology in Mitigation of Global Warming” at Institute of Engineers India, 2018.
4. **C. Bhattacharjee**, Invited lecture on “Beat Plastic Pollution” during World Environment Day 2018 celebration Seminar on Waste Management in Kolkata - Way Forward to be organized by the International Society of Waste Management, Air and Water (ISWMAW) in collaboration with CQMS, Jadavpur University and ITC Ltd, Jadavpur University, Kolkata. 2018
5. **C. Bhattacharjee**, Invited lecture on “National Conference on Engineering & Technology for Rebuilding India” organized by Vivekananda Institute of Environment & Management (VIEM), Kolkata jointly with Central Glass & Ceramic Research Institute, Kolkata, Central Glass and Ceramic Research Institute, Jadavpur, Kolkata, 2018.

3. B. Seminar/Workshop/Conference/Symposium Attended: (Name of the Teacher, Name of the Paper Presented, Name of the Seminar, place, Duration)

2019

8. Vijoyeta Chakraborty, Papita Das, Pankaj Roy, , Removal of Strontium (II) ion from aqueous solution using Graphene Oxide, International Conference on “Emerging Technologies for Sustainable Development” organised by Government College of Engineering and Leather Technology, Kolkata held at Eastern Zonal Cultural Centre & Government College of Engineering and Leather Technology, Kolkata, India (Poster): 5-6th march, 2019.
9. Sandipan Bhattacharya, Papita Das, Avijit Bhowal, Removal of Cetrizine With Graphene Oxide as an Adsorbent, International Conference On “Emerging Trends For Sustainable Development, 2019”, Organized By : Government College Of Engineering And Leather Technology. Date : 5th - 6th March, 2019 (Oral)

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10. Preetha Ganguly, Shubhalakshmi Sengupta, Papita Das, Avijit Bhowal, Comparative Study Of The Pretreatments And Their Effect On Groundnut Shell Waste For Bioethanol Production , International Conference on Emerging Technologies for Sustainable Development (ICETSD 19) on March 5-6, 2019 at GCELT campus, Kolkata.WB,India. , Proceedings:- 978-81-8211-146-2 Page- 78-81
11. Lopamudra Das, Niladri Shikhar Saha, Papita Das, Avijit Bhowal, Chiranjib Bhattacharya paper name: Batch adsorption studies on removal of Crystal Violet dye from aqueous solutions using raw sugarcane bagasses, International Conference on Emerging Technologies for Sustainable Development (ICETSD 19) on March 5-6, 2019 at GCELT campus, Kolkata.WB,India. , Proceedings:- 978-81-8211-146-2 , Page- 94-97
12. Banerjee, P., Mukhopadhyay, A. and Das, P., 2019. Treatment of azo dye by combined biodegradation and adsorption – an ecofriendly approach. Abstract book of international conference on “Environment, Development and Livelihood”, 22nd -23rd February 2019, Kolkata. Pp: 42. Organized by the Department of Geography and IQAC, South Calcutta Girls’ College, Kolkata, in collaboration with Centre For Environment And Economic Development (CEED), New Delhi.
13. Banerjee, P., Mukhopadhyay, A. and Das, P., 2019. A combined biodegradation-biosorption approach for detoxification of azo dye bearing effluents. International symposium on Environmental Chemistry, 15th February 2019, Kolkata. Organized by the Department of Environmental Science, University of Calcutta, Kolkata, in collaboration with Indian Chemical Society, Kolkata.
14. Vijoyeta Chakraborty, Papita Das, Pankaj Roy, Removal of Cadmium by thermally modified sawdust, 12th All India Peoples’ technology congress organised by forum of scientists,engineers & technologists (FOSET) held at : National Institute of Technical Teachers’ Training and Research, Kolkata on 16th and 17th February, 2019
15. Sandipan Bhattacharya, Papita Das, Avijit Bhowal, Removal of chlorothiazide from it’s aqueous solution using graphene oxide as an adsorbent, 12th All India Peoples’ technology congress organised by forum of scientists,engineers & technologists (FOSET) held at : National Institute of Technical Teachers’ Training and Research, Kolkata on 16th and 17th February, 2019
16. Lopamudra Das, Niladri Shikhar Saha, Papita Das, Avijit Bhowal, Chiranjib Bhattacharya, Fixed bed column study for the removal of aqueous malachite green dye solution using raw sugarcane bagasse, 12th All India Peoples’ technology congress organised by forum of scientists,engineers & technologists (FOSET) held at : National Institute of Technical Teachers’ Training and Research, Kolkata on 16th and 17th February,2019.
17. Niladri Shikhar Saha, Lopamudra Das, Papita Das, Avijit Bhowal, Chiranjib Bhattacharya; Extraction and application of cellulose from Rice Husk in decolonization of Malachite Green from dye contaminated waste water. 12th All India Peoples’ technology congress organised by forum of scientists,engineers & technologists (FOSET). held at : National Institute of Technical Teachers’ Training and Research, Kolkata on 16th and 17th February,2019.
18. S. R. Barman A. Mukhopadhyay and P. Das, 2019. Synthesis and characterization of activated carbon prepared from almond nut shells. Abstract Book of National Seminar on”Emerging Environmental Issues: Retrospect and Prospect” Organized by Vijaygarh Jyotish Ray College. 19th February 2019.Kolkata. [ORAL]
19. S. R. Barman A. Mukhopadhyay and P. Das, 2019. Green synthesis of Copper Nanoparticle-Activated carbon composite for the adsorption of Polyaromatic Hydrocarbons from aqueous phases. Abstract book of National Conference on Recent Developments in Nanoscience & Nanotechnology, Organized by school of material science and nanotechnology, Jadavpur University. 29-31st January 2019. T01_06 [POSTER]
20. S. R. Barman A. Mukhopadhyay and P. Das, 2019. Recycling of urban wood waste to wealth. Abstract book of one day seminar on “Contemporary Issues in Urban Economics with special reference to India”, Organized by Centre for Urban Economic Studies (CUES), University of Calcutta. 1stFebruary 2019.Pp 3 [ORAL]

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21. Parama Ghoshal and Silvana S. S. Cardoso. Mechanism of reactive convective-dissolution in the geological storage of carbon dioxide, presented at the Eighth International Symposium on Bifurcations and Instabilities in Fluid Dynamics (BIFD) 2019 held at the University of Limerick, Ireland, 16-19 July 2019.
22. Parama Ghoshal and Silvana S. S. Cardoso. Reactive convective-dissolution in a Hele-Shaw cell, presented at the *14th International Conference on Heat Transfer, Fluid Mechanics and Thermodynamics* held at the Powerscourt Hotel Resort & Spa, Wicklow, Ireland, 21-25 July 2019.
23. Sibashish Baksi, Ujjaini Sarkar, Sudeshna Saha. Enzyme based hydrolysis of a fibrous and a woody biomass: A novel protocol. The 4th International Conference on “Alternative Fuels, Energy and Environment (ICAFEE): Future and Challenges”. held at Feng Chia University, Taichung, Taiwan on 18th – 21st, October 2019.
24. Pabitra Kumar Baidya , Niwesh Ojha , Ujjaini Sarkar. Selective Hydrogenation of Succinic Acid to 1,4-Butanediol using Palladium-Alumina Bimetallic Catalyst: Effects of calcination temperature, pressure and reaction time. The 4th International Conference on Alternative Fuels, Energy and Environment (ICAFEE): Future and Challenges. held at Feng Chia University, Taichung, Taiwan on 18th – 21st, October 2019.
25. Pabitra Kumar Baidya , Niwesh Ojha , Ujjaini Sarkar. Selective Hydrogenation of Bio-refined Succinic Acid into 1,4-Butanediol using various Bimetallic Catalysts: Effects of calcination temperature, pressure and reaction time. 69th Canadian Chemical Engineering Conference. Held at Halifax, NS on October 20-23, 2019.
26. Sibashish Baksi, Ujjaini Sarkar, Sudeshna Saha. Implication of fractal kinetics and diffusion limited reaction on biomass hydrolysis. 69th Canadian Chemical Engineering Conference. Held at Halifax, NS on October 20-23, 2019.
27. S. Das, K. Nath, R. Chowdhury, Comparative studies on biomass productivity and lipid content of a novel blue-green algae during autotrophic and heterotrophic growth, “11th International Exergy, Energy and Environment Symposium (IEEEES’ 11), 2019”.
28. S. Pati, S. De and R. Chowdhury, Process Modelling of Gasification and Co-Gasification of Individual and Mixed Indian Lignocellulosic Waste- Optimization of Energy efficiency, 11th International Exergy, Energy and Environment Symposium (IEEEES’ 11), 2019.
29. S.Ghosh, A. Mishra and R. Chowdhury, Correlation of sugar release and increase of crystallinity index (CrI) during mild acid-catalyzed hydrothermal pretreatment of Indian rice straw, 11th International Exergy, Energy and Environment Symposium (IEEEES’ 11), 2019.
30. R. Das and C. Bhattacharjee, Photo-membrane Reactor: A Sustainable Approach for Environmental Pollution Control, 106th Indian Science Congress, Lovely Professional University, Jalandhar, India, 2019.
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- 3. D. Orientation Courses/ Refresher Courses Attended:(Name of the Teachers, Title of the Course, Duration, Place)**
Dr. Saswata Bose, UGC sponsored 68th Orientation Programme, 5th Feb to 6th March, 2018, UGC-HRDC, Jadavpur University Saltlake Campus.

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Dr. Saswata Bose, Emerging trends in Mechanical Engineering with Inter-Disciplinary Application, UGC sponsored winter school, 2019 under refresher course, -22nd January, 2019, Mechanical Engineering Department, Jadavpur University.

4. A. Books/Monographs etc. Published:(Name of the Teacher, Name of the Book, Name of the Publisher)

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26. U Roy, S Sengupta, P Banerjee, P Das, A Bhowal, S Datta (2018) “Assessment on the decolourization of textile dye (Reactive Yellow) using *Pseudomonas* sp. immobilized on waste materials fly ash: Response surface methodology optimization and toxicity evaluation”, *Journal of Environmental Management* , 223: 185-195
27. S Roy, S Sengupta, S Manna, P Das (2018). Chemically reduced tea waste biochar and its application in treatment of fluoride containing wastewater: Batch and optimization using response surface methodology. *Process Safety and Environment Protection* 116: 553-563
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29. S Manna, P Saha, D Roy, B Adhikari, P Das (2018). “Fixed bed column study for water defluoridation using neem oil-phenolic resin treated plant bio-sorbent”. *Journal of Environmental Management* 212: 424-432
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32. V Chakraborty, P Das, P Chaudhuri, S Sengupta (2018) “Assessment on removal efficiency of chromium by the isolated manglicolous fungi from Indian Sundarban mangrove forest: removal and optimization using Response Surface methodology”. *Environment Technology and Innovation* (Article in Press).
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34. P Ghoshal., M C Kim, S SS Cardoso (2018). “Onset of Convection in the Presence of a Precipitation Reaction in a Porous Medium: A Comparison of Linear Stability and Numerical Approaches”. *Fluids* 3(1) (Special Issue on Convective Instability in Porous Media).
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37. P R Choudhury, S Majumdar, G C Sahoo, S Saha, P Mondal (2018). “High pressure ultrafiltration CuO/hydroxyethyl cellulose composite ceramic membrane for separation of Cr (VI) and Pb (II) from contaminated water”. *Chemical Engineering Journal* 336: 570–578.
38. A Das.; C Mondal.; S Roy. “Kinetic Study of Biogas Recovery from Thermo-chemically Pretreated Rice Husk”. *Ind. Chem. Eng.* 2018, 297-313.

5. Collaborative Programs

Research Collaboration with University of Eastern Finland and Helmholtz Centre for Environmental Research (UFZ), Germany on Development of efficient biomass conversion routes for biofuel production and utilization (2018 – 21)

6. Major Achievements:

Indian Patent Granted:

1. Title: A heterogeneous base catalyst and a process for the synthesis of fuel grade biodiesel involving the same

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- Inventor: Rajat Chakraborty; Application no. 1544/KOL/201; Patent No. 288982 (October, 2017)
2. Mondal, S.; Roy, D.; Roy, S.; Mukhopadhyay, K.; Prasad, N.E. Gamma Radiation Composite and its Preparation thereof. DRDO, New Delhi, Ministry of Defence, Govt. Of India, Appl. No: 201711018290, November, 2017 (Filed).
 3. Awarded 8th National Award (Runner up) for Technology Innovation for the nomination “Novel Biodegradable natural filler reinforced hybrid polymer Composites”, under the category of Green/Biodegradable Polymer by Department of Chemicals and Petrochemicals, Govt of India, January, 2019 Awardee: Prof P Das
 4. Received NSSWM Excellent Paper Award-2019 for R. Das, C. Bhattacharjee, Application of Nanotechnology for Pharma Industry Effluent Treatment - A Sustainable Process Development, in National Symposium on Sustainable Waste Management (NSSWM-2019), 20th April 2109, Institute of Engineering and Management, Kolkata. Awardee: Jointly R. Das, C. Bhattacharjee
 5. Received Research Innovation Award (1st Prize), in “National Symposium on Applications of Engineering and Technology towards Sustainable Growth” Organized by TEQIP III Twinning Program, FET, JU and Vivekananda Institute of Environment and Management, 4th June 2019, Jadavpur University, Kolkata. Awardee: Jointly R. Das, C. Bhattacharjee

CIVIL ENGINEERING

Phone : + 91-33-2414-6210
Int. : 2457-2204
H.O.D. : Prof. Arup Guha Niyogi
Dr. Dipankar Chakraborty (w.e.f.11.10.2018)
E-mail : hodcivil@jadavpuruniversity.in

1. A. Courses Offered:

Name of the Course	Duration of Course	No. of Students Enrolled
B.E. in Civil Engg.	4 Years	141
B.E. (Evening) in Civil Engg.	5 Years	47
M.E. in Civil Engg.	2 Years	28

1. B. Number of Faculty Members: 21

2. Area of Research Activities: (Broad Areas)

- Structural Engineering
- Composite Structures
- Acoustics
- Advanced Concrete Technology
- Soil Mechanics and Foundation Engineering
- Geotechnical Earthquake Engineering
- Geo-environmental Engineering
- Ground Improvement

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- Underground Construction
- River Mechanics and Engineering
- Traffic and Transportation Engineering
- Highway Engineering
- Geohazards and Disaster Management
- Remote Sensing, GIS and Geostatistics
- Seepage Flow and Hydraulic Structure
- Environmental Engineering
- Solid Waste Management
- Air Pollution and Control

3. A. Invited Lectures:

Invited Lecture Details

1. Prof. Anupam Debsarkar delivered a lecture in the two-day long Faculty Development Programme organized by Tripura Institute of Technology (TIT), Narsingarh on “Ground water Contamination & Management” on 26-27 July, 2018 on the topic “Groundwater scenario of India” under TEQIP-III.
2. Prof. Anupam Debsarkar delivered a lecture in the two-day long Faculty Development Programme organized by Tripura Institute of Technology (TIT), Narsingarh on “Ground water Contamination & Management” on 26-27 July, 2018 on the topic “Fluoride Contamination in Ground water” under TEQIP-III.
3. Prof. Anupam Debsarkar delivered an invited lecture on “Groundwater Contamination – An Indian Scenario” at Ellite Institute of Engineering & Management, on 27th September, 2018.
4. Prof. Anupam Debsarkar delivered an invited lecture on “Plastic Waste Management – An Indian Scenario” at the State Level Seminar on “Our Legacy of Wild Life & Environment: Today & Tomorrow”, organized by Department of Zoology, Serampore College in collaboration with WWF and at CLRC Auditorium, Serampore College on 13th October, 2018.
5. Prof. Anupam Debsarkar delivered five invited lectures on the topic “Rural Solid & Liquid Waste Management” over the months August-November, 2017 under the purview of “Value Added Training Programme for Nirman Sahayaks of Government of West Bengal” organized by Department of Civil Engineering, Meghnad Saha Institute of Technology over the period of November-December, 2018.
6. Prof. Anupam Debsarkar delivered a lecture in the three-week long UGC-HRDC Sponsored Refresher Course on “Disaster Management: Water and Environmental Sanitation” organized by School of Water Resources Engineering, Jadavpur University, at the Seminar Room of School of Energy Studies, Jadavpur University on the topic “Disaster Management: Water Pollution” on 28th January, 2019.
7. Prof. Anupam Debsarkar delivered an invited lecture on “Integrated Arsenic Remediation from Contaminated Groundwater: Field Trials in Dhapdhapi, South 24 Parganas”, at the National Seminar on “Groundwater Arsenic Contamination Problem in Ganga-Meghna-Bramhaputra (GMB) Plain: It’s Health Effects, Socio-Economic Implications and Mitigation Strategies”, jointly organized by Department of Economics, Vijaygarh Jyotish Ray College and School of Environmental Studies, Jadavpur University, on 25th March, 2019 at Vijaygarh Jyotish Ray College, Kolkata.
8. Prof. Tumpa Hazra delivered a lecture in the QIP sponsored Faculty Development Programme on “Ground Water Contamination and Management” organized by Department of Civil Engineering, Tripura Institute of Technology, Tripura on 26th and 27th July, 2018.

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9. Prof. Tumpa Hazra delivered a lecture in the MOEF& CC sponsored Short course, under the auspices of CPCB, GOI on “air & water pollution” under green skill development programme (GSDP) organized by Centre for Disaster Preparedness & Management” and “Global Change Program” of Jadavpur University on 18th December, 2018 on “Our Hydrosphere: Structure of Hydrosphere, Hydrological Cycle, Composition of Hydrosphere”.
10. Prof. Tumpa Hazra delivered a lecture in the MOEF& CC sponsored Short course, under the auspices of CPCB, GOI on “air & water pollution” under green skill development programme (GSDP) organized by Centre for Disaster Preparedness & Management” and “Global Change Program” of Jadavpur University on 4th January, 2019 on “Monitoring Techniques & Analysis of Water Pollutants: Industrial & Municipal Waste Water Pollutants & Life Time of Pollutants”.
11. Prof. Tumpa Hazra delivered a lecture in the QIP sponsored Faculty Development Programme on “Ground Water Contamination and Management” organized by Department of Civil Engineering, Tripura Institute of Technology, Tripura on 26th and 27th July, 2018.
12. **Prof. S. P. Mukherjee** delivered a lecture on “liquefaction of soil—an effect of earthquake” at Heritage Institute of Technology on 22.04.2018.
13. **Prof. S. P. Mukherjee** delivered a lecture on “Behaviour of single pile under combined uplift and lateral loading” at IIT Bombay on May 17, 2018.

3. B. Refresher Courses/ Orientation Courses/ Short Term Courses/ Workshop Attended:

Details of the Course

1. **Prof. Anupam Debsarkar** participated in the workshop entitled “Community Dialogue on Kolkata’s Air Pollution” organized by Institute of Future Studies, University of Strathclyde, UK and Environment Governed Integrated Organization (EnGIO), Kolkata on 8th February, 2019 at Lions’ Club Auditorium, Deshapriya Park, Kolkata.
2. **Prof. Anupam Debsarkar** participated in the Panel Discussion on “A step towards a consensus on fighting Air Pollution: A Pulmonologist’s perspective”, as an expert at ACPCON-2019, held on 16th February, 2019 at Raas Mancha, Swabhumi, Salt Lake.

3. C. Refresher Courses/ Orientation Courses/ Short Term Courses/ Workshop Organized:

Details of the Course Coordinators

1. **Prof. Anupam Debsarkar** and **Prof. Gupinath Bhandari**, Jointly conducted a short term course on “Air & Water Pollution” under Green Skill Development Programme, MoEF & CC, Govt. of India from 20th Nov, 2018 to 14th Jan, 2019 at Seminar Room-II, Department of Civil Engineering, Jadavpur University. Prof. Gupinath Bhandari & Prof. Anupam Debsarkar
2. **Prof. S. P. Mukherjee** acted as a Committee Member in a one day International workshop on “Health Monitoring and Rehabilitation of Structures” held on 7th December, 2018 organised by centre for Disaster Management, Jadavpur University

4. A. Books/ Monographs/ Book Chapters etc. Published: (Title of Books/ Monographs/ Book Chapters etc.–Authors–Book Title–Year and Publisher)

1. Sustainable Management of Arsenic-Bearing Sludge –Mookherjee, I., Roy, A., Dutta, A., Debsarkar, A., and Aitch, P –Waste Management and Resource Efficiency, –2019&Springer Publication
2. Selection of Suitable Landfill Site for Municipal Solid Waste Disposal: A Fuzzy Logic Approach –S. Alam, K. A. Kolekar, T. Hazra, S.N. Chakrabarty –Waste Management and Resource Efficiency –2018&Springer Publication
3. Fuzzy logic modelling to predict residential solid waste generation: A case study of Baranagar –K. A. Kolekar, T. Hazra, S.N. Chakrabarty –Waste Management and Resource Efficiency –2018&Springer Publication

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4. Uncertainties in Site Characterization Using Surface Wave Techniques and Their Effects on Seismic Ground Response –Jakka RS and Roy N –Geotechnics for Natural and Engineered Sustainable Technologies – 2018&Springer Publication
 5. Leachate and Septage Management of Model Regional Waste Management Centre of Six Waste Bank Municipalities of River Hooghly –Dutta, A., Roy, A., and Mookherjee, I. –Waste Management and Resource Efficiency –2019
- 4. B. Articles Published in Journals (Including National, International & Peer-reviewed Journals):**
(Title –Journal Name –Authors –Year, Volume (No.), Pages)
1. Rainwater Harvesting (RWH)-A path not profusely explored to solve the crisis of water scarcity – IndianGround Water –Satabdi Biswas, Anupam Debsarkar and Gupinath Bhandari –Vol-XI, July, 2018, pp-24-47
 2. Hexavalent Chromium Tolerance of Bacterial Strains Isolated from Tannery Effluent Contaminated Soil – International Journal of Innovative Research & Studies –Piku Sen, Anupam Debsarkar and Debasish Pal Vol-8, 2018 Issue IV
 3. Impact of water demand on hydrological regime under climate and LULC change scenarios –Environmental Earth Sciences, Springer-Verlag GmbH Germany, Part of Springer Nature –Satiprasad Sahoo, Anirban Dhar, Anupam Debsarkar and Amlanjyoti Kar –Vol-77, 2018, page-341-359
 4. Future Scenarios of Land-Use Suitability Modeling for Agricultural Sustainability in a River Basin –Journal of Cleaner Production, Elsevier Publication –Satiprasad Sahoo, Indrani Sil, Anirban Dhar, Anupam Debsarkar, Pulakesh Das and Amlanjyoti Kar –Vol-205, Page- 313-328, September- 2018
 5. Concrete stabilization of arsenic-bearing iron sludge generated from an electrochemical arsenic remediation plant –Journal of Environmental Management, Elsevier Publication –Abhisek Roy, C. M. van Genuchten, Indranil Mookherjee, Anupam Debsarkar and Amit Dutta –Vol- 233, page-141–150, 2019
 6. Technology alternatives for decontamination of arsenic-rich groundwater—A critical review –Environmental Technology & Innovation, Elsevier Publication, –Sudipta Ghosh (Nath), Anupam Debsarkar and Amit Dutta –Vol- 13, page-277–303, January, 2019
 7. Future Scenarios of Environmental Vulnerability Mapping Using Grey Analytic Hierarchy Process – Natural Resources Research, Springer Publication –Satiprasad Sahoo, Anirban Dhar, Anupam Debsarkar and Amlanjyoti Kar –pp-1-23 January, 2019
 8. Lead Removal from Landfill Leachate by Electrocoagulation process using Iron Electrodes: Influence of pH and Direct Current, –Research Journal of Chemistry and Environment –Maiti, S., Hazra, T., Debsarkar, A, –2019, 23(6), 62-69
 9. Sustainable treatment of municipal landfill leachate by combined association of air stripping, Fenton oxidation and enhanced coagulation –Environmental Monitoring and Assessment –De, S., Hazra, T., Dutta, A. – 2019, 191:49
 10. First ply failure performances of composite clamped spherical shells. –Mechanics of Composite Materials –A.Ghosh, D.Chakravorty –May, 2018, 54(2), 191 - 206
 11. Nonlinear first ply failure analysis of composite skewed hypar shells using FEM –Structural Engineering and Mechanics – An International Journal –A.Ghosh, D.Chakravorty –68(1), 2018, 81–94
 12. First Ply Failure Analysis of Laminated Composite Thin Hypar Shells Using Nonlinear Finite Element Approach –Thin-Walled Structures –A.Ghosh, D.Chakravorty –131 (2018) 736–745
 13. Performances of Composite Hypar Shells in Progressive Failure Applying FEM –Strength of Materials –A.Ghosh, D.Chakravorty –2 (2019) in press
 14. First Ply Failure Study of Laminated Composite Conoidal Shells using Geometrically Nonlinear Formulation –Recent Advances in Theoretical, Applied, Computational and Experimental Mechanics: Proceedings of

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ICTACEM 2017 - Springer –K.Bakshi, D.Chakravorty –2019, in press

15. Application of FEM on first ply failure of composite hypar shells with various edge conditions –Steel and Composite Structures , An International Journal –A.Ghosh, D.Chakravorty –In press
 - 16..Influence of metal oxide (V_2O_5) in recycled waste materials for advanced durable construction technology Construction and Building Materials –Manas Sarkar, Moumita Maiti, Muhammad Akbar Malik, Shilang Xua, Qinghua Li, Saroj Mandal –2018, 171, 770-778
 17. Local Site Effect Due to Past Earthquakes in Kolkata –Journal of the Geological Society of India –Amit Shiuly R. B. Sahu, Saroj Mandal, Narayan Roy –2018, 91(4), 400-410
 18. Iron Oxide NPs Facilitated a Smart Building Composite for Heavy-Metal Removal and Dye Degradation –Journal ACS Omega –Manas Sarkar, Moumita Maiti, Muhammad Akbar Malik, Shilang Xua, Qinghua Li Saroj Mandal –Volume 3 Issue 1 Pages1081-1089
 19. An Alkaliphilic Bacterium BKH4 of Bakreshwar Hot Spring Pertinent to Bio-Concrete Technology – Journal of Applied Microbiology –A. Sarkar, A. Chatterjee, S. Mandal, B. Chattopadhyay –Wiley Feb 2019
 20. Response of square plates embedded in reinforced soft clay subjected due to cyclic loading –Geomechanics and Engineering, Techno Press –J. Biradar, S. Banerjee, R. Shankar, P. Ghosh, S. Mukherjee and B. Fatahi –2019
 21. A study on the effect of measured shear wave velocity from V_s -N correlation on seismic site response analysis. –Journal of Earth System and Science –Roy N, Shiuly A, Sahu RB, Jakka RS –2018 127:103
 22. Earthquake Magnitude Conversion Problem –Bulletin of Seismological Society of America –Das R, Wason HR, Gonzalez G, Sharma ML, Choudhury D, Roy N, Salazar P –2018 108:4
 23. Treatment of landfill leachate by integrated sequence of air stripping, coagulation-flocculation and adsorption... –Environ Dev Sustain –De, S., Hazra, T., Dutta, A. –2019 21(2), 657-677
 24. A Comprehensive Optimisation Model for Integrated Solid Waste Management System — a Case Study on Kolkata city, India.–Environmental Engineering Research. –Paul, K., Chattopadhyay, S., Dutta, A., Krishna, A.P., Ray, S. –(2017) Vol 24(2): pp. 220-237.
 25. Gas Management and Energy Recovery from Municipal Solid Waste Landfill. –International Journal of Research in Advent Technology –Chattopadhyay, S., Dutta, A., Ray, S., Roy, A., and Prof, A. –2018 6(5).
- 4. C. Publications in Seminars/ Conferences: (Title –Seminar/ Conference Details –Authors –Place, Year)**
1. Integrated Arsenic Remediation from Contaminated Groundwater: Field Trials in Dhapdhapi, South 24 Parganas –National workshop on ‘Arsenic Contamination And Sustainable Technological Solutions In India (ACASTSI-2019)’, organized by NSHM, Faculty of Business and Management Studies, in collaboration with “Save the Environment (STE)”, during –Sudipta Ghosh (Nath), Abhisek Roy, Anupam Debsarkar & Amit Dutta –NSHM Knowledge Campus, Durgapur, 26 -27 February, 2019,
 2. Electrochemical Arsenic Remediation-An Alternative to get Arsenic Safe Water –National Seminar on “Groundwater Arsenic Contamination Problem in Ganga-Meghna-Brahmaputra (GMB) Plain: It’s Health Effects, Socio-Economic Implications and Mitigation Strategies”, jointly organized by Department of Economics, Vijaygarh Jyotish Ray College and School of Environmental Studies, Jadavpur University –Sudipta Ghosh (Nath), Anupam Debsarkar & Amit Dutta –25th March, 2019 at Vijaygarh Jyotish Ray College, Kolkata.
 3. Stabilization of Arsenic Remediation Plant Generated Arsenic Sludge in Building Materials–National Seminar on “Groundwater Arsenic Contamination Problem in Ganga-Meghna-Brahmaputra (GMB) Plain: It’s Health Effects, Socio-Economic Implications and Mitigation Strategies”, jointly organized by Department of Economics, Vijaygarh Jyotish Ray College and School of Environmental Studies,

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Jadavpur University – Abhisek Roy, Anupam Debsarkar & Amit Dutta –25th March, 2019 at Vijaygarh Jyotish Ray College, Kolkata.

4. Socio-economic Appraisal of Arsenic Pollution and Rain Water Harvesting (RWH): A case study of Amdanga Block, North 24 Parganas, West Bengal, India –National Seminar on “Groundwater Arsenic Contamination Problem in Ganga-Meghna-Brahmaputra (GMB) Plain: It’s Health Effects, Socio-Economic Implications and Mitigation Strategies”, jointly organized by Department of Economics, Vijaygarh Jyotish Ray College and School of Environmental Studies, Jadavpur University –Satabdi Biswas, Anupam Debsarkar and Gupinath Bhandari –25th March, 2019 at Vijaygarh Jyotish Ray College, Kolkata.
5. Nonlinear First Ply Failure of Composite Hypars – A Finite Element Application –Structural Engineering Convention (SEC-2018) (11th International Conference) –Arghya Ghosh, Dipankar Chakravorty –Jadavpur University, Kolkata, December 19-21, 2018.
6. Random Wind Induced Base Shear and Moments of Self Supported Concrete Chimneys –Structural Engineering Convention (SEC-2018) (11th International Conference) –Susmita Choudhury, Soumyadip Datta, Dipanjan Mani, Dipankar Chakravorty –Jadavpur University, Kolkata, December 19-21, 2018.
7. Application of Nonlinear Finite Elements to Study Failure of Composite Conoidal Shell Roofs –Structural Engineering Convention (SEC-2018) (11th International Conference) –Kaustav Bakshi, Dipankar Chakravorty –Jadavpur University, Kolkata, December 19-21, 2018.
8. Response of single pile to lateral load with constant uplift –ICAMAG 2019 –P. Ghosh, S. P. Mukherjee, N. Roy, S. Banerjee –IIT Gandhinagar, 2019
9. Effect of Ground water level and seismic intensity on failure of a slope –ICAMAG 2019 –S. Dutta, R. K. Dubey, S. P. Mukherjee and N. Roy –IIT Gandhinagar, 2019
10. Study on stability of a slope under non seismic and seismic conditions –IGS Kolkata Chapter –S. Dutta, S. P. Mukherjee and N. Roy –Jadavpur University, 2018
11. Effectiveness of clay core in an embankment under seismic condition –ICAMAG 2019 –S. Tung, S. P. Mukherjee and G. Bhandari –IIT Gandhinagar, 2019
12. Influence of source characteristics on the uncertainties in MASW survey –7th International Conference on Earthquake Geotechnical Engineering –Desai, Aniket Sanjay; Roy, Narayan, Jakka, Ravi Sankar; Narayan, J. P.; Kranthi Kumar, Alla –VII ICEGE, Roma (Italy), 17-20 June, 2019
13. Interior acoustic analysis of arbitrary shaped rigid cavity with absorbent layer –Structural Engg Convention (Sec-2018), Jadavpur University –Dibyayati Sahana, Subhankar Pramanik, Sreyashi Das, Arup Guha Niyogi –Jadavpur University, 2018
14. Free vibration and buckling of sandwich plate with cut-out –Structural Engg Convention (Sec-2018), Jadavpur University –Subhankar Pramanik, Sreyashi Das –Jadavpur University, 2018
15. Interior acoustic analysis of arbitrary shaped rigid cavity with absorbent layer –Structural Engg Convention (Sec-2018), Jadavpur University –Dibyayati Sahana, Subhankar Pramanik, Sreyashi Das, Arup Guha Niyogi –Jadavpur University, 2018
16. Groundwater arsenic scenario of rural Murshidabad (West Bengal) from Epidemiological and Socio-economic Perspective: A Critical Review –International Seminar on “Rural Development in India: Contemporary Reflection” at The Centre for Studies in Decentralization and Rural Reconstruction (CSDRR) –Ghosh (Nath) S., Debsarkar A., Dutta A. –Rabindra Bharati University, 26th-27th April, 2018.
17. Electrochemical Arsenic Remediation- An alternative to get Arsenic Safe Water –One Day National Seminar on “Groundwater Arsenic Contamination Problem In Ganga- Meghna-Brahmaputra (GMB) Plain: Its Health Effects, Socio-Economic Implications & Mitigations Strategies” –Ghosh (Nath) S., Roy A., Debsarkar A., Dutta A. –Department of Economics, Vijoygarh Jyotish Ray College on 25th March, 2019

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5. Ph.D. Thesis Completed:(Title –Year –Candidate –Status)

1. Utilization of slaughterhouse wastes as soil conditioner for plantation of vegetable crops: A feasible option for waste minimization–2019–Malancha Roy–Submitted and defended.
2. Assessment of Municipal Landfill Leachate Pollution Potential on Adjoining water Resources and its remediation with Special Reference to Mercury–2018–S. De–Awarded.
3. Improvement of geotechnical properties of clayey soil by mixing plastic wastes–2019–P.V.Raghu–Provisional Certificate issued.
4. “Study of Seepage through Earthen Dam and Foundation by Numerical and Centrifuge Modeling” –2019 –Smita Tung–Viva Voce over.

6. Collaborative Programmes:

Details

1. **Prof. S. P. Mukherjee** is doing a collaborative project on “Dynamic behaviour of anchor plates in soft clay with geosynthetic reinforcement”, A SERB sanctioned Project for Rs. 33,91, 800/- sanctioned in May, 2015 is still continuing.

COMPUTER SCIENCE & ENGINEERING

Phone : +91-33-2413-1766

Int. : 2457-2574

H.O.D : Professor Ujjwal Maulik

Dr. Mahantapas Kundu (w.e.f.11.10.2018)

E-mail : hodcse@jadavpuruniversity.in

1. A. Courses Offered :

Name of the Course	Duration of the Course	No. of Students
BCSE	4 years	86
MCA	3 years	48
MCSE	2 years	38
MTCT	3 years	39

1. B. Number of Faculty Members:

Professor – 18

Associate Professor - 3

Assistant Professor - 6

2. A. Area of Research Activities (Broad Areas):

Machine Learning, Artificial Intelligence, Pattern Recognition, Computational Intelligence, Bioinformatics, Video and Image Processing, Face Recognition, Medical Image Analysis, Parallel Algorithms, Cloud Computing, Internet of Things, Soft computing, Data Mining, Wireless and Mobile Computing, Wireless Sensor Networks, Quantum Computing, Natural Language and Speech Processing, Emotion and Sentiment Analysis, Security, Distributed Computing, Social Network Analysis, Big Data Storage and Management.

2.B.Sponsored Projects Carried Out/ongoing (2018-19): (Project Title–Role–Funding Agency–Amount–Duration–Period)

Ujjwal Maulik

Erasmus Mundus Mobility with Asia (EMMA+) (European-Asian mobility program)–Indian Joint Coordinator (EMMA+) (European-Asian mobility program)– 3 Years–2017-2019

A big data perspective for energy management in smart grids and dwellings–Principal Investigator– DST-INRIA-CNRS targeted Indo-French Joint project, Funding agency Department of Science and Technology, Govt. Of India– 3 Years –2015-2018

PURSE - II, Department of Computer Science and Engineering, Jadavpur University–Principal Investigator –Department of Science and Technology, Govt. Of India -2 years–2016-2018

Subhadip Basu

Hand Gesture Recognition in Video for Speech and Hearing Disabled–Principal Investigator–RUSA-2, MHRD, Govt. of India–Rs.5,70,000/-1 Year–2019-20

Development of some analytical tools for analysis of large-scale protein-protein interaction networks–Principal Investigator–DBT, Govt. of India–Rs.48,22,125/-3 Years–2017-20

Multispectral Image Analysis for Various Security and Medical Applications–Co- Investigator–PURSE-II, DST, Govt. of India–Rs.37,00,000–3 Years–2015-19

Design of a Multimodal Biometric System for Various Security and Forensic applications (Phase-II)–Principal Investigator–UPE-II, UGC, Govt. of India–Rs.13,70,000–4 Years–2015-19

Development of a new morphological operator for multi-scale opening of conjoined objects–Principal Investigator (Research Award)–UGC, Govt. of India–Rs.3,00,000/- (excluding salary component)–2 Years –2016-18

Ram Sarkar

Multi-lingual Text Analytics for Camera-based Handheld Devices–Investigator–DST, SERB, Govt. of India–Rs.25,96,440/-3 years–2017-20

Sarbani Roy, Dr. Chandreyee Chowdhury, Dr. Nandini Mukherjee, Dr. Sarmistha Neogy

Environmental Monitoring: Testbed of Mixed Wireless Sensor Networks–One of the investigators–Department of Science and Technology, Promotion of University Research and Scientific Excellence (DST, PURSE Phase-II), Govt. of India–4 Years–2015-19

Nandini Mukherjee

Remote Health: A Framework for Health-care Services using Mobile and Sensor-cloud Technologies–Lead PI of a team of six collaborating institutions and PI of Jadavpur University–Information Technology Research Academy, Media Lab Asia, Ministry of Electronics and Information Technology, (MeitY), Govt. of India -5 Years–2013 – 2018

Sarbani Roy

Participatory and Real Time Pollution Monitoring system for Smart City–Principal Investigator–Higher Education, Science & Technology and Biotechnology, Department of Science & Technology, Government of West Bengal–Rs. 13,20,800–3 Years–2018-2021

Performance based Resource Management and Load balancing in Cloud Environment–Principal Investigator UGC UPE (II)–3 years–2015-2019

Sarmistha Neogy

Development of High speed MANET for intelligent collaboration –Individual–DRDO–Rs.64.3565/-2 Years–

Susmita Ghosh

Fuzzy Set Theoretic Approach for Moving Object Detection and Tracking - DST-PURSE II Project –Principal Investigator–Department of Science and Technology, Promotion of University Research and Scientific Excellence (DST, PURSE Phase-II), Govt. of India–4 Years–2015-2019

Debotosh Bhattacharjee

Development of object detection techniques from degraded complex video sequences due to dynamic variations of scenes by different atmospheric conditions for security and surveillance–Individual (PI)–DRDO, Govt. of India.

Multispectral Image Analysis for Various Security and Medical Applications–Individual(Co-PI)–PURSE-II, Govt. of India

Design of a Multimodal Biometric System for Various Security and Forensic applications Individual(Co-PI)–UPE-II, Phase-II, Govt. of India

Prediction of diseases through computer assisted diagnosis system using images captured by minimally-invasive and non-invasive modalities–Individual(Co-PI)–SPARC, MHRD, Govt. of India

Development of a computer-assisted diagnosis system for segmenting and detecting abnormalities and disease diagnosis–Individual (PI)–International Bilateral Cooperation Division, DST Govt. of India-

Nibaran Das

Development of knowledge graph from images using Deep learning–Principal Investigator–Extra Mural Research Project,(PI), SERB, Govt. of India–Rs. 33,00,000–3 Years–2016-2019

Automatic Generation of Cytological Images to Augment Data for Diagnosis of Ductal Carcinoma Using Deep Learning–Principal Investigator–SERB, Govt. of India–Rs. 26,93,500–3 years–2019-2022

Kamal Sarkar

Indian Social Media Sensor: an Indian Social Media Text Mining System for Topic Detection, Topic Sentiment Analysis and Opinion Summarization–Principal Investigator–DST-SERB–Rs. 23,96,000/-3 Years

Diganta Saha

Cache Memory Management in Mobile Environment–Principal Investigator–UGC(Under UPE II)–Rs. 10.87 Lakhs–4 Years–2015-2019

Chandreyee Chowdhury

Participatory and Real Time Pollution Monitoring system for Smart City–Co-PI–Higher Education, Science & Technology and Biotechnology, Department of Science & Technology, Government of West Bengal –Rs. 13,20,800–3 Years–2018 – 2021

Designing a Framework for Efficient Computation Offloading–Principal Investigator–UGC-UPEII scheme, Jadavpur University–Rs. 12.8 lakh (approx.)–3.5 years (approx) –2015-19

Chitrita Chaudhuri

“Application of Case Based Reasoning in Signature Authentication to Prevent Fraudulent Transaction” under Mobile Computing and Innovative Application–Principal Investigator–UGC UPE Phase II project --Years - 2019

3. A. Invited Lectures Delivered by Faculty Members:

Subhadip Basu

International:

1. “Bioimage Informatics @JU – Methods & Applications”, Hannover Medical School, Germany, May 15, 2018

National :

Invited talk in the TEQIP sponsored one day seminar “ Biomedical Engineering in Human Welfare” on 3rd August, 2018, arranged by the School of Bioscience and Engineering, Jadavpur University.

Nandini Mukherjee

1. Invited lecture in a workshop on “Uncertainty Management in Health Informatics” held between 31st July and 5th August 2018 at IEST, Shibpur. Delivered lecture on 2nd July 2018.
2. Delivered a lecture in a seminar on “Internet of Things (IOT) -Technologies and Applications” organised by The Institution of Engineers (India) West Bengal State Centre, Electronics & Telecommunication Engineering Division held on 21st June 2018.

Sarbani Roy

1. Invited two lectures in TEQIP-III sponsored two days Short Term Training Programme (STTP) on “IoT: Related Technologies and Applications” at RTU, Kota, Rajasthan, 17-18 Sept, 2018.
2. An invited keynote talk on IoT and its Applications in 5th International Conference on Mathematics and Computing (ICMC 2019), at KIIT, Bhubaneswar, Odisha, 8th February 2019.

Sarmistha Neogy

1. Invited talk on “Protecting Privacy Case Study: Healthcare” in Faculty Development Program on “Cryptography and Cyber Security”, B. P. Poddar Institute of Management and Technology, March 25-29, 2019.
2. Invited plenary lecture on “Cyber Security and Misuse of social Media” organized by IQAC & Dept. of Computer Science, Gobardanga Hindu College, October 05, 2018.
3. Invited lecture on “Network Security” in seminar on Network Security, Siliguri Institute of Technology, August 13, 2018
4. Invited lecture on “Network and Internet Security” at ACM India supported Summer School on Information Security and Forensics (for Women), during June 21-22, 2018, Bangalore

Sudip Kumar Naskar

1. Invited talk on “Cross-Lingual Information Retrieval on Digital Libraries” in 7 days International Training Programme on Library Automation for Professional Enrichment (ITPLAPE), 10-16 December, 2018, at Satyajit Ray Film & Television Institute (SRFTI), E.M. Bypass, Panchasayar, Kolkata, West Bengal 700094, India
2. Invited talk on “Natural Language Processing: Challenges and Prospects” in the National Students Computing Conference held during 21-22 April, 2018, at Veer Surendra Sai University of Technology (VSSUT), Burla, Sambalpur, Odisha, India.

Ujjwal Maulik

1. Invited keynote talk on “Data Mining in Multi-objective Framework”, 27th International Electrotechnical and Computer Science Conference, (ERK 2018), Portoroz, Slovenia, September 18, 2018.
2. Invited keynote talk on “Computational Intelligence for Data Science: simple to Big Data”, Int. Conf. on Computational Intelligence (ICCI2018), Dec. 10-11, 2018, BIT Measra, Ranchi, India.
3. Invited keynote talk on “Data Science and Machine Learning: Recent Issues and Challenges”, 2nd Int. conf. on Computational and Communication Paradigm, Feb. 25-28, 2019, Sikkim, India

Susmita Ghosh

1. Guest lecture at Vellore Institute of Technology, Vellore, February 21, 2019.
2. Delivered a lecture at the National Level Workshop entitled “Remote Sensing and Signal Processing” on “Semi supervised Neural Networks for Change Detection of Remotely Sensed Images,” Guwahati University, December 27, 2018.
3. Special classes on “Soft Computing” at Tripura Institute of Technology under Twining Plan of TEQIP III, October 11-12 and November 17-19, 2019.
4. Series of lectures on a workshop on “Neural Networks and Learning Systems” School of Information Technology, King Mongkut’s University of Technology, Thonburi, Thailand, September 24-28, 2018.
5. Delivered a lecture at an Induction Program entitled “Machine Learning and Soft Computing” on “Evolutionary Computation and its Applications,” Seemanta Engineering College, Odisha, July 09, 2018.
6. Delivered a series of lectures on “Neural Networks and Learning Machines” at IDRBT, Hyderabad, June 04-06, 2018.
7. Delivered a lecture at an FDP entitled “Machine Learning” on “Evolutionary Computation” at GITAM University, Hyderabad, June 03, 2018.
8. Session Chair: CoDS-COMAD - Jan 03, 2019.

Nibaran Das

1. Acted as an invited speaker for the workshop on Pattern Analysis and Machine Intelligence (PAMI): Document understanding to healthcare in the conference RTIP2R-2018, organized by Solapur University, Solapur, Maharashtra on December 20, 2018.
2. Acted as an invited speaker on the tutorial session in the Second International Conference on Advanced Computational and Communication Paradigms (ICACCP-2019) during February 25-28 2019 organized by SMIT, Sikkim.

Kamal Sarkar

1. Session Chair, Second International Conference on Advanced Computational and Communication Paradigms, Sikkim Manipal Institute of Technology, Sikkim, India, February 25 - 28 , 2019

Debotosh Bhattacharjee

1. Presented a paper entitled, “A Transfer-learning Based Deep Learning Framework for Automated Classification of Pap Smear Cervical Images,” at ICMMI 2019 held in Tokyo, Japan from 22-24 March 2019
2. Keynote on “Medical Image Analysis for Computer-Assisted Diagnosis System” at International Conference on Emerging Technologies for Sustainable Development (ICETSD '19) on March 5-6, 2019 at GCELT, Kolkata, West Bengal, India

Chintan Kr Mandal

1. 1 day seminar on Latex by Department MCA of Techno International New Town, in association with IEEE Young professionals affinity group, Kolkata section, 24th Nov, 2018
2. Seminar on Technical Writing - A TEQIP-III sponsored One Week Faculty Development Programme On Multimedia Processing and Technical Writing (MPTW-2018) 10th -14th September 2018, Organized by Department of Computer Science & Engineering, Loknayak Jai Prakash Institute Of Technology Chapra.
3. “Technical paper writing using LaTeX” in workshop held at Gurukul campus of Institute of Engineering and Management, Saltlake, Kolkata, India, 2nd and 5th June, 2018
4. 5-days workshop on “LATEX and its Application” from 11-15 March 2019, MMMUT Gorakhpur

Chandreyee Chowdhury

1. Delivered two lectures (“Communications in IoT:WiFi” and “Communications in IoT:Bluetooth”) in TEQIP-III sponsored two-day Short Term Training Programme (STTP) on “IoT: Related Technologies and Applications” at RTU, Kota, Rajasthan, 17-18 Sept.,2018.

Anasua Sarkar

1. Deep Computations in Health, Medicinohhålsa, NMT days 2019, 19 March, BMC, Lund University.
2. Mapping of Sequences and Variants, Workshop on Variation Interpretation at Experimental Medical Science Department, Lund University, 2 Jan, 2019.

3. B. Seminar/Workshop/Conference/Symposium Attended

Susmita Ghosh

1. Attended “MIU Annual Workshop on Machine Intelligence and Applications 2019”, Kolkata, March 29, 2019.

Nibaran Das

1. International Conference on Recent Trends in Image Processing & Pattern Recognition RTIP2R-2018, organized by Solapur University, Solapur, Maharashtra on December 20, 2018.
2. Second International Conference on Advanced Computational and Communication Paradigms (ICACCP-2019) during February 25-28 2019 organized by SMIT, Sikkim.

Nandini Mukherjee

1. 47th International Conference on Parallel Processing (ICPP 2018) held at University of Oregon, Eugene, Oregon, USA from 13th August to 16th August 2018.
2. 2018 IEEE SENSORS held in New Delhi between 28th October to 31st October 2018.
3. 20th International Conference on Distributed Computing and Networking (ICDCN 2019) held at IISc, Bangalore from 4th January to 7th January 2019.

Debotosh Bhattacharjee

1. Debotosh Bhattacharjee, Seminar on “Breast Cancer Detection using Thermal Imaging” at Northumbria University, United Kingdom on 30th November 2018

Anasua Sarkar

1. AIML@LU WS: AI & ML Technologies, Lund University, 2019-08-30.
2. LINXS 1st symposium on Integrative Structural Biology, November 19-21, Lund University

3. C. Seminar/Workshop/Conference/Symposium Organized

Ujjwal Maulik

1. Tutorial Chair, 5th Asian Conference on Pattern Recognition (ACPR 2019), Auckland, New Zealand, 26-29 November 2019.
2. Program Chair, “Computational Intelligence for Data Science: Simple to Big Data”, Int. Conf. on Computational Intelligence (ICCI2018), Dec. 10-11, 2018, BIT Measra, Ranchi, India.
3. Program Chair, “Data Science and Machine Learning: Recent Issues and Challenges”, 2nd Int. conf. on Computational and Communication Paradigm, Feb. 25-28, 2019, Sikkim, India.

Nandini Mukherjee

1. Organised 2nd International Workshop on Networking Women In Distributed Computing And Networks

Kamal Sarkar

1. Second International Conference on Advanced Computational and Communication Paradigms, Sikkim Manipal Institute of Technology, Sikkim, India, February 25 - 28 , 2019

Chintan Kr Mandal

1. Workshop on Machine Learning and Data Analytics – March 26 – 28, 2019

Anasua Sarkar

1. A 3-day Workshop on “Machine Learning and Data Analytics”, Department of Computer Science and Engineering, Jadavpur University, 26th - 28th March, 2019, Advisory Committee member.
2. Reviewer for the 2019 IEEE Congress on Evolutionary Computation (IEEE CEC 2019) which will take place in Wellington, New Zealand, June 10-13, 2019.
3. Program committee of ISSIP 2018: 2018 Second International Symposium on Signal and Image Processing, Kolkata.
4. Workshop Organizer in Mapping of Sequences and Variants, Workshop on Variation Interpretation at Experimental Medical Science Department, Lund University, 2 Jan, 2019.

3. D. Orientation Courses/Refresher Courses Attended

Chintan Kr Mandal

1. Orientation (UGC HRDC, Calcutta University)

Anasua Sarkar

1. Perspective on Learning pedagogical course, Faculty of Medicine Centre for Teaching and Learning, Lund University, May, 2019, Two weeks of full time studies

4. A. Books/Monographs etc. Published:

1. Nandini Mukherjee, Sarmistha Neogy and Samiran Chattopadhyay, *Big Data in ehealthcare: Challenges and Perspectives*, CRC Press, January 2019

4. B. Book Chapters:

1. A. Datta, S. Ghosh and A. Ghosh, “Hyperspectral Remote Sensing Images and Supervised Feature Extraction,” in *Cloud Computing for Geospatial Big Data Analytics*, (Eds.H. Das, R. K. Barik, H. Dubey, D. S. Roy), pp. 265-289, 2019, Springer
2. M. Ghosh, S. Malakar, S. Bhowmik, R. Sarkar, M. Nasipuri, “Feature Selection for Handwritten Word Recognition Using Memetic Algorithm,” in *Advances in Intelligent Computing*, Springer, pp. 103–124, 2019.
3. Arijit Das, Diganta Saha (2018), “Improvement of Electronic Governance and Mobile Governance in Multilingual Countries with Digital Etymology Using Sanskrit Grammar”, ©Springer Nature Singapore (P) Ltd. 2018 (Editors: JK Mandal and D Sinha) *Communications in Computer and Information Science* Volume No. :CCIS 836, pp. 523–530, 2018.https://doi.org/10.1007/978-981-13-1343-1_44.
4. H Roy, **D Bhattacharjee**, “Heterogeneous Face Matching Using Robust Binary Pattern of Local Quotient: RBPLQ,” *Advanced Computing and Systems for Security*, pp. 159-173, *Advanced Computing and Systems for Security: Volume Four*, Springer, 2019.
5. K Dutta, **D Bhattacharjee**, **M Nasipuri**, A Poddar, “3D Face Recognition Based on Volumetric Representation of Range Image,” *Advanced Computing and Systems for Security*, pp. 175-189, *Advanced Computing and Systems for Security: Volume Four*, Springer, 2019
6. S Pramanik, D Banik, **D Bhattacharjee**, **M Nasipuri**, “A Computer-Aided Hybrid Framework for Early Diagnosis of Breast Cancer,” *Advanced Computing and Systems for Security*, pp. 111-124, *Advanced Computing and Systems for Security: Volume Four*, Springer, 2019
7. Ayan Seal, **Debotosh Bhattacharjee**, **Mita Nasipuri**, Dipak Kumar Basu, “Thermal Human Face Recognition for Biometric Security System”, *Computer Vision: Concepts, Methodologies, Tools, and Applications*, 1838-1863, 2018.

8. Asish Bera, **Debotosh Bhattacharjee**, **Mita Nasipuri**, “Hand Biometric Verification with Hand Image-Based CAPTCHA”, *Advanced Computing and Systems for Security*, 3-18, 2018.
9. Hiranmoy Roy, **Debotosh Bhattacharjee**, “Heterogeneous Face Matching Using ZigZag Pattern of Local Extremum Logarithm Difference: ZZPLELD”, *Advanced Computing and Systems for Security*, 121-135, 2018.
10. Kaushik Roy, Chayan Halder, **Anasua Sarkar***, Jaya Paul, Offline Writer Verification Based on Bangla Handwritten character using enhanced textual feature, *Hybrid Intelligent Techniques for Pattern Analysis and Understanding*, Chapman and Hall/CRC Press, New York (ISBN: 978-1-4987-69358), pages 22, 2018, Chapter 1, eBook ISBN: 9781498769372.
11. **Anasua Sarkar***, Subhasish Das, Rajib Das, Kalyan Mahata, “Watershed Image Analysis using PSO-CA hybrid approach, Hybrid Intelligent Techniques” for *Pattern Analysis and Understanding*, Chapman and Hall/CRC Press, New York (ISBN: 978-1-4987-69358), 2018, Chapter 10, pages 18, eBook ISBN: 9781498769372.
12. Anamika Basu*, **Anasua Sarkar**, Piyali Basak, “Nutraceuticals for Human health and hypersensitivity reaction, Nutraceuticals and Innovative Food Products for, *Healthy Living and Preventive Care*, Publisher: IGI-Global, Editor: Amit Verma, Chapter 15, 2018, pp.323-341, DOI: 10.4018/978-1-5225-2970-5.ch015, ISBN13: 9781522529705, ISBN10: 1522529705, EISBN13: 9781522529712.
13. Kalyan Mahata, Rajib Das, Shubhashish Das and **Anasua Sarkar***, “Land-cover Change Detection using Pso-evaluated Quantum Ca Approach on Multi-Temporal Remote Sensing Watershed Images, Quantum-Inspired Intelligent Systems” for *Multimedia Data Analysis*, Publisher: IGI-Global, Research Essentials Collection, 2018, Chapter 6, pp.178-212, DOI: 10.4018/978-1-5225-5219-2.ch006, ISBN13: 9781522552192, ISBN10: 1522552197, EISBN13: 9781522552208 .
14. Kalyan Mahata and **Anasua Sarkar**, Cancer Pathway Network Analysis Using Cellular Automata, *Biotechnology: Concepts, Methodologies, Tools, and Applications*, IGI-Global, Chapter 83, pages 2039-2053, June 2019, DOI: 10.4018/978-1-5225-8903-7.ch083, ISBN13: 9781522589037|ISBN10: 1522589031|EISBN13: 9781522589044.
15. **Anasua Sarkar** and **Ujjwal Maulik**, Cancer Biomarker Assessment Using Evolutionary Rough Multi-Objective Optimization Algorithm, *Biotechnology: Concepts, Methodologies, Tools, and Applications*, IGI-Global, Chapter 33, pages 838-864, June, 2019, DOI: 10.4018/978-1-5225-8903-7.ch033, ISBN13: 9781522589037|ISBN10: 1522589031|EISBN13: 9781522589044.
16. **Anasua Sarkar** and Rajib Das, Remote Sensing Image Classification Using Fuzzy-PSO Hybrid Approach, *Geospatial Intelligence: Concepts, Methodologies, Tools, and Applications* (Noted as an IGI Global Core Reference Title in Environmental, Agricultural, and Physical Sciences for 2019. Information Resources Management Association (USA)), pages 636-669, March, 2019, DOI: 10.4018/978-1-5225-8054-6.ch029, ISBN13: 9781522580546|ISBN10: 1522580549|EISBN13: 9781522580553.
17. Avik Bhattacharya, Purbanka Pahari, Piyali Basak and **Anasua Sarkar**, Class Discriminator-Based EMG Classification Approach for Detection of Neuromuscular Diseases Using Discriminator-Dependent Decision Rule (D3R) Approach, *Recent Trends in Signal and Image Processing*, Part of the *Advances in Intelligent Systems and Computing* book series (AISC, volume 727), Springer Singapore, pp 49-56, January 2019, DOI: 10.1007/978-981-10-8863-6_6, Print ISBN: 978-981-10-8862-9, Electronic ISBN: 978-981-10-8863-6.
18. Jnanendra Prasad Sarkar, Indrajit Saha, **Anasua Sarkar**, **Ujjwal Maulik**, Improving Modified Differential Evolution for Fuzzy Clustering. In: Abraham A., Muhuri P., Muda A., Gandhi N. (eds) *Hybrid Intelligent Systems*. HIS 2017. *Advances in Intelligent Systems and Computing (AISC 734)*, March 2018. vol734, pp. 136–146, **Springer International Publishing AG, part of Springer Nature 2018**, DOI https://doi.org/10.1007/978-3-319-76351-4_14, Print ISBN 978-3-319-76350-7, Online ISBN 978-3-319-76351-4.

19. Subhabrata Dutta, Tanmoy Chakraborty, **Dipankar Das**. 2018. How did the discussion go: Discourse act classification in social media conversations, LMHMD, Springer, Deepak et al., ed., pp.137-160

E. Articles Published in Journals:

1. S. Chowdhury, S. Sen, A. Banerjee, V. N. Uversky, **U. Maulik** and K. Chattopadhyay, “Network mapping of the conformational heterogeneity of SOD1 by deploying statistical cluster analysis of FTIR spectra”, *Cellular and Molecular Life Sciences*, pp. 1-10, 2019.
2. I. Saha, J. P Sarkar, and **U. Maulik**, “Integrated Rough Fuzzy Clustering for categorical data analysis”, *Fuzzy Sets and Systems*, 361(15), pp. 1-32, 2019.
3. S. Sen, A. Dey, S. Chowdhury, K. Chattopadhyay, **U. Maulik**, “Understanding the Evolutionary Trend of Intrinsic Structural Disorders in Cancer Relevant Proteins as probed by Shannon Entropy Scoring and Structure Network Analysis”, *BMC Bioinformatics*, 19(13), pp. 231-242, 2019.
4. A. Sannigrahi, D. Mullick, D. Sanyal, S. Sen, **U. Maulik**, K. Chattopadhyay, “Effect of Ergosterol on the Binding of KMP-11 with Phospholipid Membranes: Implications in Leishmaniasis”, *American Chemical Society Omega*, 4(3), pp. 5155-5164, 2019.
5. S. Ray, **U. Maulik**, “Discovering Perturbation of Modular Structure in HIV Progression by Integrating Multiple Data Sources Through Non-Negative Matrix Factorization”, *IEEE/ACM Trans. Computational Biology and Bioinformatics*, 15(3), pp. 869-877, 2018.
6. S. Sen, and **U. Maulik**, “Recent advancement toward significant association between disordered transcripts and virus-infected diseases: a survey”, *Briefings in Functional Genomics*, 17(6), pp. 458-470, 2018.
7. S. Dey, S. Alberuni and **U. Maulik**, “Computational prediction of HCV-human protein protein interaction via topological analysis of HCV infected PPI modules”, *IEEE Transactions on NanoBioscience*, 17(1), pp. 55-61, 2018.
8. **U. Maulik**, S. Sen, S. Maulik and S. Bandyopadhyay, “Detecting TF-MiRNA-Gene Network Based Modules for 5hmC and 5mC Brain Samples: A Intra- and Inter-Species Case Study Between Human and Rhesus”, *BMC genetics*, 19(9), 2018 (doi: 10.1186/s12863017-0574-7).
9. S. Ray, A. Mukhopadhyay and **U. Maulik**, “A review of Computational Approaches for analysis of Hepatitis C Virus (HCV)-mediated Liver disease”, *Briefings in Functional Genomics*, 17(6), pp. 428-440, 2018.
10. **U. Maulik**, V. Uversky and S. Sen, “A statistical approach to Detect Intrinsically Disordered Proteins associated with Uterine Leiomyoma”, *Protein Peptide Letters*, 25(5), pp. 483-491, 2018.
11. S Paul, S Saha, **S Basu**, PK Saha, **M Nasipuri**, “Text localization in camera captured images using fuzzy distance transform based adaptive stroke filter,” *Multimedia Tools and Applications*, DOI: 10.1007/s11042-019-7178-3, *in press*
12. **S Basu**, D Plewczynski, “Emerging and threatening infectious diseases,” *Briefings in Functional Genomics* 17 (6), 372-373, 2018.
13. Sovan Saha, A. Prasad, Piyali Chatterjee, **Subhadip Basu**, **Mita Nasipuri**, “Protein function prediction from protein-protein interaction network using gene ontology based neighborhood analysis and physico-chemical features,” *Journal of Bioinformatics and Computational Biology*, DOI: 10.1142/S0219720018500257, *in press*.
14. Halder, A.K., Chatterjee, P., M., Nasipuri, Plewczynski, D., **Basu**, **Subhadip**, “3gClust: Human Protein Cluster Analysis,” *IEEE/ACM Transactions on Computational Biology and Bioinformatics*, 2018, DOI: 10.1109/TCBB.2018.2840996, *in press*.
15. S Bhowmik, S Malakar, R Sarkar, **S Basu**, **M Kundu**, **M Nasipuri**, “Off-line Bangla handwritten word recognition: a holistic approach,” *Neural Computing and Applications*, 1-16, DOI: 10.1007/s00521-018-3389-1, *in press*.

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56. M. Dey, A. Mondal and **D. Das**. 2018. "How to Analyze the Overall Performance of a Student: Strong or Weak?" *5th IEEE International Congress on Information Science and Technology CiSt'18*, pp. 374-379
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58. S. Mondal, S. Mahata, **D. Das**. 2018. "Preparing Bengali-English Code-Mixed Corpus for Sentiment Analysis of Indian Languages". *ALR, Workshop on Asian Language Resources, LREC 2018*, pp. 57-64.
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60. P. Maitra and **D. Das**. 2018. "Employing Cross Genre Unstructured Texts to Extract Entities in Adapting Sister Domains". *IEMGraph 2018*. Springer
61. Ayan Bandyopadhyay, Linda Achilles, Thomas Mandl, Mandar Mitra and **Sanjoy Kumar Saha**, "Identification of Depression Strength for Users of Online Platforms: A Comparison of Text Analysis Approaches", *LWDA 2019 workshop on Information Retrieval*, 2019
62. Rahul Gavas, Debatri Chatterjee, Aniruddha Sinha and **Sanjoy Kumar Saha**, "Effect of Cognitive Load on a Random Sequence Generation Task", *IEEE Region 10 Symposium*, 2019
63. Aneek Roy, Nimagna Biswas, **Sanjay Saha** and Bhabatosh Chanda, "Classification of Moving Crowd Based on Motion Pattern," *IEEE Region 10 Symposium*, 2019
64. Mukherjee N., Paul, G. and **Saha, S.K.**, "A novel position concealment audio steganography in insensible frequency" *5th International Conference on Computational Intelligence in Data Mining*, 2018
65. Rajib Sarkar, Saikat Dutta, Aneek Roy, and **Sanjoy Kumar Saha**, "Emotion based categorization of music using low level features and agglomerative clustering," *National Conference on Computer Vision, Pattern Recognition, Image Processing, and Graphics*, 2018-506-516
66. Aritra Mukherjee, Soumik Sarkar, **Sanjoy Kumar Saha**, "Real Time 3D Object Detection from Stereo Image Based on Semantic Clustering of Disparity Map" *4th Int. Conf. on Next Generation Computing*, 2018
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70. Atreya Bandyopadhyay and **Nandini Mukherjee**, "An Approach to Predict Desktop Uptime for Job Allocation in Ad-Hoc Cloud," *Proceedings of the 47th International Conference on Parallel Processing Companion*, 978-1-4503-6523-9, Eugene, Oregon, USA, pp. 1-7, 2018, 10.1145/3229710.3229743, ACM
71. K. Ray, S. Bose and **N. Mukherjee**, "A Load Balancing Approach to Resource Provisioning in Cloud Infrastructure with a Grouping Genetic Algorithm," *2018 International Conference on Current Trends towards Converging Technologies (ICCTCT)*, Coimbatore, 2018, pp. 1-6. doi: 10.1109/ICCTCT.2018.8550885
72. Aniruddha Sinha, **Sanjoy Kumar Saha**, Anupam Basu, "Determining Perceptual Similarity Among Readers Based on Eyegaze Dynamics" *6th International Doctoral Symposium on Applied Computation and Security Systems* 2019

5. Collaborative Programmes:

Ujjwal Maulik

1. Visited International Center for Theoretical Physics (ICTP), Trieste, Italy as Senior Associate. Collaborative Research Area: Computational Biology
2. Visited Grenoble INP, France Collaborative Research Area: Energy Management in Smart Grid and Housing

Subhadip Basu

1. Honorary Research Scientist, Department of Electrical and Computer Engineering, University of Iowa
2. DAAD Visiting Scientist, Hannover Medical School, Germany

Anasua Sarkar

1. Working research at Experimental Medical Science Department, Lund University on Cancer epigenetics.

Sudip Kumar Naskar

1. Saarland University, Saarbrücken, Germany
2. Universitat Politècnica de València, Valencia, Spain
3. University of Minnesota Duluth, Duluth, MN, USA
4. National Polytechnic Institute (IPN), Mexico
5. Indian Statistical Institute, Kolkata, India
6. Indian Institute of Technology, Patna, India
7. Indian Institute of Technology (ISM), Dhanbad, India
8. West Bengal State University, Kolkata, India

Debotosh Bhattacharjee

1. One collaborative project entitled “Development of a computer-assisted diagnosis system for segmenting and detecting abnormalities and disease diagnosis,” in collaboration with Medical University of Vienna, Austria.

Nandini Mukherjee

1. Lead investigator of a collaborative project titled “Remote Health: A Framework for Healthcare Services using Mobile and Sensor-Cloud Technologies” in which six institutions are participating and Jadavpur University is playing the lead role. The project is funded by ITRA, Media Lab Asia.

6. Major Achievements:

Ujjwal Maulik

1. Elected Fellow, International Association of Pattern Recognition (FIAPR), 2018.

Subhadip Basu

1. Received **DAAD Fellowship** to visit Hannover Medical School, Germany during May-June, 2018
2. Received an honorary position as **Research Scientist** from Department of Electrical and Computer Engineering, University of Iowa, USA (2016-2019).
3. Received **Research Award from UGC**, Govt. of India for 2016-2018

Anasua Sarkar

1. Obtained Postdoctoral Fellowship from Lund University for pursuing postdoctoral research from September, 2018

Debtosh Bhattacharjee

1. gLink fellowship to visit Northumbria University for one month

A. Post-Doctoral Fellowship:

Anasua Sarkar

1. Post-Doctoral Fellowship at Experimental Medical Science Department, Lund University on Cancer epigenetics, September, 2018-August 2019.

CONSTRUCTION ENGINEERING
(SALT LAKE CAMPUS)

Phone : +91-33-2335-5211
Int. : 6116
H.O.D. : Prof. Subhajit Saraswati
E-Mail : hodconstruction@jadavpuruniversity.in

1. A. Course Offered:

Name of the Course : Bachelor of Construction Engineering
Duration of course : 4 Years
No of students enrolled : 50

Name of the course : Master of Construction Engineering
(Structural Repair and Retrofit Engineering)
Duration of course : 3 Years
No of students enrolled : 18

1. B. Number of Faculty Members : 08

2. A. Area of Research Activities (Broad Areas):

Structural Health Monitoring with Static & Dynamic Response
Non-destructive Evaluation, Repair and Retrofit including Corrosion
Highway Engineering – Evaluation & Pavement Design
Concrete Technology – High Performance Concrete, Geo-Polymer Concrete
Geotechnical Investigation with DMT/SDMT using Penetro-meter
Earthquake Engineering and Disaster Mitigation

2. B. Major Research Project : Including under RUSA - II

- Structural Health Monitoring of Buildings & Bridges from field test data of various NDT, Static and Dynamic Responses.
- Sustainable Manufacturing of Low Cost Energy Efficient Earthquake Resistant Affordable Housing
- Characterization of Sub-grade Resilient modulus with variable moisture & index properties of soil in the state of West Bengal to assess pavement failure.
- Studies on Environmental Threat due to Coastal Erosion and Possible Mitigation in Area under Digha-Shankarpur Development Authority, West Bengal.
- Development of a Low-Cost Minimal Invasive Corrosion Repair Technique in Reinforced Concrete Structures adopting Advance Material System.

3. A. Invited Lectures Delivered / Sessions Chaired: (Name of the Teacher / Type of Participants / Name of the Seminar/Conference/Place /Duration)

1. **Prof. Kaushik Bandyopadhyay** chaired a technical session in the 16th Asian Regional Conference on Soil Mechanics and Geotechnical Engineering, **16 ARC** held during October, 14 – 18, 2019 at *Taipei International Convention Center (TICC)*, Taipei, Taiwan.
2. Prof. D. Bandyopadhyay was an Invited Speaker on “Structural Health Monitoring of Bridges” and also participated in a Talk Show on “Recent Challenges in Concrete Construction”, held on 27th September, 2019 at J W Marriot, Kolkata, organized by ACC Cement & Indian Concrete Institute, Kolkata.

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3. **Prof. D. Bandyopadhyay** was an Invited Speaker on “Experimental Study on Prefabricated Concrete Sandwich Panel Building System” in the National Seminar on “CONCRETE 2019: Pre-cast Concrete For Sustainable Construction” on 19th September, 2019 organized by Indian Concrete Institute at New Delhi Centre.
 4. **Prof. P.P. Biswas** was an invited speaker at orientation program of Junior Engineers of Airport authority of India at CGO complex on 3rd September 2019 on ‘Disaster Management for Civil Engineers.
 5. Prof. P.P. Biswas was an Invited speaker on ‘**Design Rural Rigid Pavement**’ in the training program on “Rural Engineering Issues” for Nirman Sahayaks from Gram Panchayats & for Block Level Junior Engineers organised by the School of Water Resource Engineering (SWRE) of Jadavpur University, 26-29th August 2019.
 6. **Prof. D. Bandyopadhyay** was an Invited Speaker on “Advancement of Fly Ash Utilization in Concrete” at ASH MEET, Mejia Thermal Power Station, DVC, Bankura on 7th July, 2019.
 7. **Prof. D. Bandyopadhyay** was an Invited Speaker on “Performance Enhancement of Concrete by Chemical Admixtures and Additives” National Seminar On “Role of Construction Chemicals/Additives to Enhance Strength and Durability of Construction and Rehabilitation Works” organised by Indian Building Congress on 6th July, 2019 at R N Mukherjee Hall, IE(I), Kolkata.
 8. **Prof. D. Bandyopadhyay** was an invited speaker on “Advances in Concrete Technology” at the Annual Meet of Architects & Technocrats of Bihar, 17.06.19 at Hotel Mourya, Patna organized by Dalmia Cement.
 9. **Prof. Kaushik Bandyopadhyay** chaired a technical session in the 2nd International Conference on Environmental Geotechnolgy, Recycled Waste Materials and Sustainable Engineering (EGRWSE2019) held during June, 16 – 20, 2019 in Chicago, USA.
 10. Prof. P.P. Biswas was an Invited speaker at HRDC ,Jadavpur University on 12th February 2019 on ‘ Strategic understanding on road safety issues during Urbanization.
 11. Prof. D. Bandyopadhyay delivered Invited several lectures in the Workshop on “Earthquake Disaster Mitigation (EQDM-2019)”, held at NIT, Silchar, January 16-20, 2019.
 12. Prof. Debasish Bandyopadhyay delivered an invited lecture on “Structural Health Monitoring of Infra-structural System by Inverse Dynamic Approach” on Concrete Day Celebration of Indian Concrete Institute, Kolkata, October 2018.
 13. Prof. S. Saraswati delivered an invited lecture on “Health Monitoring of bridges and related issues” during Indian Concrete Institute Concrete Day celebration at Kolkata, October 2018.
- 3. B. Seminar/Workshop/Conference/Symposium Attended :**
1. **Prof. D. Bandyopadhyay** attended and participated the Conference on “Concrete 2019: Precast Concrete for Sustainable Construction” at New Delhi in 19th September 2019.
 2. **Prof. S. Saraswati** attended the Conference on “Concrete 2019: Precast Concrete for Sustainable Construction”, New Delhi, 19th September 2019.
 3. **Prof. D. Bandyopadhyay** has participated in the 7th International conference on ‘Experimental Vibration Analysis for Civil Engineering Structure, EVACES 2019, 5-8 September,2019 at China.
 4. **Prof. P.P. Biswas** attended International Airfield and Highway Pavement Conference at Chicago , USA (21st-24th July 2019) organized by the American Society of Civil Engineers.
 5. **Prof. P.P. Biswas** visited the University of Texas at San Antonio from 29th July -2nd August, 2019.
 6. **Prof. K. Bandyopadhyay** participated in the 2nd International Conference on Environmental Geotechnolgy, Recycled Waste Materials and Sustainable Engineering (EGRWSE2019), June, 16 – 20, 2019 in Chicago, USA.
 7. **Prof. K. Bandyopadhyay** participated in the 16th Asian Regional Conference on Soil Mechanics and Geotechnical Engineering, 16ARC, 14–18 October, , 2019 at Taipei International Convention Center, Taipei, Taiwan.

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8. **Prof. Kaushik Bandyopadhyay** and **Prof. S. Saraswati** attended the National Workshop on Geotechnical Site Characterisation and In-situ testing (part of TC102 activity) jointly with the Indian Institute of Science, Bangalore in Bangalore in during 26-27 April, 2019 in Bangalore.
 9. **Prof. S. Saraswati** attended the International Conference “Innovative World of Concrete” held in Bengaluru, India in September 2018.
 10. **Prof. D. Bandyopadhyay** attended the International Conference “Innovative World of Concrete” organised by Indian Concrete Institute held at Bengaluru, India in 19-22 September 2018.
- 3. C. Seminar/Workshop/Conference/Symposium Organized :**
1. **Prof. D. Bandyopadhyay** and Department of Construction Engineering, Jadavpur University have organized a Masons Skill Building Workshop on 31.08.2019 on “Good Construction Practice of Residential Buildings” in association with Ultratech Cement and Indian Concrete Institute.
 2. **Prof. Kaushik Bandyopadhyay** was a member of the Organizing committee of National Workshop on Geotechnical Site Characterisation and In-situ testing (part of TC102 activity) jointly with the Indian Institute of Science, Bangalore in Bangalore in during 26-27 April, 2019 in Bangalore.
 3. **Prof. D. Bandyopadhyay** is one of the member of the Advisory Committee of the organizing of the International Conference of “Structural Engineering Convention SEC-2018”, to be held from 19th-21st December, 2018, at the department of Civil Engineering, Jadavpur University.
 4. **Prof. S. Saraswati & Prof. D. Bandyopadhyay** were the members of the organizing committee of the International conference of “Innovative World of Concrete ICI-IWC-2018”, on 19-22 September, 2018 at NIMHANS Convension Centre, Bangalore, organized by Indian Concrete Institute.
- 4. A Books/Monographs etc. Published:**
1. **Prof. S. Saraswati** is a member of technical committee of Handbook on Concrete Durability, published by Indian Concrete Institute.
 2. **Dr. P. Ghosh** published a book on *Story of steel structure*
- 4. B. Articles Published in Journals/ Conference proceedings in the Year 2018-19**
1. J S Ali and D Bandyopadhyay, “Experimental Validation of the Proposed Technique for Condition Monitoring of structure with Limited Noisy Modal Data” in International Journal of Structural Integrity (2019), August, 2019, ISSN: 1757-9864, DOI- IJSI-02-2019-0013.
 2. Jafar Sadak Ali and **Debasish Bandyopadhyay**, “Numerical and Experimental Validation of the Proposed SHM Technique form Limited Static Responses Adopting Equation Error Approach”, *Journal of Emerging Technologies and Innovative Research (JETIR)*, 2019, ISSN: 2349 5162.
 3. Jafar Sadak Ali and **Debasish Bandyopadhyay**, “Experimental Validation of the Proposed SHM Technique form Limited Extracted Dynamic Responses of a Steel Beam Adopting inverse Dynamic Approach”, *International Journal of Technical Innovation in Modern Engineering & Science (IJTIMES)*, 2019, e-ISSN: 2455-2585.
 4. J S Ali and **D Bandyopadhyay** “Condition Monitoring of Structures using Limited Noisy Data of Modal Slope and Curvature of Mode Shapes”, International **Journal** of Structural Integrity, August, 2019, **ISSN: 1757-9864**, DOI- IJSI-02-2019-0014.
 5. **Dr. ParthaPratim Biswas** (2018) “A tragedy of Bridge Management in West Bengal” published in *Economic and Political Weekly*, November3, 2018, Vol L.III, Issue 44.
 6. **P. Ghosh & A.A. Laskar**, “Sulphuric acid durability Studies of concrete with Portland cement (CEM-I), Portland Composite cement of different types (CEM-II/A-M &CEM-II/B-M) & partial replacement of Portland cement with different types of pozzolonic materials” *International Research Journal of Engineering and Technology (IRJET)*, Volume: 06 Issue: 04 | Apr. 2019

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7. **P. Ghosh** & Abdullah Ahamed Laskar “ Response of different types of cement & partial replacement of Portland cement with Fly Ash & GGBC in concrete against Phosphoric Acid Attack” *International Journal of Emerging Technology and Advanced Engineering*, Volume -9, Issue -5, May 2019
8. **P. Ghosh** & Abdullah Ahamed Laskar, “Influence of different type of cement ,Pozzolonic materials & Anti carbonation surface coating of concrete in carbonation of concrete.” *International Journal of Analytical Reviews*, Volume -6, Issue -2, May 2019
9. **P. Ghosh** & Abdullah Ahamed Laskar “Influence of different type of cement & supplementary cementitious material Fly ash & GGBS in concrete carbonation.” *International Journal of Research in Engineering Application & Management*, Volume -5, Issue -2, May 2019
10. **P. Ghosh** & Abdullah Ahamed Laskar, “Effect of different types of cement in concrete chloride permeability” *International Journal for research in applied science & Engineering Technology*, Volume -1, Issue -5, May 2019
11. **P. Ghosh** & Abdullah Ahamed Laskar, “Sulphuric Acid durability studies of concrete with Portland cement , Portland composite cement of different types & partial replacement portland cement with different types of Pozzolonic materials” *International Research Journal of Engineering & Technology*, Volume -6, Issue -4, April 2019.
12. **P. Ghosh** & Abdullah Ahamed Laskar “Influence of different type of cement & Pozzolonic materials of chloride permeability of concrete.” **Journal** of Emerging Technology and Innovative research , Volume -6, Issue -5, May 2019.
13. **P. Ghosh** & Abdullah Ahamed Laskar, “Influence of different type of cement & Mitigating effect of Pozzolonic materials & Lithium Based salt in ASR of Concrete” *American Journal of Emerging research (AJER)*, Volume -8, Issue -9, 2019.P p 98-103.
14. **P. Ghosh** & Abdullah Ahamed Laskar “Comparative durability studies of concrete by using Electrical Resistivity technique & Rapid Chloride Permeability Technique” *Journal of Emerging research application*, Volume -9, Issue -9(series-I),September 2019, PP 44-49.
15. **P. Ghosh** , Bikrom Paul, Kushal Ghosh, “Mechanical Properties and Microstructural Features using Stone as a Partial Replacement of Sand”, *International Journal of Engineering and Advanced Technology emerging research application*, Volume -9, Issue -9(series-I),Sept. 2019, PP 44-49.
16. **P. Ghosh** & Abdullah Ahamed Laskar, “Influence of different form of Lithium Barium Sulphate in migration of ASR expansion in concrete”, *IOSR Journal of Mechanical and Civil Engineering* , Volume -16, Issue -5(series-I), September-October 2019, P p 18-23..
17. **P. Ghosh** & P. Roychowdhury, “Innovation Experimentation on Hollow Cylindrical Shells of Reinforced concrete under Axial Compression load.” ISSN: 2277-3878, Volume 8, Issue 3, September -2019.
18. **P. Ghosh** & Abdullah Ahamed Laskar and Sagar Mondal, “An experimental study on RCC Chimney Shell surface damage problem of slip form concrete and its preventive measure”, *International Journal of Emerging Technology and advance Engineering*”, Vol -09, Issue -7, July 2019 PP 53-62.
19. **K. Bandyopadhyay**, P. Gangopadhyay, **S. Saraswati** & S. Bhattacharya, “Stability Analysis of a Fly ash Embankment on Soft Soil” in the 16th Asian Regional Conference on Soil Mechanics and Geotechnical Engineering, 16 ARC held during October, 14 – 18, 2019 at Taipei International Convention Center (TICC), Taipei, Taiwan.
20. **D. Bandyopadhyay** & J S Ali (2017), “Modal Strain Energy Based Structural Parameter Identification from Limited Vibration Measurement”, in the 7th International conference on ‘Experimental Vibration Analysis for Civil Engineering Structure, EVACES 2019, at China.
21. **P.P.Biswas**, **M.K.Sahis**, A. Sengupta, G.C.Mandal, “Prediction of remaining life of pavement by Surface deflection using Odemark’s approach” ASCE Conference attend on International Airfield and Highway Pavement Conference at Chicago , USA (21st-24th July 2019)

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22. **Prof. Kaushik Bandyopadhyay** presented a paper entitled, “Spirodela Polyrhiza: An Efficient Hyper accumulator of Nickel at Low Concentration” in the 2nd International Conference on Environmental Geotechnology, Recycled Waste Materials and Sustainable Engineering (EGRWSE2019) held during June, 16 – 20, 2019 in Chicago, USA.
23. **Partha Pratim Biswas, Manoj Kumar Sahis**, Agnimitra Senguta, “Determination of Compacted Dense Sand Layer Thickness on Loose Sand using Odemark’s Method for Design of Shallow Foundation” in Indian Geotechnical Conference-2018, Bangalore. 13-15th December 2018, IISC Beangaluru.
24. **P.Ghosh** et al, “Use of Brick Klin Dust as a supplementary material for fine aggregate in concrete”, COAST-2019, NIT Silchar.
25. **P.Ghosh** et al, “A Brief Review of the Effect of Mineral admixtures on the Properties of Alkali Activated Composites”, COAST-2019, NIT Silchar.
26. **P.Ghosh** et al, “Replacement of Sand with Stone Dust as a Fine Aggregate in Concrete”, COAST-2019, NIT Silchar.
27. Agamoni Das^{1*}, Jafar Sadak Ali² & **Debasish Bandyopadhyay**³, “Numerical Study on Base Isolation System for Regular & Irregular Buildings” in the International conference of “Structural Engineering Convention” SEC 2018, 19-21 December, Jadavpur University, Kolkata, pp. 144, ISBN 978-93-83660-46-9.
28. Madhumanti Ghose¹, Jafar Sadak Ali² & **Debasish Bandyopadhyay**³, “Compareative Study of Steel Concrete Composite System of High Rise Tapered Building”, in the Intl conference “Structural Engineering convention” SEC 2018, 19-21 Dec, Jadavpur University, Kolkata, pp. 56, ISBN 978-93-83660-46-9.
29. Sayantan Bosu Choudhury^{1*}, Susmita Choudhury², Jafar Sadak Ali³, **Debasish Bandyopadhyay**⁴, “Structural Health Monitoring of Corrosion Distressed High Rise RCC Buildings by Correlating Various NDT Results”, in the International Conference of “Structural Engineering Convention” SEC 2018, 19-21 December, Jadavpur University, Kolkata, pp. 155, ISBN 978-93-83660-46-9.

5. Collaborative Programmes:

- Prof. S. Saraswati & Prof. D. Bandyopadhyay of Jadavpur University have organized Training Programs for Engineers of Technip FMC on “Maintaining Quality of Concrete Construction” during July & September, 2019 in collaboration with Indian Concrete Institute, Kolkata Centre.
- Prof. Kaushik Bandyopadhyay is the Chairman of the Technical Committee 102 (TC102, India Section) under the aegis of the International Society for Soil Mechanics & Geotechnical Engineering (ISSMGE, London) during the period from 2017 to 2021.
- Prof. D. Bandyopadhyay of Jadavpur University have acted as a collaborative resource person for mentorship of Jhorhat Institute of Science and Technology under TEQIP-III program of Calcutta University.
- Prof. Kaushik Bandyopadhyay is Member of the Core Committee of the Asian Regional Technical Committee 7 (ATC7) under the aegis of the International Society for Soil Mechanics & Geotechnical Engineering (ISSMGE, London) during the period from 2017 to 2021.

6. Patent

1. **Dr. P. Ghosh** took a Patent on “Technique for different free RCC Chimney shell construction by using Slip – Form Method” September 2019

ELECTRICAL ENGINEERING

Phone : + 91-33-2414-6163

Fax : + 91-33-2414 -6168

Int. : 2457-2539

H.O.D.: Prof.Subrata Paul

E-mail : hodelectrical@jadavpuruniversity.in

1. A. Courses Offered:

Name of the course	Duration of the course
1. B.E.E.	4 Yrs.
2. B.E.E. (Evening)	5 Yrs.
3. M.E.E.	2 Yrs.
4. M.C.S.E.	2 Yrs.
5. M.E. Illumination Engg.	2 Yrs.
6. Ph.D.	

Control System Section

1. B Number of Faculty Members: 04

2. B. Major Research Projects: (Name of the Project–Funding Agency)

- Robustness Analysis of AFADEC Control Laws Covering Redundancy Management–Gas Turbine Research Establishment, (DRDO, Ministry of Defense), Bengaluru.
- Development and Validation of Algorithm for Estimation and Tracking of High Velocity Manoeuvring Targets –Program AD, (DRDO, Ministry of Defense), Hyderabad.

3. A. Invited Lectures Delivered/Sessions Chaired: (Name of the Teacher–Type of Participants–Name of Seminar/ Conference–Place and Duration)

Madhubanti Maitra–Track Chair –“IEEE Applied Signal Processing Conference”–7-9 Dec. 2018, held at Kolkata, India.

Smita Sadhu–Delivered a Talk–”Advanced Control Applied to Various Field of Engineering (ACAVFE 2018)”–Electrical Engineering Department, NIT Durgapur, August 28-Sept. 01, 2018.

4. B. Articles Published/Accepted in Journals (April, 2018 – March, 2019):

International Journals

- Aritro Dey, Smita Sadhu, Tapan Kumar Ghoshal. “Square Root Quadrature Information Filters for Multiple Sensor Fusion”, *Advances in Intelligent Systems and Computing*, vol 749, 2019 Springer, Cham. DOI: 10.1007/978-3-319-74808-5_46
- Nilanjan Patra, Smita Sadhu, Tapan Kumar Ghoshal. “Adaptive state estimation for tracking of civilian aircraft,” *IET Science, Measurement & Technology*, Volume: 12, Issue: 6, 2018, pp. 777 - 784, DOI: 10.1049/iet-smt.2017.0529.

International Conferences

- Sudeshna Dasgupta, Smita Sadhu, and Tapan Kumar Ghoshal. “Disturbance Observers for Nonlinear MIMO Systems-An Alternative Design Approach.” In *2019 53rd Annual Conference on Information Sciences and Systems (CISS)*, 20-22 March 2019, Baltimore, USA, pp. 1-6. IEEE, 2019. DOI: 10.1109/CISS.2019.8693041

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4. Sudeshna Dasgupta, Smita Sadhu, T. K. Ghoshal, "A Modified Active Anti-Disturbance Control for a Nonlinear CSTR Model", "ASME Dynamic Systems and Control Conference" (DSCC-2018), Atlanta, Georgia, USA, September 30 – October 3, 2018.
5. Spandita Das, Sayantan Chakraborty, Madhubanti Maitra, "Performance Evaluation of 2-Degrees-of-Freedom 2-Periodic Controller: Stabilization of Cart-Inverted Pendulum System, 2018" IEEE "Applied Signal Processing Conference (ASPCON)", 7-9 Dec. 2018. DOI: 10.1109/ASPCON.2018.8748411
6. Tasmita Saha, Nirmal Murmu, Sayantan Chakraborty, Madhubanti Maitra, "Robust Stabilization of Cart Inverted Pendulum System by 2-Rate Controller", 2018 IEEE Applied Signal Processing Conference (ASPCON), 7-9 Dec. 2018. DOI: 10.1109/ASPCON.2018.8748598
7. D. Roy, A. Choudhury, M. Maitra & S. Bhattacharya. "Multi-Robot Virtual Structure Switching and Formation Changing Strategy in an Unknown Occluded Environment", IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), December 2018, (pp. 4854-4861).

5. Collaborative Programme:

Madhubanti Maitra

Faculty Mentoring: Linear Control System- for the faculty of Asansole Engineering College.

6. Major Achievements:

Smita Sadhu

1. One doctoral student under the supervision of Prof Smita Sadhu has been awarded Ph.D degree in 2019.
2. One Post Graduate thesis has been awarded under the supervision of Prof Smita Sadhu.

High Voltage Section

1. B. No. of Faculty Members: 06

2. A. Area of Research Activities:

- a) Condition monitoring of large Transformers, Insulators, Lightning Arresters etc.
- b) Power quality event detection and Smart metering.
- c) Computer aided design and optimization of insulation systems.
- d) Numerical field computations.
- e) Signal conditioning in high voltage systems.
- f) Partial discharge measurements and instrumentation.
- g) Identification of transformer insulation failure.

2. B. Major Research Project : (Project–Funding Agency–Sanction Amt.(INR in Lakhs)–Principal/ Co-Principal Investigator–Status)

1. An advanced method for insulation condition monitoring using accelerated dielectric response measurement –DST (GOI) SERB –54 –Dr. Biswendu Chatterjee and Dr. Sovan Dalai–Ongoing
2. FIST-2014–DST (GOI) FIST–180–Dr. Kesab Bhattacharya–Ongoing
3. Local Lightning Prediction and Warning S–Dr. Sovan Dalai–Ongoing
4. Modeling of Space Charge and Partial Discharge in Polymeric Dielectrics for Application in High Voltage Systems–RUSA 2.0, Jadavpur University–5.3–Dr. Sovan Dalai–Ongoing
5. Development of an Advanced Online Technique for Condition Monitoring of Overhead Transmission–Dr. Arpan Kumar Pradhan–Ongoing

3. A. Invited Lectures Delivered/Sessions Chaired : (Name of the Teacher–Type of Participants–Name of the Seminar/ Conference–Date and Venue)

1. Dr. Sovan Dalai –Academicians, Researchers and Graduate Students–One week workshop on “Synchrophasor Measurement Technology for Smart Grid - Present Scenario and Implementation in Indian Power System “, 19th to 23th January,2019–National Institute of Technology, Silchar, Assam, 2019
2. Dr. Sovan Dalai –Academicians, Researchers and Graduate Students–A Workshop on “Renewable Energy” –St.Thomas College of Engineering & Technology, Kolkata, West Bengal, 2019
3. Dr. Biswendu Chatterjee–Academicians, Researchers and Graduate Students–A Workshop on “Renewable Energy”–St.Thomas College of Engineering & Technology, Kolkata, West Bengal, 2019

3.C. Seminar/Workshop/Conference/Symposium Organized: (Name of the Teacher–Name of seminar/ conference–Place –Duration)

1. Sovan Dalai, Biswendu Chatterjee, Arpan Kumar Pradhan (Role: Member of Organizing Committee) –IEEE Conference on Applied Signal Processing (ASPCON)–Department of Electrical Engineering, Jadavpur University, India –December 7-9, 2018

4. B. Articles Published/Accepted in Journals (April, 2018 – March, 2019):

International/National/Peer-reviewed Journals

1. S.Chatterjee, S.Dalai, S.Chakravorti and B.Chatterjee, “Accelerating Moisture Content Sensing of Oil impregnated paper Insulation Using Frequency Modulated Square Wave Excitations”, *IEEE Sensors Letters*, Volume: 03, Issue: 07, pp 01 – 04, 2019.
2. S. Bag, A. K. Pradhan, S. Das, S. Dalai and B. Chatterje, “S-Transform Aided Random Forest Based PD Location Detection Employing Signature of Optical Sensor”, *IEEE Transactions on Power Delivery*, Volume: 34, Issue: 04, pp 1261 – 1268, 2019.
3. S. Chatterjee, A. K. Pradhan, S. Dalai, S. Chakravorti and B. Chatterjee, “A Non-linear Model for Sensing Moisture Content in Transformers at Reduced Time”, *IEEE Sensors Journal*, Volume: 19 , Issue: 12 , pp 4639 – 4646, 2019.
4. N. Haque, S. Dalai, B. Chatterjee and S. Chakravorti, “Studies on the Effects of Moisture and Aging on Charge De-trapping Properties of Oil Impregnated Pressboard based on Isothermal Relaxation Current measurement”, *IET High Voltage*, 2019. (Accepted for publication).
5. S. Dutta, C. M. Banerjee, A. Baral , B. Chatterjee , S. Dalai and S. Chakravorti. “ A Neural Network based methodology to study Effects of Oil Properties on Induction Period Evaluated from Response of Oil-Paper Insulation Employing mineral oil, ester and mixture.” *IET Science, Measurement & Technology*, Volume: 13, Issue: 04 , pp 606 – 613, 2019.
6. S.Deb, N. Ray Choudhury, R. Ghosh, B. Chatterjee, S. Dalai, “ Short Time Modified Hilbert Transform Aided Sparse Representation for Sensing of Overhead Line Insulator Contamination”, *IEEE Sensors Journal*, Volume: 18 , Issue: 19 , pp 8125 – 8132, 2018.
7. S.Chatterjee, S.Dalai, S.Chakravorti and B.Chatterjee, ”Use of Chirp Excitations for Frequency Domain Spectroscopy Measurement of Oil-Paper Insulation”, *IEEE Transactions on Dielectrics and Electrical Insulation*, Vol. 25, Issue: 03, pp 1103-1111, 2018.
8. S. Das, A. K. Pradhan, A. Kedia, S.Dalai, B. Chatterjee and S. Chakravorti, “Diagnosis of Power Quality Events based on Detrended Fluctuation Analysis”, *IEEE Transactions on Industrial Electronics*, Vol. 65, no. 9, pp 7322-7331, Sep. 2018.

6. Major achievements:

Dr. Arpan Kumar Pradhan has been awarded the Humboldt Fellowship to pursue research work at University of Stuttgart, Germany in March, 2019.

Illumination Section

1. B. Number of Faculty Members: 4

2. A. Area of Research Activities:

Light wave communication
Laser application
Road lighting design in Indian context
Façade Lighting
Sports Lighting
Colour mixing with LEDs
Ballast-Igniter-Lamp characteristics
Lamp-life estimation
Development of energy efficient low-cost lighting control system,
Human powered Battery charger for LED based lighting system
Rural lighting system design & development
Daylight integrated artificial lighting
Smart Lighting for interior and exterior

2. B. Major Research Project: (Principal/Co-Principal Investigator–Name of the Project–Funding Agency)

Prof.-Saswati Mazumdar as Principal Investigator–Advanced Vision System for Foggy environment–RUSA 2.0

Prof. Saswati Mazumdar as Principal Investigator and Sri Suddhasatwa Chakraborty as Co-Principal Investigator–‘Experimental studies of free space laser communication link for data and voice transmission in different atmospheric condition’–DRDO

Prof. Biswanath Roy as Principal Investigator–“Design & Development of energy efficient, wireless light controller for daylight integrated artificial lighting system”–RUSA 2.0

Sangita Sahana as Principal Investigator–Energy Efficient Outdoor Lighting Design using Mesopic Photometry–RUSA 2.0

3. A. Invited Lectures Delivered/ Session Chaired: (Name of the Teacher–Type of Participants–Name of seminar/conference Place and Duration)

Suddhasatwa Chakraborty–Expert talk–CIE Expert Workshop, Technical University of Berlin–25th May 2018, Berlin, Germany

Suddhasatwa Chakraborty–Invited talk–70th Orientation Course Orientation Programme at UGC-HRD, Salt Lake Campus, Jadavpur University, 01st September 2018–UGC-HRD, Salt Lake Campus, Jadavpur University

Suddhasatwa Chakraborty–Invited Talk–“Human Centric Intelligent lighting, a protocol shift in the field of Illumination Engineering”. One day Workshop on “Energy Conservation Road Map: Present and Future Trends.” Jointly organized by Electrical Engineering Department, Jadavpur University and IEEE Circuits and Systems Society, CAS Chapter, Kolkata Section–Electrical Engineering department Seminar Room, JU December 2018

Suddhasatwa Chakraborty–Special Lecture–on “Human Centric Lighting– a paradigm shift in the field of Illumination Engineering.” at Bureau of Indian Standard (BIS)–Organized by Electro Technical Division-49 of Bureau of Indian Standard (BIS) at National Physical Laboratory, New Delhi, India

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Suddhasatwa Chakraborty–Invited talk–72nd Orientation Course Orientation Programme at UGC-HRD, Salt Lake Campus, Jadavpur University, 23rd February 2019– UGC-HRD, Salt Lake Campus, Jadavpur University

Sangita Sahana–Invited Talk–“Mesopic Photometry & It’s Application” One day Seminar, Jointly organized by Electrical Engineering Department, Jadavpur University and Indian Society of Lighting Engineers– Electrical Engg Dept, Jadavpur University, October 2018

3. C. Seminar/Workshop/Conference/Symposium Organized:(Name of the Teacher–Name of the Paper Presented–Name of Seminar/Conference–Place and Duration)

Suddhasatwa Chakraborty–“Cutting-edge Perspectives of Intelligent System Development for social cause.” organized by IEEE CIRCUITS & SYSTEMS Society Chapter, Kolkata Section in association with IET(UK) Kolkata Local Network and Electrical Engineering Department, Jadavpur University– Electrical Engineering department Seminar Room, JU on 27th July 2018

Sangita Sahana–“Comparison Of Lamp Performances In Mesopic Photometry System For Area Lighting”–International Conference on Electrical, Electronics, Computer Science & Civil Engineering (ICEECC)–Pailan College of Management & Technology and Pailan Technical Campus, Kolkata

4. B. Articles Published in the Journals (including National / International/ Peer reviewed Journal): (Name of the Teacher–Name of the Articles–Name of the Journal–Date of Publication–Volume)

Prof. Saswati Mazumdar–“Wide-Range, Open-Loop, CCT and Illuminance Control of an LED Lamp Using Two-Component Color Blending,”–*IEEE Transactions on Power Electronics*–2018–vol. 33, no. 11, 2018, pp.9830-9818.

Prof. Saswati Mazumdar–“Design & Development of a Solar Powered, CCT changing R-B-W LED Based Artificial Window”–*Light & Engineering*–2018–Vol. 26, No.4, ISSN 0236-2945, 2018.

Prof. Saswati Mazumdar–“Development of a microcontroller based emergency lighting system with smoke detection and mobile communication facilities”,–*Light & Engineering*–2019–Vol. 27, No. 1, pp 46-50, ISSN 0236-2945, 2019.

Prof. Saswati Mazumdar–“A Low-Cost, Wide-Range, CCT-Tunable, Variable-Illuminance LED Lighting System”–*LEUKOS*–2019–DOI: 10.1080/15502724.2018.1541747, pp. 1–20, February 2019.

Suddhasatwa Chakraborty and Prof. Saswati Mazumdar –“ROAD CLASSIFICATION BASED ENERGY EFFICIENT DESIGN AND ITS VALIDATION FOR INDIAN ROADS.”–*Light and Engineering*–2018 Vol. 26, No. 2, pp. 110–121, 2018 *Svetotekhnika* No. 3, 2018, pp. 60–67

Suddhasatwa Chakraborty–“Laboratory based EEG study to investigate the influence of light sources on brain processing for detection of object designed with metal halide and high-pressure sodium lamp.”–*Light and Visual Environment/Journal of Science and Technology in Lighting*–2018–vol. 41, pp. 30-39, March 26, 2018

5. Collaborative Programme:

Visibility: Contrast threshold with marking light in road lighting,” With Technical University of Berlin, Germany.

6. Major Achievements:

Suddhasatwa Chakraborty

1. Was selected as Visiting Scientist in Chair of Lighting Technology, Department of Energy & Automation Technology, Technical University of Berlin (TUB), Germany in a collaborative research project entitled “Contrast threshold with marking light in road lighting.” in the tenure May-June 2018.
2. Was nominated as Alternative Institutional Member of the Electro-Technical Committee, ETD-23, and Bureau of Indian Standard (BIS).

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3. Nominated as Member of the Electro-Technical Committee, ETD-49, Bureau of Indian Standards (BIS).
4. Was invited in CIE Division-4 annual meeting at Technical University of Berlin, 22nd-23rd May 2018, Germany.
5. Nominated as Associate Member- Division-4, International Commission on Illumination (CIE).
6. Drafting of the revision of the National Lighting Code 2019: Road Lighting section.

Machine Section

1. B. No. of Faculty Members: 09

2. A. Area of Research Activities:

- Parameter Estimation and speed control of Induction machines.
- Control of Self-excited and Doubly fed Induction Generators.
- Development of Improved Harmonic Elimination Techniques of Inverters.
- Control of Permanent magnet machines.
- Wind and Solar energy conversion systems.
- Advanced methods of Reactive power compensation.
- Condition monitoring of rotating electrical machines.
- Design and Modeling of rotating machines.
- BLDC Machines and It's control.
- Embedded systems.

2. B. Major Research projects:(Departmental/Individual –Name of the Project –Funding agency)

A Wind-Solar Hybrid Microgeneration Scheme Suitable for Wide Speed Range and Grid-isolated Remote Applications–MNRE

3. A. Invited Lectures Delivered/ Session Chaired: (Name of the Teacher–Type of Participants–Name of Seminar/ Conference–Place and Duration)

Arindam Kumar Sil–Invited Talk Smart Grid–B P Poddar Institute of Management and Technology, Kolkata, on 2nd March, 2019

3. B. Seminar/Workshop/Conference/Symposium Attended:(Name of the Teacher–Name of the workshop attended–Place–Duration)

Mihir Hembram–Hands-On Protection Relay School–CPRI, Bangalore–6th-9th February,2019

3. C. Seminar/Workshop/Conference/Symposium Organized:(Name of the Teacher–Name of seminar/ conference–Place and Duration)

Arindam Kumar Sil–Welcome to the Machine: A Panel Discussion –Electrical Engineering Department, Jadavpur University on 08.03.2019

4. B. Articles Published in the Journals (including National / International/ Peer reviewed Journal):

1. Kuheli Goswami, Ayandeeep Ganguly and Arindam Kr. Sil, “Comparing ARIMAX over ANN for Peak Load Forecasting”, International Conference on Advanced Computing and Intelligent Engineering, ICACIE, Springer Conference, held at Siksha o Anusandhan, Bhubaneswar, December, 2018.
2. Ayandeeep Ganguly, Kuheli Goswami and Arindam Kr. Sil, “ANN technique based Mid Term Load Forecasting as a case study for Peak Load Reduction”, IEEE Conference on Applied Signal Processing (ASPCON 2018), Jadavpur University, Kolkata, December, 2018.

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3. Kuheli Goswami, Ayandeep Ganguly and Arindam Kr. Sil, "Day Ahead Forecasting and Peak Load Management Using Multivariate Auto Regression Technique", Applied Signal Processing Conference 2018, IEEE Conference (ASPCON), Kolkata, December, 2018.
4. Kuheli Goswami, Ayandeep Ganguly and Arindam Kr. Sil, "Comparing Univariate and Multivariate method for Short Term Load Forecasting", International Conference on Computing, Power and Communication Technologies, IEEE Conference, Noida, September, 2018.
5. Ayandeep Ganguly, Kuheli Goswami and Arindam Kr. Sil, "Short Term Load Forecasting using Artificial Neural Network for Peak Load Reduction", International Conference on Emerging Trends in Engineering and Science, Springer Conference, Asansol Engineering College, March, 2018.
6. Diptarshi Bhowmick, Dr. Suparna Kar Chowdhury, "Estimation of Losses and Performance Parameters of Three Phase Induction Motor using Particle Swarm Optimization and H – G Diagram," Proceedings of PEDES 2018, December, 2018, Chennai India. DOI: 10.1109/PEDES.2018.8707590.
7. Diptarshi Bhowmick, Dr. Suparna Kar Chowdhury, "Parameter and Loss Estimation of Three Phase Induction Motor from Dynamic Model using H – G Diagram and Particle Swarm Optimization", Proceedings of PIICON 2018, December, 2018, Kurukshetra, India. DOI: 10.1109/POWERI.2018.8704353.

Conference Paper

1. D. Maiti, S. Mukhopadhyay, S. K. Biswas, "A 1-phase Static VAR Compensator with Low Current THD and Wide Control Range," IEEE International Conference on Power Electronics, Drives and Energy Systems (PEDES), 18-21 Dec. 2018, Chennai, India
2. S. Mukhopadhyay, S. K. Biswas, D. Maiti, N. K. Deb, S. Sinha, G. Poddar, "Field Oriented Control Strategy for a Differential Induction Machine," IEEE International Conference on Power Electronics, Drives and Energy Systems (PEDES), 18-21 Dec. 2018, Chennai, India
3. S. Sinha, S. Mukhopadhyay, D. Maiti, N. K. Deb, S. K. Biswas, "The Differential Induction Motor as a Proposed Direct Drive for Electric Vehicles," IEEE International Conference on Sustainable Energy Technologies and Systems (ICSETS), 26 Feb-1 March 2019, Bhubaneswar, India

Measurement and Instrumentation Section

1. B. No. of Faculty Members: 07

2. A. Area of Research Activities:

- Intelligent Instrumentation
- Signal Processing, Sensorics
- Smart sensing, Biometrics
- Application of E-tongue for quality assesment
- Wireless sensor applications

2. B. Major Research Projects: (Departmental/Individual–Name of the Project–Funding agency)

Dr. Palash Kumar Kundu–Development of Cardiovascular Waveform Simulator for training of medical Professionals–Higher Education, Science & Technology and Bio-Technology, Govt. West Bengal.

Dr. Gautam Sarkar (Role: Co-investigator)–Development and Validation of Algorithm for Estimation and Tracking of High Velocity Manoeuvring Targets. –DRDL, Ministry of Defense, Govt. of India, Hydrabad.

Dr. Gautam Sarkar (Role: Co-investigator)–Robustness analysis of AFADEC control laws covering redundancy management.–GTRE, DRDO, Ministry of Defense, Govt. of India, Bengaluru.

2. A. Invited Lectures Delivered/ Session Chaired:(Name of the Teacher–Type of Participants–Name of seminar/conference–Place and Duration)

Amitava Chatterjee–UG and PG students, Research Scholars, and Faculty Members–Chaired Session in First IEEE Conference on Applied Signal Processing (ASPCON), organized by IEEE Signal Processing Society Kolkata Chapter (date: December 7-9, 2018)–Jadavpur University, December 8, 2018

Amitava Chatterjee–UG and PG students, Research Scholars, and Faculty Members–Delivered Invited Lecture on “Sparse and Collaborative Representation Based Approaches for Biometric Systems” organized by Department of Applied Physics, Calcutta University, Kolkata, India–Department of Applied Physics, Calcutta University, Kolkata, India, 02 March, 2019

Amitava Chatterjee–INAE Fellows–Delivered INAE Fellow Presentation Lecture during INAE Annual Convention 2018 on “Sparse Representation and Machine Learning based Solutions for Instrumentation Systems and Control Systems” on December 14, 2018–INAE Annual Convention, Research Centre Imarat (RCI), Hyderabad, 14 December, 2018

Amitava Chatterjee–Faculty Members–Delivered Invited Lecture on “Bacterial Foraging Optimization and Gravitational Search Algorithm: Theory and Applications” (Occasion: TEQIP Sponsored FDP under Twinning Agreement on “Optimization Techniques and its Application in Science & Technology” organized by Dept of Electrical Engineering and Dept of Mathematics, Tripura Institute of Technology, Narsingarh, Agartala, Tripura) –Tripura Institute of Technology, Narsingarh, Tripura, 10 December, 2018

Amitava Chatterjee–UG and PG students and Faculty Members–Delivered Invited Lecture on “Application of Modern Control System in Real World: An Overview of Sliding Mode Control”–Department of Electrical Engineering, National Institute of Technology Mizoram, 11 October, 2018

Amitava Chatterjee–UG and PG students, Research Scholars, and Faculty Members–Delivered Invited Lecture on “Spoofing and Anti-Spoofing in Biometrics: Challenges and Solutions” (Occasion: “One day Technical Lecture Meeting on Cutting-edge Perspectives of Intelligent Systems Developments for Social Cause” organized by IEEE CAS Chapter Kolkata Section, IET Kolkata Network and Electrical Engineering Department, Jadavpur University)–Jadavpur University, Kolkata, India, 27 July, 2018

Amitava Chatterjee–UG and PG students, Research Scholars, and Faculty Members–Delivered Invited Lecture on “Fuzzy Systems and Fuzzy Control:From Theory to Implementation” (Occasion: FDP on “Enhancement of Quality Education and Research”, organized by University of Engineering and Management (UEM), Kolkata, India (Duration: 2-6 July, 2018))–Jadavpur University, Kolkata, India, 27 July, 2018

Amitava Chatterjee–UG and PG students, Research Scholars, and Faculty Members–Delivered Invited Lecture on “Pursuit Algorithms for Sparse Representations in Signal and Image Processing” (Occasion: Workshop on “Recent trends in Machine Learning and Soft Computing”, organized at Department of Comp Sc and Engg, National Institute of Technology Durgapur (Duration: 16-20 April, 2018)–Department of Comp Sc and Engg, National Institute of Technology Durgapur, 20 April, 2018

Palash K. Kundu–Invited speaker–National Level Project based workshop entitled “Internet of Things-A Practical Perspective–RCC Institute of Information Technology, Kolkata, from 6-07-2018 to 10-07-2018

Palash K. Kundu–Invited speaker–All India seminar on the topic Energy System: Generation, Utilization and Control–Electrical Engineering, Budge budge Institute of Technology, Budge budge, Kolkata.–from 21-02-2019 to 22-02-2019.

Palash K. Kundu–Invited speaker–Hands on workshop on the topic Biomedical Signal Analysis–Techno-Salt lake 04-03-2019.

Palash K. Kundu–Invited speaker–Faculty Development Programme on the topic “Analog Signal Acquisition, Analog Filtering , A/D conversion and Digital Filtering –Electrical Engineering, Techno International , New Town, Kolkata.from 04-02-2019 to 08-02-2019

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Sugata Munshi–UG Students–Delivered lecture on “Introduction & Industrial Application of different Transducers”, organized by the Department of Electrical Engineering, Pailan Technical Campus–Pailan Technical Campus, 12th May, 2018

Sugata Munshi–Practicing Engineers –Delivered lecture on “Issues and Trends In Sensorics”. One day technical seminar on “Evolving Power Sector” organized by “West Bengal State Power Engineers’ Association”–Bidyut Bhavan, Kolkata, 19th May, 2018.

Sugata Munshi–UG Students–Delivered lecture on “*Intelligent Instrumentation*” and “Programmable Logic Controllers”–Tripura Institute of Technology, Agartala, 3rd August, 2018.

Sugata Munshi–Faculty members & Students–Delivered Distinguished Professor Lecture on ‘*A cursory View of Capacitive Sensors*’–Electrical Engineering Department of ‘Institute of Engineering and Management’, Salt Lake, Kolkata, 4th October, 2018

Sugata Munshi–Practicing Engineers and Academicians–Delivered 16th Prof. J. K. Chowdhury Memorial talk on “Trends and Issues In Sensorics”–Institution of Engineers (India), West Bengal State Centre, 5th October, 2018.

Sugata Munshi–Chaired a Technical Session in ASPCON-2018–Jadavpur University, Kolkata, December-7-9, 2018.

Biswajit Bhattacharyya–Management Trainee, CESC–Power Distribution Technology–HRD Department, CESC Limited,P-18 Taratala Rd, Kolkata – 88. Duration: One day on 4th February, 2019.

Biswajit Bhattacharyya–Undergraduate students of Pailan College of Management & Technology–Microcontroller Based System Development Using Arduino UNO–Pailan College of Management & Technology,Pailan Park, Kolkata – 104. Duration: Two days. November 2 – 3, 2018.

4. A. Books / Monographs Published: (Name of the Teacher–Name of the Book–Name of the Publisher)

Amitava Chatterjee–Kaushik Das Sharma, Amitava Chatterjee, and Anjan Rakshit, *Intelligent Control: A Stochastic Optimization based Adaptive Fuzzy Approach*.

Debangshu Dey–Edited Volume by,Sovan Dalai, Debangshu Dey, Biswendu Chatterjee and Susanta Ray” *Proceedings of 2018 IEEE Applied Signal Processing Conference (ASPCON)* Electronic ISBN: 978-1-5386-6686-9ISBN: 978-1-5386-6687-6–IEEE (Institute of Electrical and Electronics Engineers).

4. B. Articles Published in the Journals (including National / International/ Peer reviewed Journal): (Name of the Teacher –Name of the Articles–Name of the Journal–Date of Publication–Volume)

D. Dey–Soumyadeep Paul, Saptarshi Chatterjee, Debangshu Dey, Sugata Munshi, “Morphological Operations with Iterative Rotation of Structuring Elements for Segmentation of Retinal Vessel Structures”,–*Multidimensional Systems and Signal Processing*, Springer (Impact Factor 1.31), Vol. 30, No. 1, pp. 373–389, 2018.–2018.–Vol. 30, No. 1, pp. 373–389,

D. Dey–P. Mondal, B. Roy, D. Dey, “Optimization of luminaire layout to achieve visually comfortable and energy efficient indoor general lighting scheme by Particle Swarm Optimization”, –*Journal of the Illuminating Engineering Society*, Taylor and Francis (Impact Factor 2.56),–2018. –DOI: 10.1080/15502724.2018.1533853

D. Dey–N. Chatterjee, B. Bhattacharyya, D.Dey and S. Munshi, “A Combination of Astable Multivibrator and Microcontroller for Thermistor Based Temperature Measurement over Internet, –*IEEE Sensors Journal* –2019.–Vol. 19 , No. 9, pp. 3252 – 3259,

D. Dey–Saptarshi Chatterjee, Debangshu Dey, SugataMunshi, “Integration of Morphological Preprocessing and Fractal Based Feature Extraction with Recursive Feature Elimination for Skin Lesion Types Classification”, –Accepted in *Computer Methods and Programs in Biomedicine* (Impact factor: 3.427), Elsevier 2019.–Manuscript no: CMPB_2019_223_R1,

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D. Dey–Saptarshi Chatterjee, Debangshu Dey, Sugata Munshi, “Extraction of features from cross correlation in space and frequency domains for classification of skin lesions”,–*Biomedical Signal Processing and Control*, Elsevier –2019.–Vol. 53.

D. Dey–P. Mondal, B. Roy, D. Dey, “Indoor lighting optimization – a comparative study between grid search optimization and particle swarm optimization”,–*Journal of Optics*, Springer, –2019–Manuscript no: OPTI-D-19-00007R1.

Amitava Chatterjee–Pritam Paral, Amitava Chatterjee, and Anjan Rakshit, “Vision sensor based shoe detection for human tracking in a human-robot coexisting environment: A photometric invariant approach using DBSCAN algorithm”–*IEEE Sensors Journal* (Impact Factor: 2.512)–2019–vol. 19, issue 12, pp. 4549-4559.

Amitava Chatterjee–Pritam Paral, Amitava Chatterjee, and Anjan Rakshit, “OPTICS-based template matching for vision sensor-based shoe detection in human-robot coexisting environments”–*IEEE Transactions on Instrumentation and Measurement* (Impact Factor: 2.456)–2019–Accepted for publication.

Amitava Chatterjee–Dibyendu Pal, Amitava Chatterjee, and Anjan Rakshit, “Robust-stable quadratic-optimal fuzzy-pdc controllers for systems with parametric uncertainties: a PSO based approach”–*Engineering Applications of Artificial Intelligence* (Impact Factor: 2.894), Elsevier publishers–2018 vol. 70, pp. 38-51.

Palash Kundu–“Development of Lossless Compression Algorithms for Power System Operational Data–IET Generation, Transmission and Distribution–September 2018–Vol. 12, Issue. 17.

Palash Kundu–Development of Cloud based Power System Operational Data Management System–IET Generation, Transmission and Distribution–March 2019–Vol. 13, Issue. 5.

Sugata Munshi–Nabanita Chatterjee, Biswajit Bhattacharyya, Debangshu Dey and Sugata Munshi, “A Combination of Astable Multivibrator and Microcontroller for Thermistor Based Temperature Measurement over Internet”,–*IEEE Sensors Journal*–2019–Vol. 19, Issue 9, pp. 3252 – 3259.

Sugata Munshi–Soumyadeep Pal, Saptarshi Chatterjee, Debangshu Dey and Sugata Munshi, “Morphological Operations with Iterative Rotation of Structuring Elements for Segmentation of Retinal Vessel Structures”–*Multidimensional Systems and Signal Processing*, Springer–January 2019 –Vol. 30, Issue 1, pp. 373-389.

Biswajit Bhattacharyya–Aven Murmu, Biswajit Bhattacharyya and Sugata Munshi, “A Synergy Of Voltage-To-Frequency Converter And Continued-Fraction Algorithm For Processing Thermocouple Signals”–*Measurement*, Elsevier Publisher –2018–Volume 16, pp 514 – 522.

Gautam Sarkar–Santanu Chattopadhyay, Gautam Sarkar and Arabinda Das “Sleep Apnea Diagnosis by DWT based Kurtosis, Radar and Histogram Analysis of Electrocardiogram”, –*IETE Journal of Research*, –2018–July, 2018, Doi: 10.1080/03772063.2018.1507765.

Gautam Sarkar –Subhra J. Sarkar, Palash K. Kundu, Gautam Sarkar, “Development of Cloud based Power System Operational Data Management System–*IET Generation, Transmission & Distribution*, February, 2019 –Vol. 13 Issue 5, pp. 644-651.

6. Major Achievements:

- a) Debangshu Dey was awarded Teachers Associateship for Research Excellence (TARE-SERB) by DST, GoI in 2018.
- b) Debangshu Dey was awarded “Young Faculty Research Fellowship” under Visvesvaraya PhD Scheme, Ministry of Electronics & Information Technology, GoI in 2019.

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- c) Amitava Chatterjee became Fellow of Indian National Academy of Engineering (FNAE), with effect from November 01, 2018.
- d) Amitava Chatterjee served as a Member of “IEEE Transactions on Instrumentation and Measurement (TIM)’s Best Paper Award Committee” in 2018.
- e) Amitava Chatterjee is adjudged “Outstanding Associate Editor of IEEE Transactions on Instrumentation and Measurement” in 2018.
- f) Amitava Chatterjee continues to serve as an Editor of *IEEE Transactions on Vehicular Technology*.
- g) Amitava Chatterjee continues to serve as an Associate Editor of *IEEE Transactions on Instrumentation and Measurement*.
- h) Amitava Chatterjee continues to serve as an Associate Editor of *IEEE Sensors Journal*.
- i) Amitava Chatterjee continues to serve as an Editor of *Engineering Applications of Artificial Intelligence Journal*, Elsevier Publishers.

Power System Section

1. B. Number of Faculty Members: 05

3. A. Invited Lectures Delivered/Sessions Chaired: (Name of the Teacher–Type of Participants–Name of Seminar/ Conference–Place and Duration)

Prof. S. K. Goswami–Invited Lecturer–Advancement of Modern Technology in Engineering and Engineering Science–NIT, Durgapur 13th Nov.- 19th November, 2018

Prof. Subrata Paul–Invited Lecturer–CESC Ltd. Jadavpur University, December 2018,

Prof. S. K. Goswami–Invited Lecturer–CESC Ltd.–Jadavpur University, December 2018,

Dr. Sunita Halder (nee Dey)–Invited Lecturer–CESC Ltd. –Jadavpur University, December 2018, 2hrs

Sri. Ayan Kumar Tudu–Invited Lecturer–CESC Ltd.–Jadavpur University, December 2018, 2hrs

Dr. Sunita Halder (nee Dey)–Invited Lecturer–Renewable Energy and FACTS devices applications in Electrical Engineering–Dr. Sudhir Sur Degree Engineering College, Dum Dum, Kolkata, organized by The Student Chapter, The Institutions of Engineers (India) of Electrical Engineering Department, on 29th March, 2019

5. B. Articles Published in Journals: (Name of the Teacher–Name of the article–Name of the journal–Date of publication–Volume, page no.)

Dulal Manna, Swapan K Goswami, Pranab Kumar Chattopadhyay–Optimisation of droop coefficients of multiple distributed generators in a micro-grid,–*IET Generation, Transmission & Distribution*–2018/8/10 –4108-4116.

Madhumita Kundu and Sudipta Debnath– “High Impedance Fault Classification in UPFC Compensated Double Circuit Transmission Lines using Differential Power Protection Scheme,” –*1st IEEE Conference on Applied Signal Processing*–7-9 Dec. 2018.

Anushree Roy and Sudipta Debnath–Smart Load for reactive power compensation and harmonic suppression in distribution system–*1st IEEE Conference on Applied Signal Processing*–7-9 Dec. 2018

Subhomita Roy and Sudipta Debnath–ANN Based Method for Power System Harmonics Estimation–*1st IEEE Conference on Applied Signal Processing*–7-9 Dec. 2018.

Subhra De and Sudipta Debnath –Virtual Instrument for Measurement of Power Quality in Unbalanced Three Phase System–*1st IEEE Conference on Applied Signal Processing*–7-9 Dec. 2018.

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Alok Kumar, Aditya, Saurav Raj, Aman Kumar Swarnkar, Kundan Barnwal, Sudipta Debnath–"A Single Ended Wavelet Based Fault Classification Scheme in Transmission Line"–*1st IEEE Conference on Applied Signal Processing–7-9 Dec. 2018.*

Sayan Paramanik, Krishna Sarker, Debashis Chatterjee, SK Goswami–Smart Grid Power Quality Improvement Using Modified UPQC–*2019 Devices for Integrated Circuit (DevIC)–2019/3/23–356-360.*

Sayan Paramanik, Krishna Sarker, Biswajit Mahanty, Avijit Chakraborty, Debashis Chatterjee, SK Goswami – "Smart Wireless Distribution for Micro Grid System"–*2019 Devices for Integrated Circuit (DevIC)–2019/3/23–348-355.*

Suman Biswal, Arnab Ghosh, Sajjan Kumar, Niladri Chakraborty, Swapan Kumar Goswami–"Cuckoo Search Algorithm Based Cost Minimization by Optimal DG and Capacitor Integration in Radial Distribution Systems", –*20th National Power Systems Conference (NPSC)–2018/12/141-6.*

Chandan Jana, Swapan Kumar Goswami, Sugata Munshi –Distributed Generation Placement Based on System Reliability in Unbalanced Distribution System with Uncertainty in Load Demand–*2018 3rd International Conference for Convergence in Technology (I2CT)–2018/4/6–1-5.*

T Malakar, SK Goswami, A Rajan– "Demand Side Management of a Commercial Customer Based on ABC Algorithm"–*Soft Computing for Problem Solving–2019–617-634.*

ELECTRONICS & TELECOMMUNICATION ENGINEERING

Phone : +91-33-2414-6002
Fax : +91-33-2414 -6217
Int. : 2457-2404
H.O.D. : Prof. Sheli Sinha Chaudhuri
E-mail : hodetce@jadavpuruniversity.in

1. A. Courses Offered:

- **B.E. Tel.E.** : 4 years (82 x 2 + 86 x 2 + 3+6+6 (for lateral entry) = 351)
- **M.E. Tel.E.** : 2 years (30 (including 5 Q.I.P) x 2 = 60)
- **Evening M.Tech.** :
 1. VLSI and Microelectronics, 3 years (18 x 3 = 54)
 2. Intelligent Automation and Robotics, 3 years (18 x 3 = 54)

1. B. Number of Faculty Members: 16+1 (DST Inspire Faculty)

2. A. Area of Research Activities: (Broad Areas)

1. Antenna Analysis and Synthesis
2. Artificial Intelligence
3. Biomedical Image/Signal Processing
4. Brain-Computer Interfaces
5. Cognitive Cybernetics

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6. Computer Vision
 7. Cryptography, Watermarking
 8. Digital Design
 9. Electron Devices and Circuits
 10. Embedded Systems
 11. Error Correcting Coding Techniques
 12. Evolutionary and Swarm Optimization
 13. Heart Sound Anomaly Detection System
 14. Intelligent Transport System
 15. Matematerials
 16. MEMs, NEMs and Gas Sensors
 17. Microstrip Antennas and Filters
 18. Microwave and Millimeter Wave Antennas
 19. Microwave Passive Device
 20. Mobile Ad-hoc Networks (MANET)
 21. Multimedia Analysis
 22. Nanodevices and Low power VLSI circuits
 23. Network Densification
 24. Optics and Optical Network
 25. Pattern Recognition
 26. Resource Management
 27. RF Energy Harvesting
 28. RF VLSI
 29. RFID and its Applications
 30. Robotics
 31. Signal Processing
 32. Substrate Integrated Waveguide
 33. Video Communication Over Cognitive Radio Platform
 34. VLSI Design
 35. Wireless Communication
 36. Wireless Sensor Networks
- 2. B. Major Research Project:**(Name of the Faculty – Title of the Project – Funding Agency – Amount (Rs.)
– Duration – Status (Completed / Ongoing)
- Prof. Amit Konar**
1. Title of the Project – UPE-II Umbrella Project in Cognitive Science
Funding Agency – UGC
Amount (Rs.) – Rs. 3.7 crores
Duration – 2016 April to 2019 March
Status (Completed / Ongoing) – Completed

Prof. Bhaskar Gupta

2. Title of the Project – Antenna System Design for Proximity Sensor
Funding Agency – ARDE, DRDO
Amount (Rs.) – 24.725 lakhs
Duration – 2016-2018
Status (Completed / Ongoing) – Ongoing
3. Title of the Project – Advanced Materials and Systems (Devices and Systems Subgroup) (Jointly with Prof. S. K. Sarkar)
Funding Agency – UGC under UPE II scheme
Amount (Rs.) – 26.032 lakhs
Duration – 2016-2018
Status (Completed / Ongoing) – Ongoing
4. Title of the Project – Investigation on Electromagnetic Energy Absorption in Plants and Fruits along with Consequent Effects
Funding Agency – JU-RUSA 2.0 Departmental support towards up-gradation in research
Amount (Rs.) – 4.99 lakhs
Duration – 2019-2020
Status (Completed / Ongoing) – Ongoing

Prof. Chayanika Bose

5. Title of the Project – Modeling Optoelectronic and Transport Characteristics Of Semiconductor Nanostructures
Funding Agency – UPE-II, UGC
Amount (Rs.) – Rs. 13 lakhs
Duration – 7 years
Status (Completed / Ongoing) – Completed on March 31, 2019

Prof. Iti Saha Misra

6. Title of the Project – An Engineering Approach for a Complete System Design of Heart Sound Anomaly Detection: An IoT Based Platform
Funding Agency – RUSA 2.0, Jadavpur University
Amount (Rs.) – Rs. 6 lakhs
Duration – March, 2019 –March, 2020
Status (Completed / Ongoing) – Ongoing
7. Title of the Project: Design and Development of Remote Monitoring of e-health system over Wireless Platform using Cognitive Radio
Principal Investigator – Prof. Iti Saha Misra,
Funding Agency – UPE-II, UGC
Amount (Rs.) – Rs. 16.25 lakhs
Duration – March, 2016–March, 2019
Status (Completed / Ongoing) – Completed

Prof. Subir Kumar Sarkar

8. Title of the Project – Development of efficient solar cell structures with the exploration of suitable material in software domain and characterization of such solar cells
Funding Agency – Rashtriya Uchchar Shiksha Abhiyan (RUSA 2.0)
Amount (Rs.) – 4.496 lakhs
Duration – 2019–2020
Status (Completed / Ongoing) – Ongoing
9. Title of the Project – Cost Effective and Manpower Efficient Real-Time Implementation of RFID Based Surveillance System for Poultry Based Industry in Rural/Urban Region to Solve the Avian Influenza/Bird Flu Problem
Funding Agency – Department of Science and Technology-West Bengal (DST-WB)
Amount (Rs.) – 15.908 lakhs
Duration – 2018-2021
Status (Completed / Ongoing) – Ongoing
10. Title of the project – Analytical Modeling and simulations of SOI/SON MOSFETs: a comparative analysis to get better device for next generation integrated circuits
Funding Agency – UGC MRP-MAJOR-ELEC-2013-19144
Amount (Rs.) – 8.325 lakhs
Duration – 2016-2018
Status (Completed / Ongoing) – Completed
11. Title of the project – Analytical Modeling and simulation based verification for low dimensional devices suitable for Low Power Application
Funding Agency – UGC UPE Phase-II
Amount (Rs.) – 7.32 lakhs
Duration – 2016-2019
Status (Completed / Ongoing) – Completed
12. Title of the project – Low Power ASIC-VLSI Implementation of Secure and Authentication Algorithms for Defense Application
Funding Agency – UGC UPE Phase-II
Amount (Rs.) – 7.82 lakhs
Duration – 2016-2019
Status (Completed / Ongoing) – Completed
13. Title of the project – PURSE II
Funding Agency – Department of Science and Technology
Amount (Rs.) – 85 Lakhs
Duration – 2015-2018
Status (Completed / Ongoing) – Completed

Dr. Sayan Chatterjee

14. Title of the Project – Design and Development of X band Dual Polarized Waveguide Slotted Array Antenna
Funding Agency – Indian Space Research Organization under RESPOND scheme
Amount (Rs.) – 20.46 lakhs
Duration – 2017–2019

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Status (Completed / Ongoing) – Ongoing

15. Title of the Project – Establishment of Special Manpower Development Facility (SMDP-C2SD)

Funding Agency – MeITy, India

Amount (Rs.) – 136 lakhs

Duration – 2015–2020

Status (Completed / Ongoing) – Ongoing

Dr. Chandrima Mondal

16. Title of the Project – Establishment of Special Manpower Development Facility (SMDP-C2SD) (Jointly with Dr. Sayan Chatterjee)

Funding Agency – MeITy, India

Amount (Rs.) – 136 lakhs

Duration – 2015–2020

Status (Completed / Ongoing) – Ongoing

3. A. Invited Lectures Delivered/Sessions Chaired: (Name of the Teacher, Type of Participants, Name of the Seminar / Conference etc. Place, Duration)

Invited Lectures Delivered

Prof. Amit Konar

1. Invited lecture on “Brain Controlled Robotics” on 24th April 2018, at the Dr. Sudhir Chandra Sur Degree Engineering College (DSCSDEC), Kolkata.
2. Invited lecture on “Brain Inspired Robotics” on 17th May 2018 at the Institution of Engineers, Gokhel Road, Kolkata.
3. Delivered a one day lecture on “Brain Computer Interfacing and Robotics” on 31st August 2018 at the Tripura Institute of Technology (TIT), Tripura, as a part of the twinning program between JU and TIT.
4. Invited lecture on “Brain Computer Interfacing and Rehabilitative Robotics” on 14th September 2018, at the Ailabs Academy, Kolkata, an IT company dealing with Artificial Intelligence research.

Prof. Ananda Shankar Chowdhury

5. Invited talk on “Computer Vision for Biomedical Problems” at TCS Research & Innovation Lab., Kolkata, India, February 2019.
6. Invited tutorial on “Unsupervised Video Data Processing: From Third-Person to First-Person” at UGC sponsored refresher course, Computer Science, Calcutta University, India, January 2019.
7. Invited tutorial on “Information Extraction in Videos: From Third-Person to First-Person”, at UGC sponsored inter-disciplinary refresher course on “Advances in Instrumentation and Automation: Role of ICT”, Instrumentation and Electronics Engineering, Jadavpur University, India, December, 2018.
8. Invited talk on “Video and Image Processing” at IEEE Technical Lecture, NetajiSubhas Engineering College, Kolkata, India, October 2018.
9. Invited tutorial on “Video Processing with Graph-based Representations and Statistical Techniques” at Fifth Summer School on Computer Vision, Graphics and Image Processing, ISI Kolkata, June 2018.

Prof. Bhaskar Gupta

10. Keynote speaker at “Summer School on Antenna and Microwave Engineering (SUSAME) 2018,” sponsored by TEQIP III, NIT Silchar, 23-27 July 2018.
11. Invited lecture at International Microwave and RF Conference (IMaRC) held from November 28 to 30, 2018 in Kolkata, India.
12. Invited lecture on Electromagnetics and Antenna Design, May 23-27, 2018 at IIT, BHU.

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Prof. Iti Saha Misra

13. Delivered a three hour invited lecture on “Journey of Mobile Wireless Communication towards 5G Development”, for the short terms course at ECE Department, Veer Surendra Sai University of Technology, Burla, Odisha, on 5th May, 2018.
14. Resource person and speaker for the TEQIP III sponsored one week short term course on “Recent Trends in Wireless Communications: Challenges and Opportunities” (ReTWiC 2018) between December, 03 – 07, 2018.
15. Delivered ComSoc Lecture on 18 May 2018 at the Inaugural Session of the opening of ComSoc Student Branch Chapter at Silchar, NIT.
16. Delivered an invited talk on “Cognitive Radio and Some Prospective Applications for 5G Communication”, at ICCAP-2019, Sikkim Manipal Institute of Technology, Majitar, East Sikkim, Sikkim-737136, India, 27th Feb 2019.
17. Delivered Inaugural Lecture on Wireless Communication and Algorithms: Opportunities for Computer Science Researcher”, on 23 Nov 2018 at the Heritage Institute of Technology.

Prof. Sheli Sinha Chaudhuri

18. Delivered an invited talk on “Latest Trends in Computer Vision Technology and its Applications” in Optronix 2019, IEEE 5th International Conference on Opto-electronics and Applied Optics, UEM, Kolkata, March 18-20, 2019
19. Delivered a lecture on “Digital Image Processing and its Application in Hazy Images” in FDP Analog and Digital Systems, Tripura Institute of Technology, Agartala, December 5-7, 2018.
20. Invited talk on “Digital Image Processing and its Application in Image Restoration” to 2nd and 3rd year students at UEM, Kolkata, 3rd October, 2018.
21. Invited lecture in faculty development program on “Aliasing Effects in Digital Image Processing”, Rajasthan Technical University, Kota, June, 27-29, 2018.

Prof. Subir Kumar Sarkar

22. IEEE Distinguished Lecture on “Renovative and Innovative Device Structures Suitable for Ultra Low Power VLSI Circuits” on 1st March, 2019, in 9th IEEE EDS Mini Colloquium (MQ) organized by the National Institute of Science & Technology (NIST), Berhampur, Orissa.
23. IEEE Distinguished Lecture on “Computation without Power Dissipation” on 31st July, 2018 in IEEE EDS Distinguished Lecture organized by ED MSIT Student Branch Chapter, IEEE MSIT Student Branch, in association with the Department of Electronics and Communication Engineering, Meghnad Saha Institute of Technology, Kolkata.
24. IEEE Distinguished Lecture on “Renovation and Innovation in Nano-Device Structures for Performance Improvement” on 31st July, 2018 at the IEEE EDS Distinguished Lecture organized by ED MSIT Student Branch Chapter, IEEE MSIT Student Branch, in association with the Department of Electronics and Communication Engineering, Meghnad Saha Institute of Technology, Kolkata.
25. IEEE Distinguished Lecture on “MOSFET Scaling” on 23rd July, 2018, at the IEEE ED Mini Colloquium (MQ) in association with Student Branch Chapter of IEEE EDS Society organized by Department of Electronics and Communication Engineering, Kalyani Government College, Kalyani, West Bengal.
26. IEEE Distinguished Lecture on “Impacts of MOSFET Device Scaling” on 10th July, 2018, at the IEEE EDS Distinguished Lecture organized by Department of Electronics and Communication Engineering in association with the student chapter of IEEE EDS Society organized by RCCIIT, Kolkata.
27. Invited speech as guest lecturer on “Bridging the Gap in Our Knowledge on Nano-devices and VLSI Design Issues” in Srinix College of Engineering, Balasore, Orissa on 1st December, 2018.
28. Invited speech on “Industry-Institute Collaboration for the Survival: Research and Product Development” in Srinix College of Engineering, Balasore, Orissa on 1st December, 2018.

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29. Invited speech on “Evolutionary and Revolutionary FET Structures for Application in Efficient and Ultra Low Power VLSI Circuits” in 2018 IEEE Electron Device Kolkata Conference (EDKCON) organized by IEEE EDS Kolkata Chapter, in Pride Hotel, Kolkata on 25th November, 2018.
30. Invited speech on “Digital Piracy : Watermarking Scheme is a Potential Solution” at the JB Institute of Engineering and Technology (Autonomous), Hyderabad, Telangana, India on 28th July, 2018.
31. Invited speech on “VLSI Circuits Design for Computation without Power Dissipation” in JB Institute of Engineering and Technology (Autonomous), Hyderabad, Telangana, India on 28th July, 2018.
32. Invited speech as guest lecturer on “Wireless Sensor Networks” at the Nalla Narasimha Reddy Education Society, Hyderabad, Telangana, India on 26th July, 2018.
33. Invited speech as guest lecturer on “Scaling Approaches in MOSFET” at the Nalla Narasimha Reddy Education Society, Hyderabad, Telangana, India on 26th July, 2018.
34. Invited speech on “Trust Management Systems for Wireless Self-Organizing Networks” at the International Conference on Communication Devices and Networking (ICCDN) – 2018, organized by Department of Electronics and Communication Engineering, SMIT, Majitar, Sikkim on 3rd June, 2018.
35. Invited lecture on “Trust Management and Energy Efficient Schemes in Wireless Self-Organizing Networks” on 18th March 2019, organized by the School of Computing, Engineering and Mathematics of Western Sydney University, Australia.
36. Guest seminar lecture on “Trust Management System in Wireless Self-organizing Networks” on 12th March 2019, organized by the School of Electrical and Data Engineering, Faculty of Engineering and IT of University of Technology Sydney, Australia.
37. Invited seminar presentation on “Computation without Power Dissipation: Searching Possibilities” on 11th March 2019, organized by Macquarie University, Sydney, Australia.
38. Delivered a one and half hour tutorial on “Advanced VLSI Design: Issues and Challenges (Part-I)” on 21st June 2018 in the short term course sponsored by TEQIP Phase-III in the Department of Electronics and Telecommunication Engineering, Jadavpur University.
39. Delivered a one and half hour tutorial on “Advanced VLSI Design: Issues and Challenges (Part-II)” on 23rd June, 2018 in the short term course sponsored by TEQIP Phase-III in the Department of Electronics and Telecommunication Engineering, Jadavpur University.

Prof. Sudipta Chattopadhyay

40. Delivered a lecture on “Binary Sequences in Spread Spectrum Multiple Access Communication” at short term course on Digital Systems and Digital Communications at Rajasthan Technical University, Kota, held between June 27-29, 2018.
41. Delivered a lecture on “Binary Sequences in Spread Spectrum Multiple Access Communication” at faculty development program on Analog and Digital Communication System at Tripura Institute of Technology, Agartala, held between December 05-07, 2018.
42. Delivered a lecture on “The Journey of IEEE Women in Engineering” at the inauguration ceremony of The Women in Engineering Student Branch, Assam, on February 15, 2019.

Dr. Jaydeb Bhaumik

43. Delivered a lecture on “Design and Application of Block Codes in Communication Systems” at faculty development program on Analog and Digital Communication System at the Tripura Institute of Technology, Agartala, held between December 05-07, 2018.
44. Delivered a lecture on “Design and Implementation of Block Codes” at short term course on Digital Systems and Digital Communications at Rajasthan Technical University, Kota, held between June 27-29, 2018.

Dr. Sayan Chatterjee

45. Delivered a one-day lecture on “IEEE Student Activities,” organized by IEEE WIE branch chapter, NIT Shilchar, on 15th February, 2019.

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46. Delivered two lectures on “Phase Locked loop” and “Receiver Architecture” at short term course on Digital Systems and Digital Communications at Rajasthan Technical University, Kota, during June 27-29, 2018.
47. Delivered lecture on “Substrate Integrated Waveguide in Future Communication” in one day seminar on Revolution in Communication at Sir R N Mookerjee Hall, Institute of Engineers, Kolkata, on 11th April, 2018.

Dr. Pratyusha Rakshit

48. Invited lecture on “Evolutionary Optimization and Its Application” at symposium on Social Transformation In Smart Mode-2019 (STSM-19), organized by Department of Electronics and Communication Engineering, Future Institute of Engineering and Management, on March 8, 2019.
49. Delivered a lecture on “Multi-Robot Coordination Using Differential Evolution” at faculty development program on Analog and Digital Communication System at Tripura Institute of Technology, Agartala, between December 05-07, 2018.
50. Invited lecture on “Multi-Robot Coordination” in Special Topics in Engineering and Technology at Department of Information Technology, Institute of Engineering and Management, on August 1, 2018.

Sessions Chaired

Prof. Ananda Shankar Chowdhury

1. Chaired a session at the Third International Conference on Computer Vision and Image Processing (CVIP) endorsed by IAPR at IIITDM Jabalpur, India, September 2018.

Prof. Bhaskar Gupta

2. Chaired a session at the International Microwave and RF Conference (IMaRC) held from November 28 to 30, 2018 in Kolkata, India
3. Chaired a session at MMS 2018 The 18th Mediterranean Microwave Symposium, Istanbul, Turkey from 31 October -2 November 2018.
4. Chaired a session in the 9th Annual IEEE Information Technology; Electronics and Mobile Communication Conference (IEEE IEMCON 2018) University of British Columbia; Vancouver, Canada 1st -3rd November 2018.

Prof. Sheli Sinha Chaudhuri

5. Chaired a session at the International Conference on Range Technology, DRDO Chandipur, February 15-17, 2019.
6. Chaired a session at the IEMENTech 2018, IEM Kolkata, May 4-5, 2018

Prof. Subir Kumar Sarkar

7. Chaired the technical session on “Circuit and Device Interactions” on 25th November, 2018 at the IEEE Electron Device Kolkata Conference (EDKCON), organized by IEEE EDS Kolkata Chapter, at the Pride Hotel, Kolkata.
8. Chaired the technical session on 03rd June, 2018 at the International Conference on Communication Devices and Networking (ICCDN) 2018, organized by the Department of Electronics and Communication Engineering, SMIT, Majitar, Sikkim on 03rd June, 2018.

Dr. Sayan Chatterjee

9. Chaired a session on “Receiver and Transmitter Components, RF MEMS and Microsystems” on 30th November at the IEEE International Microwave and RF conference (IMaRC-2018) in Kolkata, India.
10. Chaired a session on “MWCD-3” on 31st October, 2018 at the IEEE MMS- 2018 in Istanbul, Turkey.

3. B. Seminar/Workshop/Conference/Symposium Attended:(Name of the Teacher, Name of the Paper Presented, Name of the Seminar, Place, Duration)

Prof. Ananda Shankar Chowdhury

1. Third International Conference on Computer Vision and Image Processing (CVIP) endorsed by IAPR at IIITDM Jabalpur, India, September 2018.

Prof. Bhaskar Gupta

2. Advanced School of Antennas, Lecture on “Antenna Array Synthesis”, KIIT Bhubaneswar, 22-26 June 2018.
3. Keynote Speaker at the “Summer School on Antenna and Microwave Engineering (SUSAME) 2018”, sponsored by TEQIP III, NIT Silchar, 23-27 July 2018.

Prof. Iti Saha Misra

4. International Conference on Advanced Computational and Communication Paradigms (ICACCP-2019) during February 26-28, 2019, Sikkim Manipal Institute of Technology, Majitar, East Sikkim, Sikkim.

Prof. P. Venkateswaran

5. One day seminar on “IoT: Bringing Automation for Better Tomorrow” organized by TRAI, GoI, on September 14, 2018 at The Park Hotel, Kolkata.
6. One week TEQIP–III sponsored national level short term course on “Internet of Things (IoT): Theory and Applications” organized by the Dept. of CSE, IIT KGP during October 24 – 28, 2018 at IIT, Kharagpur.
7. One week AICTE sponsored short term course on “Embedded System Design” organized by the Dept. of E&ECE, IIT KGP during March 25 – 31, 2019 at IIT, Kharagpur.

Prof. Subir Kumar Sarkar

8. Attended as guest lecturer on “Bridging the Gap in our knowledge on nanodevices and VLSI Design Issues” at the Srinix College of Engineering, Balasore , Orissa on 1st December , 2018.
9. Attended as invited speaker on “Industry- Institute Collaboration for the Survival: Research and product Development” at the Srinix College of Engineering, Balasore , Orissa on 1st December , 2018.
10. Attended as invited speaker at the 2018 IEEE Electron Device Kolkata Conference (EDKCON) to deliver invited talk on “Evolutionary and Revolutionary FET Structures for Application in Efficient and Ultra Low Power VLSI Circuits” organized by IEEE EDS Kolkata Chapter, at the Pride Hotel, Kolkata on 25th November, 2018.
11. Attended as invited speaker to deliver an invited speech on “Digital Piracy: Watermarking scheme is a Potential solution” in JB Institute of Engineering and Technology (Autonomous), Hyderabad, Telangana, India on 28th July, 2018.
12. Attended as invited speaker to deliver an invited speech on “VLSI circuits design for computation without power dissipation” at the JB Institute of Engineering and Technology (Autonomous), Hyderabad, Telangana, India, on 28th July, 2018.
13. Attended as guest lecturer to deliver invited speech on “Wireless Sensor Networks” at the NallaNarasimha Reddy Education Society, Hyderabad, Telangana, India on 26th July, 2018.
14. Attended as guest lecturer to deliver invited speech “Scaling Approaches in MOSFET” in Nalla Narasimha Reddy Education Society, Hyderabad, Telangana, India on 26th July, 2018.
15. Attended as invited speaker at the International Conference on Communication Devices and Networking (ICCDN) – 2018 to deliver an invited speech on “Trust Management Systems for Wireless Self-Organizing Networks”, organized by Department of Electronics and Communication Engineering, SMIT, Majitar, Sikkim on 03rd June, 2018.

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16. Attended as Chairperson of the technical session on “Circuit and Device Interactions” on 25th November, 2018 in IEEE Electron Device Kolkata Conference (EDKCON) organized by the IEEE EDS Kolkata Chapter, at the Pride Hotel, Kolkata.
17. Attended as Chairperson of the technical session at the International Conference on Communication Devices and Networking (ICCDN) – 2018, on 03rd June, 2018, organized by Department of Electronics and Communication Engineering, SMIT, Majitar, Sikkim on 03rd June, 2018.
18. Attended a seminar as invited speaker on “Trust Management and energy efficient schemes in Wireless Self-organizing networks” on 18th March 2019, organized by the School of Computing, Engineering and Mathematics of Western Sydney University, Australia.
19. Attended a seminar as guest lecturer to deliver a lecture on “Trust Management system in Wireless Self-organizing networks” on 12th March 2019, organized by the School of Electrical and Data Engineering, Faculty of Engineering and IT of the University of Technology Sydney, Australia.
20. Attended a seminar as invited speaker to deliver a presentation on “Computation without power dissipation: searching possibilities” on 11th March 2019, organized by Macquarie University, Sydney, Australia.

Prof. Sudipta Chattopadhyay

21. All India Student – YP –WIE Congress (AISYWC’18) and presented the activity report of IEEE WIE Kolkata Section in the WIE Track held at the Vidya Vikas Institute of Engineering and Technology, Mysore during September 28 - 30, 2018.

Dr. Sayan Chatterjee

22. Participated in IEEE Region 10 Student | Young Professional | WIE Congress 2018 in Bali, Indonesia from 30th August to 2nd September, 2018.
23. Participated in the “In-class Entrepreneurship Faculty Development Program” at Jadavpur University from 30th July to 7th August 2018 sponsored by the Wadhvani Foundation and technically sponsored by TEQIP-III, JU.
24. Attended “One Day Workshop on Entrepreneurship Development Centre Network (EDCN)” at IIM Kolkata on 23rd April, 2018.
25. Attended “DAAD Falling Walls Lab” at Gandhi Bhavan, Jadavpur University on 7th April, 2018. Sponsored jointly by TEQIP-III, Jadavpur University, DAAD - German Academic Exchange Service and DWIH - German House for Research and Innovation, New Delhi.

Dr. Pratyusha Rakshit

26. Attended the 2018 IEEE World Congress on Computational Intelligence at Rio de Janeiro, Brazil during July 8-13, 2018.
27. Attended the 2018 IEEE Symposium Series on Computational Intelligence at Bengaluru, India during November 18-21, 2018.

3.C. Seminar/Workshop/Conference/Symposium Organized:(Name of the Teacher, Name of the Paper Presented, if any, Name of the Seminar, Place, Duration)

Prof. Ananda Shankar Chowdhury

1. PC Member, MedImage 2018 – Fifth Workshop on Medical Image Analysis, held in conjunction with the Indian Conference on Vision Graphics and Image Processing (ICVGIP), Hyderabad, India, December 2018.
2. Program Co-Chair, CVIP 2018 - Third International Conference on Computer Vision and Image Processing, endorsed by IAPR at IIITDM Jabalpur, India, September 2018.

Prof. Bhaskar Gupta

3. Organized a short term course on “Engineered Materials for Future Electromagnetic Research and Antenna Applications” at Department of Electronics and Telecommunication Engineering, Jadavpur University, between February 06-09, 2019, sponsored by TEQIP Phase III (A Twinning Programme).

Prof. Iti Saha Misra

4. Organized COMSOC Circuit Design Model Contest on 3rd April 2018 in association with Jadavpur University Science Club, ETCE Department JU.
5. Organized COMSOC Industry Interface Program on 3rd May 2018 at Broadband Wireless Communication Lab, ETCE, Annexe Building, First Floor.
6. Organized Membership development program and opening of COMSOC Student Branch Chapter, at NIT Silchar, on 18th May, 2018.
7. Organized Jadavpur University TEQIP-III sponsored workshop on “Towards 5G Development” on 6th July 2018 bring Industry personnel from Ericsson and National Instruments in the ETCE Department, JU.
8. Organized IEEE Distinguished Lecturer Tour program on “Data Centre Networking”, in the Department of ETCE, T-3-7, on 23rd July 2018. Prof. Suresh Subhramaniam, IEEE Fellow, from Washington University, USA delivered the DLT.
9. Organized a one-day seminar on “Graph Theory and its Applications in wireless networks”, at HIT, Kolkata on 23rd November, 2018.
10. Organized three-day workshop on Wireless Communication, Computing and IOT, Data Analytics, sponsored by UPE-II, Jadavpur University, at Amitava Dey Memorial, CSE Dept. 14-16 February 2019.

Prof. Subir Kumar Sarkar

11. Organized a short term course on “Fabrication of Microelectronic Devices for VLSI Circuits and MEMS Based Sensors” during 21st -23rd June, 2018, sponsored by TEQIP Phase-III at the Department of Electronics and Telecommunication Engineering, Jadavpur University.

Prof. Sudipta Chattopadhyay

12. Organized a one-day workshop on “Application of MATLAB in Signal Processing”, held at Digital Signal Processing Laboratory, Dept. of ETCE, Jadavpur University on April 06, 2018, under the banner of IEEE Women in Engineering, Kolkata Section.
13. Organized a one-day workshop on “Fundamentals of MATLAB”, held at Digital Signal Processing Laboratory, Dept. of ETCE, Jadavpur University, on June 25, 2018, under the banner of IEEE Women in Engineering, Kolkata Section.
14. Organized a one-day computer literacy program on “Computer is Fun” in collaboration with IEST Shibpur, held at Begum Rokeya Sabhaghar, 3rd Floor, Main Building, HSS Department, IEST Shibpur, on August 11, 2018, under the banner of IEEE Women in Engineering, Kolkata Section.

Dr. Jaydeb Bhaumik

15. Technical Program Committee Member, ICCDC 2019, HIT, Haldia, India, March 2019.
16. Technical Program Committee Member, ICITAM 2019, HIT, Haldia, India, March 2019.
17. Technical Program Committee Member, ASPCON 2018, Jadavpur University, Kolkata, December 2018.

Dr. Sayan Chatterjee

18. Technical Programme Committee Co-Chair (From July 2018 – June 2019) of IEEE R-10 annual conference TENSYP-2019 at Kolkata.
19. Financial Co-Chair of IMARC-2018 (From April, 2018-December, 2018)) at Kolkata.
20. Organized “E-summit” at Jadavpur University from 6th April to 8th April, 2018 in collaboration with TEQIP-III, JU and Entrepreneur Cell, JU.

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Dr. Chandrima Mondal

21. Local Executive Member of 5th International Conference on Microelectronics, Circuits and Systems held on 19th and 20th May, 2018, in Bhubaneswar, Odisha, India.

3. D. Orientation Courses/ Refresher Courses Attended:(Name of the Teacher, Title of the Course, Duration, Place)

Prof. Bhaskar Gupta

1. Advanced School of Antennas, Lecture on “Antenna Array Synthesis”, KIIT Bhubaneswar, 22-26 June 2018.
2. “Summer School on Antenna and Microwave Engineering (SUSAME) 2018”, sponsored by TEQIP III, NIT Silchar, 23-27 July 2018.

4. A. Books/Monographs etc. Published :(Name of the Teacher, Name of the Book, Name of the Publisher)

Books

Prof. Amit Konar

1. Amit Konar, Sriparna Saha, *Gesture Recognition-Principles, Techniques and Applications*, Studies in Computational Intelligence Book Series 724, Springer, ISBN 978-3-319-62210-1, pp. 1-272, 2018.

Prof. Bhaskar Gupta

2. Ekok Matra Magazine “Amar Gandhi Darshan” January 2019 issue.

Prof. Iti Saha Misra

3. Tamal Chakraborty, Iti Saha Misra, and Ramjee Prasad, *VoIP Technology: Applications and Challenges*, Springer Book Series on Wireless Communication, ISBN 978-3-319-3, August 2018.

Dr. Pratyusha Rakshit

4. Pratyusha Rakshit, Amit Konar, *Principles in Noisy Optimization- Applied to Multi-agent Coordination*, Cognitive Intelligence and Robotics Book Series, Springer, ISBN 978-981-10-8641-0, pp. 1-361, 2018.

Edited Volume

Dr. Jaydeb Bhaumik

1. J. Bhaumik, I. Chakrabarti, B. P. De, B. Bag, S. Mukherjee, “Proceedings of ICCDC 2017 on Communication, Devices, and Computing,” *Lecture Notes in Electrical Engineering, Springer Nature*, vol. 470, April 2018.

Book Chapters

Prof. Mrinal Kanti Naskar

1. “Realization of PSO-Based Adaptive Beamforming Algorithm for Smart Antennas,” in *Advances in Nature-Inspired Computing and Applications, Springer*, pp. 135-163, Feb 2019.
2. “PSO-Based Antenna Pattern Synthesis: A Paradigm for Secured Data Communications,” in *Nature-Inspired Algorithms for Big Data Frameworks, IGI Global*, pp. 218-245, Jan 2019.
3. “Preserving Security of Mobile Anchors Against Physical Layer Attacks: A Resilient Scheme for Wireless Node Localization,” in *Cryptographic Security Solutions for the Internet of Things, IGI Global*, pp. 211-243, Jan 2019.

Prof. P. Venkateswaran

4. S. Dhabal, R. Chakrabarti, and P. Venkateswaran, “Design of higher order quadrature mirror filter bank using simulated annealing-based multi-swarm cooperative particle swarm optimization,” in *Recent Trends in Signal and Image Processing, Advances in Intelligent Systems and Computing book series (AISC, volume 727)*, Springer, pp.1-10, April, 2018.

Prof. Sheli Sinha Chaudhuri

5. Sangita Roy, and Sheli Sinha Chaudhuri, "Fast single image haze removal scheme using self-adjusting: Haziness factor evaluation," in *International Journal of Virtual and Augmented Reality, IGI Global*, January 2019.
6. Sangita Roy, and Sheli Sinha Chaudhuri, "Low complexity single color image dehazing technique," in *Intelligent Multidimensional Data and Image Processing, IGI Global*, June 2018.
7. Sriparna Banerjee, Sangita Roy, and Sheli Sinha Chaudhuri, "Fuzzy logic and log-sigmoid function based vision enhancement of hazy images," in *Intelligent Systems and Applications, ASIC*, vol. 868, 2018.

Prof. Subir Kumar Sarkar

8. Bijoy Goswami, Disha Bhattacharjee, Dinesh Kumar Dash, Ayan Bhattacharya, and Subir Kumar Sarkar, "Drain doping engineering and its influence on device output characteristics and ambipolar conduction on a splitted-drain TFET model," in *Advances in Communication, Devices and Networking in Lecture Notes in Electrical Engineering*, vol. 537, Feb. 2019, 978-981-13-3450-4 pp. 21-27,

Prof. Sudipta Chattopadhyay

9. Subhabrata Banerjee, Sudipta Chattopadhyay, "A Novel Modified Ant Lion Optimizer Algorithm: Extension to Proposed 4D-TC", Chapter 6, *Swarm Intelligence*, vol. 2: Innovation, New Algorithms and Methods, 2018, IET, ISBN 978-1-78651-629-7, pp. 145-184, 2018.

Dr. Pratyusha Rakshit

10. Sriparna Saha, Pratyusha Rakshit, and Amit Konar, "Modified Type-2 Fuzzy Gesture Space Induced Physical Disorder Recognition," in *Computational Intelligence for Semantic Knowledge Management, Springer*, 2019, pp. 91-135.
11. Abhishek Ghosh Roy, and Pratyusha Rakshit, "Motion Planning of Non-Holonomic Wheeled Robots Using Modified Bat Algorithm," in *Nature-Inspired Algorithms for Big Data Frameworks, IGI Global*, 2019, pp. 94-124.

4. B. Articles Published in Journals: (Including National/International & Peer-reviewed Journals) (Name of the Teacher, Name of the Articles, Name of the Journal, Date of Publication, Volume)

Journals

Prof. Amit Konar

1. Diptendu Bhattacharya, and Amit Konar, "Self-adaptive type-1/type-2 hybrid fuzzy reasoning techniques for two-factored stock index time-series prediction," *Soft Computing*, vol. 22, September, 2018, pp. 6229-6246.
2. Arup Kumar Sadhu, Amit Konar, Tanuka Bhattacharjee, and Swagatam Das, "Synergism of firefly algorithm and Q-learning for robot arm path planning," *Swarm and Evolutionary Computation*, vol. 43, December 2018, pp. 50-68.

Prof. Ananda Shankar Chowdhury

3. V. N. Gangapure, S. Nanda, A.S. Chowdhury, "Superpixel based causal multisensor video fusion," *IEEE Transactions on Circuits and Systems for Video Technology*, vol. 28, no. 6, June, 2018, pp. 1263 - 1272.

Prof. Bhaskar Gupta

4. Sudipta Maity, Malay Gangopadhyaya, and Bhaskar Gupta, "Theory and experiment on horizontally inhomogeneous rectangular microstrip antenna," *IET Microwaves Antennas & Propagation*, vol. 13, no. 3, February 2019, pp. 352-359.
5. Buddhadev Pradhan, and Bhaskar Gupta, "A miniaturized band-reject filter using metamaterial structures on silicon substrate for X-band application," *IETE Journal of Research*, accepted for publication in Nov. 2018.

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6. Sudipta Maity, Malay Gangopadhyaya and Bhaskar Gupta, “45°–45°–90° Triangular Dielectric Resonator Antenna with Broadside Radiation Patterns,” *AEÜ International Journal of Electronics and Communications*, vol. 94, pp. 51–54, Sept. 2018 .
7. Sudipta Maity, Rinki Ghosal, Malay Ganguly, and Bhaskar Gupta, “The complete model chart of cylindrical dielectric waveguide,” *IET Electronic Letters*, vol. 54, no. 19, Sept. 2018.
8. Kaushik Patra, Sayantan Dhar, and Bhaskar Gupta, “Analysis of arbitrarily curved microstrip lines for radiated emission,” *IEEE Transactions on Electromagnetic Compatibility*, vol. 60, no. 3, June 2018, pp. 572-579.
9. R. P. Ghosh, K. Patra, B. Gupta, and A. K. Chowdhury, “Accurate formula to determine resonant frequency of double sided printed dipole antenna,” *IETE Journal of Research*, vol. 64, no. 3, May 2018, pp. 331-336.
10. Sudipta Maity, and Bhaskar Gupta, “Approximate theoretical investigations on isosceles triangular dielectric resonator antennas and experimental validation,” *IEEE Transactions on Antennas and Propagation*, vol. 66, May 2018, pp. 2640-2643.

Prof. Chayanika Bose

11. Banibrata Bag, Akinchan Das, I. S. Ansari, A. Proke, Chayanika Bose, and Aniruddha Chandra, “Performance analysis of hybrid FSO systems using FSO/RF-FSO link adaptation,” *IEEE Photonics Journal*, vol. 10, no. 3, June, 2018, pp. 1-17.
12. Supratik Sarkar, Samrat Sarkar, and Chayanika Bose, “Influence of polarization and self-polarization charges on impurity binding energy in spherical quantum dot with parabolic confinement,” *Physica B : Condensed Matter, Elsevier*, vol. 541, July, 2018, pp. 75-78.
13. Samir K. Sadhukhan, Chayanika Bose, D. Saha, and A. K. Chattopadhyay, “Analytical study of a dual pointer based strategy for location update using Node B sojourn time in UMTS networks,” *International Journal of Business Data Communications and Networking, IGI*, vol. 14, no. 2, July, 2018, pp. 44-70.
14. Madhupriya Samanta, Moumita Mukherjee, Uttam Kumar Ghorai, Samrat Sarkar, Chayanika Bose, and Kalyan K. Chattopadhyay, “Ultrasound assisted catalytic degradation of textile dye under the presence of reduced Graphene Oxide enveloped Copper Phthalocyanine nanotube,” *Applied Surface Science, Elsevier*, vol. 449, August, 2018, pp. 113-121.
15. Akinchan Das, Banibrata Bag, Chayanika Bose, and Aniruddha Chandra, “Performance analysis of MIMO FSO link with Alamouti coding and switch-and-examine combining,” *Photonic Network Communications, Springer*, vol.36, no. 3, December, 2018, pp. 350—360.

Prof. Iti Saha Misra

16. Tanumay Manna, and Iti Saha Misra, “Performance analysis of scheduled access mode of the IEEE 802.15.6 MAC protocol under non-ideal channel conditions,” in *IEEE Transactions on Mobile Computing*, February, 2019. doi: 10.1109/TMC.2019.2901852.
17. Tanumay Manna, and Iti Saha Misra, “A prediction and scheduling frame- work in centralized cognitive radio network for energy efficient non-real time communication,” *Communication Systems, Wiley*, vol. 31, no. 13, e3716, Sep. 2018.
18. Dulal Mandal, Arnab Maiti, and Iti Saha Misra, “Low cost portable solution for real time complete detection and analysis of heart sound components,” *Springer Journal: Wireless Personal Communications*, vol. 105, no.4, March 2019, ISSN 0929-6212, DOI 10.1007/s11277-019-06287-0.

Prof. Manotosh Biswas

19. M. Biswas, and M. Sen, “Fast and accurate model for a coax-fed rectangular patch antenna with varying aspect ratio, feed location and substrate electrical parameters,” *Journal of Electromagnetic Waves and Applications*, vol. 33, Dec. 2018, pp. 428-45.
20. M. Biswas, and M. Dam, “Closed-form model to determine the co-axial probe reactance of an equilateral triangular patch antenna”, *International Journal of Microwave and Wireless Technologies*, vol. 10, May 2018, pp. 801-813.

Prof. Mrinal Kanti Naskar

21. "Signature-free watermark for protecting digital signal processing cores used in CE devices [Hardware Matters]," *IEEE Consumer Electronics Magazine*, vol. 8, no. 1, 2019, pp. 92-94, 10 December 2018.
22. "Optimizing DSP cores using design transformation [Hardware Matters]," *IEEE Consumer Electronics Magazine*, vol. 7, no. 4, 2018, pp. 91-94, June 2018.
23. "Wavelet and Curvelet transforms for biomedical image processing," *Handbook of Research on Information Security in Biomedical Signal Processing*, 2018, pp. 95-129, Aug 2018.

Prof. P. Venkateswaran

24. Sandhya Pattanayak, P. Venkateswaran, and R. Nandi, "Autocorrelation based spectrum sensing technique for cognitive radio application," *IEICE Communication Express*, Aug, 2018.
25. S. Dhabal, and P. Venkateswaran, "An improved global-best-guided cuckoo search algorithm for multiplierless design of two-dimensional IIR filters," *Circuits, Systems, and Signal Processing*, Springer, Vol. 38, No. 2, pp. 805–826. March, 2019.

Prof. Subir Kumar Sarkar

26. Arpita Ghosh, and Subir Kumar Sarkar, "Improved small-signal model of single-electron transistor," *IEEE Transactions on Nanotechnology*, vol. 17, no. 6, November 2018, pp. 1244-1251.
27. Anup Dey, Bikram Biswas, and Subir Kumar Sarkar, "Fabrication of Au-modified mixed metal oxide methane gas sensor and experimentation for better performance," *Sensor Letters, ASP*, vol. 17, no.2, March 2019, pp. 250-255.
28. Dinesh Kumar Dash, Priyanka Saha, Aman Mahajan, Tripty Kumari and Subir Kumar Sarkar, "3D analytical modeling and electrical characteristics analysis of gate engineered SiO₂/HfO₂ stacked trigate TFET," *Indian Journal of Physics, Springer*, March 2019, DOI: 10.1007/s12648-019-01446-2.
29. Priyanka Saha, Saheli Sarkhel and Subir Kumar Sarkar, "Two-dimensional potential and threshold voltage modeling of work function engineered double gate high-k gate stack Schottky barrier MOSFET," *Journal of Electronic Materials, Springer*, March 2019, doi.org/10.1007/s11664-019-07133-6.
30. Pritha Banerjee, and Subir Kumar Sarkar, "Performance analysis and investigation of subthreshold short-channel behavior of a dual-material elliptical gate-all-around MOSFET," *Journal of Electronic Materials, Springer*, March 2019, doi.org/10.1007/s11664-019-07082-0.
31. Pritha Banerjee and Subir Kumar Sarkar, "Analysis of short channel characteristics in graded channel dual-material elliptical gate-all-around (GC DM EGAA) MOSFET," *Semiconductor Science and Technology, IOP*, January 2019, DOI: 10.1088/1361-6641/aafc86.
32. Tapas Chakrabarti, Abir Jana, Komal Kumari and Subir Kumar Sarkar, "Dye-sensitized solar cells using natural pigments," *International Journal of Innovations in Engineering and Technology (IJET)*, vol. 12, no. 2, January 2019.
33. Komal Kumari, Tapas Chakrabarti, Abir Jana, Disha Bhattachartjee, Bhaskar Gupta and Subir Kumar Sarkar, "Comparative study on Perovskitesolar cells based on Titanium, Nickel and Cadmium doped BiFeO₃ active material," *Optical Materials, Elsevier*, vol. 84, August 2018, pp.681-688.
34. Pritha Banerjee, and Subir Kumar Sarkar, "Modeling and analysis of a front high-k gate stack dual-material tri-gate Schottky barrier silicon-on-insulator MOSFET with a dual-material bottom gate," *Silicon, Springer*, August 2018, DOI: 10.1007/s12633-018-9940-y.
35. Priyanka Saha, and Subir Kumar Sarkar, "Threshold voltage modeling of linearly graded binary metal alloy gate electrode with DP MOSFET," *IETE Journal of Research, Taylor & Francis*, August 2018, DOI 0.1080/03772063.2018.1508374.
36. Saheli Sarkhel, Priyanka Saha and Subir Kumar Sarkar, "Exploring the threshold voltage characteristics and short channel behavior of gate engineered front gate stack MOSFET with graded channel," *Silicon, Springer*, August 2018, pp.1-8,

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37. Tapas Chakrabarti, Anup Dey and Subir Kumar Sarkar, "Comparative analysis of physical organic and inorganic dyesensitized solar cell," *Optical Materials, Elsevier*, vol. 82, August 2018, pp. 141-146.
38. Tapas Chakrabarti, and Subir Kumar Sarkar, "Analytically performance study of newly modelled HIT solar cell with different materials," *International Journal of Latest Technology in Engineering, Management & Applied Science (IJLTEMAS)*, vol. VII, no. IV, April 2018, ISSN 2278-2540.
39. Tiya Dey Malakar, Partha Bhattacharyya, and Subir Kumar Sarkar, "Study of device parameters for work function engineered gate recessed S/D SOI MOSFET incorporating quantum mechanical effects," *Microsystem Technologies*, April 2018, DOI. 10.1007/s00542-018-3904-4.
40. Sanjeev Narayan Bal, Manas Ranjan Nayak, and Subir Kumar Sarkar, "On the implementation of a secured watermarking mechanism based on cryptography and bit pairs matching," *Journal of King Saud University – Computer and Information Sciences, Elsevier*, April 2018.

Prof. Sudipta Chattopadhyay

41. Prabhat Kumar Panda, and Sudipta Chattopadhyay, "A modified PKM environment for the security enhancement of IEEE 102.16E," *Computer Standards and Interfaces, Elsevier*, vol. 61, January, 2019, pp. 107-120.
42. Prabhat Kumar Panda, and Sudipta Chattopadhyay, "An improved authentication and security scheme for LTE/LTE-A networks," *Journal of Ambient Intelligence and Humanized Computing, Springer*, vol. 61, Feb. 2019, pp. 1-23.

Dr. Jaydeb Bhaumik

43. J. Samanta, J. Bhaumik and S. Barman, "Compact and power efficient SEC-DED codec for computer memory ," *Journal of Microsystem Technologies, Springer*, February 2019, pp. 1-10,
44. P. Pal, B. Jana, and J. Bhaumik, "Watermarking scheme using local binary pattern for image authentication and tamper detection through dual image," *Journal of Security and Privacy, Wiley*, vol. 2, no. 2, March 2019, pp. 1-16.
45. J. Samanta, J. Bhaumik and S. Barman, "FPGA and ASIC implementation of RS (47, 41) codec for intelligent home networking system," *Journal of Active and Passive Electronic Devices, Old City Publishing*, vol. 13, no. 4, November 2018, pp.317-327.
46. G. Maity, J. Bhaumik, and A. Kundu, "A new SPN type architecture to strengthen block cipher against fault attack," *International Journal of Network Security*, vol. 20, no. 3, May, 2018, pp. 455-462.

Dr. Sayan Chatterjee

47. Sourav Das Chowdhury, Subrata Manna, Sayan Chatterjee, Ranjan Sen, and Mrinmay Pal, "Mega-Hertz repetition rate broadband nano-second pulses from an actively mode-locked Yb-fiber laser," *Laser Phys*, vol. 29, 12th February, 2019, pp. 1-5.
48. Sourav Das Chowdhury, Atasi Pal, Sayan Chatterjee, Ranjan Sen, and Mrinmay Pal, "Multipulse dynamics of dissipative solution resonance in an all-normal dispersion mode locked fiber laser", *IEEE/OSA Journal of Lightwave Technology*, vol. 36, no. 24, December 15, 2018, pp. 5773-5779.

Dr. Chandrima Mondal

49. Jayanti Paul, Chandrima Mondal, and Abhijit Biswas, "Enhancing digital performance of nanoscale GeOI MOSFETs through optimization of buried oxide properties and channel thickness," *Microsystem Technologies, Springer*, vol. 1, September 2018, pp. 1-7.

Prof. Amit Konar and Dr. Pratyusha Rakshit

50. Sriparna Saha, Pratyusha Rakshit, and Amit Konar, "Ballet E-learning using fuzzy set induced posture recognition by piece-wise linear approximation of connected components," *Applied Soft Computing*, vol. 65, April, 2018, pp. 554-576.
51. Pratyusha Rakshit, and Amit Konar, "Realization of learning induced self-adaptive sampling in noisy optimization," *Applied Soft Computing*, vol. 69, August, 2018, pp. 288-315.

52. Reshma Kar, Pratyusha Rakshit, Amit Konar, and Aruna Chakraborty, "Uncertainty Management by Feature Space Tuning for Single-trial P300 Detection," *International Journal of Fuzzy Systems, Springer*, vol. 21, no. 3, January, 2019, pp. 916-929.

Prof. Bhaskar Gupta and Prof. Subir Kumar Sarkar

53. Komal Kumari, Tapas Chakrabarti, Abir Jana, Disha Bhattachartjee, Bhaskar Gupta and Subir Kumar Sarkar, "Comparative study on Perovskitesolar cells based on Titanium, Nickel and Cadmium doped BiFeO₃ active material," *Optical Materials, Elsevier*, vol. 84, August 2018, pp.681-688.

Prof. Bhaskar Gupta and Dr. Sayan Chatterjee

54. Amartya Banerjee, Kaushik Patra, Sayan Chatterjee, Bhaskar Gupta, and Anup Kumar Bandyopadhyay, "Theoretical investigations on the resonance characteristics of CPW-fed miniaturized strip monopole antennas," *Radio Engineering*, vol. 27, no. 4, December 2018, DOI: 10.13164/re.2018.0948.

Conferences

Prof. Amit Konar

1. Madhuleena Dasgupta, Amit Konar, and Atulya K. Nagar, "Online prediction of dopamine concentration using EEG-induced type-2 fuzzy abduction," in *IEEE Symposium Series on Computational Intelligence (SSCI)*, 18-21 November, 2018, pp. 212-218.
2. Tanuka Bhattacharjee, Sriparna Saha, Amit Konar, and Atulya K. Nagar, "Static video summarization using artificial bee colony optimization," in *IEEE Symposium Series on Computational Intelligence (SSCI)*, 18-21 November, 2018, pp. 777-784.
3. Arindam Ray, Kaustuv Mukherji, Amit Konar, and Atulya K. Nagar, "Type-2 fuzzy logic induced gesture recognition for robot task planning," in *IEEE Symposium Series on Computational Intelligence (SSCI)*, 18-21 November, 2018, pp. 1359-1366.
4. Sriparna Saha, Rimita Lahiri, Amit Konar, and Atulya K. Nagar, "Gesture driven remote robot maneuver for unstructured environment," in *IEEE Symposium Series on Computational Intelligence (SSCI)*, 18-21 November, 2018, pp. 1793-1800.
5. Lidia Ghosh, Reshma Kar, Amit Konar, Aruna Chakraborty, and Atulya K. Nagar, "Identification of brain activation regions in inductive learning based scientific creativity test," in *IEEE Symposium Series on Computational Intelligence (SSCI)*, 18-21 November, 2018, pp. 950-957.
6. Anjali Shukla, Arnab Rakshit, Amit Konar, Lidia Ghosh, and Atulya K. Nagar, "Decoding of mind-generated pattern locks for security checking using type-2 fuzzy classifier," in *IEEE Symposium Series on Computational Intelligence (SSCI)*, 18-21 November, 2018, pp. 1976-1981.

Prof. Ananda Shankar Chowdhury

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Prof. Bhaskar Gupta

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Prof. Chayanika Bose

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Prof. Mrinal Kanti Naskar

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Prof. P. Venkateswaran

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Prof. Sheli Sinha Chaudhuri

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Prof. Subir Kumar Sarkar

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Prof. Sudipta Chattopadhyay

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Prof. Iti Saha Misra

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Dr. Jaydeb Bhaumik

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Prof. Amit Konar and Dr. Pratyusha Rakshit

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Prof. Bhaskar Gupta and Dr. Sayan Chatterjee

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Prof. Subir Kumar Sarkar and Prof. Sudhabindu Ray

83. Savio Sengupta, Dipanjan Sen, Subhashis Roy, Sudhabindu Ray, and Subir Kumar Sarkar, “Analysis of four-stage charge pump circuit for UHF RFID tag design,” in *3rd International Conference, 2019 Devices for Integrated Circuits (DevIC)*, Kalyani Government Engineering College, West Bengal, India, March 23rd-24th, 2019.
84. Dipanjan Sen, Savio Jay Sengupta, Subhashis Roy, Sudhabindu Ray, and Subir Kumar Sarkar, “Impact Analysis of dual material double gate oxidestack junction-less MOSFET in RFID memory cell realization,” in *3rd International Conference, 2019 Devices for Integrated Circuits (DevIC)*, Kalyani Government Engineering College, West Bengal, India, March 23rd-24th, 2019.
85. Bikram Biswas, Anup Dey, Subhashis Roy, Sudhabindu Ray, and Subir Kumar Sarkar, “Pd Doped TiO₂ – CuO mixed metal oxide thin film sensor for H₂ sensing application,” in *3rd International Conference, 2019 Devices for Integrated Circuits (DevIC)*, Kalyani Government Engineering College, West Bengal, India, March 23rd-24th, 2019.
86. Savio Jay Sengupta, Dipanjan Sen, Subhashis Roy, Bikram Biswas, Sudhabindu Ray, and Subir Kumar Sarkar, “A novel approach for RFID based distributed security against physical access of university data” *International Conference in Recent Trends on Electronics And Computer Science (ICRTECS)*, NIT Silchar, Assam, India, March 18-19, 2019.

5. Collaborative Programmes:

Prof. Ananda Shankar Chowdhury

1. With Prof. Atulya K. Nagar of Liverpool Hope University, UK
2. With Prof. Anca L. Ralescu of University of Cincinnati
3. With Prof. Lakhmi C. Jain of University of South Australia, Adelaide
4. With Mohan S. Kankanhalli, National University of Singapore, Singapore on “A Game-theoretic Model of Relative Saliency”
5. With Alexandre X. Falcao, University of Campinas, Brazil on “A Graph-theoretic approach for Superpixel Generation”
6. With Michael H.F. Wilkinson, Bernoulli Institute of Mathematics and Computer Science, University of Groningen, The Netherlands on “Connected Filters and Graph Morphology in Image Analysis”

Prof. Bhaskar Gupta

7. National Symposium/Workshop on “Applications of Engineering and Technology towards Sustainable Growth” (The Event is a curtain-raiser of World Environment Day Programme) in collaboration with Vivekananda Institute of Environment & Management held on 4th June, 2019

Prof. Iti Saha Misra

8. With Prof. Ramjee Prosad, Aarhus University, Herning, Denmark

Prof. Subir Kumar Sarkar

9. With Prof. Supriyo Bandyopadhyay of Virginia Commonwealth University, USA in the field of Spintronics

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10. With Dr. Partha Bhattacharya of Indian Institute of Engineering Science and Technology, Shibpur (formerly BESU) on nanodevices
11. With Dr. Ashish Kumar De and Prof. B. Maji of National Institute of Technology, Durgapur
12. With Mr. Pranab Kishore Dutta and Mr. Swanirbhar Majumder of North Eastern Regional Institute of Science and Technology (NERIST)
13. With Dr. N. B. Singh of Manipur Institute of Technology

6. Major Achievements:

Prof. Amit Konar

1. Editor-in-Chief, Springer book series on Cognitive Intelligence and Robotics for the period: April 2018 to March 2019
2. Associate Editor, IEEE Trans. on Fuzzy Systems for the period: April 2018 to March 2019
3. Associate Editor, IEEE Trans. on Emerging Trends in Computational Intelligence for the period: April 2018 to March 2019

Prof. Ananda Shankar Chowdhury

4. Associate Editor, *Springer Nature Computer Science* (2019)
5. Outstanding Reviewer, *Pattern Recognition and Pattern Recognition Letters* (2018)
6. Associate Editor, *IEEE Signal Processing Letters* (continued from 2017)
7. Associate Editor, *Pattern Recognition Letters* (continued from 2018)

Prof. Bhaskar Gupta

8. Participated in Academic Audits of NIT Patna, June 06, 2018

Prof. Iti Saha Misra

9. Elected as the VICE Chair of IEEE Kolkata Section, Jan 2019
10. Obtained IEEE ComSoc Best Chair Award, Jan 2019
11. Best paper award for “Developing a 3D Beam Former Model with Varied MIMO Channels,” in *International Conference on Advanced Computational and Communication Paradigms-2019*, 25th to 28th Feb., 2019, Sikkim Manipal Institute, Majiter.
12. Directors Nominee of BOS , Heritage Institute of Technology
13. Board of Governor Member of Tripura University
14. BOS Member of BIT, MESRA, Ranchi

Prof. Sheli Sinha Chaudhuri

15. Acted as an expert in the selection committee for selection of Junior Mentor at Digha Science Centre under the Birla Industrial and Technological Museum, Kolkata, March 19, 2019

Prof. Subir Kumar Sarkar

16. Invited several times as one of the expert members in various National Level Accreditation Board, April 2018, June 2018, August 1018.
17. Has 3 foreign trips having been invited by :
 - School of Computing, Engineering and Mathematics of Western Sydney University, Australia to deliver an invited speech in a seminar on 18th March 2019
 - School of Electrical and Data Engineering, Faculty of Engineering and IT of University of Technology Sydney, Australia to deliver a guest seminar lecture on 12th March 2019
 - Macquarie University, Sydney, Australia to deliver seminar presentation on 11th March 2019

18. Best Paper Awards:

- Sutanni Bhowmick, M.Tech student, under the supervision of Prof. Subir Kumar Sarkar, has been awarded Best Paper Award for the paper entitled, “Implementation of L-shaped Double Metal Dual Gate TFET towards Improved Performance Characteristics and Reduced Ambipolarity” in *Information, Photonics and Communication 2019 (IPC’19)*, 1st-3rd February, 2019, organized by Department of Electronics and Communication Engineering in association with SPIE Student Chapter, B. P. Poddar Institute of Management and Technology (BPPIMT), Kolkata (WIE Best Student/Research Scholar Paper Awarded).
- Dinesh Kumar Dash, PhD Research Scholar (QIP Engg.) under the supervision of Prof. Subir Kumar Sarkar, has been awarded Best Paper Award for the paper entitled “Analytical Modeling of Graded Metal Graded Dielectric Silicon-On-Nothing TFET –A Comparative Study” in *IEEE International Conference on Computing, Power and Communication Technologies (GUCON)2018*, 28th-29th September, 2018, Greater Noida, Uttar Pradesh, India.

Prof. Sudipta Chattopadhyay

19. Chairperson, IEEE WIE Kolkata Section, since 2017
20. Secured the 1st Place as Chairperson, WIE Kolkata Section, under the WIE Track in the All India Student – YP –WIE Congress (AISYWC’18) organized by IEEE India Council and IEEE Bangalore Section held at Vidya Vikas Institute of Engineering and Technology, Mysore, between September 28 - 30, 2018.
21. Member of Academic Council, Siksha O Anusandhan Deemed to be University, Bhubaneswar.

Dr. Sayan Chatterjee

22. Appointed as IEEE EXECOM member in January 2019
23. Appointed as member of Institutional innovation Council, January 2019 onwards Jadavpur University
24. Member of TEQIP–III (2018-19) Internal core committee, Jadavpur University
25. Member of Improved Student learning Central committee under TEQIP-III (2018-19), Jadavpur University

Dr. Pratyusha Rakshit

26. Awarded International Travel Support to present paper in 2018 IEEE World Congress on Computational Intelligence at Rio de Janeiro, Brazil by Science and Engineering Research Board, a statutory body under Department of Science and Technology, Ministry of Science and Technology, Government of India
27. Treasurer and EXECOM member, IEEE Computational Intelligence Society, Kolkata (since 2017)

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FOOD TECHNOLOGY & BIO-CHEMICAL ENGINEERING

Phone : +91-33-2414-6822
Int. : 2457-2241/22
H.O.D. : Prof. Uma Ghosh
Dr. Dipankar Halder(w.e.f.01.02.2019)
E-mail : hodftbe@jadavpuruniversity.in

- 1. A. Courses Offered:** B.E – 4 yr, Intake : 40/yr
M.Tech - 2 yr, Intake :10 / yr.
Ph.D - 34 (Total strength)

B. Number of Faculty Members: 07 (Sanctioned post - 15)

2. A. Area of Research Activities:

Food fortification, drying; Solid state fermentation, enzymes , antioxidants, Green Technologies of Extraction, Nutraceuticals, Edible Oils and Frying Applications, Electronic Nose Applications in Agro Commodities, Environment benign synthesis of metal nanoparticles and their application in waste water treatment ,food safety and food packaging, food adulteration, cold plasma technology, nanoparticle in agriculture, Bioremediation, fermented food, enzyme technology.

2. B. Major Research Project:

- Individual R&D project entitled, ‘Studies on prevention of Diabetes Mellitus, Hypercholesterolemia and Alzheimer’s disease using nanoencapsulated supercritical carbon dioxide extracts of small cardamom’ from Product Development & Research, from Spices Board, Cochin, Ministry of Commerce and Industry, Govt. of India.
- Individual R & D Project on ‘Traditional fermented foods of Ladakh region: Standarization of process parameters.’ Funded by DST, Govt of India.
- Individual R & D Project on “Isolation and Identification of a Phytase Producing Probiotic Bacteria from Jalebi Batter and its Application to Soy Milk Fermentation”, UGC.
- Individual R & D Project on ‘Fortification of Bread using green banana Peel Flour and Cumin Seeds’ Funded by RUSA 2.0. Amount 6.2 Lakhs.
- Departmental R & D Project on ‘Development of Fruit- Vegetable based Nutraceutical Products. Part (a) Development of a vegetable based bakery product; Part (b) a Nanoliposomal Natural Food Antioxidant from a vegetable Source; Part (c) Plasma sterilised fruit- vegetable products. Funded by RUSA 2.0.
- Individual R & D Project on ‘Sustainable green technology for development of a food supplement based on antioxidant synergy of serotonin, melatonin and L-tryptophan from supercritical carbon dioxide extract of gamma irradiated tomatoes’. Funded by RUSA 2.0.
- Individual R & D Project on ‘Studies on γ -irradiation of lutein and serotonin-melatonin rich agro-commodities for extension of shelf lives of the produces and design of novel therapeutic/food supplements using the irradiated produces’, funded by Department of Food Processing Industries and Horticulture, Govt. of West Bengal.
- Individual R & D Project for Irradiation Unit assisting (i) Food Processing Industries (ii) R & D in new areas of Irradiated Food (iii) Training Centre for Food Irradiation especially for Eastern & North Eastern Region, from Ministry of Food Processing Industries, Govt. of India, New Delhi and Department of Food Processing Industries & Horticulture, Govt. of West Bengal.
- Individual R & D Project on “Ultra high temperature processing electrical energy heating” sponsored by Ministry of Food Processing Industries, Govt. of India, New-Delhi and Department of Food Processing Industries & Horticulture, Govt. of West Bengal.

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- Individual R & D Project on “Sustainable synthesis of Ag and Au nanoparticles ... (microorganism, antibiotic and protein) present in food” . Sponsored by RUSA 2.0.
- Departmental R & D Project on “Environment benign synthesis..contaminated with dyes and pesticides” Sponsored by RUSA 2.0.
- Individual R & D Project on “Strategic assessment of traditional Bandel Cheese and its production for economic development of local people”. DST-Govt of W.B.,
- Individual R & D Project on “Performance Modeling of a Combined System of Phycoremediation with a Fixed Film Bioreactor for the Treatment of Dairy Industry”, from Science and Engineering Research Board (SERB).
- Individual R & D Project on “Fermentative production of microbial Asparaginase enzyme and its application to high temperature Processed Foods for Acrylamide mitigation”, from DHESTBE, Govt. of West Bengal.
- Individual R & D Project on “Bioremediation of Phenolic compounds from Waste Water using Isolated Microbial Strains” funded by RUSA 2.0.

3. A. Invited lectures Delivered/Sessions Chaired:

Dr. Dipankar Halder

- National seminar “MCCCON 2019” on “Academia-Industry Meets Industrial Process” on 5th - 6th February, 2019 at MIDNAPORE CITY COLLEGE, Paschim Medinipur- 721129, WB

Dr. Prasanta Kumar Biswas

- National seminar on “Effects of Pesticides and Food Adulteration on Human Health” H L Ray Building, Jadavpur University Campus, Kolkata, on 25th May 2019.
- 1st Agrochemicals Congress: Country’s Status on Various Fronts of Agrochemicals during November 13-16, 2019 at ICAR-IARI, New Delhi.

Dr. Paramita Bhattacharjee

- Invited talk on ‘Application of Supercritical Fluid Extraction as a Non-Thermal Processing Technology for Food Flavors and Fragrances’, Talk for UG students of Department of Biotechnology, University of Engineering and Management (UEM), Kolkata, March 11, 2019.
- Invited talk on ‘Gamma Radiation Processing of Agro Commodities for New Product Development’, *One day Seminar on Modern Food Processing Technology and Innovative Food Product Development (Sampriti 2019)*, organized by the Department of Food Technology, Techno India, Salt Lake, Kolkata, February 23, 2019.
- Invited talk on ‘Is 1,8-cineole, the bioactive principle of small cardamom seeds the new molecule for mitigating oxidative stress disorders? Investigations on efficacies of supercritical carbon dioxide extract of this biomolecule and its nanoliposomal formulation’, *International Conference on Technological Innovations for Integration of Food and Health: A Focus on North-Eastern India (TiiFH-2019)*, organized by the Department of Food Engineering & Technology in association with AFSTI, Tezpur University, Tezpur, February 14-16, 2019.
- Invited talk (guest lecture) on ‘Can nanoliposomes of supercritical carbon dioxide extracted spiceactives of yellow mustard and small cardamom seeds be natural alternatives of statin in redressing hypercholesterolemia? *Asian Symposium on Medicinal Plants, Spices, and other Natural Products XVI (ASOMPS XVI 2018)*, BMICH & Galadari Hotel, Colombo, Sri Lanka, December 12-14, 2018.

Dr. Debabrata Bera

- National seminar on ‘Functional components in marine sources’, Vidyasagar University, 2019.

Dr. Sunita Adhikary (Nee Pramanik)

- Invited Lecture Delivered at ‘One day Workshop on Exploring Opportunities in Food Processing Technology (EOFPT-2019)’ organized by WBSCT&VE&SD, on 6th Feb, 19.

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- Invited Lecture on “Pesticides and Food Adulterations-Effect on Human Health” organized by Development Research Communication & Services Centre Joint Collaboration with AFSTI Kolkata Chapter on 25th May, 19.

3. B. Seminar/Workshop/Conference/Symposium Attended:

Prof. Runu Chakraborty

- Presentation on ‘Evaluation of Three Different Drying Methods Effect on Polyphenol Content, Flavonoid Content, Antioxidant Activity, Antimicrobial Activity and Color of *Camellia assamica*,’ by Abhijit Das, Runu Chakraborty and Utpal Raychaudhuri; 8th International Food convention on Holistic Approaches for Start-Ups, Human Resource Training for Agriculture and Food Industry Gemmation (HASHTAG), December 12-15, 2018 at CSIR-CFTRI, Mysore, India, organized by Association of Food Scientists & Technologists (India).

Prof. Uma Ghosh

- Presentation on a statistical approach for the enhanced production of alkaline protease from isolated strain *Alternaria alternat* TUSGF1 utilization of agro waste; Tapasi polley and Uma Ghosh, 2nd International conference on biotechnology & biological sciences, 2018.
- Presentation on “A Review on the effect of drying techniques on antioxidant potential of fruits and vegetables” in National Symposium on “Role of Resource Management in agriculture in the context of Food Security, Nutrition and Economy”, Arjuma Sultana, Uma Ghosh. The Agriculture Society of India, University of Calcutta, December 15-17, 2018.
- Paper titled ‘Nanotechnology: Approach to combat biofilm especially in food and medical sector’; Sarkar S, Mitra A, Halder D; NATCOSEB 2019, Amity University, Rajarhat, 18-20 October, 2019.
- Paper titled ‘Synthesis of silver nanoparticle...in combination with antibiotic’ Ghosh M, Mitra A, Halder D; NATCOSEB 2019, Amity University, Rajarhat, 18-20 October, 2019.
- Paper titled ‘Yeast extract mediated synthesis ... in contaminated water samples’, Chakraborty S, Mitra A, Halder D; NATCOSEB 2019, Amity University, Rajarhat, 18-20 October, 2019.

Dr. Dipankar Halder

- Paper titled “Synthesis of Silver Nanoparticles ... and their antimicrobial activity- A comparative study”; Dinda, G.; Halder, D.; Mitra, A. ; (NCRDNN2019), Jadavpur University, 29-31st January 2019.
- Paper titled “Plant-Mediated Synthesis of Silver Nanoparticles ...Catalytic Applications”; Dinda G, Mitra A, Halder D; International Conference on Chemistry for Human Development (ICCHD 2018), organized by Calcutta University, Kolkata.
- Paper titled ‘Removal of textile dye ...biomass of *Aspergillus niger*’; Bag S, Mitra A, Halder D, Bera D, NATCOSEB 2019, Amity University, Rajarhat, 18-20 October, 2019.
- Paper titled ‘Nanotechnology : Approach to combat biofilm especially in food and medical sector’; Sarkar S, Mitra A, Halder D; NATCOSEB 2019, Amity University, Rajarhat, 18-20 October, 2019.
- Paper titled “Synthesis of silver nanoparticle ... in combination with antibiotic”, Ghosh M, Mitra A, Halder D; NATCOSEB 2019, Amity University , Rajarhat, 18-20 October, 2019.
- Paper titled “Yeast extract mediated synthesis ... in contaminated water samples” Chakraborty S, Mitra A, Halder D; NATCOSEB 2019, Amity University, Rajarhat, 18-20 October, 2019.

Dr. Paramita Bhattacharjee

- ‘A new biomedicine from yellow mustard seeds for curing Type-2 diabetes’, Soumi Chakraborty, Dipshikha Tamili (Paramita Bhattacharjee as mentor), Oral-cum-Poster presentation at *Anveshan: National Student Research Convention 2018*, under the category Health Science & Allied Sciences, organized by the Association of Indian Universities, New Delhi and hosted by Ganpat University, Gujarat, March 12-14, 2019.

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- ‘A new biomedicine from yellow mustard seeds for curing Type-2 diabetes’, Soumi Chakraborty, Dipshikha Tamili (Paramita Bhattacharjee as mentor), Poster-cum-Oral presentation at East Zone Inter-University Research Convention *Anveshan 2018-19*, under the category Basic Science, organized and hosted by Central University of Jharkhand, Ranchi, under the aegis of Association of Indian Universities (AIU), New Delhi, February 18-19, 2019.
- ‘Can nanoliposomes SC-CO₂ extract of small cardamom seeds be a new biotherapeutic for type 2 diabetes?’, Kaninika Paul, SoumiChakraborty, Paramita Bhattacharjee, Nilendra Chatterjee and Tapan Kumar Pal, Poster Presentation at National Conference on *Recent Developments in Nanoscience & Nanotechnology*, organized by the School of Materials Science and Nanotechnology, Jadavpur University, January 29-31, 2019.
- ‘Efficacy of nanoencapsulated supercritical carbon dioxide extract of small cardamom seeds in combating Type-II diabetes: *In vitro* characterization and *in vivo* rat model study’, Kaninika Paul, Soumi Chakraborty, Paramita Bhattacharjee, Nilendra Chatterjee and Tapan Kumar Pal, Poster Presentation at *IUFOST 2018 (India), 19th World Congress of Food Science and Technology*, CIDCO Exhibition Centre, Mumbai, October 23-27, 2018.
- ‘Gamma-irradiation of yellow corn (*Zea mays*) kernels post packaging enhances lutein content and shelf life’, Sayani Pal, Soumi Chakraborty and Paramita Bhattacharjee, Poster Presentation at *IUFOST 2018 (India), 19th World Congress of Food Science and Technology*, CIDCO Exhibition Centre, Mumbai, October 23-27, 2018.
- ‘Does melatonin-rich mustard seed extract prevent hypercholesterolemia? *In vivo* rat model and molecular docking studies’, Soumi Chakaborty, Dipan Chatterjee, Paramita Bhattacharjee*, Shrabani Pradhan, Koushik Das, Dilip Kumar Nandi and Dipankar Chaudhuri, Poster Presentation at *National Symposium on Promotion & Development of Indian Medicinal Plants*, Special reference - Brahmi (*Bacopamonnieri*) on the occasion of the 5th Convention of Society for Ethnopharmacology (SFE)-India, organized by SFE, Kolkata, India, Jadavpur University Main Campus, Kolkata, September 7-8, 2018.
- ‘Efficacy of 1,8-cineole-rich supercritical carbon dioxide extract of small cardamom seeds in preventing Alzheimer’s disease’, Kaninika Paul, Paramita Bhattacharjee and Sasanka Chakrabarti, Poster Presentation at *National Symposium on Promotion & Development of Indian Medicinal Plants*, Special reference - Brahmi (*Bacopamonnieri*) on the occasion of the 5th Convention of Society for Ethnopharmacology (SFE)-India, organized by SFE, Kolkata, India, Jadavpur University Main Campus, Kolkata, September 7-8, 2018.
- ‘Role of 1,8-cineole-rich supercritical carbon dioxide extract of small cardamom seeds in combating type-II diabetes and Alzheimer’s disease: Rat model, iHOMA2, SHSY5Y cell line and molecular docking studies’, Soumi Chakaborty, Kaninika Paul, Paramita Bhattacharjee and Sasanka Chakrabarti, Poster Presentation at *National Symposium on Human Biology: Newer Perspectives*, organized by Central Calcutta Society for Advancement of Human Development and Research on the occasion of its 25th Foundation Day in collaboration with Bose Institute, Kolkata & sponsored by the Department of Biotechnology, Govt. of West Bengal, at Centenary Campus, Bose Institute, Kolkata, July 23, 2018.

Dr. Debabrata Bera

- Paper titled ‘Removal of textile dye ...biomass of *Aspergillus niger*’; Bag S, Mitra A, Halder D, Bera D, NATCOSEB 2019, Amity University, Rajarhat, 18-20 October, 2019.
- Paper titled ‘Nanotechnology: Approach to combat biofilm especially in food and medical sector’; Sarkar S, Mitra A, Halder D; NATCOSEB 2019, Amity University, Rajarhat, 18-20 October, 2019.
- Paper titled ‘Synthesis of silver nanoparticle ... in combination with antibiotic’ Ghosh M, Mitra A, Halder D; NATCOSEB 2019, Amity University, Rajarhat, 18-20 October, 2019.
- Paper titled ‘Yeast extract mediated synthesis ... in contaminated water samples Chakraborty S, Mitra A, Halder D; NATCOSEB 2019, Amity University, Rajarhat, 18-20 October, 2019

Dr. Sunita Adhikary Nee Pramanik

- Najmun Nahar, Sunita Adhikari (Nee Pramanik), Utpal Raychowdhury “Characterization of black gram nuggets (Bori): Traditional product of Midnapore district, West Bengal, India”. Oral presentation of the paper at BIOSPECTRUM, 2018 organized by UEM, Kolkata during 27th - 28th July, 2018.
- Abhishek Das, Pradyut Kundu, Sunita Adhikari (Nee Pramanik), “Characteristics and Treatment of Dairy Industry Wastewater in a Suspended Growth Batch Reactor”. Oral presentation of the paper at ATIPC – 2018 organized by Indian Institute of Engineering Science & Technology (IEST), Shibpur, Howrah, W.B. during December 17th – 19th 2018.
- Paper titled “Nanotechnology : Approach to combat biofilm especially in food and medical sector”; Sarkar S, Mitra A, Halder D; NATCOSEB 2019, Amity University , Rajarhat, 18-20 October, 2019.
- Paper titled “Synthesis of silver nanoparticle ... in combination with antibiotic” Ghosh M, Mitra A, Halder D; NATCOSEB 2019, Amity University , Rajarhat, 18-20 October, 2019.
- Paper titled “Yeast extract mediated synthesis ... in contaminated water samples” Chakraborty S, Mitra A, Halder D; NATCOSEB 2019, Amity University , Rajarhat, 18-20 October, 2019.

3. C. Seminar/Workshop/Conference/Symposium Organized:

Dr. Prasanta Kumar Biswas:

- National seminar on “Effects of pesticides and Food Adulteration on human Health” H L Ray Building, Jadavpur University Campus, Kolkata, 25th May 2019.

3. E. Orientation Courses/Refresher Courses Organized:

Prof. Uma Ghosh, Dr. Debabrata Bera & Dr. Sunita Adhikary (Nee Pramanik)

- UGC Sponsored Refresher Course on “Recent Advancement in Food and Bioprocess Technology” organised at Dept. of FTBE, JU from 02.01.2019 to 22.01.2019

4. A. Books/Monographs etc. Published:

Dr. Paramita Bhattacharjee

- Paramita Bhattacharjee and Soumi Chakraborty, “Neurotransmitters in Edible Plants. Implications in Human Health,” In: *Neurotransmitters in plants: Perspectives and Applications*, A Ramakrishna and VV Roshchina (Eds.), Chapter 22, pp. 387-407, CRC Press, BocaRaton, 2019.
- Paramita Bhattacharjee and Sayantani Dutta, “Assessment of Quality of Confectionery Products using Electronic Nose Technology,” In: *Bioprocessing Technology in Dairy and Food*, D.K Verma and P.P. Srivastav (Eds.), Apple Academic Press, USA, in Press, 2019.
- Paramita Bhattacharjee, Kaninika Paul and Sayantani Dutta, “Supercritical Carbon dioxide Extraction of Piperine: A Green Extraction Method for Biomolecule of Therapeutic Importance”, In: *Emerging Thermal and Non-thermal Technology in Food Process Engineering*, D.K Verma and P.P. Srivastav (Eds.), Apple Academic Press, USA, in Press, 2019.

Dr. Debabrata Bera.

- Lakshmeshri Roy, Debabrata Bera, Sunita Adak, “Mycosynthesized Nanoparticles: Role in Food Processing Industries”, *Fungal Nanobionics: Principles and Applications* 287-316, 2019.

Dr. Sunita Adhikary (Nee Paramanik)

- Mausumi Ray, Pradyut Kundu, Sunita Adhikari (Nee Pramanik), Chapter on “Isolation and Characterization of Microbial Asparaginase to Mitigate Acrylamide Formation in Food” published as book chapter (Chapter No. 13), pp no. 95-100 in *Advances in Plant & Microbial Biotechnology*. ISBN: 978-981-13-6321-4, Springer Publisher.
- Abhishek Das, Pradyut Kundu, Sunita Adhikari (Nee Pramanik), Chapter on “Bioremediation of Wastewater Using Microalgae” Publication as Book Chapter (Chapter: 8), pp no. 55-60 in *Environmental*

Biotechnology for Soil and Wastewater Implications on Ecosystems, ISBN: 978-981-13-6321-4, Springer Publisher.

4. B. Articles published in Journals:

Prof. Runu Chakraborty

- Suman Kumar Saha, Suhrita Dey and Runu Chakraborty “Effect of microwave power on drying kinetics, structure, colour and antioxidant activities of Corncob” accepted for publication in *Journal of Food Process Engineering*, publisher Wiley Blackwell Science, UK 17 Jan, 2019.
- Runni Mukherjee, Abhishek Datta and Runu Chakraborty. “Soaking of Soybean Meal: Evaluation of Physicochemical Properties and Kinetic Studies”. *Journal of Food Measurement and Characterisation*. Publisher: Springer. 13(1), 390-403. DOI 10.1007/s11694-018-9954-6.

Prof. Uma Ghosh

- Ipsita Banerjee Uma Ghosh, “Effect of pretreatment on drying attributes and quality assessment of bael powder” *International Journal for Research in Engineering Application & Management(IJREAM)*. Vol-04, Issue-08, Nov2018.
- Ipsita Banerjee Uma Ghosh, “Effect of thermal treatment on phenolic and antioxidant content of fresh bael juice” *International Journal of agricultural Engineering*. Vol-11, Issue-2, Oct2018, 282-288.
- Polley T, Ghosh U. “Optimization of Process Parameters for Production of Alkaline Protease by OVAT Method Using Isolated Strain *Alternaria alternata* TUSGF1”, *Asian Food Science Journal*, vol. 9 (4):1-8, 2019.
- Ray S., Mukherjee A., Ghosh U.2018. Selection and Utilization of Food waste Bagasse for fermentation using *saccharomyces cerevisiae*. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*. 9(6), 1329 -1337.

Dipankar Halder

- “Therapeutic applications of mushrooms and its compositional analysis by high throughput screening techniques”; Chatterjee D, Das S, Halder D; *IJPSR*, 10(8) (2019) : 1000-11.
- “Phytosynthesis of silver nanoparticles using *Zingiber officinale* extract: evaluation of their catalytic and antibacterial activities”; Dinda, G., Mitra, A., Pal, N., Chatteraj D K; *J of disper. Sc. Tech.* <https://doi.org/10.1080/01932691.2019.1653194>.
- “Anti-biofilm activity and food packaging application of room temperature solution process based polyethylene glycol capped Ag-ZnO-graphene nanocomposite” ; Naskar A, Khan H, Sarkar R, Kumar S, Jana S, Halder D ; *Materials Science and Engineering C*; 91 (2018) 743–753.
- Synthesis of Gold Colloid Using *Zingiber officinale*: Catalytic Study; Dinda, G., Mitra. A. Halder, D. *Nano Mat ChemBio Dev* ; 1 (1) (2018): 1-6.
- “Antimycobacterial activities of an edible mushroom extract and its synergy with the standard antituberculous drugs”; Chatterjee D, Das S, Halder D; *Journal of Clinical and Diagnostic Research*. 12(6)(2018) : 37-41.
- “Fruit extract capped colloidal silver nanoparticles and their application in reduction of methylene blue dye”; Swargiary M, Kumar S, Mitra A, Halder D; *Biocatalysis and Biotransformation* ; <http://dx.doi.org/10.1080/10242422.2018.1508283>; 2018.

Dr. Prasanta Kumar Biswas :

- “Complementary feeding may pose a risk of simultaneous exposures to aflatoxin M1 and deoxynivalenol in Indian infants and toddlers: Lessons from a mini-survey of food samples obtained from Kolkata, India”; *Food and Chemical Toxicology*, 123 (2019) 9-15.

- Name of article: “Zinc sulphide nanoparticle (nZnS): A novel nano-modulator for plant growth”; *Plant Physiology and Biochemistry*, 142 (2019) 73-83.

Dr. Paramita Bhattacharjee

- Sayani Pal and Paramita Bhattacharjee, “Lutien-fortified potato soup and freeze-dried lutein powder designed with supercritical carbon dioxide extract of yellow corn kernels are promising nutraceutical foods”, *Journal of Food Processing and Preservation*, DOI: 10.1111/jfpp.14005, 2019.
- Kaninika Paul, Paramita Bhattacharjee, Nilendra Chatterjee and Tapan Kumar Pal, “Nanoliposomes of supercritical carbon dioxide extract of small cardamom seeds redresses Type 2 diabetes and hypercholesterolemia”, *Recent Patents on Biotechnology*, 13: 1-20, DOI: 10.2174/1872208313666190404101336, 2019.
- Soumi Chakraborty and Paramita Bhattacharjee, “Design of lemon-mustard nutraceutical beverages based on synergism among antioxidants and *in vitro* antioxidative, hypoglycaemic and hypocholesterolemic activities: Characterization and shelf life studies”, *Journal of Food Measurement and Characterization*, DOI: 10.1007/s11694-018-9826-0, 2018.
- Kaninika Paul and Paramita Bhattacharjee, “Process optimization of supercritical carbon dioxide extraction of 1,8-cineole from small cardamom seeds by response surface methodology: In vitro antioxidant, antidiabetic and hypocholesterolemic activities of extracts”, *Journal of Essential Oil Bearing Plants*, DOI: <https://doi.org/10.1080/0972060X.2018.143406>, 2018.
- Kaninika Paul and Paramita Bhattacharjee, “Mass transfer and hydrodynamic study of supercritical carbon dioxide extraction of 1,8-cineole from small cardamom seeds”, *Chemical Engineering Communications*, DOI: <https://doi.org/10.1080/00986445.2018.1428959>, 2018.
- Anupama Bose and Paramita Bhattacharjee, “Development of a new equation in fuzzy logic analysis for ascertaining appropriate dose of gamma irradiation of virgin coconut oil”, *Methods X*, 2018.
- Sayani Pal and Paramita Bhattacharjee, “Polypropylene-based packaging materials for shelf-life enhancement of yellow corn (*Zea mays*) kernels: Effects on lutein, aflatoxin content, sensory and nutritional profiles”, *Journal of Food Processing and Preservation*, DOI: 10.1111/jfpp.13618, 2018.

Dr. Debabrata Bera

- Papan K. Hor, Mousumi Ray, Shilpee Pal, Kuntal Ghosh, Jyoti P. Soren, Smarajit Maiti, Debabrata Bera, Somnath Singh, Sanjay Dwivedi, Miklós Takó, Pradeep K. Das Mohapatra and Keshab C. Mondal. *Some Functional Properties of khambir, an Ethnic Fermented Cereal-Based Food of Western Himalayas*, *Frontier in Microbiology*, 2019.

Dr. Sunita Adhikary (Nee Pramanik)

- Abhishek Das, Pradyut Kundu, Sunita Adhikari (Nee Pramanik), “Characteristics and Treatment of Dairy Industry Wastewater in a Suspended Growth Batch Reactor” Research Paper accepted for publication in *International Journal of Environment and Waste Management*.

5. Collaborative Programmes:

- Research collaboration with Peerless Hospital and B K Roy Research Centre, Kolkata.
- Environmental Health Sciences, Arnold School of Public Health, University of South Carolina, Columbia, SC, 29208, USA.
- Research collaboration with C-DAC, Kolkata.
- Research collaboration with Dept. of Biochemistry, M M Institute of Medical Sciences & Research, M M (Deemed to be) University, Haryana.
- Research collaboration with Dept. of Nutrition, Vidyasagar University.

6. Major achievements:

- Paper titled “Evaluation of the Effect of Fermentation on Protein and Phenolic Profiles of Soybean Meal” by Runni Mukherjee, Abhishek Dutta and Runu Chakraborty won the best paper award in the 2nd International Conference on Biotechnology & Biological Sciences, ‘Biospectrum 2018’ at University of Engineering & Management, Kolkata on 27th-28th July, 2018.
- Received Venus International Faculty Awards-VIFA 2019, ‘Distinguished Faculty in Engineering’ Award during the 5th Contemporary Academic Meet (CAM 2019).
- Patent awarded : Paramita Bhattacharjee and Dipan Chatterjee, Indian Patent No. 295801(217/KOL/2012) granted and recorded in the Register of Patents on April 16, 2018 on ‘Natural colorant from peels of egg plants’,
- Third position for the research paper entitled ‘A new biomedicine from yellow mustard seeds for curing Type-2 diabetes’, by Soumi Chakraborty, Dipshikha Tamili (Paramita Bhattacharjee as mentor), at *East Zone Inter-University Research Convention Anveshan 2018-19*, under the aegis of Association of Indian Universities (AIU), New Delhi, February 18-19, 2019.
- Selected Poster Award for the research paper entitled ‘Efficacy of nanoencapsulated supercritical carbon dioxide extract of small cardamom seeds in combating Type-II diabetes: *In vitro* characterization and *in vivo* rat model study’, Kaninika Paul, Soumi Chakraborty, Paramita Bhattacharjee, Nilendra Chatterjee and Tapan Kumar Pal, Poster Presentation at *IUFOST 2018 (India), 19th World Congress of Food Science and Technology*, CIDCO Exhibition Centre, Mumbai, October 23-27, 2018.

INFORMATION TECHNOLOGY

(SALT LAKE CAMPUS)

Phone : + 91-33-2335-8321
 Int. : 6128
 H.O.D. : Dr. Bhaskar Sardar
 E-mail : hodit@jadavpuruniversity.in

1. A. Courses Offered

Name of the Course	Duration of the Course	Annual Intake	Year of Inception
B.E.(Information Technology)	4 years degree course	86	2000
M.E (Software Engineering)	2 year degree course	25	2002
6-Semester M.E.(Software Engineering)	3 year degree course (Evening)	20	2004

for TCS sponsored students

1. B. Number of Faculty Members:

Professor: 02 (Sanctioned: 01)
 Associate Professor: 03 (Sanctioned: 01)
 Assistant Professor: 02 (Sanctioned 05)
 Assistant Professor (Contractual): 09

2. A. Area of Research Activities: (Broad Area)

All teachers are actively engaged in research activities. The thrust areas of the department may be classified as follows:

- I. Image processing, Video Compression, Pattern Recognition
- II. Distributed Object Computing, Middleware
- III. Middleware in Mobile Computing, Mobile Ad hoc Networks
- IV. Artificial Intelligence, Machine Learning
- V. Network Architecture, Routing Protocols
- VI. Parallel Processing, Cryptography and Network Security, Distributed Computing
- VII. Data Mining and Knowledge Discovery, Cloud Computing, Biodiversity
- VIII. Bioinformatics, Audio processing, RFID, Sensor Networks
- IX. Distributed Algorithms & Swarm Robotics.
- X. Mobile Computing, Vehicular Networks

2. B. Major Research Project/Consultancy :(Departmental / Individual–Name of the project–Investigator/Coordinator–Funded Agency)

Individual–Distributed Cloud Systems–Samiran Chattopadhyay [PI], Kartick Chandra Mondal [Co-PI]–DST-PURSE II

Individual–Integration of Data Analysis and Data Mining with ERP Data Warehouse of Heterogeneous Data Generated from ERP Information System–Prof Samiran Chattopadhyay[PI]Kartick Chandra Mondal[Co-PI]–CARS, DRDO

Individual–Knowledge Discovery from Protein Interactions: Application to HIV–Kartick Chandra Mondal [PI]–Jadavpur University, Kolkata (JUResearch Grant)

Individual–Data Mining Algorithms for Associative Classifier and Distributed Association Rule mining: Application to Protein Interaction–Kartick Chandra Mondal [PI]–UPE – II, University Grants Commission, Government of India 2015-2019

Individual–Integration of Data Mining in Biodiversity Application to Forest Diversity–Kartick Chandra Mondal [MENTOR]–DST, WOS-A2018 – 2021

Individual–Mobile Enabled Content Delivery–Prof Samiran Chattopadhyay [PI]Munmun Bhattacharya[CO-PI]–University Grants Commission, Government of India

Individual–Analysis of gene expressions–Prof Samiran Chattopadhyay [PI]Munmun Bhattacharya[CO-PI]–PURSE-II

Individual–Algorithms to ensure the privacy and security in online social networking sites. – M u n m u n Bhattacharya[PI]–RUSA 2.0 2019-2020

Individual–A fairness based Market Linkage Framework for Women Self Help Group to assuage the Rural-Urban Information Asymmetry using ICT–Parama Bhaumik [PI]–RUSA 2.02019-2020

Individual–Secure Authentication for ATM transactions using Near Field Communication (NFC) Technology –Uttam Kumar Roy [PI]–RUSA 2.02019-2020

Individual–Dr. Sruti Gan Chaudhuri (PT) –RUSA 2.0 2019-2020

Individual–Development of High speed MANET for intelligent collaboration–Prof. Samiran Chattopadhyay [Co-Investigator]–DRDO2019 – 2021

Individual–National Digital Library–Prof. Samiran Chattopadhyay(Consultant)–MHRD (IIT Kiharagpur) 2018 – 2020

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Individual–Cosmic Quest–Prof. Samiran Chattopadhyay [Co-PI] –Vigyan Prasar (DST, GoI)

Departmental–Integrated Health Analytics and Services–Dr. Bhaskar Sardar–RUSA 2.0

Departmental–Faster and Secured Communications in 5G–Prof. Bibhas Chandra Dhara–RUSA 2.0

3. A. Invited Lectures Delivered/Session Chaired: (Name of the Teachers, Type of the Participants, Name of the Seminar/ Conference etc., Place, Duration)

1. Samiran Chattopadhyay

1.1 Chaired the Session “TS 1.4: Intelligent Data Mining & Data Warehousing” on 27/07/2018 in the 2nd International Conference on “Computational Intelligence, Communications, and Business Analytics” (CICBA-2018).

1.2 Chaired the Session “TS: IX , Software and Service Engineering”,

2. Parama Bhaumik

2.1 “Refresher course on Advances in Instrumentation and Automation: Role of ICT” at Department of Instrumentation & Electronics Engineering, Jadavpur University as Resource Person.

2.2 Session Chair at International Conference eHaCON 2019 (Ethical Hacking Conference), organized by Institute of Engineering and Management Kolkata on 22nd August 2019

3. Kartick Chandra Mondal

3.1. Workshop on Scientific Writing, on April 22-26, 2019 at Department of Computer Science & Engineering, University of Kalyani as Resource Person.

3.2. In Second International Conference on Computational Intelligence, Communications, and Business Analytics on 27-28 July, 2018 at Kalyani Govt. Engg. College, Kalyani, India as Session Chair.

4. Munmun Bhattacharya

4.1. “Refresher course on Advances in Instrumentation and Automation: Role of ICT” at Department of Instrumentation & Electronics Engineering, Jadavpur University as Resource Person.

3. B. Seminar/Workshop/Conference/Symposium Attended: (Name of the Teachers, Name of the paper presented, Name of the Seminar/ Conference etc., Place, Duration)

1. Kartick Chandra Mondal

1.1 In Second International Conference on Computational Intelligence, Communications, and Business Analytics on 27-28 July, 2018 at Kalyani Govt. Engg. College, Kalyani, India as Participant.

2. Munmun Bhattacharya

2.1 In Second International Conference on Computational Intelligence, Communications, and Business Analytics on 27-28 July, 2018 at Kalyani Govt. Engg. College, Kalyani, India as Participant.

3. Parama Bhaumik

3.1 Attended 3-Day Workshop on Machine Learning and Data Analytics organized by Department of Computer Science and Engineering, Jadavpur University, 26th - 28th March, 2019.

4. Tohida Rehman

4.1 Attended 7 Day Short Term Course on Smart and Green ICT sponsored by TEQIP III on May 16- 22, 2018 at Deptt. Information Technology, Jadavpur University.

4.2 7 Day Short Term Course on Internet of Things:Theory and Applications sponsored by (TEQIP III),organized by IIT, KGP(Dept. of CSE) October 24-28, 2018.

4.3 7 Day Short Term Course on sponsored by (AICTE) on Machine learning Using Python organized by NITTTR,Chandigarh (Dept. of C.S.E), April, 29-March 3,2019.

4.4 2 Day workshop on PyTorch organized by Calcutta University, June 29-30, 2019

3. C. Seminar/Workshop/Conference/Symposium Organized:(Name of the Teacher, Name of the Paper Presented, if any, Name of the Seminar, Place, Duration)

1. Dr. Bhaskar Sardar and Prof. Samiran Chattopadhyay, “Smart and Green Information and Communication Technologies”, TEQIP – III sponsored Short Term Course organized by Department of Information Technology, Jadavpur University from May 16 – May 22, 2018.

3. D. Orientation Courses/Refresher Courses Attended: (Name of the Teachers, Title of the Course, Duration, Place)

1. Kartick Chandra Mondal

- 1.1 Refresher Course on “Disaster Management: Water and Environmental Sanitation”, UGC-HRDC, Jadavpur University, Saltlake Campus, Kolkata, India, 7th January 2019 To 30th January 2019, 3 Weeks
- 1.2 7 Day Short Term Course on “Smart and Green ICT” sponsored by TEQIP III on May 16- 22, 2018 at Deptt. Information Technology, Jadavpur University.

2. Munmun Bhattacharya

- 2.1 7-Day Short Term Course on “Smart and Green ICT” sponsored by TEQIP III on May 16- 22, 2018 at Deptt. Information Technology, Jadavpur University.

3. Rohini Basak

- 3.1 7 Day Short Term Course on “Smart and Green ICT” sponsored by TEQIP III on May 16- 22, 2018 at Deptt. Information Technology, Jadavpur University.

4. Palash Kundu

- 4.1 7 Day Short Term Course on “Smart and Green ICT” sponsored by TEQIP III on May 16- 22, 2018 at Deptt. Information Technology, Jadavpur University.

5. Sujit Kumar Das

- 5.1 7 Day Short Term Course on “Smart and Green ICT” sponsored by TEQIP III on May 16- 22, 2018 at Deptt. Information Technology, Jadavpur University.

6. Sruti Gan Chaudhuri

- 6.1 7 Day Short Term Course on “Smart and Green ICT” sponsored by TEQIP III on May 16- 22, 2018 at Deptt. Information Technology, Jadavpur University.

7. Parama Bhaumik

- 7.1 7 Day Short Term Course on “Smart and Green ICT” sponsored by TEQIP III on May 16- 22, 2018 at Deptt. Information Technology, Jadavpur University.

8 Uttam Kumar Roy

- 8.1 7 Day Short Term Course on “Smart and Green ICT” sponsored by TEQIP III on May 16- 22, 2018 at Deptt. Information Technology, Jadavpur University.

4. A. Books/Monographs/Book Chapters Published (Name of the Teachers, Name of the Book, Name of the publisher)

Samiran Chattopadhyay

1. Nandini Mukherjee, Sarmistha Neogy, Samiran Chattopadhyay, Big Data in e-healthcare: Challenges and Perspectives, Chapman and Hall/CRC, 2019.
2. Debarshi Kumar Sanyal, Samiran Chattopadhyay, Rajdeep Chatterjee, *Figure Retrieval from Biomedical Literature: An Overview of Techniques, Tools and Challenges*, Machine Learning in Bio-Signal Analysis and Diagnostic Imaging, Edited by Nilanjan Dey Surekha Borra Amira Ashour Fuqian Shi, Academic Press, December , 2018 (in Press)

Kartick Chandra Mondal

1. Kartick Chandra Mondal and Nicolas Pasquier, "Algorithms for Data Mining and Bio-informatics", 336 pages, Publisher: LAP LAMBERT Academic Publishing (April 24, 2018), Language: English, ISBN-10: 3330045558, ISBN-13: 978-3330045552, Product Dimensions: 5.9 x 0.8 x 8.7 inches

4. B. Articles published in Journals/Conferences: (National/International/Peer-reviewed)

Samiran Chattopadhyay

1. Soumya Banerjee, Vanga Odelu, Ashok Kumar Das, Samiran Chattopadhyay, Joel J. P. C Rodrigue, Physically Secure Lightweight Anonymous User Authentication Protocol for Internet of Things using Physically Unclonable Functions, accepted in *IEEE Access*, 2019 (IF: 4.098)
2. Arpita Mallick, Anindita Saha, Chandreyee Chowdhury, Samiran Chattopadhyay "Energy Efficient Routing Protocol for Ambient Assisted Living Environment", accepted in *Wireless Personal Communications*, Springer, 2019 [IF 1.200]
3. Soumya Banerjee, Vanga Odelu, Ashok Kumar Das, Jangirala Srinivas, Neeraj Kumar, Samiran Chattopadhyay, Kim-Kwang Raymond Choo, "A Provably-Secure and Lightweight Anonymous User Authenticated Session Key Exchange Scheme for Internet of Things Deployment", accepted in *IEEE Internet of Things Journal* (IF 5.863), 2019.
4. Suvadip Batabyal, Parama Bhaumik, Samiran Chattopadhyay, Sudip Misra "Steady State Analysis of Buffer Occupancy for Different Forwarding Strategies in Mobile Opportunistic Network", accepted in *IEEE Transactions in Vehicular Technology* (IF 4.432), 2019
5. Barman, Hubert Shum, Samiran Chattopadhyay, Debasis Samanta "A Secure Authentication Protocol for Multi-server-based e-Healthcare using a Fuzzy Commitment Scheme", accepted in *IEEE Access*, 2018. [2017 IF: 3.557]
6. Raja Karmakar, Samiran Chattopadhyay, Sandip Chakraborty "Intelligent MU-MIMO User Selection with Dynamic Link Adaptation in IEEE 802.11ax", accepted in *IEEE Transactions on Wireless Communications*. [2018 IF: 5.888]
7. Diptangshu Pandit, Li Zhang, Samiran Chattopadhyay, Chee Peng Lim and Chengyu Liu "A Scattering and Repulsive Swarm Intelligence Algorithm for Solving Global Optimization Problems", accepted in *Knowledge-based systems, Elsevier* [IF: 4.5]
8. Santanu Chatterjee, Sandip Roy, Ashok Kumar Das, Samiran Chattopadhyay, Neeraj Kumar, and Athanasios V. Vasilakos "Secure Biometric-Based Authentication Scheme using Chebyshev Chaotic Map for Multi-Server Environment," *IEEE Transactions in Secured and Dependable Computing*, Volume 15, Issue 5, 824 – 839, September/October 2018 [Impact factor: 2.926]
9. Soumya Banerjee, Vanga Odelu, Ashok Kumar Das, Samiran Chattopadhyay, Neeraj Kumar, Youngho Park, Sudeep Tanwar, "Design of an Anonymity-Preserving Group Formation Based Authentication Protocol in Global Mobility Networks", *IEEE Access*, Volume 6, Issue 1, 20673 – 20693, December 2018 [Impact Factor: 3.244].
10. Chandreyee Chowdhury, Nauman Aslam, Ghufran Ahmed, Samiran Chattopadhyay Sarmistha Neogy; Li Zhang, "Reliability Analysis of Wireless Sensor Networks for Remote Deployment," *Wireless Personal Communications*, Volume 98, Issue 1, pp 1331-1360, Springer, 2018 [Impact Factor: 0.951]
11. Sandip Roy, Ashok Kumar Das, Santanu Chatterjee, Neeraj Kumar, Samiran Chattopadhyay, and Joel J. P. C. Rodrigues "Provably Secure Fine-Grained Data Access Control over Multiple Cloud Servers in Mobile Cloud Computing Based Healthcare Application," *IEEE Transactions in Industrial Informatics*, Early Access, 2018 [SCI IF: 6.74]
12. Anindita Sarkar Mondal, Madhupa Sanyal, Samiran Chattopadhyay, Kartick Chandra "Mondal Performance Analysis of Structured, Un-Structured, and Cloud Storage Systems", *International Journal of Ambient Computing and Intelligence (IJACI)*, IGI Global, Volume 10, Issue 1, pp. 1-29, 2019.

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13. Neepa Biswas, Samiran Chattopadhyay, Gautam Mahapatra, Santanu Chatterjee and Kartick Chandra Mondal, "A New Approach for Conceptual Extraction-Transformation-Loading Process Modeling, *International Journal of Ambient Computing and Intelligence (IJACI)*", IGI Global, Volume 10, Issue 1, pp. 30 – 45, 2019.
14. Hindol Bhattacharya, Samiran Chattopadhyay, Matangini Chattopadhyay and Avishek Banerjee, "Storage and Bandwidth Optimized Reliable Data Placement", accepted in *International Journal of Ambient Computing and Intelligence (IJACI)*, IGI Global Volume 10, Issue 1, pp. 78 – 95, 2019.
15. Sk. Simran Akhtar, Debarshi Kumar Sanyal, Samiran Chattopadhyay, Plaban Kumar Bhowmick and Partha Pratim Das, "A Metadata Extractor for Books in a Digital Library" accepted for publication in the proceedings of the 20th International Conference On Asia-Pacific Digital Libraries (ICADL) 2018 [CORE Rank A].
16. Anindita Sarkar, Kshitij Pant and Samiran Chattopadhyay, "DRSQ - A Dynamic Resource Service Quality Based Load Balancing Algorithm", Proceedings of Second International Conference on "Computational Intelligence, Communications, and Business Analytics" (CICBA-2018), 2018, to be published in CCIS, Springer.
17. Hindol Bhattacharya, Arnab Bhattacharya, Samiran Chattopadhyay and Matangini Chattopadhyay, "LDA Topic Modeling based Dataset Dependency Matrix Prediction", Proceedings of Second International Conference on "Computational Intelligence, Communications, and Business Analytics" (CICBA-2018), 2018, to be published in CCIS, Springer.
18. Nilkantha Garain, Samiran Chattopadhyay, Gautam Mahapatra, Santanu Chatterjee and Kartick Chandra Mondal, "Design and implementation of an improved data warehouse on clinical data", Proceedings of Second International Conference on "Computational Intelligence, Communications, and Business Analytics" (CICBA-2018), 2018, to be published in CCIS, Springer.
19. Pragma Kar, Soumya Banerjee, Kartick Chandra Mondal, Gautam Mahapatra, Samiran Chattopadhyay, "A Hybrid Intrusion Detection System For Hierarchical Filtration of Anomalies," *Information and Communication Technology for Intelligent Systems*, Springer Nature, Singapore, 2019 (in Press).
20. Saswati Mukherjee, Matangini Chattopadhyay, Samiran Chattopadhyay, and Pragma Kar, "EAER-AODV: Enhanced Trust Model Based on Average Encounter Rate for Secure Routing in MANET", *Advances in Intelligent Systems and Computing*, vol 667. Springer, Singapore, May 2018
21. Sriyanjana Adhikary, Samiran Chattopadhyay and Sankhayan Choudhury, "A Novel Bio-inspired Algorithm for increasing Throughput in Wireless Body Area Network (WBAN) by Mitigating Inter-WBAN", *Advances in Intelligent Systems and Computing*, vol 667. Springer, Singapore, May 2018.

Bibhas Chandra Dhara

1. S. Umer, B. C. Dhara and B. Chanda, "Face Recognition Using Fusion of Feature Learning techniques", *Measurement*, 2019.
2. S. Kandar, Dhaibat Chaudhuri, Apurbaa Bhattacharjee and B. C. Dhara, "Image encryption using sequence generated by cyclic group", *Journal of information security and applications*, vol-44 pp. 117-129, 2019.
3. S. Umer, B. C. Dhara and B. Chanda, "Person Identification using Fusion of Iris and Periocular Deep Features", *Engineering Applications of Artificial Intelligence*.
4. S. Umer, B. C. Dhara and B. Chanda, "Recognition of Constrained and Less-constrained Iris Images Based on Ensemble of Patch Statistics Features", *The Visual Computers*, 2019 Sep 1;35(9):1327-44.
5. Sumit Pal, S. Kandar and B. C. Dhara, "A Novel Copy-Move Image Forgery Detection Method Using 8-Connected Region Growing Technique", First International Conference on "Advances in Electrical and Computer Technologies 2019" (ICAECT 2019).
6. C. Maiti and B. C. Dhara, "Robust Non-blind Video Watermarking using DWT and QR Decomposition", In International Conference on "Computational Intelligence in Pattern Recognition (CIPR 2019)".

Bhaskar Sardar

1. M. Das, A. Banerjee, B. Sardar, "A framework for evaluating branch predictors using multiple performance parameters", accepted for publication in Inderscience *International Journal of High Performance Systems Architecture (IJHPSA)* (In Press).
2. M. Das, A. Banerjee, B. Sardar, "A Shared BTB Design for Multicore Systems", IEEE/ACM International Symposium on Code Generation and Optimization, co-located with HPCA, pp.267-268, February 2019.
3. S. S. Ray, S. Singh, C. Sengupta, S. Ghosh, B. Sardar, "A Fine-grained Integrated IP Lookup Engine for Multigigabit IP Processing", International Conference on "Advanced Networks and Telecommunications Systems (ANTS)", IEEE, pp. 1-6, December 2018.
4. R. Mondal, A. Biswas, B. Sardar, "Effect of Mobility and Receive Window on TCP in Device to Device Communication" International Conference on "Research in Computational Intelligence and Communication Networks (ICRCICN)", IEEE, pp. 182-187, November 2018.
5. M. Das, A. Banerjee, B. Yu, B. Sardar, "A Multi-component Branch Predictor Design for Low Resource Budget Processors" International workshop on "Pioneering Processor Paradigms" (WP3) 2018, co-located with HPCA 2018, Vienna.

Kartick Chandra Mondal

1. Arunava Sankar Nath, Aparajita Pal, Somnath Mukhopadhyay, Kartick Chandra Mondal, (2019) "A survey on cancer prediction and detection with data analysis.", *Innovations in Systems and Software Engineering (ISSE)*, Springer-Verlag London Ltd., part of Springer Nature 2019, Pages: 1-13, DOI: <https://doi.org/10.1007/s11334-019-00350-6>, Print ISSN: 1614-5046, Online ISSN: 1614-5054.
2. Hrishav Bakul Barua and Kartick Chandra Mondal, (2019), "A Comprehensive survey on Cloud Data Mining (CDM) Frameworks and Algorithms." *ACM Computing Surveys*, Vol. 52(5), 2019, Article No. 104, 62 pages, DOI: 10.1145/3349265.
3. Hrisav Bakul Barua, and Kartick Chandra Mondal, (2019) "Approximate computing: A survey of recent trends Bringing greenness to computing and communication", *Journal of The Institution of Engineers (India): Series B (IEIB)*, Pages: 1-9, DOI: <https://doi.org/10.1007/s40031-019-00418-8>, Print ISSN: 2250-2106, Online ISSN: 2250-2114.
4. Neepa Biswas, Anamitra Sarkar, and Kartick Chandra Mondal, "Efficient incremental loading in ETL processing for real-time data integration.", *Innovations in Systems and Software Engineering, S.I. : CICBA 2018*, pp. 1-9, 2019, DOI: <https://doi.org/10.1007/s11334-019-00344-4>, Print ISSN: 1614-5046, Online ISSN: 1614-5054.
5. Neepa Biswas, Samiran Chattopadhyay, Gautam Mahapatra, Santanu Chatterjee, and Kartick Chandra Mondal, "A New Approach for Conceptual ETL Process Modeling." *International Journal of Ambient Computing and Intelligence (IJACI)*, IGI Global (SI titled: "Storage, Process and Intelligent Systems") Vol 10(1), 2019, pp. 30-45, DOI: 10.4018/IJACI.2019010102.
6. Anindita Sarkar Mondal, Madhupa Sanyal, Samiran Chattopadhyay, and Kartick Chandra Mondal, "Performance Analysis of Structured, Un-structured & Cloud Storage Systems" *International Journal of Ambient Computing and Intelligence (IJACI)*, IGI Global (SI titled: "Storage, Process and Intelligent Systems") Vol 10(1), 2019, pp. 1-29, DOI: 10.4018/IJACI.2019010101.
7. Kartick Chandra Mondal, and Hrisav Bakul Barua, "Fault Analysis and Trend Prediction in Telecommunication using Pattern Detection: Architecture, Case study and Experimentation", In: Mandal J., Mukhopadhyay S., Dutta P., Dasgupta K. (eds) *Computational Intelligence, Communications, and Business Analytics. CICBA 2018. Communications in Computer and Information Science*, vol 1030, Pages: 307-320, DOI: https://doi.org/10.1007/978-981-13-8578-0_24, Print ISBN: 978-981-13-8577-3, Online ISBN: 978-981-13-8578-0. (Conference Proceedings)

8. Nilkantha Garain, Samiran Chattopadhyay, Gautam Mahapatra, Santanu Chatterjee and Kartick Chandra Mondal, “Design and implementation of an improved data warehouse on clinical data”, In: Mandal J., Mukhopadhyay S., Dutta P., Dasgupta K. (eds) *Computational Intelligence, Communications, and Business Analytics. CICBA 2018. Communications in Computer and Information Science*, vol 1031, Pages: 278-290, DOI: https://doi.org/10.1007/978-981-13-8581-0_23, Print ISBN: 978-981-13-8580-3, Online ISBN: 978-981-13-8581-0. (Conference Proceedings)
9. Sudarshan Biswas, and Kartick Chandra Mondal, “Dynamic FP Tree Based Rare Pattern Mining Using Multiple Item Supports Constraints”, In: Mandal J., Mukhopadhyay S., Dutta P., Dasgupta K. (eds) *Computational Intelligence, Communications, and Business Analytics. CICBA 2018. Communications in Computer and Information Science*, vol 1031, Pages: 291-305, DOI: https://doi.org/10.1007/978-981-13-8581-0_24, Print ISBN: 978-981-13-8580-3, Online ISBN: 978-981-13-8581-0. (Conference Proceedings)
10. Neepa Biswas, Anamitra Sarkar, and Kartick Chandra Mondal, “Empirical Analysis of Programmable ETL Tools”, In: Mandal J., Mukhopadhyay S., Dutta P., Dasgupta K. (eds) *Computational Intelligence, Communications, and Business Analytics. CICBA 2018. Communications in Computer and Information Science*, vol 1031, Pages: 267-277, DOI: https://doi.org/10.1007/978-981-13-8581-0_22, Print ISBN: 978-981-13-8580-3, Online ISBN: 978-981-13-8581-0. (Conference Proceedings)
11. Pragma Kar, Soumya Banerjee, Kartick Chandra Mondal, Goutam Mahapatra, Santanu Chattopadhyay, (2019) “A Hybrid Intrusion Detection System for Hierarchical Filtration of Anomalies.”, In: Satapathy S., Joshi A. (eds) *Information and Communication Technology for Intelligent Systems. Smart Innovation, Systems and Technologies*, vol 106, Pages: 417-426, Springer, Singapore, DOI: https://doi.org/10.1007/978-981-13-1742-2_41, Print ISBN: 978-981-13-1741-5, Online ISBN: 978-981-13-1742-2 (Conference Proceedings)
12. Kartick Chandra Mondal, Biswadeep Deb Nandy, Arunima Baidya, (2018) “A Factual Analysis of Improved Python Implementation of Apriori Algorithm.” In: Mandal J., Mukhopadhyay S., Dutta P., Dasgupta K. (eds) *Methodologies and Application Issues of Contemporary Computing Framework*. Springer, Singapore, pp 139-151, DOI: https://doi.org/10.1007/978-981-13-2345-4_11, Print ISBN: 978-981-13-2344-7, Online ISBN: 978-981-13-2345-4 (Edited Book Chapter)
13. Sudarsan Biswas, Neepa Biswas and Kartick Chandra Mondal, “Parallel Apriori based Distributed Association Rule Mining: A Comprehensive Survey.”, 2018 Fourth International Conference on “Research in Computational Intelligence and Communication Networks” (ICRCICN), DOI: 10.1109/ICRCICN.2018.8718690, Electronic ISBN: 978-1-5386-7638-7, USB ISBN: 978-1-5386-7637-0, Print on Demand(PoD) ISBN: 978-1-5386-7639-4
14. Hrisav Bakul Barua, and Kartick Chandra Mondal, “Green Data Mining using Approximate Computing: An experimental analysis with Rule Mining”, IEEE International Conference on “Computing, Power and Communication Technologies” (GUCON) 2018, IEEE Conference Record No 42736, DOI: 10.1109/GUCON.2018.8675095, Electronic ISBN: 978-1-5386-4491-1, USB ISBN: 978-1-5386-4490-4, Print on Demand(PoD) ISBN: 978-1-5386-4492-8

Utpal Kumar Ray

15. Sandeep Kumar Pandey, Tapobrata Dhar, Ryan Saptarshi Ray, Aritro Sengupta, Utpal Kumar Ray, “An innovative way of increasing the efficiency of Identity-Based Cryptosystem by Parallelisation of Threads”, published in Conference Proceedings of International Conference on “Computer Networks and Inventive Communication Technologies” (ICCNCT 2018) (Proceedings published by Springer as Lecture Notes on Data Engineering and Communications Technologies, Volume 15), 26-27 April 2018, ISBN:978-981-10-8680-9, ISBN:978-981-10-8681-6(eBook), ISSN:2367-4512, ISSN:2367-4520(electronic), pp 497-514
2. Ryan Saptarshi Ray, Parama Bhaumik, Utpal Kumar Ray, “Fault-tolerant smt (software transactional memory) using replication”, published in *International Journal of Computer Engineering & Technology*

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(IJ CET) ISSN (PRINT): 0976 – 6367, ISSN (ONLINE): 0976 – 6375 Volume- 9, Issue-3, May-June 2018, pp 175-181

3. Ryan Saptarshi Ray, Parama Bhaumik, Utpal Kumar Ray, “Flexible Programming Approach using STM”, published in *International Journal of Computer Sciences and Engineering (IJ CSE)* E-ISSN:2347-2693 Volume- 6, Issue-7, July 2018, pp 349-353

Rohini Basak

1. Rohini Basak, Sudip Kumar Naskar, Alexander Gelbukh: “Short-answer grading using textual entailment”, *Journal of Intelligent & Fuzzy Systems*, vol 36, no 5, pp: 4909-4919. 2019. DOI: 10.3233/JIFS-179038
2. Dibyendu Seal, Uttam K Roy, Rohini Basak: “Sentence-Level Emotion Detection from Text Based on Semantic Rules”, “Information and Communication Technology for Sustainable Development”, Proceedings of ICT4SD 2018, pp: 423-430, 2019.
3. Bhuvnesh Chaturvedi, Rohini Basak: “Automatic Short-Answer Grading using Corpus-based Semantic Similarity Measurements”, International Conference on “Advanced Computing and Intelligent Engineering (ICACIE 2019)” [ACCEPTED]

Munmun Bhattacharya

1. M Bhattacharya, D Ghosh “An algorithm for Selecting Optimal Trust Path in Online Social Networks using Particle Swarm Optimization”, CICBA 2018, 27 – 28 July, 2018.

Parama Bhaumik

1. Suvadip Batabyal, Parama Bhaumik, Samiran Chattopadhyay, Sudip Misra, “Steady State Analysis of Buffer Occupancy for Different Forwarding Strategies in Mobile Opportunistic Network”, *IEEE Transactions on Vehicular Technology*, DOI 10.1109/TVT.2019.2915111, (Volume: 68 , Issue: 7) Page(s): 6951 - 6963, INSPEC Accession Number: 18832083
2. Hiren Dutta, Parama Bhaumik “Real-Time Dynamic Data Control mechanism using Auto rebalancing strategy for IoT Applications”, March-May 2018 issue (Volume No. 6, Issue No. 1) of *i-manager’s Journal on Computer Science (JCOM)*
3. Ryan Saptarshi Ray, Parama Bhaumik, Utpal Kumar Ray, “Fault-tolerant smt (software transactional memory) using replication” published in *International Journal of Computer Engineering & Technology (IJ CET)* ISSN (PRINT): 0976 – 6367, ISSN (ONLINE): 0976 – 6375 Volume- 9, Issue-3, May-June 2018, pp 175-181
4. Swarna Kamal Paul, Prince Gupta and Parama Bhaumik , “ Learning to solve single variable linear equations by universal search with probabilistic program graphs” in proceedings of 8th World Congress on “Information and Communication Technologies (WICT 2018)” Kochi, India December 17-19, 2018.
5. Smritikona Barai, Nupur Boral and Parama Bhaumik , “Reducing the negative effect of malicious nodes in Opportunistic networks Using Reputation based Trust Management” in proceedings of 8th World Congress on “Information and Communication Technologies (WICT 2018)” Kochi, India December 17-19, 2018.
7. Ryan Saptarshi Ray, Parama Bhaumik, Utpal Kumar Ray, “Flexible Programming Approach using STM”, published in *International Journal of Computer Sciences and Engineering (IJ CSE)* E-ISSN: 2347-2693 Volume- 6, Issue-7, July 2018, pp 349-353

Uttam Kumar Roy

1. Uttam K. Roy, Shivashis Ganguly, Arijit Ukil, “Non-Invasive Estimation of Random Blood Glucose from Smartphone-based PPG”, *International Journal of Biomedical Engineering and Technology*, ISSN online:1752-6426, ISSN print:1752-6418 (In press)
2. Divyans Mahansaria and Uttam, “Secure Authentication for ATM transactions using NFC technology”, Kumar Roy The IEEE (53rd) International Carnahan Conference on “Security Technology,” October 1-3, 2019, Chennai, India, pp. 181-185

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3. Uttam K. Roy, Divyans Mahansaria, “Two-Factor Authentication Using Mobile OTP and Multi-dimensional Infinite Hash Chains”, “Future of Information and Communication Conference (FICC) 2020”, to be held from 5-6 March 2020, San Francisco, United States (accepted)

Sruti Gan Chaudhuri

1. Subhash Bhagat, Sruti Gan Chaudhuri, Krishnendu Mukhopadhyaya, Mutual Visibility for Asynchronous Robots. “International Colloquium on Structural Information and Communication Complexity, SIROCCO 2019”: Structural Information and Communication Complexity. pp 336-339
2. Sruti Gan Chaudhuri, Flocking along line by autonomous oblivious mobile robots. The 20th International Conference on “Distributed Computing and Networking ICDCN 2019:” 460-464, doi>10.1145/3288599.3295583 - Presented
3. Sruti Gan Chaudhuri, Gathering of Autonomous Mobile Robots Under Limited Sensing Ranges. 7th International Conference on “Advances in Computing, Communications and Informatics (ICACCI 2018) ICACCI 2018”, 909-914, , doi> 10.1109/ICACCI.2018.8554579,
4. M Mondal, S Gan Chaudhuri, S Bhattacharya, Uniform Circle Formation by Fat Robots, International Conference on “Intelligent Data Communication Technologies and Internet of Things (ICICI) 2018” pp 350-362, doi> 10.1007/978-3-030-03146-6_39

Tohida Rehman

1. T Rehman “A Fuzzy Intelligent Advisor through Matlab under E-Learning Environment.” published in *IOSR Journal of Engineering (IOSRJEN)*ISSN (e): 2250-3021, ISSN (p): 2278-8719 Vol. 09, Issue 4 (April. 2019), ||S (II) || PP 32-37.

INSTRUMENTATION & ELECTRONICS ENGINEERING

(SALT LAKE CAMPUS)

Phone : + 91-33-2335-2587

Int. : 6139

H.O.D. : Dr. Runu Banerjee Roy

E-mail : hodiee@jadavpuruniversity.in

1. A. Courses Offered:

Name of the Course : Bachelor of Instrumentation & Electronics Engineering

Duration : 4 Years

Year from which the course Started : 1989

Total Intake : 57

No. of students Enrolled:57

Name of the Course : Bachelor of Technology in Instrumentation and Electronics Engineering

Duration : 3 Years

Year from which the course Started : 1966

Total Intake : 21

No. of students Enrolled:18

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Name of the Course : Master of Technology in Instrumentation and Electronics Engineering

Duration : 2 Years

Year from which the course Started : 2001

Total Intake : 08

No. of students Enrolled:08

Name of the Course : Ph.D.

Year from which the course Started : 1966

No. of students Enrolled:19

1. B. Number of Faculty Members:

Professor(s)	Associate Professor	Assistant Professor(s)
Subhankar Bandyopadhyay	Kalyan Majumdar	Prolay Sharma
Ardhendu Ghoshal		Abhjit Chandra
Rajib Bandyopadhyay		Shyamali Mitra
Bivas Dam		
Rajanikanta Mudi		
Kumardeb Banerjee		
Bhaswati Goswami		
Ratna Ghosh		
Bipan Tudu		
Runu Banerjee Roy		

2. A. Area of Research Activities:

- | | |
|---------------------------------|---|
| i) Signal Processing | ii) Digital System Design |
| iii) Intelligent Control | iv) Electronic Olfaction and Taste Characterization |
| v) Embedded Systems | vi) Sensor Design |
| vii) Control System | viii) Filtering and estimation |
| ix) Bio-medical instrumentation | x) Spectroscopic Instrumentation |

2. B. Major Research Projects:[Name of the Project–Investigators–Funding Agency–Amount (Rs. Lakhs) Duration]

Development of near infrared spectroscopy (NIRS) based method for real-time estimation of the biochemical quality parameters during tea processing–Prof. Rajib Bandyopadhyay–National Tea Research Foundation, Tea Board, Govt. of India–22.00–2016-2019

Development of potentiostat system for electrochemical applications–Prof. Rajib Bandyopadhyay Department of Science and Technology, Govt. of India–35–2016-2018

Development of QCM gas sensors for quality monitoring of agro products–Dr. Prolay Sharma–Department of Science and Technology, Govt. of India–38–2016-2018

Modeling, Characterization and control of a Fast Steering Mirror Assembly–Prof. Kumardeb Banerjee–DRDO, Gov of India–22–2016-2018

Development of sensor probes for quantification of active constituents in *Andrographis paniculata* and *Piper nigrum* using Near Infrared Spectroscopy (NIRS)–Prof. Rajib Bandyopadhyay, Prof. Pulok Mukherjee–National Medicinal Plant Board, Ministry of Ayush–52.50–2018-2020

Design of low complexity sharp cut-off variable bandwidth digital FIR filter for next generation communication system–Dr. Abhijit Chandra–Department of Science and Technology, Govt. of India–21.32–2017-2020

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Qualitative assessment of Indian tea by developing specific electrodes of an electronic tongue–Prof. Runu Banerjee Roy–Department of Science and Technology, West Bengal–12.50–2018-2021

Development of electrodes for electronic tongue using molecular imprinted techniques for detection of important chemicals in medicinal plants–Prof. Bipan Tudu–Department of Science and Technology, Govt. of India–23.11–2018-2021

3. A. Invited Lectures Delivered/ Session Chaired:

- i) Prof. Rajib Bandyopadhyay was invited to deliver a lecture on “Recent advances on Near infrared and Raman spectroscopy for estimation of quality of agro products.” at ITMO University, St Petersburg, Russia on 14th May 2018.
- ii) Prof. Rajib Bandyopadhyay was invited to deliver a talk in the short course on Recent Trends in Intelligent Systems Design (RTISD 2019) on 9th January 2019 at NIT Durgpur.
- iii) Prof. Rajib Bandyopadhyay presented a paper on “Exploration of Near Infrared Spectroscopy for *Andrographis paniculate*: Discrimination between samples with different andrographalide content at ANS 2018, held at Kunming, China during June 21-21, 2018.
- iv) Prof. Rajib Bandyopadhyay was invited to lecture on “Data processing for sensor arrays - statistical methods” and “Data processing for sensor arrays - biologically inspired methods” in the short term course on Data Analytics for Instrumentation System (DAIS’ 19) at IIT Kharagpur on 16th February 2019.

3. B. Seminar/ Workshop/ Conference/Symposium Attended:

Paper presented in International Conferences :

1. Somali Nandy, Bhaswati Goswami and Ratna Ghosh, “Deriving a linear model for passively acquired bio-potentials using sample ACF,” in Proceedings of *2018 IEEE Applied Signal Processing Conference (ASPICON)*, Kolkata, India, December 7-9, 2018.
2. Arindam Sarkar, Somen Biswas, Gaytri Datwal, Sayantan Debnath, Bhaswati Goswami and Ratna Ghosh, “Design and calibration of a multi-channel low voltage data acquisition system,” in Proceedings of *2018 IEEE Applied Signal Processing Conference (ASPICON)*, Kolkata, India, December 7-9, 2018.
3. Debojyoti Banerjee, Paramita Banerjee, Bhaswati Goswami and Ratna Ghosh, “Deriving an electrical model of a two terminal piezoelectric buzzer from its impedance response,” in Proceedings of *2018 IEEE Applied Signal Processing Conference (ASPICON)*, Kolkata, India, December 7-9, 2018.
4. Paramita Banerjee, Ratna Ghosh and Bhaswati Goswami, “Analysis of major mode of vibration of a RFA based dental implant stability measuring sensor with varying length of L arm,” in Proceedings of *2018 IEEE Applied Signal Processing Conference (ASPICON)*, Kolkata, India, December 7-9, 2018.
5. Paramita Banerjee and Ratna Ghosh, “Electrical equivalent cascade model of piezoelectric based sensor,” in Proceedings of *2018 IEEE Applied Signal Processing Conference (ASPICON)*, Kolkata, India, December 7-9, 2018.
6. Arnab Ghosh, Subhabrata Roy and Abhijit Chandra, “Prefilter-Equalizer Based Structure: A New Design Strategy for Narrow-band FIR Filters”, in Proceedings of *2018 IEEE Applied Signal Processing Conference (ASPICON)*, Kolkata, India, December 7-9, 2018.
7. Saumita Kar, Hemanta Naskar, Bipan Tudu, Rajib Bandyopadhyay “Comparison of multivariate analysis techniques for brand classification of turmeric powders by near-infrared (NIR) spectroscopy,” *Fourth International Conference on Research in Computational Intelligence and Communication Networks (ICRCICN 2018)*, RCC Institute of Information Technology, Kolkata, India, November 22 - 23, 2018.
8. Hemanta Naskar, Saumita Kar, Sudip Biswas, Bipan Tudu, Rajib Bandyopadhyay, Panchanan Pramanik “Linear regression modelling on epigallocatechin-3-gallate sensor data for green tea,” *Fourth International*

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Conference on Research in Computational Intelligence and Communication Networks (ICRCICN 2018), RCC Institute of Information Technology, Kolkata, India, November 22 - 23, 2018.

9. Angiras Modak, Trisita Nandy Chatterjee, Sangita Nag, Runu Banerjee Roy, Bipan Tudu, Rajib Bandyopadhyay “Linear regression modelling on epigallocatechin-3-gallate sensor data for green tea,” *Fourth International Conference on Research in Computational Intelligence and Communication Networks (ICRCICN 2018)*, RCC Institute of Information Technology, Kolkata, India, November 22 - 23, 2018.
10. Srikanta Acharya, Debangana Das, Trisita Nandy Chatterjee, Soumen Mukherjee, Runu Banerjee Roy, Bipan Tudu, Rajib Bandyopadhyay, “Selection of optimum number of Sensors of an electronic tongue for efficient classification of black tea: a combinatorial approach based on discrete cosine transform and artificial neural network,” *Fourth International Conference on Research in Computational Intelligence and Communication Networks (ICRCICN 2018)*, RCC Institute of Information Technology, Kolkata, India, November 22 - 23, 2018.
11. Somdeb Chanda, Rishabh Bajaj, Sahnaz Tasrin, Bipan Tudu, “Determination of optimum wavelength region to quantify caffeine content in tea leaves using Particle Swarm and Grey Wolf Optimization techniques,” *The Sixth Asian NIR Symposium (ANS 2018)*, Kunming, China, June 21-24, 2018.
12. Ajanto Kumar Hazarika, Somdeb Chanda, Sk. Anarul Islam, Pratim Pandey, Bipan Tudu, “Prediction of total Polyphenol content in green tea by NIR (Near Infrared Spectroscopy) using SVR and PLS regression model,” *The Sixth Asian NIR Symposium (ANS 2018)*, Kunming, China, June 21-24, 2018.
13. Dilip Sing, Somdeb Chanda, Subhadip Banerjee, Bipan Tudu, Kalyan Majumdar, Bivas Dam, Rajib Bandyopadhyay, Pulok K. Mukherjee, “Exploration of near infrared spectroscopy for *Andrographis paniculata*: Discrimination between samples with different andrographalide content,” *The Sixth Asian NIR Symposium (ANS2018)*, Kunming, China, June 21-24, 2018.

3. C. Seminar/ Workshop/ Conference/Symposium Organized:

- i) ISA Student Section – Jadavpur University (Dept of Instrumentation & Electronics Engg) organized a Tech Talk on “Functional Safety Basics as per IEC 61508/61511” March 28, 2019 by Mr. Avi Chatterjee, Rockwell Automation India (Pvt) Ltd.
- ii) ISA Student Section – Jadavpur University (Dept of Instrumentation & Electronics Engg) organized a Tech Talk on “Trends in Instrumentation & Automation in Cooling Tower” March 19, 2019 by Mr. G. K. Sinha, Dy.Chief-Engineering Service, Paharpur Cooling Towers Limited.
- iii) Department of Instrumentation and Electronics Engineering, Jadavpur University in collaboration with Tocklai Tea Research Institute (Tea Research Association), Jorhat, Assam and Japan Council of Near Infrared Spectroscopy, Japan organized one-day International Workshop on Application of Near Infrared Spectroscopy in Food & Agriculture is organized at Science City Auditorium, Kolkata on 23rd March 2019.

3. D. Orientation course/ Refreshers course attended:

Dr. Abhijit Chandra attended UGC-HRDC Sponsored 72nd Orientation Program organized by the Human Resource Development Center, Jadavpur University from 06.02.2019 to 06.03.2019 at Jadavpur University Salt Lake campus.

3. E. **Orientation Course/ Refreshers Course Organized:** UGC-HRDC Sponsored Three Week Refresher Course on “Advances in Instrumentation and Automation: Role of ICT”, organized by the Department of Instrumentation and Electronics Engineering, Jadavpur University from 03.12.2018 to 22.12.2018 at Jadavpur University Salt Lake campus as Course Coordinator.

4. B. Articles published in Journals:

INTERNATIONAL

1. Sukanta Ghosh, Abhijit Chandra, Rajani K. Mudi, "A Novel Fuzzy Pixel Intensity Correlation Based Segmentation Algorithm for Early Detection of Alzheimer's Disease", *Multimedia Tools and Applications (Springer)*, Online First on 27th October, 2018.
2. Ananya Bose and Abhijit Chandra, "Conditional Differential Coefficients Method for the Realization of Powers-of-two FIR Filter", *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, vol. 37, no. 12, pp. 3221-3225, 2018.
3. Avik Moulik, Shounak Lahiry and Abhijit Chandra, "Design of Minimum-Phase FIR Filter: An Evolutionary Approach", *Proceedings of the National Academy of Sciences, India Section A: Physical Sciences (Springer)*, Online First on 11th February, 2019.
4. Hemanta Naskar, Sudip Biswas, Bipan Tudu, Rajib Bandyopadhyay, Panchanan Pramanik, "Voltammetric detection of thymol (THY) using polyacrylamide embedded graphite molecular imprinted polymer (PAM@G-MIP) electrode," *IEEE Sensors Journal*, vol. 19, no.19, pp. 8583-8589, 2019.
5. Pradip Saha, Santanu Ghorai, Bipan Tudu, Rajib Bandyopadhyay, Nabarun Bhattacharyya, "Tea quality prediction by sparse modeling of electronic tongue signals," *IEEE Transaction on Instrumentation and Measurement*, vol. 68, no.9, pp. 3046-3053, 2019.
6. Abhishruti Bhuyan, Bipan Tudu, Rajib Bandyopadhyay, Arunangshu Ghosh, Sanjeev Kumar, "ARMAX modeling and impedance analysis of voltammetric e-tongue for evaluation of infused tea," *IEEE Sensors Journal*, vol. 19, no. 11, pp. 4098-4105, 2019.
7. Saumita Kar, Bipan Tudu, Arun Jana, Rajib Bandyopadhyay, "FT-NIR spectroscopy coupled with multivariate analysis for detection of starch adulteration in turmeric powder," *Food additives and Contaminants: Part A*, vol. 36, no. 6, pp. 863-875, 2019.
8. Sanjeev Kumar, Arunangshu Ghosh, Bipan Tudu, Rajib Bandyopadhyay, "A circuit model estimation of voltammetric taste measurement system for black tea," *Measurement*, vol. 140, pp. 609-621, 2019.
9. Saptarshi Ghosh, Bipan Tudu, Nabarun Bhattacharyya, Rajib Bandyopadhyay, "A recurrent Elman network in conjunction with an electronic nose for fast prediction of optimum fermentation time of black tea," *Neural Computing and Applications*, vol. 31(Suppl 2), pp. 1165-1171, 2019.
10. Sk Babar Ali, Barnali Ghatak, Nilava Debabhuti, Satyaki Pal, Prolay Sharma, Bipan Tudu, Nabarun Bhattacharyya, Rajib Bandyopadhyay, "Determination of α -myrcene Volatile in Mango by Quartz Crystal Microbalance Sensor," *IEEE Sensors Journal*, vol. 19, no. 3, pp. 893-900, 2019.
11. Mahuya Bhattacharyya Banerjee, Susmita Pradhan, Runu Banerjee Roy, Bipan Tudu, Dipak Kumar Das, Rajib Bandyopadhyay, Panchanan Pramanik, "Detection of benzene and volatile aromatic compounds by molecularly imprinted polymer coated quartz crystal microbalance Sensor," *IEEE Sensors Journal*, vol. 19, no. 3, pp. 885-892, 2019.
12. Barnali Ghatak, Sk Babar Ali, Bipan Tudu, Panchanan Pramanik, Soumyo Mukherji, Rajib Bandyopadhyay, "Detecting Ocimene in mango using mustard oil based quartz crystal microbalance sensor," *Sensors and Actuators B*, vol. 284, pp. 514-524, 2019.
13. Trisita Nandy Chatterjee, Debangana Das, Runu Banerjee Roy, Bipan Tudu, Ajanto Kr Hazarika, Santanu Sabhapondit, Pradip Tamuly, Rajib Bandyopadhyay, "Development of a nickel hydroxide nanopetal decorated molecular imprinted polymer based electrode for sensitive detection of epigallocatechin-3-gallate in green tea," *Sensors and Actuators B*, vol. 283, pp. 69-78, 2019.
14. Mahuya Bhattacharyya Banerjee, Runu Banerjee Roy, Bipan Tudu, Rajib Bandyopadhyay, Nabarun Bhattacharyya, "Black tea classification employing feature fusion of E-nose and E-tongue responses," *Journal of Food Engineering*, vol.244, pp. 55-63, 2019.

15. Ajanto Kumar Hazarika, Somdeb Chanda, Santanu Sabhapondit, Sandip Sanyal, Pradip Tamuly, Sahnaz Tasrin, Dilip Sing, Bipan Tudu, Rajib Bandyopadhyay, "Quality assessment of fresh tea leaves by estimating total polyphenols using near infrared spectroscopy," *Journal of Food Science and Technology*, vol. 55, no. 12, pp. 4867-4876, 2018.
16. Saumita Kar, Bipan Tudu, Anil K. Bag, Rajib Bandyopadhyay, "Application of near-infrared spectroscopy for the detection of metanil yellow in turmeric powder," *Food Analytical Methods*, vol. 11, no. 5, pp. 1291-1302, 2018.
17. Kamalika Tiwari, Bipan Tudu, Rajib Bandyopadhyay, Anutosh Chatterjee, Panchanan Pramanik, "Voltammetric sensor for electrochemical determination of the floral origin of honey based on a zinc oxide nanoparticle modified carbon paste electrode," *Journal of Sensors and Sensor Systems*, vol. 7, no. 1, pp. 319-329, 2018.
18. Prabal Patra, Chitresh Kundu, Arunangshu Ghosh, Bipan Tudu, Rajib Bandyopadhyay, "Methods for automatic identification of coke ovens for auto positioning systems in coke plant of steel industries," *Diagnostyka*, vol. 19, no. 2, pp. 95-103, 2018.
19. Prabal Patra, Chitresh Kundu, Bipan Tudu, Rajib Bandyopadhyay, Punit Rathore, "A novel method for mitigation of false echo in radar-based positioning system in high scattering zone application areas," *Int. J. Instrumentation Technology*, vol. 2, no. 1, pp. 62-77, 2018.
20. Barnali Ghatak, Sk Babar Ali, Amrita Prasad, Arunangshu Ghosh, Prolay Sharma, Bipan Tudu, Panchanan Pramanik, Rajib Bandyopadhyay, "Application of polymethacrylic acid imprinted quartz crystal microbalance sensor for detection of 3-carene in mango," *IEEE Sensors Journal*, vol. 18, no. 7, pp. 2697-2704, 2018.
21. Trisita Nandy Chatterjee, Debangana Das, Runu Banerjee Roy, Bipan Tudu, Santanu Sabhapondit, Pradip Tamuly, Panchanan Pramanik, Rajib Bandyopadhyay, "Molecular imprinted polymer based electrode for sensing catechin (+C) in green tea," *IEEE Sensors Journal*, vol. 18, no. 6, pp. 2236-2244, 2018.
22. Ajanto K Hazarika, Somdeb Chanda, Santanu Sabhapondit, Sandip Sanyal, Pradip Tamuly, Sahnaz Tasrin, Dilip Sing, Hemanta Naskar, Bipan Tudu, Rajib Bandyopadhyay "On-site estimation of total polyphenol in fresh tea leaf using near-infrared spectroscopy," *NIR news*, vol. 29, pp. 9-14, 2018.
23. Sk Babar Ali, Barnali Ghatak, Nilava Debabhuti, Prolay Sharma, Arunangshu Ghosh, Bipan Tudu, Nabarun Bhattacharya, Rajib Bandyopadhyay, "Detection of α -Caryophyllenein mango using a quartz crystal microbalance sensor," *Sensors and Actuators B*, vol. 255, pp. 3064-3073, 2017, 2018.
24. Saumita Kar, Hemanta Naskar, Bipan Tudu, Rajib Bandyopadhyay, "Application of a polytrimethoxysilane based molecularly imprinted polymer (MIP) electrode towards discrimination of different types of turmeric powder," *Carbon - Science and Technology*, vol. 10, no. 4, pp. 8-16, 2018.
25. Debangana Das, Trisita Nandy Chatterjee, Runu Banerjee Roy, Bipan Tudu, Santanu Sabhapondit, Ajanto Kumar Hazarika, Panchanan Pramanik, Rajib Bandyopadhyay, "Discrimination of green tea using an Epigallocatechin-3-gallate (EGCG) sensitive molecular imprinted polymer (MIP) based electrode," *Carbon - Science and Technology*, vol. 10, no. 4, pp. 27-37, 2018.

6. Major Achievements:

Prof. Rajib Bandyopadhyay was selected as:

1. Member of the Technical Program Committee, International Symposium on Olfaction and Electronic Nose (ISOEN), 2019, Fukuoka, Japan.
2. Member of the Executive Committee of Birla Industrial and Technological Museum, Kolkata, 2019.
3. Member of the Executive Committee of Central Training and Research Laboratory, National Council of Science Museums, Ministry of Culture, 2019.

MECHANICAL ENGINEERING

Phone : + 91-33-2414-6177

Int. : 2457-2248

H.O.D. : Prof. Gautam Majumdar

E-mail : hodmechanical@jadavpuruniversity.in

1. A. Courses offered:

Name of the Courses	Course Duration	Intake capacity
Bachelor's Degree in Mechanical Engineering	4 Years	150
Bachelor's Degree in Mechanical Engineering (Evening Course)	5 Years	40
Master's Degree in Mechanical Engineering	2 Years	25
Master's Degree in Mechanical Engineering (Automobile Engineering)	2 years	18

1. B. Number of Faculty Members:

- Professors: **33**
- Associate Professors: **14**
- Asst. Professors: **15**
- Total: 62**

2. A. Departmental Research Activities: (Broad Areas)

- Hydraulic and Combustion control
- Experimental and Computational fluid dynamics and heat transfer including problems on multi-phase flow.
- Mechatronics and Control.
- Heat transfer analysis of various production process.
- Combustion modeling and simulation.
- Pollution and its control.
- Alternative fuels.
- I.C. Engine & Combustion.
- Vibration analysis.
- Vibration control in machine foundations.
- Laser machining process.
- Fracture Mechanics.
- Dynamic instability of machine structures.
- Synthesis and analysis of machine components.
- Experimental stress and deformation analysis.
- Composite structure.
- Computer Aided Design & Manufacturing (CAD/CAM).
- Energy and Exergy analysis of advanced power and cogeneration systems. Clean coal technology. Combined cycles. Energy conservation. Fuel cell technology.
- Mechatronics.
- Biomechanics and Bioengineering.

- Product Development: Product development performance using the Structural Equation Modeling (SEM) approach.
- Sustainable Energy.
- Microfluidics.

2. B. Major Research Projects:

Dr. Achintya Mukhopadhyay

- “Determination of Heat Transfer and Phase Transformation of Hot-Rolled Steel in Run-out Table”, sponsored by Tata Steel (May 2018 – May 2021) (Rs. 34,73,920/-) (Co-Investigators: Prof. Swarnendu Sen, Prof. Pranibesh Mandal, Prof Sourav Sarkar).
- “Data-driven Early Prediction of Abnormal Behaviour of Combustion Systems using Machine Learning Strategies”, sponsored by Ministry of Human Resource Development, Govt. of India under the Scheme for Promotion of Academic and Research Collaboration (SPARC) (April 2019 – April 2021) (Rs. 48,93,353/-) (US PI: Prof Asok Ray, Pennsylvania State University, USA; Indian Co-PI: Prof. Swarnendu Sen, JU; US Co-PI: Prof. J. A. O’Connor, Penn State).

Dr. Anindya Sundar Das

- Individual Project. “Investigation of the Performance of a Rotor-Shaft System Supported on Magnetic-Bearings mounted on a Maneuvering Marine Vessel based on the Stability and Vibration Response”. Funding Agency: Naval Research Board, DRDO. Duration: May 2015 – April 2018. Date of Completion: 30 April 2018.

Dr. Anirban Mitra

- Co-investigator, “Evaluation of Fracture and Fatigue Crack Growth (FCG) behaviour of Alloy 617 Base and Welded Materials”. (National Mission on Advanced Ultra Super Critical Technology).
- Co-investigator, “Evaluation of Fracture and Fatigue Crack Growth (FCG) behaviour of Alloy 617 Forging Materials”. (National Mission on Advanced Ultra Super Critical Technology).

Dr. Dipankar Sanyal

- Principle Investigator. “To develop procedure for joining next generation high used for supercritical/ultra supercritical power plant by Friction Stir Welding”. Funding Agency: Ministry of Steel, New Delhi. Rs 4,87,26,386/-. Duration: 2015 – Contd.

Dr. Sadhan Kumar Ghosh

International Research Projects ongoing - Prof Sadhan K Ghosh as PI

- Royal Academy of Engineering, UK funded (2019-2021): Circular Economy adoption within small and medium sized enterprises in India and the UK. (40,000 GBP).
- Funded by Global Challenge Research Funding, UK (2019-2020): Social Wellbeing and Mental Health Challenges of Employees of Small and Medium Sized Enterprise (SMEs) in Emerging Economies (2019-2020). (10,000 GBP) .
- ShotaRustaveli National Science Foundation (SRNSF), Georgia, funded (2019-2022): Development of an Integrated Methodology for Determination of the Likelihood of Emerging Illegal Dumpsites in High Mountainous Rural Regions on the Example of Georgia, (GEL 180 000). Partner:Institute of Hydrometeorology at Georgian Technical University, Georgia.
- IGES Centre Collaborating with UNEP on Environmental Technologies (CCET), Japan and International Society of Waste Management, Air and Water (ISWMAW), India funded (2018-20): Developing Indore Case Study, the cleanest city in India (USD 5000).

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- European Union funded: Horizon 2020 Research projects from European commission (July 2018 – June 2022) : PI from Jadavpur University, Project Entitled, “ India H₂O bio-mimetic and phyto-technologies Designed for low-cost purific Action and recycling of water. 20 participating organizations from 7 countries- India, UK, Denmark, Singapore, Spain, Netherlands and Israel. (INR 130 million).
- Asian Productivity Organization (APO), Japan and China Productivity Council, Taiwan (May 2016 – continued) : Research Project, “Green Productivity for the Base of the Pyramid for Sustainable Development in APO Member Countries”. Lead Partner : National Taipei University of Technology, Taiwan; Partners : India, Vietnam; Thailand Indonesia; Malaysia; USA; Funded by : APO, Japan & CPC, Taiwan (USD 30,000).
- UNCRD, Japan; ISWMAW, CRIC (Consortium of researchers in international collaboration), India supported Research Project: International Collaborative Research Project on, “Global Status of implementation of Circular Economy” (2018-2021), participated by experts from 34 countries. Prof Sadhan K Ghosh is the Project Leader. Participating countries : India, Austria, Australia, Bangladesh, Brazil , Canada, China, Egypt, Ecuador, Germany, Indonesia, Israel, Italy, Japan, Kenya, Lebanon, Lao DPR, Malaysia, Mauritius, New Zealand, Norway, Nigeria, Norway, Rep. of Korea, Rep. of South Africa, Russian Federation, Serbia, Samoan Islands, Soudi Arabia, Sri Lanka, Thailand, Japan, USA , UK and Vietnam etc.
National Research Projects (Funded) ongoing - Prof Sadhan K Ghosh as PI
- ISI, Kolkata funded (2019-2021):Pro-Environmental attitude survey (PES), Psychology Research Unit of the Indian Statistical Institute, Kolkata (INR 12,60,000).

Dr. Sanjib Kumar Acharyya

- Study on the Effect of Loading Rate and Specimen Size on Master Curve of Pressure Vessel Steel Materials, BARC – Mumbai, Rs. 33.4 Lakhs, Ongoing.
- Measurement of Mass Properties of Payloads, RCI, Rs. 9.95 Lakhs, Ongoing.
- Evaluation of fracture and fatigue crack growth (FCG) behaviour of Alloy 617 base and weld material, IGCAR, Rs. 497.80 Lakhs, Ongoing.
- Evaluation of fracture and fatigue crack growth (FCG) behaviour of Alloy 617 Forging material. IGCAR Rs. 481.14 Lakhs, Ongoing.
- Characterisation of resistance of armour plates against ballistic impact and sensitivity analysis based on material and geometric parameters and microstructures, PXE, Rs. 15 Lakhs, Ongoing.

Dr. Sudipta De

- Individual Project (Designation: Indian Coordinator), ‘Road map for decarbonization of Indian energy system: exploring innovative solutions’ under Indo-Norwegian Cooperation Program (INCP), Funding Agency: UGC-India and SIU-Norway.
- Individual Project (Designation: Indian Coordinator), ‘Sustainable energy and environment solutions: technology and policy’ under UTFORSK Program between Norway and BRICS countries and Japan, Funding Agency: DIKU-Norway.
- Individual Project (Designation: Co-PI), ‘Development of efficient biomass conversion routes for biofuel production and utilization’, under INNO-INDIGO program of EU, Funding Agency: DST and DBT-India and EU.
- Institutional Project (Designation: Member): ‘Enhancing quality assurance management and benchmarking strategies in Indian universities (EQUAM-BI)’, Funding Agency: European Commission.

2. A. Invited Lectures Delivered/Sessions Chaired:

Dr. Achintya Mukhopadhyay

- “Analysis of Thermal Systems: A Dynamical Systems Perspective”, at Workshop on Heat Transfer and Fluid Flow in Minichannels and Microchannels, NIT Durgapur, June 2018.

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- “Multiphase Flow Modelling: From Single Phase to Multiphase Formulation”, at Workshop on Boiling, Jadavpur University, September 2018.
- “Modelling of Liquid Sheet Breakup and Spray Formation”, at Workshop on Combustion Processes in I.C. Engines, NIT Silchar, November 2018.
- “Simulation of Polydisperse Sprays using Multifluid and Method of Moments”, at Workshop on Combustion Processes in I.C. Engines, NIT Silchar, November 2018.
- “Use of Dynamical Systems Approach for Early Detection of Lean Blowout in Gas Turbine Combustors”, at International Workshop on Energy, Power and Environment, NIT Kurukshetra, March 2019.

Dr. Himadri Chattopadhyay

Session Chair

- The 45th National and 7th International Fluid Mechanics and Fluid Power (FMFP) Conference. 10-12 December 2018. Department of Mechanical Engineering, IIT Bombay.

List of Lectures Delivered

- Lecture delivered as expert speaker in one week workshop on Computational Technologies (CT 2018) under TEQUIP III in NIT Silchar, Assam on 16th – 20th August 2018.
- Lecture delivered in National Conference on Critical Heat Flux & Multi phase Flow at IIT BHU, Varanasi jointly organized by IIT (Bombay) on 22nd -23rd December, 2018.
- Lecture delivered in Regional Boiler Workshop on Efficient Operation and Maintenance of Boilers at FOSMI, Kolkata on 22 nd January, 2019.
- Lecture delivered in Interdisciplinary Refresher Course on Emerging Trends on Mechanical Engineering with Inter-disciplinary Applications at Jadavpur University, Kolkata on 2nd January, 2019
- Lecture delivered in “Workshop on Boiling”, at Jadavpur University, Kolkata on September 7-8, 2018.

Dr. Gautam Majumdar

- Session Chair: National Conference on Recent Development in Nanoscience & Nanotechnology, January 29 – 31, 2019. School of Materials Science & Nanotechnology, Jadavpur University.

Dr. Prasanta Sahoo

- Keynote address in National Conference on Trends and Advances in Mechanical Engineering, Kalyani, Feb 15-16, 2019.

Dr. Sadhan Kumar Ghosh

Lectures delivered in foreign countries and india

- China, Hefei University, Hefei, China: Invited Speech on “Waste Management in India and SBM” at the International Conference on Technology and Waste Management in Hefei University, Hefei, China, during June 12-13, 2018.
- Kuala Lumpur : Delivered Plenary Speech, “Waste Management under legal Framework in India” at the ISWA World Congress 2018 at International Convention Centre at Kuala Lumpur, Malaysia during October 21-24, 2018.
- Thailand, 3RINCs : Delivered speech at the 5th 3R International Scientific Conference on Material Cycles and Waste Management (3RINCs) held 27 Feb - 1 Mar 2019, at Pullman Bangkok King Power, Bangkok, Thailand.
- Thailand, UNCRD: Delivered speech and acted as the rapporteur at the 9th Regional 3R Forum in Asia and the Pacific organised by Thailand Government, UNCRD and Govt of Japan during 4-6 March 2019; at Royal Orchid Sheraton Hotel & Towers, Bangkok, Thailand; Theme: 3R as a Way for Moving towards Sufficiency Economy – Implications for SDGs.

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- China, Tsinghua University: Delivered Keynote Speech on “Marine Littering and Micro Plastics”, at the ICWMT14, International Conference on Waste Management and Technology, by Tsinghua University, Basel Convention Regional Centre for Asia and the Pacific, held at Beijing, China, from 21st to 24th, March 2019.
- Nepal, ICIMOD: Delivered Keynote Speech at the “1st Sub Regional workshop on Preparation of Status Report and Sub-regional Roadmap for Implementing the Global Waste Management Goals towards addressing SDGs in South Asia”, during 25-26 March 2019, at the International Center for Integrated Mountain Development, Kathmandu, Nepal.
- USA: Delivered the Opening Plenary Speech in Annapolis, Maryland, Washington DC, on “Sustainable Waste Management in Ribboning & Retting of Jute: Alternative to Plastics”, in the 34th International Conference on Solid Waste Technology and Management, by Widener University, USA held during March 31- April 03, 2019.
- India at BIS : Delivered Inaugural address in the World Accreditation Day 2018 on 9th June 2018 organised by QCI, NABET and BIS at Peerless Inn, J.L.Nehru Road, Kolkata.
- India at JU : Delivered the address in the World Environment Day Seminar 2018 (Beat the Plastic Pollution) on 5th June 2018 organised by CQMS, ISWMAW, FOSMI at Jadavpur University, Kolkata.
- India at ISI : Delivered Invited speech at Indian Statistical Institute (ISI) on “Eco-friendly High Speed Jute Ribboning Process – Reducing water footprints and occupational health Hazard”, in the Seminar on “Strategies in jute industry sectors” on 3rd June, 2018, ISI, Barranagar, Kolkata.
- India at BNCCI: World Environment Day 2018 Invited Speech in WED Seminar held on 4th June 2018 at Conference Hall of Bengal National Chamber of Commerce and Industries (BNCCI) organised by BNCCI, Kolkata.
- India at CPCB : World Environment Day 2018 Invited Speech at Central Pollution Control Board, at Kolkata office in WED Seminar held on 5th June 2018 at Conference Hall at Kasba, Kolkata.
- India at Indore : Delivered speech and acted as the rapporteur at the 8th Regional 3R Forum in Asia and the Pacific being jointly organised by Union of ministry of housing and urban affairs and government of Madhya Pradesh, UNCRD and Govt of Japan held at Brilliant Convention Centre during April 9 to 12, 2018.
- India at the Consulate General of the Federal Republic of Germany Kolkata: “Circular Economy” at the Science Lecture Series Session at Goethe Institut – Max Mueller Bhavan Park Mansions, on 24th August 2018.
- India at IconSWM, ANU: Delivered the Keynote Speech at 8th IconSWM 2018 (International Conference on Solid Waste Management, held at Acharya Nagarjuna University, Guntur, during November 22-24, 2018.

Session Chaired (2018-19)

- Chaired the Technical Session in the 34th International Conference on Solid Waste Technology and Management, Philadelphia, Widener University, USA held in March, 2019.
- Chaired the 8th International Conference on Solid Waste Management, 8th IconSWM, Acharya Nagarjuna University, Guntur, held during November 22-24, 2018.
- Chaired Technical Session in the ICWMT14 China, Basel Convention Regional Centre for Asia and the Pacific, Tsinghua University, Beijing, China, March 2019.
- Chaired the Mayor’s Session in the 8th Regional 3R Forum in Asia and the Pacific being jointly organized at Brilliant Convention Centre, Indore held during April 9 to 12, 2018.
- Chaired Technical Session at the ISWA Congress 2018 at Convention Centre, Kuala Lumpur, Malaysia during October 21-24, 2018.
- Chaired the inaugural and valedictory programme of the 8th IconSWM 2018 (International Conference on Solid Waste Management), Acharya Nagarjuna University, Guntur, November 22-24, 2018.

Dr. Sudipta De

- ‘Evaluation of advanced coal-fuelled electricity generation technologies’, in regional workshop on “Indian Power Sector: Supporting a Low Carbon Transition” organized by NITI Aayog, India in association with International Energy Agency (IEA) and Asian Development Bank (ADB) on 23rd April, 2018 at Hotel Lalit Great Eastern, Kolkata.
- ‘Energy Transitions – Academic Opportunities and Challenges in India’ in one day workshop on Energy Transitions – Opportunities and Challenges in Germany, India and Norway at University of Stavanger, Norway on 08 October 2019.
- ‘Distributed energy solution: a few case studies with agricultural wastes of India’, in National Conference on Waste to Energy Conversion, organized jointly by IIT-Guwahati and NIT-Mizoram, at Aizawl during 28-29 December 2018.
- ‘Importance of Innovation Ecosystem’, in Innovation 2019 by Confederation of Indian Industry (CII) on 16 March 2019 at ITC Sonar, Kolkata

B. Seminar/Workshop/Conference/Symposium Attended

Dr. Achintya Mukhopadhyay

- S. Bagchi, S. Sarkar, U. Sen, A. De, A. Mukhopadhyay and S. Sen, “Investigation of Bluff Body Stabilized Flames with Modal Decomposition”, Proc. 7th International and 45th National Conference on Fluid Mechanics and Fluid Power, FMFP 2018, Mumbai, December 2018.

Dr. Himadri Chattopadhyay

- S.M. Rahman and H. Chattopadhyay: ‘Performance evaluation of four widely accepted numerical methods to estimate Weibull parameters for wind speed data of Kolkata, India’, International Conference on Recent Developments in Mechanical Engineering, (ICRDME 2019) March 21-22, 2019, S.A. Engineering College, Chennai, India. (Received best paper award).
- Samanta. R., Chattopadhyay. H. and Guha. C., (2018), ‘Effect of Prandtl number on differentially heated lid driven cavity: analysis using lattice Boltzmann method’, 7th International and 45th National Conference on Fluid Mechanics and Fluid Power (FMFP), December 12, 2018, IIT Bombay, Mumbai, India.

Dr. Sadhan Kumar Ghosh

- 34th International Conference on Solid Waste Technology and Management, Philadelphia, Widener University, USA held during March, 2019, AT Annapolis, Maryland, Washington DC
- 14th International Conference on Waste Management and Technology at Beijing, China during March 21-24, 2019 by Basel Convention Regional Centre for Asia and the Pacific, Tshinhua University, Beijing.
- 8th International Conference on Solid Waste Management, 8th IconSWM 2018 at Acharya Nagarjuna University, Guntur, AP, India, by International Society of Waste Management, Air and Water (ISWMAW), CQMS, Jadavpur University, TERI, IIT Kgp., IISc Bangalore and KWSA, JSMCWM.
- 8th 3R Forum on Asia Pacific organized by UNCRD and Govt of Thailand and Japan, during April 9 to 12, 2018 at Bangkok, Thailand.

C. Seminar/Workshop/Conference/Symposium Organized

Dr. Himadri Chattopadhyay

- Himadri Chattopadhyay, Organized (as Coordinator) under TEQIP – III of Jadavpur University, “Workshop on Boiling” held at Mechanical engineering Department, Jadavpur University on September 7-8, 2018.

Dr. Sadhan Kumar Ghosh

- 8th International Conference on Solid Waste Management, 8th IconSWM 2018 at Acharya Nagarjuna University, Guntur, AP, India, by International Society of Waste Management, Air and Water (ISWMAW), CQMS, Jadavpur University, TERI, IIT Kgp., IISc Bangalore and KWSA, JSMCWM.

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- WED (World Environment Day) Celebration Workshop on 5th June 2018: Beat the Plastics Pollution at Jadavpur University.
- Indo - Taiwan Workshop on 11th August by CQMS, JU and Fu Jen Catholic University.

Dr. Sudipta De

- Sudipta De, Organized (as Indian Coordinator of UTFORSK project) with the Bengal Chamber of Commerce and Industry (BCCI) and University of Stavanger, Norway under UTFORSK Program: ‘An interactive workshop on “Energy system in transition” at Hotel Hyatt Regency, Kolkata on 2nd May 2018.
- Sudipta De, Organized (as Nodal Officer-Academic, TEQIP-III, JU) under TEQIP – III of Jadavpur University, ‘SWAYAM: General overview and its features’ by Dr. Manpreet Singh Manna, Director, AICTE and in-charge of SWAYAM on 17th July 2018.
- Sudipta De, Organized (as Indian Coordinator of UTFORSK project of Norway) A one-day seminar with University of Stavanger (UiS), Norway and The Bengal Chamber of Commerce and Industry (BCCI) on ‘Future Ready Cities – An Experience Sharing with Norway’ 17th December 2018.
- Sudipta De, Organized as Faculty Coordinator of American Society of Mechanical Engineers (ASME) GT India Students’ Seminar for East and North East India held at Jadavpur University on 1st December, 2018.

D. Orientation Courses/Refresher Courses Attended:

Dr. Anindya Sundar Das

- Title of the Course: 70th Orientation Programme (UGC-Sponsored). Duration: From 27/08/2018 to 26/09/2018. Place: UGC Human Resource Development Centre (HRDC), Jadavpur University, Kolkata.

E. Orientation Courses/Refresher Courses Organized:(Name of the Teacher–Title of the Course–Duration–Place)

Dr. Dipankar Sanyal

- Coordinator, along with Saikat Mookherjee and Rana Saha as Joint Coordinators, One-week Short Term Course on Mechatronics and Electrohydraulic Systems from May 21 to 25, 2018 (TEQIP-III supported) at Jadavpur University.
- Coordinator, along with Saikat Mookherjee and Rana Saha as Joint Coordinators, Faculty Development Program on Electro-Hydraulic System Simulation and Analysis, April 25 and 26 (TEQIP-III supported) at Jadavpur University.

3. A. Books/Monographs etc. Published:

Dr. Achintya Mukhopadhyay

- *Fundamentals of Combustion Engineering* (jointly with Prof. Swarnendu Sen), CRC Press, 2019.

Book Chapters

- A. Chakravarty, P. Datta, K. Ghosh, S. Sen and A. Mukhopadhyay, “Coolability of Heat Generating Porous Debris Beds in Severe Accident Situations” in *Two-Phase Flow for Automotive and Power Generation Sectors*, K. Saha, A.K. Agarwal, K. Ghosh and S. Som, eds., Springer, 2019
- P. Datta, A. Chakravarty, K. Ghosh, A. Mukhopadhyay and S. Sen, “Direct Contact Condensation of Steam in Subcooled Water” in *Two-Phase Flow for Automotive and Power Generation Sectors*, K. Saha, A.K. Agarwal, K. Ghosh and S. Som, eds., Springer, 2019
- U. Sen, A. Mukhopadhyay and S. Sen, Dynamic Systems Approach for Laminar Ducted Flames in *Energy for Propulsion: A Sustainable Technologies Approach*, A. Runchal, A. Gupta, A. Kushari, A. De and S.K. Aggarwal, eds., Springer, 2018.
- S. Sarkar, J. Munshi, S. Pramanik, A. Mukhopadhyay and S. Sen, Interaction of Water Spray with Flame in *Energy for Propulsion: A Sustainable Technologies Approach*, A. Runchal, A. Gupta, A. Kushari, A. De and S.K. Aggarwal, eds., Springer, 2018.

Dr. Gautam Majumdar

- G Majumdar, S Lamichaney, R K Baranwal, S K. Maity. *Quality of Environment and Clean Manufacturing*, 2019. Reference Module in Materials Science and Materials Engineering. Elsevier (UK).
- R K Baranwal, N Biswas, B Oraon, G Majumdar. *Advances in Surface Engineering for Improved Energy Storage*. 2019. Elsevier (UK).

Dr. Prasanta Sahoo

- P. Sahoo (Ed.), *Optimizing Current Strategies and Applications in Industrial Engineering*, 2019, 345 pages, ISBN13: 9781522582236, IGI Global, USA.
- P Sahoo and J Paulo Davim (Eds.), *Advances in Materials, Mechanical and Industrial Engineering*, 2019, 739 pages, ISBN: 978-3-319-96967-1, Springer Nature Switzerland AG.
- Paul S., Acharyya S., Sahoo P., Chattopadhyay J., “Rate Dependence of Dynamic Fracture Toughness of 20MnMoNi55 Low-Carbon Steel Using Two Methods on Instrumented Drop Weight Test of PCVN”. In: Prakash R., Suresh Kumar R., Nagesha A., Sasikala G., Bhaduri A. (eds) *Structural Integrity Assessment. Lecture Notes in Mechanical Engineering*. Springer, Singapore, 2019.
- S K Das, P Sahoo, Electroless Nickel-Phosphorous Deposit (Chapter 3), In F Delaunoy, V Vitry, L Bonin (Eds.) *Improving Electroless Nickel Plating: Fundamentals to Applications*, Taylor & Francis, 2019.
- Sahoo P., Mukhopadhyay A. (2019) “Tribological Measurement of Electroless Nickel Coatings” (Chapter 5). In: Davim J. (eds) *Measurement in Machining and Tribology. Materials Forming, Machining and Tribology*. Springer, Cham.
- P Sahoo, S K Das, “Emerging trends in additive and subtractive manufacturing” (Chapter 1). In: J Paulo Davim (Ed.) *Additive and Subtractive Manufacturing*, De Gruyter, Berlin, 2019.
- P Sahoo, S K Das, J P Davim, “Tribology of materials for biomedical applications” (Chapter 1, 1-45) in *Mechanical Behaviour of Biomaterials* (Ed. J Paulo Davim), 2019, Elsevier – WP, <https://doi.org/10.1016/B978-0-08-102174-3.00001-2>.
- P Sahoo, S K Das, “Manufacturing Engineering Education—Indian Perspective” (Chapter 2, 31-72) in *Manufacturing Engineering Education* (Ed. J P Davim) 2019, Elsevier-CP, ISBN 978-0-08-101247-5, DOI: 10.1016/B978-0-08-101247-5.00002-2
- A Mukhopadhyay, T K Barman, P Sahoo, “Electroless Nickel Coatings for High Temperature Applications” (Chapter 11, 297-331) in *Composites and Advanced Materials for Industrial Applications* (Eds. K Kumar and J P Davim), 2018, IGI-Global, DOI: 10.4018/978-1-5225-5216-1.ch013

Dr. Sadhan Kumar Ghosh

Book Chapter

- Ipsita Saha, Amit Kundu, Sadhan Kumar Ghosh, “Exploring the rationale between ERP and EPR in Asian Countries using cloud based Approach” selected for book chapter publication by Springer with book title: *Sustainable Waste Management : Policies and Case Studies*, Volume 1., pp: 15-25, ISBN: 978-981-13-7070-7, DOI: https://doi.org/10.1007/978-981-13-7071-7_2
- Ipsita Saha, Amit Kundu, Sadhan Kumar Ghosh “A Study to Establish an Energy-Efficient Sustainable Business Model in Virtual ERP” selected for book chapter published by Springer with book title: *Waste Management and Resource Efficiency*, Book Subtitle: *Waste Management and Resource Efficiency*, Springer. pp: 1167-1174. DOI: 10.1007/978-981-10-7290-1_96. Link: https://link.springer.com/chapter/10.1007%2F978-981-10-7290-1_96.
- Ipsita Saha, Amit Kundu, Sadhan Kumar Ghosh “Organizational Perspective of Critical Success factor to establish ERP as a Sustainable Solution” published in UGC approved journal *Kindler* VolXVII Jan-Jun17 published by Army Management Institute.

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- Bhattacharyya, S., & Ghosh, S. K. (2019). A Review on Various Thermochemical Technologies for Resource Recovery from Sewage Sludge. In *Waste Valorisation and Recycling* (pp. 1-17). Springer, Singapore.
- Baidya, R., Bhattacharya, T., Kumar, G., & Ghosh, S. K. (2019). “Energy Analysis of Water Hyacinth–Cow Dung–Sawdust Mixture Briquettes—An Indian Perspective”. In *Waste Management and Resource Efficiency* (pp. 719-725). Springer, Singapore.
- Baidya, R., Debnath, B., & Ghosh, S. K. (2019). “Analysis of E-Waste Supply Chain Framework in India Using the Analytic Hierarchy Process”. In *Waste Management and Resource Efficiency* (pp. 867-878). Springer, Singapore.
- Roychoudhuri, R., Debnath, B., De, D., Albores, P., Banerjee, C., & Ghosh, S. K. (2019). “Estimation of E-waste Generation—A Lifecycle-Based Approach”. In *Waste Management and Resource Efficiency* (pp. 825-832). Springer, Singapore.
- Baidya, R., Debnath, B., & Ghosh, S. K. (2019). “Analysis of E-Waste Supply Chain Framework in India Using the Analytic Hierarchy Process”. In *Waste Management and Resource Efficiency* (pp. 867-878). Springer, Singapore.
- Debnath, B., Chowdhury, R., & Ghosh, S. K. (2019). “An analysis of e-waste recycling technologies from the chemical engineering perspective”. In *Waste Management and Resource Efficiency* (pp. 879-888). Springer, Singapore.
- Mukherjee, A., Debnath, B., & Ghosh, S. K. (2019). “Carbon Nanotubes as a Resourceful Product Derived from Waste Plastic—A Review”. In *Waste Management and Resource Efficiency* (pp. 915-934). Springer, Singapore.
- Debnath, B., Ghosh, A., Prathima, B., Birawat, K. K., & Ghosh, S. K. (2019). “Status of Composting for OFMSW Treatment in Karnataka and West Bengal: Case Studies and Sustainability”. In *Waste Valorisation and Recycling* (pp. 225-236). Springer, Singapore.
- Debnath, B., Chowdhury, R., & Ghosh, S. K. (2019). “Urban Mining and the Metal Recovery from E-Waste (MREW) Supply Chain”. In *Waste Valorisation and Recycling* (pp. 341-347). Springer, Singapore.
- Debnath, B., & Ghosh, S. K. (2019). “Hydrogen Generation from Biorefinery Waste: Recent Advancements and Sustainability Perspectives”. In *Waste Valorisation and Recycling* (pp. 557-572). Springer, Singapore.
- Debnath, B., Ghosh, A., Kumar, M., Shariff, A., Kumar, B.M., and Ghosh, S.K., 2019. “Waste Management Challenges due to Tourism in Hilly Areas in India: A case study of Chamundi Hill, Mysore”. In *Sustainable Waste Management: Policies and Case Studies*. Springer Book Chapter. 7th IconSWM—ISWMAW 2017, Volume 3.
- Dutta, N., Ghosh, A., Debnath, B., Ghosh, S. K., (2019). “Climate Change in Hilly Regions of India: Issues and Challenges in Waste Management”. In *Sustainable Waste Management: Policies and Case Studies*. Springer Book Chapter. 7th IconSWM—ISWMAW 2017, Volume 3.
- Debnath, B., Ghosh, A., Prathima, B., Birawat, K.K. and Ghosh, S. K., 2019. “Status of Composting for OFMSW Treatment in Karnataka and West Bengal: Case Studies and Sustainability”. In *Waste Valorisation and Recycling* (pp. 225-236). Springer, Singapore. 7th IconSWM—ISWMAW 2017, Volume 2.

Books as Editor:

- Chief Editor : *Proceedings of 8th IconSWM 2018* Two Volumes, in November 2018
- Associate Editor, Special issue of *International Journal of Materials Cycle and Waste Management*, Member Technical Committee of 4th 3RINCs, April 2018.
- *Waste Management and Resource Efficiency*, published in January 2019, Springer Publication.
- *Sustainable waste management: Policies & Case Studies*: published in January 2019, Springer Publication.
- *Waste Water Recycling and Management*: Published in June 2018, ISBN 978-981-13-2619-6, Springer Publication.

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- *Energy Recovery Processes from Wastes*, Theme based book, ISBN 978-981-329-228-4, Springer Nature, © 2020.
- *Waste Valorisation and Recycling Technology*: Published in June 2018, Springer Publication. Volume 2, ISBN 978-981-13-2784-1, © 2019.
- *Urban Mining and Sustainable Waste Management*, Theme based book by Springer Nature, under publication, ISBN 978-981-15-0532-4, © 2020.
- *Bio-resource Utilization and Bioprocess*, ISBN 978-981-15-1607-8, book by Springer Nature,
- Editor of the Book, *Waste Management and Resource Efficiency*, Proceedings of 6thIconSWM 2016, Sept 2018; Springer Publication, ISBN 978-981-10-7290-1.
- Editor of the book volume: *Sustainable waste management: Policies & Case Studies*: Proceedings of 7th IconSWM 2017, published in Dec 2018, Springer Publication.
- Associate Editor for WM&R (SAGE) June 2018 edition: *International Journal of Materials Cycle and Waste Management*, Member Technical Committee of 4th 3RINCs.

Dr. Sudipta De

Books:

1. De S., Bandyopadhyay S, Assadi M, Mukherjee D.A, (2018): *Sustainable Energy Technology and Policies- A Transformational Journey* (Vol 1); book doi: 10.1007/978-981-10-7188-1 (Springer).
2. De S., Bandyopadhyay S, Assadi M, Mukherjee D.A, (2018): *Sustainable Energy Technology and Policies- A Transformational Journey* (Vol 2); book doi: 10.1007/978-981-10-8343-8 (Springer).
3. Gautam A, De S, Dhar A, Gupta J G, Pandey A, (2018): *Sustainable Energy and Transportation Technologies and Policy*; book doi: 10.1007/978-981-10-8343-8 (Springer).

Book Chapters:

- Jana, K. and De, S.* (2019): "Overview of CCS: A Strategy of Meeting CO2 Emission Targets", in Volume 9: *Mitigating Greenhouse Effect and Carbon Footprint through Renewability Approach of Encyclopedia in Renewable and Sustainable Materials* (Elsevier) (in press).
- Ray, A and De, S.* (2019): "Renewable Electricity Generation: Effect on GHG Emission." in Volume 9: *Mitigating Greenhouse Effect and Carbon Footprint through Renewability Approach of Encyclopedia in Renewable and Sustainable Materials* (Elsevier) (in press).
- Mondal, S. and De, S.* (2019): 'Power from low grade heat – novel technology to reduce carbon footprint', *Encyclopedia of Renewable and Sustainable Materials*: Editors M A Maleque, et. al Elsevier. (in press)
- Jana K and De, S.* (2019): 'Polygeneration as efficient and de-carbonized energy solution', *Encyclopedia of Renewable and Sustainable Materials*: editors M A Maleque et. al , Elsevier. (in press).
- Ray A and De S.* (2019): 'Hybrid Renewable Multigeneration: Low Carbon Sustainable Solution with Optimum Resource Utilization', *Encyclopedia of Renewable and Sustainable Materials*: Editors M A Maleque et. al, Elsevier. (in press).
- Ray A and De,S.* (2018); 'Distributed Polygeneration Using Solar Energy: A Future Sustainable Energy System for India', *Applications of Solar Energy*, editors: Himangshu Tyagi, Avinash Kumar Agarwal, Prodyut R Chakraborty and Satvasheel Powar ISBN 978-981-10-7205-5, Springer.

B. Articles Published in Journals: (including National/ International & pre reviewed journals)

Dr. Achintya Mukhopadhyay

- R. Saha, K. Ghosh, A. Mukhopadhyay and S. Sen, "Flow reversal prediction of a single-phase square natural circulation loop using symbolic time series analysis", *Sadhana*, Accepted for publication, 2019.
- S. De, A. Bhattacharya, S. Mondal, A. Mukhopadhyay and S. Sen, "Identification and early prediction of lean blowout in premixed flames", *Sadhana*, Accepted for publication, 2019.

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- S. De, A. Biswas, A. Bhattacharya, A. Mukhopadhyay and S. Sen, “Use of flame colour and chemiluminescence for early detection of lean blowout in gas turbine combustors at different levels of fuel-air premixing”, *Combustion Science and Technology*, in press, 2019.
- S. Sarkar, A. Mukhopadhyay and S. Sen, “Numerical investigation of the effects of polydisperse water sprays on extinction conditions of counterflow methane non-premixed flames”, *Combustion Theory and Modelling*, Vol. 23 pp. 626 – 650, 2019.
- S. De, A. Bhattacharya, S. Mondal, A. Mukhopadhyay and S. Sen, “Investigation of flame behavior and dynamics prior to lean blowout in a combustor with varying mixedness of reactants for early detection of lean blowout”, *International Journal of Spray and Combustion Dynamics*, in press, 2019.
- D. Dasgupta, S. Nath and A. Mukhopadhyay, Linear and Non-linear Analysis of Breakup of Liquid Sheets: A Review, *Journal of the Indian Institute of Science*, Vol. 99 pp. 59 - 75, 2019.
- S. Modal, N.F. Ghalyan, A. Ray and A. Mukhopadhyay, “Early Detection of Thermoacoustic Instabilities Using Hidden Markov Models”, *Combustion Science and Technology*, Vol. 221 pp. 1309 - 1336, 2019.
- A. Garai, S. Mondal, S. Pal, S. Chatterjee, S. Sen and A. Mukhopadhyay, “Experimental investigation of spray formation in a hybrid atomizer using diesel, ethanol and ethanol blended diesel”, *Experimental Thermal and Fluid Science*, Vol. 100 pp. 158 – 170, 2019.

Dr. Anirban Mitra

- Hareram Lohar, Anirban Mitra, and Sarmila Sahoo, “Geometrically Non-Linear Frequency Response of Axially Functionally Graded Beams Resting on Elastic Foundation under Harmonic Excitation”, *International Journal of Manufacturing, Materials, and Mechanical Engineering*, 2018, vol. 8(3), pp. 23-43. doi:10.4018/IJMMME.2018070103.
- Hareram Lohar, Anirban Mitra, and Sarmila Sahoo, “Mode switching phenomenon in geometrically nonlinear free vibration analysis of in-plane inhomogeneous plates on elastic foundation”, *Curved and Layered Structures*, 2018, vol. 5(1), pp. 156-179. <https://doi.org/10.1515/cls-2018-0012>.
- Hareram Lohar, Anirban Mitra, and Sarmila Sahoo, “Free Vibration of Initially Deflected Axially Functionally Graded Non-Uniform Timoshenko Beams on Elastic Foundation”, *Romanian Journal of Acoustics and Vibration*, 2018, vol. 15(2), pp. 75-89.
- Hareram Lohar, Anirban Mitra, and Sarmila Sahoo, “Nonlinear Response of Axially Functionally Graded Timoshenko Beams on Elastic Foundation under Harmonic Excitation”, *Curved and Layered Structures*, 2019, vol. 6(1), pp. 90-104.
- Tamonash Jana, Anirban Mitra, Prasanta Sahoo, “Finite Element Based Contact Analysis of a Radially Functionally Graded Hemisphere and a Rigid Flat”, *International Journal of Surface Science and Engineering*, 2019. (Article in Press) [SCI, Impact Factor (2018): 0.981]
- Tamonash Jana, Anirban Mitra, Prasanta Sahoo, “Dynamic Analysis of Elastically and Plastically Graded Spherical and Cylindrical Contact”, *Proceedings of IMechE, Part J, Journal of Engineering Tribology*, 2019. (published online) <https://doi.org/10.1177/1350650119841756> [SCI, Impact Factor (2018): 1.137]
- Puja B. Chowdhury, Anirban Mitra, and Sarmila Sahoo, “Mode frequency analysis of antisymmetric angle-ply laminated composite stiffened hypar shell with cutout”, *Mechanics and Mechanical Engineering*, 2019, vol. 23, pp. 162–171.

Dr. Dipak Laha

- Laha D. and Gupta J. N. D. (2018) “An improved cuckoo search algorithm for scheduling jobs on identical parallel machines”. *Computers & Industrial Engineering*, 126, 348-360.
- Majumder, A., Laha, D. and Suganthan, P. N. (2018) “A hybrid cuckoo search algorithm in parallel batch processing machines with unequal job ready times”, *Computers & Industrial Engineering*, 124, 65-76.

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- Majumder, A., Laha, D. and Suganthan, P. N. (2019) Bacterial foraging optimization algorithm in robotic cells with sequence-dependent setup times. *Knowledge-Based Systems*, 172, 104-122.

Dr. Dipankar Sanyal

- N. Mondal, R. Saha, S. Mookherjee and D. Sanyal, 2019, A novel method to design pressure compensator for variable displacement axial piston pump, *Proc. IMechE Part E:J Process Mechanical Engineering*, online on June 19, 2018, DOI: 10.1177/0954408918783409, VOL. 233, NO. 2, pp. 314–334, April.
- S. Dasmahapatra, R. Saha, S. Mookherjee and D. Sanyal, 2018, “Designing an Input-linearized Adaptive Sliding Mode Coupled Nonlinear Integral Controller”, *IEEE/ASME Trans. Mechatronics*, online on Sept 17, 2018, DOI 10.1109/TMECH.2018.2870911, VOL. 23, NO. 6, pp. 2888-2895, December.

Dr. Gautam Majumdar

- Nallusamy, S., Balakannan, K., Chakraborty, P. S., & Majumdar, G. (2018). A Mixed-Integer Linear Programming Model of Closed Loop Supply Chain Network for Manufacturing System. In *International Journal of Engineering Research in Africa* (Vol. 35, pp. 198-207). Trans Tech Publications.
- Nallusamy, S., Balakannan, K., Chakraborty, P. S., & Majumdar, G. (2018). “A Mixed-Integer Linear Programming Model of Closed Loop Supply Chain Network for Manufacturing System”. In *International Journal of Engineering Research in Africa* (Vol. 35, pp. 198-207). Trans Tech Publications.
- Sarkar, S., Baranwal, R. K., Lamichaney, S., De, J., & Majumdar, G. (2018). “Optimization of electroless Ni-Co-P coating with hardness as response parameter: A computational approach”. *Jurnal Tribologi*, 18, 81-96.
- Biswas, N., Baranwal, R. K., Majumdar, G., & Brabazon, D. (2018). “Review of duplex electroless coatings and their properties”. *Advances in Materials and Processing Technologies*, 4(3), 448-465.
- Sarkar, S., Baranwal, R. K., Banerjee, S., Prakash, A., Mandal, R., & Majumdar, G. (2018). “Parametric Optimization of Process Parameters on the Response of Microhardness of Electroless Ni-P Coating”. *Journal of Molecular and Engineering Materials*, 6.
- Sarkar, S., Baranwal, R. K., Biswas, C., Majumdar, G., & Haider, J. (2019). “Optimization of process parameters for electroless Ni-Co-P coating deposition to maximize micro-hardness”. *Materials Research Express*.
- Nallusamy, S., Rajan, S. S., Sundar, S., & Majumdar, G. (2019). “Study on Enhancement of Quality Level through a Lean Approach in an Original Equipment Manufacturer”. In *International Journal of Engineering Research in Africa* (Vol. 43, pp. 145-156). Trans Tech Publications Ltd.
- Sarkar, S., Baranwal, R. K., Koley, I., Mandal, R., Mandal, T., & Majumdar, G. (2018). “Optimization of Corrosion Resistance of electroless Ni-Co-P coating using Taguchi Method”. *Advances in Micro and Nano Manufacturing and Surface Engineering*.

Dr. Himadri Chattopadhyay

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Dr. Prasanta Sahoo

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Dr. Sadhan Kumar Ghosh

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Dr. Sanjib Kumar Acharyya

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Dr. Sudipta De

- Ray, A. and De, S.* (2019): "A small-scale distributed polygeneration with local renewable resources for a remote place of India: techno-economic optimisation", *International Journal of Ambient Energy* (Taylor and Francis), (in press).
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- Ray, A. and De, S*. (2018): "Techno-economic optimization of a small scale distributed polygeneration with local renewable resources for a remote place of India", *International Journal of Ambient Energy* (Taylor and Francis), (in press).
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- Ray, A., Jana, K., Assadi, M., De, S.* (2018): "Distributed polygeneration using local resources for an Indian village: multi-objective optimization using metaheuristic algorithm". *Clean Technologies and Environmental Policy* (Springer) (doi:10.1007/s10098-018-1562-y), 20(6), 1323-1341.

4. Collaborative Programmes:

Dr. Sudipta De

- Indo-Norwegian Cooperation Program with University of Stavanger, Norway
- UTFORSK Program with the University of Stavanger, Norway and the Bengal Chamber of Commerce and Industry
- Inno-Indido Program with University of Eastern Finland, Finland and Helmholtz Centre for Environmental Research – UFZ, Germany and IIT, Kharagpur

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5. Major Achievements :

Dr. Achintya Mukhopadhyay

- Received INSA Teachers Award 2018, Indian National Science Academy, New Delhi

Dr. Sudipta De

- Member, Innovation Task Force, Confederation of Indian Industry (CII)
- Key Resource Person, Energy and Environment Committee of The Bengal Chamber of Commerce and Industry
- Member, Education Committee of The Bengal Chamber of Commerce and Industry

Dr. Sadhan Kumar Ghosh

- Recognition as International Expert on SWM : Invited to act as the expert in Preparation of Status Report and Sub-regional Roadmap for Implementing the Global Waste Management Goals towards addressing SDGs in eight South Asian countries, invited by the SACEP (South Asian Countries Environmental Programme), Sri Lanka and IGES Centre Collaborating with UNEP on Environmental Technologies (CCET), Japan in 2019-2020.
- International Sports and Nature familiarization activity (First of its kind in Jadavpur University): As the head of delegation of the Cycling Team, participated in the Summer Cycling Programme in Taiwan invited by the Chinese Taipei University Sports Federation (CTUSF) and Fu Jen Catholic University with two officers, Dr. Rajat Ray, Dean of Students and Dr. Aparup Konar, DoP, and ten students across Jadavpur university during September 02-07, 2019.
- Selected as the Chairman, 9th International Conference on Sustainable Waste Management, 9th IconSWM 2019 to be held at KIIT DU, Bhubaneswar, Odisha, India, between November 27-30, 2019.
- Publication of a significant book on CE: The first book on global perspective on circular economy including cases by experts from 20 countries, edited by Prof. Sadhan K Ghosh released on 27th November 2019 at Bhubaneswar at the inaugural programme of 9th IconS WM 2019.

METALLURGICAL & MATERIAL ENGINEERING

Phone : + 91-33-2414-6940
Int. : 2457-2325
H.O.D. : Prof. Pravash Ch. Chakraborti
E-mail : hodmetal@jadavpuruniversity.in

- 1. A. Courses Offered:**
- 4 – Year BE degree in Metallurgical Engg.
 - 2 - Year ME degree in Industrial Metallurgy
 - 2- Year M.Tech degree in Material Engineering
- Undergraduate Students: 42 Nos.
ME degree in Industrial Metallurgy Students: 12 Nos.
M.Tech degree in Material Engineering Students: 22 Nos.

- 1. B. Number of Faculty Members:** 06

2. A. Area of Research Activities (Broad Areas):

Nano Materials, Extraction of Metals, Melting & Solidification, Corrosion behavior of Metal & Material, Deformation Fatigue & fracture of materials, Welding Technology, Thermodynamics and Kinetics, Chemical/ Extractive Metallurgy, Transport Phenomena, Material Processing, Archaeo Metallurgy, Waste utilization. Chemical Processing, Composites, Nanocomposites, Metal Matrix Composites, Metal-Ceramic, Mineral Processing, Nanostructured Materials, Ceramic Materials, Welding/Joining, Electrode development. Materials processing and characterization, Phase transformation in metals and alloys, Mechanical Behaviour of Materials, Electrochemistry and Corrosion, High Energetic Electrode Materials, Fuel Cell, Battery, Electrochemical Energy, Modeling, Simulation and Engineering Software, Materials Extraction from waste by green, pollution free processes

2. B. Major Research Project: (Title of the Project–Funding Agency–Period–Amount)

AMRITA KUNDU

FUNDED PROJECT

Cyclic Plastic Deformation Behaviour of 304LN Austenitic Stainless Steel at Room Temperature to 550 deg C (Principal Investigator)–DST (GOI)–2016-2019–Rs. 39,51,675.00

Development of mixed microstructure by thermomechanical processing of steel and its influence on mechanical properties (Sole Investigator)–DST (GOI)–2012-2017–Rs. 35 Lakhs

PRAVASH CHANDRA CHAKRABORTI

FUNDED PROJECT

Evaluation of creep crack growth (CCG) behaviour for Alloy 617 Base and Weld materials(PROJECT LEADER)–Indira Gandhi Centre for Atomic Research, Kalpakkam–2017-2019–Rs. 512.34 lacs.

Evaluation of creep crack growth (CCG) behaviour for Alloy 617 Forgings (PROJECT LEADER)–Indira Gandhi Centre for Atomic Research, Kalpakkam–2017-2019–Rs. 458.28 lacs

Generation of Creep-Fatigue Interaction Properties of Alloy 625 (PROJECT LEADER)–Indira Gandhi Centre for Atomic Research, Kalpakkam –2017-2019–Rs. 469.82 lacs.

3. B. Seminar/Workshop/Conference/Symposium Attended:(Name of the Seminar/Workshop/Conference/Symposium–Place–Duration)

Dr. Rajib Dey

Metals Conclave 2019–Hotel Park–One day

National Seminar on Prospects of Copper & Copper Alloy–Hotel Park–One day

National Seminar on Management of Excavation Stability–Biswa Bangla Convention Centre–One day

Technologies and Process Routes for Attaining 300 MTPA Steel Making Capacity in India by 2030–Steel Tech–One day

Symposium on Union Budget 2018-19 : An In depth Analysis–Hotel Oberoi Grand–One day

Prof. Akshay Kumar Pramanick

International Seminar on Prospects and Challenges in Metallurgical and Allied Industries with Special Emphasis on Quality, Safety and Environment–22nd February, 2019–Kolkata, India

3. C. Seminar/Workshop/Conference/Symposium Organised:(Name of the Seminar/Workshop/Conference/Symposium–Place–Duration)

Dr. Rajib Dey

Prospects and Challenges in Metallurgical & Allied Industries with Special Emphasis on Quality, Safety and Environment–Hotel Floatel Bengal–One day

Dr. Sathi Banerjee

National Symposium on Sustainable development of the Iron and Steel Industry and Implementation of Industry 4.0.–Jadavpur University–15th to 16th March, 2019(Metallix 19)

Prof. Akshay Kumar Pramanick

National Symposium on Sustainable development of the Iron and Steel Industry and Implementation of Industry 4.0.–Jadavpur University–15th to 16th March, 2019(Metallix 19).

4. A. Books/Monographs etc. Published:

Prof. Subil Paul:-

1. **Subir Paul** and **Raj Krishna Paul** , Java Modeling and Simulation for Beginner to Advance, Amazon Books, ISBN-10: 1980738556, ISBN-13: 978-1980738558, 2018, 414 pages ASIN: B07BWMTNH

4. B. Articles Published in Journals: (Sl. No.–Title–Journal’s Name–Author)

Dr. Rajib Dey:-

1. “Gait Analysis For Assessment Of Chronic Low Back Pain From Lumbar Facet Joints”–*Global Journal of Bio Science & Biotechnology*–Arghya Majumdar, Rajib Dey
2. “Optimization of Reduction Parameters of Quenched Titaniferous Magnetite Ore by Boiler Grade Coal Using Box-Behnken Design”–*Journal of The Institution of Engineers (India): Series D (IEID)*–Bitan Kumar sarkar, Maharshi Ghosh Dastidar, Rajib Dey, Gopes Chandra Das, Sourodipta Chowdhury, Dhiman Kumar Mahato
3. “Effect of alkali on different iron making process”–*Material Science & Engineering International Journal*–Maharshi Ghosh Dastidar, Bitan Kumar Sarkar, Manoj Kumar Mitra, Rajib Dey
4. “Optimization of Quenching Parameters for the Reduction of Titaniferous Magnetite Ore by Lean Grade Coal Using the Taguchi Method and Its Isothermal Kinetic Study”–*Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*–B.K. Sarkar, N.Kumar, R. Dey, G.C. Das
5. “Study on reduction kinetics of iron ore sinter using coke dust”–*International journal of metallurgical & materials Science and Engineering (ijmmse)*–Arghya Majumder, Bitan kumar Sarkar, Maharshi Ghosh Dastidar, Gopes Chandra Das & Rajib Dey

Dr. Sathi Banerjee

1. “Solution Combustion Synthesis of Alumina Spinel and its characterization”–*Interceram*, vol 67, 2018, p 35 - 41. –S. R. Ghosh, S. Mukherjee, S. Banerjee
2. “Disinfection of drinking water via algae mediated green synthesized copper oxide nanoparticles and its toxicity evaluation”–*Journal of Environmental Chemical Engineering*, Volume 7, Issue 1, February, 2019, 102867. –Priyankari Bhattacharyaa, Snehasikta Swarnakar, Sourja Ghosh, Swachchha Majumdar, Sathi Banerjee

Prof. S.Paul

1. “Sweet and Sour Corrosion of 304 Stainless Steel in Oilfield Environment by Polarization, Impedance, XRD and SEM Studies”–*Innovations in Corrosion and Materials Science* 2019, Volume 8 in print–Subir Paul, Sulagna Sarkar
2. “Investigation of Sweet and Sour Corrosion of Mild Steel in Oilfield Environment by Polarization, Impedance, XRD and SEM Studies”–*CORROSION SCIENCE AND TECHNOLOGY*, Vol.17, No.5(2018), pp.249~256 pISSN: 1598-6462 / eISSN: 2288-6524–Subir Paul, Bikramjit Kundu
3. “Electrochemical Energy; Sugar Cane Renewable fuel; Electro catalytic Energy”–*Current Alternative Energy*, Bentham Science Publishers 2019, publication in print–Subir Paul, Amit Paria

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4. "Development and characterization of Al-Ni and nanographite electrodes for Energy storage"–*Nanomaterials and Energy*, Volume 8 Issue 1, June 2019, pp. 64-72–Subir Paul, Tanuj Kumar
5. "MODELING AND COMPUTATION BY ARTIFICIAL NEURAL NETWORK OF FRACTURE"–*International Journal of Modeling, Simulation, and Scientific Computing*, 2018, Vol. 09, No. 06, 1850051 (2018) <https://doi.org/10.1142/S1793962318500514>–Subir Paul and Sibhasish Bhattacharjee
6. "Prediction and Computation of Corrosion Rates of A36 Mild Steel in Oilfield Seawater"–*Journal of Material Engineering and Performance*, Springer, ASM, vol 27, 2018, ISSN: 1059-9495 (Print) DOI : 10.1007/s11665-018-3385-8–Subir Paul, Rajdeep Monda
7. "Electrochemical Development of Ni-Cu Electrodes by Direct and Pulse Current Coating in Ethanol Electro-oxidation for DEFC"–*Portugaliae Electrochimica Acta 2018, 36(5), 293-307*–Sujit Kumar Guchhait, Subir Paul
8. "Synthesis and Characterization Electro Catalytic Al-Ni and Nano Graphite Electrodes for Rechargeable Al ion Battery"–*Current Catalysis 2018,7 Volume:7, Year : 2018 Pages:149-155* <http://www.eurekaselect.com/161825/article> –Subir Paul Tanuj Kumar
9. "Modeling And Computation By Artificial Neural Network Of Fracture Toughness Of Low Alloy Steel To Study The Effect Of Alloy Composition"–*International Journal of Modeling, Simulation, and Scientific Computing 2018 Vol. 9, No. 6 (2018) 1850051 (14 pages) c© World Scientific Publishing Company DOI:10.1142/S1793962318500514*<https://doi.org/10.1142/S1793962318500514>–Subir Paul, Shibasish Bhattacharjee

Prof. P.C. Chakraborti

1. "Evaluation of ductile tearing resistance of dual-phase DP780 grade automotive steel sheet from essential work of fracture (EWF) tests"–*Theoretical and Applied Fracture Mechanics*, 103, 2019, Article No. 102278.–R. Sarkar, S. K. Chandra, P.S.De, P.C.Chakraborti and S.K.Ray
2. "An automated methodology for grain segmentation and grain size measurement from optical micrographs"–*Measurement: Journal of the International Measurement Confederation*, 140, 2019, Pages 142-150.–S. Banerjee, P.C. Chakraborti and S. K. Saha
3. "Fracture toughness evaluation of interstitial-free steel using essential work of fracture (EWF) method"–*Engineering Fracture Mechanics*, 204, 2018, Pages 29-45–S. K. Chandra, R. Sarkar, A.D.Bhowmick, P.S.De, P.C.Chakraborti and S.K.Ray
4. "Uniaxial ratcheting behaviour of dual-phase steel sheet"–*Materials Engineering and Performance*, 27(7), 2018, Pages 3688-3698. –P.S. De, J.K.Mahato, A.Kundu, P.C. Chakraborti and M.Shome
5. "Ductile tearing resistance indexing of automotive grade DP590 steel sheets: EWF testing with DENT specimens"–*Materials Engineering and Performance 27(4)*, 2018, Pages 2018-2023.–S. Sahoo, N. Padmapriya, P.S.De, P.C.Chakraborti and S.K.Ray
6. "Sintering and tribomechanical properties of gel-combustion-derived nano-alumina and its composites with carbon nanotubes"–*Journal of Materials Science*, 53(12), 2018, Pages 8989-9001.–R. Halder, S. Sarkar, S. Bandyopadhyay and P.C.Chakraborti
7. "Asymmetric cyclic behavior of fine and coarse grained pure copper and aluminium"–*Lecture Notes in Mechanical Engineering*, (9789811060014), 2018, Pages 397- 411. –J. K. Mahato, P.S. De, A.Kundu and P.C. Chakraborti

Prof. Akshay Kumar Pramanick

1. "Comparative Study of Dimensional Variation and Surface Characteristics of thin Walled Investment Casting of Different Geometrical Shape for Different gating System in Hot Clay Mold", –*International Organization of Scientific Research*, Vol. 9, Issue-3, March, 2019, pp-17-23.–Soumyajit Roy, Akshay Kumar Pramanick, Prasnta Kumar Datta

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2. “Characteristics of Dimensional Variation and Shrinkage Analysis of Wax- Based Thin-Walled Investment Casting in Hot Clay Mold for Batch Production”–*International Journal of Computational Engineering Research (IJCER)*, Volume, 09, Issue, 3, March 2019, 43-52.–Soumyajit Roy, Akshay Kumar Pramanick, Prasnta Kumar Datta
3. “Influence of Austempering Temperature and Time on the Microstructure and Mechanical Properties of Ductile Iron Weldment Using Developed Coated Electrode”,–*Journal of Material Engineering and Performance*, April,2019, 28(4), 2071–2085, DOI: 10.1007/s11665-019-03989-1 –T. Sarkar, A. K Pramanick, S. K. Sahoo, T. K. Pal, A. K Pramanick
4. “Development of New Low Nickel Coated Electrode for Welding of Ductile Iron and Its Response to Austempering” *International Journal of Mineral metallurgy and materials*,–September, 2018, 25 (9), 1090-1103, doi.org/10.1007/s1261–Tapan Sarkar, Ajit Kumar Pramanick, Tapan Kumar Pal, Akshay Kumar Pramanick
5. “Variation of nano Ce content in austempered ductile iron (ADI) weld metal and its effects on microstructure” –*Trans Indian Inst Met*, October, 2018,71(10), 2375-2385, doi.org/10.1007/s12666-018-1368-y–Tapan Sarkar, Tapan Kumar Pal, Akshay Kumar Pramanick
6. “ In vitro Evaluation for Bioactivity properties of crystalline Silica – Aluminium Metal Matrix Composite in Simulated Body Fluid,”–*Emerging Trends in Science and Technology*, ISBN 978-81-8487-642-0, pp 30.1-30.5, August, 2018–Sourav Debnath, Akshay Kumar Pramanick

Dr. Amrita Kundu

1. “Influence of strain amplitude on the development of dislocation structure during cyclic plastic deformation of 304 LN austenitic stainless steel”–*Materials Science and Engineering A*, 2019, Volume 762, <https://doi.org/10.1016/j.msea.2019.138090>–A. Kundu, D.P. Field and P. C. Chakraborti
2. “Effect of the laser power on the mechanical performance of the laser spot welds in dual phase steels” –*Journal of Materials Processing Technology*, 2019, 267, pp. 114-123.–J. Kundu, T. Ray, A. Kundu and M. Shome
3. Uniaxial Ratcheting Behavior of Dual-Phase Steel Sheet–*Journal of Materials Engineering and Performance*, 2018, Volume 27, Pages 3688-3698.–P. S. De, J. K. Mahato, A. Kundu, P. C. Chakraborti and M. Shome,

5. Collaborative Programmes:

Research programmes with TATA Steel Ltd, Jamshedpur, RDCIS, Ranchi, RINL, Vishakhapatnam, National metallurgical laboratory, Jamshedpur, Bhabha Atomic Research Centre, Mumbai, Titagarh Wagons Ltd., Salem Steel Plant.

Dr. Rajib Dey (Topic–Funding Agency/Company)

1. Development of Transdermal patch using Nano Carriers for Controlled & Sustained Delivery of Mixture of Turmeric & Slaked Lime–RUSA 2.0
2. Utilization of Plant Waste for Sustainable development of Iron and Steel Sector–RUSA 2.0

6. Major Achievements:

Prof. Pravash Chandra Chakraborti

Invited for participation in the National Mission Programme on Advanced Ultra Supercritical Power Plant project under the aegis BHEL-NTPC- IGCAR consortium.

Prof. Rajib Dey

Awarded by

Steel and Metallurgy

Mining, Geological and Metallurgical Institute of India

Award name

Steelies India 2018 Award for excellence

Institutes Gold Medal

PHARMACEUTICAL TECHNOLOGY

Phone : + 91-33-2414-6676

Int. : 2457-2274

H.O.D : Prof. Pulok K Mukherjee

E-mail : hodpharmacy@jadavpuruniversity.in

1. A. Course offered:

Name of the course	Duration of the course	Current intake
B. Pharm.	4 years	77
M. Pharm.	2 years	25
M. Pharm. (Clinical Pharmacy and Pharmacy Practice)	2 years	08
Ph.D.— As per UGC guidelines		

1. B. Number of Faculty Members: 14

2. A. Area of Research Activities: (Broad Areas)

The Department of Pharmaceutical Technology, Jadavpur University is one of the premier department with excellent teaching quality and research facilities with the esteemed research laboratories equipped with modern instruments. The significant numbers of research grants from various governments and other professional agencies give financial support to reveal excellent research output. The department publishes innovative research publications in high impact journals. Six major disciplines of the department, such as Pharmaceutics, Pharmacology, Pharmacognosy, Pharmaceutical Chemistry, Pharmaceutical Biotechnology, and Industrial Pharmacy are working in the following major areas of research viz. drug discovery from natural and synthetic sources, quality, efficacy and safety evaluation of herbal medicine, formulation development, identification of molecular mechanism of diseases, predictive pharmacology and toxicology, and standardization of drug/formulations.

2. B. Major Research Project :

1. Major Research Project (Departmental/Individual, Name of the Project/Funding Agency): JU RUSA 2.0, Jadavpur University Prof T.K.Maity
2. Investigating combinations of Indian Medicinal Plant isolates for Human Histamine Receptor Type I suppression – with a focus on management of Allergy – JU RUSA – 2 Jadavpur University.
3. Major Research Project (Departmental/Individual, Name of the Project/Funding Agency): RUSA 2.0 implemented by Jadavpur University, Kolkata, Prof. T. Jha - Design and experimental validation of some derivatives and analogs of isoglutamine as dual inhibitors of matrix metalloproteinase-2 (MMP-2) and histone deacetylase 8 (HDAC8) by synthesis and biological evaluation to get some useful anticancer agents.

3. A. Invited Lectures Delivered/Sessions Chaired:

1. Delivered lecture at Faculty Development Programme of Tripura University, Tripura during 5th April, 2018.
2. Delivered lecture at BCDA College of Pharmacy & Technology, Barasat during 9th August.
3. Delivered lecture at CPS Puri, Odisha during 13th August, 2019.

3. C. Seminar/Workshop/Conference/Symposium Organized:

1. PCI sponsored “Continuing Education Programme for Pharmacy Teachers” – 5-7 Sep 2018, K P Basu Memorial Hall, Jadavpur University -

4. A. Books/Monographs etc. (Published):

1. Kirtania M D, Maity A, Chakraborty D and Ghosh LK. Chapter 15 “Polysaccharide based nanoparticles for colon specific drug delivery” in the book entitled *Polysacchride based Nano-biocarrier in drug delivery* by CRC Press (Taylor & Francis Group), Boca Raton, 2018.
2. Nilanjan Adhikari, Sk. Abdul Amin, Achintya Saha, Tarun Jha. (2018) Chapter 9, “Application of computation in the biosynthesis of phytochemicals”. In *Computational Phytochemistry*, S. D. Sarkar and L. Nahar, Eds, Elsevier, Netherlands, pp. 256-272.
3. Pulok K. Mukherjee, Debayan Goswami, Bhaskar Das, Subhadip Banerjee (2019) “Nelumbo nucifera: pharmacological profile, metabolite profile and therapeutic uses” Chapter 8 in book titled *Natural Medicines: Clinical Efficacy, Safety and Quality* CRC Press, Taylor and Francis group-. ISBN 9781138733060
4. Pulok K. Mukherjee, Subhadip Banerjee, Amit Kar (2019) “Globalization of traditional medicine under the modern medicine portfolio” Chapter 28 in book titled *Natural Medicines: Clinical Efficacy, Safety and Quality*. CRC Press, Taylor and Francis group-. - pages, ISBN 9781138733060
5. Subhadip Banerjee, Sayan Biswas, Pulok K. Mukherjee (2019) “Ayurveda: Evidence based approach for drug development” in Chapter 31 book titled *Natural Medicines: Clinical Efficacy, Safety and Quality* CRC Press, Taylor and Francis group ISBN 9781138733060

4. B. Articles Published in Journals: (Including National/International & Peer-reviewed Journals)

1. Gouranga Nandi, Abhijit Changder, Lakshmi Kanta Ghosh, “Graft-copolymer of polyacrylamide-tamarind seed gum: Synthesis, characterization and evaluation of flocculating potential in paracetamol suspension”; - *Carbohydrate Polymers* 215 (2019) 213–225.
2. Soma Das, Gouranga Nandi, and (Dr) L.K. Ghosh “Okra and its various applications in drug Delivery, food Technology, Health Care and Pharmacological Aspects- A-Review” — *Journal of Pharmaceutical Science and Research-Volume-11(6)* 2019-p- 2137-2147.
3. Tanushree Singha, Jagadish Singh, Jayatri Naskar, Tapan Kumar Maity and Nimai Chand Ganguly “Synthesis of some novel 2-[5-mercapto-3-(substitued) [1,2,4] triazol-4-yl]-isoindole-1,3-dione derivatives and evaluation of their anticancer activity on EAC bearing mice model”, *International Journal of Pharmacy and Biological Sciences*, 2018, 8(4)
4. Tanushree Singha, Tapan Kumar Maity, Saumen Karan, Birendra Nath Karan, Subbiah Ramasamy, Nimai Chand Ganguly, “Synthesis, Characterization, and Biological Evaluation of Some Novel Phthalimide Derivatives”, *International Journal of Pharmaceutical & Biological Archives* – 2018 9(4)
5. Satarupa Acharjee, Tapan Kumar Maity, Subir Samanta, Supriya Mana, Tania Chakraborty, Tanushree Singha & Arijit Mondal, “Antihyperglycemic activity of chalcone based novel 1-{3-[3-(substituted phenyl) prop-2-enoyl] phenyl} thioureas” - *Synthetic Communications*-2018, 48(23)
6. Puspita Roy, Tanmoy Guria, Birendra Nath Karan, Subbiah Ramasamy, Tapan Kumar Maity, “Synthesis of 2,4,6-trisubstituted pyrimidine analogues via chalcone derivatives and their anticancer evaluation” - *International Journal of Pharmacy and Biological Sciences*- 2018, 8(3)
7. BN Karan, Tapan Kumar Maity, BC Pal, T Singha, S Jana, “Betulinic Acid, the first lupane-type triterpenoid isolated via bioactivity-guided fractionation, and identified by spectroscopic analysis from leaves of *Nyctanthes arbor-tristis*: its potential biological activities in vitro assays” - *Natural product research* – 2018, 32
8. Tanmoy Guria, Puspita Roy, Tapan kumar Maity - “Synthesis, Pharmacological Evaluation and Ligand-Protein Interaction Study of Hybrid Urea and Thiourea Derivatives as Antihyperglycemic Agents” - *International Research Journal of Pharmacy* – 2018, 9(5)
9. Pallab Mandal, Anirbandeep, Bose, Suparna, Bag, Arunava, Biswas, Jasmina Khanam, Tapan Kumar Pal - “LC-MS/MS method development and validation of an antihistaminic, calcium channel blocker, diphenyl-

- methylpiperazine group containing cinnarizine in human plasma with an application to BA/BE studies in Indian volunteer”, *Pharm Pharmacol Int J*, 2018, 6(6):475-82
10. Pallab Mandal, Soumya Chakraborty, Balaram Ghosh, Chiranjit Saha, Jasmina Khanam, and Tapan Kumar Pal – “Simultaneous Determination and Quantitation of Diosmetin and Hesperetin in Human Plasma by Liquid Chromatographic Mass Spectrometry With an Application to Pharmacokinetic Studies” - *Journal of Chromatographic Science* – 2019:1-11
 11. Saswati Bhattacharya, Jasmina Khanam, Pradipta Sarkar and Tapan Kumar Pal - “A chemotherapeutic approach targeting the acidic tumor microenvironment: combination of a proton pump inhibitor and paclitaxel for statistically optimized nanotherapeutics” - *The Royal Society of Chemistry* – 2019, Vol 9: 240–254
 12. Sanjoy Kumar Das, Nancy Kahali, Anindya Bose, Jasmina Khanam - “Physicochemical characterization and *in vitro* dissolution performance of ibuprofen-Captisol®(sulfobutylether sodium salt of β -CD) inclusion complexes” - *Journal of Molecular Liquids* – 2018: 261 , 239–249
 13. Sanjoy Kumar Das, Soumalya Chakraborty, Chhandita Roy, Rajan Rajabalaya, Amal WidaadMohaimin, Jasmina Khanam, Arunabha Nanda and Sheba R David - “Ethosomes as Novel Vesicular Carrier: An Overview of the Principle, Preparation and its Applications” - *Current Drug Delivery* – 2018 Volume 15 (6)
 14. Kar, B., Nepal, A., Kumar, R.B.S., Dolai, N., Bhattacharya, S., Mazumder, U.K., Haldar, P.K. - “Correction to: Antioxidant and anti-inflammatory properties Hymenodictyon excelsum bark” *Oriental Pharmacy and Experimental Medicine*, (2013), 13, 2, (103-111).
 15. Chakraborty, M., Bala, A., Bhattacharya, S., Haldar, P. - “Hypoglycemic effect of ethyl acetate fraction of methanol extract from *Campylandra aurantiaca* rhizome on high-fat diet and low-dose streptozotocin-induced diabetic rats” - *Pharmacognosy Magazine*, 2018, 14(59)
 16. Gangopadhyay, A, Chakraborty, M., Haldar, P.K., Chaulya, N.C., Ghosh, A. - “Evaluation of anticancer activity of ethanolic extract of *Cyperus kyllingia* endl. In ehrlich ascites carcinoma-induced swiss albino mice” - *Asian Journal of Pharmaceutical and Clinical Research*, 2018, 11(10)
 17. Biswas, M., Bhattacharya, S., Mukhopadhyay, R, Haldar, P.K. - “*Dregea volubilis* (L. f.) Benth. (Asclepiadaceae): an appraisal on pharmacognostic, phytochemical and pharmacological studies” - *Oriental Pharmacy and Experimental Medicine*, 2018, 18(1)
 18. Seth, M, Khan, H, Bhowmik, R, Karmakar, S, Jana, S. - “Facile fabrication of fluorine free zirconium zinc stearate based superhydrophobic and superoleophilic coating on cotton fabric with superior antibacterial property” - *Journal of Sol-Gel Science and Technology*, 2019
 19. K, Anand, Karmakar, S, Ray S, Sharayar, M.A, Bhowmik, R, Bera, R – “Nanoemulgel: Emerging as smarter topical lipoidic emulsion based nano carrier for skin health care applications” – Recent Patents on Anti-Infective Drug Discovery- 2019-10-21
 20. M Veerabadhran, S Chakraborty, S Mitra, S Karmakar, J Mukherjee - “Effects of flask configuration on biofilm growth and metabolites of intertidal Cyanobacteria isolated from a mangrove forest” - *Journal of applied microbiology* - 2018/7, 125
 21. Amit Kundu, Prasanta Dey, Pradipta Sarkar, Sanmoy Karmakar, In Hwan Tae, Kyeong Seok Kim, Jae Hyeon Park, Su Hyun Lee, Byung Mu Lee, Lalmuanawmi Renthlei, Zothan Puia, Hyung Sik Kim - “Protective effects of *Croton hookeri* on streptozotocin-induced diabetic nephropathy” - *Food and Chemical Toxicology* 2019:110873
 22. Dipan Adhikari, Sanmoy Karmakar - “In vitro Pro-inflammatory Activity and Associated Pharmacological Activities of *Paracondylactis indicus* Dave”. *Nematocyst Venom - Pharmacologia*, 2018, 9: 114
 23. Sk. Abdul Amin, Nilanjan Adhikari & Tarun Jha. (2018) “Design of Aminopeptidase N inhibitors as Anticancer Agents”. *Journal of Medicinal Chemistry*, 61 (15), 6468-6490. (Impact Factor 6.259).

24. Sk. Abdul Amin, Nilanjan Adhikari & Tarun Jha. (2018) "Diverse classes of HDAC8 inhibitors: In search of molecular fingerprints that regulate the activity". *Future Medicinal Chemistry*, 10 (13), 1589-1602. (Impact factor 3.969).
25. Ruchi Gaikwad, Soumajit Ghorai, Sk. Abdul Amin, Nilanjan Adhikari, Tarun Patel, Kalpataru Das, Tarun Jha & Shovanlal Gayen. (2018) "Monte Carlo based modelling approach for designing and predicting cytotoxicity of 2-phenylindole derivatives against breast cancer cell line MCF7". *Toxicology in Vitro*, 52, 23-32. (Impact factor 3.105).
26. Sk. Abdul Amin, Nilanjan Adhikari, Sonam Bhargava, Tarun Jha & Shovanlal Gayen. (2018) "Structural exploration of hydroxyethylamines as HIV-1 protease inhibitors: New features identified". *SAR and QSAR in Environmental Research*, 29 (5), 385-408.
27. Sk. Abdul Amin, Nilanjan Adhikari, Shovanlal Gayen & Tarun Jha. (2018) "Integrin antagonists: a special emphasis on structural requirements of N-benzoyl-L-biphenylalanines as $\alpha_4\beta_7$ and $\alpha_4\beta_1$ antagonists". *Current Signal Transduction Therapy*, in press, doi: 10.2174/1574888X13666180301123106.
28. Sk. Abdul Amin, Nilanjan Adhikari, Tarun Jha & Shovanlal Gayen. (2018) "A review on camptothecin analogs with promising cytotoxic profile". *Anti-Cancer Agents in Medicinal Chemistry*, in press. doi: 10.1080/07391102.2018.1477625.
29. Sk. Abdul Amin, Nilanjan Adhikari & Tarun Jha. (2018) "Structure-activity relationships of HDAC8 inhibitors: Non-hydroxamates as anticancer agents". *Pharmacological Research*, 131, 128-142.
30. Sk. Abdul Amin, Nilanjan Adhikari, Shovanlal Gayen & Tarun Jha. (2018) "First report on the validated classification-based chemometric modeling of human rhinovirus 3C protease (HRV 3Cpro) inhibitors". *International Journal of Quantitative Structure-Property Relationships*, 3 (2), 1-20.
31. Prakruti Trivedi, Nilanjan Adhikari, Sk. Abdul Amin, Tarun Jha & Balaram Ghosh (2018) "Design, synthesis and biological screening of 2-aminobenzamides as selective HDAC3 inhibitors with promising anticancer effects". *European Journal of Pharmaceutical Sciences*, 124, 165-181.
32. Nilanjan Adhikari, Sk. Abdul Amin, Prakruti Trivedi, Tarun Jha & Balaram Ghosh (2018) "HDAC3 is a potential validated target for cancer: An overview on the benzamide-based selective HDAC3 inhibitors through comparative SAR/QSAR/QAAR approaches". *European Journal of Medicinal Chemistry*, 157, 1127-1142.
33. Sk. Abdul Amin, Nilanjan Adhikari, Shovanlal Gayen & Tarun Jha. (2018) "Reliable structural information for rational design of benzoxazole type potential cholesteryl ester transfer protein (CETP) inhibitors through multiple validated modelling techniques". *Journal of Biomolecular Structure and Dynamics*, in press. doi: 10.1080/07391102.2018.1552895.
34. Sk. Abdul Amin, Nilanjan Adhikari, Balaram Ghosh & Tarun Jha. (2019) "Designing potential HDAC3 inhibitors to improve memory and learning". *Journal of Biomolecular Structure and Dynamics*, 37, 2133-2142.
35. Nilanjan Adhikari, Sk. Abdul Amin & Tarun Jha. (2019) "Selective and nonselective HDAC8 inhibitors: A therapeutic patent review". *Pharmaceutical Patent Analyst*, 7 (6), 259-276.
36. Suvankar Banerjee, Nilanjan Adhikari, Sk. Abdul Amin & Tarun Jha. (2019) "Histone deacetylase 8 (HDAC8) and its inhibitors with selectivity to other isoforms: An overview". *European Journal of Medicinal Chemistry*, 164, 214-240.
37. Sk. Abdul Amin, Nilanjan Adhikari, Sonali Kotagiri, Tarun Jha & Balaram Ghosh. (2019) "Histone deacetylase 3 inhibitors in learning and memory processes with special emphasis on benzamides". *European Journal of Medicinal Chemistry*, 166, 369-380.
38. Sandip Kumar Baidya, Sk. Abdul Amin*, Suvankar Banerjee, Nilanjan Adhikari & Tarun Jha. (2019) "Structural exploration of arylsulfonamide-based ADAM17 inhibitors through validated comparative multi-QSAR modelling studies". *Journal of Molecular Structure*, 1188, 128-142.

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39. Julekha Kazi, Ria Mukhopadhyay, Ramkrishna Sen, Tarun Jha, Shantanu Ganguly & Mita Chatterjee Debnath. (2019) "Design of 5-fluorouracil (5-FU) loaded, folate conjugated peptide linked nanoparticles, a potential new drug carrier for selective targeting of tumor cells", *MedChemComm.* 10, 559-572.
40. Saptarshi Sanyal, Sk. Abdul Amin, Nilanjan Adhikari & Tarun Jha. (2019) "QSAR modeling on a series of arylsulphonamide-based hydroxamates as potent MMP-2 inhibitors". *SAR and QSAR in Environmental Research*, 30, 247-263.
41. Sanskar Jain, Sk. Abdul Amin, Nilanjan Adhikari, Tarun Jha & Shovanlal Gayen. (2019) "Good and Bad Molecular fingerprints for human rhinovirus 3C protease inhibition: Identification, validation and application in designing of new inhibitors through Monte Carlo-based QSAR study". *Journal of Biomolecular Structure and Dynamics*, in press.
42. Subhrangshu Supakar, Aulie Banerjee & Tarun Jha., (2019) "Intermolecular association of some selected melanin monomers and their optical absorption". *Computational and Theoretical Chemistry*, 1151, 43-49.
43. Biswas S, Harwansh R K, Kar A, Mukherjee Pulok K. "Validated High-Performance Thin-Layer Chromatographic Method for the Simultaneous Determination of Quercetin, Rutin, and Gallic Acid in *Amaranthus tricolor L.*". *Journal of Planar Chromatography* 32 (2019) 2, 1-6
44. Biswas S, Mukherjee Pulok K., Harwansh R K., Bannerjee S, Bhattacharjee P "Enhanced bioavailability and hepatoprotectivity of optimized ursolic acid-phospholipid complex". *Drug Development and Industrial Pharmacy* 45(6), 946-958
45. Chanda J, Mukherjee Pulok K, Biswas R, Biswas S, Tiwari AK, Pargaonkar A. "UPLC-QTOF-MS analysis of a carbonic anhydrase inhibiting extract and fractions of *Luffa acutangula (L.) Roxb* (ridge gourd)". *Phytochemical Analysis* (2018), 30(2):148-155 doi.org/10.1002/pca.2800
46. Mukherjee Pulok K, Banerjee S, Kar A. "Exploring Synergy in Ayurveda and Traditional Indian Systems of Medicine Synergy," 7 (2018), 30-33
47. Goswami D., Mahapatra, AD, Banerjee S, Kar A, Ojha D, Mukherjee Pulok K, Chattopadhyay D. "Boswellia serrata oleo-gum-resin and α -boswellic acid inhibits HSV-1 infection in vitro through modulation of NF- κ B and p38 MAP kinase signaling"
48. Mukherjee Pulok K, Biswas R., Sharma A., Banerjee S, Biswas S, Katiyar CK. "Validation of medicinal herbs for anti-tyrosinase potential". *Journal of Herbal Medicine*, 14 (2018) 1-16

6. Major Achievements:

1. Prof L K Ghosh has been selected as one of the Board of Governors of National Institute of Pharmaceutical Education and research (NIPER)-GUWAHATI
2. Birbal Sahni Birth Century Award (2019) from Indian Science Congress Association, Kolkata, India awarded to Prof. Pulok Kumar Mukherjee during the 106th Science Congress at Jalandhar, Punjab.
3. Fellow of National Academy of Sciences, India [FNASc.] (2018) awarded to Prof. Pulok Kumar Mukherjee by the National Academy of Science India, Allahabad.
4. NASI - Reliance Industries Platinum Jubilee Award (2018) in Biological Sciences awarded to Prof. Pulok Kumar Mukherjee by the National Academy of Science India, Allahabad for his outstanding contribution in translational research on medicinal plants.

7. Research Scholars Awarded:

1. Koushik Sengupta for his Thesis entitled "Design, Development, Evaluation and Statistical Optimization of Control Release Matrix Tablets of Salbutamol Sulphate. December" 2018
2. Debjani Sarkar for her Thesis entitled "Development Formulation and Evaluation of a Sustained Release Gastroretentive Delivery system of Metformin hydrochloride" on December, 2018.

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3. Moumita Das Kirtania for her Thesis entitled “Colon targeted drug delivery systems” on December, 2018
4. Rubina Bose for her thesis entitled “ Pharmacokinetic Evaluation of Various Dosage Forms of Sustained Release Gliclazide Tablets and Its Therapeutic in Diabetic Patients.” On December, 2018.
5. Mr. Nilanjan Adhikari entitled “Glutamine Derivatives and Analogs as Matrix Metalloproteinase-2 Inhibitors: Rational Design, Synthesis, Biological Screening and Molecular Modeling Studies” was awarded for Ph.D. (Pharm) degree, Jadavpur University.
6. Mr. Mainak Chakraborty entitled “Pre-clinical evaluation and molecular mechanism of flavonoid enriched fraction of *Campylandra aurantiaca* on type II diabetic rat” on April, 2019.
7. SK Milan Ahmmed entitled “Safety Evaluation of Some Antidiabetic Plants through Drug Metabolizing Enzymes” under guidance of Prof Pulok K Mukherjee was awarded for Ph. D. (Pharm) degree Jadavpur University.
8. Shiv Bahadur, entitled “Metabolism Mediated Interaction Study of Some Medicinal Plants through CYP450 Enzymes” under guidance of Prof Pulok K Mukherjee was awarded for Ph. D. (Pharm) degree Jadavpur University.

POWER ENGINEERING

(SALT LAKE CAMPUS)

Phone : + 91-33-2335-5813
Fax : 91-33-2335-7254
Int. : 6159
H.O.D. : Prof. Amitava Datta
E-mail : hodpower@jadavpuruniversity.in

1. A. Courses Offered : (Name of the Course, Duration of the Course, No of Students Enrolled)

Bachelor of Power Engineering: 4 years, Total No. of Students Enrolled = 175

Master of Power Engineering: 2 years, Total No. of Students Enrolled =36

Ph.D (Engg.): Presently 24 registered research scholars

1. B. Number of Faculty Members : 12 (Professor – 8; Assistant Professor – 4)

2. A. Area of Research Activities: (Broad Areas)

Power Economics and Deregulation, Nonconventional Generation and Environment, Microgrids, Novel Materials, Applied superconductivity, Wireless sensor networks, Combustion modeling and diagnostics, energy, atomization, computational and experimental fluid dynamics and heat transfer, microfluidics, surface science and engineering, water harvesting, phase change heat transfer, biological fluid flow, heat transfer using nanofluid, experimental aerodynamics, hydro power, wind power, power system optimization, soft computing techniques, application of nanofluids in power engineering, real-time & embedded systems.

2. B. Major Research Project: (Departmental / Individual along with the names of Co-ordinator(s)/ Investigator(s)–Name of the Project–Funding Agency)

Prof. Amitava Datta (PI) Prof. Ranjan Ganguly (Co-PI)–Development of High Efficiency Domestic LPG Stove through Numerical Simulation–LERC, Bangalore

Prof. Amitava Datta (Nodal Person)–Enhancing Quality Assurance Management and Benchmarking Strategies in Indian Universities–EU, ERASMUS PLUS

Prof. Amitava Gupta–Indigenously Developed Spectroscopic Radiation Portal Monitors for National Security –MHRD/DRDOIMPRINT PROGRAM(with IIT Kanpur)

Prof. Ranjan Ganguly (PI)Prof. Amitava Datta (CI)–Study of condensation in presence of noncondensable gases: effects of surface wettability and flow parameters–Board of Research in Nuclear Sciences(BRNS) of the DAE, Govt. of India

3. A. Invited Lectures Delivered/Sessions Chaired: (Name of the Teacher–Type of Participation(Invited Lecture/Session chaired/Panel expert/Keynote address)–Name of the Seminar/Conference–Place–Duration)

Prof. Amitava Datta–Invited Lecture on *Development of High Efficiency Domestic LPG Stove through Numerical Simulation*–National seminar on Initiatives for Improvements in Thermal Efficiency of LPG & PNG Cooking–India Habitat Center, New Delhi–22nd Feb., 2019

Prof. Amitava Datta–Invited Lecture on *Sustainability Transition in India Power Sector: Role of Distributed Generation*–3rd International Conf. on Sustainable Energy and Environmental Challenges–IIT Roorkee–18 – 21 December, 2018

Prof. Amitava Datta–Invited Lecture on *Flow and Combustion Characteristics in Gas Turbine Combustors*–ASME India Gas Turbine Seminar Jadavpur University, Kolkata–1st December, 2018

Prof. Amitava Datta–Invited Lecture on *Energy System in Transition*–International Interactive Workshop organized by BCC&I, Kolkata–Hyatt Regency Hotel, Kolkata–2nd May, 2018

Prof. Amitava Gupta–Keynote Speaker–ICIET 2019–Dhaka University, Bangladesh–December 2018

Prof. Amitava Gupta–Invited Speaker–Indo-US Science and Technology Forum (IUSSTF) Symposium on Advanced Sensors and modelling Techniques on Nuclear Reactor Safety–Indian Institute of Technology, Bombay–December 2018

Prof. Niladri Chakraborty–Invited Talk –One Day Seminar on Recent Trends in Electrical Engineering & Beyond–Guru Nanak Institute of Technology, Kolkata–8th September, 2018

Prof. Niladri Chakraborty–Chairperson–Emerging Trends in Energy and Electrical Systems–ETES 2019–Assam Engineering College, Guwahati, Assam–29-30th March 2019

Prof. Ranjan Ganguly–Invited Lecture on *Capturing water from thin air: each drop counts*–BCC&I Environment and Energy Conclave 2018–Bengal Chambers of Commerce and Industries, Kolkata–23rd August, 2018

Prof. Ranjan Ganguly–Invited Lecture on *Fundamentals of surface microfluidics*–Short Course on “Emerging Trends in Mechanical Engineering with Inter-Disciplinary Application”–Mechanical Engineering Department, Jadavpur University–5th January, 2019

3. B. Seminar/Workshop/Conference/Symposium Attended: (Name of the Teacher–Title of the Paper –Presented–Name of the Seminar–Place –Duration)

Prof. Niladri Chakraborty–Cuckoo Search Algorithm Based Cost Minimization by Optimal DG and Capacitor Integration in Radial Distribution Systems–NPSC National Institute of Technology, Tiruchirappalli, Tamilnadu–14th-16th December, 2018

Prof. Niladri Chakraborty, Gargi Konar, Sayani Sikder–Effect of Hybrid Energy Storage on Sizing of PV-Wind Standalone System using Bacteria Foraging Optimization Algorithm–NPSC–National Institute of Technology, Tiruchirappalli, Tamilnadu–14th-16th December, 2018

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Prof. Niladri Chakraborty–Optimal Active and Reactive Power Dispatch for coordinated Wind Thermal Generation System–NPSC–National Institute of Technology, Tiruchirappalli, Tamilnadu–14th-16th December, 2018

Prof. Niladri Chakraborty–Generalized Stochastic Petri Nets (GSPN) for Analysis of Microgrid under Uncertainties–NPSC–National Institute of Technology, Tiruchirappalli, Tamilnadu–14th-16th December, 2018

Prof. Niladri Chakraborty–An approach to quantify the applicability of DG placement techniques using Fault Tree Analysis–NPSC–National Institute of Technology, Tiruchirappalli, Tamilnadu–14th-16th December, 2018

Prof. Niladri Chakraborty–Standalone renewable based microgrid for rural areas of North East India with optional grid sales capability–Emerging Trends in Energy and Electrical Systems-ETES 2019–Assam Engineering College, Guwahati, Assam–2 days , 29-30th March, 2019

3. C. Seminar/Workshop/Conference/Symposium Organized:(Name of the Teacher–Name of the Seminar/Conf/Workshop–Place–Duration)

Prof. Amitava Gupta–DAAD Falling WallsLab 2018–Jadavpur University, Kolkata April 2018

3. D. Orientation Courses/ Refresher Courses Attended: (Name of the Teachers–Title of the Course Place–Duration)

Dr. Bhimsen Tudu–UGC sponsored Winter School, 2019 under Refresher Course on “Emerging Trends in Mechanical Engineering with Inter-Disciplinary Application” –Jadavpur University, Kolkata, India–2nd Jan-22nd Jan, 2019

Dr. Subrata Mondal–UGC-HRDC sponsored 72nd Orientation Programme–Jadavpur University, Salt Lake Campus, India–6th Feb - 6thMarch, 2019

4. A. Books/Monographs etc. Published:(Name of the Teacher–Name of the Book–Name of the Publisher with ISBN No. if any)

Editors: Amitava Datta and others–*Advances in Internal Combustion Engine Research*–Springer, ISBN 978-981-10-7575-9.

Atmadeep Bhattacharya and Amitava Datta–“Laminar Burning Velocity of Biomass-Derived Fuels and Its Significance in Combustion Devices”–*Sustainable Energy Technology and Policies A Transformational Journey*, Volume 2, pp. 359-378 (eds. S. De et al.)–Springer, ISBN 978-981-10-8392-1, 2018.

Prakash Ghose, Amitava Datta, Ranjan Ganguly, Achintya Mukhopadhyay, Swarnendu Sen–“Modelling of Soot Formation in a Kerosene Spray Flame”–*Modeling and Simulation of Turbulent Combustion* (eds. S. De et al.), Ch. 12, pp. 363-394–Springer 978-981-10-7409-7, 2018.

K.K.Mandal et al.–“Comparison of Improvement in Technical, Commercial and Environmental Benefits by Optimal Single-Point, Twin-Point and Triple-Point Deterministic PV-Based DG Injection by Jaya Algorithm”–*Lecture Notes in Electrical Engineering*–Springer ISBN 978-981-13-8687-9.

K.K.Mandal et al.–Optimal Reactive Power Dispatch Incorporating Solar Power Using Jaya Algorithm–*Lecture Notes in Electrical Engineering*–Springer ISBN 978-981-13-8687-9.

4. B. Articles Published in Journals: (Name of the Authors–Title of the Article–Name of the Journal–Volume (Issue), Pages from-To, Year)

1. A. Bhattacharya, A. Datta, “Effects of blending 2,5-dimethylfuran on the laminar burning velocity and ignition delay time of isooctane/air mixture”, *Combustion Theory and Modelling*, 23(1), 105-126, 2019.
2. A. Bhattacharya, A. Datta, “Effects of Nitromethane addition on the Laminar Burning Velocity and Ignition Delay of Syngas/Air Flames”, *Combustion Science and Technology*, 190(7), 1283-1301, 2018.

3. A. Hazra, S. Das, M. Basu, "Heat Transfer Search Algorithm for Non-convex Economic Dispatch Problems", *Journal of The Institution of Engineers (India): Series B*, 99(3), 273-280, 2018.
4. Arnab Ghosh, Niladri Chakraborty, "A Novel Residual Energy based Distributed Clustering and Routing Approach for Performance Study of Wireless Sensor Network", *International Journal of Communication Systems*, 32 (7), 1-26, 2019.
5. Arnab Ghosh, Niladri Chakraborty, "Cascaded Cuckoo Search Optimization of Router Placement in Signal Attenuation Minimization for Wireless Sensor Network in Indoor Environment", *Engineering Optimization*, Article in Press. DOI: 10.1080/0305215X.2019.1569645, 2018.
6. B. Tudu, K. K. Mandal, N. Chakraborty, "Optimal design and development of PV-wind-battery based nano-grid system: A field-on-laboratory demonstration", *Frontiers in Energy*, 13(2), 1-15, 2018.
7. D. Palit, N. Chakraborty, "Optimal bidding in emission constrained economic dispatch", *International Journal of Environmental Science and Technology*, doi.org/10.1007/s13762-018-2160-6, 2018.
8. D.K. Yadav, A.Gupta, P.Munshi, "Non linear Dynamic Inversion based controller design for load following operations in Pressurized Water Reactors with bounded Xenon oscillations", *Nuclear Engineering and Design*, 308, 241-254, 2018.
9. Kallol Roy, Kamal Krishna Mandal, Atis Chandra Mandal, "Ant-Lion Optimizer algorithm and recurrent neural network for energy management of micro grid connected system", *Energy*, 167, 402-416, 2019.
10. K.Halder, D.Bose and A. Gupta, "Stability and Performance Analysis of Networked Control Systems: A Lifted Sample-Time Approach with L2 Induced Norm", *ISA Transactions*, 86, 62-72, 2019.
11. M. Basu, "Fast Convergence Real-Coded Genetic Algorithm for Short-Term Solar-Wind-Hydro-Thermal Generation Scheduling", *Electric Power Components and Systems*, 46(11-12), 1239-1249, 2018.
12. M. Basu, "Multi-area dynamic economic emission dispatch of hydro-wind-thermal power system", *Renewable Energy Focus* , 28, 11-35, 2019.
13. M. Das, M. Sarkar, A.Datta, A.K.Santra, "Study on viscosity and surface tension properties of biodiesel-diesel blends and their effects on spray parameters for CI engines", *Fuel*, 220, 769-779, 2018.
14. M. Das, M. Sarkar, A.Datta, A.K.Santra, "An experimental study on the combustion, performance and emission characteristics of a diesel engine fuelled with diesel-castor oil biodiesel blends", *Renewable Energy*, 119, 174-184, 2018.
15. P. K. Das, A. K. Mallik, R. Ganguly, A. K. Santra, "Stability and thermophysical measurements of TiO₂ (anatase) nanofluids with different surfactants", *Journal of Molecular Liquids*, 254, 98-107, 2018.
16. S. Das, A. Hazra, M. Basu, "Metaheuristic optimization based fault diagnosis strategy for solar photovoltaic systems under non-uniform irradiance", *Renewable Energy*, 118, 452-467, 2018.
17. S Das, K Halder, A Gupta, "Transformation of LQR weights for Discretization Invariant Performance of PI/PID Dominant Pole Placement Controllers", *Robotica*, Cambridge University Press, 2019.
18. S. Mandal, K. K. Mandal, B. Tudu, N. Chakraborty, "A New Improved Hybrid Algorithm for Multi-objective Capacitor Allocation in Radial Distribution Networks", *Advances in Intelligent Systems and Computing*, 816, 585-597, 2018.
19. Sajjan Kumar, Kamal K. Mandal, Niladri Chakraborty, "Optimal DG placement by multi-objective opposition based chaotic differential evolution for techno-economic analysis", *Applied Soft Computing Journal*, 78, 70-83, 2019.
20. Sajjan Kumar, Kamal K. Mandal & Niladri Chakraborty, "A novel opposition-based tuned-chaotic differential evolution technique for techno- economic analysis by optimal placement of distributed generation", *Engineering Optimization*, 1-23, 2019.
21. Syamasree Biswas (Raha), Kamal Krishna Mandal, Niladri Chakraborty, Hybrid SMES based Reactive Power Dispatch by Cuckoo Search Algorithm, *IEEE Transaction on Industry Applications*, 55(1), 907-917, Jan/Feb 2019.

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22. T. Bar, C. Basu, M. Das, A. K. Santra, S. Sen, "Simulation of heat transfer and dissipation in targets used in nuclear astrophysics experiments", *Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms*, 449, 105-116, 2019.
23. U. Sen, S. Chatterjee, J. Crockett, R. Ganguly, L. Yu, C.M. Megaridis, "Orthogonal liquid-jet impingement on wettability-patterned impermeable substrates", *Physical Review Fluids*, 4, 014002, 2019.

5. Collaborative Programmes: (Nature of Activity–Participant–Duration)

Research Collaboration with LPG Equipment Research Corporation, Bangalore–Prof. Amitava Datta and Prof. Ranjan Ganguly–Continuing since 2016.

Research Collaboration with Prof. Ranjana Chowdhury, Dept. of Chemical Engg., JU on *Development of efficient biomass conversion routes for biofuel production and utilization* under EU, DST and DBT (India) INNO-INDIGO Project–Prof. Amitava Datta–Continuing since 2017.

Designing a collaborative programme with Calcutta Electric Supply Corporation (CESC) for Masters Level Studies–Prof. Niladri Chakraborty–Starting

Knowledge Share with National Physical Laboratory (NPL)–Prof. Niladri Chakraborty–Continuing.

Joint Research Collaboration programme with Central Institute of Mining and Fuel Research (CIMFR)–Prof. Niladri Chakraborty–Informal.

Joint International Conference Organizing Collaboration with Dr. MGR Institute, Chennai –Prof. Niladri Chakraborty–Planned.

Research visit to University of Illinois at Chicago–Prof. Ranjan Ganguly–3 weeks.

6. Major Achievements: Honors/Awards

(Year of award–Name of full time teachers receiving awards from state level, national level, international level–Designation–Name of the award, fellowship, received from Government or recognized bodies

2019–Amitava Datta–Professor–Fellowship of International Society of Energy, Environment and Sustainability

2019–Amitava Datta–Professor–Member, Solar and Renewable Energy Eastern Regional Council, ASSOCHAM

2019–Amitava Datta–Professor–Judge in Knowledge Conclave competition organized by CESC Ltd., Kolkata

2018–Amitava Datta–Professor–International Expert of Russian Science Federation in evaluating projects

2018–Niladri Chakraborty–Professor–Jury, ENCON Awards, Confederation of Indian Industries (CII)

2019–Niladri Chakraborty–Professor–Specialized Energy Expert, Govt of West Bengal, for preparation of energy action plan, for the state of West Bengal

2018–Ranjan Ganguly–Professor–Fellowship of West Bengal Academy of Science and Technology

PhDs Awarded in the Year

[Name of the Department–Name of the Candidate–Name of the Supervisor(s)]

Power Engg.–Abhik Hazra–Prof. Mousumi Basu, Prof. Amitava Gupta

Power Engg.–Atmadeep Bhattacharya–Prof. Amitava Datta

Power Engg.–Bhimsen Tudu–Prof. K.K.Mandal, Prof. N.Chakraborty

Power Engg.–Debashis Palit–Prof. Niladri Chakraborty

Power Engg.–Jagat Kishore Pattanaik–Prof. Mousumi Basu, Dr. Debaprasad Dash

Power Engg.–Kaushik Halder–Prof. A.Gupta

Power Engg.–Mithun Das–Prof. Apurba Kumar Santra, Prof. Amitava Datta

Patents Granted/Published/Awarded in the Year

(Title of the Patent–Name of the inventors–StatusNational/International–Patent status Granted/
Published/Awarded–Patent Number–Date of Publication)

Spill-tray and pan support for thermal efficiency enhancement of a domestic LPG stove–A.K. Bera,
M.M.Verma, M. Das, A. Datta, R. Ganguly–National–Published–Indian Provisional Patent Application
No. 201841049368–January 30, 2019

PRINTING ENGINEERING

(SALT LAKE CAMPUS)

Phone : + 91-33-2335-0408
Int. : 6189
H.O.D. : Dr. Soumen Basak
E-mail : hodprinting@jadavpuruniversity.in

1. A. Courses Offered:

Name of the Course	Duration of the Course	No. of Students Enrolled
B.E. in Printing Engineering	4 years	37
M.Tech. in Printing Engineering & Graphic Communication	2 years	10
Ph.D.		

1. B. Number of Faculty Members: 8

2. A. Area of Research Activities: Printing Material Science, Image Analysis, Paper Technology, Digital Color Imaging, Color Management System, Ink Technology, Surface Coating, Digital Image Processing, Digital Halftoning, Color Science.

PRODUCTION ENGINEERING

Phone : + 91-33-2414-6153
Int. : 2457-2319
H.O.D. : Prof. Arunanshu Sekhar Kuar
E-mail : hodproduction@jadavpuruniversity.in

1. A. Courses Offered:

- i) B. Prod. E.:** 4 years **No. of students:** 57 in each year
- ii) M. Prod. E.:** 2 years **No. of students:** 13 in each year
- iii) Ph. D. (Engg.)**

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1. B. Number of Faculty Members: 11 (Eleven)

2. A. Area of Research Activities:

Advanced manufacturing technology, Micromachining Processes, Metrology, Robotics, Flexible manufacturing systems (FMS), CAD, CAM, CIM, Robotics, Mechatronics, Artificial Intelligence, Concurrent Engineering, Reverse Engineering, Rapid Response Manufacturing Total Quality Management, Ergonomics, Simulation, Production and Operations management, Tribology and Terotechnology, MIS, ERP and Decision support system (DSS).

2. B. Major Research Project: (Departmental/ Individual–Name of the Project/ Funding Agency)

1. Prof. B. Bhattacharyya, P.I. of ongoing Project title: “Experimental investigation on electrochemical milling of Ti and Ni alloys”, funded by AR & DB (Rs. 49.882 lacs).

3. A. Invited Lectures Delivered/Sessions Chaired: (Name of the Teachers–Type of Participants–Name of the Seminar/ Conference etc–Place–Duration)

1. Prof. Shankar Chakraborty delivered a lecture on “A multivariate quality loss function approach for parametric optimization of NTM processes” in AICTE sponsored short term course on ‘Recent Advances in Machining Processes (RAMP)’ organized by Production Engg. Dept., Veer Surendra Sai University of Technology, Sambalpur, Burla, Odisha during 7th -12th May, 2018.
2. Prof. Biswanath Doloi delivered an expert lecture on ‘Laser beam machining processes for advanced materials processing’ in short term course on material processing and surface treatment organised by Mechanical Engg. Dept., National Institute of Technology, Silchar, Assam during 1st – 5th Oct., 2018.
3. Prof. Biswanath Doloi delivered a lecture on ‘Advanced manufacturing and advanced machining processes-an overview’ in Seminar on Advance Machining Process, organised by Mechanical Engg. Dept. Techno India, Batanagar, Kolkata, on 31st Oct., 2018.
4. Prof. Bijan Sarkar delivered an invited talk on “Building trust through quality with growth & competitiveness”, organized by Ordnance Factory, Dum Dum, Jessore Road, Kolkata-28 on 30th Nov., 2018.
5. Prof. Bijoy Bhattacharyya was invited to deliver Prof. Amitabha Bhattacharyya Memorial Lecture on “Electrochemical Machining: macro to micro-the chronology of development” in 7th International and 28th All India Manufacturing Technology, Design and Research (AIMTDR-2018) conference, organised by Anna University, Chennai between 13th – 15th Dec., 2018.
6. Prof. Bijan Sarkar delivered a Key Note address on, “Big Data Analytics: A Way to Reach Pinnacle of Productivity” in National Conference on Trends & Advances in Mechanical Engineering (TAME – 2019), organized by Kalyani Government Engineering College, Kalyani, Nadia-741 235 during 15th to 16th Feb., 2019.
7. Prof. Biswanath Doloi delivered a keynote lecture on ‘Laser micro-machining processes for advanced manufacturing applications’ in International Conference on Advances in Materials and Manufacturing Engineering (ICAMME-2019) organised by School of Mechanical Engg., KIIT Bhubaneswar, Odisha, during 15-17th March, 2019.
8. Prof. Biswanath Doloi delivered a lecture on ‘Electrochemical discharge micro-machining for micro-manufacturing applications’ in National Workshop on Intelligent and Micro-Manufacturing under UGC CAS Ph-V programme organised by Production Engg. Dept., Jadavpur University, Kolkata, during 27th – 28th March, 2019.

3. B. Seminar/Workshop/Conference/Symposium Attended: (Name of the Teachers– Name of the Paper Presented–Name of the Seminar–Place–Duration)

Prof. Biswanath Doloi attended the 7th International and 28th All India Manufacturing Technology, Design and Research (AIMTDR-2018) conference organised by Anna University, Chennai between 13th – 15th Dec., 2018.

3. C. Seminar/Workshop/Conference/Symposium Organized:

National workshop on “Intelligent & Micro Manufacturing” organised by Production Engg. Dept., JU under CAS Ph-V programme during 27th - 28th, March 2019.

3. D. Orientation Courses/ Refresher Courses Attended: (Name of the Teachers–Title of the Course–Duration–Place)

Dr. Biplab Ranjan Sarkar attended AICTE sponsored short term course on ‘Recent Advances in Machining Processes (RAMP)’ organized by Production Engg. Dept., Veer Surendra Sai University of Technology, Sambalpur, Burla, Odisha during 7th -12th May, 2018.

4. A. Books/ Monographs etc. Published: (Name of the Teachers–Name of the Book–Name of the publisher)

1. Kibria, Golam, Jahan, Muhammad Pervej, Bhattacharyya, Bijoy, “Micro Electrical Discharge Machining Processes - Technologies and Applications,” Springer (India) Pvt. Ltd Publishers, 2019, ISBN 978-981-13-3074-2.
2. V. Rathod, B. Doloi, B. Bhattacharyya, “Machining Guidelines for Fabricating Microgrooves of Varied Cross Sections by Electrochemical Micromachining”, *Book chapter in ‘Precision Product-Process Design and Optimization’*, Editors: Pande, Sanjay S., Dixit, Uday Shanker, Springer (India) Pvt. Ltd Publishers, 2018, 211-238, ISBN: 978-981-10-8767-7.
3. G. Kibria, A. Sen, H. M. Tariq Aziz, B. Doloi, B. Bhattacharyya, “Pulsed Nd:YAG Laser Surface Texturing of Pure Titanium Material” Book chapter in *‘Precision Product-Process Design and Optimization’*, Editors: Pande, Sanjay S., Dixit, Uday Shanker, Springer (India) Pvt. Ltd Publishers, 2018, 211-238, ISBN: 978-981-10-8767-7.

4. B. Articles Published in Journals: (Including National/International & Peer-reviewed Journals)

1. Mishra, K., Sarkar, B.R., Bhattacharyya, B., “Influence of inner-spraying rotating tool during electrochemical milling of Nimonic-263 alloy,” *Materials and Manufacturing Processes*, 2019, 34(7), pp. 807-813.
2. Kunar, S., Bhattacharyya, B., “Fabrication of various micropatterns by maskless micro-electrochemical texturing,” *Manufacturing Review*, 2019, 6, Article 6.
3. Chakraborty, S., Bhattacharyya, B., Diyaley, S., “Applications of optimization techniques for parametric analysis of non-traditional machining processes: A review,” *Management Science Letters*, 2019, Vol. 9, pp. 467–494.
4. Debnath, S., Laskar, H.R., Bhattacharyya, B., “Investigation into generation of micro features by localised electrochemical deposition,” *Journal of The Institution of Engineers (India): Series C*, February 2019, 100(1), pp 113–119.
5. Kunar, S., Bhattacharyya, B., “Effect of various masked patterned tools during micro-electrochemical texturing,” *Microsystem Technologies*, April 2019, 25(4), pp 1475–1492.
6. Kunar, S. and Bhattacharyya, B., “Electrochemical micromachining of micro square pattern using reusable masked tool,” *Materials and Manufacturing Processes*, 2019, 34(5), pp. 487-493.
7. Mukhopadhyay, P., Biswas, D., Sarkar, B.R., Doloi, B., Bhattacharyya, B., “Influence of Al powder on circularity during micro electro-discharge machining of Monel K-500,” *Journal of Materials Forming and Machining Processes*, 2019, 6(2). Pp. 15-30.
8. Tiwary, A.P., Das, P.P., Chakraborty, S., Pradhan, B.B., Bhattacharyya, B., “Parametric optimization of micro-EDM process during micro-hole machining on Ti-6Al-4V using WASPAS method”, *IOP Conference series: Materials Science and Engineering*, 2018, 377(1), Article 012202.
9. Kibria, G., Lepcha, P.L., Shivakoti, I., Doloi, B., Bhattacharyya, B., “Pulsed Nd:YAG Laser micro-turning of alumina to study the effect of overlap factors on surface roughness performance”, *IOP Conference series: Materials Science and Engineering*, 2018, 377(1), Article 012185.

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10. Kibria, G., Chatterjee, S., Shivakoti, I., Doloi, B., Bhattacharyya, B., "RSM based experimental investigation and analysis into laser surface texturing on titanium using pulsed Nd:YAG Laser", *IOP Conference series: Materials Science and Engineering*, 2018, 377(1), Article 012203.
11. Tiwary, A.P., Pradhan, B.B., Bhattacharyya, B., "Investigation on the effect of dielectrics during micro-electro-discharge machining of Ti-6Al-4V," *International Journal of Advanced Manufacturing Technology*, March 2018, 95(1-4), pp 861–874.
12. Kunar, S., Mahata, S., Bhattacharyya, B., "Influence of electrochemical micromachining process parameters during fabrication of varactor micropattern," *International Journal of Advanced Manufacturing Technology*, April 2018, 96(1-4), pp. 411–427.
13. Kunar, S., Bhattacharyya, B., "Electrochemical microsurface texturing with reusable masked patterned tool," *Engineering Science and Technology, an International Journal*, October 2018, 21(5), pp. 1095-1103.
14. Mallick, B., Sarkar, B.R., Doloi, B., Bhattacharyya, B., "Analysis on the effect of ECDM process parameters during micro-machining of glass using genetic algorithm," *Journal of Mechanical Engineering and Sciences, September* 2018, 12(3), pp. 3942-3960.
15. Sen, A., Doloi, B., Bhattacharyya, B., "An experimental investigation into fibre laser micro-drilling of quartz," *International Journal of Mechatronics and Manufacturing Systems*, 2018, 11(2-3), pp. 182-202.
16. Kunar, S., Bhattacharyya, B., "Influence of various flow methods during fabrication of micro ellipse pattern by maskless electrochemical micromachining," *Journal of Manufacturing Processes*, 35, October 2018, pp. 700-714
17. Mishra, K., Dey, D., Sarkar, B.R., Bhattacharyya, B., "Modeling on volumetric material removal for fabrication of complex shapes by EC milling of Ti6Al4V," *Journal of the Electrochemical Society*, June 2018, 165(9), pp. E388-E396.
18. Das, S., Paul, S., Doloi, B., "An experimental and computational study on the feasibility of bio-dielectrics for sustainable electrical discharge machining," *Journal of Manufacturing Processes*, 2019, 41, pp. 284-296.
19. Das, S., Paul, S., Doloi, B., "Application of CFD and vapour bubble dynamics for efficient electrothermal simulation of EDM: An Integrated Approach," *International Journal of Advanced Manufacturing Technology*, 2019, 102(5-8), pp. 1787–1800.
20. Mishra, K., Mukhopadhyay, P., Sarkar, B.R., Doloi, B., Bhattacharyya, B., "Improvement of micro-EDM performances with aid of vibration," *International Journal of Precision Technology*, August 2018, 8(1), pp. 38-65.
21. Das, S.K., Dutta, A.K., Debnath, S.K., "Development of path planning algorithm of centipede inspired wheeled robot in presence of static and moving obstacles using modified critical-snake bug algorithm," *IAES International Journal of Artificial Intelligence (IJ-AI)*, 2019, 8(2), pp. 95-106.
22. Dutta, A.K., Debnath, S.K., Das, S.K., "Path-planning of snake-like robot in presence of static obstacles using critical-snake bug algorithm," *Advances in Computer, Communication and Control*, February 2019, 41, pp 449-458.
23. Kar, A., Dutta, A.K., Debnath, S.K., "Application of cloud computing for priority job scheduling by multiple robots operating in a co-operative environment," *Advances in Intelligent Systems and Computing*, March 2019, 904, pp 285-293.
24. Mandal, K.K., Kaur, A.S., Mitra, S., "Experimental investigation on laser micro-machining of Al 7075 Al," *Optics and Laser Technology*, November 2018, 107, pp. 260-267.
25. Biswas, R., Das, M.C., Bhattacharyya, S., Mitra, S., "Selection of Nd:YAG laser beam micro-drilling parameters using multi-criteria decision making methods," *Optics and Laser Technology*, 2019, 119, Article 105596.
26. Mahanty, S., Roy, N., Kaur, A.S., Mitra, S., "Mathematical modelling of the Nd:YAG laser micro-drilling of aluminium 5052 for process optimization and analysis of sensitivity," *International Journal of Laser Science: Fundamental Theory and Analytical Methods*, 2018, 1(2), pp. 91-108.

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27. Diyaley, S., Biswas, A.B., Chakraborty, S., “Determination of the optimal drill path sequence using bat algorithm and analysis of its optimization performance,” *Journal of Industrial and Production Engineering*, March 2019, 36(2), pp. 97-112.
28. Chakraborty, S., Das, P.P., “Parametric optimization of non-traditional machining processes using Taguchi method and super ranking concept,” *Yugoslav Journal of Operations Research*, 2019, 29(2), pp. 249-271.
29. Chakraborty, S., Kumar, V., Ramakrishanan, K.R., “Selection of the all-time best World XI Test cricket team using the TOPSIS method,” *Decision Science Letters*, January 2019, 8(1), pp. 95-108.
30. Das, P.P., Diyaley, S., Chakraborty, S., Ghadai, R.K., “Multi-objective optimization of wire electro discharge machining (WEDM) process parameters using grey-fuzzy approach,” *Periodica Polytechnica Mechanical Engineering*, November 2019, 63(1), pp. 16-25.
31. Chakraborty, S., Agarwal, S., Dandge, S.S., “Analysis of Cotton Fibre Properties: A Data Mining Approach,” *Journal of The Institution of Engineers (India): Series E*, December 2018, 99(2), pp 163–176.
32. Chakraborty, S., Ranjan, R., Mondal, P., “A state-wise performance appraisal of the Indian roads using PROMETHEE-GIS approach,” *Benchmarking: An International Journal*, November 2018, 25(9), pp. 3338-3356.
33. Samanta, A., Sekh, M., Sarkar, S., “Influence of different control strategies in wire electrical discharge machining of varying height job,” *International Journal of Advanced Manufacturing Technology*, February 2019, 100(5-8), pp 1299–1309.
34. Bera, A. K., Jana, D.K., Banerjee, D., Nandy, T., “Multiple-criteria fuzzy group decision-making with multi-choice goal programming for supplier selection: A case study,” *Discrete Mathematics, Algorithms and Applications*, 2019, 11(3).
35. Banerjee, D., Mal, P., Ghosh, A., Majumdar, A., “Effect of yarn fineness and various knitting parameters on ultraviolet resistance of knitted fabrics,” *Indian Journal of Fibre & Textile Research (IJFTR)*, 2018, 43, pp. 153-157.
36. Das, S., Banerjee, D., Mukherjee, S., “A report based on analysis of posture and occupational health of welders in different welding units,” *Universal Journal of Public Health*, 2018, 6(3), pp. 127-134.
37. Agarwal, P., Hunt, K., Zhuang, J, Sarkar, B., Sharma, R., “An exploratory analysis for performance assessment of state police forces in India: an eclectic approach,” *Operational Research*, Published Online: 04 March, 2019.
38. Das, D., Bhattacharya, S., Sarkar, B., “Material selection in engineering design based on nearest neighbor search under uncertainty: A spatial approach by harmonizing the Euclidean and Taxicab geometry”, *Artificial Intelligence for Engineering Design, Analysis and Manufacturing (AIEDAM)*, 2019, 33(3), pp. 238-246
39. Sen, K., Ghosh, S., Sarkar, B., “Evaluation strategy of hydraulic crane through mathematical programming: an automated approach to meet customer requirement”, *Journal of The Institution of Engineers (India): Series C*, 2019, 100(4), pp. 647-664
40. Mallick, B., Das, S., Sarkar, B., Das, S., “Application of the modified similarity-based method for multi-criteria inventory classification”, *Decision Science Letters, Open Access*, Volume 8, Issue 4, October 2018, pp 455-470.
41. Jana, S., Parekh, R., Sarkar, B., “An approach towards classification of fruits and vegetables using fractal analysis” , *Communications in Computer and Information Science*, 2019, 1031, pp. 167-180.
42. Nath, S., Sarkar, B., “Decision system framework for performance evaluation of advanced manufacturing technology under fuzzy environment”, *OPSEARCH*, 2019, 55(3-4), pp. 703-720.

4. Collaborative Programmes:

A joint project work with Messers. Landis+Gyr., Joka, Kolkata on “Time and motion study” for determining the productivity standards of Smart meters-Ph (1P) & Ph. (TP) carried out by Prof. Debamalya Banerjee during Dec., 2018.

5. Major Achievements:

1. Prof. Bijoy Bhattacharyya was selected as a fellow of Indian National Academy of Engineering (IANE) in IANE Annual Convention-2018 at Hyderabad on 14th Dec., 2018.
2. Prof. Bijan Sarkar was invited as an expert in the selection committee in Industrial Engg. and Management for recruitment of teachers in Maulana Abul Kalam Azad University (MAKAUT), West Bengal on 27th Nov., 2018.
3. Prof. Bijan Sarkar was invited to act as expert to a Live Phone-in Programme “TARUNER SWAPNO” organised by All India Radio, Kolkata’s Yuvavani Section on 3rd Aug., 2018 and 1st March, 2019.
4. Prof. Bijan Sarkar was invited to act as a member in the proposal evaluation committee meeting for introduction of B. VOC course in different AICTE approved colleges under Maulana Abul Kalam Azad University (MAKAUT), West Bengal for the session 2018-19 on 21st, 23rd, 25th and 28th to 30th May, 2018.
5. Prof. Bijan Sarkar was invited to act as a member in CAS meeting convened by Maulana Abul Kalam Azad University (MAKAUT), West Bengal on 12th Oct., 2018.
6. Prof. Bijan Sarkar was a guest speaker in 3rd Regional Science & Technological Congress (Northern Region) organized by Jalpaiguri Government Engineering College, Jalpaiguri, West Bengal-735102 during 12th – 13th Dec., 2018.
7. Prof. Bijan Sarkar was invited to act as one of the judges for the 3rd Regional Science & Technological Congress (Southern Region) at Bidhanagar College, Salt Lake, Kolkata-64 during 18-19th Dec., 2018.
8. Prof. Bijan Sarkar was invited to act as a member in Ph D committee meeting in management of Maulana Abul Kalam Azad University (MAKAUT), West Bengal on 1st and 30th Aug., 2018, 26th Feb., 2019, 12th and 19th March, 2019.
9. Prof. Bijan Sarkar was invited as a member in academic council committee meeting of Maulana Abul Kalam Azad University (MAKAUT), West Bengal on 17th May, 2018.
10. Prof. Bijan Sarkar was invited as a member in Board of Governors meeting of Calcutta Institute of Engineering & Management (CIEM), Tollygunge, Kolkata-40 on 12th May and 25th Aug., 2018.
11. Prof. Bijan Sarkar was invited to act as an external examiner for M.Sc. Data Science organized by Institute of Management Study (IMS), E M Bypass, Kolkata-99 on 30th Nov., 2018
12. Prof. Bijan Sarkar delivered a lecture as KEY SPEAKER in the seminar entitled as “Impact of artificial intelligence in the field of mechanical engineering” organized by Camelia School of Engineering, Barasat, Kolkata-124 on 11th May, 2018.
13. Prof. Bijan Sarkar was reelected for the post of HONORARY SECRETARY of Operational Research Society of India (ORSI) for the year 2019-2020.
14. Prof. Bijan Sarkar was invited as a special invitee professor of International Institute of Management Sciences (IIMS), held in Chatterjee International Centre, 4th Floor, Room No. 13, 33A, J.L. Nehru Road, Kolkata-71.
15. Prof. Biswanath Doloi was invited to act as an external examiner of Ph D thesis in Mechanical Engg. Dept., IIT Guwahati on 23rd May, 2018.
16. Prof. Biswanath Doloi was invited to act as an external examiner of Ph D thesis at Dr. Babasaheb Ambedkar Technological University, Lonere, Maharashtra on 6th Aug., 2018.
17. Prof. Soumya Sarkar was invited to act as a member in Ph D committee meeting (Mechanical/ Production Engg.) of Maulana Abul Kalam Azad University (MAKAUT), West Bengal on 26th Feb., 2019.

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SECTION B

[ACADEMIC REPORT. 1.04.2018 TO 31.03.2019]

FACULTY COUNCIL OF SCIENCE

D E P A R T M E N T S

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CHEMISTRY

Phone & Fax: +91-33-2414 6223
+ 91 336 2457 2267
Int. : 2457-2267
2457-2147(Inorganic)/ 2104 (Organic)/
2458 (Physical)/2453 (Radio Chemistry)
2295 (Chem.Engg. Build.)
H.O.D. : Prof. Kalyan Kumar Das
Prof. Chittranjan Sinha (w.e.f.06.02.2019)
E-mail : hodjuchemistry@gmail.com
hod@chemistry.jdvu.ac.in
hod.chemistry@jadavpuruniversity.in

1. A. Course Offered:

Name of the Course	Duration of the Course	No. of Student
B.Sc.	3 years	72+62+65
M.Sc. (Day)	2 years	39+48
M.Sc. (Evening)	3 years	35X3

1. B. No. of Faculty Members:

Professor	Associate Professor	Assistant Professor
21	9	12

2. A. Area of research activities:

Dr. Amit Saha

Synthetic Organic Chemistry: Organic Synthesis; Transition metal catalyzed C-H activations and modern cross-coupling reactions; heterogeneous nano-catalysis.

Dr. Amrita Saha

Coordination Chemistry

Dr. Arunabha Thakur

Organometallic Synthesis, Molecular Recognition

Dr. Arup Gayen

Synthesis and development of novel nanostructured oxide based materials for the production of hydrogen for fuel cell applications via reforming reactions including methanol steam reforming (MSR), dry and steam reforming of methane (DRM & SRM); Photocatalytic dye degradation; Catalytic transformations of small organic molecules; Heterogeneous catalysis for the abatement of environmental pollution.

Dr. Bibhuti Bhushan Show

Thin film semiconductors: Synthesis, Characterization and their applications in the field of Photoelectrochemical Cells (PEC) (Solid-Liquid junctions), Solar Cells (Solid-Solid junctions), Photochemical Catalysis, Electrocatalysis and Photo Switching device fabrication.

Prof. Chittaranjan Sinha

Coordination Chemistry, Ion and molecular Sensor, Metal Organic Framework, Photoluminescence, Electrochemistry, Computation.

Prof. Gourhari Maiti

Multi-component reactions for the synthesis of bioactive heterocyclic compounds.

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Development of reagents and methodologies towards the synthesis of heterocyclic molecules of biological importance.

Lewis acid mediated various organic transformations.

Synthesis of small heterocyclic molecules of biological importance by using organocatalyst.

Prof. Kajal Krishna Rajak

Inorganic Chemistry

Dr. Mohabul Alam Mondal

Organic Synthesis

Prof. Nitin Chattopadhyay

Photochemistry, Biophysical chemistry, Surface chemistry, Steady-state and time-resolved fluorometric study of various photophysical and photochemical processes in homogeneous as well as microheterogeneous environments, Binding of drugs with relevant biological targets like proteins, DNA etc., Fluorescence sensing, Polymer photophysics, Theoretical modeling and simulations of photophysical and/or photochemical observations.

Dr. Partha Mahata

Inorganic and Solid State Materials Chemistry

Dr. Partha Roy

Inorganic Chemistry

Prof. Rina Ghosh

Development of regio-, chemo- and stereoselective methods in organic synthesis with special reference to carbohydrate field

Synthesis of oligosaccharides related to bacterial polysaccharide

Studies on Chemosensors

Prof. Samaresh Bhattacharya

Coordination chemistry, Bio-inorganic Chemistry, Organometallic chemistry, Catalysis

Dr. Samit Guha

Organic and Biomolecular Chemistry; NIR Organic Dyes; Targeting and Imaging of Mitochondria, Solid Phase Peptide Synthesis; Transmembrane Peptide; Molecular Recognition and Sensing; Membrane Fusion; Synthetic Ion Channel; Synthetic Molecular/Supramolecular Machine.

Prof. Saurabh Das

Bio-inorganic Chemistry, Chemical Biology

Dr. Shouvik Chattopadhyay

Inorganic Chemistry and Coordination Chemistry

Prof. Soumen Ghosh

Surface and Biophysical Chemistry

Prof. Subrata Nath Koner

Coordination Chemistry, Heterogeneous Catalysis, Molecular Magnetism

Prof. Sujoy Baitalik

Photophysics and Photochemistry of Coordination Compounds

Recognition and Sensing of Selected Ions

BIOPHYSICAL CHEMISTRY

Our focus of interest is the structural and functional aspects of the interaction of biologically active small molecules with different polymorphic forms of biomolecules. The small molecules includes different pharmacologically active naturally occurring alkaloids and flavonoids, while the biomolecules are nucleic acids, proteins and enzymes.

Prof. Swapan Kumar Bhattacharya

Catalysis, Energy studies, Electrochemistry, Physical Chemistry.

Prof. Umasish Jana

- Iron-catalyzed intramolecular alkyne-carbonyl metathesis for the synthesis of structurally diverse organic molecules.
- Domino reaction for the synthesis of benzofused heterocycles.
- Iron-catalyzed carbon-carbon bond formation via direct substitution of alcohols.
- Iron-catalyzed synthesis of heterocycles *via* multicomponent coupling (MCRs) reaction for the synthesis of pharmaceutically important small molecules.

Dr. Tanurima Bhaumik

Synthetic Organic Chemistry

Prof. Tapan Kumar Mondal

- i. Synthesis and characterization of new redox non-innocent azoimine and diimine functionalized heterocyclic ligands and their transition metal complexes.
- ii. Coordination compound of transition metal ions with heterocyclic ligands and study their chemical reactivity through experiments and theoretical studies.
- iii. Synthesis of cyclometalated complexes of Platinum Group Metals (PGM) by C-H and C-S bond activation and exploration of their potential catalytic applications.
- iv. Development of new optical sensors for selective detection of metal ions, anions, reactive oxygen species and nerve agents.

Prof. Umesh Chandra Halder

1. Area of Research Activities: (Bio-organic chemistry)

- a. Physico-chemical modifications of globular proteins and studies on their effect on protein folding and studies on molecular interactions during amorphous or amyloid fibril formation. Our study will be helpful to develop the molecules useful for prevention of protein aggregation responsible for different neurodegenerative diseases like Parkinson and Alzheimer's diseases.
- b. Studies on interactions of proteins with small molecules including different drugs, nucleic peptides etc.
- c. Purification, characterization and structure determination of novel serine proteases and their protein inhibitors for their commercial applications.
- d. Developments of nanoparticles based system and their influence on structure, function and aggregation of proteins and also the targeted drug deliver.
- e. Purification and structure determination of a silica leaching protein "Bioremediase, a unique protein from a novel bacterium BhKI, ushering a new hope in concrete technology".

Dr. Partha Pratim Parui

Fluorosensing for detection of Biomolecule and biologically important anions and Biosystems analysis to detect interfacial physiochemical properties, such as pH, polarity etc.

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Prof. Chandan Kumar Mondal

Dynamical study of real and model quantum system.

Prof. Jnan Prakash Naskar

Electrochemistry, Bioinorganic Chemistry and Coordination Chemistry

Prof. Kaushikisankar Pramanik

Aspects of non-innocent ligands in Coordination Chemistry

B. Major Research Project:

Dr. Amit Saha

UGC-BSR-Start-up Grant: 10 lakhs; 2 years

Dr. Amrita Saha

“Design and Synthesis of organic Fluorescent Probes for Detection of Zinc (II) Ion”
DST, SERB, India (Sanction No. SB/FT/CS-102/2014, dated-18.07.2015).

Dr. Arunabha Thakur

Sponsors	Title of the project	Duration	Amount
DST-Inspire, Synthesis and characterization of carbene stabilized mixed binary pnictogens for small molecule activation		2015-2020.	35 Lakhs
UGC-BSR start up, Stimuli-Responsive Boron-doped Conjugated Oligomers, Polymers, and Macrocycles and Their Applications,		2018-2020.	10 Lakhs
WB-DST, Conversion of Carbon dioxide to Most Promising Synthetic Fuels by Organocatalyst		2018-2021.	2.4 Lakhs

Dr. Arup Gayen

Individual centric DST SERB sponsored project “Tailored nanostructure and nanocomposite oxide materials for steam and dry reforming of methane” (File No. EMR/2016/001811 dated 26.12.2016)Rs. 61.25 L

Dr. Bibhuti Bhushan Show

1. Department of Higher Education, Science, Technology and Biotechnology, Govt. of West Bengal (WB-DST) sponsored project entitled: “Nanostructured Materials and Interfaces for Enzymeless Electrochemical Sensing of Serotonin and Dopamine”, Sanctioned letter No.: 22(Sanc.)/ST/P/S&T/16G-49/2017, Dated: 12.06.2018, as Co-Principal Investigator with CEGESS, IEST, Shibpur, Howrah.

Prof. Chittaranjan Sinha

Title : “Rhodamine inspired Sulfonamides : Structure, Chemosensor and exploration of their biomaterial activity” has been sanctioned by the Council of Scientific & Industrial Research, New Delhi, India. 01(2894)/09/EMR-II, dated 03.05.2017.

Prof. Kajal Krishna Rajak

Sl. No.	Title of the Project	Funding Agency	PI
1.	Chemistry of Rhenium Incorporating Polydentate Ligands: Synthesis, Characterization, Optical Properties and DFT Studies,	DST, Govt of West Bengal.	Prof. Kajal Krishna Rajak

Dr. Mohabul Alam Mondal

Design and synthesis of 2-aminosugar-based organocatalysts for on water enamine based asymmetric reactions, SERB, New Delhi

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Prof. Nitin Chattopadhyay

Departmental/Individual

Individual

Name of the Project Unusual fluorescence anisotropies of probes in protic solvents: A new horizon towards salvation.

Project No. EMR/2016/001087

Funding Amount Rs. 47,74,000/-

Funding Agency D.S.T., Govt. of India.

Dr. Partha Mahata

1. Principal Investigator on “UGC-BSR Research Start-Up-Grant (No.F.30-471/2019(BSR)), Title: Investigation on Synthesis, Structure and Luminescence based Sensing Properties of Rare-Earth based Metal-Organic Frameworks Compounds” by UGC, New Delhi (Duration: 28 March 2019 to 27 March 2021, Total allotment Rs. 10 lac).
2. Principal Investigator on “DST INSPIRE Faculty Award grant (IFA12-CH-69), Title: Synthesis, Structure and Properties of New Porous Metal Organic Coordination Networks (MOCNs) based on Designed Organic Ligands” by DST, New Delhi (Duration: 18 July 2013 to 17 July 2019, Total allotment Rs. 35 lac).
3. Co-Investigator on “SERB Project, Title: A concerted drive towards ambient pressure synthesis and physical characterization of multiferroic quadruple perovskites $A^1A_3B_4O_{12}$ ” (Duration: 2 July 2016 to 1 July, 2019, Total allotment Rs. 37.5 lac)

Prof. Rina Ghosh

1. As PI, “Synthesis of Oligosaccharides Glycosylation Reactions”, CSIR, Scheme No. 02(0313)/17/EMR-II, Dated 05/05/2017.

Prof. Samaresh Bhattacharya

CSIR Project: Sanction No. 01(2994)/19/EMR-II

Title: Formation and utilization of ruthenium(0) species for radical generation, C-X (X = H or halogen) activation and catalytic application.

Dr. Samit Guha

Project title	Start date	Completion date	Project cost	Sponsoring organization
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Molecular Recognition and Sensing at the Lipid Bilayer-Water Interface and Inside the Lipid Membrane. 19 th July 2018, Ongoing (Three years)			4604000 (Forty Six Lakh Four Thousand Only).	DST-SERB Early Career Award, Government of India, FILE NO. ECR/2017/001405
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Prof. Soumen Ghosh

Name of the Project - Colloidal and Solution Behaviour Solvent

Funding Agency - Council of Scientific and Industrial Research, Govt. of India

Prof. Subrata Nath Koner

1. UGC: Synthesis, characterization and catalytic applications of metal complex functionalized silica-based mesoporous solids
2. CSIR: Chiral Induction into Metal-Organic Frameworks for Heterogeneous Asymmetric Catalysis
3. SPARC (MHRD) Project: Single Molecule Magnets and Molecular Magnetic Coolers from Lanthanide-based Metal-Organic Framework Materials (Indian Co-PI, Indo-Japanese Project)

Prof. Sujoy Baitalik

1. Title of the Project: Platinum Metal-based Light-Harvesting Assemblies with Polyheterocyclic Ligands: Designing of Functional Materials
Funding Agency: DST-SERB (File NO. EMR/2015/001163)
Amount Sanctioned: 46.9 lakhs
Duration: 30.01.2016—29.01.2019
2. Title of the Project: Design of Multichannel Receptors for Anions by Taking Profit of Metal-Ligand Interaction
Funding Agency: CSIR (Project No: 01(2945)/18/EMR-II)
Amount Sanctioned: 12.0 lakhs
Duration: 01.06.2019 —31.05.2022 (Ongoing)

Dr. Tapan Kumar Mondal

- i. Novel cyclometalated complexes of platinum group metals: Structure, electroluminescence and catalytic aspects (SERB, New Delhi) (No. YSS/2015/001533; Project amount: Rs. 31,91,250/-; Present status: Completed).
- ii. Synthesis of new palladium and platinum complexes with azo/imine functional ligands: Exploration of potential catalytic and biological activity (SERB, New Delhi) (No. EEQ/2018/000266); Project amount: Rs. 17,98,500/-; Present status: Ongoing).

3. A. Invited Lectures delivered/ Sessions chaired:

Dr. Arunabha Thakur

1. Oral presentation on “Ferrocenyl electrochemical chemosensors: Application in molecular logic” by Arunabha Thakur, on 9th April, 2018 at IISER-Kolkata.

Dr. Arup Gayen

1. Two Days National Conference on Applied Materials Science, Centre for Applied Chemistry, Central University of Gujarat, Gandhinagar—382029, (April 6—7, 2018).
2. International Conference on Synthetic Potent Molecule and Its Application (ICSPMIA-2018), Department of Chemistry, Sikkim Manipal Institute of Technology, Majitar, Rangpo– 737136 (October 30—31, 2018).

Dr. Bibhuti Bhushan Show

International Conference: Oral Presentation, 2019. Electrochemical Synthesis of Oxide and Sulphide semiconductor thin films: their characterization and applications, Chemistry Meets Industry and Society (CIS 2019) Salerno, Italy 28-30 August 2019, Organized by Italian Chemical Society.

Prof. Chittaranjan Sinha

- (i) Invited Talk in the International Conference on “Chemical Research in Materials and Biological Sciences (CRMBS-2019)”, March 15-16, 2019, Department of Chemistry, Assam University, Silchar, Assam. Abstract of “Chromogenic and Fluorogenic probes for ion sensing” – Chittaranjan Sinha, published in Book of Abstracts, CRMBS-2019, p-8.
- (ii) Invited Talk in the International Conference on “Emerging Technologies for sustainable development (ICETSD '19)”, 5-6 March, 2019, Govt College of Engineering and Leather Technology, Kolkata. Title, “Structure and Photochromism of Coumarinyl-Azo-imidazole” – Papia Datta, Dibakar Sardar and Chittaranjan Sinha, published in the Proceedings of ICETSD '19, p 4-10, 2019.

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- (iii) Lectureship program in the PK College Contai, Purba Medinipur on 20-21 April, 2019 and delivered talk entitled, "EMF in UG Course".
- (iv) Invited Talk in the State level seminar jointly organised by Belda College, Belda, Paschim Medinipur and Egra S.S.B. College, Egra, Purba Medinipur and supported by Indian Chemical Society on "Recent trends in Chemistry" on 23rd March, 2019. Title of Talk "The Chemical Bonds".
- (v) Delivered talk in International Seminar on "Recent Trends in Chemistry (RTC-2019)" 3rd January, 2019, in the Department of Chemistry, P. D. Women's College, Jalpaiguri. Title, "Sulfamethoxazole derivatives and their metal complexes: Towards design of new drugs".

Prof. Nitin Chattopadhyay

- 15. Invited talk in the one day Seminar on "Recent Trends in Chemistry" in Belda College, Medinipur (W), March 23, 2019.
- 14. Invited talk in National Seminar on "Chemical Sciences: Today and Tomorrow (CSTT-2019)" in Jadavpur University, March 14, 2019.
- 13. Resource Person in the DST INSPIRE Science Camp – 2019 organized by National Institute of Science & Technology, Berhampur, Orissa, January 29 – February 02, 2019.
- 12. Resource person in the Academy Lecture Workshop "Fundamentals and Applications of Chemistry in Material and Biological Sciences: Recent Trends" at Surendranath College, Kolkata, during January 02-17, 2019.
- 11. Prof. S.R. Mohanty Memorial Lecture (2018) at National Institute of Science and Technology, Berhampur in the 32nd Annual Conference of Orissa Chemical Society, December 23-24, 2018.
- 10. Advisory Committee Member and Invited Speaker in National Conference on "Recent Developments in Chemistry (RDC-2018)" at National Institute of Technology Durgapur, December 17-19, 2018.
- 9. Resource person in the Academies' Refresher Course on "The class room Chemistry – Concepts and Curiosities", Jhargram Raj College, Jhargram, West Bengal, December 06-20, 2018.
- 8. National Advisory Committee Member and Invited Speaker in National Conference on "Recent Trends in Research in Applied Sciences: An Interdisciplinary Approach" at Ganesh Lal Agarwal College, Daltonganj (Palamu), Jharkhand, during December 06-07, 2018.
- 7. Resource person in the UGC Refresher Course in Chemistry (Thrust area: Recent Trends in Chemical Sciences), Department of Chemistry, University of Calcutta, during November 30 – December 20, 2018.
- 6. Resource person in the UGC Refresher Course in Physics (RCPHYS1819) on "Recent Developments in Physics: Theory and Experiment", Department of Physics, Jadavpur University, during November 19 – December 11, 2018.
- 5. Convener and Resource person in the Academy Lecture Workshop "Principles of Chemistry in Biosciences from the Perspective of Undergraduate Students" at Rishi Bankim Chandra College, Naihati, 24 Parganas, during October 3-5, 2018.
- 4. Resource person in the UGC Refresher Course in Chemistry in Pt. Ravishankar Shukla University, Raipur during September 06-26, 2018.
- 3. Resource person in the Academy Lecture Workshop "Recent Trends in Chemistry", Kazi Nazrul University, Asansol, during August 29-30, 2018.

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2. Invited talk in the International Seminar on “Recent Advances in Molecules and Materials (RA2M-2018)”, Haldia Institute of Technology, August 02-03, 2018.
1. Plenary Lecture in National Conference on “Chemistry: Today and Tomorrow (CTT-2018)”, Department of Chemistry, Kalyani University, July 16-17, 2018.

Dr. Partha Mahata

Invited talk:

1. Delivered invited talk on “Luminescent Metal-Organic Materials as Sensors in Aqueous Medium” by Partha Mahata at 1st International Conference on Crystal Engineering: From Molecule to Crystal, held on March 30- March 31, 2019 at NIT Raipur.
2. Delivered invited talk on “Metal-Organic Materials as Chemosensors in Aqueous Medium” by Partha Mahata at International Symposium on Advanced Functional Materials (ISAFM-2018), held on July 12 – July 14, 2018 at IISER Thiruvananthapuram.

Session chaired in Conferences

1. International Symposium on “Advanced Functional Materials (ISAFM-2018)”, held on July 12 – July 14, 2018 at IISER Thiruvananthapuram.

Prof. Rina Ghosh

1. “Synthesis of heterocyclic compounds and oligosaccharides utilizing one-pot multicomponent reactions” in the International symposium “Recent Advances in Molecules and Materials (RA2M-2018)” held during August, 2-3, 2018 at Haldia Institute of Technology (HIT), Haldia.
2. Chaired a scientific session in the International Conference “Sweet 18 Glycochemistry, Biology and Technology (SGBT-2018)” held at IISER, Kolkata during 19-21 Decenmer, 2018.
3. Chaired a scientific session in the National Seminar on “Chemical Sciences: Today and Tomorrow (CSTT-2019)”, held in the Department of Chemistry, Jadavpur University on March 14th, 2019.
4. “Synthesis of a tetrasaccharide derivative related to the cell wall polysaccharide of B. anthracis utilizing one-pot glycosylation reactions” in the “International Symposium on Green Chemistry: ISGC-2019” held during 13th to 17th May, 2019 in La Rochelle, France.

Prof. Samaresh Bhattacharya

Delivered invited Lectures at

- Sambalpur University
- University of Calcutta
- M S University-Baroda
- Bhagalpur University
- Haldia Institute of Technology
- NIT-Meghalaya

Session Chaired at

- Jadavpur University
- NIT-Meghalaya
- MTIC-XVI symposium, Pune
- IACS, Kolkata
- Haldia Institute of Technology

Prof. Saurabh Das

Invited Lecture at: International Seminar on “Recent Advances in Molecules and Materials (RA2M-2018)” In commemoration of the 157th Birth Anniversary of AcharyaPrafulla Chandra Ray organized by School of Applied Science & Humanities, Haldia Institute of Technology, Haldia, West Bengal & The Indian Chemical Society, Kolkata.

Duration of Conference: August 2nd& 3rd, 2018.

Title of talk: Significance of the generation of semiquinone radical anion by anthracycline anticancer drugs and their hydroxy-9,10-anthraquinone analogues: Interaction with nucleic acids and DNA.

Prof. Soumen Ghosh

- i) Invited Speaker in the National Seminar on “Contemporary Challenges in Chemistry” (NSC3 – 2018), November 20-21, 2018 organized by Department of Chemistry, North-Eastern Hill University (NEHU), Shillong, Meghalaya - 793022 and S. N. Bose National Centre for Basic Sciences, Kolkata - 700106.
- ii) Acting as a Chairperson in International Conference on “Emerging Technologies for Sustainable Development” (ICETSD '19) on March 5–6, 2019, organized by Government College of Engineering and Leather Technology, Block - LB 11, Sector - III, Salt Lake, Kolkata – 700106 held at Eastern Zonal Cultural Centre (EZCC), IB-201, Salt Lake City, Kolkata-700106, W.B.

Prof. Subrata Nath Koner

Lecture delivered:

1. Delivered lecture on “Heterogeneous Catalysis over Metal-Organic Framework” April 10, 2018, Graduate School of Science, Yokohama City University, Yokohama, Japan.
2. Delivered lecture on “Heterogeneous Catalysis over Porous Solids” April 12, 2018, Graduate School of Chemistry, Kyushu University Campus, Fukuoka, Japan.
3. Delivered lecture as visiting Professor on “Heterogeneous Catalysis”; July 13-14, 2018, Zhengzhou University, Henan Province, China

Chairing Session:

1. International Conference on “Advancement in Science & Technology”, (Indo-Japanese Conference), held at Visva-Bharati, Santiniketan on August 3-4, 2018

Prof. Sujoy Baitalik

1. Delivered an invited lecture in UGC sponsored Refreshers’ Course in Chemistry at the University of Calcutta on December 14, 2018.
2. Chaired a session in a National Seminar on Chemical Sciences: Today and Tomorrow (CSTT-2019) under Centre for Advanced Studies II Program at Triguna Sen Auditorium, Jadavpur University, Kolkata, on March 14, 2019.

Prof. Swapan Kumar Bhattacharya

Invited lecture in “National seminar on energy storage and conversion” organized by department of Instrumentation science of Jadavpur University on 6th December, 2018.

Dr. Tapan Kumar Mondal

- i. “Invited Talk” in the 54th Annual Convention of Chemists of Indian Chemical Society, held on December, 23-25, 2017, Venue: Uka Tarasadia University, Bardoli, Surat.

Prof. Jnan Prakash Naskar

International Conference: Oral Presentation, 2019. Biological Perspective of Some Novel Oxime-based Palladium Compounds. 2nd Euro Chemistry Conference organized by Scient Global Conferences in Valencia, Spain during June 17-19, 2019.

B. Seminar/Workshop/Conference/Symposium Attended:

Dr. Amit Saha

National Seminar on Chemical Sciences: Today and Tomorrow (14th March 2019)
Department of Chemistry, Jadavpur University, Kolkata

Dr. Amrita Saha

Chemical Sciences : Today and Tomorrow (CSTT-2019).

Dr. Arunabha Thakur

Name of Author/Name of the Paper Presented/Name of the Seminar/Place, Duration

Arunabha Thakur*, Sushil Ranjan Bhatta, Manisha Karmakar

ICT-Isomerization Induced Turn-On Fluorescence Probe with a Large Emission Shift for Mercury Ion: Application in Combinational Molecular Logic. National Seminar on "Current Developments in Chemical Sciences" Center For Advanced Studies II, 7th March, 2018, Jadavpur University, Kolkata.

Arunabha Thakur

ICT-Isomerization Induced Turn-On Fluorescence Probe with a Large Emission Shift for Mercury Ion: Application in Combinational Molecular Logic. International Conference on Organometallics and Catalysis (ICOC 2018), 13-16th December 2018Goa, Hotel Holiday Inn

Dr. Bibhuti Bhushan Show

National Attended 2019, National Seminar on Celebration of the International Year of the Periodic Table, Triguna Sen auditorium, JU Campus, Kolkata 700032, Hosted by Dept. of Chemistry, JU, under CAS II program.

Prof. Chittaranjan Sinha

- (i) Poster presented in the National Seminar on "Chemical Sciences : Today and Tomorrow" on March 14, 2019 in the Department of Chemistry, Jadavpur University. (a) "A Series of ortho-hydroxyl-arylamine : Fluorescence Sensitivity towards Zn²⁺ ion and cancer cell imaging"- Sunanda Dey and Chittaranjan Sinha, Book of Abstract, p-10, 2019.(b) "Supramolecular assembly of acetylenedicarboxylato bridged 1D coordination polymer : electrochemical CO₂ reduction and magnetic properties" – Basudeb Dutta, Chittaranjan Sinha, Mohammad Hedayetullah Mir, Book of Abstract, p-18, 2019.
- (ii) Delivered Talk in Moulana Azad College on "International Lecture Series on Chemistry" 7th January, 2019. Title of Talk, "Life and Wor of Acharya Prafulla Chandra Ray".
- (iii) Delivered Talk in One day State level Seminar on "Modern Techniques of Teaching" in the Department of Chemistry, Sitananda College, Nandigram, Purba Medinipur, 21/12/2018. Title, "Radioactivity".
- (iv) Talk in the lecture workshop on "Recent Development in Chemistry-2018" on 7-8 September, 2018. In the Department of Chemistry, Cooch Behar Panchanan Barma University, Cooch Behar, WB, India. Title of Talk, "The Chemical Bonds : An Overview".

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Prof. Gourhari Maiti

National Seminar on “Chemical Sciences: Today and Tomorrow”, March 14, 2019 organized by Department of Chemistry, Jadavpur University, Kolkata-700 032.

Dr. Partha Mahata

1. 1st International Conference on “Crystal Engineering: From Molecule to Crystal”, held on March 30- March 31, 2019 at NIT Raipur.
2. International Symposium on “Advanced Functional Materials (ISAFM-2018)”, held on July 12 – July 14, 2018 at IISER Thiruvananthapuram.
3. National Seminar on “Chemical Sciences: Today and Tomorrow”, held on March 14, 2018 at Department of Chemistry, Jadavpur University.

Dr. Partha Roy

- (i) National Seminar on “Chemical Sciences : Today and Tomorrow (CSTT)”, held on March 14, 2019, Jadavpur University, Kolkata.

Prof. Samaresh Bhattacharya

Attended several Symposia and Conferences within the country.

Prof. Saurabh Das

1. “A monomeric Zn(II) complex of Ornidazole shows better efficacy on *Entamoebahistolytica* (HM1:IMSS strain)”, Promita Nandy, Neha Banyal, Kasturi Mukhopadhyay, Saurabh Das.
Oral presentation by scholar PromitaNandy at the “International Conference on Synthetic Potent Molecule and Its Application (ICSPMIA-2018)” in collaboration with Royal Society of Chemistry, Eastern India Section at Sikkim Manipal Institute of Technology (SMIT), Majitar, Sikkim during October 30-31, 2018.
2. “Electrochemically generated reduction products of ornidazoleinteract with nucleic acid bases and DNA”, Promita Nandy and Saurabh Das.
Poster presented by Ms. PromitaNandy at the seminar on “Trends in Surface Science and Related Areas”(TSSRA) onOctober 06, 2018,jointly organized by Department of Chemistry, Sarojini Naidu College for Women & Indian Society for Surface Science and Technology, Department of Chemistry,Jadavpur University Kolkata. **Ms. Nandy received one of the three best research paper award.**

Dr. Shouvik Chattopadhyay

“National Symposium on Celebration of The international year of The periodic table” organized by the Department of Chemistry, JU on AUGUST 13 & 14, 2019, at Department of Chemistry Jadavpur University, Kolkata - 700 032

Title of the paper presented: Spontaneous resolution of enantiomers of dinuclearmixed valence cobalt(III/II) complexes built from achiral precursors.

Prof. Soumen Ghosh

- i) One day Seminar on “Trends in Surface Science and Related Areas (TSSRA-XV)”, October 6, 2018 held in Dept. of Chemistry, Sarojini Naidu College for Women, Kolkata – 700028 sponsored by West Bengal State Council of Higher Education.
- ii) National Seminar on “Chemical Sciences: Today and Tomorrow (CSTT-2019), March 14, 2019” organized by Department of Chemistry, Jadavpur University, Kolkata - 700032, W. B.

Prof. Umasish Jana

National Seminar on “Chemical Sciences: Today and Tomorrow” (14th March, 2019, Department of Chemistry, Jadavpur University)

Dr. Tanurima Bhaumik

Poster presented in National Seminar on “Chemical Sciences: Today and Tomorrow” (CSTT-2019) held on 14th March, 2019 under Centre for Advanced Studies II Program organized by the Department of Chemistry, Jadavpur University, Kolkata 700032.

Prof. Umesh Chandra Halder

- i) Hasan Parvej, Suddhanta Choudhury and Umesh Chandra Halder, “*Dopamine inhibits the fibrillation of bovine β -lactoglobulin*” Participated and presented the poster in National Seminar on “Chemical Sciences: Today and Tomorrow” organized by Department of Chemistry, Jadavpur University, Kolkata, March 14, 2019.
- ii) Shahnaz Begum, Nayim Sepay, Ramkrishna Dalui, Hasan Parvej, Suddhanta Choudhury, Swarnali Paul, Umesh Chandra Halder, “*Investigation of the anti-amyloidogenic activity of human insulin under different anionic salt stress*” Participated and presented the poster in National Seminar on “Chemical Sciences: Today and Tomorrow” organized by Department of Chemistry, Jadavpur University, Kolkata, March 14, 2019.

Prof. Jnan Prakash Naskar

National Attended 2019 “Chemical Sciences: Today and Tomorrow” Hosted by Dept. of Chemistry, JU under UGC Centre for Advanced Studies II Program March 14, 2019

C. Seminar/Workshop/Conference/Symposium Organized:

Dr. Amit Saha

“Treasurer” in National Seminar on Chemical Sciences: Today and Tomorrow (14th March 2019) Department of Chemistry, Jadavpur University, Kolkata.

Dr. Bibhuti Bhushan Show

National 2019, National Seminar on Celebration of the International Year of the Periodic Table Triguna Sen auditorium, JU Campus, Kolkata 700032, Hosted by Dept. of Chemistry, JU, under CAS II program.

Prof. Chittaranjan Sinha

- (a) Convener of Annual Convention of Chemists and International Conference on “Recent Advances on Chemical Sciences and Allied Areas (RACS2A-2018)” on 28-30 December, 2018 organized by Indian Chemical Society in collaboration with Nawgachhia Degree College, Bihar, India to commemorate 157th birth anniversary of the founder President, Acharya P. C. Ray.
- (b) International Advisory Committee Member of the International Conference on “Chemical Research in Materials and Biological Sciences (CRMBS-2019)”, March 15-16, 2019, Department of Chemistry, Assam University, Silchar, Assam.

Prof. Nitin Chattopadhyay

3. Advisory Committee Member of National Conference on “Recent Developments in Chemistry (RDC-2018)” at National Institute of Technology Durgapur, December 17-19, 2018.
2. National Advisory Committee Member of National Conference on “Recent Trends in Research in Applied Sciences: An Interdisciplinary Approach” at Ganesh Lal Agarwal College, Daltonganj (Palamu), Jharkhand, during December 06-07, 2018.

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1. Convener of the Academy Lecture Workshop “Principles of Chemistry in Biosciences from the Perspective of Undergraduate Students” at Rishi Bankim Chandra College, Naihati, 24 Parganas, during October 3-5, 2018.

Dr. Partha Roy

- (i) Co-convener of National Seminar on “Chemical Sciences: Today and Tomorrow” (CSTT), held on March 14, 2019, Jadavpur University, Kolkata.

Prof. Sujoy Baitalik

1. Organized a National Seminar on “Chemical Sciences: Today and Tomorrow” (CSTT-2019) under Centre for Advanced Studies II Program at Triguna Sen Auditorium, Jadavpur University, Kolkata, on March 14, 2019.

Prof. Swapan Kumar Bhattacharya

As convener of one day National seminar on “Chemical Sciences: Today and Tomorrow” on behalf of the department of Chemistry of Jadavpur University on 14 th March, 2019

D. Orientation Courses/Refreshers Courses Attended

Dr. Arunabha Thakur

72nd Orientation Program, Ref No: HRDC-JU/72OP1819/208

Dr. Bibhuti Bhushan Show

Interdisciplinary Refresher Course, February 26 to March 18, 2019. Winter School in Basic Sciences, UGC-HRDC, Banaras Hindu University, Varanasi-221005.

Dr. Samit Guha

Samit Guha, Orientation Program, 72nd Orientation Programme, 6th February 2019 to 6th March, 2019.

E. Orientation Courses/Refreshers Courses organized

4. A. Books/Monographs Published:

B. Articles Published in Journals:

Dr. Amit Saha

Sl. No./Name of Teacher (Role)/Name of article Name of journal/Date of publication Volume and page no.

- 1 Amit Saha (Corresponding author) “Unprecedented thiocarbamidation of nitroarenes: a facile one-pot route to unsymmetrical thioureas Organic Chemistry” *Frontiers (Royal Society of Chemistry)*, 16 Nov 2018, 2019, 6,70
- 2 Amit Saha (Corresponding author) “Benign One-Pot Synthesis of Carbamo (dithioperoxo) thioate Compounds in Water Medium Using N-(Arylthio) phthalimides as the Electrophilic Sulfur Source”, *Chemistry Select (Wiley-VCH)*, 31 Oct 2018, 2018, 3, 11895
- 3 Amit Saha (Corresponding author) “A Convenient, Clean and Expeditious Synthesis of bis (heterocyclyl) methanes Over High Surface Area Zirconium Phosphate Catalyst in Water: A Green Approach Current Green Chemistry” (*Bentham Science Publishers*), 23 May 2018, 2018, 5, 40

Dr. Amrita Saha

1. “Experimental and computational investigations of the photosensitive Schottky barrier diode property of an azobenzene based small organic molecule”
S. Banerjee, A. Dey, P. Ghorai, P. Brandao, J. Ortega-Castro, A. Frontera, P. P. Ray and A. Saha, *New Journal Chemistry*, 2018, 42, 13430–13441.

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2. “Syntheses, crystal structures, DNA binding, DNA cleavage and DFT study of Co(III) complexes involving azo-appended Schiff base ligands”
S. Banerjee, R. Patra, P. Ghorai, P. Brandao, S. G. Chowdhury, P. Karmakar and **A. Saha**, *New Journal Chemistry*, 2018, 42, 16571–16582.
3. “An aminoquinoline based biocompatible fluorescent and colourimetric pH sensor designed for cancer cell discrimination”
J. Mandal, P. Ghorai, P. Brandao, K. Pal, P. Karmakar and **A. Saha**, *New Journal Chemistry*, 2018, 42, 1988–19826.
4. “Synthesis of Multinuclear Zn(II) Complexes Involving 8-Aminoquinoline- Based Schiff-Base Ligand: Structural Diversity, DNA Binding Studies and Theoretical Calculations”
P. Ghorai, P. Brandao, A. Bauza, A. Frontera and **A. Saha**, *ChemistrySelect*, 2018, 3, 7697–7706.
5. “Design and synthesis of a novel fluorescent-colorimetric chemosensor for selective detection of Zn(II) and Cu(II) ions with applications in live cell imaging and molecular logic gate”
P. Ghorai, S. Banerjee, D. Nag, S. K. Mukhopadhyay and **A. Saha**, *Journal of Luminescence*, 2019, 205, 197–209.
6. “2-hydroxy-5-methylisophthalaldehyde based fluorescent-colorimetric chemosensor for dual detection of Zn²⁺ and Cu²⁺ with high sensitivity and application in live cell imaging”
J. Mandal, P. Ghorai, K. Pal, P. Karmakar and **A. Saha**, *Journal of Luminescence*, 2019, 205, 14–22.

Dr. Arunabha Thakur

1. Naphthalene-Glycine Conjugate: An Extremely Selective Colorimetric Chemosensor for Iodide Ion in Aqueous Solution.
Arunabha Thakur*, Sushil Ranjan Bhatta, Bijan Mondal, Deepak Kakash, Piyush Chawla. *Sensors and Actuators B: Chemical* 2018, 267, 617-626
2. Metal-Coordination Driven Intramolecular Twisting: A Turn-On Fluorescent-Redox Probe for Hg²⁺ Ion through Interaction of Ferrocene Nonbonding Orbital and Dibenzylidenehydrazine
Sushil Ranjan Bhatta, Bijan Mondal, Sudhir Lima, Arunabha Thakur*
Dalton Trans. 2019, 48, 8209-8220.

Dr. Arup Gayen

1. U. Dutta, D. Ghosh, A. Haque, L. Kumar, T. K. Mandal, P. S. Walke, K. Pal, A. Gayen, A. K. Kundu and Md. M. Seikh, “A revisit to the effect of annealing temperature on magnetic properties of LaFe_{0.5}Mn_{0.5}O₃,” *J. Phys.: Condens. Matter* 31, 225801 (9pp) (2019).
2. S. Maiti, D. Das, K. Pal, J. Llorca, L. Soler, S. Colussi, A. Trovarelli, K. R. Priolkar, P. R. Sarode, K. Asakura, Md. M. Seikh and A. Gayen, “Methanol steam reforming behavior of sol-gel synthesized nanodimensional Cu_xFe_{1-x}Al₂O₄ hercynites”, *Appl. Catal. A, Gen.* 570, 73-83 (2019).
3. U. Dutta, A. Hossain, P. S. Walke, D. Ghosh, N. E. Mordvinova, O. I. Lebedev, A. Haque, K. Pal, A. Gayen, A. K. Kundu and Md. M. Seikh, “Synthesis, structure and magnetic properties of nanodimensional La_{1-x}Ba_xFe_{0.5}Mn_{0.5}O₃ perovskites”, *J. Alloys Compd.*, 777, 1396-1402 (2019).
4. K. Pal, A. Mondal, R. Jana, P. P. Ray and A. Gayen; “Domestic LED light driven methylene blue degradation by g-C₃N₄-CaCu₃Ti₄O₁₂ composite”, *Appl. Surf. Sci.*, 467-468, 543-553 (2019).
5. K. Pal, R. Jana, A. Dey, P. P. Ray, Md M. Seikh and A. Gayen; “Performance analysis of

Fe-doped calcium copper titanate quadruple perovskite in optoelectronic device”, *Chem. Phys. Lett.*, 709, 110-115 (2018).

6. K. Pal, K. Ghorai, S. Aggrawal, T. K. Mandal, P. Mohanty, Md. M. Seikh and A. Gayen; “Remarkable Ti-promotion in vanadium doped anatase titania for methylene blue adsorption in aqueous medium”, *J. Environ. Chem. Engg.*, 6, 5212-5220 (2018).
7. U. Dutta, D. Ghosh, A. Haque, P. S. Walke, N. E. Mordvinova O. I. Lebedev, K. Pal, **A. Gayen**, A. K. Kundu and Md. M. Seikh; “Influence of Ti-doping on the magnetic exchange interaction of $\text{La}_{0.5}\text{Ca}_{0.5}\text{MnO}_3$ nanoparticles”, *J. Magn. Magn. Mater.*, 464, 132-138 (2018).

Dr. Bibhuti Bhushan Show

1. “Fluorescence enhancement via aggregation effect due to microenvironmental alterations in human hemoglobin protein in presence of carbon quantum dots (CQD): Comparative spectroscopic approach”, M. Chakraborty, I. Mitra, K. Sarkar, M. Bardhan, S. Paul, S. Basu, A. Goswami, A. Saha, **B. Show**, T. Ganguly, *Spectrochim. Acta A*, 2019, 215, 313-326.
2. “Adsorption of As (III) and As (V) from aqueous solution by modified Cassia fistula (golden shower) biochar”, Md. A. Alam, W. A. Shaikh, Md. O. Alam, T. Bhattacharya, S. Chakraborty, **B. Show**, I. Saha, *Appl. Water Sci.*, 2018, 8(7), 198(1-14), <https://doi.org/10.1007/s13201-018-0839-y>.
3. “Design of a Pyrene Scaffold Multifunctional Material: Real-Time Turn-On Chemosensor for Nitric Oxide, AIEE Behavior, and Detection of TNP Explosive”, A. S. M. Islam, M. Sasmal, D. Maiti, A. Dutta, **B. Show**, Md. Ali, *ACS Omega*, 2018, 3(8), 10306-10316.
4. “A turn-on fluorogenic chemosensor for Fe^{3+} and a Schottky barrier diode with frequency-switching device applications”, H. A. Molla, R. Bhowmick, A. S. M. Islam, **B. Show**, N. Mukherjee, A. Mondal, Md. Ali, *Photochem. Photobio. Sci.*, 2018, 17 (4), 465-473.

Prof. Chittaranjan Sinha

- (a) B. Chowdhury, K. Naskar, D. Mallick, C. Sen, K. K. Sarkar and C. Sinha*, “Synthesis, characterization, photochromism and theoretical interpretation of bis-(triphenylphosphine)-Cu(I)- and Ag(I)-(1-alkyl-2-(arylazo) imidazole) complexes” *J. Indian Chem. Soc.*, 2018, 95, 405-516.
- (b) S. Roy, S. K. Sarkar, R. Saha, T. K. Mondal and C. Sinha, “Cobalt(II), nickel(II) and copper(II) complexes of N-{(2-pyridyl)methylidene}-6-coumarin : Characterization, DNA interaction, catecholase activity and theoretical interpretation”, *Inorg. Chim Acta*, 2018, 482, 659-668.
- (c) S. Mondal, T. K. Mondal, R. Y. M. Mandal and C. Sinha*, “Copper(II)-Sulfonamide Schiff base complexes : Structure, biological activity and theoretical interpretation” *Polyhedron*, 2018, 151, 344-354.
- (d) K. Naskar, S. Maity, S. Jana, B. Dutta, S. Tanaka, D. Mallick, T. Akitsu, and C. Sinha*, “Arylazoimidazole Coordinated and Naphthalene-Dicarboxylato Bridged Polymers of Co(II) and Photochromic Zn(II) Complexes” *Cryst. Growth Des.* 2018, 18, 2986-2997.
- (e) B. Dutta, A. Dey, K. Naskar, S. Maity, F. Ahmed, S. Islam, C. Sinha, P. Ghosh, P. P. Ray and M. Hedayetullah Mir, “Two isostructural linear coordination polymers: the size of the metal ion impacts the electrical conductivity”, *New J. Chem.*, 2018, 42, 10309-10316.
- (f) B. Dutta, A. Dey, K. Naskar, F. Ahmed, R. Purkait, S. Islam, S. Ghosh, C. Sinha, P. P. Ray and M. Hedayetullah Mir, “Cu(II)-Based binuclear compound for the application of photosensitive electronic devices”, *New J. Chem.*, 2018, 42, 8629-8637.
- (g) B. Dutta, S. Md Pratik, S. Jana, C. Sinha, A. Datta, and M. Hedayetullah Mir, “Novel Br $\cdots\pi$ (Chelate) Interaction in a 1D Coordination Polymer Revealing Aromaticity” *Chemistry Select*, 2018, 3, 4289-4291.
- (h) K. Das, G. W. Woyessa, A. Datta, S. Goswami, E. Garribba, A. Frontera, C. Sinha*, “A Ni(II)

- derivative incorporating tetradentate Schiff base precursor: Structure, spectral, electrochemical and DFT interpretation” , *J. Mol. Str.*, 2018, 1173, 462-468.
- (i) B. Chowdhury, K. Naskar, D. Mallick, K. K. Sarkar, C. Sen, C. Sinha, “Photochromism of {bis(diphenylphosphino)methane}(1-alkyl-2-(aryloxy)imidazole)silver(I) hexafluorophosphate complexes”, *Inorg. Chim. Acta*, 2018, 483, 87-92.
- (j) A. Roy, A. Ray, P. Sadhukhan, K. Naskar, G. Lal, R. Bhar, C. Sinha, S. Das, “Polyaniline-multiwalled carbon nanotube (PANI-MWCNT): Room temperature resistive carbon monoxide (CO) sensor” *Synthetic Metal*, 2018, 245, 182-189.
- (k) B. Dutta, A. Dey, S. Maity, C. Sinha, P. P. Ray and M. Hedayetullah Mir, “Supramolecular Assembly of a Zn(II)-Based 1D Coordination Polymer through Hydrogen Bonding and $\pi\cdots\pi$ Interactions: Crystal Structure and Device Applications”, *ACS Omega*, 2018, 3, 12060-12067.
- (l) B. Dutta, R. Jana, Chittaranjan Sinha, Partha Pratim Ray and Mohammad Hedayetullah Mir, “Synthesis of a Cd(II) based 1D coordination polymer by in situ ligand generation and fabrication of a photosensitive electronic device,”, *Inorg. Chem. Front.*, 2018, 5, 1998–2005.
- (m) S. Dey, R. Purkait, C. Patra, M. Saha, S. Mondal, K. Das Saha and C. Sinha, “Highly selective and sensitive recognition of Zn(II) by a novel coumarinyl scaffold following spectrofluorometric technique and its application in living cells” *New J. Chem.*, 2018, 42, 16297—16306.
- (n) B. Dutta, J. Datta, S. Maity, C. Sinha, Di Sun, P. P. Ray and M. Hedayetullah Mir “Electrical property and Schottky behavior of a flexible Schiff-base compound: X-ray structure and stabilization of 1D water chain”, , *Phys. Chem. Chem. Phys.*, 2018, 20, 24744-24749.
- (o) A. K. Bhanja, S. Mishra, K. Kar, K. Naskar, S. Maity, K. Das Saha and C. Sinha, “Use of rhodamine-allyl Schiff base in chemodosimetric processes for total palladium estimation and application in live cell imaging”, *New J. Chem.*, 2018, 42, 17351—17358.
- (p) R. Purkait, A. Das Mahapatra, D. Chattopadhyay, C. Sinha*, “An azine-based carbothioamide chemosensor for selective and sensitive turn-on-off sequential detection of Zn(II) and H_2PO_4^- , live cell imaging and INHIBIT logic gate” *Spectrochim Acta*, 2019, 207, 164-172.
- (q) C. Huedo, F. Zani, A. Mendiola, S. Pradhan, C. Sinha, E. López Torres, “Synthesis, antimicrobial activity and molecular docking of di and triorganotin (IV) complexes with thiosemicarbazidederivatives”, *Appl Organometal Chem.* 2019, 33, e4700.
- (r) S Dey, R Purkait, K Pal, K Jana, C Sinha* “Aggregation-Induced Emission-Active Hydrazide-Based Probe: Selective Sensing of Al^{3+} , HF_2^- , and Nitro Explosives”, *ACS Omega*, 2019, 4, 8451-8464.
- (s) S Dey, S Maity, A Dasmahapatra, D Chattopadhyay, C Sinha, “A Phenyl Thioether Based Probe: Zn^{2+} Ion Sensor, Structure Determination and Live Cell Imaging” *Chemistry Select*, 2019, 4, 4472-4477.
- (t) A. K. Adak, R. Purkait, S. K. Manna, B. C. Ghosh, S. Pathak, C. Sinha, “Fluorescence sensing and intracellular imaging of Pd^{2+} ions by a novel coumarinyl-rhodamine Schiff base”, *New J. Chem.*, 2019, 43, 3899-3906
- (u) B Chowdhury, D Mallick, KK Sarkar, K Naskar, C Sinha*, “{Bis (diphenylphosphino) methane}(1-alkyl-2-(aryloxy) imidazole) copper (I) perchlorate: Synthesis, structure and photochromism” *Inorg. Chim. Acta* 2019, 488, 125-130.
- (v) R Purkait, AD Mahapatra, D Chattopadhyay, C Sinha*, “An azine-based carbothioamide chemosensor for selective and sensitive turn-on-off sequential detection of Zn (II) and H_2PO_4^- , live cell imaging and INHIBIT logic gate” *Spectrochimica Acta Part A*, 2019, 207, 164-172.

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- (w) K Naskar, S Sil, N Sahu, B Dutta, AMZ Slawin, PP Ray, C Sinha “Enhancement of Electrical Conductivity due to Structural Distortion from Linear to Nonlinear Dicarboxylato Bridged Zn (II) 1D-Coordination Polymers”, *Crystal Growth & Design*, 2019, 19, 2632 – 2641.
- (x) B Dutta, D Das, J Datta, A Chandra, S Jana, C Sinha, P P Ray, M H Mir, “Synthesis of a Zn (II)-based 1D zigzag coordination polymer for the fabrication of optoelectronic device with remarkably high photosensitivity”, *Inorg. Chem. Frontiers*, 2019, 6, 1245 – 1252.
- (y) “Azoimine Chelated Ruthenium(II)- and Osmium(II)-Carbonyl Complex Catalyzed Alcohol Oxidation Reaction”, Chittaranjan Sinha*, *Current Organocatalysis*, 2019, 6, 139-157.

Prof. Kajal Krishna Rajak

- (1) A. Maity, K.K. Rajak, *Journal of Molecular Structure* 2019, 1181, 38-47.(2). S. B. Roy, A. Maity, T. Das, K.K. Rajak, *Journal of Luminescence* 2019, 206, 649–659. (3). A. Maity, S. Bera, K. K. Rajak, *Journal of Organometallic Chemistry* 2019. 887, 48-63

Dr. Mohabul Alam Mondal

- 1. Mondal, M. A.; Mondal, S.; Khan, A. A. “Acid catalyzed, One-Pot Synthesis of Quinazolin 4-ones via Intramolecular 1,4 Hydrogen Atom Transfer Reaction”, *Journal of Chemical Sciences Under Review*
- 2. Mondal, M. A.; Khan, A. A.; Mitra, K. “Iron(III)-catalyzed selective direct olefination of dihydropyrimidinone with aromatic aldehyde. *Journal of Chemical Sciences* 2018, 130 (11), 151.
- 3. Mohabul, A. M.; Abdul Ashik, K.; Kanchan, M. “Tetrazole 5-Acetic Acid Catalyzed Synthesis and Photophysical Study of 2-aryl-2,3-dihydroquinolin-4(1H)-ones”. *Letters in Organic Chemistry* 2019,16, 176

Prof. Nitin Chattopadhyay

- 1. P. Kundu, S. Das, N. Chattopadhyay*, 2019, “Managing Efficacy and Toxicity of Drugs: Targeted Delivery and Excretion”, *Int. J. Pharmaceutics*, 565, 378-390.
- 2. N. Chattopadhyay, 2019, “Are we going to face a quandary in finding efficient reviewer for scientific publications?” *Curr. Sci.*, 116, 878.
- 3. P. Kundu, T. Mondal, S. Das, N. Chattopadhyay*, 2019, “Delivery of a bioactive photosensitizer to natural DNA using β -cyclodextrin as carrier”, *Ind. J. Chem. B*, 58, 147-156.
- 4. A. Ray, S. Das, N. Chattopadhyay, 2019, “Aggregation of Nile Red in water: Its arrest through encapsulation in β -cyclodextrin”, *ACS Omega*, 4, 15-24.
- 5. P. Kundu, N. Chattopadhyay*, 2019, “Exogenous delivery of a pyrazole based bioactive probe to natural DNA through non-ionic TX-165 micellar carrier”, *J. Drug Delivery Sci. Technol.*, 49, 413-419.
- 6. A. Ray, S. Sengupta, N. Chattopadhyay*, 2019, “Concurrent ground and excited state proton transfer of (E)-2-((naphthalene-2-ylidene)-methyl)phenol: Modulation in micellar media”, *J. Photochem. Photobiol. A*, 371, 433-443.
- 7. S. Das, N. Chattopadhyay*, 2018, “Heteroatom controlled probe-water cluster formation of a series of ESIPt probes: An exploration with fluorescence anisotropy”, *Chem. Phys. Letts.*, 708, 37-41.
- 8. P. Kundu, N. Chattopadhyay*, 2018, “Photophysics of Anthril in Fluids and Glassy Matrixes”, *J. Phys. Chem. A*, 122, 5545-5554.

9. P. Kundu, N. Chattopadhyay*, 2018, "Unraveling the binding interaction of a bioactive pyrazole-based probe with serum proteins: Relative concentration dependent 1:1 and 2:1 probe-protein stoichiometries", *Biophys. Chem.*, 240, 70-81.
10. S. Biswas, D. Jana, G. Kumar, S. Maji, P. Kundu, U. Ghorai, R. Giri, B. Das, N. Chattopadhyay, B. K. Ghorai, S. Acharya, 2018, "Supramolecular Aggregates of Tetraphenylethene Cored AIEgen towards Strategic Mechanoluminescent and Electroluminescent Devices", *ACS Applied Mater. Interfaces*, 10, 17409-17418.
11. S. Ghosh, N. Roy, T. Sanjoy Singh, N. Chattopadhyay*, 2018, "Photophysics of a coumarin based Schiff base in solvents of varying polarities", *Spectrochim. Acta A*, 188, 252-257.

Dr. Partha Mahata

1. "Effect of charge transfer and structural rigidity on divergent luminescence response of a metal organic framework towards different metal ions: luminescence lifetime decay experiments and DFT calculations", Prakash Majee, Debal Kanti Singha, Sudip Kumar Mondal and **Partha Mahata**, *Photochemical & Photobiological Sciences*, (2019), 18, 1110, DOI: 10.1039/C9PP00024K (Impact factor: 2.408).
2. "Detection of pesticide using the large stokes shift of luminescence of a mixed lanthanide co-doped metal-organic framework", Debal Kanti Singha, Prakash Majee, Sudip Kumar Mondal and **Partha Mahata**, *Polyhedron*, (2019), 158, 277, DOI: <https://doi.org/10.1016/j.poly.2018.10.066> (Impact factor: 2.067)
3. "Detection of Pesticides in Aqueous Medium and in Fruit Extracts using a Three-Dimensional Metal–Organic Framework: Experimental and Computational Study", Debal Kanti Singha, Prakash Majee, Saurodeep Mandal, Sudip Kumar Mondal and **Partha Mahata**, *Inorganic Chemistry*, (2018), 57, 12155, DOI: 10.1021/acs.inorgchem.8b01767 (Impact factor: 4.85)
4. "Trace-level and selective detection of uric acid by a luminescent Zn (II) based 1D coordination polymer in aqueous medium", Abir Maji, Prakash Majee, Debal Kanti Singha, Ananta Kumar Ghosh, Sudip Kumar Mondal and **Partha Mahata**, *Journal of Photochemistry and Photobiology A: Chemistry*, (2018), 365, 125, DOI: doi.org/10.1016/j.jphotochem.2018.07.033. (Impact factor: 2.891)
5. "A luminescent cadmium based MOF as selective and sensitive iodide sensor in aqueous medium", Debal Kanti Singha, Prakash Majee, Sudip Kumar Mondal and **Partha Mahata**, *Journal of Photochemistry and Photobiology A: Chemistry*, (2018), 365, 389, DOI: doi.org/10.1016/j.jphotochem.2018.01.024. (Impact factor: 2.891)
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- 6) "Polymer of Intrinsic Microporosity (PIM 7) Coating Affects Triphasic Palladium Electrocatalysis", Ankita Mahajan, Swapan K Bhattacharya, Sébastien Roachat, Andrew D Burrows, Philip J Fletcher, Yuanyang Rong, Alan B Dalton, Neil B McKeown, Frank Marken, *Chem Electro Chem*, 2018, 5, DOI: 10.1002/celc.201801359
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- 8) "Synthesis and characterization of biopolymer based hybrid hydrogel nanocomposite and study of their electrochemical efficacy, Arindam Giri, Rahul Bhowmick, Chandraday Prophan, Dipanwita Majumder, Swapan Kumar Bhattacharya, Mahammad Ali, *International Journal of Biological Macromolecules*, 2019,123, 228-238.
- 9) Synthesis of a novel pyrene derived perimidine and exploration of its aggregation induced emission, aqueous copper ion sensing, effective antioxidant and BSA interaction properties" *Journal: Journal of Photochemistry and Photobiology A: Chemistry*
- 10) "Size Control Synthesis of Pure Ni nanoparticles and Anodic-Oxidation of Butan-1-ol in Alkali. Senjuti Banik, Ankita Mahajan, Swapan kumar Bhattacharya, Materials" *Chemistry and Physics* (2019), doi: 10.1016/j.matchemphys.2019.121747

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Prof. Umasish Jana

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Dr. Tanurima Bhaumik

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Prof. Tapan Kumar Mondal

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3. S. Gharami, K. Aich, D. Sarkar, P. Ghosh, N. Murmu, T. K. Mondal, "An ESIPT based chromogenic and fluorescent ratiometric probe for Zn²⁺ with imaging in live cells and tissues", *New J. Chem.*, 2019, 43, 1857-1863.
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Prof. Umesh Chandra Halder

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Dr. Partha Pratim Parui

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2. Glutathione-selective "off-on" fluorescence response by a probe-displaced modified ligand for its detection in biological domains P. P. Parui,* A. Ray,* S. Das, Y. Sarkar, T. Paul, S. Roy, R. Majumder and J. Bandyopadhyay *New J. Chem.*, 2019, 43, 3750.
3. Determination of proton concentration at cardiolipin-containing membrane interfaces and its relation with the peroxidase activity of cytochrome c Partha Pratim Parui,* Y. Sarakar, R. Majumder, S. Das, H. Yang, K. Yasuhara and S. Hirota* *Chem. Sci.*, 2019, 10, 9140.

Prof. Chandan Kumar Mondal

Rectify the effect of measurement in survival probability of the ground vibrational state in

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Prof. Jnan Prakash Naskar

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2. P. Saha, **J. P. Naskar**, S. Majumder, B. Saha, R. Ganguly, A. Bhattacharya and S. Chowdhury, “Experimental and computational studies on a new mixed ligands *oxido*-rhenium(V) compound”, J Chin Chem Soc. 65 (2018) 1035-1043
3. S. Ghosh, D. Singharoy, A. Dhara, **J. P. Naskar** and S. C. Bhattacharya “Nonionic Surfactants as Potential Carriers of a Synthesized Pyrimidine Derivative: Spectroscopic and Quantum Chemical Investigations”, Eur. J. Inorg. Chem. (2018) 2695-2701
4. S. Ghosh, D. Singharoy, A. Dhara, **J. P. Naskar** and S. C. Bhattacharya “Employing a synthesized pyrazole derivative for selectively visible detection of fluoride ion and its explanation by theoretical calculations” J. Indian Chem. Soc. 95 (2018) 933-938
5. J. Mondal, A. K. Manna, K. Rout, **Jnan P. Naskar** and G. K. Patra “A simple Schiff base as selective and sensitive fluorescent-colorimetric hydrazine chemosensor”, International Journal of Environmental Analytical Chemistry 98 (2018) 1160-1174
6. B. Saha, P. Saha, A. Mandal, **J. P. Naskar**, D. Maiti and S. Chowdhury “Sequential detection of Cu²⁺ and cysteine using an imidazole-based chemosensor in aqueous solution”, J Chin Chem Soc. 66 (2019) 506-514
7. S. Ghosh, D. Singharoy, **J. P. Naskar** and S. C. Bhattacharya “Deciphering of Ligand-to-Metal Charge-Transfer Process: Synthesis, Spectroscopic and Theoretical Study”, ChemistrySelect 4 (2019) 458-464
8. S. Ghosh, D. Singharoy, **J. P. Naskar** and S. C. Bhattacharya “Perceptive of block copolymers as potential delivering system of synthesized pyridine and pyrimidine derivatives: Spectroscopic and computational approach”, Journal of Molecular Liquids 291 (2019) 111103

Prof. Subrata Mukhopadhyay

1. “Structures, Photoresponse Properties, and Biological Activity of Dicyano-Substituted 4 Aryl-2-pyridone Derivatives” Tripti Mandal, Sudipta Pathak, Arka Dey, Md. Maidul Islam, Saikat Kumar Seth, Abdulla Al Masum, Joaquín Ortega-Castro, Partha Pratim Ray, Antonio Frontera, and **Subrata Mukhopadhyay** *ACS Omega* 2019, 4, 7200 – 7212.
2. “An organic compound with 4-(4-pyridinyl)-2-pyridone backbone and its salts: structures, photoresponse properties and DNA binding abilities” Tripti Mandal, Arka Dey, Sudipta Pathak, Md. Maidul Islam, Saugata Konar, Joaquín Ortega-Castro, Saikat Kumar Seth, Partha Pratim Ray, Antonio Frontera and **Subrata Mukhopadhyay** *RSC Advances*, 2019, 9, 9663 – 9677.
3. “Colorimetric and “off-on” fluorescent Pd²⁺ chemosensor based on rhodamine-ampyrone conjugate: synthesis, experimental and theoretical studies along with in vitro applications” Sanchita Mondal, Saikat Kumar Manna, Sudipta Pathak, Abdulla Al Masum and **Subrata Mukhopadhyaya** *New J. Chem.*, 2019, 43, 3513 – 3519.
4. “Elucidating the chemical and biochemical applications of *Citrus sinensis* mediated silver nanocrystal” Nurunnesa Siddiqui, Abdulla Al Masum, Md. Raihan Uddin, Sukhendu Mandal, Mohana Sengupta, Md. Maidul Islam, **Subrata Mukhopadhyay** *J. Biomol. Struct. Dyn.*, 2019, accepted for publication.

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5. "Amelioration of Nicotine Induced Toxicity by Nanocurcumin in Protein Malnourished Condition" Krishna Chattopadhyay, Somashree Biswas, **Subrata Mukhopadhyay** and Brajadulal Chattopadhyay *Sci. J. Biol.* 2018, 2, 101 – 108.
6. "Enhanced Photosensitive Schottky Diode Behavior of Pyrazine over 2 Aminopyrimidine Ligand in Copper(II)-Phthalate MOFs: Experimental and Theoretical Rationalization" Anowar Hossain, Arka Dey, Saikat Kumar Seth, Partha Pratim Ray, Pablo Ballester, Robin G. Pritchard, Joaquín Ortega-Castro, Antonio Frontera, and **Subrata Mukhopadhyay** *ACS Omega*, 2018, 3, 9160 – 9171.
7. "Terpyridine derivatives as "turn-on" fluorescence chemosensors for the selective and sensitive detection of Zn²⁺ ions in solution and in live cells" Tripti Mandal, Anowar Hossain, Anamika Dhara, Abdulla Al Masum, Saugata Konar, Saikat Kumar Manna, Saikat Kumar Seth, Sudipta Pathak and **Subrata Mukhopadhyay** *Photochem. Photobiol. Sci.* 2018, 17, 1068 – 1074.
8. "Two Zinc(II)-Based Metal Complexes of New Pyrimidine Derived 2 Ligand: Anion-Dependent Structural Variations and Charge Transport Property Analysis" Saugata Konar, Arka Dey, Somnath Ray Choudhury, Kinsuk Das, Sudipta Chatterjee, Partha Pratim Ray, Joaquín Ortega-Castro, Antonio Frontera, and **Subrata Mukhopadhyay** *J. Phys. Chem. C*, 2018, 122, 8724 – 8734.
9. "Potential amelioration of nicotine-induced toxicity by nanocurcumin" Krishna Chattopadhyay, Anwesha Samanta, **Subrata Mukhopadhyay** and Brajadulal Chattopadhyay *Drug Dev. Res.*, 2018, 79, 119 – 128.
10. "Coordination Polymers Based on Phthalic acid and Aminopyrazine Ligands: On the importance of N–H··· π Interactions" **Anowar Hossain, Saikat K. Seth, Antonio Bauzá**, Subrata Mukhopadhyay and Antonio Frontera, *Polymers*, 2018, 10, 182 – 195.

Prof. Kaushikisankar Pramanik

Name of the teacher	Name of the Article	Name of the Journal
Kausikisankar Pramanik	"Palladium(ii) and platinum(ii) complexes of glyoxalbis(N-aryl)osazone: molecular and electronic structures, anti-microbial activities and DNA-binding study"	<i>New Journal of Chemistry, New J. Chem.</i> 2019, 43, 9891
Kausikisankar Pramanik	"Redox-active diaminoazobenzene complexes of rhodium(iii): synthesis, structure and spectroscopic characterization"	<i>New J. Chem.</i> , 2018, 42, 5548

5. Collaborative programs:

Dr. Amrita Saha

Dr. Antonio Frontera

Departament de Química, Universitat de les Illes Balears, Crta. De Valldemossa km 7.5, 07122 Palma (Balears), Spain. E-mail: toni.frontera@uib.es

Dr. Bibhuti Bhushan Show

- (a) Department of Chemistry, IEST, Shibpur, Howrah, West Bengal, India
- (b) Department of Civil and Environmental Engineering, Birla Institute of Technology, Mesra, Ranchi, Jharkhand 835215, India,
- (c) Department of Chemistry, Sripat Singh College, Jiaganj, Murshidabad, West Bengal 742123, India

Prof. Chittaranjan Sinha

- (a) Prof. Elena Lopez Torres,

Departamento de Química Inorgánica, c) Francisco Tomás y Valiente, 7, Universidad Autónoma de Madrid, Cantoblanco, 28049-Madrid, Spain.

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(b) Prof. Dr. Takashiro Akitsu

Department of Chemistry, Faculty of Science, Tokyo University of Science 1-3 Kagurazaka, Shinjuku-ku, Tokyo 162-8601, Japan

(c) Dr. M. H. Mir

Department of Chemistry, Aliah University, Rajarhat, Kolkata, India

Dr. Partha Mahata

1. Dr. Sudip Kumar Mondal of Visva-Bharati University, Santiniketan for the detailed understanding of photophysical behavior of the compounds
2. Prof. Ayan Datta of IACS, Kolkata for theoretical understanding of the luminescence behavior of the compounds.

Dr. Partha Roy

(i) Corrado Rizzoli of Universita' degli Studi di Parma, Italy

(ii) WMC Sameera of Hokkaido University, Japan

Prof. Samaresh Bhattacharya

Have been doing collaborative work with Prof. Parimal Karmakar (Department of Life Science and Biotechnology, JU) and Prof. Michael G. Richmond of University of North Texas, USA.

Prof. Sujoy Baitalik

Some collaborative research is going on the optical properties of nanomaterials (particularly on Perovskites) with Prof. Narayan Pradhan, School of Materials Sciences, Indian Association for the Cultivation of Science, Jadavpur, Kolkata 700032.

Prof. Swapan Kumar Bhattacharya

Papers 1,2,5,6,8,9. and 12 are from collaborative programme.

6. Major achievements:

Prof. Chittaranjan Sinha

- (a) Publications of about 25 articles in high impact journal.
- (b) Three Research Scholars awarded Ph.D.(Sc) degree during this period.
- (c) Elected Fellow of West Bengal Academy of Science and Technology, 2018.

Prof. Nitin Chattopadhyay

Prof. S. R. Mohanty Memorial Lecture Award of Orissa Chemical Society.

Dr. Samit Guha

DST-SERB Early Career Award, Government of India, 2018

Prof. Subrata Nath Koner

Elected, Fellow of West Bengal Academy of Science and Technology, 2018

Prof. Swapan Kumar Bhattacharya

RULA International Research Ratna Awards: "Distinguished Scientist in Physical Chemistry".

GEOGRAPHY

Phone : 2414 6065
Int. : 2457-3003
H.O.D. : Prof. Lakshmi Sivaramakrishnan
E-mail : hod.geography@jadavpuruniversity.in,

The Department of Geography under the Faculty of Science is offering Undergraduate degree in Geography. The first session of students were admitted in 2015-16 sessions. This has been a long-standing vision of the Faculty of Science which has ultimately become fruitful. The Department has a vision of becoming one of the best in West Bengal, for which several plans and programmes are being chalked out like preparations of the most updated syllabus in Geography under the Science Faculty, and students will be offered science subsidiary subjects allied to Geography. The Department also plans to develop a state of the art Remote Sensing and GIS laboratory for the students so that they can have access to the most updated knowledge of this branch of Geography which is emerging as a potential area of recruitment. The Department has started the Postgraduate degree course in Geography from the academic year 2018-19. Future plans also include the offering of a diploma course in Remote Sensing and GIS. The Department is hosted on the third and fourth floor of the Megnad Saha Bhavan (Integrated Science Building).

Profile of the Department

1. A. Courses Offered:

Name of the course	Duration of the Course	No. of students
1. B.Sc. in Geography	03 Years	20 (In each year)
2. M.Sc. in Geography	02 Years	20
3. Ph.D. in Geography		15

B. Number of Faculty Members:

Professor -01
Assistant Professor -01

2. A. Area Research activities

Dr. Lakshmi Sivaramakrishnan:

Urban and Regional Planning, Rural development, Environmental Assessments, Gender Issues, Urbanization and related aspects

Dr. Debajit Datta:

Natural Resource Management, Political Ecology, Urbanization and Rural Change, Sustainable Tourism

B. Major Research Project

Lakshmi Sivaramakrishnan

1. Research project titled "Development of Integrated Database for Sustainable Land Resource Management at Village Level in Selected Blocks of Darjeeling District, West Bengal" amounting INR 24,93,400/- funded by JU RUSA 2.0 since February, 2019 as Joint Coordinator

Debajit Datta

1. Research project titled "Development of Integrated Database for Sustainable Land Resource Management at Village Level in Selected Blocks of Darjeeling District, West Bengal" amounting INR 24,93,400/- funded by JU RUSA 2.0 since February, 2019 as Joint Coordinator

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2. Research project titled “Assessment of Above Ground Biomass Dynamics of Vegetation Communities for Sustainable Environmental Management along Digha-Sankarpur Coastal Stretch, India using SAR Data” amounting INR 566,800/- funded by JU RUSA 2.0 since February, 2019
3. Research project titled “Spatially Explicit Estimation of Wetland Carbon Stocks in the Contai-Baleshwar Coastal Stretch, India by Integrating Elemental Analysis and Geospatial Technologies” as Principal Investigator amounting Rs. 30,33,800/- funded by Science and Engineering Research Board, Department of Science and Technology, GoI as Early Career Research Award since December, 2018

C. Minor Research Project

3. A. Invited Lectures Delivered/Session Chaired:

Lakshmi Sivaramakrishnan

1. “Socio-Cultural Dimensions of Migration”, in the ‘Inter-Disciplinary Workshop on Migration for Better Life: Challenge and Response in a Globalized World’, University of Kalyani on 7th July 2018
2. Delivered a Lecture as Resource person in UGC-HRDC-JU Refresher course on “Modern Methods in Earth System Science” on 20th September 2018, Remote Sensing and GIS in Urban Studies, Department of Geological Sciences, JU
3. Delivered a special lecture as resource person at Bagbazar Women’s College on “Urban Research and Recent Trends” on 29th September 2018.
4. Delivered the Plenary Lecture at the “International Conference on Society and Sustainability: An Interdisciplinary Approach on Migration of Youth and Social Impact on Elderly Population” on 12th January 2019 at Vivekananda College, Behala

Debajit Datta

1. Delivered a lecture in the workshop on ‘Application of Quantitative Techniques in Spatial Planning’ organized by Centre of Human Settlement Planning, JU on 21 December, 2018

B. Seminar/ Workshop/Conference/Symposium Attended:

Debajit Datta

Name of the Paper Presented	Name of Seminar/Conference	Place	Duration
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Landscape modification, livelihood losses, and socio-political conflicts: a geospatial analysis of coastal aquaculture practices in West Bengal, India.	Tenth IALE World Congress on ‘Nature and society facing the Anthropocene challenges and perspectives,	University of Milano-Bicocca, Italy.	July 1-5, 2019
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“Co-existence of co-operation and conflict: reconstructing identities in the Koch-Rajbanshi sovereignty politics of India” (As a co-author with C. Sengupta),	Third Ireland India Institute Conference on South Asia, 2019 organized by the Ireland India Institute,	Dublin City University, Ireland,	April 24-26, 2019
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“Effects of coastal settlement expansions on interdunal wetlands along Medinipur coastal plain, West Bengal”,	India (As a co-author with A.K. Roy), International Conference on ‘Global Water Crisis: Agriculture and Food Security in the Era of Climate Change’,	Aligarh Muslim University, India,	December 1-3, 2018
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“Analyzing ecological sustainability of urban and peri-urban agroecosystems of Kolkata Metropolitan Area”,	13 th DGS International Geography Conference on ‘Sustainable Rural Development-Geospatial Solutions’,	Bangalore University, India,	September 20-22, 2018
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“Ethnic sovereignty movements and electoral democracy: deconstructing the Koch-Rajbanshi identity politics of North-east India”,	14th Biennial Conference of Asian Studies in Israel,	Hebrew University of Jerusalem, Israel,	May 23-24, 2018
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C. Seminar/ Workshop/Conferences/Symposium Organized

Lakshmi Sivaramakrishnan and Debajit Datta

1. One day Lecture on **Colonial and Post Colonial Geography**, held on 17.12.18
Speaker: **Prof. Sumona Bandopadhyay**
Department of Geography, University of Calcutta
2. One day Lecture on **Rostov's Stages of Economic Growth** held on 18.7.19
Speaker: **Prof. D.K.Nayek**
Professor of Geography
North Eastern Hill University
Shillong -22

4. A. Books/ Monographs etc. Published:

Debajit Datta

1. Chakraborty S, Saha S, Majumdar D and Datta D (2019), "Long-term dynamics of mangrove forest in Andaman, India". In: Ghosh JK and da Silva I (Eds.) *Applications of Geomatics in Civil Engineering*. Springer, Singapore. ISBN: 978-981-13-7066-3
2. Majumdar D, Chakraborty S, Saha S and Datta D (2019), "Importance and utilities in GIS". In: Mukherjee S (Ed.), *A Geospatial Analysis of Anthropogenic & Seismological Impacts on the Coastal Ecosystems of Andaman Islands during 2000-2017*. Avenel Press, Burdwan. ISBN: 978-81-939776-6-8
3. Sengupta C and Datta D (2018), "Reproduction of gendered spaces and human rights through ethno-politics: a discourse on Koch-Rajbanshi sovereignty movement of West Bengal". In: Das BK (Ed.), *Human Rights Issues in India: Challenges Ahead*. Swarasati Book Stall, Kolkata. ISBN: 978-81-937756-0-8
4. Mazumder S and Datta D (2018), "Organic farming practices in Kolkata: problems and prospects". In: Basu S (Ed.), *Perspectives on Inclusive Urbanism: Exploring Marginality in Kolkata*. Alphanumera, Kolkata. ISBN: 978-81-925563-7-6

B. Articles Published in Journals

Lakshmi Sivaramakrishnan

1. L. Sivaramakrishnan and A. Bhattacharya (2018) : "Rural-Urban Disparity in Access to Household Level Basic Amenities: A Case of West Bengal", Amit Bhattacharyya, *Population Geography*, Vol.40, No.1 and 2, June-Dec 2018 pp 31-42
2. Ambika Roy Bardhan and L. Sivaramakrishnan (2018) : "Well Being of Aged in Kolkata, *Indian Journal Of Regional Science*", Vol., No. 50, June 2018 , pp 82-89, ISSN 00469017, e ISSN 2456-6519
3. Sushobhan Majumdar and L. Sivaramakrishnan (2018) : "Possibilities of Urbanization in Rural Areas of Kolkata Metropolitan Area", *Transaction of the Indian Institute of Geographers*, Vol.40 No.2 2018, pp 225 – 239, ISSN 09709851,
4. M.Khatun and L. Sivaramakrishnan (2019) : "Socio Economic changes of Existing Villages of New Town Kolkata", *Asian Journal of Multidimensional Research*, Vol.8 No. January 2019, ISSN: 22784853. PP 136-145

Debajit Datta

1. Sengupta C and Datta D (2019), "Quest for identity: linking ethnicity, electoral politics and violence in Koch-Rajbanshi sovereignty movement of India", *Human Geographies-Journal of Studies and Research in Human Geography* 13(1):1-18

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- Chatterjee D, Datta D and Naskar M (2019), "The paradox of development: forest rights, mining and displacement in Odisha, India", *Research Journal of Humanities and Social Sciences* 10(1): 163-169
- Mazumder S and Datta D (2019), "Spatial pattern of urban and peri-urban aquaculture in Kolkata Metropolitan Area, India", *International Journal of Innovative Studies in Sociology and Humanities* 4(1): 34-43
- Mazumder S, Datta D, Naskar M and Ghosh R (2019), "Urban and peri-urban agriculture in Kolkata Metropolitan Area: an assessment of status and sustainability", *Contemporary Social Sciences* 28(1): 207-222
- Sengupta C, Naskar M and Datta D (2019), "Ethno-politics in contested urban spaces: analyzing the Gorkhaland and Koch-Rajbanshi sovereignty movement of northern West Bengal in India", *International Journal of Applied Social Science* 6(1): 28-39
- Roy AK and Datta D (2018), "Analyzing the effects of afforestation on estuarine environment of river Subarnarekha, India using geospatial technologies and participatory appraisals", *Environmental Monitoring and Assessment* 190(11):645-660 (Springer, Impact Factor: 1.804)
- Basu M and Datta D (2018), "Urbanization and social change: analyzing demographic and socio-economic transformations of Asansol Durgapur Planning Area of West Bengal, India", *Contemporary Social Sciences* 27(3):123-138
- Datta D (2018), "Assessment of mangrove management alternatives in village-fringe forests of Indian Sunderbans: resilient initiatives or short-term nature exploitations?", *Wetland Ecology and Management* 26(3): 399-413 (Springer, Impact Factor: 1.508)

GEOLOGICAL SCIENCES

Phone : +91-33-2414-6214

Int. : 2457-2268/2719

H.O.D. : Prof. Sanjoy Sanyal

E-mail : hod.geology@jadavpuruniversity.in

1. A. Courses Offered

Name of the Course	Duration of Course	No Of students Enrolled
1. B.Sc. in Geological Sciences	3 Years	145
2. M.Sc in Applied Geology	2 Years	68
3. Ph.D		44

1. B. Number of Faculty Members Total - 17

Professor – 10

Assistant Professor – 7

1. C. Faculty members and their broad area of research activities

Dr. Anupam Ghosh Micropalontology

Dr. Babar Ali Shah Sedimentology, Hydrogeology & Environmental Geochemistry

Prof. Dipak C Pal Ore Geology & Geochemistry

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Prof. Nibir Mandal	Structural Geology, Solid Earth Geophysics and Tectonics, Geodynamics, Computational Mineral physics
Prof. Pulak Sengupta	Earth Sciences
Dr. Sadhana M Chatterjee	Metamorphic Petrology & Structural Geology
Prof. Sanjoy Sanyal	Hard Rock Petrology and Crustal Evolution
Prof. Sisir Kanti Mondal	Igneous Petrology, Geochemistry, Ore Geology of mafic-ultramafic rocks
Dr. Soumik Mukhopadhyay	Sedimentology and Sequence stratigraphy
Prof. Subir Mukherjee	Ore geology and Micropalontology
Prof. Subir Sarkar	Sedimentology
Prof. Subrata Karmakar	Earth Sciences
Dr. Sunipa Mondal	Sedimentology, Geochemistry, Geomorphology
Prof. Supriya Mondal	Solid Earth Geophysics and Tectonics
Dr. Susanta Chaudhuri	Engineering and Environmental Geology; Geohydrology and Fluvial Hydraulics
Prof. Susanta Kumar Samanta	Structural Geology, Tectonics, Engineering Geology
Dr. Tridib Kumar Mondal	Structural Geology and Tectonics

2. A. Major Ongoing Research Programmes in the Department are:

Sr. No.	Research Programme	Sanctioned Grant (<i>in Lakhs of Rupees</i>)
1.	DST. FIST	240
2.	CAS (Phase VI)	131
3.	DST (Purse - II)	29
4.	UPE II (Energy, Environment and Climate Change)	03

3. B. Major Research Project (Stared / Ongoing)

Title of the Project/Sponsoring Agency Project worth (in Rs.)/Faculty members and their role

Teleconnections of the Late Quaternary Paleoclimatic events between Sub-Polar North Atlantic and Southern Indian Ocean. DST- Russian Science Foundation : 65,00,000.00 Anupam Ghosh (Member)

Petromineralogical, Sedimentological and Geochemical studies of Quartz Pebble Conglomerate and associated rocks in parts of Birtola-Bagiyabahal area, Sundergarh District, Orissa, eastern India. DAE-BRNS : 32,19,000.00, Dipak C Pal (PI); Soumik Mukhopadhyay (CO-PI)

Physical behavior of Natural Silicates and oxides, and its implication in environmental studies: a computational approach. DAE-BRNS : 40,19,700.00, Nibir Mandal (PI)

Study of emplacement and evolution of granitic rocks in transpressional ductile shear zone from parts of the western margin of Delhi Fold Belt, Rajasthan. DST-SERB : 26,00,000.00 Sadhana M. Chatterjee (PI)

Physicochemical and deformational control of Rare Earth and Rare Metal (REE-RM) mineralization in parts of South and North Purulia Shear Zone (SPSZ and NPSZ), East Indian shield. DAE-BRNS : 54,82,000.00, Sanjoy Sanyal (PI); Pulak Sengupta (CO-PI)

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Basin evolutionary history and microbial mat proliferation versus Uranium Mineralization in Badami Group, Karnataka. DAE-BRNS : 38,88,900.00, Subir Sarkar (PI); Soumik Mukhopadhyay (CO-PI)

Systematic study of molluscs and other benthic faunal diversity and their palaeoecological, palaeobiogeographical distribution during Jurassic-Cretaceous transition in Kutch, western India. DST-SERB : 18,58,260.00, Sunipa Mandal

Fabric analysis and tectonic stress determination in the rocks of Chitradurga region (Dharwar craton, south India) – implications for upper crustal fluid flow. DST -SERB: 10,68,000.00, Tridib Kumar Mondal

3. A. Invited Lectures Delivered/Sessions Chaired/Key note speeches

Anupam Ghosh

1. Delivered an invited talk in the “Short Term Course on Recent Refinery Practices” held in the Department of Chemical Engineering, Jadavpur University during 4th-6th June, 2018
2. Delivered an invited talk in “Industry-Academia Interaction Session”, GEO India 2018, 4th ‘South Asian Geosciences Conference’ held in Greater Noida, Delhi NCR during 6th-8th September, 2018
3. Delivered an invited talk on Changing Trends and future prospects in Geological Sciences, GEOFEST-19 held in the Department of Geology, Presidency University on 02.03.2019
4. Delivered an invited talk in the seminar “Role of Women in Environment Sustainability in the Islands of Sunderban of West Bengal” organized by Dharti Foundation and National Commission for Women held in Department of Geology, Hooghly Mohsin College on 09.03.2019-10-03-2019

Pulak Sengupta

1. Delivered invited talk and interacted with young talented students in the Science Camp organized by Jagadish Bose National Science Talent Search, Kolkata held on 18.03.2019
2. Delivered invited talk on “Origin of Ruby (corundum) in mantle and mantle-derived rock’s in the national conference on “Advances in Mantle Petrology” held in Benaras University during 4.10.2018 to 6.10.2018
3. Delivered invited talk in the 72nd Orientation Programme for teachers and librarians organized by UGC-HRDC, JU during the period from 06.02.2019 to 06.03.2019

Sanjoy Sanyal

1. Delivered a talk on ‘Physicochemical and structural control of REE-RM mineralization in parts of NPSZ and SPSZ, East Indian Shield’, in AMD, Hyderabad on 12.06.2018
2. Delivered a talk on ‘Orogenic Metamorphism: its implication and significance’ in the refresher course on “Modern methods in Earth System Science” held at the Department of Geological Sciences, Jadavpur University during 18.09.18 to 11.10.2018

Subir Sarkar

1. Delivered key note lecture in the National Seminar “Sedimentary researches: last five decades of advancement and prospects in future” (28th-30th January, 2019), 35th convention of Indian association of sedimentologists-2019, held in Department of Applied Geology, Dr. H.S Gour Viswavidyalaya, Sagar, M.P.
2. Delivered key note lecture on a National seminar on “Advances in Stratigraphy and Geochronology in Indian Sedimentary Basins and Road Ahead” held in Delhi University, Department of Geology, Centre of Advance Study, University of Delhi, 27th February, 2019

Subrata Karmakar

1. Delivered a talk on 01.10.2018 entitled 'From thin section to crustal evolution: Modern perspective and application of phase diagram' in the UGC-HRDC-JU Refresher Course on "Modern methods in Earth System Science" organized by Department of Geological Sciences, Jadavpur University.

3. B. Seminar/Workshop/Conference/Symposium/Training Course Attended

1. Sadhana M Chatterjee presented poster in the National Conference on "Rock Deformation and Structure" held at Delhi University during 4th to 06th October 2018
2. Dr. Susanta Chaudhuri attended HYDRO-18 INTERNATIONAL, 23rd International Conference on Hydraulics, Water Resources and River Engineering held at NIT, Patna; December 2018
3. Dr. Susanta Chaudhuri attended 3rd Regional Science & Technology Congress, Department of Higher Education, Science & Technology and Biotechnology, Government of West Bengal, December 2018

3. C. Seminar/Workshop/Conference/Symposium/Training Course Organized

Dr. Anupam Ghosh has organized American Association of Petroleum Geologists -Jadavpur University Student Distinguished Lecture by Mr. Leonard Ray on 'Climate Change, the Transitional Role of Fossil Fuels and Geopolitics' on 01.02.2019

3. D. Orientation Courses/ Refresher Courses Attended

Sunipa Mandal attended UGC-HRDC refresher course on "Modern methods in Earth system science" organized by the Department of Geological Sciences and HRDC, Jadavpur University during the period from 18.09.18 to 11.10.18

3. E. Orientation Courses/Refresher Courses Organized

Dipak C Pal and Sisir K Mondal jointly coordinated a 21-day UGC-sponsored refresher course on "Modern methods in Earth System Science" in the department of Geological Sciences, Jadavpur University during the period from 18.09.18 to 11.10.18 organized by UGC-HRDC

4. A. Books/Book Chapters/Monographs/Special volumes etc. Published

1. Barman, S.D., Islam, A., Das, B.C., Mandal, S., Pal, S.C., 2018. "Imprints of Neo-tectonism in the Evolutionary Record Along the Course of Khari River in Damodar Fan Delta of Lower Ganga Basin". *Quarterly Geomorphology in India* Springer Cham, ISBN: 978-3-319-90426-9, pp.105-126.
2. Mukhopadhyay, S., Choudhuri, A., Chakraborty, N., Sarkar, S., 2017. "Aseismic tectonism-induced soft-sediment deformation in a tranquil palaeogeography: Chikkshelikere Limestone Member, Proterozoic Kaladgi Basin, southern India". In: M.E.A. Mondal (Ed.), *Geological Evolution of Precambrian Indian Shield*; Society for Earth Scientists Series, Springer, 351-372.
3. Mukhopadhyay, S., Samanta, P., Bhattacharya, S., Sarkar, S., 2017. "Stratigraphic Evolution and Architecture of the Terrestrial succession at the base of the Neoproterozoic Badami Group, Karnataka, India. In: M.E.A. Mondal (Ed.), *Geological Evolution of Precambrian Indian Shield*; Society for Earth Scientists Series, Springer, 121-157.
4. Samanta, P., Mukhopadhyay, S., Mandal, S., Sarkar, S., 2017. "Controls on cyclic sedimentation within the Neoproterozoic Sirbu Shale, Vindhyan Basin, central India". In: M.E.A. Mondal (Ed.), *Geological Evolution of Precambrian Indian Shield*; Society for Earth Scientists Series, Springer, 271-295.
5. Sarkar, S., Banerjee, S., 2019: "A Synthesis of Depositional Sequence of the

Proterozoic Vindhyan Supergroup in Son Valley” (A Field Guide) (ISBN 978-981- 329-551-3) p.220. *Springer*

4. B. Articles Published in Refereed Journals

1. Acharyya, S. S., Mondal, T. K. 2019. “Stress enhanced tensile fractures in elliptical clast in conglomerate”, *Journal of Structural Geology*. 122, 81-88. Impact Factor: 3.128
2. Baidya AS, Pal DC, Upadhyay D. 2019. “Chemical weathering of garnet in Banded Iron Formation: implications for the mechanism and sequence of secondary mineral formation and mobility of elements”; *Geochimica et Cosmochimica Acta*. DOI: <https://doi.org/10.1016/j.gca.2019.08.03> (Impact Factor: 4.690)
3. Barai, N., Mandal, N. 2018. “Breakup versus coalescence of closely packed fluid drops in simple shear flows”. *International Journal of Multiphase Flow*, 111, 1-15. (Impact Factor: 2.509)
4. Chakraborty, N., Mandal, A., Choudhuri, A., Mandal, S., Sarkar, S., 2018. “Indigenous siliciclastic and extraneous polygenetic carbonate facies in the Albian-Turonian Karai Shale, Cauvery Basin, India”. *Carbonates and Evaporites*, doi: <https://doi.org/10.1007/s13146-018-0419-0>. (Impact Factor: 1.131).
5. Chakraborty, N., Sarkar, S., Mandal, A., Mandal, S., Bumby, A., 2018. “Microenvironmental constraint on $\delta^{13}\text{C}$ depletion: Garudamangalam Sandstone, Cauvery Basin, India”. *Marine and Petroleum Geology*, 91, 776-784. (Impact Factor: 3.281).
6. Chatterjee, S., Mondal, S., Gain, D., Baidya, T.K., Mazumdar, D. 2018. “Interpretation of magnetic fabrics in the Dalma volcanic rocks and associated meta-sediments of the Singhbhum mobile belt”. *Journal of Earth System Science*, V.127(6).
7. Chatterjee, S., Mondal, S., Paul, P., Das, P. 2018. “Paleocurrent and environmental implications from Anisotropy of Magnetic Susceptibility (AMS): A case study in Talchir and Barakar Formations, Raniganj Basin, West Bengal, India”. *Arabian Journal of Geosciences*, V.11(11): 288.
8. Chatterjee, S., Mondal, S., Roy, P., Gain, D., Bhattacharya, A. 2018. “Magneto-mineralogy characterization and manifestations magnetic fabrics from the gneissic rocks and associated intrusive bodies in and around Bankura and Purulia Districts, West Bengal, India”. *Current Science*, V. 114(9), pp. 1894-1902.
9. Chaudhuri S., Debnath, K., Roy, S., Manik, M. K. 2018. “Flume study on contraction scour in clay–sand mixed cohesive bed”. *ISH Journal of Hydraulic Engineering*, (Taylor & Francis), 2018, vol. 25(1), pp.79- 86. (Impact Factor: 1.04)
10. Choudhuri, A., Schieber, J., Sarkar, S., Bickford, M.E. and Basu, A. 2019. The “Lower Kaimur Porcellanite” (Vindhyan Supergroup) is of sedimentary origin and not tuff. *Journal of Geological Society of India* (in press)
11. Das, D., Mondal, T. K., Hossain, S. (accepted). “Quantification of quartz reefs and mafic dykes of the Bundelkhand, Craton, Central India: A study based on Spatial and Fractal analysis”. *Geological society of India*. (Impact Factor: 0.994)
12. Das, S., Sanyal, S., Karmakar, S., Sengupta, S., Sengupta, P., 2019. “Do the deformed alkaline rocks always serve as a marker of continental suture zone/ ? A case study from parts of the Chotanagpur Granite Gneissic complex”, *India. J. Geodyn*. 129, pp.59-79.
13. Das, V, K., Roy, S., Burman, K., Debnath, K., Chaudhuri, S., Mazumder, B., S. 2019. “Investigations on undercutting processes of cohesive river bank”, *Engineering Geology, Elsevier*, vol. 252, pp. 110-124. (Impact Factor: 3.10)

14. Dasgupta, R. and Mandal, N., 2018. "Surface topography of the overriding plates in bi-vergent subduction systems: A mechanical model". *Tectonophysics*, 746, pp.280-295. (Impact Factor: 2.764)
15. Dey, A., Karmakar, S., Mauricio, IM., Mukherjee, S., Sanyal, S., Sengupta, P., 2019. "Petrology and geochronology of a suite of pelitic granulites from parts of the Chotanagpur Granite Gneiss Complex, eastern India : Evidence for Stenian-Tonian reworking of a late Palaeoproterozoic crust". *Geo. J.*, pp.1-30. DOI:10.1002/gi.3552
16. Dey, A., Karmakar, S., Mukherjee, S., Sanyal, S., Dutta, U., Sengupta, P., 2019. "High Pressure metamorphism of mafic granulites from the Chotanagpur Granite Gneissic Complex, India: Evidence for collisional tectonics during assembly of Rodinia". *J. Geodyn.* 129, pp.24-43.
17. Dey, A., Roy Choudhury, S., Mukherjee, S., Sanyal, S., Sengupta, P., 2019. "Origin of vesuvianite-garnet veins in calc-silicate rocks from part of the Chotanagpur Granite Gneiss Complex, East Indian Shield: the quantitative P-T-XCO₂ topology in parts of the system CaO-MgO-Al₂O₃-SiO₂-H₂O-CO₂ (+Fe₂O₃, F)". *Am. Mineral.* 104, pp.744-760.
18. Marques, F.O., Mandal, N., Ghosh, S., Ranalli, G., Bose, S., 2018. "Channel flow, tectonic overpressure, and exhumation of high-pressure rocks in the Greater Himalayas". *Solid Earth*, 9, 1061-1078. IF: 2.380
19. Marques, F.O., Ranalli, G. and Mandal, N., 2018. "Tectonic overpressure at shallow depth in the lithosphere: The effects of boundary conditions". *Tectonophysics*, 746, 702-715. IF: 2.764
20. Mandal, N., Sarkar, S., Baruah, A. and Dutta, U., 2018. "Production, pathways and budgets of melts in mid-ocean ridges: An enthalpy based thermo-mechanical model". *Physics of the Earth and Planetary Interiors*, 277, pp.55-69. IF: 2.319
21. Mandal, S., Chaudhuri, A., Mandal, I., Sarkar, S., Chakraborty, P.P. and Banerjee, S. 2019 "Revisiting the boundary between the Lower and Upper Vindhyan, Son valley", *India J. Earth Syst. Sci.* (2019), 128:222, Indian Academy of Sciences <https://doi.org/10.1007/s12040-019-1250-24>
22. Mondal, S. K., Das, P.K., Mandal, N., Arya, A. 2019. "A novel approach to quantify the structural distortions of U/Th snub-disphenoids and their role in zircon to reidite type phase transition of uranothorite". *arXiv preprint*: 1907.05115, 2019 (Cornell University)
23. Mondal, T. K., Acharyya, S. S. 2018. "Fractured micro-granitoid enclaves: A stress marker". *Journal of Structural Geology*. 113, 33-41. (Impact Factor: 3.128)
24. Mukherjee, S., Dey, A., Sanyal, S., Mauricio, IM., Sengupta, P., 2019. "Bulk rock and zircon geochemistry of granitoids from Chotanagpur Granite Gneissic Complex (CGGC) : Implications for the late Palaeoproterozoic arc magmatism in the East Indian Shield". *Contrib. Miner. Petrol.* 174; 67. <https://doi.org/10.1007/s00410-019-1601-7>.
25. Mukherjee, S., Dey, A., Sanyal, S., Sengupta, P., 2019. "Proterozoic Crustal Evolution of the Chotanagpur Granite Gneissic Complex, Jharkhand-Bihar-West Bengal, India: Current Status and Future Prospect", in: Mukherjee, S. (Ed.), *Tectonics and Structural Geology/ : Indian Context*. Springer Nature Switzerland, pp. 7-54.
26. Mukhopadhyay, M., Biswas, U., Mandal, N., Misra, S. 2019. "Factors controlling shear roughness: an insight from field and laboratory experiments". *Journal of Geophysical Research: Solid Earth*, 124 (2), 1273-1293 (Impact Factor: 3.48)
27. Sarkar, S., Banerjee, S. and Chakraborty, P.P. 2019. "Microbial Mat Structures and role of microbes in Precambrian siliciclastic sedimentation". *Legacy Vol. 2020 IGCP* (in press)
28. Talukdar, M., Mukhopadhyay, D., Sanyal, S., Sengupta, P., 2019. "Early Palaeoproterozoic

structural reconstitution of a suite of rocks from the Mahadevi Layered Complex”, Tamil Nadu, India. *Geol.J.*,1-28.DOI:10.1002/gi.3618.

5. Abstracts in Seminar/Conference/Symposium

1. Acharyya, S.S., Mondal, T.K., 2018. “Paleostress analysis from fractured clasts – a study based on Talya conglomerate, south India”. *5th Rock Deformation and Structures conference (RDS-V), Abstract Vol.*, p.83, Duration-3 Days
2. Bhowmick, S., Saha, S., Mondal, T.K., 2018. “Determination of upper crustal fluid pressure condition in and around G.R.Halli, Chitradurga schist belt (Dharwar craton, India): preliminary results”. *5th Rock Deformation and Structures conference (RDS-V), Abstract Vol.*, p.86, Duration-3 Day
3. Buragohain, D. and Ghosh, A. 2018. “A comparative study of the recent benthic foraminiferal assemblages in the east and west coast of India”. *3rd Regional Science and Technology Congress 2018*, 18th -19th December, 2018, p. 112
4. Chatterjee, A. P., Mondal, T. K., 2018. “Fracture network characterization in syn-tectonic granite: an example from Chitradurga Schist Belt, Dharwar craton, south India”. AGU-2018 fall meeting (iposter), Duration-3 Days
5. Chatterjee, S., Mondal, S. 2018 “Saturating Isothermal Remanent Magnetization (SIRM) studies from the rocks of Dalma Rocks (Singhbhum, Jharkhand): Determining feasibility of recording magnetic remanence”. *3rd Regional Science and Technology Congress*, Government of West Bengal, Southern Division, Kolkata.
6. Chatterjee, S., Mondal, S., Mazumdar, D., Gain, D. 2018 “Magnetic fabric as indicator of lava flow pattern: A case study from Gworipatnam lava flow, West Godavari, India, Geo-symposium 2018” (sponsored by CAS-VI), Department of Geological Sciences, Jadavpur University, Kolkata.
7. Chatterjee SM, Sarkar AK, Roy A, and Manna A 2018 “Syn-tectonic granite emplacement in ductile transpressive regime: A case study of porphyritic granite from the western margin of the South Delhi Fold Belt, Rajasthan, India”, *EGU General Assembly 2018*, Vol. 20, EGU2018-4518, 2018.
8. Das, V. K., Banerjee, R., Chaudhuri. S., Debnath, K. 2018. “Study on Erosion and Undercut of Cohesive River Bank – An Experimental Approach”. *Hydro-18 International, 23rd International Conference on Hydraulics, Water Resources and River Engineering, NIT, Patna, December 2018*, pp. 36.
9. Maity, R., Mondal, S. 2018. “Magnetic Susceptibility as a proxy for pollution in Triveni-Bandel area, Hooghly district, West Bengal, India”. *3rd Regional Science and Technology Congress*, Government of West Bengal, Southern Division, Kolkata.
10. Maity, R., Mondal, S., Chatterjee, S., Gain, D. 2018 “Magnetic investigation fly ash pollution in Triveni-Bandel area, Hooghly district, West Bengal, India”, Geo-symposium 2018 (sponsored by CAS-VI), Department of Geological Sciences, Jadavpur University, Kolkata.
11. Manna A, Chatterjee SM, Sarkar AK, and Roy A 2018. “Polyphase deformations in a part of South Delhi Fold Belt, Rajasthan, India”. National Conference on “Rock Deformation and Structure” at Delhi University, 4th to 06th October 2018.
12. Mandal, S., Sarkar, S., 2019. “Occult imprint of tectonism in the evolutionary record of alluvial fan systems in a cluster at eastern Himalayan foothills”. *35th Convention, Indian Association of Sedimentologists, Dr. Hari Singh Gour Vishwavidyalaya, Sagar; 28-30th January, 2019; Extended Abstracts’ Volume*, pg-95.

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13. Mondal, T.K., Acharyya, S.S., 2018. "Fractures in micro-granitoid enclaves: a new stress Indicator". *5th Rock Deformation and Structures conference (RDS-V), Abstract Vol.*, p.87, Duration-3 Days
14. Palmjunder, M., and Chaudhuri, S., Das, V. K., Das, A. 2018. "Post-monsoon Geo-Hydrological Scenario of Indpurand Taldangra Block, Bankura district, West Bengal, India - a Comparative Study", *3rd Regional Science & Technology Congress*, Department of Higher Education, Science & Technology and Biotechnology, Government of West Bengal, December 2018, pp. 99.
15. Palmjunder, M., Chaudhuri. S. Das, V. K., Nag, S. K. 2019. "Post and Pre-monsoon Geo-Hydrological Scenario of Indpurand and Taldangra Block, Bankura district, West Bengal, India-a Comparative Study", *26th West Bengal State Science & Technology Congress*, Department of Higher Education, Science & Technology and Biotechnology, Government of West Bengal, Kolkata, March 2019, pp.48.
16. Paul, P., Chatterjee, S., Mondal, S. 2018. "Determination of paleocurrent pattern from sediments of Talchir and Barakar formations, Raniganj Basin, West Bengal", *Geo-symposium 2018 (sponsored by CAS-VI)*, Department of Geological Sciences, Jadavpur University, Kolkata.
17. Paul, P., Mondal, S. 2018. "Paleocurrent analysis using Geophysical techniques: Studies from Lower Gondwana rocks in Maithon areas", *3rd Regional Science and Technology Congress*, Government of West Bengal, Southern Division, Kolkata.
18. Roy A, Chatterjee SM, Sarkar AK, Manna A, and Das S 2018. "Deformation patterns of granitoids and gneisses of Marwar Craton at the contact of western margin of South Delhi Fold Belt, Rajasthan, India and its implications". National Conference on "Rock Deformation and Structure" at Delhi University, 4th to 06th October 2018.
19. Roy, M., and Chaudhuri. S. 2018. "Variation of Major Index Properties of Soil along the Course of the River Ganga from Rishikesh, Uttarakhand to Gadiara, WB". December 2018, pp. 104.
20. Roy, P., Mandal, S., 2019. "Taphonomy of two co- occurring species of *Kutchithyris* (Brachiopoda) from the Kuldhar member of Jaisalmer Formation, India". *35th Convention, Indian Association of Sedimentologists*, Dr. Harisingh Gour Vishwavidyalaya, Sagar; 28-30th January, 2019; Extended Abstracts' Volume, pg-55.
21. Saha, B., Mukhopadhyay, S., Samanta, P., 2019. "Evolution of siliciclastic shelf in the Neoproterozoic Girbhakar Sandstone, Rajasthan, India". *Abstract Volume. National Seminar on Sedimentary Researches: Last Five Decades of Advancement and Prospects in Future*, *35th Convention of IAS*, Sagar, India, P. 26.
22. Samanta, P., Mukhopadhyay, S., 2019. "Fluvial to estuarine transition at the base of the Neoproterozoic Girbhakar Sandstone, Rajasthan, India". *Abstract Volume. National Seminar on Sedimentary Researches: Last Five Decades of Advancement and Prospects in Future*, *35th Convention of IAS*, Sagar, India, P. 28.
23. Sarkar AK, Chatterjee SM, Roy A and Manna A 2018. "Study of deformed porphyritic granite from the western margin of South Delhi Fold Belt, Rajasthan, India: Evidence of syn-tectonic granite emplacement in ductile transpressive regime". National Conference on "Rock Deformation and Structure" at Delhi University, 4th to 06th October 2018.
24. Sen, A., Koley, A., Samanta, P., Mukhopadhyay, S., 2019. "Genesis and orientation of Chandipore Mud-balls – A unique phenomenon". *Abstract Volume. National Seminar on Sedimentary Researches: Last Five Decades of Advancement and Prospects in Future*, *35th Convention of IAS*, Sagar, India, P. 62.

6. Ongoing Collaborations

Anupam Ghosh

Prof. Helena Alexanderson, Lund University, Sweden

Prof. Stefano C. Vainia, Bologna University, Italy

Dr. Rahul Mohan, Scientist E, National Centre of Polar Research, Goa

Dr. Tushar Kaushik, Scientist B, Agharkar Research Institute, Pune

Dipak C Pal

Prof. Chris McFarlane, Department of Earth Sciences, University of New Brunswick, Canada

Prof. Dave Lentz, Department of Earth Sciences, University of New Brunswick, Canada

Dr. Louise Corriveau, Geological Survey of Canada

Prof. David Selby, Department of Earth Sciences, Durham University, UK

Dr. Dewashish Upadhyay, Department of Geology and Geophysics, IIT, Kharagpur

Dr. K.L. Pruseth, Department of Geology and Geophysics, IIT, Kharagpur

Dr. A.K. Sarangi, Uranium Corporation of India Limited

Shri B. C. Sarkar, Atomic Minerals Directorate for Exploration and Research, DAE, Govt, of India

Nibir Mandal

Professor Giorgio Ranalli, Department of Earth Sciences, Carleton University, Canada

Professor Fernando Ornelas Marques, Dep. Geologia, Fac. Ciências, Universidade de Lisboa, Edifício C6, Piso 2 1749-016 Lisboa Portugal

Dr. Ashok Arya, Scientist, Material Science Division, Bhaba Atomic Research Centre Mumbai, India

Dr. Santanu Bose; Department of Geology, Ballygunge Science College, University of Calcutta, Kolkata, India

Dr. Changyeol Lee, Department of Earth System Sciences, Yonsei University Seoul, South Korea

Pulak Sengupta

Prof. Michael Raith, University of Bonn, Germany

Prof. R. Klein Schrodte, University of Cologne, Germany

Prof. M. Ibanez-Mejia, University of Rochester, USA

Dr. Upama Dutta, IIT-ISM

Dr. D. Upadhyay, IIT

Dr. Tapobrata Sarkar, IISER-Kolkata

Sanjoy Sanyal

Prof. Michael Raith, University of Bonn, Germany

Prof. R. Klein Schrodte, University of Cologne, Germany

Prof. M. Ibanez-Mejia, University of Rochester, USA

Dr. Upama Dutta, IIT-ISM

Dr. D. Upadhyay, IIT-Kgp

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Dr. Tapobrata Sarkar, IISER-Kolkata

Prof. D. Mukhopadhyay Calcutta University (Retd.)

Subir Sarkar

Prof. Santanu Banerjee, IIT Mumbai

Prof. Partha Pratim Chakraborty, Delhi University

Susanta Chaudhuri

Prof. Koustuv Debnath, Professor & Head, Department of Aerospace Engineering and Applied Mechanics, IEST, Shibpur, Howrah. W.B, India, Mobile: +919830434409.

Dr. Krishnendu Barman, Assistant Professor, Department of Mathematics, Vidyasagar University, Paschim Midnapore, WB, India, Mobile: +918777809557.

7. Awards/Honors/Recognitions/Fellowships Received

Dr. Anupam Ghosh was selected for Indian Arctic Expedition 2018-19 under the call of Ministry of Earth Sciences (MOES) and National Centre for Polar and Ocean Research (NCPOR), 31st July -5th September, 2018.

Susanta Chaudhuri received the 'Outstanding Paper' award in the 'Environmental Science' division for the conference proceeding entitled "Post-monsoon Geo-Hydrological Scenario of Indpur and Taldangra Block, Bankura District, West Bengal, India - a Comparative Study" in the 3rd Regional Science & Technology Congress - December 2018, South Zone. West Bengal. December – 2018.

Tridib Mondal received K Naha award for structural geology from the Geological Society of India

8. Serving as member/expert in any national/international academic body/committee (in good standing)

Dipak C Pal

- i) Council member of the International Association on the Genesis of Ore Deposit (IAGOD) as the Regional Councilor from India for four years' term (2016-2020)

Nibir Mandal

- i) Chairman, INSPIRE Faculty Programme, Earth & Planetary Sciences (2016-)
- ii) Convener, Sectional Committee (Earth Science), WAST (2016-)
- iii) Member, Sectional Committee, WAST
- iv) Visitor's Nominee, Allahabad University
- v) Core Member, Programme Advisory Committee (SERB)
- vi) Member of the Council, Indian National Science Academy, New Delhi
- vii) Member, Committee for Integrated M.Sc. Programme, School of Earth Sciences, Hyderabad University
- viii) Expert Member, Faculty Promotion Evaluation, University College of Cork, Ireland

Pulak Sengupta

- i) Mentor, Field traverse monitoring program (North-eastern India), IGC-2020
- ii) Member, DST-FIST, Department of Science and Technology, Govt. of India 2017-2020
- iii) Member, Sectional Committee, Indian Academy of Science, 2019-21

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- iv) Member, Sectional Committee, Indian National Academy of Science, 2018-2020
- v) Member Executive Council, Electron Microscopic Society of India, 2017-2019
- vi) Member, Science Education Panel, INSA, NASI, IASc, 2019-2021
- vii) Member, Expert Committee, UPSC
- viii) Expert Panel Judge, Biju Pattnaik Award for Scientific Excellence, OBI, Govt. of Odisha, December, 2019

9. Editorial Board member (in good standing) in any Journal

Pulak Sengupta is *Associate Editor, Journal of Earth System Sciences*

Subir Sarkar is in the *editorial board of Journal of Palaeogeography* (Springer)

Sisir Mondal is Associate Editor of *Ore Geology Reviews and Journal of the Geological Society of India*.

10. Notable achievements of MSc./Ph.D students

- 1) 18 students qualified All India JAM (Joint Admission Test for MSc.), 12 of them were among top 30 including the topper (Sri Arkojyoti Pathak).
- 2) On-campus placement drive: 5 students→ Hindustan Zinc Limited (Vedanta Group); 2 students→ HINDALCO
- 3) Off-campus placement drive: 1 student→ Halliburton; 1 student → Larsen & Toubro (LNT); 1 student→ SIGNA
- 4) 1 Research Scholar has qualified the UPSC Examination, 2018 and selected to join Geological Survey of India (GSI) as Assistant Geologist
- 5) 7 students qualified NET and 11 students qualified GATE
- 6) Smt. Shilpa Srimani, Research Scholar received prestigious ‘Indo-Canadian Shastri Fellowship’ and visited University of Regina, Canada for her research work between 13th February, 2019 to 31st July, 2019.
- 7) Smt. Debolina Chatterjee (Research Scholar), participated in Indian Arctic Expedition 2018-2019 (40 days), during the period 31st July, 2018 to 5th September, 2018
- 8) Manaska Mukhopadhyaya (Research Scholar) was awarded JST Sakura Science Program 2019 to conduct a short term research at ERI, University of Tokyo, Japan.
- 9) Shri Vikas Das (Ph.D Scholar) received the 2nd best paper award for the research presentation entitled “Study on Erosion and Undercut of Cohesive River Bank – An Experimental Approach” in *HYDRO-18 INTERNATIONAL, 23rd International Conference on Hydraulics, Water Resources and River Engineering*, NIT, Patna, on the theme ‘Experimental Hydraulics’.
- 10) Smt. Enakshi Das (Research Scholar) passed the Public Service Commission, Govt. of West Bengal selection and got placement in Nimtauri College, East Midnapur as Assistant Professor.
- 11) Smt. Nivedita Lahiri (Research Scholar) passed the Public Service Commission, Govt. of West Bengal selection and got placement in Hoogly Mahosin College as Assistant Professor.
- 12) Smt. Indrani Mondal (Research Scholar) passed the College Service Commission, Govt. of West Bengal selection and got placement in J.K. College, Purulia as Assistant Professor.

INSTRUMENTATION SCIENCE

Phone : +91-33-2414-6321
Int. : 2457-2379
H.O.D. : Dr. Sankar Narayan Patra
E-mail : hod.inst.sc.@jadavpuruniversity.in

1. A. Courses Offered: M.Sc. (Instrumentation) , 2 years Course , Intake 23 and Ph.D., present Number of Research Scholars: 16

(Name of the Course, Duration of the Course, No of Students Enrolled)

1. B. Number of Faculty Members :

- a. Dr Anup Kumar Ghosh
- b. Dr Sachindranath Das
- c. Dr Sankar Narayan Patra

2. A. Area of Research Activities:Material Synthesis, Sensors Developments, Energy Storage, Solar Cell, Instruments design, Adaptive and Intelligent Signal Processing, Modeling

(Broad Areas)

2. B. Major Research Project :

(Departmental/Individual, Name of the Project/Funding Agency)

1. (Departmental) “Inclusion of nano-Ag/DCL in cellulose fibers for the development of antifungal, biocompatible and haemocompatible bandage material by using hybrid chemical route”; JU-RUSA 2.0
2. (Individual PI.-Co.PI- Dr Anup Kumar Ghosh) “Realization of oxide based solar cells: Glass-Mo/Cu₂O/CuO/ZnO/Al-ZnO/ITO heterojunction solar cell with improved performance”; SERB, DST, Govt. of India.
3. (Individual PI.-Dr Anup Kumar Ghosh) “Neurological and dermatological effect of MAHUA (Madhucalongifolia) flowers in Vitro”; JU-RUSA 2.0
4. (Individual PI.-Dr Sachindranath Das) “Energy storage devices based on CNT composite and surface modified metal oxide nanocrystals”. Department of Science and Technology, Govt. of India.
5. (Individual PI. -Dr Sachindranath Das) “Correlation between the compositional, structural and optical properties of perovskite layer with the efficiency of solar cell”; Department of Science and Technology, Govt. of India.
6. (Individual PI.-Dr Sachindranath Das) “Tuning the thermoelectric figure of merit of conducting polymer by incorporating metal nano clusters”; UGC-DAE CRS, KC, Govt. of India.
7. (Individual PI.-Dr Sachindranath Das) “Study on optoelectronic properties of mixed halide hybrid perovskite material synthesized by mechano-chemical method”; Department of Science and Technology and Biotechnology, Government of West Bengal.
8. (Individual PI. -Dr Sachindranath Das) “Fabrication of self-powered energy storage system”; JU-RUSA 2.0
9. (Individual PI.-Prof. M. Khan) “Time Dependent Nonlinear Structure in Plasmas in the Frame Work of Lagrangian Fluid Description”; CSIR, GOI.

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10. (Individual PI.-Prof. R. Bhar) “Structural Properties and Astrophysical Application of Quantum Plasma”; SERB, Govt. of India duration

3. C. Seminar/Workshop/Conference/Symposium Organized:

1. Workshop on Instrumental Techniques, Maintenance and Servicing of Analytical and Laboratory Instruments: February 4-8, 2019
2. National symposium on recent trends in Instrumentation Science and Technology (NSRTIST-2019): January 18, 2019
3. National seminar on Energy Storage and Conversion (NSESC-2018): December 6, 2018

3. D. Orientation Courses/ Refresher Courses Attended:

(Name of the Teachers, Duration, Place)

1. Name of the Teachers : Dr. Sachindranath Das
Title of the Course: Refresher Programme in Physics
Duration :29.05.2018-18.06.2018
Place: Indian School of Mines, Dhanbad

4. A. Books/Monographs etc. Published:

(Name of the Teacher, Name of the Book, Name of the Publisher)

Name of the teacher - **Dr. Sachindranath Das**

1. “Transition Metal Oxide-Based Nano-materials for Energy Storage Application” A. Ray, A. Roy, S. Saha, S. Das, *Science, Technology and Advanced Application of Supercapacitors, In Tech Open*, 2018, Nov 5.

4. B. Articles Published in Journals: (Including National/International & Peer-reviewed Journals)

(Name of the Teacher, Name of the Articles, Name of the Journal, Date of Publication, Volume)

a. Name of the Teacher - **Dr. Anup Kumar Ghosh**

1. “Freestanding flexible composite films of CdS impregnated cellulose nanocrystals/PVDF: Synthesis and Characterization”, D Das, S Das, S Hussain, A K Ghosh and A K Pal. *Int. J. Plast. Technol.*, 22(2), 326-340 (2018)
2. “Studies on Cellulose Nanocrystals Extracted from Musa Sapientum: Structural and Bonding Aspects”, D Das, S Hussain, A K Ghosh and A K Pal. *Cellul. Chem. Technol.*, 52(9-10), 729-739 (2018).
3. “A Peptide Based Pro-drug Disrupts Alzheimer’s Amyloid into Non-toxic Species and Reduces A β Induced Toxicity In Vitro”. A. Paul, S. Kumar, S. Kalita, A. K. Ghosh, A. C. Mondal, , & B. Mandal, *Int. J. Pept. Res. Ther.*, 24(1), 201-211 (2018).
4. “CdS impregnated cellulose nanocrystals/PVDF composite flexible and freestanding films: Impedance spectroscopic studies”, D Das, R Bhunia, S Das, R Dey, S Hussain, A K Ghosh and A K Pal. *Polym. Eng. Sci.*, 58(8), 1419-1427 (2018)

b. Name of the teacher - **Dr. Sachindranath Das**

5. “Dielectric relaxation, AC conductivity behavior and its relation to microstructure in mechanochemically synthesized Mn-doped CeO₂ nanocrystals”: A Dhara, S Sain, P Maji, S N Das and S K Pradhan; *Solid State Ionics* 87 (2019) 93-100
6. “Study on charge storage mechanism in working electrodes fabricated by sol-gel derived spinel Ni Mn 2O₄ nanoparticles for supercapacitor application”; A. Ray, A. Roy, M. Ghosh, J.A. Ramos-Ramón, S. Saha, U.Pal, S.K.Bhattachrya, S. N. Das; *Applied Surface Science* 463 (2019) 513-525

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7. "Fabrication of improved graphene oxide (IGO) supported CuO nanocrystals derived from metal-organic-framework template for high performance hybrid supercapacitors": D. A. Islam, A. Chakraborty, A. Roy, S. N. Das and H. Acharya, *Chemistry Select* 3(2018)11816-11823
8. "Polyaniline-Multiwalled Carbon nanotube (PANI-MWCNT): Room temperature resistive carbon monoxide (CO) sensor": A. Roy, A. Ray, P. Sadhukhan, K. Naskar, G. Lal, R. Bhar, C. Sinha, S. N. Das; *Synthetic Metals* 245 (2018) 182-189
9. "Morphological behaviour, electronic bond formation and electrochemical performance study of V₂O₅-Polyaniline composite and its application in asymmetric supercapacitor"; A.Roy, A.Ray, P. Sadhukhan, S.Saha, S. N. Das; *Materials Research Bulletin* 107 (2018) 379-390
10. "Fabrication of Symmetric supercapacitor using cesium lead iodide (CsPbI₃) microwire": P.Maji, A.Ray, P.Sadhukhan, A.Roy and S N Das; *Materials Letters* 227 (2018) 268-271
11. "Study on charge transfer mechanism and dielectric relaxation of cesium lead bromide (CsPbBr₃)": P. Maji, A. Ray, P. Sadhukhan, S. Chatterjee, S. N. Das; *Journal of Applied Physics* 124 (2018) 124102
12. "NiO-CNT composite for high performance supercapacitor electrode and oxygen evolution reaction": A. Roy, A. Ray, S. Saha, M. Ghosh, T. Das, B. Satpati, M. Nandi, S. N. Das; *Electrochimica Acta* 283 (2018) 327-337
13. "Discrete Dipole Approximation for Calculating Optical Properties of ZnO nanoparticles and ZnO-PVP composites": S. Patra, P. Sengupta, A. Ray, A. Roy, S.N. Das; *Ceramics International* 44 (2018) 14236-14241
14. "Organo-lead Halide Perovskite Regulated Green Light Emitting PVDF Electrospun Nanofiber Mat and its Potential Utility for Ambient Mechanical Energy Harvesting Application", A.Sultana, Md M.Alam, P. Sadhukhan, U.K.Ghorai, S.N. Das, T.R. Middy and D. Mandal, *Nano Energy* 49 (2018) 380-392
15. "Electrochemical properties of TiO₂-V₂O₅ nanocomposites as a high performance supercapacitor electrode material" A. Ray, A. Roy, P. Sadhukhan, S.Roy Chaowdhury, P. Maji, S.K. Bhattacharya and S.N.Das; *Applied Surface Science* 443 (2018) 581-591
16. "Solvent free Solid state Synthesis of High Yield Mixed Halide Perovskites for Easily Tunable Composition and Band gap": P. Sadhukhan, S. Kundu, A. Roy, A. Ray, P. Maji, H. Dutta, S. K. Pradhan and S. N. Das; *Crystal Growth & Design* 18 (2018) 3428-3432
17. "Influence of dipping cycle on SILAR synthesized NiO thin film for improved electrochromic performance": M. R. Das, A. Roy, S. Mpelane, A. Mukherjee, P.Mitra and S. N Das; *Electrochimica Acta* 273 (2018) 105-114
18. "ZnO polymer composite based visible blind UV photo detector": S.Patra, A.Ray, A.Roy, P. Sadhukhan, S. Pujaru, U.K. Ghorai, R.Bhar, S.N.Das; *Materials Research Bulletin* 101 (2018) 240-245
19. "Microstructure, optical, dielectric and electrical characterizations of Mn doped ZnO nanocrystals synthesized by mechanical alloying"; A. Dhara, S. Sain, S. N. Das and S.K. Pradhan; *Ceramics International* 44 (2018) 7110-7121
- c. Name of the Teacher - **Dr. Sankar Narayan Patra**
20. "A Search for Periodicities in F10.7 Solar Radio Flux Data", S. Roy, A. Prasad, S. C. Panja, K. Ghosh, Sankar Narayan Patra, *Solar System Research*, vol.-53, no.-3, pp.-224-232, May 2019.
21. "Fast Converging Cuckoo Search Algorithm to design symmetric FIR filters", P. Das, S.K. Naskar, Sankar Narayan Patra, *International Journals of Computers and Applications*, Taylor and Francis Group, March 2019,

22. "Causality Analysis between Solar Irradiance and Forbush Decrease Indices", Sankar Narayan Patra, Amrita Prasad, Soumya Roy, Gautam Bhattacharya, Subhash Chandra Panja, Koushik Ghosh, *Indian Journal of Theoretical Physics*, vol 66 nos 1&2, 2018
 23. "Human factor analysis for railway coach and bogie maintenance using principal component analysis and factor analysis", S. Poddar, S. C. Panja, Sankar Narayan Patra, M. Gangopadhyaya, *International Journal of Human Factors and Ergonomics*, vol.- 6, no.- 1, pp.- 35-56, 2019,
 24. "Fabrication of fiber aided nano device for minimally invasive photonics based sub-micron level lesion detection and interventional treatment", F. Kibria, Sankar Narayan Patra, *International Journal for Research in Engineering Application & Management (IJREAM)*, Vol-04, Issue-08, ISSN : 2454-9150,
 25. "Hardware efficient FIR filter design using global best steered quantum inspired cuckoo search algorithm", P. Das, S. K. Naskar, Sankar Narayan Patra, *Applied Soft Computing*, vol.7, pp.1-19, Oct., 2018.
 26. "A Novel Approach to Realize of All Optical Frequency Encoded Dabit Based XOR and XNOR Logic Gates Using Optical Switches with Simulated Verification", Ghosh, S. Hazra, N. Haldar, D. Roy, Sankar Narayan Patra, J. Swarnakar, P.P. Sarkar, S. Mukhopadhyay, *Optics and Spectroscopy*, vol.- 124, no.-3, pp.-337-342, March, 2018.
 27. "Analysis of energy management in micro grid–A hybrid BFOA and ANN approach", K. Roy, K. K. Mandal, A. C. Mandal, Sankar Narayan Patra, *Renewable and Sustainable Energy Reviews*, vol. 82, pp.- 4296-4308, June , 2018.
 28. "Scaling Analysis of the Flare Index Data from Kandilli Observatory", S. Roy, A. Prasad, S. Chowdhury, S. C. Panja, Sankar Narayan Patra, *Proceedings of the International Astronomical Union*, vol.-13, no.-S340, pp.-161-162, June . 2018.
 29. "Nonlinear Autoregressive Model (NARX) of Stationary Forbush Decrease Indices Based on Levenberg-Marquardt Feedback Algorithm", Sankar Narayan Patra, S. C. Panja, A. Prasad, S. Roy, K. Ghosh, *Proceedings of the International Astronomical Union*, vol.- 13, no.-S340, pp.-323-324, June. 2018.
 30. "Multifractal Analysis of the 10.7 cm daily Solar radio flux data", Prasad, S. Roy, S. C. Panja, Sankar Narayan Patra, *IEEE Applied Signal Processing Conference (ASPCON)*, pp.-224-228, Kolkata, India, Dec. 2018,
 31. "Dye-Sensitized Solar Cells Fabrication Employing Natural Hues as Photosensitizing Substances", Kumar, S. Chatterjee, A. K. Ghosh, S. Das, Sankar Narayan Patra, *IEEE Electron Devices Kolkata Conference (EDKCON)*, pp.261-264, Kolkata, India, Nov. 2018,
- d. Name of the Teacher - Prof. A K Pal & Prof R Bhar**
32. "Phosphorus doping of diamond-like carbon films by radio frequency CVD-cum-evaporation technique", R Dey, S Dolai, S Hussain, R Bhar, and A.K. Pal, *Diamond and Related Materials* 82 (2018), 70-78.
 33. "Fabrication and characterization of Cu/Cu₂O/CuO/ZnO/Al-ZnO/Ag heterojunction solar cells", R Bhunia, S Dolai, R Dey, S Das, S Hussain, R Bhar, and AK Pal, *Semiconductor Science and Technology*, 33 (2018), 105007.
 34. "Synthesis, characterization and photo-response of p-type cupric oxide thin films prepared by sol-gel technique", S Dolai, R Dey, S Hussain, R Bhar, AK Pal, *Materials Science and Engineering: B*, 236 (2018), 153-161.

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35. "Probing local structures in (Ni/Co) co-doped ZnO/PVDF composite flexible and free standing films by using XAS and XPS studies", A. K. Yadav, R. Dey, S. N. Jha, D. Bhattacharyya, S. Hussain, R. Bhar and A. K. Pal., 2018, *Xray Spectrometry Journal*.
36. "Photovoltaic properties of F:SnO₂/CdS/CuO/Ag heterojunction solar cell", Sukdev Dolai, Rajkumar Dey, Shamima Hussain, Radhaballav Bhar and Arun Kumar Pal, *Materials Research Bulletin* 109 (2019) 1–9.
37. "Magnetic properties in nanocrystalline nickel incorporated CuO films", S. Dolai, S. Sarangi, S. Hussain, R. Bhar and A. K. Pal, *Journal of Magnetism and Magnetic Materials* 479 (2019) 59–66.

e. Name of the Teacher - Prof. M Khan

38. "Damped solitary waves on a superfluid vortex filament": A. Mitra, M. Khan and R. Roychoudhury; *Chaos, Solitons & Fractals*, 21, 222-225 (2018).
39. "The effects of free vortex decay in quasi-classical and ultra-quantum turbulence": A. Mitra; *J Low Temp Phys*, 194 (1-2), 88-98 (2018)
40. "Superfluid Boson-Fermion mixture: Structure formation and Collective periodic motion": A. Mitra; *J Low Temp Phys*, 190 (1-2), 90-99 (2018).
41. "Nonlinear density collapse in one-dimensional cold atomic gas": Sayanee Jana, Samiran Ghosh, Nikhil Chakrabarti and Manoranjan Khan: *Physica Scripta*, 94, 055210 (2019)

5. Collaborative Programmes:

6. Major Achievements:

Section III

Annexures (Administrative)

* **Officers of the University:** (as on 31.3.2019).

* **University Bodies :**

(Court/Council/EC/Finance Committee, including list of members).

* **Teachers :**

Existing Faculty Members (Arts, Engg. and Tech., Science & ISLM as on 31.3.19.)

* **Research Scholars Awarded :**

a) Ph.D/D.Phil/D.Litt. Complete title of the thesis to be mentioned

LIFE SCIENCE & BIO-TECHNOLOGY

Phone : +91-33-2414-6710
Int : 2457-2983/2466
H.O.D. : Prof. Ratan Gachhui
Prof. Biswadip Das (w.e.f. 08.05.2018)
E-mail : hod.lifescbiotech@jadavpuruniversity.in

1. A. Courses Offered :

(Name of the Course, Duration of the Course, No of Students Enrolled)

Name of the Course	Duration of the course	No. of students enrolled
M.Sc.(Biotechnology)	2 Years	45

1. B. Number of Faculty Members :

Professors	Associate Professor/ Readers	Assistant Professor/Lecturer
3	0	2

2. A. Area of Research Activities :

(Broad Areas)

1. Microbial Biodiversity & Microbial Biotechnology
2. Molecular Biology & Gene Technology
3. Cell biology of cancer, aging, Nanobiotechnology
4. Messenger RNA biogenesis and surveillance, Regulation of Eukaryotic gene Expression, Quality Control of Eukaryotic gene expression.
5. Transcriptional regulation of cardiac development and diseases.

2. B. Major Research Project :

(Departmental/Individual, Name of the Project/Funding Agency)

Investigators	Name of Project	Funding Agency
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Prof. Parimal Karmakar

“Development of polyherbal based functional, biopolymer hydrogel for delivery of novel healing agents in excision and burn wound” (BT/PR25380/NER/95/1168/2017), DBT twinning, ongoing Project cost: 75.42 Lakh, 2018-21

“To assess the contribution of PTEN and its post-translational modulation in DNA repair DST sub-pathways” (EMR/2016/001151), Dept of Science and Technology, Govt. of India, ongoing, Project cost 40.7 lakh, 2017-20

“Development of functional biopolymer-based matrices for delivery of healing agents in 2018-21 chronic wound” (File no: ST/P/S & T/2G-13/2017), DBT, ongoing, WB, 15 Lakh, 2018-21

Prof. Biswadip Das

“Uncovering Nuclear Machinery involved in the Turnover of ribosomal and other non-coding RNAs in *Saccharomyces cerevisiae*” [File No. 38(1427)/16/EMR-II dated 17-05-2016], CSIR –Ongoing, Project Cost 27.8 Lakhs

Dr. Paltu Kumar Dhal

“Indigenous Microorganisms (IMO's)-based Technology for Bioremediation of Phosphogypsum generated from Phosphoric Acid Plants in India”. (Code:570GLO2013), Phos Agro/UNESCO/IUPAC Research-Ongoing Grant. Project Cost : US\$28,388.00

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“Endophytic Bacterial Community of Rice Root from Saline Zone of Sundarban; West Bengal: Development of Microbial Biofertilizers using Indigenous Microorganisms (IMO’s)- based Technology for Higher Rice Production” (File No : EEQ/2018/000006)DST- Govt. of India, Ongoing, Project cost 39.19 lakh, 2019-22

“Agricultural Cultivation for Scientific Adaptation of Santalum album L. plant” (Co-PI)Memo No. 420(Sanc.)/ST/P/S&T/1G-31/2018, DST- West Bengal, Ongoing, Project cost 12.9 lakh, 2019-22

Dr. Arunima Sengupta

“AMPK, FOXO AND NFATC3 transcription factor function in regulation of cardiomyocyte proliferation”. (Ref No: BT/Bio-CARE/01/9686/2013-14), DBT-Project cost 50.78 lakhs, ongoing till May 2019

Start-up grant under UGC-Faculty Recharge Program (FRP), UGC- Project cost 6 Lakhs, till March 2019

3. A. Invited Lectures Delivered/Sessions Chaired:

(Name of the Teacher, Type of Participants, Name of the Seminar / Conference etc. Place, Duration)

Name of the Teacher/Type of Participation/Name of the Seminar/Conf Place/ Duration

Prof. Parimal Karmakar

Key notes lecture “Perspectives of human health Microbial Biotechnology & innovation, National Seminar, Department of Physiology with community health & department of Microbiology, Vidyasagar University”, 27-29 March, 2018.

Dr. Paltu Kumar Dhal

Invited Lecture Delivered-ZMT regional alumni conference in Southeast Asia Universitas Padjadjaran (UNPAD), Bandung, Indonesia, April 23 -27, 2018.

Invited Lecture Delivered 8th IUPAC International Conference on Green Chemistry (ICGC) Bangkok (Thailand), 9-14 September 2018.

3. B. Seminar/Workshop/Conference/Symposium Attended:

(Name of the Teacher, Name of the Paper Presented, Name of the Seminar, Place, Duration)

Name of the Teacher/Name of the Paper presented/Name of the Seminar/Place/Duration

Parimal Karmakar (Invited Speaker)

National conference on “Materials and Nanotechnology: Ideas, Innovation and initiatives” (NCMN-2019), organized by Department of Chemistry, GLA university, Mathura 15-16 February, 2019.

43rd Annual Conference of Environmental mutagen society of India and International symposium on Impact of environmental Mutagenesis in the Human genome. Vellore Institute of Technology, India. January 31-february 2, 2019.

Dr. Arunima Sengupta

Oleic acid-mediated attenuation of arsenic induced cardiac hypertrophy by regulating AMPK/ FOXO/NFATc3 signaling pathway XLII All India Cell Biology Conference in BITS Pilani K K Birla Goa Campus, BITS Pilani K K Birla Goa Campus, 21st to 23rd December 2018.

3. D. Orientation Courses/ Refresher Courses Attended: None

(Name of the Teachers, Title of the Course, Duration, Place)

Name of the Teacher/Role/Name of the Refresher Course/Place/Duration

Dr. Paltu Kumar Dhal

Participant, 68th Orientation Programme conducted by HRDC-JU, Kolkata, Jadavpur University, Salt lake campus Kolkata. February 2nd- March 4th, 2018.

Dr. Paltu Kumar Dhal

Participant, Modern Methods in Earth System Science, Department of Geological Science, JU, Kokata. 18th September-11th October, 2018.

Dr. Arunima Sengupta

Participants, 72nd Orientation Programme conducted by HRDC-JU, Kolkata, Jadavpur University, Salt lake campus Kolkata. 6th Feb-6th March, 2019.

4. A. Books/Monographs etc. Published :

(Name of the Teacher, Name of the Book, Name of the Publisher)

Name of the Teacher	Book/Monograph	Publisher	Volume	Year
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Dr. Paltu Kumar Dhal

Title of the chapter: “Bacterial communities of Uranium contaminated tailing ponds and their interactions with different heavy metals” in *Advances in Soil Microbiology: Recent Trends and Future Prospects*. Springer Book, DOI.10.1007/978-981-10-6178-3_6, 2018

Title of the chapter: “Bacterial biological control agents for soil-borne diseases management in pulses: Present status and future prospects” Microbial Mitigation of Stress Response of Food Legume Plants, CRC press, Taylor and Francis, In press 2019

Ratan Gachhui

Chakravorty S, Bhattacharya S, Bhattacharya D, Sarkar S, Gachhui R. “Kombucha: A Promising Functional Beverage Prepared From Tea”. In: Grumezescu A.M., Holban A.M. (Eds.), *Non-Alcoholic Beverages*,. Woodhead Publishing, Elsevier BV.2019;6:285-327, 2019.

4. B. Articles Published in Journals: (Including National/International & Peer-reviewed Journals)

(Name of the Teacher, Name of the Articles, Name of the Journal, Date of Publication, Volume)

Authors	Title	Name of the Journal	Date of Publication	Volume
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Prof. Parimal Karmakar with Deblina Ghosh, VA Bohr, Parimal Karmakar “Acetylation of Werner protein at K1127 and K1117 is important for nuclear trafficking and DNA repair”. *DNA Repair, I.F. 4.461*. 201979 (2019) 22–31

Prof. Parimal Karmakar with, A Samui, K Pal, P Karmakar, SK Sahu “In situ synthesized lactobionic acid conjugated NMOFs, a smart material for imaging and targeted drug delivery in hepatocellular carcinoma”. *Mater Sci Eng C Mater Biol Appl*. IF 5.08 2019; 98:772-781.

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curcumin-loaded folic acid-tagged metal organic framework for triple negative breast cancer therapy in *in vitro* and *in vivo* systems”. *New J. Chem.*. 2019 43, 217-229

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Dr. Biswadip Das, Debasish Sarkar, Sunirmal Paira, “Nuclear mRNA degradation tunes the gain of the unfolded protein response in *Saccharomyces cerevisiae*”. *Nucleic Acids Res* (2018 Thompson Reuters Impact factor: 11.147). 2018, Volume: 46, 1139-1156, doi: 10.1093/nar/gkx1160

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Dr. Paltu K. Dhal Soumendranath Chatterjee, Priyanka Mukhopadhyay, Raktima Bandyopadhyay, Debraj Biswal, Prabir Kumar, Bandyopadhyay “Molecular characterization and phylogenetic analysis of *Plasmodium vivax*, *Plasmodium falciparum*, *Plasmodium ovale*, *Plasmodium malariae* and *Plasmodium cynomolgi*” *Journal of Parasitic Diseases*, 2017. March 2017, Volume 41, Issue 1, pp 230–236

Dr. Paltu K. Dhal Pranamita Kunda and Abhishek Mukherjee “Endophytic bacterial community of rice (*Oryza sativa* L.) from coastal saline zone of West Bengal: 16S rRNA gene based metagenomics approach”. *Meta Gene*. 2018, Volume 18: pp 79–86

Tilak Nayak, Debjit De, Chiranjib Barman, Parimal Karmakar, Argha Deb, Paltu Kumar Dhal “Characterization of indigenous bacteria from radon rich groundwater and their tolerance to

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physicochemical stress”. *International Journal of Environmental Science and Technology* 2019, <https://doi.org/10.1007/s13762-019-02445-w>

Sen P, Polley A, Sengupta Arunima and Chakraborty S. “Tbx20 promotes H9c2 cell survival against oxidative stress and hypoxia in vitro”, *Indian Journal of Experimental Biology* 2019, Vol 57(9): 643-659

5. Collaborative Programmes:

6. Major Achievements:

1. Eight Students joined in Dr. Reddy’s Laboratory, Hyderabad as Scientist. 2 students were selected to receive RISE fellowship from Department of Science, Technology, Higher Education and Biotechnology, Government of West Bengal for carrying out their summer training Programme in 2017 summer at various leading laboratories across the state. 5 no. of students qualified in UGC-CSIR NET examination, June and December, 2017.
2. Dr. Paltu K. Dhal receives a **PhosAgro/UNESCO/IUPAC Green Chemistry for Life Research Grant**.
3. Dr. Paltu K. Dhal serves as **External Researcher at Japan Agency for Marine-Earth Science and Technology**, Yokohama, Japan from 1st July to 15th August 2019.

MATHEMATICS

(DRS, UPE-II, DST-PURSE Supported)

Phone : +91-33-2414-6717
Int. : 2457-2465/2518
H.O.D. : Prof. Ashis Kr. Sarkar
E-mail : hod.mathematics@jadavpuruniversity.in

1. A. Courses Offered:

B.Sc (Hons.):	3 years	Total intake: 105
M.Sc (Day) :	2 years	Total intake: 60
M.Sc (Night):	3 years	Total intake: 60
Ph.D Course work.		

1. B. Number of Faculty Members: 28 (in position) 17 (vacant)

Professor:	20
Associate Professor:	03
Assistant Professor:	05
Emeritus Professor:	01

2. A. Areas of Research Activities:

Algebra, Mathematical Biology, Bio-Fluid Mechanics, Computer Science, Cosmology & Astrophysics, Differential and Computational Geometry, Dynamical Meteorology, Dynamical

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System, Fluid Mechanics, Functional Analysis, Game Theory, Graph Theory, Mathematical Physics, Operational Research, Plasma Dynamics, Real Analysis, Solid Mechanics.

2. B. Major Research Project:

Prof. Bibhas C. Giri

- Title:** Development and analysis of supply chain models concerning environmental sustainability
Funding Authority: Council of Science & Industrial Research (CSIR)
Duration of the project: 2018-2021.
Project Value: ₹16,39,510.
- Title:** Mathematical model development and analysis of bullwhip effect in closed-loop supply chain under uncertainties.
Funding Authority: SERB (MATRICS), DST
Duration of the project: 2018-2021.
Project Value: ₹6,00,000.

Prof. Kallol Paul

Title: Birkhoff-James orthogonality and its application in the geometry of Banach spaces.
Funding Authority: MATRICS SERB, DST.
Duration of the project: 2018-2020.

Prof. Nandadulal Bairagi

- Title:** Dynamics Preserving Discretization Technique for Nonlinear System of Differential Equations.
Funding Authority: MATRICS (SERB, DST).
Duration of the project: 2018-2021
- Title:** Emergent dynamics in ecological networks: Spreading of disease and its control study.
Funding Authority: SERB, DST (P.I).
Duration of the project: 2017-2020
- Title:** Modelling and analysis of stochastic HIV infection with linear and nonlinear incidence.
Funding Authority: CSIR
Duration of the project: 2018-2021
- Title:** Modelling and analysis of stochastic ecological and eco-epidemiological systems with nonlinearity
Funding Authority: Indo-French Centre for Applied Mathematics (IFCAM)
Duration of the project: 2018-2021

Prof. Priti Kumar Roy

- Title:** Exploring uncertainties for production bottlenecks of biodiesel in SCEN: Deterministic and Stochastic studies with dynamic optimization.
Funding Authority: SERB (File Number: EEQ/2017/000723)
Duration of the project: March 18–Till Date.

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- Title:** Development of Models of Immune-Dependent Disorders and Finding Optimal Strategies for Their Treatment: Analytical and Computational Approaches.

Funding Authority: DST-RFBR

Prof. Subenoy Chakraborty

Title: Symmetries in Differential Equation and Its Application to Classical and Quantum Cosmology

Funding Authority: SERB, recommended by MATRICS(MTR/2017/000407)

Duration of the project: June, 2018-till date.

Prof. Sudeshna Banerjea

- Title:** Water wave scattering by obstacles of various geometrical configurations.

Funding Authority: Council of Science & Industrial Research (CSIR)

Duration of the project: 2016-2019.

- Title:** Integral equation and its application to the problems on interaction of water waves with obstacles present in ocean.

Funding Authority: SERB, DST (recommended by MATRICS)

Duration of the project: 2018-2021.

Dr. Gopal Chandra Shit

- Title:** Modelling of electro-osmotic flow and heat transfer in a micro-channel for microfluidic applications

Funding Authority: SERB, DST

Duration of the project: 2017-2021.

Project Value: ₹20,32,000

3. A. Invited Lectures Delivered/Session Chaired:

Prof. Arindam Bhattacharyya

- Delivered an invited lecture at 106th Indian Science Congress on “Ricci solitons on wrapped product spaces” and chaired a session during 3rd to 7th January, 2019 organized by Lovely Professional University.
- Delivered an invited talk on “Curvilinear Coordinate System” in a workshop of Mathematics at Ramkrishna Mission Vivekananda Centenary College, Rahara on 23rd-24th February, 2019.

Prof. Bibhas C. Giri

- Delivered an invited talk at the National Conference on “Optimization Techniques to Engineering and Management Sciences”, Department of Basic Science, NSHM Knowledge Campus, Durgapur, during 15-16 November, 2018
- Chaired a session in the 1st International Conference on “Frontiers of Operations Research and Business Studies (FORBS 2018)” Calcutta Business School, Kolkata, 11-13 October, 2018.

Prof. Kallol Paul

- Delivered an invited talk at International Conference on Banach Algebras, Harmonic Analysis and Operator Theory held during Nov. 20 - 22, 2018, at Sardar Patel University, Vidyanagar, Gujarat, India.
- Delivered an invited talk at Teachers Enrichment National Level Workshop on Mathematics and Its Recent Advancement held during Oct 30-31, 2018 at Midnapore College, West Bengal.

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3. Delivered an invited talk at 2018 International Workshop on Operator Theory and its Applications held during July 23 - July 27, 2018, at East China Normal University, Shanghai, China.
4. Delivered an invited talk at 2018 International Workshop on Matrices and operators held during July 15-July 18, 2018, at Shanghai University, China.
5. Delivered an invited talk titled “Operator orthogonality in the space of linear operators on Banach space” at 33rd Annual Conference of the Ramanujan Mathematical Society (ACRMS - 2018) held at Delhi University during 1st-3rd June, 2018.
6. Delivered talk at National Level Teachers Enrichment Workshop in Mathematical Sciences (NLTEWMS-2018, 23rd May-6th June) at Calcutta Mathematical Society on Functional Analysis on 28th May 2018 and 31st May 2018.

Prof. Nandadulal Bairagi

1. Gave a series of talks in the Training Programme on Dynamical Systems: Theory and Applications (DSTA 2018) organized by Indian Institute of Technology (ISM) Dhanbad during April 02-06, 2018
2. Gave a Seminar on Mathematical Biology organized by Czech Academy of Sciences, Prague, Czech Republic on 17th June 2018.
3. Gave a Seminar on population dynamics at ICT SAI FR, Brazil on 14th August 2018.
4. Invited talk delivered in the National Seminar Future India: Science and Technology organized by DAV College, Kanpur during 23-25th November 2018.
5. Invited talk delivered in the Emerging Applications of Nonlinear Dynamics and Chaos in Science and Engineering held at IIT Jodhpur during 13-15th December 2018.
6. Delivered Presidential Talk in the Mathematical Sciences (including Statistics) at the 106th Indian Science Congress 2019 held at Lovely Professional University, Jalandhar, Punjab organized during 3-7th January 2019.
7. Invited talk delivered in the National Conference on Ancient and Modern Mathematics (NCAMM 2019) organized by Maharaja Bir Bikram University during 23-24 February 2019.
8. Given Seminar on dynamical system at Beijing Technology and Business University, Beijing, China on 6th March 2019.
9. Invited talk delivered in the National Conference on Recent Trends in Differential Equation: Theory, Modelling and Computation (NCDE) held at Indian Institute of Technology, Patna from 29-30 March 2019.

Prof. Priti Kumar Roy

1. Delivered an invited talk at Xinyang Normal University, Henan 464000, P.R. China, 3rd April, 2018.
2. Delivered an invited talk at Henan Normal University, Xinxiang Shi, Henan Sheng, China, 453002, 4th April, 2018.
3. Poster Presentation of the research work “Effect of Early Treatment on Cervical Cancer through Diagnosis” in International Congress of Mathematicians held at Rio de Janeiro, Brazil from August 1st to 9th, 2018.

Prof. Subenoy Chakraborty

1. Delivered two lectures on “Black Hole” and “The Mathematical Background of Relativity Theory” at Raiganj Surendranath Mahavidyalaya, Uttar Dinajpur on 6th April, 2018.

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2. Delivered a lecture on “Black Hole-The Story Far Behind Us” at Balagar Vijay Krishna Mahavidyalaya, on 7th April, 2018.
3. Delivered a lecture on “Black Hole-The Story Far Behind Us” at Narasinha Dutta College, on 21st April, 2018.
4. Delivered an invited lecture on “Partial Differential Equations and its Applications” was delivered in the refresher’s course at the Department of Mathematics, University of Burdwan, July 27, 2018.
5. Delivered an invited talk on “Black Hole-The Story Far Behind Us” at NIT Rourkela, on 7th December, 2018.
6. Delivered a course of lectures on “Einstein General Theory of Relativity” and “Dark Energy” at NIT Manipur, during 11-15th December, 2018.
7. Delivered an invited talk on “The Mathematical Background of Gravitational Waves” at the Indian National Science Congress, on 5th January, 2019.
8. Delivered an invited talk on “Geometric Aspects of General Relativity” in a one-day seminar organized by the Department of Mathematics, Ramkrishna Mission Vivekanda Centenary college, Rahara on 23rd February, 2019.
9. Delivered an invited talk on “General Relativity and Differential Geometry” in a National seminar organized by the Department of Mathematics, Egra college, Medinipore on February, 2019.
10. Delivered an invited talk on “Mathematical Story of General Relativity” in a National seminar organized by the Department of Mathematics, Raiganj University, Uttar Dinajpur on 15th March, 2019.
11. Delivered an invited talk on “General Relativity from Mathematical Point of View” in a one-day seminar organized by the Department of Mathematics, Ramkrishna Mission Vivekanda Centenary college, Rahara on 16th March, 2019.
12. Delivered a lecture on “Gravity Theory” at Vidyasagar College for women, on 26th March, 2019.

Prof. Sudeshna Banerjea

1. Delivered lecture at First Refresher Course in Mathematical Science & Computing held at Burdwan University on 26th July, 2018.
2. Visited University of Ghent Belgium from 15th March, 2019 to 4th April, 2019 to collaborate with Prof. Marnix Van Deale and delivered a lecture on “Scattering Problems in Water wave theory”.

Prof. Sujit Kumar Sardar

Delivered invited talk and chaired a session at International Conference on Algebra and Geometry (ICAG 2018) organized by the Department of Mathematics, Thaksin University held at Maritime Park and Spa Resort, Krabi, Thailand, from *14 to 15 of December, 2018*.

Prof. Sagnik Sinha

1. Prasenjit Mondal, Sagnik Sinha. “Semi-stationary Equilibrium Strategies in Non-cooperative N-person Semi-Markov Games”. Accepted on September 2018 in Springer book series of the International Conference on Mathematical Analysis and Applications in Modeling (ICMAAM 2018) Proceedings at Jadavpur University, Kolkata-700032, India.
2. Jana, R., Das, A.K. and Sinha, S., “On Processability of Lemke’s Algorithm”, *Applications & Applied Mathematics*, 13(2) (2018) pp. 1123-1131.

Dr. Sukhendu Kar

Delivered an invited talk in the International Conference on Algebra and Continuum Mechanics (ICACM-2018) during 23rd to 25th November, 2018 organized by the Department of Mathematics and Statistics, Himachal Pradesh University, Shimla.

Dr. Gopal Chandra Shit

1. Delivered an invited talk at “World Congress on Cardiac Sciences-2018” during November 28 – 29, 2018 at J.N. Tata Auditorium, IISc., Bangalore.

Title of talk: Modeling of blood flow and heat transfer through diseased artery under magnetic environment.

3. B. Seminar/Workshop/Conference/Symposium Attended / Organized:

Prof. Arindam Bhattacharyya

1. Organized National Level Teachers’ Enrichment Workshop during 23rd May to 6th June, 2018, at Calcutta Mathematical Society organized jointly by Calcutta Mathematical Society and The (Indian) Mathematics Consortium, Pune.
2. Organized a National Seminar at Calcutta Mathematical Society in 7th-8th December 2018.
3. Acted as an organizing committee member of conference on “Current Trends in Mathematics and its Applications” held on 8th March, 2019 in Department of Mathematics, Jadavpur University.

Dr. Manasi Mandal

Organized a national conference on “Current Trends in Mathematics and its Applications” held on 8th March, 2019 in Department of Mathematics, Jadavpur University.

Dr. Nilanjana Mahata

Organized a national conference on “Current Trends in Mathematics and its Applications” held on 8th March, 2019 in Department of Mathematics, Jadavpur University.

Prof. Subenoy Chakraborty

Organized a one-day seminar on “Physical Problems and the Role of Mathematics” at the Department of Mathematics, Jadavpur University on 18th January, 2019.

3. C. Orientation Courses / Refresher Courses Attended / Organized:

Prof. Kallol Paul

Invited talk titled “On Hahn Banach Theorem and its Applications in Geometry of Banach space” delivered in UGC-HRDC, North Bengal University organized Refresher Course in Mathematics during December 10-11, 2018 at North Bengal University.

4. A. Paper Published in Journals and Books:

Prof. Arindam Bhattacharyya

1. Datta Choudhury, Shouvik; Dey, Santu; Bhattacharyya, Arindam; “Volume of a pentahedron revisited”. *Palest. J. Math.* 8 (2019), no. 2, 275–278.
2. Bhattacharyya, Arindam; Pahan, Sampa; “On a class of $N(k)$ -mixed generalized quasi-Einstein manifolds”. *Acta Comment. Univ. Tartu. Math.* 22 (2018), no. 2, 167–178.
3. Pahan, Sampa; Pal, Buddhadev; Bhattacharyya, Arindam; “Characterization on a non-flat Riemannian manifold”. *Proc. Nat. Acad. Sci. India Sect. A* 88 (2018), no. 1, 41–47.
4. Dey, Santu; Pal, Buddhadev; Bhattacharyya, Arindam; “Regularization of heptahedra using geometric element transformation method”. *Eur. J. Pure Appl. Math.* 11 (2018), no. 1, 315–330.

Prof. Bibhas C. Giri

1. B.C. Giri, C. Mondal, T. Maiti; "Analysing a closed-loop supply chain with selling price, warranty period and green sensitive consumer demand under revenue sharing contract", *Journal of Cleaner Production* 190 (2018) 822-837.
2. H. Pal, S. Bardhan, B.C. Giri; "Optimal replenishment policy for non-instantaneously perishable items with preservation technology and random deterioration start time", *International Journal of Management Science and Engineering Management* (2018) 13(3) 188-199.
3. P. Biswas, S. Pramanik, B.C. Giri; "Multi-attribute group decision making based on expected value of neutrosophic trapezoidal numbers", *Neutrosophic Sets and Systems* 19, (2018) 40-46.
4. K. Mondal, S. Pramanik, B.C. Giri; "Hybrid binary logarithm similarity measure for MAGDM problems under SVNS assessments", *Neutrosophic Sets and Systems* 20, (2018) 12-25.
5. B.C. Giri, S.K. Dey; "Game theoretic analysis of a closed-loop supply chain with backup supplier under dual channel recycling", *Computers & Industrial Engineering*, 129(2019) 179-191.
6. O. Dey, B.C. Giri; "A new approach to deal with learning in inspection in an integrated vendor-buyer model with imperfect production process", *Computers & Industrial Engineering*, 131(2019) 515-523.
7. B.C. Giri, B. Sarker; "Coordinating a multi-echelon supply chain under production disruption and price-sensitive stochastic demand", *Journal of Industrial and Management Optimization*, 15(4)(2019) 1631-1651.
8. B.C. Giri, C. Mondal, T. Maiti; "Optimal product quality and pricing strategy for a two-period closed-loop supply chain with retailer variable markup", *RAIRO Operations Research*, 53(2) (2019) 609-626.
9. S. Bardhan, H. Pal, B.C. Giri; "Optimal replenishment policy and preservation technology investment for a non-instantaneous deteriorating item with stock-dependent demand", *Operational Research* 19(2) (2019) 347-368.
10. P. Biswas, S. Pramanik, B.C. Giri; "NH-MADM strategy in neutrosophic hesitant fuzzy set environment based on extended GRA", *Informatica*30(2) (2019) 213-242.
11. P. Mandal, B.C. Giri; "A two-warehouse integrated inventory model with imperfect production process under stock-dependent demand and quantity discount offer", *International Journal of Systems Science: Operations & Logistics*, (2019) 15-26.

Prof. Farook Rahman

1. H Shaw, F Rahaman, Sabiruddin Molla, Amna Ali; "Gravitational Collapse of an Interacting Vacuum Energy Density with an Anisotropic Fluid", *Physics of the Dark Universe*, 24, 100291(2019)
2. N Singh, F Rahaman S K Maurya; "A generalized Finch-Skea class one static solution", *Eur.Phys.J. C*, 89, 381 (2019)
3. Suparna Biswasa, Shounak Ghosha, B.K. Guha, S Ray, Farook Rahaman; "Strange stars in Krori-Barua spacetime under f(R,T) gravity", *Annals Phys.* 401, 1 (2019)
4. F Rahaman, Sabiruddin Molla, Amna Ali, Saibal Ray; "Solar system tests in constraining parameters of dyon black holes", *Eur. Phys.J. C*78, 948 (2018)
5. D Deb, Farook Rahaman, B K Guha, S Ray; "Anisotropic strange stars under simplest minimal matter-geometry coupling in the f(R,T) gravity", *Phys.Rev.D* 97, 084026 (2018)

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6. D Deb, Farook Rahaman, B K Guha, S Ray; "Strange stars in $f(R,T)$ gravity", *JCAP*, 03(2018)044 (2018)
7. D Deb, S Ray, Farook Rahaman K K Guha, Roychowdhury; "A new model for strange stars", *Gen.Rel.Grav.* 50, 112 (2018)
8. Kimet Jusufi, Nayan Sarkar, Farook Rahaman, Ayan Banerjee, Sudan Hansraj; "Deflection of light by black holes and massless wormholes in massive gravity", *C* 78, 349 (2018)
9. T Manna, Farook Rahaman, S Molla, J Bhadra, Hasrat Shah; "Strong Lensing of a Regular Black Hole with an Electrodynamics Source" *Gen.Rel.Grav* 50, 54 (2018)
10. D Deb, Farook Rahaman, B K Guha, S Ray, Maxim Yu Khlopov; "Anisotropic strange stars in the Einstein-Maxwell spacetime" *Eur.Phys.J.C* 78, 465 (2018)
11. Kimet Jusufi, Farook Rahaman, A Banerjee; "Semiclassical gravitational effects on the gravitational lensing in the spacetime of topological defects", *Annals of Physics*, 389, 219-233 (2018)
12. S Ghosh, B K Guha, Farook Rahaman, S Ray; "Gravastars with higher dimensional spacetimes", *Annals of Physics*, 394, 230 (2018)
13. H A Shah, Farook Rahaman; "Gravitational Collapse of Interacting Combination of Dark Matter and Dark Energy in the Context of Braneworld Regime", *Mod.Phys.Lett.A* 33 , 23, 1850132 (2018)
14. N Paul, S S De, Farook Rahaman; "Cosmological solutions and finite time singularities in Finslerian geometry" *Mod.Phys.Lett.A* , 33, 1850046 (2018)
15. Ksh N Singh, N Sarkar, N Pant, Farook Rahaman; "Relativistic fluid spheres with Karmarkar condition" *Int.J.Mod.Phys.D* , 1950003 (2018)
16. F Ahmed, F Rahaman, S Sarkar "Black holes/naked singularities in four-dimensional non-static spacetime and the Energy-Momentum distributions" *Eur.Phys.J. A*54 (2018) no.12, 224
17. F Rahaman, S Sarkar, N Singh, N Pant; "Generating functions of Wormholes" *Mod.Phys.Lett. A*34, 1950010 (2019)
18. S Ray, A Aziz, F Rahaman, M. Khlopov, B K Guha; "Constraining values of bag constant for strange star candidates" *Int.J.Mod.Phys.D*, 28, 1941006 (2019)
19. N Sarkar, S Sarkar, F Rahaman, N Singh; "Anisotropic fluid spheres satisfying the Karmarkar condition" *Mod.Phys.Lett. A*, 33, 1950113 (2019)
20. N Sarkar, S Sarkar, F Rahaman, P Kuhfitig; "Possible formation of wormholes from dark matter in an isothermal galactic halo and void" *Mod.Phys.Lett. A*, 34, 1950188 (2019)
21. T Manna, F Rahaman, Sabiruddin Molla, Amna Ali; "Gravitational Lensing, Precession of Periapsis and Time Delay due to Wormhole in Quintessence Polytopic Spacetime" *Mod.Phys.Lett.A*, to appear (2019)
22. M Azam, F Rahaman, M Sami, J Bhatt; "The Planckonions" *Mod.Phys.Lett.A*, to appear (2019)
23. H Shaw, Huafeisun, F Rahaman, F Ahmed; "Gravitational collapse of dust fluid and dark energy in the presence of curvature: B H formation", *Mod.Phys.Lett.A*, to appear (2019)
24. N Singh, P Bhar, F Rahaman, Modhugamba; "A generalized class one static solution", *Heliyon*, 5, e01929 (2019)
25. S Roychoudhuri, D Deb, F Rahaman, S Ray, B K Guha; "Charged anisotropic strange stars in Finslerian geometry", *Eur.Phys. J. C*, to appear (2019)

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26. N Singh, N Sarkar F Rahaman, S Sarkar; “Compact star models in class I spacetime”, *Eur.Phys. J. C*, to appear (2019)
27. S Biswas, D Shee, F Rahaman, S Ray; “Relativistic strange stars in Tolman-Kuchowicz spacetime” *Annals of Physics*, to appear (2019)
28. S Ghosh, S Basu, F Rahaman, S Ray, B K Guha; “Gravastars in (3+1) dimensions admitting Karmarkar condition”, *Annals of Physics*, to appear (2019)
29. A Aziz, F Rahaman, S Ray, B K Guha; “Neutron star under homotopy perturbation method”, *Annals of Physics*, to appear (2019)
30. S Biswas, S Ghosh F Rahaman, S Ray, B K Guha; “Gravastars in (3 + 1) dimensions admitting Karmarkar condition”, *Annals of Physics*, to appear (2019)

Prof. Kallol Paul

1. P. Bhunia, S. Bag and K. Paul; “Numerical radius inequalities and its applications in estimation of zeros of polynomials”, *Linear Algebra Appl.*, 573 (2019) (Online-15.03.2019)166 -177.
2. D. Sain, K. Paul, A. Mal and A. Ray; “A complete characterization of smoothness in the space of bounded linear operators”, *Linear Multilinear Algebra*, 08.03.2019. <https://doi.org/10.1080/03081087.2019.1586824>.
3. K. Paul, A. Mal and Pawel Wójcik; “Symmetry of Birkhoff-James orthogonality of operators defined between infinite dimensional Banach spaces”, *Linear Algebra Appl.*, 563 (2019) (Online-03.11.2018) 142-153.
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Prof. Nandadulal Bairagi

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Prof. Priti Kumar Roy

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Prof. Subenoy Chakraborty

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Prof. Sudeshna Banerjea

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Prof. Sujit Kumar Sardar

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Prof. Abhijit Lahiri

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Prof. Dipak Kesh

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Dr. Sukhendu Kar

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Dr. Gopal Chandra Shit

1. N. K. Ranjit, G. C. Shit: "Entropy generation on electromagnetohydrodynamic flow through a porous asymmetric micro-channel", *European Journal of Mechanics / B Fluids (Elsevier)*, vol.-77 (2019) 135 – 147, SCI, Impact Factor: 1.984.
2. G. C. Shit, S. Maiti, M. Roy, J. C. Misra, "Pulsatile flow and heat transfer of blood in an overlapping vibrating atherosclerotic artery": A numerical study, *Mathematics and Computers in Simulation (Elsevier)*, vol.-166 (2019) 432 – 450, SCI, Impact Factor: 1.409.
3. N.K. Ranjit, G. C. Shit, D. Tripathi: "Entropy generation and Joule heating of two layered electroosmotic flow in the peristaltically induced micro-channel", *International Journal of Mechanical Sciences (Elsevier)*, vol.-153-154 (2019) 430 – 444, SCI, Impact Factor: 3.570.

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4. G. C. Shit, S. Mukherjee: "MHD Graphene-Polydimethylsiloxane Maxwell nanofluid flow in a squeezing channel with thermal radiation effects", *Accepted in Applied Mathematics and Mechanics (Springer)*, (2019), SCI, Impact Factor: 1.538.
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6. G. C. Shit, Sreeparna Majee: "Magnetic field interaction with blood flow and heat transfer through diseased artery having abdominal aortic aneurysm", *European Journal of Mechanics / B Fluids (Elsevier)*, vol.-71 (2018) 1 – 14, SCI, Impact Factor: 1.984.
7. G. C. Shit, Sreeparna Majee: "Computational modeling of MHD flow of blood and heat transfer enhancement in a slowly varying arterial segment", *International Journal of Heat and Fluid Flow (Elsevier)*, vol.-70 (2018) 237 – 246, SCI, Impact Factor: 2.103.
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11. Bhatti, M.M, G. C. Shit: Mathematical modeling of heat and mass transfer effects on MHD peristaltic propulsion of two-phase flow through a Darcy-Brinkman-Forchheimer Porous medium, *Advanced Powder Technology (Elsevier)*, vol.-29 (2018) 1189-1197, SCI, Impact Factor: 2.943.

4. B. Books/Monographs Published:

Prof. Kallol Paul

K. Paul and D. Sain, Book chapter titled "On Birkhoff-James orthogonality in the geometry of Banach spaces" in the book "Advanced Topics in Mathematical Analysis", 2018, CRC Press, ISBN 9780815350873 - CAT# K345827.

Prof. Priti Kumar Roy

1. *Mathematical Models for Therapeutic Approaches to Control Psoriasis*, Springer, Published in 2019. (Role: Author).
2. *Mathematical Analysis and Applications in Modeling – ICMAAM*, Springer, Accepted 2018, *in press*. (Role: Editor).

Dr. Sukhendu Kar

S. Jana, S. Kar & S. Mandal: *Mathematics for Competitive Examinations*; Fifth Edition – 2017; Academic Publishers; ISBN 978-81-933395-8-9; Pages – 680.

5. Major Achievements:

Prof. Arindam Bhattacharyya

Elected Secretary of Calcutta Mathematical Society for the term 2018-2021.

Prof. Bibhas C. Giri

Best Paper award at the 1st International Conference on Frontiers of Operations Research & Business Studies (FORBS 2018), Calcutta Business School, 11-13 October, 2018, Calcutta Business School, India

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Prof. Kallol Paul

1. Visited Shanghai University, Shanghai, China to collaborate with Prof. Qing-Wen Wang for two weeks during 14th July 2018 to 28th July 2018.
2. Visited Indian Statistical Institute, Bangalore Centre to Collaborate with Professor T.S.S.R.K. Rao during 18th June 2018 to 30th June 2018.
3. Collaboration with Professor Jacek Chmielinsky of Pedagogical University of Krakow, Poland.

Prof. Nandadulal Bairagi

1. Received NBHM full support for attending International Congress of Mathematicians held in Rio De Janeiro, Brazil from 1-9th August 2018.
2. Received full support from Czech Academy of Sciences for collaborative research programme with Institute of Mathematics, Czech Academy of Sciences, Brno, Czech Republic for the period 18th May to 17th June 2018.
3. Received full support from Beijing Technology and Business University, Beijing, China for collaborative research programme with the Mathematics Department for the period 28th February to 9th March 2019.

PHYSICS

Phone : + 91-33-2413-8917
Int. : 2457-2448
H.O.D. : Prof. Debasish Lohar
E-mail : hod.physics@jadavpuruniversity.in

Over the time the Department of Physics has become a significant Centre of academic activities involving different branches of Physics. It has acquired distinction in research covering both theoretical and experimental Physics. It is ranked 2nd among all the Physics departments of all Indian universities (NISTADS, 2010) and ranked 11th among combined universities and research institutes (Current Science, vol. 97, no. 6 page 25, 2009) in India. It has received the following prestigious awards:

- UGC DSA II: 170 Lakhs (2014-2019)
- DST- PURSE

2. A. Courses Offered:

- i. B. Sc., Physics (Honours)
- ii. M. Sc., Physics (Day & Evening)
- iii. M. Sc., Electronics
- iv. Post M. Sc. Diploma in Medical Physics
- v. Ph.D.

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B: Research Centers/Schools:

1. Condensed Matter Physics Research Center (CMPRC).
Coordinator: **Prof. Brajadulal Chattopadhyay.**
2. Relativity and Cosmology Research Center(RCRC).
Coordinator: **Dr. Avijit Mukherjee and Dr. Somen Mondal**
3. Nuclear & Particle Physics Research Center(NPPRC).
Coordinator: **Prof. Argha Deb.**

C. Number of Faculty Members: 35

2. A. List of Faculty Members and their area of research activity:

Sl. No.	Name	Designation	Specialization
1.	Dr. Argha Deb	Professor	Nuclear and High Energy Physics
2.	Dr. Ajay Kumar Ghosh	Professor	Condensed Matter Physics
3.	Dr. Asim Kumar Ghosh	Professor	Strongly Correlated Electrons and Magnetism
4.	Dr. Basudev Ghosh	Professor	Plasma Physics and Electronics.
5.	Dr. Brajadulal Chattopadhyay	Professor	Biophysics, BioConcreteTechnology
6.	Dr. Debasish Biswas	Professor	Laser Spectroscopy, Atomic and Molecular Physics
7.	Dr. Debasish Lohar	Professor Head of the Department	Atmospheric Physics
8.	Dr. Kalyan Kumar Chattopadhyay	Professor	Nanoscience and Technology, Chattopadhyay Semiconductors
9.	Dr. Nabin Baran Manik	Professor	Organic Solar Cell, Low Temperature Characterisation of opto-devices, Instrumentation
10.	Dr. Ruma Ray	Professor	Experimental Condensed Matter Physics, Magnetism
11.	Dr. Sukhen Das	Professor	X-ray Crystallography (Powder diffraction), Biophysics Biological membrane), Glass and Ceramic Materials
12.	Dr. Sanjay Kumar	Professor	Electronics, Condensed Matter Physics (Expt), Nano-magnetism
13.	Dr. Jayoti Das	Professor	Gas sensing application, Porous silicon, Fabrication of Multilayer graphene thin film.
14.	Dr. Joydeep Chowdhury	Professor	Molecular Spectroscopy
15.	Dr. Mitali Mandal	Professor	Heavy Ion Physics Environmental Radioactivity
16.	Dr. Avijit Mukherjee	Associate Professor	String Theory and Mathematical Physics
17.	Dr. Sk. Saiyad Ali	Associate Professor	Astrophysics and Cosmology

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18.	Dr. Pabitra Kumar Paul	Associate Professor	Langmuir-Blodgett film, Molecular spectroscopy
19.	Dr. Subhankar Ray	Associate Professor	Theoretical Physics, Statistical Physics, Mathematical Physics
20.	Dr. Sulava Bhattacharyya	Associate Professor	Condensed Matter Physics
21.	Dr. Tapas Kumar Ballav	Associate Professor	Biomedical Instrumentation, Medical Modeling, Bio Physics.
22.	Dr. Sanat Karmakar	Associate Professor	Soft Condensed Matter Physics and Biophysics
23.	Dr. Partha Pratim Ray	Associate Professor	Materials Science (LB film)
24.	Dr. Subhadipta Mukhopadhyay	Associate Professor	Condensed Matter Physics, Electronics
25.	Dr. Puspendu Sahu	Associate Professor	X-ray diffraction, Electron Back Scattered Diffraction, Grain Boundary Engineering
26.	Dr. Abhijit Samanta	Assistant Professor	High Energy Physics
27.	Mr. Abiral Tamang (on study leave)	Assistant Professor	Biophysics, Materials Science
28.	Dr. Bharati Tudu	Assistant Professor	Magnetic materials And Magnetization dynamics, X-ray scattering (Experimental)
29.	Dr. Dhruva Banerjee	Assistant Professor	Theoretical Physics
30.	Dr. Dipankar Mandal (on lien)	Assistant Professor	Nanopiezotronics, Ferroelectric materials, Energy Harvesting devices
31.	Dr. Saikat Kumar Seth	Assistant Professor	X-ray Crystallography and Crystal engineering
32.	Dr. Sarmishtha Mandal	Assistant Professor	Condensed Matter Physics
33.	Dr. Soumen Mondal	Assistant Professor	Astrophysics, Accretion processes, Gravitational wave
34.	Dr. Subrata Sarkar	Assistant Professor	Material Science
35.	Dr. Kaustab Das (DST Inspire)	Assistant Professor	Nanoscience and Technology, Material Science

Publications

- “Crystallinity mediated variation in optical and electrical properties of hydrothermally synthesized boehmite (γ -AlOOH) nanoparticles”. Shubham Roy, Souravi Bardhan, Kunal Pal, Saheli Ghosh, Paulami Mandal, Santanu Das, Sukhen Das, *Journal of Alloys and Compounds*, 763, pp-749-758, 2018.
- “Bio-Waste Crab Shell extracted Chitin Nanofiber Based Superior Piezoelectric Nanogenerator”. Nur Amin Hoque, Pradip Thakur, Prosenjit Biswas, Minarul Shaikh, Swagata Roy, Biswajoy Bagchi, Sukhen Das, Partha Pratim Ray. *Journal of Materials Chemistry A, J.Mater.Chem.A*, 6, pp - 13848–13858, 2018.
- “In Situ synthesized SrF₂/Polyvinylidene Fluoride nanocomposite film based Photo-Power Cell with imperious performance and stability”, Farha Khatun, Pradip Thakur, Nur Amin Hoque, Arpan Kool, Swagata Roy, Prosenjit Biswas, Biswajoy Bagchi, Sukhen Das, *Electrochimica Acta*, 282, pp - 194-204, 2018.

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Nur Amin Hoque, Prosenjit Biswas, Kunal Pal, Pradip Thakur, Kaustuv Das, Parimal Karmakar, Sukhen Das, *Colloids and Surfaces B: Biointerfaces* 171 (2018) 300–307

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- B. Mahanty, K. Maity, S. Sarkar and Dipankar Mandal, “Human Skin Interactive Self-powered Piezoelectric e-skin based on PVDF/MWCNT Electrospun Nanofibers for Non-invasive Health Care Monitoring”, *Material Today: Proceedings*, 2019 (Accepted on 3rd Feb., 2019), Ms. Ref. No.: MTP-32R1.

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PATENT

Kalyan Kumar Chattopadhyaya

Large Scale synthesis of Cobalt Pthalocyanine nanotubes for supercapacitor applications, patent number: 201931011233, (2019), U. K. Ghorai, S. Mondal, J. Sarkar, A. Gain, K. K. Chattopadhyay.

AWARD

Joydeep Chowdhury

Elected as Fellow of West Bengal Academy of Sciences & Technology (FASc &T) for the year 2018 in Physical Sciences.

Dipankar Mandal

India Top Cited Author Award 2019 from IOP publishing house, UK.

GRANT

Bharati Tudu

International travel grant from DST-SERB for attending international conference “9th Joint European Magnetic Symposia (JEMS) 2018”, held in Mainz, Germany during 03rd -7th September 2018.

BOOK/CHAPTER:

Debasish Lohar

Computational Methods for Physics MEDTECH Publisher, A Division of Scientific International Pvt Ltd., ISBN - 378-93-88716-17-8, March 2019, 330p.

Kalyan Kumar Chattopadhyay

“Thermoelectric Materials: Improving Energy Efficiency and Decreasing CO₂ Emissions”, Diptonil Banerjee, Kalyan K Chattopadhyay, *Encyclopedia of Renewable and Sustainable Materials*, Elsevier (in press) (2019).

Kalyan Kumar Chattopadhyay

“Diamond-Like Carbon: An Efficient Cost-Effective Material for Beverage Storing”, KK Chattopadhyay, D Banerjee, *Trends in Beverage Packaging*, (Elsevier) (2019) 135-161

Kalyan Kumar Chattopadhyay

“Nanofluid in Energy Harvesting and Related Applications”, D. Mitra, K. K. Chattopadhyay, P Chattopadhyay, *Encyclopedia of Renewable and Sustainable Materials*, Elsevier (2018).

Kalyan Kumar Chattopadhyay

“Hybrid Inorganic Organic Perovskites: A Low-Cost-Efficient Optoelectronic Material”, (Chapter 5) *Perovskite Photovoltaics, Basic to Advanced Concepts and Implementation* (2018), Pages 123-162, Diptonil Banerjee and Kalyan Kumar Chattopadhyay.

Brajadulal Chattopadhyay

“Genetically-enriched microbe-facilitated self-healing nano-concrete”. Elsevier Book titled *SMART NANOCONCRETES AND CEMENT-BASED MATERIALS: PROPERTIES, MODELLING AND APPLICATIONS*. Edited by Nguyn Tun Anh”. (In Press).

Soumen Mondal

A Pseudo-Newtonian Approach to Study the Accretion Processes Around Kerr Black Holes, “Exploring the Universe: From Near Space to Extra-Galactic”, *Astrophysics and Space Science Proceedings*, Volume 53. ISBN 978-3-319-94606-1. Springer International Publishing AG, part of Springer Nature, 2018, p. 195.

Research Projects: (Ongoing/Completed)

Sukhen Das

Investigations on the development of Tetracycline-entrapped Calcium Phosphate Nanoparticle (Tet-CPNP) as a potential Drug against Tetresistant Pathogenic Bacterial Diseases, with special Emphasis on its Antibacterial Potency in Mice Infected with Diarrhea-causing and tetresistant Bacteria and its mechanism of action on the resistant bacteria. Funding agency DBT.

Sukhen Das

Synthesis and Characterization of Piezoelectric & Photoactive Nano-composite and their Application in Root canal disinfection. Funding agency WBDST.

Sukhen Das

Waste water remediation: novel use of piezocatalytic ceramic-polymer nanocomposite. Funding agency DST-SERB.

Kalyan Kumar Chattopadhyay

Synthesis of MgO-Carbon Refractory for Steel Making; Funding Agency: Steel Authority of India-RDCIS (SAIL-RDCIS).

Kalyan Kumar Chattopadhyaya

Nanomismission project in Nanoscience & Technology for PG teaching and Research - DST-Nano Mission. Funding Agency: DST.

Kalyan Kumar Chattopadhyaya

Low dimensional metal chalcogenides and its hybrids for energy storage and energy harvesting applications. Funding Agency: RUSA 2.0.

Asim Kumar Ghosh

Studies on Heisenberg spin chains with Dzyaloshinskii-Moriya interaction in the presence of fields, Amount: Rs. 18,75,008.00, Funding Agency: DAE BRNS (No. 37(3)/14/16/2015/BRNS, 27.7.2015) Status: Completed.

Brajadulal Chattopadhyay

Development of Microbial-incorporated 100% Fly ash Geopolymer: A Higher Strength and more Durable Cement-alternative for sustainable Construction Technology– Funding agency RUSA 2.0 of Jadavpur University (2019-2020).

Brajadulal Chattopadhyay

A Study of Anti-Hyperglycemic properties of Gymnedenia Orchidis Lindl of Orchdaceae Family – Funding agency Research Society for the study of Diabetes in India (RSSDI) from January 2017 to December 2018.

Joydeep Chowdhury

Fabrication of highly reproducible SERS active substrates through controlled plasmonics and their applications in ultrasensitive chemical and biological sensing [Sanction Order No.: 03(1437)/18/EMR-II; Total outlay: 21.82 Lakh], Funding agency CSIR.

Joydeep Chowdhury

Lab on chips for trace detections of arsenic, melamine, heavy ions and in one click diagnostic applications using SERS [Sanction Order No.: 202 (Sanc.)/ST/P/S&T/16G-22/2017, Total outlay: 13.58 Lakh, (2018-2021)]. Funding agency DHESTBT Govt. of West Bengal

Joydeep Chowdhury

Moving beyond the folds: Design of DNA origamis as breadboard mimicking scaffolds and their interactions with nanoparticles through SERS [Sanction Order No.: EMR/ 2017/000901, Total outlay: 60.58 Lakh, (2018-2021)]. Funding agency DST-SERB.

Mitali Mandal

Study on QGP and Its Properties Using Correlation and Fluctuation Phenomena in Ultra-relativistic Heavy Ion Collisions. Funding agency DST, Amout Rs. 3.276 Lakh

Mitali Mandal

Assessment of Radiological Impact of Environmental Radon in Some Selected Regions of West Bengal. Funding agency DST (RUSA 2.0), Amout Rs. 5 lakh

Kaustuv Das

Study of zinc oxide thin films as gas sensor under high relative humidity, WB DST funded project, Dr. Kaustuv Das (P.I.) and Dr. J.Sengupta and Dr. U.N. Nandi (Co P.I), 2018-2021, 6.21 lakhs.

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Kaustuv Das

Development of Nanomaterial based Gas Sensor for Environment Monitoring, JU RUSA 2.0 UGC funded project, Dr. Kaustuv Das (P.I.), 2019-2020, 5.36 lakhs.

Kaustuv Das

Fabrication of Infrared Photo-detector based on 2D systems and Tuning the Detection Window by coupling with Nanostructures, SERB DST funded project, Dr. A. Singha (P.I) Dr. Kaustuv Das (Co PI), 2,018-2021, 14.85 lakhs for JU (Total: 65.18)

Sanat Karmakar

Studies on the interaction of antimicrobial peptide with phospholipid membranes. Funding agency and reference No.: DBT, Govt. of India BT/PR8475/BRB/10/1248/2013 Sanctioned budget (Rs): 4305000, Duration: 21.06.2016-21.06.2019

Soumen Mandal

Study of irregular radio galaxy, Funding agency UGC RUSA 2.0, Amount Rs. 4,44,800.

Nabin Baran Manik

Study on the Effect of Carbon Nanotubes and Nanoparticles on Organic Photodetector, Funding agency RUSA 2.0, 2019 – ongoing, Rs.6.0 Lakh.

Pabitra Kumar Paul

Photophysical investigations of the effects of nano-clay minerals on artificial biomembrane prepared by Langmuir-Blodgett method, Rs 32,34,000/- Funding Agency: SERB-DST.

Saikat K. Seth

Crystal Engineering of Some Organic Co-crystals: Structural Resemblance and Theoretical Studies, Funding Agency: RUSA 2.0.

Bharati Tudu

Understanding the evolution of perpendicular magnetic anisotropy and domain structures in ferromagnetic multilayer thin films: Amount: 53.9 Lac, Funding agency: DST-SERB.

Bharati Tudu

Perpendicularly Polarized Spin Transport in Semiconductors: An Investigation using Electrical Spin Injection and Detection, Amount: 40.19 Lac, Funding agency: DST-SERB

Bharati Tudu

Investigation of thermally robust (Co/X)_n thin films for perpendicularly magnetized tunnel junctions, Amount: 06 Lac, Funding agency: RUSA 2.0

COMPLETION OF PHDs (AWARDED)

Sukhen Das: Monalisa Chakraborty

Sukhen Das: Nur Amin Hoque

Sukhen Das: Sumanta Day

Nabin Baran Manik: Sujata Chakraborty

Nabin Baran Manik: Ashish Kumar Mondal

Jayoti Das : Chandra Mukherjee

Joydeep Chowdhury: Shubhendu, Gopa and Bipan

Mitali Mandal: Soma Ghosh (Biswas)

Partha Pratim Ray: Dr. Joydeep Datta

Partha Pratim Ray: Dr. Mrinmay Das

Puspendu Sahu: Bhupeshwar Mahato

Dipankar Mandal: Prakriti Adhikari

Dipankar Mandal: Sujoy Kumar Ghosh

Dipankar Mandal: Md. Mehebab Alam

Dipankar Mandal: Rajat Patra

Conference Organised:

Kalyan Kumar Chattopadhyaya

National Conference in Recent Developments in Nanoscience and Nanotechnology, 29-31 January, 2019, at Jadavpur University; Convenor: Prof. K.K. Chattopadhyaya

Invited Talk/Paper/Oral Presentation/Attended Conferences:

Kalyan Kumar Chattopadhyaya

Prof. K. K. Chattopadhyaya delivered an Invited Lecture in the National Conference entitled “Condensed Matter Days 2018” during 27-29th August, 2018 at Burdwan University.

Kalyan Kumar Chattopadhyaya

Prof. K.K. Chattopadhyaya Chaired a session in the National conference entitled “Condensed Matter Days 2018” during 27-29th August, 2018 at Burdwan University.

Kalyan Kumar Chattopadhyaya

Prof. K.K. Chattopadhyaya delivered an Invited Lecture in the Nanotechnology Workshop on 4th August, 2018 at Kalyani University.

Kalyan Kumar Chattopadhyaya

Prof. K.K. Chattopadhyaya delivered an Invited Lecture in the National Conference “Spectrum” (2018) at St. Xaviers College, Kolkata.

Kalyan Kumar Chattopadhyaya

Prof. K.K. Chattopadhyaya delivered an Invited Lecture in the National conference entitled Biomedical Engineering in Human Welfare at Jadavpur University, on 3rd August, 2018.

Kalyan Kumar Chattopadhyaya

Prof. K.K. Chattopadhyaya Chaired a session in the National conference entitled “Advances in Materials Research and Simulation” at Indian Association for the Cultivation of Science, Kolkata, 25th May (2018).

Kalyan Kumar Chattopadhyaya:

Prof. K.K. Chattopadhyaya delivered an Invited Lecture in the International Conference entitled ‘Recent Trends in Science Towards Sustainable Development’, organized by the Indian Chemical Society during 6-7th August, 2018 at APC college, Kolkata.

Kalyan Kumar Chattopadhyaya

Prof. K.K. Chattopadhyaya delivered an invited Lecture at Nano, 2018 - Advanced Techniques in Nano Science and Technology (3rd - 8th December, 2018) at Institute of Nano Science and Technology (INST), Chandigarh.

Kalyan Kumar Chattopadhyaya

Prof. K.K. Chattopadhyaya delivered an invited Lecture at the IASST, Assam, on May 11 (2018).

Kalyan Kumar Chattopadhyaya

Prof. K.K. Chattopadhyay delivered an Invited Lecture at the Induction programme in the The Govt. College of Engineering and Ceramic Technology, 1 August (2019)

Kalyan Kumar Chattopadhyaya

Prof. K.K. Chattopadhyay delivered an Invited Lecture at the International Conference on Current Trends in Materials Science and Engineering during 18-20 July, 2019 (CTMSE 2019) at S.N. Bose National Centre for Basic Sciences.

Kalyan Kumar Chattopadhyaya

Prof. K.K. Chattopadhyay delivered an Invited Lecture at the Refresher Course of Applied Chemistry, of University of Calcutta, on 6th Sept (2019).

Kalyan Kumar Chattopadhyaya

Prof. K.K. Chattopadhyay delivered Keynote lecture and was session chair to 1st International Conference on Clean and Renewable Energy (ICCARE 2019) on 12th July 2019, NIT Dugapur.

Kalyan Kumar Chattopadhyaya

Prof. K.K. Chattopadhyay delivered 10th S.P. Sengupta Memorial Lecture, at CSIR CGCRI, Organised by MRSI Kolkata Chapter (2019).

Kalyan Kumar Chattopadhyaya

Prof. K.K. Chattopadhyay delivered Keynote lecture in the conference “Frontiers in Solid State Physics” on February 22, (2019) at IACS, Kolkata.

Kalyan Kumar Chattopadhyaya

Prof. K.K. Chattopadhyay delivered an invited Lecture in the National Conference entitled “Contemporary Issues on Natural and Anthropocentric Effect in Environmental Crisis” held on 15–16th March, 2019, at Tehatta Govt. College.

Kalyan Kumar Chattopadhyaya

Prof. K.K. Chattopadhyay delivered an Invited Lecture at Emerging Frontiers in Materials Science (EFMS-2019) February 15-16, Behala College

Kalyan Kumar Chattopadhyaya

Prof. K.K. Chattopadhyay delivered an invited Lecture at Nano, 2018 - Advanced Techniques in Nano Science and Technology (3rd-8th December, 2018) at Institute of Nano Science and Technology (INST), Chandigahr.

Kalyan Kumar Chattopadhyaya

Prof. K.K. Chattopadhyay delivered an invited Lecture at the IASST, Assam, on May 11 (2018).

Kalyan Kumar Chattopadhyaya

Prof. K.K. Chattopadhyay delivered an invited Lecture at the Calcutta University, dept. of Electronic Science, March 29 (2019).

Kalyan Kumar Chattopadhyaya

Prof. K.K. Chattopadhyay delivered an invited Lecture at Vidyasagar College for Women, on February, 2 (2019).

Abiral Tamang

Oral presentation on “Redox sensing in live cells through microfluidic non-endocytic delivery of quantum dots” at the Bionano-Summer School held in Hirschegg, Kleinwalsertal, Austria between 12th to 19th of August, 2018.

Mitali Mandal

Attended International Conference on Nuclear, Particle and Accelerator Physics (ICNPAP-2018), 23-26 October, 2018, Ranchi, India.

Sanat Karmakar

International conference on Nanotechnology, Institute of fire and safety Engineering, Brajolahalk, Haldia, 16-17th November, 2018.

Sanat Karmakar

International Conference on Complex fluids and soft Matter (Compflu-2018), Department of Chemical Engineering, Indian Institute of Technology, Roorkee, 6-9th December, 2018.

Sanat Karmakar

International conference on complex and functional materials ICCFM-2018. S. N. Bose Centre for Basic Sciences, Kolkata, 13-16th December, 2018.

Sanat Karmakar

Indian Biophysical Society meeting, IISER, Kolkata, 15-17 March, 2019.

Soumen Mandal

Presented a paper entitled Exploring the dissipative shocks in relativistic accretion flows around black holes' in the international conference on 'Exploring the Universe: Near Earth Space Science to Extra-Galactic Astronomy' held at S N Bose National Centre For Basic Sciences during 14-17 November 2018.

Soumen Mandal

Attended and presented a paper entitled "On the properties of dissipative shocks in relativistic accretion flows around black holes" in the XXXVII Meeting of Astronomical Society of India, held at CHRIST (Deemed to be University), Bengaluru Feb 18-22, 2019.

Saiyad Ali

Participated and presented a poster on "Studying the Galactic synchrotron emission using multi-frequency foreground simulation for 150 MHz GMRT observation" in the international conference on "The Meter Wave-length Sky - II (MWSKY-II)" NCRA, Pune, India, March 18-22, 2019.

Saiyad Ali

Participated in the One-Day (State-Level) conference on "Recent Trends in Relativity & Cosmology", Relativity & Cosmology Research Centre, Jadavpur University, Kolkata, 15th March, 2019.

Saiyad Ali

Participated in the conference on "Gravity at Different Length Scales ", School of Physical Sciences Indian Association for the Cultivation of Science, Jadavpur, Kolkata, February 25-27, 2019.

B. D. Chattopadhyay

Avishek Chatterjee, Saroj Mandal. (2019). Delivered a talk as Key Note Speaker on "Bacteria incorporated 100% Fly ash geopolymer: A new hope for an alternative and sustainable construction material" at International Civil Engineering and Architecture Conference 2019 (ICARC-19). 17-20 April, 2019. Trabzon, Turkey.

Nabin Baran Manik

Effect of Fullerene Nanoparticles on Barrier Height of Crystal Violet Dye Based Organic Device” -Sudipta Sen, Nabin Baran Manik, 3rd International Conference on Electronics, Materials Engineering & Nano – Technology (IEMENTECH 2019) IEEE Conference # 48150, Institute of Engineering and Management, Kolkata, 29-31st August, 2019.

Nabin Baran Manik

Study on the Effect of 8 nm Size Multi Walled Carbon Nanotubes (MWCNT) on the Barrier Height of Malachite Green (MG) Dye Based Organic Device - Sudipta Sen, Nabin Baran Manik, 2nd International Conference on Current Trends in Materials Science and Engineering (CTMSE 2019), S.N. Bose National Centre for Basic Sciences, Kolkata, 18-20th July, 2019.

Nabin Baran Manik

Study on the Effect of Single Walled Carbon Nanotubes (SWCNT) on Trap Energy and Barrier Potential in Rose Bengal (RB) Dye Based Organic Device - Sudipta Sen, Sujata Chakraborty, Nabin Baran Manik, National Seminar on Emerging Frontiers in Materials Science (EFMS-2019), Behala College, Kolkata, 15-16 Feb, 2019.

Nabin Baran Manik

Effect of Dye concentration on Turmeric Dye Based Herbal Electronic Diode - Swapan Bhunia, Pallab. Kr. Das, N. B. Manik, National Seminar on Emerging Frontiers in Materials Science (EFMS-2019), Behala College, Kolkata, 15-16 February 2019.

Nabin Baran Manik

Effect of Single Walled Carbon Nanotubes (SWCNT) on the Barrier Potential of Crystal Violet (CV) Dye Based Organic Diode” - Sudipta Sen, Sujata Chakraborty, Nabin Baran Manik, National Conference on Condensed Matter Physics (CMDAYS 2018) Bose - 125 Event, The University of Burdwan, 29-31st August, 2018.

Nabin Baran Manik

Effect of series resistance on ideality factor of Phenosafranin dye based organic diode-P.K. Das, S. Bhunia, A. Halder, N. B. Manik, National Conference on Condensed Matter Physics (CMDAYS 2018) Bose - 125 Event, The University of Burdwan, 29- 31st August, 2018.

Nabin Baran Manik

Study on Turmeric dye based electronic herbal diode” - Swapan Bhunia, Pallab Das, N. B. Manik, National Conference on Condensed Matter Physics (CMDAYS 2018) Bose - 125 Event , The University of Burdwan, 29- 31st August, 2018.

Debasish Biswas

Invited talk entitled ‘Lasers and its Applications in Spectroscopy and Atmospheric Science’ delivered at Two Days Workshop on ‘Laser Technology for Tactical Communication’ held on 11-12 December, 2018 at Dr. Triguna Sen Auditorium.

Debasish Biswas

Invited talk entitled ‘Diode Laser Spectroscopy’ delivered on March 01, 2019 at the Refresher Course titled ‘ICT: Improving the quality of Higher Education and Innovation on Higher Education’ for Faculties in Universities / Colleges / Institutes (from 01 March to 15 March, 2019) organised by the Faculty Development Centre (FDC), Tripura University under the scheme of Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT), Ministry of Human Resource Development, Department of Higher Education, Government of India.

Joydeep Chowdhury

Invited talk on “SERS at the confluence of Spectroscopy and Materials Science” in National Seminar on Emerging Frontiers In Materials Science (EEMS- 2019) held on February 15-February 16, 2019 at Department of Physics and Electronics, Behala College.

Joydeep Chowdhury

Spectroscopic and Molecular Simulation Approach to explore the Binding interaction between Lysozyme and Juglone: Saumen Saha, Joydeep Chowdhury. National seminar on Emerging Frontiers In Material Science (EFMS - 2018) held on February 15 - February 16, 2019 at Behala College, Kolkata. (Oral Presentation)

Joydeep Chowdhury

Enzymatic Activity Of Trypsin On DPPC Monolayer And In Langmuir-Blodgett Film With Vibrational Spectroscopic Study: Saumen Saha, Joydeep Chowdhury. International Conference on Perspectives in Vibrational Spectroscopy (ICOPVS 2018) held on November 25 to November 29, 2018 at Bhaba Atomic Research Centre (BARC), Mumbai. (Poster Presentation)

Joydeep Chowdhury

Controlled Aggregation of Gold Nano Particles in the Langmuir-Blodgett Film Matrix of PMMA: An Efficient SERS Sensing Platform with Unique Molecular Selectivity: Somsubhra Saha, Joydeep Chowdhury. International Conference on Perspectives in Vibrational Spectroscopy (ICOPVS 2018) held on November 25 to November 29, 2018 at Bhaba Atomic Research Centre (BARC), Mumbai. (Poster Presentation)

Joydeep Chowdhury

Monomeric and N-H... O bonded dimeric forms of Hydroxylamine – O- Sulfonic acid: investigated by raman and temperature dependent FTIR spectra aided by ab initio, car parrinello molecular dynamics. Natural bond orbital. Atoms in molecules and wavelet transform theory: Bipan Dutta, Joydeep Chowdhury. International Conference on Perspectives in Vibrational Spectroscopy (ICOPVS 2018) held on November 25 to November 29, 2018 at Bhaba Atomic Research Centre (BARC), Mumbai. (Poster Presentation)

Joydeep Chowdhury

Wavelength Scanned SERS Spectra of 4- Mercaptopyridine Adsorbed on Nanocolloidal Gold Entrapped in Langmuir Reverse Schaefer Film Of 5CB Liquid Crystal: An Approach to Correlate Near-Field Response With Far-Field SERS Enhancement

Pabitra Kumar Paul

Graphene oxide: an efficient nanotemplate to control the molecular aggregation and fluorescence quenching of organic dye Acridine orange, Invited talk delivered at International Conference on Nanomaterials: Synthesis, Characterization and Applications (ICN 2018), December 11-13, 2018, Mahatma Gandhi University, Kottayam, Kerala, India.

Saikat K. Seth

Salt-bridge (SB) interaction at work in building extended supramolecular networks: Experimental and theoretical study, in 12th International Conference and Exhibition on Materials Science and Chemistry in Zurich, Switzerland during 20/05/2018 to 22/05/2018.

Bharati Tudu

Participated and presented a paper at “9th Joint European Magnetic Symposia (JEMS) 2018, held in Mainz, Germany during 03rd -7th September 2018”.

Dipankar Mandal

MRS Spring Meeting 2019, Phoenix, Arizona, USA (Contributory talk): Human Skin Interactive Bio-e-skin for Self-powered Health Care Monitoring and All Organic Piezoelectric E-Skin

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Sensor for Self-Powered Wearable Electronics and Human Physiological Signal Monitoring (Symposium EP03: Materials Strategies and Device Fabrication for Biofriendly Electronics).

Dipankar Mandal

3rd International Conference on Recent Advances in Material Chemistry (ICRAMC-2019), Feb. 13 – 15, 2019, SRM Institute of Science and Technology, Chennai (Invited Talk): Bio-Piezoelectric Nanogenerator for Implantable Devices.

Dipankar Mandal

National Seminar on “Advanced Materials and Devices with Emphasis on Nanotechnology for Green Energy” on 31 January, 2019, Bidhan Chandra College, WB (Plenary Lecture): Nanogenerator for Self-Powered Electronic Devices: An Effective way of Waste Energy Harvesting.

Dipankar Mandal

National Conference on Recent Developments in Nanoscience & Nanotechnology (NCRDNN 2019), 29–30 January, 2019, Jadavpur University, Kolkata (Invited Talk): Flexible Pyroelectric Nanogenerator for Self-Powered Systems.

Dipankar Mandal

International Meeting on Energy Storage Devices (IMESD-18), 10–12 December, 2018, IIT Roorkee (Invited talk): Piezoelectric Nanogenerators for Self-Powered Electronics.

Dipankar Mandal

63rd DAE Solid State Physics Symposium, 18–22 December, 2018, GJUST, Haisar, Haryana (Invited talk): Flexible Pyroelectric Nanogenerator.

Dipankar Mandal

Indo-German Meeting 2018 on “Molecular Interactions in Cellular Environments as Basis for Biomimetic Approaches” during 4-6 October, 2018 (Invited talk): Bio-Piezoelectric Nanogenerator.

Achievement of the Students from Lab

Sukhen Das

Souravi Bardhan, Shubham Roy and Shilpa Maity was Awarded the 1st prize at Anveshan-Student Research Convention (East Zone) organized by Association of Indian Universities (AIU, UGC) and Central University of Jharkhand, India in the Basic Science category.

Sukhen Das

Souravi Bardhan, Shubham Roy and Shilpa Maity was Awarded the 2nd prize at Anveshan-Student Research Convention (National Level) organized by Association of Indian Universities (AIU, UGC) and Ganpat University, Gujarat India in the Basic Science category.

Kalyan Kumar Chattopadhyaya

Dr. Biswajit Das received best oral presentation award in the Second International Conference on Nano Science and Engineering Applications ICONSEA-2018, 4th-6th Oct, 2018, Institute of Science and technology, Jawaharlal Nehru Technology University, Hyderabad, (Oral presentation)

Kalyan Kumar Chattopadhyaya

Dr. Biswajit Das received best thesis presentation award in the Second International Conference on Nano Science and Engineering Applications ICONSEA-2018, 4th-6th Oct, 2018, Institute of Science and technology, Jawaharlal Nehru Technology University, Hyderabad.

Achievements of Dr. Atiskumar Chattopadhyay

Principal Secretary, Faculty Council of Science

Scientific Achievement During 2019

Dr. Atiskumar Chattopadhyay, Principal Secretary, Faculty Council of Science

Area of Research Activities:

1. Synthesis and characterization of Nanocomposites for biomedical application by green synthesis.
2. Synthesis of Nanoconjugates and its details Preclinical investigation.
3. Pathophysiological investigation of various medicinal, herbal products by animal experimentation using histological, enzymatic and biochemical techniques.
4. Development of herbal preparation, its detailed analysis and pre-clinical study.
5. Detailed systemic toxicological investigation of the drugs and toxins, both short term and long term.

Article Published in Journals:

1. Atiskumar Chattopadhyay, Soumendra Darbar, Srimoyee Saha, Parimal Karmakar. "Effects of Alprazolam Administration on the Vital Organs of Adult Wistar Albino Rats, Biochemical and Toxicological Studies". *Indian Journal of Pharmaceutical Education and Research*. 2019 Jan-Mar. Vol 53, Issue 1, 127-132.
2. Soumendra Darbar, Srimoyee Saha, Kausikisankar Pramanik and Atiskumar Chattopadhyay*. "Preliminary Assessment of Acute and 28-Day Repeated Dose Oral Toxicity of a Newly Developed Herbal Mixture on Experimental Animal". *Indian Journal of Pharmaceutical Education and Research*. 2019 Oct-Dec. Vol 53, Issue 4 (Suppl), 669-676.
3. Soumendra Darbar, Srimoyee Saha, Kausikisankar Pramanik and Atiskumar Chattopadhyay*. "Toxicological Assessment of Silver Nanoparticles Synthesized through Green Route using *Andrographispaniculata*". *J. Nanosci. Tech.* - Volume 5 Issue 1 (2019) 619-621.

Invited Talk/Oral Talk in National and International Conference/Seminar

1. Soumendra Darbar, Srimoyee Saha, Kausikisankar Pramanik and Atiskumar Chattopadhyay. "Free radical scavenging potential and Antioxidant activity of Silver Nanoparticle Coupled with *Andrographispaniculata* (AP-Ag NP) Against Carbon tetrachloride (CCl₄) induced toxicity in mice". *Biospectrum*, 8th to 10th 2019. Oral Presentation
2. Soumendra Darbar, Srimoyee Saha, Kausikisankar Pramanik and Atiskumar Chattopadhyay. "Unprecedented Redox scavenging signature along with antioxidant action of silver nanoparticle coupled with *Andrographispaniculata* (AP-Ag NP) against carbon tetrachloride (CCl₄) induced toxicity in mice". "Sci Tech Biomed-Cancer Sciences 2019". Tokyo: Japan.
3. Soumendra Darbar, Srimoyee Saha, Kausikisankar Pramanik and Atiskumar Chattopadhyay. "Therapeutic Efficacy of a Newly Developed Herbal Formulation Against CCl₄ Induced Hepatic Fibrosis". "Indian Science Congress". 3rd to 7th January, 2019, Lovely professional University, Jalandhar, Punjab. Oral Presentation
4. Soumendra Darbar, Srimoyee Saha, Kausikisankar Pramanik and Atiskumar Chattopadhyay. "Safety and Efficacy Study of Silver Nanoparticle Synthesized through Green Route Using

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Andrographis *paniculata* in Experimental Model”. “3rd Pharm. Tech. IAPST International Conference”; 19th and 20th January, 2019, Centurian University, Bhubaneswar, Odisha. Oral Presentation

5. Atiskumar Chattopadhyay and Soumendra Darbar “Antiulcer effect of newly developed multi herbal formulation against ethanol induced acute gastric ulcer”. “PHYSIOCON 2019”, 15th to 17th November, 2019 at Bankura Christian College.

Award and Honor

Best Presentation Award

1. Soumendra Darbar, Srimoyee Saha, Kausikisankar Pramanik and Atiskumar Chattopadhyay*. “Free radical scavenging potential and Antioxidant activity of Silver Nanoparticle Coupled with Andrographispaniculata (AP-Ag NP) Against Carbon tetrachloride (CCl₄) induced toxicity in mice”. “Biospectrum”, 8th to 10th 2019.

Collaborative Programmes:

Undertaking research work on Indian herbs with Prof. (Dr.) Dilip Kumar Nandi, Raja Narendra Lal Khan Women’s College; Gope Palace, Medinipur, Vidyasagar University Road, Phulpahari, West Bengal 721102.

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SECTION B

[ACADEMIC REPORT.1.04.2018 TO 31.03.2019]

FACULTY COUNCIL OF INTERDISCIPLINARY STUDIES,

LAW & MANAGEMENT

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ADVANCED STUDIES ON INDUSTRIAL POLLUTION CONTROL ENGINEERING

Phone : 2457-2482/2698
Director. : Prof. Avijit Bhowal
E-mail : dir.advst@jadavpuruniversity.in

Publications:

1. J. Modak, **A. Bhowal**, S. Datta, “Continuous decolorization of dye solution by homogeneous Fenton process in a rotating packed bed reactor”. *International Journal of Environmental Science and Technology* (2019) article in press.
2. R. Gopinathan, **A. Bhowal**, C. Garlapati, “Adsorption Studies of Some Anionic Dyes Adsorbed by Chitosan and New Four-Parameter Adsorption Isotherm Model”. *Journal of Chemical Engineering Data* 64 (2019) 2320-2328.
3. A. Sen, **A. Bhowal**, S. Datta, “Application of natural dye on polytrimethylene terephthalate fiber”. *Research Journal of Textile and Apparel*. 23(2019) 71-90.
4. U. Roy, **P. Das**, **A. Bhowal**, “Treatment of azo dye (congo red) solution in fluidized bed bioreactor with simultaneous approach of adsorption coupled with biodegradation: optimization by response surface methodology and toxicity assay”. *Clean Technologies and Environmental Policy* (2019) article in press
5. S. Karmakar, **A. Bhowal**, **P. Das**, “A comparative study of liquid-liquid extraction in different rotating bed contactors”. *Chemical Engineering and Processing –Process Intensification* 132 (2018) 187-192.
6. A. Roy, **A. Bhowal**, S. Datta, “Dyeing of PTT fiber with disperse dyes using Response Surface Methodology”. *Asian Dyer* April-May (2018) 45-48.
7. U. Roy, S. Sengupta, **P. Das**, **A. Bhowal**, S. Datta, “Integral approach of sorption coupled with biodegradation for treatment of azo dye using *Pseudomonas* sp.: batch, toxicity, and artificial neural network”, *3 Biotech* 8 (2018) 192.
8. P. Banerjee, A. Mukhopadhyay, **P. Das**, “Graphene oxide–nanobentonite composite sieves for enhanced desalination and dye removal”, *Desalination* 451 (2019) 231-240.
9. P. Das, S. Mohanty, A. Ganguli, **P. Das**, P. Chaudhuri, “Role of Manglicolous fungi isolated from Indian Sundarban mangrove forest for the treatment of metal containing solution: Batch and optimization using response surface methodology”, *Environment Technology and Innovation* 13 (2019) 166-178.
10. V. Chakraborty, **P. Das**, “Carbonaceous materials synthesized from thermally treated waste materials and its application for the treatment of Strontium metal solution: Batch and optimization using Response Surface Methodology”, *Environmental Technology & Innovation* 15 (2019) 100394.
11. P. Banerjee, **P. Das**, A. Mukhopadhyay, “Treatment of textile effluent using bacteria-immobilized graphene oxide nanocomposites: evaluation of effluent detoxification using *Bellamyabengalensis*”, *Clean Technologies and Environmental Policy*, DOI: 10.1007/s10098-018-1602-7.
12. S. Manna, S. Bhattacharya, S. Sengupta, **P. Das**, “Synthesis of graphene oxide dots coated biomatrices and its application for the removal of multiple pollutants present in wastewater”, *Journal of Cleaner Production* 203 (2018) 83-88.
13. U. Roy, S. Sengupta, P. Banerjee, **P. Das**, A. Bhowal, S. Datta, “Assessment on the decolourization of textile dye (Reactive Yellow) using *Pseudomonas* sp. immobilized on waste materials fly ash: Response surface methodology optimization and toxicity evaluation”, *Journal of Environmental Management* 223 (2018) 185-195.
14. S. Manna, P. Saha, D. Roy, B. Adhikari, **P. Das**, “Fixed bed column study for water defluoridation using neem oil-phenolic resin treated plant bio-sorbent”, *Journal of Environmental Management* 212 (2018) 424-432.

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15. S.Roy, S. Sengupta, S. Manna, **P. Das**, “Chemically reduced tea waste biochar and its application in treatment of fluoride containing wastewater: Batch and optimization using response surface methodology”, *Process Safety and Environment Protection* 116 (2018) 553-563.
16. A. Sen, **A. Bhowal**, S. Datta, “Dyeing of PTT fibre with disperse dyes using Response surface methodology - II”. *Asian Dyer* 15(2018) 50-54.
17. A. Sen, **A. Bhowal**, S. Datta, “Comparison of dyeing of polyester fibers with natural dye and bio- mordant. Progress in Colors”, *Colorants and Coating* 11(2018) 165-172

Projects:

1. **Project Title:** “Role of carbonaceous materials and cellulose nano-fibres polymeric composite for treatment of multiple pollutants present in waste water”.
Funding Agency: Dalmia Holdings group limited (2017 -20).
Investigator(s): Prof. P Das (and Prof. A. Bhowal)
2. **Project Title:** “Green synthesis of iron nanoparticles from manglicolous fungi of Indian Sunderban and their application in sequestration of heavy metals from contaminated water”.
Funding Agency: DBT sponsored project (in collaboration with University of Calcutta and National Institute of Technology–Rourkella). (2016 -19).
Principal Investigator: Prof. P Das.
3. **Project Title:** “Removal of pharmaceutical derivatives present in waste water by advanced oxidation integrating with microstructure and rotating packed bed of grapheme (G)/Graphene oxide (GO)/GO-metal nanocomposites”.
Funding Agency: DST (in collaboration with IIT – Guwahati).
Principal Investigator: Prof. P Das.
4. **Project Title:** “Synthesis of Graphene oxide coated natural Waste materials and its application for simultaneous treatment of wastewater containing fluoride and chromium: Reactor performance in batch, fluidized bed bed membrane reactor”,
Funding Agency: SERB DST
Principal Investigator: Prof. P Das.
5. **Project Title:** “Zeolite-based Low-cost Hybrid Membrane Photo-Bioreactor System for Treating and Recycling of High Strength Industrial Wastewater”; (Co-PI) in collaboration with Department of Chemical Engineering, NIT-Rourkella, Department Of Life Science, NIT, Rourkela, School Of Environmental Science And Engineering, IIT-Kharagpur (Co-PI), Department of Chemical Engineering, Chemical Engineering, Institute Of Chemical Technology”,
Funding Agency: IMPRINT - II sponsored project
Co-Principal Investigator: Prof. P Das.
6. **Project Title:** “Integral approach of separation of polycyclic aromatic hydrocarbon form aqueous solution using waste biomass based magnetic nanocomposites and advanced oxidation”,
Funding Agency: RUSA2
Investigators: A. Bhowal, A. Deb Sarker, A. Majumder, P. Das, P. Roy

Conferences:

1. A. Ganguli, **P. Das**, S. Datta, “Removal Of Phenol From Its Aqueous Solution By Bacteria Immobilized Graphene Oxide Nanocomposite”, International Conference on Advanced Technologies for Industrial Pollution Control (ATIPC-2018) December 17-19, 2018.

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2. P. Ganguly, S. Sengupta, **P. Das, A. Bhowal**, “Synthesis of cellulose from peanut shell waste and its use in bioethanol production”, 8th International Conference on Sustainable Waste Management by Acharaya Nagarjuna University, Andhra Pradesh, November 22-24, 2018.
3. P. Ganguly, S. Sengupta, **P. Das, A. Bhowal**, “Synthesis of cellulose and lignin and their application in bioethanol production and waste water treatment”. International Conference on Bio-Innovation for Environmental and Health Sustainable Development by CSIR-Indian Institute Of Toxicology Research, Lucknow, November 27-28, 2018.
4. R. Sarkhel, S. Sengupta, **P. Das, A. Bhowal**, “Biodegradation of Polymers by bacteria isolated from marine environment”, International Conference on bio-innovation for environmental and Health Sustainable Developments(BEHSD-2018) organised by Biotech Research Society BRSI and CSIR, IITR, Lucknow November 27-28, 2018.
5. S. Bhattacharya, **P. Das, A. Bhowal**, “Removal of Cetrizine With Graphene Oxide as an Adsorbent”, International Conference On “Emerging Trends For Sustainable Development, 2019”, Organized By : Government College Of Engineering And Leather Technology. (5th - 6th March, 2019)
6. N. Saha, L. Das, **P. Das, A. Bhowal**, C. Bhattacharya; “Application of Rice Husk in removal of Malachite Green from waste water : A comparative study on raw Rice Husk and Rice Husk charcoal,” 8th International Conference on Sustainable Waste Management, Acharaya Nagarjuna University, Andhra Pradesh, Nov 22-24, 2018

Book Chapter:

1. U. Roy, **P. Das, A. Bhowal**, S. Datta, 2018. “Biodegradation of Azo dye using the Isolated Novel Bacterial Species: *Acinetobacter* sp”. In: Ghosh S. (eds). *Utilization and Management of Bioresources*, [Springer Nature Singapore, Pp: 187-193 (PDF)]. https://doi.org/10.1007/978-981-10-5349-8_18.
2. P. Banerjee, A. Mukhopadhyay, **P. Das**, 2018. “Nanomaterial for CO₂ Sequestration”. In: *Encyclopedia of Renewable and Sustainable Materials*. Eds: M.A. Maleque, E. Bayraktar, I. Choudhury, D. Grau, J. Haider, S. Hashmi, M. Hashmi, G. Majumdar, H. Metselaar, Z. Qamar, M. Roy, Elsevier [DOI: 10.1016/B978-0-12-813195-4.11031-4] (*In press*)
3. S. Chowdhury, S. Pan, R. Balasubramanian, **P. Das**, 2018. “Three-Dimensional Graphene-Based Macroscopic Assemblies as Super-Absorbents for Oils and Organic Solvents”, *A New Generation Material Graphene: Applications in Water Technology*, 43-68
4. U. Roy, S. Manna, S. Sengupta, P. Das, S. Datta, A. Mukhopadhyay, A. Bhowal, 2018. “Dye removal using microbial biosorbents”, *Green Adsorbents for Pollutant Removal: Innovative materials*, 253-280, Springer Publications.
5. S. Sengupta, S. Manna U. Roy P. Das, 2018. “Manufacturing of biodegradable poly lactic acid (PLA): Green alternatives to petroleum derived plastics”, *Encyclopedia of Renewable and Sustainable Materials*. Eds: M.A. Maleque, E. Bayraktar, I. Choudhury, D. Grau, J. Haider, S. Hashmi, G. Majumdar, H. Metselaar, Z. Qamar, M. Roy, Elsevier [DOI: 10.1016/B978-0-12-813195-4.11031-4] (*In press*).

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AUTOMOTIVE ENGINEERING

Phone	: + 91-33- 2414-6927
Int.	: 2457-2242
Director.	: Prof. Ranajit Kumar Chakrabarti
Jt. Director	: Prof. Gautam Sutradhar
E-mail	: dir.auto@jadavpuruniversity.in

1. Areas of Research Activities :

Research on development of a new generation of Automotive Engines.

Methoding of Engine Castings.

Development of new materials to be used for different automobile components and their microstructure interpretation and mechanical properties.

Energy economy analysis and pollution control in Foundries producing automobile components by modifying the existing cupolas to divided blast cupolas.

Research on preparation of Molding Sand having properties suitable for automobile castings.

2. Major Research Projects :

- a) "R&D and Innovation Centre for Howrah Foundry Cluster" sponsored by Technology Information Forecasting and Assessment Council (TIFAC), Department of Science and Technology, Government of India.
- b) "Modification of divided blast cupolas and Conversion of conventional cupolas into divided blast cupolas for Howrah Foundries" - a project sponsored by Technology Information Forecasting and Assessment Council (TIFAC), Department of Science and Technology, Government of India.

3. Seminar/Workshop/ Conference/ Symposium organized :

The R&D and Innovation Centre for Howrah Foundry Cluster building was inaugurated by Dr. Anil Kakodkar, Chairman, Technology Information Forecasting and Assessment Council (TIFAC), Department of Science & Technology (DST), Government of India, New Delhi. Eminent foundry technologist, entrepreneurs and expert members from IFA, HFA & IIF attended the inaugural function.

Seminar/workshops were organized in collaboration with IFA, HFA and IIF at Jadavpur and Howrah.

4. Major Achievements :

The project on R&D and Innovation Centre for Howrah Foundry Cluster has achieved the following major achievements.

● Casting Simulation Laboratory

Casting Simulation job had been completed for some major foundries in Howrah and Serampore successfully utilising facilities developed at our laboratory fully equipped with advanced solid modeling software namely ProE and casting simulation software PRO-CAST.

Advanced training on the CAD software PRO-E and casting simulation software PRO-CAST have already been imparted to the project staff for honing their skill for simulation projects.

● Laboratories for Chemical/spectroscopic analysis, Metallurgical/ metallographic Testing

The Nodel Centre is now fully equipped to take up the following Design and Testing Assignment:-

- 1) Metallography including In-Situ Metallography of casting at the foundry through Leica DMIL Metallurgical Microscope of German make and Apollo make In-Situ Kits.
- 2) NDT-Portable Dynamic Hardness Tester of Askib Engineers Pvt. Ltd. Make Hardness Testing Machine.
- 3) Hardness, U.T.S, Y.S. & Elongation through Fine Testing make 20 Ton UTM.
- 4) Chemical Analysis facilities using Strohein Apparatus etc.

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We have served to many foundries producing quality casting in Howrah belt with our testing facilities and got good response on regular basis. This has led them to become quality conscious and as a result some foundries have installed their own Metallurgical Microscope and other testing facilities.

Mobile Casting Clinic

The Mobile Casting Clinic, started functioning on regular basis from July 2009. The Mobile Casting Clinic is provided with sand testing equipments as well as recently installed temperature measuring device combined with carbon equivalent analyzer.

An expert also accompanies the Mobile Casting Clinic who advises the industry regarding the reasons and remedies of the routinely encountered defects. Mobile Van moves along a route predetermined route by the Foundry Association for carrying our sand testing at nominal rates. Mobile Casting Unit has received an overwhelming response from foundries indicating and justifying its timely introduction.

The Mobile Casting Clinic while on service at various foundries of Howrah Cluster carries out the following testing of sand at nominal yearly membership/registration fees and suggesting remedies of defects arising out of sand practice.

- Determination of Moisture Content
- Permeability Test
- Mould Hardness Test
- Core Hardness Test
- Green Compressive Strength Test
- Comp actability Test
- Determination of AFS grain Fineness No.
- Determination of Total Clay Content.

The Mobile Casting Clinic has also got the following additional test facilities for the foudries-

- Carbon Equivalent, Carbon %, Silicon % and temperature measurement
- Consultancy facility also available on request

Due to introduction of Mobile Casting Clinic Howrah Foundry Cluster is not only happy to receive the service for testing facilities, they have become conscious also to go for quality casting, and as a result many foundries now in Howrah have set up their own sand testing laboratory.

Consultancy services through Mobile Casting Clinic

Manufacture of high Phosphorous cast iron Railway brake block from cupola metal has been optimized and demonstrated in a Howrahfoundry shop.

Other Activities

- **Modification of Divided Blast Cupola (DBC)**

An extended project work sponsored by TIFAC DST to the Jadavpur University deals with the proper modification of the DBCs of Howrah Foundry Cluster with an objective of energy economy by reduction of coke rate.

Out of Five numbers of foundries in Howrah for which the modification work for their existing cupolas are to be carried out under the project, three numbers namely **M/s. Dhang Iron Company, Shree Shyam Iron Foundry and Super Iron Foundry** have already been completed satisfactorily. It was found that with the modifications, the cupolas could become much more energy efficient and coke consumption could go down around 30% and with an appreciable reduction in Suspended Ponticulate matter level. The cost involved for modifications recovered by the entrepreneurs in 4/6 months time.

Dr. Prabhat Ranjan Executive Director-TIFAC visited R&D Centre in connection with the project monitory committee meeting. He had highly appreciated implementation of the project and congratulated each team

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member of the School of Automotive Engineering, who was associated with this project. Dr. Ranjan requested Prof. Ranajit Chakrabarty, Director, School of Automotive Engineering, Jadavpur University to highlight the success story of the project with the details of background of the cluster, activities undertaken by the R&D and Innovation Centre at Jadavpur University, a report on implementation of the centre along with the audited fund utilization certificate.

The project activities of the School conducted an indepth study of the background of Howrah Foundry Cluster and also a study on the Technology Gap Analysis on the Howrah Foundry Cluster including that on Automotive Components.

It was appreciated by Technology Information, Forecasting & Assessment Council (TIFAC) that this R&D and Innovation centre and Mobile Casting Clinic has become an excellent infrastructure to address the R&D and services, needs of the foundry industry in and around Howrah. It was also acknowledged by Technology Information, Forecasting & Assessment Council (TIFAC) that such kind of R&D infrastructure was not available anywhere in the eastern part in India.

Project Achievement Highlights:

- Installation and successful running of nodal centre equipped with mechanical testing laboratory, metallographic laboratory, chemical laboratory including some sand testing facilities.
- Installation and successfully running of mobile casting clinic with revenue generation.
- Generation of awareness amongst foundry owners for setting up their own sand testing lab. And using facility of mobile casting clinic.
- Installation and successful running of casting simulation serving more than 10 foundries.
- Successful modification of divided blast cupola leading to reduction of coke consumption around 33%.
- Production of documentary film on Howrah Foundry Cluster.

Extension proposals have been submitted to TIFAC involving four modules of training programme for foundry technicians, supervisory personnel and undergraduate students of Mechanical Engineering, proposed to be conducted by the R&D and Innovation Centre with the support from TIFAC.

Technology Information, Forecasting & Assessment Council (TIFAC), Department of Science & Technology has advised that

- R&D and Innovation Centre for Howrah Foundry Cluster at the School of Automotive Engineering, Jadavpur University to prepare a detailed project report highlighting various project achievements.
- Unspent balance of the project towards non recurring expenditure may be utilized to meet the recurring expenditure for the project which should continue with the operation of the Nodal Centre and the Mobile Casting Clinic.
- The School of Automotive Engineering may utilize the revenue generated from the project towards meeting the project recurring expenditure for continuing the operation of the Nodal Centre and the Mobile Casting Clinic.
- TIFAC would continue to act as the knowledge partner for the “R&D and Innovation Centre” and mentor the Centre towards its planned activities in the future. TIFAC would extend technical and managerial support towards the Phase-II of the project for training and other allied programmes.

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BIOSCIENCE & ENGINEERING

Phone : +91-33-2414-6567

Int. : 2457-2958

Director : Dr. Piyali Basak

E-mail : dir.bioengg@jadavpuruniversity.in

1. A. Courses Offered: (Name of the Course, Duration of the Course, No of Students Enrolled)

Name of the Course	:	M.E. (Biomedical Engineering)
Duration of the course	:	2 years
Intake of students	:	13 per year
No. of Students Enrolled	:	11

1. B. Number of Faculty Members :

Professors	:	2 (2 Vacant)
Associate Professor	:	1 (Vacant)
Assistant Professor	:	3 (1 Vacant)

2. A. Area of Research Activities: (Broad Areas)

Application of various branches of Engineering towards solutions of Bio-Science and Health related problems for the benefit of mankind. Current research activities include but not limited to following:

- i. Biomedical Instrumentation including development of Biomedical Sensors and Signal Conditioning Systems. Advanced Material for High Energy Imaging Devices etc. including their applications in Design of Bio-Implants
 - ii. Medical Imaging and Image Processing. Analysis and Processing of Biomedical Signals for Diagnosis and Therapy including applications involving Mathematical Modeling, Human Computer Interfacing, Artificial Intelligence, Rehabilitation Engineering etc.
 - iii. Biomaterials. Development and characterization of Bio-polymers in different form include membranes, nano-particle etc. which can be used as Bioactive Coatings, wound dressing. Evaluate Bio-Degradability and Drug Delivery property of different biopolymers. Biocompatibility testing including hemo-compatibility testing, cytotoxicity testing, MTT assay etc. Tissue Engineering.
 - iv. Bioremediation of industrial waste by using microbial consortium.
 - v. Development of anticancer drug from natural sources.
 - vi. Biomechanics related to Soft and Hard Biological Tissues, Bio-Fluids, and Application of Finite Element Methods for analysis & Design of Biomechanical Systems.
- #### 2. B. Major Research Project : (Departmental/Individual, Name of the Project/Funding Agency)
- Individual Evaluation of Moringa Oleifera leaf, flower, fruit extract, and its nano fabricated molecule: a comparative Study on Cancer cell line/ WB-DST, PI: Dr. Piyali Basak
- #### 3. A. Invited Lectures Delivered/Sessions Chaired: (Name of the Teacher, Type of Participants, Name of the Seminar / Conference etc. Place, Duration)
1. **Dr. Monisha Chakraborty Invited talk on** "Telemetry and National Service Scheme" at Lady Brabourne College, Kolkata, 2018
 2. **Dr. Monisha Chakraborty Invited talk on** "Childhood in Crisis: Role of Technology" at Indumati Sabha Griha, 2018
 3. **Dr. Monisha Chakraborty Invited talk on** the occasion of celebration of National Science Day 2019 at Swapnopuran Shishu Shiksha Niketan, Hingolgunj, Basirhat, North 24 Parganas

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4. **Dr. Monisha Chakraborty Invited talk on** "Reference Collections as one-stop solution to foundational knowledge" as Guest Speaker at Elsevier eBook Forum 2019 (South Asia) held at Radisson Blu Hotel Guwahati, 2019
 5. **Dr. Monisha Chakraborty Invited talk on** "Entrepreneurship and Role of Technology" at Indian Chamber of Commerce, 10th Floor, 4, India Exchange Place, Kolkata in the workshop on Women Entrepreneurship "She-preneurship", 2019
 6. **Dr. Monisha Chakraborty Invited talk on** "Daily Life Mathematics: Imagine, Invent and Inspire" in the valedictory session to the students in the Four Day workshop at Indumati Sabhagriha, 2019.
 7. **Dr. Monisha Chakraborty Invited talk on** "Innovation Incubation and Startup with IPR Possibilities" at NIT Manipur, 2019.
 8. **Dr. Piyali Basak**, Invited Talk, delivering lecture in 1st Indo-Bangladesh workshop on Biomaterials 19th – 20th February 2019, Pilot Plant Process Development Centre, BCSIR, Bangladesh..
 9. **Dr. Piyali Basak**, Invited Talk, National Conference on "Innovative Structural Materials for Potential Application" (NCISM, 2018) Advanced Engineering Materials Research Foundation, Bhubaneswar, Odisha India; 24th -25th Dec 2018.
3. **B. Seminar/Workshop/Conference/Symposium Attended:** (Name of the Teacher, Name of the Paper Presented, Name of the Seminar, Place, Duration)

I. International Conferences:

1. Rania Indu, Anjan Adhikari, **Piyali Basak**, Tapas Kumar Sur, Anup Kumar Das. "Evaluation of Drug-Drug Interaction on Concomitant Administration of Anti-diabetics and Hypolipidemics", 2nd International Conference on Biotechnology & Biological Sciences, BIOSPECTRUM 2018, University of Engineering & Management. Kolkata, Abstract No- PO: 47, Page-81, 27th-28th July 2018.
2. Banerjee. N, **Basak. P**, Hossain. C.M, **Biswas.S** "Analysis of Phytochemical Properties of Ethanolic Extract of *Allium cepa* L. and Evaluation of its Antioxidant and Antibacterial Effects", 2nd International Conference on Biotechnology and Biological Sciences, UEM, Kolkata, India 27-07-2018 to 28-07-2018
3. Nilotpol Das and Monisha Chakraborty, "Effects of Indian Classical Music on Heart Rate Variability", IEEE Sponsored 5th International Conference for Convergence in Technology (I2CT) 2019, Pune, Maharashtra, India, 2019
4. Anadi Biswas, Debanjan Parbat and Monisha Chakraborty, "Establishment of EMG-Force relationship obtained during Simultaneous Voluntary Contraction of Biceps and Flexor Digitorum Profundus Muscles", IEEE Sponsored 5th International Conference for Convergence in Technology (I2CT) 2019, Pune, Maharashtra, India, 2019
5. Sukriti, Monisha Chakraborty, Debjani Mitra, "Epilepsy Seizure Detection using Non-linear and DWT-based features", IEEE International Conference on Wireless Communications Signal Processing and Networking, 2019, SSN College of Engineering, Chennai.
6. Sk. Hasanur Rahaman, Arnab Bhattacharjee, Suman Saha, Monisha Chakraborty and Jui Chakraborty, shRNA intercalation in CaA1LDH nanoparticle: a prospect for colon cancer treatment, ICAM, Jamia Millia Islamia University, New Delhi, 2019
7. Monisha Chakraborty and Saleem Hashmi, "Detector Materials and their Imaging Applications", Abstract published at 21st International Conference on Advances in Materials and Processing Technologies (AMPT) 2018 at Dublin City University, Dublin, Ireland, 2018
8. Rituparna Acharya, Monisha Chakraborty and Jui Chakraborty, Prospective Treatment of Alzheimer's disease using siRNA-layered Double Hydroxide Nanoconjugate, International Conference on Current Trends in Material Science and Engineering (CTMSE 2018), held on 2018 at S.N Bose National Centre for Basic Sciences.

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9. Monisha Chakraborty and Saleem Hashmi, Abstract of the paper, “CZT Thin Films using RF Sputtering and PVD”, is accepted for 22nd International Conference on Advances in Materials & Processing Technologies (AMPT 2019), to be held in Taipei, Taiwan on Oct. 20-24, 2019
10. Monisha Chakraborty and Saleem Hashmi, Abstract of the paper, “ CZT Thin Film using Simultaneous Vacuum Evaporation” is published in ICoSEM2019 held at Kualalumpur, 2019
11. Arnab Bhattacharjee, Sk. Hasanur Rahaman, Suman Saha, Monisha Chakraborty and Jui Chakraborty, “The effect of phase pure calcium aluminium layered double hydroxide nanoparticles in the modulation of CAMKII α , SOD and TNF α activity in cancer cell: a therapeutic implication”, International Conference on Current Trends in Materials Science and Engineering (CTMSE 2019), Organized by Institute of Engineering & Management, Kolkata and S. N. Bose National Centre For Basic Sciences, Kolkata, 2019
12. Sk. Hasanur Rahaman, Arnab Bhattacharjee, Suman Saha, Monisha Chakraborty and Jui Chakraborty, “CaAl LDH nanoparticles mediated delivery of shRNA: a prospect for colon cancer treatment”, International Conference on Current Trends in Materials Science and Engineering (CTMSE 2019), Organized by Institute of Engineering & Management, Kolkata and S. N. Bose National Centre For Basic Sciences, Kolkata, 2019

II. National Conferences:

1. Dr. Piyali Basak*. National Conference on Recent Developments in Nanoscience and Nanotechnology (NCRDNN 2019); January 29-31, 2019; “A cytotoxicity assay between/of *Aegle marmelos* aqueous leaf extract and its Green-synthesized Silver Nanocomposites (AgNCs) on Human PBMCs and MCF-7 cell line; along with synthesis and characterization of PVA-Gelatin based composite hydrogel membranes as potential delivery systems for the synthesized AgNCs in vivo”;
2. Dr. Piyali Basak*. 106th Indian Science Congress (2019); January 3-7, 2019; “Fabrication of Delivery Systems for Green-synthesized Silver Nanoparticles through Synthesis and Characterization of different PVA-based composite hydrogel membranes for applications in vivo”;
3. Dr. Piyali Basak*. National Conference on Innovative Structural Materials (NCISM 2018); December 24-25, 2018; “A Comparative study of the Cytotoxicity between/of *Embllica officinalis* aqueous fruit extract and its Green-Synthesized Silver Nanocomposites (AgNCs) on Human PBMCs and MCF-7 cell line”
4. Piyali Basak,. “Elucidation of the Effect of Concomitant Administration of Anti-Diabetics and Anti-Inflammatory Drugs in Animal Models”, National Conference on Collaborative Health Sciences- Visions for the Future, NATCONPH 2019, NSHM Knowledge Campus, Kolkata, Abstract No- OP3, Page-77, 14th-15th February 2019.
5. Basak, P, “Investigating the potential of bacteria isolated from different sources for the biodegradation of Remazol Brilliant Blue Present in Industrial Waste”, National Conference On Innovative Structural Materials , Bhubaneswar, Odisha, India 24-12-2018 to 25-12-2018
6. Basak, P “A Cytotoxicity assay of *Aegle marmelos* aqueous leaf extract and its Green-Synthesized Silver Nanocomposites (AgNCs) on Human PBMCs and MCF-7 cell line; along with the Synthesis and Characterization of PVA-Gelatin based composite hydrogel membrane as a potential delivery system for the synthesized AgNCs in vivo”, National Conference on Recent Developments in Nanoscience and Nanotechnology, Jadavpur University, Kolkata, India 29-01-2019 to 31-01-2019
7. **Piyali Basak**. Anti metastasis activity: Evaluated by cell based adhesion assay on gelatin fibronectin coated plate invitro. Best poster Award Programe. 106. Indian Science congress held at Phagawara, Jalandhar. India from 3rd January to 7th January, 2019.
8. Samrat Paul, Piyali Basak. Evaluating Growth of MCF-7 and MDA-MB-231 Cell Line on Porous Gelatin Scaffold. National conference on innovative structural materials-2018 held at bhubaneswar, Odisha, India from 24-25th, December, 2018..

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9. Samrat Paul, Priti Hazra ,Piyali Basak. Biochemical Estimation of Withania somnifera (Ashwagandha) Root Extract for enhancement of cell growth and Proliferation. National conference on innovative structural materials-2018 held at bhubaneswar, Odisha, India from 24-25th, December 2018, Bhubaneswar.
- 3. C. Seminar/Workshop/Conference/Symposium Organized:** (Name of the Teacher, Name of the Paper Presented, if any, Name of the Seminar, Place, Duration)
Piyali Basak, Biomedical Engineering in Human Welfare, K.P. Basu Memorial Hall Jadavpur University, One Day, 3rd August 2018
- 4. A. Books/Monographs etc. Published:** (Name of the Teacher, Name of the Book, Name of the Publisher)
1. Basak. P “Biodecolourization of Azo Dyes by Microbes”, *Textile Industry and Research in 2030: Challenges and Opportunities*. Publisher: Shree Vaishnav Institute of Textile Technology. ISBN : 978-93-5351-406-8
 2. P Basak “Class Discriminator-Based EMG Classification Approach for Detection of Neuromuscular Diseases Using Discriminator-Dependent Decision Rule (D3R) Approach” - *Recent Trends in Signal and Image Processing*, 2019
 3. Monisha Chakraborty and M. S. J. Hashmi, “Graphene as a Material-An Overview of its Properties and Characteristics and Development Potential for Practical Applications”, *Reference Module in Materials Science and Materials Engineering*. Oxford: Elsevier; 2018
 4. Monisha Chakraborty and M. S. J. Hashmi, “Potential of Graphene for Miniature Sensors and Conducting Devices for Biomedical Applications”, *Reference Module in Materials Science and Materials Engineering*. Oxford: Elsevier; 2018
 5. Monisha Chakraborty and M. S. J. Hashmi, “Cadmium Telluride and Cadmium Zinc Telluride as Detector Materials and Their Practical Applications” *Reference Module in Materials Science and Materials Engineering*. Oxford: Elsevier; 2018
- 4. B. Articles Published in Journals:** (Including National/International & Peer-reviewed Journals) (Name of the Teacher, Name of the Articles, Name of the Journal, Date of Publication, Volume)
1. Basak P., , “Exploring different sources for Malachite decolorising bacteria” *Journal of the Indian Chemical Society* Volume 96, Issue 4, April, 2019 1.
 2. Basak P. “Effect of concomitant therapy of anti-diabetics and hypolipidemics on biochemical and histological parameters in animal models”. *Asian Journal of Pharmacy and Pharmacology*. 2019; 5(4): 771-778.
 3. Basak P. “Evaluation of drug-drug interaction on concomitant administration of anti-diabetics and hypolipidemics in in vivo models”. *International Journal of Biosciences*. 2019; 14(1): 317-327.
 4. Basak.P , “Phytochemical Analysis and comparative study of Antibacterial Effect of Turmeric Extracts Using Different Solvents” *IOP Conf. Series: Materials Science and Engineering* 410ISSN 17578981 doi:10.1088/1757-899X/410/1/012018
 5. Basak.P , “Potential Therapeutic Activity of Bio-Synthesized Silver Nanoparticles as Anticancer and Antimicrobial Agent”, *IOP Conf. Series: Materials Science and Engineering* 410ISSN 17578981 doi:10.1088/1757-899X/410/1/012020
 6. Basak.P, “Green Synthesis and Characterization of Gelatin-PVA Silver Nanocomposite Films for Improved Antimicrobial Activity” , *IOP Conf. Series: Materials Science and Engineering* 410ISSN 17578981 doi:10.1088/1757-899X/410/1/012019
 7. P Basak - “Green synthesis and characterization of silver nanoparticles using belladonna mother tincture and its efficacy as a potential antibacterial and anti-inflammatory agent” *Materials Chemistry and Physics*, Volume 228, Date of publication: 2019/4/15
 8. P Basak, “RISUG® based improved intrauterine contraceptive device (IUCD) could impart protective effects against development of endometrial cancer”, *Medical hypotheses*, Volume124, Date of publication: 2019/3/1

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9. P Basak “Biocompatible polyvinyl alcohol and RISUG® blend polymeric films with spermicidal potential”. *Biomedical Materials*, Volume 14, Date of publication: 2019/2/6
10. P Basak, - “Bis (Isothiocyanatomethyl) Benzene, A Plant Derived Anti-Neoplastic Compound: Purified from Moringa Oleifera Leaf Extract”. *Anti-cancer agents in medicinal chemistry*, Date of publication: 2019/2
11. P Basak “Three dimensional structure prediction and ligand-protein interaction study of expansin protein ATEXPA23 from Arabidopsis thaliana L”.– *Indian Journal of Biochemistry and Biophysics*, Volume : 56, Date of publication: Feb-2019
12. P Basak “Impact of styrene maleic anhydride (SMA) based hydrogel on rat fallopian tube as contraceptive implant with selective antimicrobial property” - *Materials Science and Engineering: C*, Volume: 94, Date of publication: 2019/1/1
13. Basak P., “Polypharmacy and Comorbidity Status in the Treatment of Type 2 Diabetic Patients attending a Tertiary Care Hospital: An Observational and Questionnaire-based Study”. *Perspectives in Clinical Research*. 2018; 9(3): 139-144.
14. Paul S, Basak P, Majumder R, Mukherjee A, Ghosh J, Patra S, Jana NK. “Biochemical Estimation of Moringa oleifera Leaf Extract for Synthesis of Silver Nanoparticle Mediated Drug Delivery System”. *J. Plant Biochem. Biotechnol.* (2019). PP: 1-8. <https://doi.org/10.1007/s13562-019-00517-z>
15. R Majumder, P Parida, S Paul, P Basak. In vitro and in silico study of Aloe vera leaf extract against human breast cancer. *Natural product research*, 2018; PP 1-4. <https://doi.org/10.1080/14786419.2018.1534848>
16. Monisha Chakraborty and Sugata Bhattacharyya, “Air-annealed growth and characterization of Cd_{1-x}Zn_xTe thin films grown from CdTe/ZnTe/CdTe multi-stacks”, *Vacuum, Elsevier*, 149, 156-167. ISSN: 0042-207x, 2018
17. Rituparna Acharya, Monisha Chakraborty and Jui Chakraborty, “Prospective treatment of Parkinson’s disease by a siRNA–LDH nanoconjugate”, *Med. Chem. Commun, Royal Society of Chemistry*, 2019, 10, 227-233, DOI: 10.1039/c8md00501j
18. Sk. Hasanur Rahaman, Arnab Bhattacharjee, Suman Saha, Monisha Chakraborty, Jui Chakraborty, “shRNA intercalation in CaAl-LDH nanoparticle synthesized at two different pH conditions and its comparative evaluation”, *Applied Clay Science, Elsevier*, 171, 2019, 57–64, 2019
19. Arnab Bhattacharjee, Sk Hasanur Rahaman, Suman Saha, Monisha Chakraborty, Jui Chakraborty, “Determination of half maximal inhibitory concentration of CaAl layered double hydroxide on cancer cells and its role in the apoptotic pathway”, *Applied Clay Sciences, Elsevier*, 168, 31–35, 2019
20. Rituparna Acharya, Amir Mohammed Alsharabasy, Suman Saha, Sk. Hasanur Rahaman, Arnab Bhattacharjee, Suranjana Halder, Monisha Chakraborty, Jui Chakraborty, “Intercalation of shRNA-plasmid in Mg-Al layered double hydroxide nanoparticles and its cellular internalization for possible treatment of neurodegenerative diseases”, *Journal of Drug Delivery Science and Technology, Elsevier*, 52, 500–508, 2019
21. Sk. Hasanur Rahaman, Arnab Bhattacharjee, Monisha Chakraborty, Nina Daneu, Jui Chakraborty “Incorporation of shRNA in bioactive glass coated SS316L implant material and its role in inhibition of the osteoclast activity for better post implantation fixation”, *Journal of Drug Delivery Science and Technology, Elsevier*, 52, 730–737, 2019
22. Rituparna Acharya, Monisha Chakraborty, Jui Chakraborty “An in vitro comparative study of layered double hydroxide nanoconjugate in the delivery of small interference and short hairpin ribonucleic acid, *Accepted for publication in Bulletin of Materials Science*, 2019
23. Monisha Chakraborty and Saleem Hashmi, “Wonder Material Graphene: Properties, Synthesis and Practical Applications”, published in *Advances in Materials and Processing Technologies, Taylor & Francis*, (2018) ISSN: 2374-068x (print) ISSN: 2374-0698 (online), <https://doi.org/10.1080/2374068X.2018.1484998>

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24. Monisha Chakraborty and Saleem Hashmi, "High Energy Radiation Detection Materials: Fabrication and Applications", published in *Advances in Materials and Processing Technologies*, Taylor & Francis, 2019, doi: <https://doi.org/10.1080/2374068X.2019.1575714>
25. Monisha Chakraborty and Saleem Hashmi, "Simultaneous Vacuum Evaporation for CZT Thin Film Fabrication", accepted for publication in *Advances in Materials and Processing Technologies*, Taylor & Francis, 2019
26. Sayantani Basu and Monisha Chakraborty, "OCT Image Classification Model using hybrid filters and convolutional neural networks", *International Journal of Emerging Technology and Advanced Engineering*, vol 8, issue 1, 2018
27. Moumita Pal and Monisha Chakraborty, "Observation on Training Neural Network for Diagnosing Schizophrenia", *International Journal of Advanced Research in Computer Science*, Vol 9, No. 1, 2018
28. Moumita Pal and Monisha Chakraborty, "Fuzzy Based System for Diagnosing Schizophrenia", *International Journal of Engineering Science and Technology (IJEST)*, Vol. 10, No.01, 2018
29. Moumita Pal and Monisha Chakraborty, "Choice of Support Vector Machine Kernel for Classifying Schizophrenia Data", *International Journal of Computer Science & Information Technology Research Excellence* Vol. 8 Issue 1, 2018
30. Moumita Pal and Monisha Chakraborty, "Fuzzy Clustering For Diagnosing Schizophrenia", *International Journal of Computer Engineering and Applications*, Volume XII, Issue III, 2018
31. Monisha Chakraborty, "Fragrance as a Source of Well-Being: Fractal Study Using ECG Time Series", *International Journal of Advanced Research in Computer Science*, Volume 9, issue 2, 2018
32. Monisha Chakraborty, "Meditation as Therapy: Fractal Study Using ECG Time Series", *International Journal of Advanced Research in Computer Science*, Vol 9, issue 2, 2018
33. Monisha Chakraborty, "Effect of Chi Meditation on Heart rate Oscillations: Fractal Study" published in *International Journal of Engineering Research and Applications*, Vol. 8, Issue 4 (Part -III) 2018, 56-59
34. Moumita Pal and Monisha Chakraborty, "HRV Parameters As A Bio- Marker Of Preterm Infant And Normal Sinus Rhythm ECG", *International Journal of Computer Engineering and Applications*, 2018

5. Collaborative Programmes:

Research Collaboration with:

1. Zoology Department, Burdwan University
2. Dublin City University, Ireland
3. IIT Dhanbad
4. Dept. of Veterinary Surgery & Radiology, W.B. University of Animal & Fishery Sc.
5. CSIR-CGCRI
6. C.V. Raman Centre for Physics and Music, Jadavpur University
7. Department of Mechanical Engineering, Jadavpur University
8. School of Energy Studies, Jadavpur University
9. Computer Science Department, Jadavpur University
10. Pharmaceutical Technology, Jadavpur University
11. Life Science & Biotechnology, Jadavpur University

6. Major Achievements:

- Piyali Basak. Received Outstanding young scientist in Bio-materials award in RULA International Innovation and Betterment Awards 2018 ceremony taken place on November 12th 2018 in Tiruchirappalli, Tamil Nadu, India.

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- Rania Indu –(Research scholar under Dr. Piyali Basak) Awarded 2nd Best Oral Presentation in the National Conference on Collaborative Health Sciences- Visions for the Future, NATCONPH 2019, organized by NSHM Knowledge Campus, Kolkata.
- Rania Indu –(Research scholar under Dr. Piyali Basak) Awarded Best Poster Presentation in the 2nd International Conference on Biotechnology & Biological Sciences, BIOSPECTRUM 2018, organized by University of Engineering & Management, Kolkata.
- Samrat Paul-(Research scholar under Dr. Piyali Basak) ISCA Best Poster award (7th January, 2019) in the Section of Medical Science Including Physiology.
- Section Editor of Reference Module in Materials Science and Materials Engineering. Oxford: Elsevier
- Review Editor of Reference Module in Materials Science and Materials Engineering. Oxford: Elsevier
- Invited International Member in the 21st International Conference in Advances in Materials and Processing Technologies Conference (AMPT) 2018 during 4th to 7th September, 2018 held in Dublin City University, Dublin, Ireland
- Chaired two Technical Sessions in the 21st International Conference in Advances in Materials and Processing Technologies Conference (AMPT) 2018 during 4th to 7th September, 2018 held in Dublin City University, Dublin, Ireland
- Invited as Chief Guest and delivered lecture at Swapnopuran Shishu Shiksha Niketan, Hingolgunj, Basirhat, North 24 Parganas on the occasion of celebration of National Science Day 2019
- Invited as Guest Speaker at Elsevier eBook Forum 2019 (South Asia) held at Radisson Blu Hotel Guwahati, 2019
- Invited as Guest of Honour at the workshop on Women Entrepreneurship "She-preneurship" held in the main auditorium of Indian Chamber of Commerce, 10th Floor, 4, India Exchange Place, Kolkata, 2019.
- Invited to deliver valedictory address to the students in the Four Day workshop on Daily Life Mathematics: Imagine, Invent and Inspire conducted by Kolkata Nivedita Shakti and sponsored by the Department of Science & Technology and Biotechnology, Government of West Bengal at Indumati Sabhagriha, 2019.
- *My interview on* "Daily Life Mathematics: Imagine, Invent and Inspire" workshop is given in UPWORDS Magazine
- Invited as a panelist in the book "Random Subterranean Mosaic: 2012-2018" launch event at Oxford Book Store Kolkata, 2019
- My book: "Journey so far: A Glimpse" published by Citadel Publishers, ISBN: 978-93-81493-66-3 is released at Kolkata International Book Fair, 2019
- My Rabindrasangeet Music Album, "*Tomar Kaache*" is released at Kolkata International Book Fair, 2019
- Invited as Institute guest for delivering Invited Lecture during the Workshop on "Innovation Incubation and Startup with IPR Possibilities" held at NIT Manipur, 2019
- Joint Secretary of National Conference on "Environmental Radiation: Impact on Society and its Implications (ERISI-2019)" to be held on November, 15-16, 2019
- Rendered Rabindrasangeet at CTVN AKD Plus Channel in the programme "Pratidiner Rabindranath"
- Appreciations of my Rabindrasangeet got place in Newspapers, "Natun Gati" weekly newspaper, covering the programme "Ekush Shotoker Golpo Kobita, Doshom Shonkolon"
- Invited guest in the programme on 20th April, 2019 at Bangla Academy organized by Ekusher Bhabona Potrika" covered in "Natun Gati" weekly newspaper

Number of PhD thesis submitted in 2018-2019: Two

Number of PhD thesis awarded in 2018-2019: One

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COGNITIVE SCIENCE

Phone : + 91-33-2414-6720

Int. : 2457-2357

Director.: Dr. Amrita Basu

E-mail : dir.cognitive@jadavpuruniversity.in

Professor Amita Chatterjee, Professor Emeritas, School of Cognitive Science

1. Area of Research Activities:

Perception, emotion, reasoning, e-learning, History and Philosophy of Cognitive Science

2. Major Research Project:

1. UPE II, UGC

3. Invited Lectures Delivered/ Sessions Chaired:

Chaired Sudhindranath Datta Memorial Lecture delivered by Professor Sukanta Chaudhuri, organized by the Hirendranath Datta Foundation, Jadavpur University.

Delivered a lecture at Bose Institute on BCI Technology and its Ethical Implications in October 2017.

Delivered Hirendranath Datta Memorial Lecture on “Buddhi, Bodhi o Bigyan”, organized by the Hirendranath Datta Foundation, Jadavpur University on 10 January 2018.

Delivered the keynote address on “Embodied Consciousness” at Presidency University, Kolkata in January 2018.

Delivered 6 lectures on Philosophy of Mind, Language and Cognition as a Visiting Professor in the Department of Philosophy, North Bengal University, in March 2018.

4. Seminar/Workshop conference/Symposium Attended:

1. Presented a paper on “Gender Gap in Mathematics and Science: Some Observations from the Indian Perspective” in a seminar organized at the University of Taipei, Taiwan, in November 2017, representing the International Union of the History of Science and Technology.
2. Delivered a lecture on “Thought Experiments as a Method of Cognitive Science”, in a conference organized by the University of Salzburg in December 2017.
3. Delivered a lecture on “Do our epistemic intuitions vary across culture” in the seminar organized by the Ramakrishna Mission Institute of Culture on the occasion of 150th Birth anniversary of Sister Nivedita on Multi-cultural Philosophy, in January 2018.
4. Delivered a lecture on “Ganiter Dharapat o Galpa-salpa” in a national seminar entitled oMathematics and Culture II, organized by IIUST, Shibpur in January, 2018.
5. Delivered a lecture on “Indian Psychology” in a workshop organized by Applied Psychology Department, Calcutta University in February 2018.
6. Presented a paper in the R.P.Das Centenary seminar organized by Calcutta University in February 2018.
7. Presented a paper on ‘Communication’, in a seminar organized by Alochana Chakra.
8. Moderated a symposium on ‘Women and Glass Ceiling Effect’ at the Department of Education, Loreto College, Kolkata in March 2018.

5. Orientation Courses/Refresher Courses Attended :

Delivered a lecture on ‘How to deal with imprecision in our language’ in the Orientation Course organized by the Academic Staff College, Jadavpur University.

6. Books/Monographs etc. Published :

Indian Philosophy and Meditation: Perspectives on Consciousness, co-authored with Rahul Banerjee, Routledge, London and New York, 2018.

7. Articles Published in Journals:

- A review of the book, *The Scientific Status of Psychoanalysis: Evidence and Confirmation*, Pushpa Misra, *Journal of Indian Academy of Applied Psychology*, vol 43, no.2, 2017.
- “Roads to Mathematical Pluralism”, *Journal of Indian Council of Philosophical Research*, ICPR and Springer, Vol 34.2, May, 2017.
- “The Gettier Intuition from South America to Asia”, co-authored with E. Machery, S. Stich et al., *Journal of Indian Council of Philosophical Research*, S ICPR and Springer, Vol 34.3, September, 2017.
- “Âtmatver nânâ star”, translated the paper “Layers of Selfhood”, *Âtma ebang târ apar*, Jitendranath Mohanty, Oxford University Press, 2018.

8. Collaborative Programmes:

Collaborated with Stephen P. Stich, Rutgers, USA, et al. in the “Intellectual Humility and Cultural Diversity’ Project, funded by John Templeton Foundation and Rutgers University, USA.

9. Major Achievements:

Editor-in-Chief, *Journal of Indian Council of Philosophical Research*, ICPR and Springer (till December 2017).

Second Vice President (2016-19), Division of Logic, Methodology, Philosophy of Science and Technology, International Union of History and Philosophy of Science and Technology.

Member, Advisory Committee of SATYAM (Science and Technology in Yoga and Meditation) Project of DST.

Consultant, of the project “The Geography of Philosophy”, funded by the John Templeton Foundation (USA).

Lopamudra Choudhury, Professor

1. Area of Research Activities:

Diagram Logic, Cognition of the blind, Applied ethics

2. Major Research Project:

National Programme for Perception Engineering II, MeitY
UPE II, UGC

3. Research Publications:

1. “Venn Diagram with Names of Individuals and Their Absence: A Non-Classical Diagram Logic”, (with Reetu Bhattacharjee and Mihir kumar Chakraborty), *Logica Universalis*, 12(1-2): 141-206 (2018).
2. “A Survey and Evaluation of Diagrams for Navya-Nyâya”, (with Jim Burton and Mihir Kumar Chakraborty), *Diagrams 2018*: 280-295 (2018).
3. “Spider Diagrams with Absence”, (with Gem Stapleton and Mihir kumar Chakraborty), *DMSVIVA 2018*: 91-100 (2018).
4. “Venn io_;: a diagram system for universe without boundary”, (with Reetu Bhattacharjee and Mihir kumar Chakraborty), *Logica Universalis*, 2019, 13(3), 289-346.

4. Conference/Seminar organized:

Workshop On Visual Reasoning, February 18-19, School of Cognitive Science, Jadavpur University in collaboration with IEST Shibpur.

Mihir Kumar Chakraborty, Visiting Professor

1. Area of Research Activities:

Modal Logic, Linear Logic, Rough Set Theory and its Logic, Fuzzy Set Theory and its Logic, Nonmonotonic Reasoning and Belief Change, Logic of Diagrams, Knowledge Representation, Applications of Philosophy of Mathematics

2. Research Publications:

1. "Covering-based rough sets and modal logics". Part II, (with Minghui Ma), *Int. J. Approx. Reasoning* 95: 113-123 (2018).
2. "Venn Diagram with Names of Individuals and Their Absence: A Non-classical Diagram Logic", (with Reetu Bhattacharjee and Lopamudra Choudhury), *Logica Universalis*, 12(1-2): 141-206 (2018).
3. "A Survey and Evaluation of Diagrams for Navya-Nyâya", (with Jim Burton and Lopamudra Choudhury), *Diagrams* 2018: 280-295 (2018).
4. "Spider Diagrams with Absence", (with Gem Stapleton and Lopamudra Choudhury), *DMSVIVA* 2018: 91-100 (2018).
5. "Sequent Calculi for Varieties of Topological Quasi-Boolean Algebras", (with Minghui Ma and Zhe Lin), *IJCSR* 2018: 309-322 (2018).
6. "Decidability in Pre-rough Algebras: Extended Abstract", (with Zhe Lin and Minghui Ma), *IJCSR* 2018: 511-521 (2018).
7. "Information flow in logic for distributed systems: Extending graded consequence", (with Soma Dutta and Andrzej Skowron), *Inf. Sci.* 491: 232-250 (2019).
8. "The Finite Embeddability Property for Topological Quasi-Boolean Algebra 5", (with Zhe Lin), *ICLA 2019*: 30-41 (2019).
9. "Venn io_1 : a diagram system for universe without boundary", (with Reetu Bhattacharjee and Lopamudra Choudhury), *Logica Universalis*, 2019, 13(3), 289-346.

3. Books published:

Theory of Graded Consequence: A General Framework for Logics of Uncertainty, (with Soma Dutta), Springer, eBook ISBN: 978-981-13-8896-5, DOI: 10.1007/978-981-13-8896-5 (2019).

4. Conference Presentation:

1. Invited talk at International Conference on Recent Trends in Mathematical Sciences (ICRTMS 2018), Department of Applied Mathematics, Maharaja Bir Bikram University, Agartala, Tripura, India, March, 2018.
2. Invited lecture, Ho Chi Minh City, Vietnam
3. Invited talk at 3rd International Conference on Intelligence Science (ICIS 2018), Peking University, Beijing, China, November, 2018.
 - a. Paraconsistency: Some basic issues, Paraconsistent Logic Pre-Conference Workshop, ICLA, March 1–5, 2019, Indian Institute of Technology Delhi.
 - b. Plenary Talk, IJCRS 2019, Debrecen, Hungary

5. Conference/Seminar Organized:

1. Workshop on Mathematics and Culture – II, January 8-10 2018, Initiative for Studies in Science Technology and Culture (ISSTaC) in association with Department of HSS, IEST- Shibpur.
2. Special Session on Rough Logics and Foundations of Rough Sets, IJCRS, 2018, August 20-24, Quy Nhon, Vietnam.
3. Workshop on Logic and Metalogic, UNILOG conference, June 16-26, Vichy, France.

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4. 7th Indian School on Logic and its Applications (Part II), Logic and Automata, December 17-22, IEST-Shibpur.
5. Workshop On Visual Reasoning, February 18-19, School of Cognitive Science, Jadavpur University in collaboration with IEST Shibpur.
6. **Academic Visit:**
 1. Sun Yat-sen University, November 2018.
 2. NIIT Patna, 12th-16th February, 2019.
 3. IIT Delhi, 6th March, 2019.
 4. IMSC Chennai, 26th April- 1st May, 2019
 5. University of Debrecen, Hungary, June 13- 30, 2019
7. **Others**
 - Chaired panel: Invited talk by Chris Cornelis, *Fuzzy Rough Sets: Achievements and Opportunities*, IJCRS 2019, Debrecen, Hungary.
 - Adjunct Professor at Indraprastha Institute of Information Technology, Delhi, 2019.
 - Adjunct Professor at Indian Institute of Science Education and Research Kolkata, 2019.

CULTURAL TEXTS & RECORDS

Phone : +91-33-2414-6681
Int. : 2457-2943/2631
Director : Prof. Amlan Das Gupta
Jt. Director : Prof. Abhijit Gupta
E-mail : dir.ctr@jadavpuruniversity.in

1. A. Courses Offered:

Name of the Course	Duration	No of Students Enrolled
Certificate Course in Editing and Publishing	5 months	35

1. B. Number of Faculty Members:

Director: Amlan Das Gupta, Professor of English (academic details given under relevant department list)

No Permanent Staff

List of Members of Academic Committee, School of Cultural Texts and Records

1. The Vice-Chancellor, JU - Chairman
2. Professor Amlan Das Gupta Director of School and Vice-Chairman
3. Professor Abhijit Gupta, Department of English, Joint Director of School
4. Professor Samantak Das, Department of Comparative Literature, Member
5. Professor Mahidas Bhattacharya, Department of Linguistics, Member
6. Professor Moinak Biswas, Department of Film Studies, Member
7. Professor Paromita Chakravarti, Department of English, Member

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8. Professor Nilanjana Deb, Department of English, Member
9. Professor Abhijit Roy, Department of Film Studies, Member
10. Professor Rajeswar Sinha, Department of Bengali, Member
11. Professor Chandan Majumdar, Department of Computer Science and Engineering, Member
12. Professor Sudip Kumar Naskar, Department of Computer Science and Engineering, Member
13. Professor Sipra Mukherjee, Department of English, West Bengal State University, Barasat (External Member)
14. Professor Ujjayan Bhattacharya, Department of History, Vidyasagar University (External Member)

2. A. Area of Research Activities: (Broad Areas)

Documentation and digitization of endangered cultural material
Electronic editing and software development
Research and training in the related fields
Strengthening collaboration among institutions with similar interests

2. B. Major Research Project: (Departmental/Individual, Name of the Project/Funding Agency)

Departmental–2013-2019–Documentation of Cultural Texts (subgroup of CR&SS Programme)–UGC-UPE II

Departmental–2013-continuing–Digitisation of paper records–Victoria Memorial Hall, Kolkata

Departmental–2016-2020–Two centuries of Indian Print–British Library Endangered Archives Project

6. Major Achievements:

For all details pertaining to items 3-6, please see under Departmental profiles.

EDUCATION TECHNOLOGY

Phone : +91-33-2414-6129

Int. : 2457-2442

Director. : Prof. Matangini Chattopadhyay

Jt. Director : Dr. Ranjan Parekh

E-mail : dir.edutech@jadavpuruniversity.in

1. A. Courses Offered (Name of the course, Duration of Course, No. of Students Enrolled):

Name of the Course	Duration of Course	No. of Students Enrolled
Master in Multimedia Development, (4-semester)	2 Years	06
M. Tech IT (Courseware Engineering), (4-semester)	2 years	19
Certificate Course on Multimedia Development & Applications	6 months	–
Post Graduate Diploma in Multimedia and Web Technology (Distance mode), (4-semester)	1 Year	No Enrollment
M.A. in Environment and Development (Distance mode), (4-semester)	2 Years	Suspended (Decision taken by Dept. of Economics)

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1. B. Number of Faculty Members:

Sanctioned Posts	Professor (02+01) (XIth Plan))	Associate Professor (02)	Assistant Professor (01)	Assistant Professor <i>(on contract)</i> (04)	Total (10)
Existing Number of Teachers	Professor (01)	Associate Professor (01)	Assistant Professor (0)	Assistant Professor <i>(on contract)</i> (02)	Total (04)

2. A. Area of Research Activities (Broad Areas)

- Education Technology
- Teaching-Learning Methodology
- Intelligent Tutorial System
- Courseware Engineering
- Computer aided Language learning
- Learning Management System
- e-Learning
- Digital Distance Education
- Quality Assurance for e-Learning
- Multimedia Content Creation Process
- Multimedia Databases and Content Based Retrieval
- Image Processing and Pattern Recognition
- Mobile Multimedia Communication
- Distributed Object Computing
- Mobile Computing
- m-Learning
- Mobile Application
- Quality Assurance for m-Learning
- Cryptography and Steganography
- Wireless Sensor Network & Wireless Security
- Web Services & Web Technology
- Risk Management and Financial Engineering
- Speech / Character Recognition

2. B. Major Research Project (Departmental/Individual, Name of the Project, Funding Agency):

a. Departmental / Individual: Prof. Matangini Chattopadhyay, **Principal Investigator**, Prof. Samiran Chattopadhyay, Co-Principal Investigator, Dr. Saswati Mukherjee, Co-Investigator

Name of the Project: “Cosmic Quest”

Funding Agency: Vigyan Prasar, an autonomous organization under the Department of Science & Technology, Govt. of India, 2019 - 2021 (2 years), the total volume of the project is INR 2,07,53,532.80

b. Departmental / Individual: Prof. Matangini Chattopadhyay, **Coordinator**, Jadavpur University, India

Name of the Project: *Adaptation of TRAILS for hand-held devices*

Funding Agency: JU-RUSA 2.0, June 2019 – March 2020, the total volume of the project is INR 15,98,000.00

c. Departmental / Individual: Prof. Matangini Chattopadhyay, **Principal Investigator**, Professor Samar Bhattacharya and Dr. Ranjan Parekh as Co-Principal Investigators.

Name of the Project: “Design and Development of Web Based Teaching Material (Engineering) for Undergraduate and Postgraduate Laboratory.”

Funding Agency: University Grant Commission University with Potential for Excellence - Phase II, September 2012 – March 2019, the total volume of the project is Rs. 120.00 Lakh.

3. D. Orientation Courses/Refresher Courses Attended (Name of the teachers, Title of the Course, Duration, Place):

Dr. Saswati Mukherjee, “IT Enabled Learning for STEM”, September 10-12, 2018, IIT Bombay.

E. Orientation Courses/Refresher Courses Organized (Name of the teachers, Title of the Course, if any, Duration, Place):

Dr. Saswati Mukherjee (Program Coordinator), Certificate Course on “Multimedia Development & Applications”, March 2018 - August 2018 (6 months).

4. B. Articles Published in Journals/Conferences (Name of the Teacher, Name of the Articles, Name of the Journal, Date of Publication, Volume):

- Hindol Bhattacharya, A. Bhattacharya, Samiran Chattopadhyay, **Matangini Chattopadhyay**, *LDA Topic Modeling Based Dataset Dependency Matrix Prediction*, In International Conference on “Computational Intelligence, Communications, and Business Analytics”, pp. 54-69, Springer, Singapore, July, 2018.
- Mitra, A., Kundu, A., **Chattopadhyay, M.**, & Chattopadhyay, S., “On the exploration of Equal Length Cellular Automata rules targeting a Map Reduce design in Cloud”, *International Journal of Cloud Applications and Computing (IJCAC)*, 8(2), 1-26. IGI Global, 2018.
- Shilpi Bose, Chandra Das, **Matangini Chattopadhyay**, Kuntal Ghosh, Samiran Chattopadhyay, “An Ensemble Filtering Approach based Supervised Gene Clustering Algorithm to Identify Informative Genes to Improve Sample Classification Accuracy in Microarray Gene Expression Data”, International Conference on Computational Intelligence and Data Analytics (ICCIDA), Bhubaneswar, October 26-27, 2018.
- S. Bal, S. Mahanta, L. Mandal, **R. Parekh**, “Bilingual Machine Translation: English to Bengali”, in Proc. of Int. Ethical Hacking Conf. (eHaCON 2018), pp. 247-259, ISBN 978-981-13-1544-2, Kolkata, April 6-7, 2018.
- S. Chakraborty, **R. Parekh**, “Improved Musical Instrument Classification Using Cepstral Coefficients and Neural Networks”, in J.K. Mandal, S. Mukhopadhyay, P. Dutta, K. Dasgupta (Eds.), “Methodologies and Application Issues of Contemporary Computing Framework” (MAICCF), pp. 123-138, Springer, 2018 [ISBN : 978-981-13-2345-4]
- C. Ganguly, S. Jana, **R. Parekh**, “Geometrical Transformation Invariant Approach for Classification of Signatures Using k-NN Classifier”, in J.K. Mandal, S. Mukhopadhyay, P. Dutta, K. Dasgupta (Eds.), “Computational Intelligence, Communications, and Business Analytics”. (CICBA 2018), July 27–28, 2018, Kalyani, India, part of Communications in Computer and Information Science, vol 1031. Springer, Singapore, pp. 106-120, Springer, 2018 [ISBN : 978-981-13-8578-0]
- S. Pal, S. Jana, **R. Parekh**, “Super-Resolution of Textual Images using Autoencoders for Text Identification”, in Proc. of IEEE Applied Signal Processing Conference (ASPCON 2018), Dec. 7-9, 2018, Kolkata, pp. 153-157 [ISBN : 978-1-5386-6686-9]
- S. Jana, **R. Parekh**, B. Sarkar, “An Approach Towards Classification of Fruits and Vegetables Using Fractal Analysis”, in J.K. Mandal, S. Mukhopadhyay, P. Dutta, K. Dasgupta (Eds.), “Computational Intelligence, Communications, and Business Analytics”. (CICBA 2018), July 27–28, 2018, Kalyani, India, part of Communications in Computer and Information Science, vol 1031. Springer, Singapore, pp. 167-180, Springer, 2018 [ISBN : 978-981-13-8581-0]
- Md. Safikul Alam, **Joydeep Mukherjee** “Content based Natural Image Retrieval using Histogram, Segmentation and Edge” *International Journal of Computer Applications*, Volume 180 – No.52, June 2018, ISSN-(0975 – 8887)

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- Arindam Mondal, **Joydeep Mukherjee** “An Approach to Predict a Student’s Academic Performance using Recurrent Neural Network (RNN)” *International Journal of Computer Applications*, Vol.- 181- No.6, July, 2018 ISSN-(0975-8887).
- R. Dhar, **S. Mukherjee**, “Android-based Text Reader for Partial Vision Impairment”, Fifth International Conference on “Electrical, Electronics & Computer Engineering, IEEE”, Nov 2-4, 2018.

5. Collaborative Programmes:

National:

- Strategy Academy Centre for Advanced Studies (TSACAS), Kolkata School of Education Technology, Jadavpur University (SET, JU) and the Strategy Academy Centre for Advanced Studies (TSACAS) jointly started a program titled “Post Graduate Diploma in Management and Entrepreneurship” through Live and two-way interactive Digital Network and it is going on successfully.

International:

- Royal Society International Exchanges/Grant Ref: IE160609 Dr Hubert P. H. Shum, University of Northumbria, Newcastle upon Tyne, UK and Dr Matangini Chattopadhyay, Jadvapur University, India jointly submitted a project entitled “An Affective Smart Environment for Personalized Learning and Teaching” to the Royal Society International Exchanges. The Royal Society (“Funding Body”) has accepted our project proposal and has awarded us £11841 for 02 years starting from 31 March, 2017 till 30 March, 2019 to carry out collaborative research including international travel from both directions. The project has been successfully completed.

6. Major Achievements:

- Dr. Ranjan Parekh was promoted to post of Professor under CAS, effective from December 2017.

7. Additional Remarks:

- The Smart Classroom of SET is being utilized for Recording/Editing for the project “Cosmic Quest” funded by Vigyan Prasar, an autonomous organization under the Department of Science & Technology, Govt. of India.
- The Smart Classroom of SET is being utilized for Recording/Editing for the project entitled “Design and Development of Web Based Teaching Materials (Engineering) for Undergraduate and Post Graduate Laboratory” under UGC UPE Phase II Scheme.
- Two (02) students were awarded Ph.D (Engg.) degree under the guidance of Prof. Matangini Chattopadhyay (Co-guide).
- Prof. Matangini Chattopadhyay guided Masters Degree research work of two (02) students, completed in June 2018.
- Dr. Ranjan Parekh guided Masters Degree research work of five (05) students, completed in June 2018.
- Five (05) students have completed their Masters Thesis under the guidance of Mr. Joydeep Mukherjee in June, 2018.

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ENERGY STUDIES

Int. : 2457-2907

Director.: Prof. Tushar Jash

E-mail : dir.energy@jadavpuruniversity.in

1. A. Courses Offered: M.Tech in Energy Science & Technology

1. B. Number of Faculty Members: 02

2. A. Area of Research Activities:

- a) Solar PV
- b) Solar Thermal
- c) Bio Energy
- d) Wind Energy
- e) Energy Conservation Management
- f) Building Energy Management

2. B. Major Research Project:

DST PURSE II, State Fellowship (01), MNRE (02), RUSA 2.0 (02), CSIR (01)

Dr. Ratan Mandal

3. A. Invited Lectures Delivered/Sessions Chaired:

- I. Delivered an invited lecture on “Solar Photovoltaic Power Plant” in a Solar Energy Training Program, conducted by Geetanjali Solar Enterprise, P-14, Kasba Industrial Estate, Kolkata - 700107 on 9th January, 2018.
- II. Delivered an invited lecture on “Solar Photovoltaic Power Systems and its Performance Analysis” in AICTE and SESI sponsored three days National Seminar on “Sustainable Energy and Grid Interaction of Large Scale Power Generation – Design and Installation Knowhow” held on 31st Jan – 2nd Feb. 2018 at Department of Electrical Engineering, Netaji Subhash Engineering College, Garia, Kolkata – 700152.
- III. Delivered an invited lecture on “Role of Renewable Energy in Disaster Management” in the UGC-HRDC sponsored three weeks Refresher Course on “Disaster Management: Water and Environment Sanitation” held on 07th January – 30th January 2019 at Jadavpur University, Kolkata – 700032.
- IV. Delivered an invited lecture on “Introduction to Non-Conventional Energy & its Challenges” in an Academic Seminar held on 30th January, 2018 at Department of Electrical Engineering, Pailan Technical Campus, Kolkata – 700104.
- V. Delivered an invited lecture on “Solar Photovoltaic Power Plant, Wind-Solar Hybrid System and On-grid Off-grid Hybrid System” in a Solar Energy Training Program, conducted by Geetanjali Solar Enterprise, P-14, Kasba Industrial Estate, Kolkata - 700107 on 19th June, 2018.
- VI. Delivered an invited lecture on “Solar Photovoltaic Power Systems – Challenges & Opportunities” in the program of National Science day celebration on the theme of “Science for the People and People for Science” Organized by Guru Nanak Institute of Technology, 24 Parganas (N), West Bengal on 28th February, 2019.
- VII. Delivered an invited lecture on “Energy: Present Status & Future Perspectives” in the program of “Innovate to INSPIRE 2019” Organized by IncubateIND in association with Energy Efficiency Service Limited (EESL), ESCO etc. at Nasscom, Monibhandar Building, Webel Bhavan Premises, Sector – V, Salt Lake, Kolkata.

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C. Seminar/Workshop/Conference/Symposium Organized:

One of the organizing and working committee members in the following programs

- i. One day National Seminar on “Energy Problem Facing the Third World and the Probable solutions For Sustainable Development and Poverty Alleviation” at School of Energy Studies, Jadavpur University on 04th January, 2019.
- ii. Special Lecture Program by Dr. Sanat Kumar Saha, Member (Eminent Scientist), West Bengal Council of Higher Education, Gov. of West Bengal, on “Energy and Environment – An Indian Perspective at School of Energy Studies, Jadavpur University on 13th May, 2019

4. B. Articles Published in Journals:

1. Madhumita Das and Ratan Mandal, “A comparative performance analysis of direct, with battery, super capacitor, and battery-super capacitor enabled photovoltaic water pumping systems using centrifugal pump”, *Solar Energy* (June 2018),171:302-309.
2. Ratan Mandal, Gaurab Basu and Biswajit Ghosh, “Studies on the Developing of Nano-Structured ‘Cu₂S’ film for photovoltaic application”, January 2018, *Materials today: proceedings* 5(11):23099-23106.
3. K. Chakroborty, R. Mandal, D. K. Mandal, S. Gangopadhyay, “Estimation of Series Resistance in Different Organic Compound Dye Based Organic Diodes”, *International Journal of Innovative Knowledge Concepts*, Volume 7, 2019, Pages 170-177.
4. Alope kumar Das, Ratan Mandal, KushalChakrobarty, Dulal Krishna Mandal, “Design and fabrication of Indigo dye based organic thin film”, *International Journal of Innovative Knowledge Concepts*, Volume 7, 2019, pages 178-184.
5. K. Chatterjee, S. Ra, B. Pal, K. Adhikary, U. Gangopadhyay, R. Mandal, “A comparative study of sio₂:Tio₂ composite and sio₂ film by sol-gel method for solar cell application”, (2019) *Springer Proceedings in Physics*, 215, pp. 341-347.
6. Suman Haldar, Ratan Mandal, and Arindam Mondal, “Impact of clean transportation systems in rural economy: A study”, *AIP Conference Proceedings* 2091, 020013 (2019); <https://doi.org/10.1063/1.5096504>.

ENVIRONMENTAL STUDIES

Phone : + 91-33-2414-6147

Int. : 2457-2543/2874

Director. : Dr. Tarit Roychowdhury

E-mail : dir.environmental@jadavpuruniversity.in

1. A. Courses Offered : (Name of the Course, Duration of Course, No of Students Enrolled)

- Ph.D. (Science and Engineering)
- Master of Technology in Environmental Biotechnology (Students Enrolled: 18)
- Advanced Diploma in Industrial Safety & Environmental Management (Students Enrolled: 30)

B. Number of Faculty Members: 4 (Four)

2. A. Area of Research Activities : (Broad Areas) Microbial biodiversity, bioremediation, bioplastics, slaughterhouse waste management, Environmental Chemistry, Arsenic and environment, Air pollution and aerobiology, Trace metal biogeochemistry, atmospheric chemistry

2. B. Major Research Project : (Departmental/Individual, Name of the Project/Funding Agency)

Joydeep Mukherjee:

1. Title: Bioremediation of polyaromatic hydrocarbons in the *Sundarbans* by application of phototrophic biofilms Sponsored by: Department of Biotechnology, Government of West Bengal; Amount: Rs. 24,84,020.00, Duration: 2018-2021
2. Title: Production of organic fertilizer by utilizing slaughterhouse wastes and its application for the cultivation of potato and vegetables, Sponsored by: Department of Science & Technology, Government of West Bengal, Amount: Rs. 22,99,600.00; Duration: 2018-2021

Dr. Tarit Roychowdhury

1. Title: Spatial distribution of uranium and associated water quality parameters in drinking and groundwater/ drinking water of five districts (Nadia, Bardhaman, North Twenty four Parganas, Kolkata, Howrah) of West Bengal (Principal Investigator). Sponsored by: Board of Research in Nuclear Science (Department of Atomic Energy), Govt. of India. Amount: Rs. 26,94,300/
2. Title: Mobility and mechanism of fluoride leachability into the aquifer of Sonarpur-Rajpur-Baruipur belt of the bank of Adi Ganga in South 24 Parganas district, West Bengal. Sponsored by: Water & Sanitation Support Organization, Public Health Engineering Department, Govt. of West Bengal. Amount: Rs. 3,75,100/
3. Title: Studies on chronic exposure to arsenic toxicity through food chain and drinking water with respect to rice grain contamination in selected sites of West Bengal and search for mitigation options. Sponsored by: Higher Education, Science & Technology and Biotechnology, Department of Science & Technology, Govt. of West Bengal. Amount: Rs. 25,99,600/
4. Title: 'IMPRINT II A' project, funded by Science and Engineering Research Board (SERB), Department of Science & Technology, Govt. of India: Arsenic and other contaminants free drinking water production of ~20,000 L/day in the arsenic affected area of India using laterite and ferromanganese slag based technology (IMPRINT-IIA, File number: IMP/2018/001228) A MOU has been assigned between IIT, Roorkee and Jadavpur University on this regard. Amount: Rs. 55,31,600/ (JU part: Rs. 13,28,400/)
5. Rashtriya Uchchatar Shiksha Abhiyan (RUSA) Project, Jadavpur University: Investigations of chronic exposure of arsenic, fluoride and nitrate toxicity through drinking water and dietary intakes, adverse health effects and mitigation strategies in exposed population of West Bengal, India. Amount: Rs. 4,50,000/.

Dr. Subarna Bhattacharya:

1. Title: "Profiling of indoor airborneusing foldscope microscope"; Sponsored by: Department of Biotechnology, Govt of India; Amount: Rs. 8 Lakh ; Duration: 2018-2019
2. Title: "Profiling of indoor airbornemangrove plant extract"; Sponsored by: Government of West Bengal, Department of Higher Education Science & Technology and Biotechnology (Science & Technology Branch and Biotechnology; Amount: Rs. 12 Lakh ; Duration: 2018-2021

Dr. Reshmi Das

1. Title: Anthropogenic Lead in the Atmosphere – Isotopes for Source Apportionment (M4011721 - RG125/16-(S)); Sponsored by: Ministry of Education, Singapore; Amount: SGD125,000.00; Duration: 2016-2019

3. A. Invited Lectures Delivered/ : (Name of the Teacher, Type of Session Chaired Participants, Name of the Seminar / Conference etc. Place, Duration)

Dr. Tarit Roychowdhury

1. Unscientific approach of use and misuse of water body resources: Groundwater arsenic-contamination with special reference to food chain: Impact, Measurement and Mitigation. Invited Awareness lecture on issue related to Swachhta Pakhwada, Sahitya Akademi, National Academy of Letters, 4, D. L. Khan Road, Kolkata-700025, 25th April, 2018.

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2. Unscientific approach towards use of water body resources: Groundwater arsenic-contamination with special reference to food chain in West Bengal, India: Magnitude, Health effects & Remedial Strategies. Invited Awareness lecture on issue related to 'World Environment Day', Bhairab Ganguly College, Belgharia, Kolkata-700056, 5th June, 2018.
3. Groundwater arsenic-contamination with special reference to food chain in West Bengal, India: Magnitude, Health Effects and Remedial Strategies. Invited Lecture in 'Brain Storming Session' on "Water Resources of Eastern (West Bengal, Bihar & Jharkhand) and North-Eastern States of India". Centre for Groundwater Studies in association with Geological Society of India, CSIR-CGCRI, Kolkata, 8-9 June, 2018.
4. Clean environment and the responsibility of the citizens to keep the globe clean and green. Invited Awareness lecture on issue related to 'Swachhta Bharat Mission', Swachhta Workshop, National Institute of Research on Jute and Allied Fibre Technology, 12, Regent Park, Kolkata-700040, 28th June, 2018.
5. Clean environment – Health, hygiene and sanitation: Responsibility of the citizens to keep the globe clean and green with special reference to waste and water. Invited Awareness lecture on issue related to 'Swachhta Bharat Mission', Swachhta Hai Seva (SHS) – 2018, Minerals and Metals Trading Corporation (MMTC) Limited, NIC Building, 8, India Exchange Place, Kolkata-700001, 28th September, 2018.
6. Sanitary protection and upgradation of traditional surface water sources in rural West Bengal for producing Sulabh safe water for drinking and cooking purpose: An innovative approach. Interactive session followed by adoption of recommendation to be chaired by Prof. K. J. Nath, Key discussants: Dr. Tarit Roychowdhury. Sulabh International Social Service Organization and Sulabh International Academy of Environmental Sanitation & Public Health. Seminar at ITC, Sonar Bangla, 4th December, 2018.
7. International conference on "Advanced technologies on industrial pollution control (ATIPC-2018)". Chair the Technical Session VI entitled "Water quality monitoring and treatment in industrial area", Civil Engineering Department, Indian Institute of Engineering Science and Technology, Shibpur, 18th December, 2018.
8. State groundwater scenario and its mitigations: special reference to arsenic and fluoride. 'Invited speaker' in National conclave on "Water Resources Management". Academy of Water Technology & Environ Management & Corporate Monitor in association with CSIR-Central Glass & Ceramic Research Institute, A P C Seminar Hall, CSIR-CGCRI, Kolkata, January 17-18, 2019.
9. Groundwater arsenic contamination in West Bengal, India: special reference to status, distribution, food chain contamination, health effects and mitigation strategies. 'Invited speaker' in National Seminar on "Environmental Issues: Current scenario from the view point of scientific studies", Abstract Volume, Acharya Brojendranath Seal College, Cooch Behar, February 19-20, 2019.
10. Groundwater arsenic and fluoride contamination in West Bengal, India: special reference to status, distribution, food chain contamination, health effects and mitigation strategies. 'Invited talk' on UGC-CPE funded 7 days' workshop: Environmental crisis with special emphasis on West Bengal. Department of Botany, Zoology and Economics, Barrackpore Rastraguru Surendranath College, February 23, 2019.
11. Groundwater arsenic contamination in West Bengal, India: special reference to status, distribution, food chain contamination, health effects and mitigation strategies. 'Invited speaker' in Seminar on arsenic mitigation plan. Raninagar-II Panchayat Samiti and Raninagar-II Development Block, Raninagar, Murshidabad, March 02, 2019.
12. Groundwater arsenic contamination in West Bengal, India: Status, distribution, food chain contamination, health effects and mitigation strategies. 'Invited talk' on National Seminar on 'Groundwater arsenic contamination problem in Ganga-Meghna-Brahmaputra (GMB) plain: Its health effects, socio-economic implications and mitigation strategies. Department of Economics, Vijaygarh Jyotish Ray College, Jadavpur in collaboration with School of Environmental Studies, Jadavpur University, Vijaygarh Jyotish Ray College, 25th March, 2019.

3. B. Seminar/WorkshopConference/SymposiumAttended : (Name of the Teacher, Name of Paper Presented, Name ofthe Seminar, Place, Duration)

Dr. Joydeep Mukherjee:

1. 'Identification of marine sponge pathogen and purification and characterization of virulence factor, collagenase enzyme': S. Bhattacharya, J. D. Choudhury, J. Mukherjee: American Society for Microbiology (ASM) Conference, 7-11 June, 2018, Atlanta, USA.
2. 'Effect of surface materials, planktonic and biofilm growth on production of exocellular polysaccharides from intertidal cyanobacteria for both health as well as for industrial application': M. Veerabhadran, J. Mukherjee: 3rd European Conference on Biodeterioration of Stone Monuments, November, 8 to 9th, 2018, Cergy-Pontoise, France.

Dr. Subarna Bhattacharyya

1. Participated and paper presented at 'Microcosom 2019', a national seminar organized by Dr. B. R. Ambedkar Institute of Technology, Port Blair, Andaman and Nicobar Island, India

4. B. Articles Published in Journals : (Name of the Teacher, Name of(Including National / International the Articles, Name of Journal,& Peer-reviewed Journals) Date of Publication, Volume)

Dr. Joydeep Mukherjee

2. 'Production enhancement and characterization of the polyhydroxyalkanoate produced by *Natrinemaajinwuensis* (as synonym) a *Natrinemaaltunense* strain RM-G10', : Riddhi Mahansaria, Anusua Dhara, Amit Saha, Saubhik Haldar, Joydeep Mukherjee: International Journal of Biological Macromolecules, 107 (Pt. B), 1480-1490, 2018
3. A new collagenase enzyme of the marine sponge pathogen *Pseudoalteromonas agarivorans* NW4327 is uniquely linked with a TonB dependent receptor: Sayak Bhattacharya, Jayanta Debabrata Choudhury, Ratan Gachhui, Joydeep Mukherjee: International Journal of Biological Macromolecules: 109, 1140-1146, 2018
4. "Effects of flask configuration on biofilm growth and metabolites of intertidal cyanobacteria isolated from a mangrove forest": Maruthanayagam Veerapathiran, Sandeep Chakraborty, Sayani Mitra, Sanmoy Karmakar, Joydeep Mukherjee: Journal of Applied Microbiology, 125, 190-202, 2018
5. *Oxynemaestuarii* sp. nov. (Microcoleaceae) isolated from an Indian mangrove forest: Sandeep Chakraborty, Veerapathiran Maruthanayagam, Anusree Achari, Riddhi Mahansaria, Arnab Pramanik, Parasuraman Jaisankar, Joydeep Mukherjee: Phytotaxa, 374, 24-40, 2018
6. Mathematical modelling for phytoplankton distribution in Sundarbans estuarine system, India: Tanaya Das, Saranya Chakraborti, Joydeep Mukherjee, Goutam Kumar Sen: Ecological Modelling 368, 111-120, 2018

Dr. Tarit Roychowdhury:

1. 'Arsenic accumulation in paddy plants at different phases of pre-monsoon cultivation'. N. Roy Chowdhury, R. Das, M. Joardar, S. Ghosh, S. Bhowmick, T. Roychowdhury. *Chemosphere*(Elsevier Journal) 2018, 210, 987-997 (IF: 5.108).
2. 'Impact of arsenic contaminated groundwater used during domestic scale post harvesting of paddy crop in West Bengal: Arsenic partitioning in raw and parboiled whole grain'. N. Roy Chowdhury, S. Ghosh, M. Joardar, D. Kar, T. Roychowdhury. *Chemosphere*(Elsevier Journal) 2018, 211, 173-184 (IF: 5.108).
3. 'Spatial variability and competing dynamics of arsenic, selenium, iron and bioavailable phosphate from ground water and soil to paddy plant parts'. A. Biswas, S. Biswas, A. Das, T. Roychowdhury. *Groundwater for Sustainable Development* (Elsevier Journal) 2018, 7, 328-335.
4. 'Variation of arsenic accumulation in paddy plant with special reference to rice grain and its additional entry during post-harvesting technology'. N. Roy Chowdhury, M. Joardar, S. Ghosh, S. Bhowmick, T. Roychowdhury. Book: *Ground Water Development – Issues and sustainable solutions*. Edited by S. P. Sinha Ray, Publisher: Springer, Singapore, 2019, 289-303.

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5. 'Role of microRNAs in senescence and its contribution to peripheral neuropathy in the arsenic exposed population of West Bengal, India'. D. Chatterjee, A. Bandyopadhyay, N. Sharma, S. Basu, T. Roychowdhury, S. S. Roy, A. K. Giri. *Environmental Pollution*(Elsevier Journal) 2018, 233, 596-603 (IF: 4.358).
6. 'Low Arsenic Exposure Risk in Endemic Population, Cohort Study for Consecutive Years'. A. Biswas, A. Das, T. Roychowdhury, D. N. GuhaMazumder. *Exposure & Health*(Springer Journal) 2018, 10, 273-286 (IF: 4.85).
7. 'Arsenic phytoavailability in Okra (*Abelmosch usesculentus* (L) Moench), role of bacterial consortium'. S. Bhowmick, A. Biswas, N. Roy Chowdhury, T. Roychowdhury. Book: *Defining modern biology: plants and microbes*, Edited by A. Sarkar, V. Mandal, S. K. Sil, S. Majumdar, C. Barman, Sujana Publication, Kolkata – Ranchi, 2018, Chapter 13, 135-143.
8. 'Investigation of environmental-concern trace elements in coal and its combustion residues from thermal power plants in eastern India'. D. Saha, D. Chatterjee, S. Chakravarty, T. Roychowdhury. *Natural Resources Research* (Springer Journal) 2019, 28(4), 1505-1520 (IF: 3.094).
9. 'Phyto-remedial detoxification of arsenic by *Pistia stratiotes* and assessment of its anti-oxidative enzymatic changes'. M. Pal, C. Goswami, M. Mukherjee, T. Roychowdhury. *Bioremediation Journal* (Taylor & Francis)2019(in press), (IF: 1.438)
10. 'Arsenic contamination in Kolkata metropolitan city: Perspective of transportation of agricultural products from arsenic endemic areas'. A. Biswas, S. Swain, N. Roy Chowdhury, M. Joarder, A. Das, M. Mukherjee, T. Roychowdhury. *Environmental Science and Pollution Research* (Springer Journal), 2019, 26, 22929-22944 (IF: 2.914).

Dr. Subarna Bhattacharyya

1. Mahanty, S., Bakshi, M., Ghosh, S., Chatterjee, S., Bhattacharyya, S., Das, P., Chaudhuri, P. (2019). Green Synthesis of Iron Oxide Nanoparticles Mediated by Filamentous Fungi Isolated from Sundarban Mangrove Ecosystem, India. *BioNanoScience*, 1-15.
2. Ghosh, S., Bakshi, M., Kumar, A., Ramanathan, A. L., Biswas, J. K., Bhattacharyya, S., Rinklebe, J. (2019). 'Assessing the potential ecological risk of Co, Cr, Cu, Fe and Zn in the sediments of Hooghly–Matla estuarine system, India'. *Environmental geochemistry and health*, 41(1), 53-70.
3. Ghosh, S., Bakshi, M., Mitra, S., Mahanty, S., Ram, S.S., Banerjee, S., Chakraborty, A., Sudarshan, M., Bhattacharyya, S. and Chaudhuri, P. (2019). Elemental geochemistry in acid sulphate soils—A case study from reclaimed islands of Indian Sundarban. *Marine pollution bulletin*, 138, 501-510.

Dr. Reshmi Das

1. 'Sources of atmospheric lead (Pb) in and around an Indian megacity': R Das, ATBM Mohtar, D Rakshit, D Shome, X Wang. *Atmospheric Environment* 193, 57-65, 2018.
 2. 'Estimation of Metal Emissions From Tropical Peatland Burning in Indonesia by Controlled Laboratory Experiments': R Das, X Wang, M Itoh, S Shiodera, MKuwata. *Journal of Geophysical Research: Atmospheres* 124, 6583-6599, 2019.
5. **Collaborative Programmes** : A MOU has been assigned between IIT, Roorkee and Jadavpur University regarding 'IMPRINT II A' project, funded by Science and Engineering Research Board (SERB), Department of Science & Technology, Govt. of India: Arsenic and other contaminants free drinking water production of ~20,000 L/day in the arsenic affected area of India using laterite and ferromanganese slag based technology (IMPRINT-IIA, File number: IMP/2018/001228).
6. **Major Achievements** :
- Dr. Joydeep Mukherjee Launch of the new teaching course Advanced Diploma in Industrial Safety & Environmental Management in equal partnership with Nuvoco Vistas Corp. Ltd. (Formerly Lafarge India Pvt. Ltd.)

ILLUMINATION SCIENCE, ENGINEERING & DESIGN

Phone : + 91-33-2414-6616
Int. : 2457- 2541
Director. : Sri Parthasarathi Satvaya
E-mail : dir.illumination@jadavpuruniversity.in

List of Publications:

(Nature of Publication–Title–Conference/Journal details–Publication Reference Details–Name of Authors)

1. International Journal (UGC Approved)–International Journal of Engineering Technology Science and Research–A study on the Energy Efficient Interior Lighting System of a Heritage Building–ISSN 2394-3386, Volume 5 , Issue 1 , January 2018–Dr. Kamalika Ghosh and Anubrata Mondal
2. International Conference–An approach towards feasibility Survey to overcome the Electric Power Deficiencies at various states of India–2nd International Conference on New Frontiers of Engineering, Science, Management and Humanities, ICNFESMH-2018; Venue: MCCIA Pune–Conference Proceedings , Date 18th Feb 2018–Shambhabi Chatterjee, Dr. Kamalika Ghosh, Dr. Debashish Das
3. International Journal (UGC Approved)–An approach towards feasibility Survey to overcome the Electric Power Deficiencies at various states of India–*International Journal of Engineering Technology Science and Research* (UGC-approved), Impact Factor 2.12–ISSN2394-3386, Vol 5, Issue 2, Feb 2018–Shambhabi Chatterjee, Dr. Kamalika Ghosh, Dr. Debashish Das
4. International Journal of Power Electronics (UGC Approved)–Universal Control Algorithm for Automatic LED driver–International Journal of Power Electronics–*Int. J. Power Electronics*, Vol. X, No. Y, xxxx , Feb, 2018–Kamalika Ghosh, Biswanath Roy, Viswanath Gupta and Biswarup Basak.
5. International Journal (UGC Approved & SCI Expended Journal)–Performance Analysis of various high powered LED–*Light & Engineering*,–ISSN 0236 2945Vol. 26, No. 1, pp.91-98, March. 2018–Dr. Kamalika Ghosh, Debashis Raul.
6. International Journal (UGC Approved Journal)–‘VLC for signal Transmission and reception: A nobel approach’–*International Journal of Modern Trends in Engineering and Research Power Electronics* –Published , DOI : 10.21884/IJMER.2018.5090.XSCCX–Kazi A H Taslim Arif, Animesh Bhattacharya, Dr. Kamalika Ghosh, Tapas Kumar Dawn
7. International Journal (UGC Approved & SCI Expended Journal)–‘Performance of chip-on-board and surface-mounted high-power LED luminaires at different relative humidities and temperatures’–*Lighting Research & Technology*–doi.org/10.1177/1477153518819040, Dec, 2018–Debashis Raul, Dr. Kamalika Ghosh.
8. International Conference –‘Daylighting in Urban Context’–International Conference on Electrical, Electronics, Civil & Computer Science–30th April, 2019–P. Bhattacharjee, S. Moitra, S. Mondal, Dr. Kamalika Ghosh
9. International Journal (UGC Approved) –Daylighting in Urban Context–*International Journal for Computer Science & Engineering*, ISSN :2347-2693, Impact Factor :2.54–18th May 2019–P. Bhattacharjee, S. Moitra, S. Mondal, Dr. Kamalika Ghosh.
10. National Journal (UGC Approved)– ‘Some Studies on the fading effect of Lamps on Archives’–*Journal of Asiatic Society*–ISSN 0368-3308, Volume LXI Issue 1, June,2019–Dr. Kamalika Ghosh and Anubrata Mondal.
11. International Journal (UGC Approved)– ‘Analysis of Temperature at Substrate and Sink Area of 5 W COB-Type LEDs, with and Without Driver’–*Advances in Control, Signal Processing and Energy Systems* (Springer)–ISBN 978-981-32-9345-8 DO, https://doi.org/10.1007/978-981-32-9346-5_11, Sept, 2019–Debashis Raul.

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12. International Journal (UGC Approved & SCI Expanded Journal) –Studies on Germicidal Benefit of Ultra Violet Ray upon Old Paper Documents–*Light & Engineering* (ISSN No.:0236 2945) –Vol 27 pp 17-24, Date of Publication 12/09/2019–Dr. Kamalika Ghosh and Anubrata Mondal.
13. International Conference –Thermal behaviour on the heat sink area of LED for different Thermal Interface Materials–*International Conference on Impact of Changing Energy Mix in the Power Sector* (The Institution of Engineers (India))–To be held on 23-24 Nov, 2019–Debashis Raul, Dr. Kamalika Ghosh.
14. International Journal (UGC Approved & SCI index)– ‘Analysis on Thermal Behavior of the Sink and Die area with different Thermal Interface Material for High Power Light Emitting Diodes’–*Lighting Research & Technology*–Under Publication–Debashis Raul, Dr. Kamalika Ghosh.

INTERNATIONAL RELATIONS & STRATEGIC STUDIES

Int. : 2475 2068/2229
Director. : Professor Shibashis Chatterjee
E-mail : dir.irss@jadavpuruniversity.in

1. A. Courses Offered :

(Name of the Course, Duration of the Course, No of Students Enrolled)

The School has introduced multidisciplinary PhD programme from 2011-12 academic session. While the essential focus remains on the strategic and security-centric issues, the research scholars admitted to the program also work on areas of bilateral relations among states and international organizations. The School at present has 8 research scholars enrolled in the programme.

1. B. Number of Faculty Members:

The academic activities of the School are monitored by an Academic Committee whose members are drawn from different Departments spread over all the Faculties of the University. The Director is from the Department of International Relations.

2. A. Area of Research Activities: (Broad Areas)

The School has special interest in the areas of international relations and strategic studies, in foreign policy and event analysis, emerging issues and concepts of global politics.

3. B. Seminar/Workshop/Conference/Symposium Attended: (Name of the Teacher, Name of the Paper Presented, Name of the Seminar, Place, Duration)

Information is available under the Department of International Relations.

3. C. Seminar/Workshop/Conference/Symposium Organized: (Name of the Teacher, Name of the Paper Presented, if any, Name of the Seminar, Place, Duration)

1. School of International Relations and Strategic Studies in collaboration with the Mahanirban Calcutta Research Group (MCRG) hosted a panel titled “Refugee Crisis around the Mediterranean”, with Petar Bojanić, Professor, Director, Centre for Ethics, Law and Applied Philosophy, Belgrade, Director, Institute for Philosophy and Social Theory, University of Belgrade, Director, Centre for Advanced Studies - South East Europe, University of Rijeka, Sanja Bojanić, Executive Director, Centre for Advanced Studies for South East Europe, University of Rijeka and David Newman, Dean, Faculty of Humanities and Social Sciences, Professor, Politics and Government, Ben-Gurion University as speakers, on November 27, 2018.

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2. Organized a lecture by Dr. Rajat Ganguly, Academic Chair, International Relations and Security Studies, based at Murdoch University in Perth, Australia, on "Ethnic Conflict: Concept, Theory and Evidence" on June 22, 2018.
3. The School successfully organized a short term workshop on Research Methodology in Social Sciences in collaboration with the Jadavpur Association of International Relations (JAIR) between February 4 and 16, 2019, with partial financial assistance of Indian Council of Social Science Research ERC.
4. Dr. Debasish Chaudhuri, an independent research scholar and Adjunct Fellow of the Institute of Chinese Studies, New Delhi, delivered a talk on the 'Recent Political Development in Xinjiang' on September 14, 2018.
5. Dr. Caroline Shenaz Hossein, Associate Professor and Coordinator, Business & Society Program, Department of Social Science, York University, Canada, was affiliated to the School for a period of one-month, from December 2018 to January 2019 to discuss her research into a book on *Mutual aid and the Black Banker Ladies*. She participated in an interactive meeting on December 23, 2018 and shared some of her thoughts.

LANGUAGES & LINGUISTICS

Int. : 2457-2144/2943/2420

Director.: Dr. Samir Karmakar

E-mail : dir.language@jadavpuruniversity.in

1. A. Courses Offered:

(i) Linguistics

- (a) MA in Linguistics under the Faculty of Arts, J.U.
- (b) MPhil in Linguistics under the Faculty of Interdisciplinary Studies, Law and Management
- (c) PhD in Linguistics under the Faculty of Interdisciplinary Studies, Law and Management
- (d) Choice based undergraduate courses under Faculty of Arts
- (e) Certificate Course in Linguistics (evening) of 1 year duration

(ii) Language Courses

- (a) Certificate Courses (1 year): French, German, Spanish, Korean, Japanese, English, Chinese, Bengali, Hindi, Sanskrit
- (b) Diploma Courses (1 year): French, German, Spanish, Japanese, Bengali, Hindi
- (c) Advanced Diploma Courses (1 year): French, Japanese
- (d) Advanced Diploma I and II (two years): Bengali
- (e) Short Term Language Course: Bengali for the Japanese Student from Tokyo University of Foreign Studies

1. B. Number of Faculty Members:

- (i) One Professor post is vacant from January 2018 onward due to the retirement of Dr. Mahidas Bhattacharya
- (ii) Dr. Samir Karmakar, Assistant Professor and Director of the School
- (iii) Dr. Atanu Saha, Assistant Professor and Joint Director of the School
- (iv) Guest faculties for linguistic courses: 4
- (v) Guest faculties for language courses: 21

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2. A. Area of Research Activities:

Language Documentation, Syntax, Semantics, Pragmatics, Grammatical Studies, Psycho-Neurolinguistics

2. B. Major Research Project: (Departmental/Individual Name of the Project/Funding Agency)

- i. Study and research in Indigenous and Endangered languages in India with special focus to West Bengal funded by UGC, PI Atanu Saha and CoPI Samir Karmakar
- ii. DiMLex-Bangla v. 1.0, funded by Potsdam, Department of Linguistics, Released on 2018-11-07 by Universität Potsdam, Department of Linguistics, Language: Bangla (bn), <https://github.com/discourse-lab/DiMLex-Bangla> First released: 2018-11-07, project associates SoumyaSankarGhosh and LahariChatterjee

3. A. Invited Lectures Delivered /Sessions Chaired: (Name of the Teacher, Type of Participants, Name of the Seminar/Conference etc. Place, Duration)

Dr. Atanu Saha

- i. Atanu Saha presented a paper on “field as a tool for building up academic social responsibility” during international workshop on Academic Social Responsibility at JU by centil, JU in collaboration with UEA 27th July, 2019
- ii. Atanu Saha delivered a talk on “Role of Digital Games in Language Learning” at Institute of Engineering and management on 26 sept 2018 during the literary fest
- iii. Atanu Saha delivered a lecture on “Benefits of the Multilingual and Multicultural Educational System in the Northeast.” in the International Webinar OHASA 2019, 26 February, 2019 organized by Sarsuna College, Kolkata.
- iv. Challenges in Documenting Linguistic Diversity Less Studied Languages of West Bengal delivered by Dr. Atanu Saha during MEDIATING MULTILINGUALISM: AN INDO-SCOTTISH COLLOQUIUM Venue: AMITY UNIVERSITY HARYANA, D-Block Conference Room Amity Education Valley, Pachgaon-Manesar, Dt Gurgaon 122413 March 18-19, 2019.

Dr. Samir Karmakar

- i. Karmakar, S. (2019). “Language, Learner, and Learning: Issues in Language Pedagogy and Language Acquisition”. In a National Symposium on “A Dialogue between Generative and Cultural-Cognitive Approach to Language Acquisition and Language Pedagogy”. Center for Advanced Study. Zakir Hussain Center for Educational Studies, School of Social Sciences, Jawaharlal Nehru University. 29.03.2019.
- ii. Chaired a Session During 7th International Conference on Endangered and Lesser Known Languages 22-23 February 2019 in collaboration with ICSSR-ERC, CIIL and RUSA 2.0, JU.

Project Staffs:

- i. Mitra, N. (2018). Students of Law & Linguistics, ‘A Two-day Workshop on Documenting Lesser Known Linguistic communities, and Building Linguistic resources’, National Law University at Delhi, 18-19th September, 2018.
- ii. Soor, S. (2018). Linguistics fraternity of India. One Day Workshop on Preparation for the Fieldwork in Language Documentation School of Languages, Jadavpur University, Kolkata, West Bengal, India. 1 Day - 02.08.2018.

Post-graduate Students

- i. Ghosh, S.S (2018) “Listening Comprehension for foreign learners: A Study in Bangla Language Teaching” Workshop on Preparing Syllabus and Curriculum of Bengali as a Second Language for Foreigner Students, organized by Department of Bengali, Jadavpur University.
- ii. Giri, P. (2018). Chaired a session in Lingvistiko V 1.1 organized by Ling Club at School of Languages and Linguistics in Jadavpur University (04.09.2018).

3. B. Seminar/Workshop/Conference/Symposium/Attended:

Dr. Atanu Saha

- i. Joint National Workshop on Documenting Lesser Known Communities and Building Linguistic Resources 18-19 Sept 2018 Under the Aegis of UGC project on Endangered and Indigenous languages with the National Law University, Venue: National Law University New Delhi.
- ii. 7th International Conference on Endangered and Lesser Known Languages 22-23 February 2019 in collaboration with ICSSR-ERC, CIIL and RUSA 2.0, JU.

Dr. Samir Karmakar

- i. 46th All India Conference of Dravidian Linguists, 21-23 June, 2018, in collaboration with Dravidian Linguistics Association, Thiruvananthapuram, Central Institute of Indian Languages, Mysore, The Asiatic Society, Kolkata, Anthropological Survey of India, Port Blair, Indian Council of Social Science Research.
- ii. International Symposium on Linguistic Ecology and Language Technology, 21 June, 2018 in Collaboration with Asiatic Society, Kolkata.
- iii. A Lecture on 'The East Asian linguistic phylum: A reconstruction based on language and genes' by Prof. George van Driem was organized at The Asiatic Society on 22nd June, 2018 as the collaborator of The Asiatic Society, Kolkata.
- iv. Suniti Kumar Chatterji Memorial Lecture – 5, BâElâ Monosyllables: A Sonority Based Study by Prof. Mina Dan, on 31st August 2018, Organized in Collaboration with Kolkata Society for Asiatic Studies.
- v. A Seminar on "On non-literal meaning : Indian Traditional and Gricean Approaches" by Professor B.N. Patnaik on Wednesday, 28th November, 2018 at 3pm at Room No. 3, Bengali Department, Jadavpur University in collaboration with Department of Linguistics, University of Calcutta.
- vi. Banerjee, A., Karmakar, S., Ghosh, S. (2019). Factivity and nominalization: A study on 'mind-predicates' in Bangla. 8th National Conference on Logic and Its Application. IIT Delhi, March 1-5, 2019.

Project Staffs:

- i. Majumder, Arup. *Kinship Terms and Terminology of Koda: An Anthro-Linguistic Observation*. 46th All India Conference of Dravidian Linguists (AICDL) & International Symposium organised in Jadavpur University, Kolkata in collaboration with School of Languages and Linguistics and Central Institute of Indian Languages, Mysore from 21st to 23rd June 2018.
- ii. Majumder, Arup. *Consequences of Socio-Economic variables in Language shift in a village of West Bengal: An Anthro-Linguistic view of Koda*, National Seminar on Tribal Culture in West Bengal, organised by Cultural Research Institute, Tribal Development Department, Government of West Bengal, Kolkata on 28th and 29th June, 2018.
- iii. Majumder, Arup. *Selection of Linguistic Field, Data Collection and Field Management*, Workshop on Preparation for the Fieldwork in Language Documentation at School of Languages and Linguistics, Jadavpur University on 2nd August 2018.
- iv. Majumder, Arup. *Health of Indigenous People of West Bengal: Special References to Toto*. Two day International Seminar on Recent Trends in Science Towards Sustainable Development, Organised by Acharya Prafulla Chandra College in collaboration with Indian Chemical Society, Kolkata, W.B on 6th and 7th August, 2018.
- v. Majumder, Arup. *Language and Culture: A Linguistic Anthropological Study of Koda*, National Seminar on Debating Indian Aspirational Languages: DIAL-2018, organised by Centre for Endangered Languages (CFEL), Visva-Bharati, Santiniketan, W.B on 9th to 11th September, 2018.
- vi. Majumder, Arup. *Mahali Clans: Anthro-Linguistic Study*. National seminar on Contemporary Anthropology and North-East India and Forty-Eight Annual Conference of The Indian Anthropological Society, Kolkata, Organised by Department of Anthropology, Cotton University, Guwahati, Assam on 1st to 3rd November, 2018.

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- vii. Majumder, Arup. *Problems of Tribal Women Education in India: Special References to Mahali, Jhargram*. 3rd Regional Science and technology Congress (Southern Region), 2018, Organised by Bidhannagar College and Department of Higher Education, Science and Technology and Biotechnology, Government of West Bengal on December 18-19, 2018.
- viii. Majumder, Arup. *A Linguistic Anthropological Study of Mahali Language*, 7th International Conference on Endangered and Lesser-known Languages (ELKL-7) organised by School of Languages and Linguistics, Jadavpur University, Kolkata, from 21- 23 February, 2019.
- ix. Majumder, Arup. *Kurmali: A Linguistic- Anthropological Overview*, Two days International Seminar on Understanding Tribes in Neo- Liberal Era under WB-OHEPEE programme, Organised by P.G. Department of Anthropology, Utkal University, Bhubaneswar, Odisha on March 09-10, 2019.
- x. Majumder, Arup. *Health care Practices by Mahali Community in a Village of West Bengal*, National Seminar on Health Status and Health Care Practices of Scheduled Tribes in West Bengal, Organised by Cultural Research Institute, Backward Classes Welfare Department, Government of West Bengal, Kolkata on 15th March, 2019.
- xi. Mitra, N. (2018). 'Informant Selection Procedure & Field Ethics', One Day Workshop on Preparation for the Fieldwork in Language Documentation, Jadavpur University, 2nd August, 2018.
- xii. Mitra, N. (2018). 'Phonemic Inventory of Toto: A Brief Overview', DIAL-2018, VisvaBharati, 9-11 September, 2018.
- xiii. Mitra, N. (2019). 'Lodha: A Linguistic and Socio-Economic Study', ELKL7, 2019, Jadavpur University, 21-23 February, 2019.
- xiv. Soor, S. (2019). Language Archiving of SRIELI-SLL-JU. 7th International Conference on Endangered and Lesser Known Languages. School of Languages, Jadavpur University, Kolkata, West Bengal, India. 2 Days - from 22.02.2019. to 23.02.2019.
- xv. Soor, S. (2019). (Attended) Preconference Workshop on 'Language Documentation, Data Management and Transcription' & 'Documenting Child Language Acquisition in Lesser-known Languages'. School of Languages, Jadavpur University, Kolkata, West Bengal, India. 1 Day - 21.02.2019.
- xvi. Soor, S. (2018). Big Data Handling in R Environment. International Conference on Exploring the Horizons of Library and Information Sciences: From Libraries to Knowledge Hubs Documentation Research and Training Centre (DRTC), Indian Statistical Institute, Bangalore, Karnataka, India. 3 Days - from 07.08.2018. to 09.08.2018.
- xvii. Soor, S. (2018). (Attended) International Short Term Course on Open Source Software for Library Management Indian Institute of Technology (IIT) Kharagpur, Kharagpur, West Bengal, India. 6 Days - from 07.05.2018. to 12.05.2018.

Post-Graduate Students

- i. Banerjee, A. (2018). A perspective sensitive approach to non-asserted main point of 'mone hoy'. 46th All Indian Conference of Dravidian Linguists (AICDL-46). 21-23 June, 2018. Jadavpur University.
- ii. Banerjee, A. (2019). "Static and dynamic *thinking*: A case of lexicalization in Bangla", 13th Students' Conference of Linguistics in India (SCONLI-13), Indian Institute of Technology (ISM) Dhanbad, 24-25 January, 2019.
- iii. Banerjee, A., Karmakar, S. Ghosh, S. (2019). Factivity and Nominalization: A study of mind-predicates in Bangla. 8th Indian Conference on Logic and its Applications (ICLA-8). Indian Institute of Technology, Delhi. March 1-5, 2019.
- iv. Banerjee, A. (2019) jointly with Diti Bhadra (Harvard University), "Gerunds in Deontic Ground", 9th Formal Approaches to South Asian Languages (FASAL-9), Reed College, Portland, Oregon, 16-17 March, 2019.

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- v. Banerjee, S. (2018). Temporality in Bangla-A Syntax Semantic Interface, 46th All India Conference of Dravidian Linguistics & International Symposium on Linguistic Ecology and Language Technology, School of Languages and Linguistics, Jadavpur University, Kolkata, 21st-23rd June 2018.
- vi. Bhowmik, R. (2019). “The passage towards extinction: The Malda Variety of Khortha” during the 7th INTERNATIONAL CONFERENCE ON ENDANGERED AND LESSER KNOWN LANGUAGES, School of Languages and Linguistics, Jadavpur University, Kolkata, February 22-23, 2019.
- vii. Bhowmik, R. (2019). “The Situation of Ergativity in the Malda variety of Khortha” in the National Seminar on Debating Aspirational Indian Languages: DIAL-2018, Visva-Bharati, Santiniketan, September 9-11, 2018.
- viii. Bhowmik, R. (2018). Faculty Development Programme on “Linguistics and English Language Teaching”, Department of English, The Bhawanipur Education Society College, Kolkata, October 29-November 3, 2018.
- ix. Bhowmik, R. (2018). “A Study on Bengali Elaborate Color Terms” in the 46th All India Conference of Dravidian Linguists & International Symposium on Linguistic Ecology and Language Technology, School of Languages and Linguistics, Jadavpur University, Kolkata, June 21-23, 2018.
- x. Chopra, G. (2018). SCONLI 12; “Rabha (KochaKrou) Phonology: Restructuring the Phoneme Inventory”; Jan 2018; MGAHV Wardha, Maharashtra; 3 days.
- xi. Chopra, G. (2019). SCONLI 13, “The Pragmatics of Emojis – Reduction in Communicative Efficacy Due To Non Standardization”; Jan 2019, IIT Dhanbad, Jharkhand; 2 days.
- xii. Dutta, A. (2018). 46th ALL INDIA CONFERENCE OF DRAVIDIAN LINGUISTICS & INTERNATIONAL SYMPOSIUM ON LINGUISTIC ECOLOGY AND LANGUAGE TECHNOLOGY (Name of the Paper: PRESERVING THE DIVERSE FORMS OF BENGALI: MAKING THE ‘ECOSYSTEM’ STABLE, Place: Jadavpur University, 21-23 June 2018).
- xiii. Dutta, A. (2019). NIRIKH DWITIYO ANTORJATIK SAHITYA SAMMELAN: TATWA O BANGLAR SAHITYA SANSKRITI (Name of the Paper: BINIRMAN O BANKIM: SPIVAK-PATHE ‘RAJSINGH’-ER ‘CHOTURTHO SANSKARANER BIGYAPON’, Place: Rajshahi University, 23-24 February 2019).
- xiv. Dutta, S. (2018). Bangla Numeral Classifiers. 46th All India Conference of Dravidian Linguists & International Symposium on Linguistic Ecology and Language Technology (AICDL-46). Jadavpur University, Kolkata., India. 21st – 23rd June, 2018. CIIL, Mysore, India.
- xv. Dutta, S. (2018). Bangla Numeral Classifier ‘^a’ and It’s Semantic Interpretation Derived by Lambda Calculus. 40th International Conference of the Linguistic Society of India (ICOLSI-40). 5th – 7th December, 2018.
- xvi. Dutta, S. (2018). Lodha: Socio-Economic Struggle for Linguistic Identity. 1st Conference on Indigenous Languages, (COIL-1). IIT, Patna, India. 21st – 23rd February, 2019.
- xvii. Dutta, S. (2018). Workshop on “Information and Communication Technology-Forensic Linguistics” (ICTFLING 2019) Organized by CDAC Kolkata and IIT Patna. 11th – 12th January, 2019
- xviii. Ghosh, S.S & Banerjee, A (2018, June) “Finding Collocation Pattern: A Case study of Bangla Particle *ar*. In 46th All India Conference of Dravidian Linguistics (AICDL-46) at Jadavpur University, Kolkata, India.
- xix. Giri, P. (2018). Presented Paper entitled ‘Linguistic Approach to Translation Process: In the Subtitles of Bengali Film Belaseshe’ in 46th All India Conference of Dravidian Linguists at Jadavpur University, Kolkata (June, 2018).
- xx. Giri, P. (2018). Attended the *Suniti Chatterjee Memorial Lecture* by Prof. Mina Dan on ‘Bangla Monosyllables: A Sonority Based Study’ (Aug, 2018).
- xxi. Giri, P. (2018). Attended Workshop on ‘Locating Indigeneity: Creation Songs From India, Canada, New Zealand and Australia’ organized by Centre for Advanced Study (Phase III), Department of Comparative Literature, Jadavpur University (Sep, 2018).

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- xxii. Giri, P. (2018). Attended Special Lecture by Professor B. N. Patnaik 'On Non-Literal Meaning: Indian Traditional and Gricean Approaches' in collaboration with Department of Linguistics, University of Calcutta at Jadavpur University (November, 2018).
- xxiii. Giri, P. (2019). Presented Paper entitled 'Agreement in Adjectives in Bangla, Oriya and Asamiya' in 5th National Language Conference at Ravenshaw University, Orissa (4th – 5th Feb, 2019).
- xxiv. Giri, P. (2019). Attended '7th Endangered and Lesser-Known Languages' at Jadavpur University (21 – 23 February, 2019).
- xxv. Giri, P. (2019). Presented Paper entitled 'Worldview of Creation Tales: A Comparative Study of Santhal and Mâori Communities' organized by Kolkata Society for Asian Studies (15-17 March, 2019).
- xxvi. Mukherjee, S. (2019). A Pragmatic Analysis of Bangla Deictic Forms, SCONLI13, IIT(ISM) Dhanbad, 24th-25th January, 2019.

3. C. Seminar/Workshop/Conference/Symposium Organized:

Dr. Atanu Saha

- i. Joint National Workshop on Documenting Lesser Known Communities and Building Linguistic Resources 18-19 Sept 2018 Under the Aegis of UGC project on Endangered and Indigenous languages with the National Law University, Venue: National Law University New Delhi.
- ii. 7th International Conference on Endangered and Lesser Known Languages 22-23 February 2019 in collaboration with ICSSR-ERC, CIIL and RUSA 2.0, JU.

Dr. Samir Karmakar

- i. 46th All India Conference of Dravidian Linguists, 21-23 June, 2018, in collaboration with Dravidian Linguistics Association, Thiruvananthapuram, Central Institute of Indian Languages, Mysore, The Asiatic Society, Kolkata, Anthropological Survey of India, Port Blair, Indian Council of Social Science Research.
- ii. International Symposium on Linguistic Ecology and Language Technology, 21 June, 2018 in Collaboration with Asiatic Society, Kolkata.
- iii. A Lecture on 'The East Asian linguistic phylum: A reconstruction based on language and genes' by Prof. George van Driem was organized at The Asiatic Society on 22nd June, 2018 as the collaborator of The Asiatic Society, Kolkata.
- iv. Suniti Kumar Chatterji Memorial Lecture – 5, BâElâ Monosyllables: A Sonority Based Study by Prof. Mina Dan, on 31st August 2018, Organized in Collaboration with Kolkata Society for Asiatic Studies.
- v. A Seminar on "On non-literal meaning : Indian Traditional and Gricean Approaches" by Professor B.N. Patnaik on Wednesday, 28th November, 2018 at 3pm at Room No. 3, Bengali Department, Jadavpur University in collaboration with Department of Linguistics, University of Calcutta.

Project Staffs:

- i. Majumder, Arup. *Selection of Linguistic Field, Data Collection and Field Management*, One Day Workshop on Preparation for the Fieldwork in Language Documentation, jointly by Dr. Arup Majumder, Dr. Bornini Lahiri, and Nivedita Mitra at School of Languages and Linguistics, Jadavpur University, 2nd August 2018.
- ii. Majumder, Arup. *Linguistic- Anthropological Aspects of Language Study*. Documenting Lesser Known Communities and Building Linguistic Resources to be held on 18-19 September, 2018 at National Law University, Dwarka Sector 14, New Delhi -110078.
- iii. Mitra, N. (2018). 'Informant Selection Procedure & Field Ethics', One Day Workshop on Preparation for the Fieldwork in Language Documentation, jointly organized by Nivedita Mitra, Dr. Arup Majumder and Dr. Bornini Lahiri at School of Languages and Linguistics, Jadavpur University, 2nd August 2018.

Post-graduate Students:

Ling Club_Jadavpur University, (a students' initiative), School of Languages and Linguistics Jadavpur University, Kolkata 700032. Organizes the following events:

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Event Name–Date–Venue–Speaker(s)/Scholar(s)/Moderator(s)

1. Lingvistiko V1.1 (conference/seminar)–04.09.2018–Buddhdeb Basu Sabhaghar–Dr. Mahidas Bhattacharyay, Dr. Samir Karmakar, Arka Banerjee & Vasundhara Srivastava
2. Articulate V1.1 (reading group)–16.01.2019–School of Languages & Linguistics (Lang. Lab.)–Dr. Ambalika Guha
3. Assimilate V1.1 (outreach)–16.02.2019–School of Languages & Linguistics, (Lang. Lab.)–Saman Khan
4. Lingvistiko V1.2 (conference/seminar)–18.04.2019–TEQIP, Room # 109–Dr. Samir Karmakar, Dr. Atanu Saha, Dr. Ishani Guha, Dr. Ambalika Guha
5. Lingvistiko V2.1 (conference/seminar)–22.07.2019–TEQIP, Room # 109–Soumik Dutta, Ratul Ghosh
6. Articulate V2.1 (reading group)–07.08.2019–School of Languages & Linguistics (Lang. Lab.)–Ratul Ghosh

4. A. Books/Monographs etc. Published:

- i. Mitra, N. and Saha, A. (2018). 'Indian Languages and Cultures A Debate', Marginalized Publication, ISBN 978-93-87441-31-6, 2018.
- ii. Pal, Patitpaban (2018). *Bhashaboinganik Porjalochonay Bangla Sandorbhakonikaay Ojosbita*, Citadel: Kolkata ISBN: 978-93-81493-61-8.
- iii. Pal, Patitpaban (Ed.) (2018). *Kathasahitye Peshabhittik Porichay o Kathonshoili: Manobadhikar Bonam Samajik Sbikriti*. Patitpaban Pal (self): Purba Bardhaman. e-ISBN: 978-93-5321-520-0.

4. B. Articles Published in Journals: (Including National/International & Peer-reviewed Journals)

Dr. Atanu Saha

- i. Saha, A. (2018). "A usage based analysis of Bangla Discourse Markers in Mass Media Texts" at 4th Asia Pacific corpus linguistics conference Takamatsu Japan ed. Yukio Tono and Hitoshi Ishahara coauthored with Dr. Niladri Sekhar Dash and Mahul Bhattacharya.
- ii. Saha, A. (2018). "Issues and Challenges in Preparing Multilingual Digital Lexicons" in the Memorabilia published on the occasion of observing the glorious Martyrs' Day and International Mother Language Day 2019, published by International Mother Language Institute, Bangladesh.
- iii. Saha, A. (2018). Submitted a paper on "Preparing Multilingual dictionaries with an open source mechanism" in Proceedings of ICELD-May 2018 (Accepted).

Dr. Samir Karmakar

- i. Ghosh, S. S & Karmakar, S (2018) "Pragmatics of Discourse Particle *je* in Bangla". *Journal of Advanced Linguistic Studies (JALS)*, 247-263, Vol:7 (1-2) Bahri Publication, New Delhi, India
- ii. Ghosh, S.S, Karmakar, S & Banerjee, A (2018) "Finding Structural Dependency: A Study of Bangla NPI *ar*". *Jadavpur Journal of Language and Linguistics (JJLL)*, 139-148, Vol:2(2).
- iii. Karmakar, S. (2018). Shishu Sahitye Sbaopnil Kutabhash: Kharij/Multubir Tattba (Paradox of dream in Children Literature: Theory of Deferring). In *Aalochona Chakra*, 45th collection, 162-165.

Project Staffs

- i. Majumder, Arup. 'Clans in Koda: An Anthro-Linguistic Observations', *North Bengal Anthropologists*, 2018, 4 (1)
- ii. Majumder, Arup. 'Role of Socio-economic Variables in Language Shift: A Case Study from West Bengal', *Jadavpur Journal of Languages and Linguistics*, 2018, 2 (1)
- iii. Majumder, Arup. 'Questionnaire on Anthro-linguistic Aspects', *Jadavpur Journal of Languages and Linguistics (Supplementary Issue)*, 2018, 2 (3).
- iv. Majumder, Arup. 'Questionnaire for Geo-linguistic Surveys: Demographic profiling of the language community', *Jadavpur Journal of Languages and Linguistics (Supplementary Issue)*, 2018 2(3).
- v. Majumder, Arup. 'Effect of Land Acquisition on Social Structure: An Ethnographic Study of a Village in Paschim Medinipur District', West Bengal, *South Asian Anthropologist*, 2019, 14 (1)
- vi. Majumder, Arup. An Anthro-Linguistic Outlook of Koda Clan. *International Journal of Language and Applied Linguistics*, 2019, 3(2).

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- vii. Mitra, N. (2018). 'Nativizing Loanwords in Bangla: Optimality Theoretic Approach', *Beekkha*, ISSN: 2395-5872, Vol 4, No 1, 2018.
- viii. Mitra, N. (2018). 'Vowel Template Asymmetries: A Semiotic Aspect', *Bulletin of the Department of Linguistics*. University of Calcutta. No. 21, 2019. ISSN:2319-6165.
- ix. Soor, S. (2018). Data Technicality and Data Management in Field Language Documentation, *Jadavpur Journal of Languages and Linguistics (Peer-reviewed)*, Vol. 2, No. 2, December 2018

Post Graduate Students' Publications

- i. Banerjee, S. (2018). 'The Syntax and Semantics of Tense and Aspect in Bangla', *Jadavpur Journal of Languages and Linguistics*, 2/12/2018, Volume 2, Number 2
- ii. Bhowmik, R. (2018). 'The situation of Ergativity in the Malda variety of Khortha'. *In Indian Languages and Cultures* (1st ed., pp. 321-330). Delhi: The Marginalised Publication.
- iii. Bhowmik, R. (2018). 'A STUDY ON BENGALI ELABORATE COLOR TERMS'. *Jadavpur Journal of Languages and Linguistics*, 2(2), 23-33. Retrieved February 2, 2019, from <http://jjll.jdvu.ac.in/journal/index.php/JJLL/article/view/61>
- iv. Ghosh, S.S & Karmakar, S (2018) "Pragmatics of Discourse Particle *je* in Bangla". *Journal of Advanced Linguistic Studies (JALS)*, 247-263, Vol:7 (1-2) Bahri Publication, New Delhi, India
- v. Ghosh, S.S, Karmakar, S & Banerjee, A (2018) "Finding Structural Dependency: A Study of Bangla NPI ar". *Jadavpur Journal of Language and Linguistics (JJLL)*, 139-148, Vol:2(2).
- vi. Giri, P. (2018a). 'Semantic Types of Adjectives and Their Semantic Classification in Bangla'. (M. S. Thirumalai, Ed.) *Language in India*: ISSN: 49042, 18 (10), 171-179.
- vii. Giri, P. (2018b). Semantic Classification of Adjectives: A Comparative Study. (M. S. Thirumalai, Ed.) *Language in India*: ISSN: 49042, 18 (11), 183-196.
- viii. Giri, P. (2018). Linguistic Analysis of Audio-Visual Translation: With Reference to the Subtitles of Belaseshe. - *Jadavpur Journal of Languages and Linguistics*: ISSN: 2581-494X, 18 (2), 1 – 6.
- ix. Giri, P. (2019). 'Scalar Adjectives in Dutch, Bangla and English'. (M. S. Thirumalai, Ed.) *Language in India*: ISSN: 49042, 19 (2), 404 – 415.
- x. Mukherjee, S. (2019). An analysis of the deictic expression *ei* and *o/oi* in Bangla, *Jadavpur Journal of Languages and Linguistics*, 30th June 2019, Volume 3).
- xi. Nandi, T. (2018). Research article on 'A Comparative Study of Classifiers in Bangla and Chinese' got published in *Jadavpur Journal of Languages and Linguistics* Vol 2, No. 2.
- xii. Pal, P. & Das, H. Chand. (2018). Implementation of Literary theory "Existentialism": 'Tughlaq' of GirishKarnad. *International Journal of Interdisciplinary and Multidisciplinary studies (IJIMS)*. e-ISSN: 2348-0343. UGC referred journal.
- xiii. Pal, Patitpaban (2018). Kotha Sahityer Likhito O Shruti Madhyome Post-Humanism: Tottbe of proyoge, *Kornika* 8(1), ISSN: 2347-9175.

5. Collaborative Programmes:

- i. POS Tagged Bangla Text Corpus Generation till 2021, PI Dr Niladri Shekhar Dash, Co-PI Dr. AtanuSaha, LRU, Isi Kolkata.
- ii. DiMLex-Bangla v. 1.0, funded by Potsdam, Department of Linguistics, Released on 2018-11-07 by Universität Potsdam, Department of Linguistics, Language: Bangla (bn), <https://github.com/discourse-lab/DiMLex-Bangla> First released: 2018-11-07, project associates Soumya Sankar Ghosh and Lahari Chatterjee.

6. Major Achievements:

LingClub_JadavpurUniversity, (a students' initiative), School of Languages and Linguistics Jadavpur University, Kolkata 700032.

MATERIALS SCIENCE & NANOTECHNOLOGY

Phone : + 91-33-6512 8386

Int. : 2457-2876

Director: Dr. K. K. Chattopadhyay

E-mail : dir.nanotech@jadavpuruniversity.in

1. A. Courses offered:

Name of the course – M.tech in Nano Technology

Duration of the course – 2 years

No of students Enrolled –

1. B. Number of Faculty Members: 3

2. A. Area of Research Activities:

- Nanomaterials and density functional theory
- Optical and catalytic properties of nanomaterials
- Nanomagnetism
- Density functional theory
- Antibacterial activity
- Synthesis of Nanomaterials and Nanocomposites
- Process Development of Metal Extraction
- Thermodynamics and kinetics
- Nano biotechnology

2. B. Major Research Project: (Department/Individual–Name of the Project–Funding Agency)

Dr. Sourav Sarkar–Size Selective Carbon Quantum Dots and its Application to Luminescence and Solar Cell–Science and Engineering Research Board (SERB)–DST

Dr. Mahua Ghosh Chaudhuri–Synthesis of drug (herbal values) entrapped nano material to treat cancer disease & other disease causing organisms–WBDST

Dr. Mahua Ghosh Chaudhuri–Design of nanocarriers for sustained release of conventional analgesic drugs–WBDST

Dr. Mahua Ghosh Chaudhuri–Development of transdermal patch using Nano carriers of controlled & sustained delivery of mixture of turmeric & slaked lime–RUSA 2.0

Dr. Kalyan Kumar Chattopadhyay–Synthesis of MgO-Carbon Refractory for Steel Making–Steel Authority of India-RDCIS (SAIL-RDCIS)

Dr. Kalyan Kumar Chattopadhyay–DST Nanomission project in Nanoscience & Technology for PG teaching and Research–DST- Nano Mission 2015-2021

Dr. Kalyan Kumar Chattopadhyay–Low dimensional metal chalcogenides and its hybrids for energy storage and energy harvesting applications–RUSA

3. A. Invited Lectures Delivered/ Sessions Chaired:

(Name of the Teacher–Type of Participants–Name of the Seminar/ Conference–Place–Duration)

Dr. Sourav Sarkar–Invited Lectures delivered–Academic Aspects of Engineering Education, Induction Program of 1 st Year B.Tech Students, Techno International Batanagar–Maheshtala, South 24 Parganas, WestBengal–17th August, 2019

Dr. Sourav Sarkar–Invited Lectures delivered–Introduction to Field Effect Transistors–Siliguri Institute of Technology, Sukna, Darjeeling, West Bengal–28-29th September, 2018

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Dr. Kalyan Kumar Chattopadhyay–Invited Lectures delivered–Condensed Matter Days 2018–Burdwan University–27-29th August, 2018

Dr. Kalyan Kumar Chattopadhyay–Invited Lectures delivered–Nanotechnology Workshop–Kalyani University–4th August, 2018

Dr. Kalyan Kumar Chattopadhyay–Invited Lectures delivered–‘Spectrum’ (2018)–St. Xaviers College, Kolkata

Dr. Kalyan Kumar Chattopadhyay–Invited Lectures delivered–Biomedical Engineering in Human Welfare–Jadavpur University–3rd August, 2018.

Dr. Kalyan Kumar Chattopadhyay–Invited Lectures delivered–Advances in Materials Research and Simulation–Indian Association for the Cultivation of Science, Kolkata–25th May 2018

Dr. Kalyan Kumar Chattopadhyay–Invited Lectures delivered–Recent Trends in Science Towards Sustainable Development–APC college, Kolkata–6-7th August, 2018

Dr. Kalyan Kumar Chattopadhyay–Invited Lectures delivered–Advanced Techniques in Nano Science and Technology–Institute of Nano Science and Technology (INST), Chandigarh–3rd – 8th December, 2018

Dr. Kalyan Kumar Chattopadhyay–Invited Lectures delivered–IASST, Assam–11th May, 2018

Dr. Kalyan Kumar Chattopadhyay–Invited Lectures delivered–The Induction programme Govt.–College of Engineering and Ceramic Technology–1st August 2019

Dr. Kalyan Kumar Chattopadhyay–Invited Lectures delivered–International Conference on Current Trends in Materials Science and Engineering (CTMSE 2019)–S.N. Bose National Centre for Basic Sciences –18-20th July, 2019

Dr. Kalyan Kumar Chattopadhyay–Invited Lectures delivered–Refresher Course of Applied Chemistry–University of Calcutta–6th September, 2019

Dr. Kalyan Kumar Chattopadhyay–Invited Lectures delivered–10th S.P. Sengupta Memorial Lecture–CSIR CGCRI, Organised by MRSI Kolkata Chapter–2019

Dr. Kalyan Kumar Chattopadhyay–Invited Lectures delivered–Contemporary Issues on Natural and Anthropocentric Effect in Environmental Crisis–Tehatta Govt. College–15–16th March, 2019

Dr. Kalyan Kumar Chattopadhyay–Invited Lectures delivered–Frontiers in Solid State Physics–IACS, Kolkata–February 22, 2019

Dr. Kalyan Kumar Chattopadhyay–Invited Lectures delivered–Emerging Frontiers in Materials Science (EFMS-2019)–Behala College–February 15-16, 2019

Dr. Kalyan Kumar Chattopadhyay–Invited Lectures delivered–Advanced Techniques in Nano Science and Technology–Institute of Nano Science and Technology (INST), Chandigarh–3rd - 8th December, 2018

Dr. Kalyan Kumar Chattopadhyay–Invited Lectures delivered–Dept. of Electronic Science–Calcutta University–29th March, 2019

Dr. Kalyan Kumar Chattopadhyay–Invited Lectures delivered–Vidyasagar College for Women–2nd February, 2019

Dr. Kalyan Kumar Chattopadhyay–Session chaired–1st International Conference on Clean and Renewable Energy (ICCARE 2019)–NIT Dugapur–12th July 2019

3. B. Seminar/ Workshop/ Conference/ Symposium Attended: (Name of the Teacher–Name of the paper presented–Name of the Seminar–Place–Duration)

Dr. Sourav Sarkar–Wettability of Metal Assisted Chemically Etched (MaCE) Grass like Silicon Nanowires,–IEEE Electron Device Kolkata Conference (2018 IEEEEDKCON),–Kolkata–November 24-25, 2018

3. C. Seminar/ Workshop/ Conference/ Symposium organized: (Name of the Teacher–Name of the Seminar–Place–Duration)

Dr. Kalyan Kumar Chattopadhyay–National Conference in Recent Developments in Nanoscience and Nanotechnology –Jadavpur University–29-31 January, 2019

4. A. Books/ Monographs etc. Published:

(Name of the Teacher–Name of the Books/ Monographs–Name of the Publisher)

Dr. Chandan Kumar Ghosh–*Microbial Nanobionics* (Book series: Nanotechnology in the Life Sciences) (Chapter: Role of Nanomaterials in Food Preservation)–Springer Nature Switzerland AG 2019

Dr. Kalyan Kumar Chattopadhyay–*Encyclopedia of Renewable and Sustainable Materials* (Chapter: Thermoelectric Materials: Improving Energy Efficiency and Decreasing CO₂ Emissions)–Elsevier (in press) (2019)

Dr. Kalyan Kumar Chattopadhyay–*Trends in Beverage Packaging* (Chapter: “Diamond-Like Carbon: An Efficient Cost-Effective Material for Beverage Storing”)–Elsevier 2019

Dr. Kalyan Kumar Chattopadhyay–*Encyclopedia of Renewable and Sustainable Materials* (Chapter: Nanofluid in Energy Harvesting and Related Applications)–Elsevier 2018

Dr. Kalyan Kumar Chattopadhyay–*Perovskite Photovoltaics: Basic to Advanced Concepts and Implementation* (Chapter: “Hybrid Inorganic Organic Perovskites: A Low-Cost-Efficient Optoelectronic” Material)–Elsevier 2018

4. B. Articles Published in Journals:

(Name of the Teacher–Name of the Articles–Name of the Journal–Date of Publication–Volume)

Dr. Chandan Kumar Ghosh– “Zinc sulphide nanoparticle (nZnS): A novel nano-modulator for plant growth” –*Colloid and Interface Science Communications*–2019–32

Dr. Chandan Kumar Ghosh–“Size-dependent antibacterial activity of copper nanoparticles against *Xanthomonas oryzae*– A synthetic and mechanistic approach”–*Colloid and Interface Science Communications*–2019–32

Dr. Chandan Kumar Ghosh– “Au nanoparticle-decorated aragonite microdumbbells for enhanced antibacterial and anticancer activities”–*Materials Science & Engineering C*–2019–103

Dr. Sourav Sarkar–Efficient Cold Cathode Emission in Crystalline-Amorphous Hybrid: Study on Carbon Nanotube-Cadmium Selenide System–*Physica E: Low-dimensional Systems and Nanostructures*–2018–97

Dr. Mahua Ghosh Chaudhuri– “Preparation of carboxy-methyl cellulose-capped nanosilver particles and their antimicrobial evaluation by an automated device”–*Applied Nanoscience*–2018–9

Dr. Mahua Ghosh Chaudhuri– “Nanomaterials in relation to their drug delivery and release mechanisms: a review exemplified with Some herbal drugs”–*World Journal of Pharmaceutical Research*–2018–7

Dr. Kalyan Kumar Chattopadhyay– “CsPbBrCl₂/g-C₃N₄ type II heterojunction as efficient visible range photocatalyst”,–*Journal of Hazardous Materials*–2019–380

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- Dr. Kalyan Kumar Chattopadhyay–“Tailored mesoporous nanocrystalline Ga₂O₃ for dye-selective photocatalytic degradation”–*Microporous and Mesoporous Materials*–2019–288
- Dr. Kalyan Kumar Chattopadhyay– “Solution processed Copper Phthalocyanine nanowires: A promising supercapacitor anode material”–*Physica E: Low-dimensional Systems and Nanostructures*–2019–114
- Dr. Kalyan Kumar Chattopadhyay– “Tailored CsPbX₃ Nanorods for Electron-Emission Nanodevices”–*ACS Applied Nano Materials*–2019–(In Press)
- Dr. Kalyan Kumar Chattopadhyay– “Bias-tuned dielectric properties and Non-Debye relaxation in vanadium doped BaSnO₃ nanocubes”–*Materials Research Express*–2019–6
- Dr. Kalyan Kumar Chattopadhyay– “Co incorporated Ni₃S₂ hierarchical nano/micro cactus for electrochemical water splitting”–*International Journal of Hydrogen Energy*–2019–44
- Dr. Kalyan Kumar Chattopadhyay– “GLAD synthesised erbium doped In₂O₃ nano-columns for UV detection”–*Journal of Materials Science: Materials in Electronics*–2019–30
- Dr. Kalyan Kumar Chattopadhyay– “Plasma enhanced Chemical Vapour deposited amorphous carbon coating for hydrophobicity enhancement in commercial cotton fabrics”–*Physica E: Low-dimensional Systems and Nanostructures* 2019–114
- Dr. Kalyan Kumar Chattopadhyay– “Graphene wrapped organic nanotube: A promising material for Oxygen Reduction Reactions”–*Materials Letters*–2019–248
- Dr. Kalyan Kumar Chattopadhyay–Three-dimensional VO₂@ PANI micro flower array for flexible supercapacitor *Materials Letters*–2019–In press
- Dr. Kalyan Kumar Chattopadhyay–Enhanced Photoluminescence Properties of Low-Dimensional Eu³⁺-Activated Y₄Al₂O₉ Phosphor Compared to Bulk for Solid-State Lighting Applications and Latent Fingerprint Detection-Based Forensic Applications–*Microscopy and Microanalysis*–2019–In press
- Dr. Kalyan Kumar Chattopadhyay–Enhancement of radiative transitions in Sm³⁺ activated CaTiO₃ nanophosphor by modulating co-activator concentration–*Journal of Materials Science: Materials in Electronics*–2019–30
- Dr. Kalyan Kumar Chattopadhyay–Magnesium incorporated graphitic carbon nitride for effective removal of fluoride ions–*Journal of the Indian Chemical Society*–2019–96
- Dr. Kalyan Kumar Chattopadhyay–Investigation of ORR performances on graphene/Phthalocyanine nanocomposite in neutral medium–*Microscopy and Microanalysis* –2019 –In press
- Dr. Kalyan Kumar Chattopadhyay–Textile-Based RGO-Muffled Cobalt (II, III) Oxide Hybrid Nano-architectures for Flexible Energy Storage Device–*Applied Surface Science*–2019–485
- Dr. Kalyan Kumar Chattopadhyay–Graphene wrapped organic nanotube: A promising material for ORR –*Materials Letters*–2019–248
- Dr. Kalyan Kumar Chattopadhyay–sp³ Bonded 2-Dimensional Allotrope of Carbon: A First-Principles Prediction–*Carbon*–2019–146
- Dr. Kalyan Kumar Chattopadhyay–Morphology tailored Triazine-based Crystalline Organic Polymer for Efficient Mercury Sensing–*New Journal of Chemistry*–2019–43
- Dr. Kalyan Kumar Chattopadhyay–Amorphous Carbon Nanotube Mediated Low-Temperature Synthesis of Red Emitting Self-assembled Europium Oxy-carbonate Microflower–*Materials Research Bulletin*–2019 –112
- Dr. Kalyan Kumar Chattopadhyay–Achievement of Nearly Super Hydrophobicity in Plasma Enhanced Chemical Vapor Deposited One and Two Dimensional Carbon Nanostructures–*Physica E*–2019–108

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- Dr. Kalyan Kumar Chattopadhyay–Controllable white light generation from novel BaWO₄: Yb³⁺/Ho³⁺/Tm³⁺ nanophosphor by modulating sensitizer ion concentration–Journal of Materials Science: Materials in Electronics–2019–30
- Dr. Kalyan Kumar Chattopadhyay–Endorsement of Manganese Phthalocyanine microstructures as electrocatalyst in ORR: experimental and computational study–Electrochimica Acta–2019–296
- Dr. Kalyan Kumar Chattopadhyay–Investigation of electrochemical performances of ceramic oxide CaCu₃Ti₄O₁₂ nanostructures–Journal of Solid State Chemistry–2019–269
- Dr. Kalyan Kumar Chattopadhyay–Flexible, transparent resistive switching device based on topological insulator Bi₂Se₃- organic composite–Journal of Applied Physics–2018–124
- Dr. Kalyan Kumar Chattopadhyay–Geometrically intricate sheet-on-rod/flake hierarchy embracing cobaltosic and manganese oxides over flexible carbon scaffold for binder free high energy density supercapacitor –Cryst Eng Comm–2018–20
- Dr. Kalyan Kumar Chattopadhyay–Resonant energy transfer in van der Waal stacked MoS₂ – functionalized graphene quantum dots composite with ab-initio validation–Nanoscale–2018–10
- Dr. Kalyan Kumar Chattopadhyay–Amorphous Graphene–Transformer Oil Nanofluids with Superior Thermal and Insulating Properties–Carbon–2018-139
- Dr. Kalyan Kumar Chattopadhyay–Realization of White Light Emission as a Manifestation of Dy³⁺ to Eu³⁺ Energy Transfer in Single Component MgAl₂O₄: Dy³⁺, Eu³⁺ Nanophosphor: A Promising Candidate For Solid State Lighting & Self referencing Optical Thermometry Applications–Dalton Transactions–2018 –47
- Dr. Kalyan Kumar Chattopadhyay–Low Temperature Synthesis of Graphitic Carbon Nitride Nanorods for Heavy Metal Ions Sensing–Solid State Sciences–2018–82
- Dr. Kalyan Kumar Chattopadhyay–Amorphous Carbon Nanotubes-Nickel Oxide Nanoflower hybrids: A Low Cost Energy Storage Material–ACS Omega–2018–3
- Dr. Kalyan Kumar Chattopadhyay–Morphology control and photoluminescence properties of Eu³⁺ activated Y₄Al₂O₉ nanophosphors for solid state lighting applications–Cryst Eng Comm–2018–20
- Dr. Kalyan Kumar Chattopadhyay–Tunable cathodoluminescence over entire visible window from all-inorganic perovskite CsPbX₃ 1D architecture–Journal of Materials Chemistry C–2018–6
- Dr. Kalyan Kumar Chattopadhyay–Flowerlike Cu₂NiSnS₄ Microspheres for Application as Electrodes of Asymmetric Supercapacitors Endowed with High Energy Density–Cryst Eng Comm–2018–20
- Dr. Kalyan Kumar Chattopadhyay–Nickel Doped Graphitic Carbon Nitride Nanosheets and Its Application for Dye Degradation by Chemical Catalysis–Materials Research Bulletin–2018–101
- Dr. Kalyan Kumar Chattopadhyay—Porosity-Tuned NiO Nanoflakes: Effect of Calcination Temperature for High Performing Supercapacitor Application–Journal of Electroanalytical Chemistry–2018–813
- Dr. Kalyan Kumar Chattopadhyay–1D-2D Hybrids as Efficient Optoelectronic Material: A Study on Graphitic Carbon Nitride Nanosheets Wrapped Zinc Oxide Rods–Dalton Transactions–2018–47
- Dr. Kalyan Kumar Chattopadhyay–One pot solvothermal synthesis of ZnPc nanotube and its composite with RGO: A high performance ORR catalyst in alkaline medium–Applied Surface Science–2018–449
- Dr. Kalyan Kumar Chattopadhyay–Ultrasound assisted catalytic degradation of textile dye under the presence of reduced Graphene Oxide enveloped Copper Phthalocyanine nanotube–Applied Surface Science –2018–449

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Dr. Kalyan Kumar Chattopadhyay–Removal of Textile Dyes by Carbon Nanotubes: A comparison between Adsorption and UV Assisted Photocatalysis–Physica E–2018–99

Dr. Kalyan Kumar Chattopadhyay–Neutralizing the Charge Imbalance Problem in Eu³⁺ Activated BaAl₂O₄ Nanophosphor: Theoretical Insights and Experimental Validation Considering K⁺ Co-Doping–ACS Omega–2018–3

6. Major Achievements:

Patents Obtained: Large Scale synthesis of Cobalt Pthalocyanine nanotubes for supercapacitor applications, patent number: 201931011233, (2019), U. K. Ghorai, S. Mondal, J. Sarkar, A. Gain, K. K. Chattopadhyay.

Student's Award from the group:

1. Dr. Biswajit Das received best oral presentation award in the Second International Conference on Nano Science and Engineering Applications ICONSEA-2018, 4th – 6th Oct, 2018, Institute of Science and technology, Jawaharlal Nehru Technology University, Hyderabad, (Oral presentation)
2. Dr. Biswajit Das received best thesis presentation award in the Second International Conference on Nano Science and Engineering Applications ICONSEA-2018, 4th – 6th Oct, 2018, Institute of Science and technology, Jawaharlal Nehru Technology University, Hyderabad.

MEDIA COMMUNICATION & CULTURE

Phone : + 91-33-2414-6352

Int. : 2457-2351

Director: Prof. Partha Pratim Basu

Jt. Director: Dr. Sujit Kumar Mandal

E-mail : dir.media@jadavpuruniversity.in

1. A. Courses Offered: (Name of the Course, Duration of Course, No of Students Enrolled)

- a. UGC-approved Certificate Course on 'Radio Production'; 6 months; 30 students
- b. PhD programme: 3 students

1. B. Number of Faculty Members:

Director: Prof. Partha Pratim Basu, Department of International Relations (Till August, 2018)

Director: Prof. Abhijit Roy, Department of Film Studies (Since August, 2018)

Joint Director: Dr. Sayantan Dasgupta, Department of Comparative Literature (Since August, 2018)

No permanent faculty member; The UGC-approved Certificate Course on 'Radio Production' is taught by 5 teachers from Jadavpur University and 9 from outside the University

New Academic Committee of the School constituted on 4 January, 2019

Professor Suranjan Das, Hon'ble Vice Chancellor – Chairman

Professor Abhijit Roy, Director of the School – Vice Chairman

Dr. Sayantan Dasgupta, Joint Director of the School

Professor Sudeshna Banerjee, Department of History, Jadavpur University

Professor Amites Mukhopadhyay, Department of Sociology, Jadavpur University

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Professor Partha Pratim Bose, Department of International Relations, Jadavpur University
Professor Dalia Chakraborty, Department of Sociology, Jadavpur University
Professor Nilanjana Gupta, Department of English, Jadavpur University
Dr. Imankalyan Lahiri, Department of International Relations, Jadavpur University
Professor Paromita Chakravarti, Department of English, Jadavpur University
Professor Lopamudra Choudhury, Department of Philosophy, Jadavpur University
Dr. Suchetana Chattopadhyay, Department of History, Jadavpur University
Dr. Kaustav Bakshi, Department of English, Jadavpur University
Professor Sipra Mukherjee, Department of English, West Bengal State University
Dr. Someswar Bhowmik, Director, Educational Multimedia Research Centre, St. Xavier's College
(Autonomous), 493 Ajaynagar, Kolkata-700094

2. A. Area of Research Activities: (Broad Areas)

- Media Studies, Communication Studies, Cultural Studies
- Indian Television, Television Studies
- Radio Studies
- Media and Convergence; Intermediality
- Media, Politics and Democracy
- Media Ethics
- Digital Media, Cybercultures
- Urban Studies
- Performance Studies, Oratures
- Pedagogic Histories and Politics
- Children, Youth and Media
- Community Radio, Alternative Media Practices

2. B. Research Project (Department/Individual, Name of the Project, Funding Agency):

1. 'Youth Community Reporters' (Funding agency: UNICEF; Coordinator: Prof. Nilanjana Gupta) <http://www.youthcommunityreporters.com>
2. The School runs a project called 'Medianest' to commemorate the spirit, integrity and passion for news of late Shri Sandipta Chatterjee, a journalist and television anchor of repute who died at the early age of 34 in 2012. With the support of an endowment from Sandipta's friends, 'Medianest' organizes the annual 'Sandipta Chatterjee Memorial Lecture', publishes the lectures and runs an interactive blog called 'Newsly Yours' for nurturing new ideas on media, ethics, politics and society. <http://www.medianest.org.in>
3. 'Building Bridges: Visual Storytelling to Allow Urban Youth Explore Possibilities Beyond Borders of Circumstance', Fulbright-Nehru project (involving JU students and students and young workers from adjoining areas) conducted by Professor Sanjeev Chatterjee, School of Communication, University of Miami, in collaboration with School of Media, Communication and Culture, December 2018—March 2019; Funding agency: United States-India Educational Foundation; Academic Coordinator & Creative Consultant: Prof. Abhijit Roy; <https://www.porouscity.otherindias.com>

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The following projects under the 'University with Potential for Excellence' scheme (phase-II) of the UGC, affiliated to the School, ended on 31 March, 2019:

4. 'Madrasas in India' (Principal Investigator: Prof. Nilanjana Gupta)
5. 'Acropolis: A Study of the Concept of the Global City' (Principal Investigator: Prof. Nilanjana Gupta)
6. 'Dance and Performance' (Principal Investigator: Prof. Nilanjana Gupta)
7. Project 'Interface' on how the newly set up industrial belt in Jharkhand has affected the ethnic cultural heritage of the place (Principal Investigator: Prof. Ipshta Chanda and Prof. Nilanjana Gupta)
8. 'New Media for Change: Multimedia Stories on Under-Reported Issues' (Principal Investigator: Prof. Abhijit Roy). www.daftaripara.org
9. 'Palagaan', a project on 'Folk Performance' (Principal Investigator: Dr. Sujit Kumar Mandal)
10. 'Soundscapes of Kolkata' (Principal Investigator: Dr. Parthasarathi Bhaumik). kolkatasounds.org

The School manages Jadavpur University's Community Radio: 90.8 Community Radio JU (Convener: Prof. Nilanjana Gupta). Launched on 14 April 2008, 90.8 MHz Community Radio JU is the first of its kind in eastern India. It provides an interactive platform for students, teachers, research scholars, staff of JU and local people around JU to showcase their talent, creativity, innovations and community work. Programmes broadcast by the radio station reach listeners within a radius of 10 km around the University. Thematic focus: Education, Sports, Health & Hygiene, Traditional & Folk Song, Culture & Heritage, Music & Entertainment, Youth Issues. Child Rights, Law, Drama on Social Issues, Disability Issues, Travel etc. The UGC-approved 6-month certificate course 'Radio Production' offered by the School uses the resource and expertise of the Community Radio extensively for training students.

3. A. Invited Lectures Delivered/Session Chaired by Academic Committee members (Name of the teacher, Type of Participants, Name of the Seminar/Conference etc. Place, Duration):

Prof. Abhijit Roy

1. Moderated a panel discussion on 'Mahabharat in Comics' at the three-day national seminar on 'The Epic of the Moment: Exploring the Narrative Cultures of the Mahâbhârata', organized by Department of Bengali, Presidency University, in collaboration with North East India Company (Silchar, Assam). Presidency University, 3 April, 2018.
2. 'Voices from the Regions: Does the Vernacular Mass Media have A Specific Character?', presentation at the panel discussion on 'Two Hundred Years of Vernacular Mass Media in India', Bhawanipur Education Society College, Kolkata. 30 April, 2018.
3. 'The Beginning: Early Silent Cinema', lecture at Film Appreciation Course organized by Maya Art Space, Kolkata. 7 June, 2018.
4. 'Reality TV, Participatory Culture and the Many Locations of Bengal and Bengalianness', Lecture at Inter-Asia Cultural Studies Summer School organized by Department of Film Studies, Jadavpur University, in collaboration with Inter-Asia Cultural Studies society, Lingnan University, Hong Kong, and the Centre for the Study of Culture & Society, Bangalore. Jadavpur University. 26 June, 2018.
5. Chaired the lecture on 'Dark spaces: Cave Painting, Cinema Halls and Visual Storytelling' by Dr. Suman Ghosh (College of Liberal Arts, Bath Spa University, UK). Department of Comparative Literature, Jadavpur University. 18 July, 2018.
6. 'State and the Inter-Media Context of Radio-Film-TV in Postcolonial India' and 'Televisuality and the 'Live Public' in Post-Liberalization Indian Popular Film', two lectures at the MHRD-sponsored 7-Day Faculty Development Programme on 'Multimodality, Multimediality in Literature, Cinema and the Allied Arts', Ramanujan College, University of Delhi. 6 August, 2018.

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7. 'Media and the Emergent forms of Publicness in Post-Liberalization India', lecture at Centre for Culture, Media and Governance, Jamia Millia Islamia, New Delhi. 7 August, 2018.
8. 'Media Governance in India: Key Issues in History' and 'Airwaves and the 'Public' in Post-Liberalization India', two lectures at the Special Summer School on Social Studies organized by Department of Political Science, University of Calcutta. 8 September, 2018.
9. 'Bipananbad o televisioner bhasha', Lecture at the UGC-sponsored Refresher Course on 'Shailibijnan: Tattwe o prayoge' organized by Department of Bengali, University of Calcutta. 17 September, 2018.
10. 'Television Studies: Key Issues', lecture at the Centre for Journalism and Mass Communication, Visva-Bharati. 30 September, 2018.
11. 'Indian Media and Issues in Human Rights', lecture at the UGC-sponsored Refresher Course on 'UN and the Global Perspective of Human Rights', Department of International Relations, Jadavpur University. 16 November, 2018.
12. Moderated a panel discussion organized by School of Media, Communication and Culture, Jadavpur University, and the British Council, Kolkata, on the occasion of the centenary of the first world war armistice and the India premiere of the film *They Shall not Grow Old* (Director: Peter Jackson, 2018). 20 November, 2018.
13. Participated in the panel discussion on 'Inspired by Shakespeare' organized by the British Council, Kolkata, on the occasion of the launch of the Indian edition of the book *Shakespeare in Indian Cinemas: Local Habitations* (eds. Poonam Trivedi and Paramita Chakrabarti). 24 November, 2018.
14. 'Exploring Intersectionality through Indian Media', lecture at the short-term gender sensitization course titled 'Interpreting Gender at its Intersections' organized by School of Women's Studies in collaboration with UGC-HRDC, Jadavpur University. 30 November, 2018.
15. Moderated a panel discussion on 'Filming the City' at the 4-day exhibition/colloquium on 'New Cities: Imagining and Imaging the Global City in India' organized by the School in collaboration with the Indian Council for Cultural Relations (ICCR), supported by UGC-UPE phase-II and Indian Council for Social Science Research. ICCR Nandalal Bose Gallery, Kolkata. 17 February, 2019.
16. Chaired the presentation on 'Politics and Cinema: Revisiting the Nehruvian Times' by Professor Partha S. Ghosh, Senior Fellow, Institute of Social Sciences, New Delhi. Department of International Relations, Jadavpur University, 19 February, 2019.
17. Introduced two films (*Inextinguishable Fire*, dir: Harun Farocki and *A German Youth*, dir: Jean-Gabriel Périot) at the weeklong event titled '1968 Global Youth Protests: Kolkata and Germany' organized by the Centre of Advanced Study, Phase III, Department of Comparative Literature, Jadavpur University, and the Goethe-Institut/Max Mueller Bhavan, Kolkata. Jadavpur University, 25 and 26 February, 2019.
18. 'Media and Politics: Key Approaches', lecture at the UGC-sponsored 6-month certificate course on 'Radio Production', School of Media, Communication and Culture, Jadavpur University, 18 March, 2019.

Dr. Sayantan Dasgupta

1. Chaired a session in the XIV CLAI Biennial International Conference on 'Studying South Asian Narratives through Pluralist and Dialogic Frames', organized by the Comparative Literature Association of India at Maulana Azad National Urdu University, Hyderabad, March 11-14, 2019.
2. Invited Speaker at National Seminar on 'Translation and Pedagogy', Department of English, Jamia Millia Islamia, New Delhi, March 1, 2019.
3. 'Kolkata: A City of Translators', talk at roundtable discussion on 'City of Translators', Sahitya Akademi and TOLEDO, Kolkata, November 9, 2018.

Prof. Nilanjana Gupta

1. 'Ilmnama: The stories of Many Muslims in India', Indira Gandhi Centre for National Integration & Department of Arabic, Visva-Bharati, Shantiniketan, February 2019

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2. 'Media & Disaster Management', School of Oceanography, JU
3. 'Women, Minorities and Education', School of Women's Studies, JU
4. 'Reading Texts', Dept of International Relations, JU

Prof. Partha Pratim Basu

1. Two lectures on 'Farmers' Agitations in India' in a Summer Course for College and University Teachers organized by Dept. of Political Science, University of Calcutta, 12 September, 2018.
2. 'Bangladesh: Religion, society and politics', National Council of Education, Kolkata, 30 September, 2018.
3. Panelist at roundtable on 'UN Vision 2030 on Sustainable Development', Dept. of Political Science, Presidency University, 5 October 2018.
4. 'Two lectures on 'Philosophical Foundations of Human Rights' at the Refresher Course, Dept. of International Relations, Jadavpur University, 2 and 20 November, 2018.
5. Lecture on 'Sivnath Shastri as an Educationist', Sadharan Brahma Samaj, Kolkata, 20 January, 2019.
6. Lecture on 'Discourse Analysis' at the Workshop on Research Methodology, Jadavpur Association of International Relations, 7 February, 2019.
7. Chaired a session at a conference on 'Contours of India's Act East Policy: Opportunities, Challenges and Future Trends in Indo-ASEAN Partnership', Kolkata Society for Asian Studies, University of Calcutta, 18 February, 2019.
8. Two lectures on 'Religion and Politics in Pakistan and Bangladesh', Refresher Course, HRDC, Burdwan University, 22 February, 2019.

Prof Amites Mukhopadhyay

1. 'Qualitative Methods in Social Sciences', lecture at the Orientation Programme organized by UGC-HRDC Jadavpur University, July 2018.
2. 'Rethinking Methods in Social Sciences', lecture at the Orientation Programme organized by UGC-HRDC Jadavpur University, November, 2018.

Prof. Dalia Chakraborty

1. Invited lecture delivered on 'Visual Sociology', UGC-HRDC Orientation Programme, Jadavpur University, 11 July, 2018.
2. Invited lecture delivered on 'Communication Skill', Electrical Engineering Department, Jadavpur University, 17 August, 2018.
3. Invited lecture delivered on 'Science and Sociology', Department of Sociology, Shri Shikshaytan College, Kolkata, 28 September, 2018.
4. Invited lecture delivered on 'Philosophy in Sociology', UGC-HRDC Refresher Course on 'Social and Political Philosophy: Indian and Western', Department of Philosophy, Jadavpur University, 11 December, 2018.
5. Invited lecture delivered on 'Post-modernism', Bhawanipore Education Society College, Kolkata, 29 January, 2019.
6. Invited lecture delivered on 'Women's Empowerment', Women's Cell, Tarakeshwar Degree College, 20 March, 2019.

Dr. Suchetana Chattopadhyay

1. Presentation at a panel discussion on the occasion of the India premiere of the film *They Shall Not Grow Old* (a film based on restored footage from the Imperial War Museums' collection on First World War), commemorating the centenary of the Armistice. Organized by School of Media, Communication and Culture, JU and British Council, Kolkata, 20 November 2018.

Dr. Kaustav Bakshi

1. Invited discussant on the panel, 'Sexing India: Hindutva, LGBTQ Rights, and Global Philanthropy', at CLAGS, City University of New York, 2 April 2018.
2. 'Queering the Streets: How the LGBT Movement in the US influenced India', lecture at the American Center and Library, Kolkata, 25 June 2018.

3. B. Seminar/Workshop/Conference/Symposium Attended (Name of the Teacher, Name of the Paper Presented, if any, Name of the Seminar, Place, Duration):

Prof. Abhijit Roy

1. 'Music of Satyajit Ray and the Aesthetics of *Simplicity*', paper presented at the national seminar on 'The Literature of a Century' organized by Prof. Rita Chatopadhyay and Sanskrit Pustak Bhandar, Kolkata. Jadavpur University, 27 April, 2018.

Dr. Sayantan Dasgupta

1. 'Cross-cultural Connections' in the XIV CLAI Biennial International Conference on 'Studying South Asian Narratives through Pluralist and Dialogic Frames', organized by the Comparative Literature Association of India at the Maulana Azad National Urdu University, Hyderabad, 11-14 March, 2019.

Prof. Partha Pratim Basu

1. 'Rammohun Roy and Secularism in India', at a seminar titled 'Rammohun Roy and Brahma Samaj Movement', 128th Brahma Conference, Brahma Sammilani Samaj, Kolkata, 23 November 2018.
2. 'Intellectuals and Politics: From Nehruvian to Post-Nehruvian India', at a seminar titled Redefining the Political', Dept. of Political Science, University of Calcutta, 13 February, 2019.

Prof. Amites Mukhopadhyay

1. 'Forested Borders, Fluid Movements: Imagining and Negotiating Borders in the Indian Sundarbans', paper presented at the symposium on 'Cross Border Entanglements in Eastern South Asia' as part of Annual South Asia Conference, University of Wisconsin, Madison, USA, October, 2018.
2. 'Watery Landscape, Fluid Movements: Imagining Border', paper presented at the seminar on 'Walls of a nation: People, culture, memories and experiences', Department of Sociology, Gour Banga University, Malda, West Bengal, February 2019.
3. 'Pedagogy and Critical Thinking: Instituting Higher Education', paper presented at the seminar on 'Excellence in Higher Education: Emerging Concerns and the Road Ahead', Patna Women's College (Autonomous), February 2019.
4. 'Finite Border, Infinite Practices: Everyday Lives at the Borders' Edge', paper presented at the 44th All India Sociological Conference, St Philomena College (Autonomous), Mysuru, Karnataka, 27-29 December 2018.
5. 'Beyond the Lifeworld and System: Rethinking the Binary', paper presented at the seminar on 'Self and the Lifeworld', Department of Sociology, North Bengal University, 1-2 March 2019.
6. 'From Objects (Material Objects/Material Culture) in Anthropological Studies to Objects in Everyday Studies: Methodological Implications for Objects in Everyday Studies', paper presented at the seminar on 'Artefacts in Everyday Life', National Institute of Science Education and Research, Bhubaneswar, Odisha, 23-24 March, 2019.

Dr. Kaustav Bakshi

1. 'Public versus Private in the Discourses of Women's Movement in Sri Lanka: The Contemporary Sri Lankan English Novel and its Critique of 'Respectability'', paper presented at the 25th European Conference on South Asian Studies (ECSAS2018), Paris, 24 July to 27 July 2018.
2. "Austen in the Era of 'Shopping Mall' Cinema in Bombay: Showcasing Emma in *Aisha*", paper presented at the UGC- CAS- III sponsored state-level seminar on 'From 'the Great Tradition' to Spin-offs: Re-reading Jane Austen', Department of English, Jadavpur University, 27 February 2019.

3. C. Seminar/Workshop/Conference/Symposium Organised (Name of the Teacher, Name of the Paper Presented, if any, Name of the Seminar, Place, Duration):

Organized by the School

1. 'Visual Storytelling for Change: Notes from the Field', a talk by Professor Sanjeev Chatterjee, Department of Cinema and Interactive Media, School of Communication, University of Miami. Jadavpur University, 9 October, 2018.
2. 'Edges of Time: Exploring the Past, Present and Future of Dance in Kolkata', symposium organized by 'Dance and Performance', a UGC-UPE project of the School. Jadavpur University, 28 October, 2018.
3. 'Surveillance: Who is Watching Whom and Why' a talk by Professor Ananda Mitra, Professor of Communication, Wake Forest University, United States. 2 November, 2018.
4. The School in collaboration with the British Council, Kolkata, commemorated the centenary of the First World War Armistice. The event hosted the India premiere of the film *They Shall Not Grow Old* (Peter Jackson, 2018, a film based on restored footage from the Imperial War Museums' collection on the First World War), followed by a panel discussion (Speakers: Professor Moinak Biswas, Department of Film Studies, JU, and Dr. Suchetana Chattopadhyay, Department of History, JU). Jadavpur University, 20 November 2018.
5. 'Living & Dying: Meanings in Maithili Folklore', a talk by Dr. Dev Nath Pathak, Department of Sociology, South Asian University, New Delhi, 8 January, 2019.
6. Film screening of *Bideshi* (Director: Soumitra Adhikari, 2018) and lecture on 'NRC and the Citizenship Amendment Bill' by Partha Pratim Moitra, 29 January, 2019.
7. 4-day colloquium/multimedia exhibition on 'New Cities: Imagining and Imaging the Global City in India' organized by School of Media Communication and Culture, Jadavpur University, supported by UGC-UPE phase-II and the Indian Council for Social Science Research, in collaboration with the Indian Council for Cultural Relations. ICCR Nandalal Bose Gallery, Kolkata. 14-17 February, 2019. (Coordinator: Prof. Nilanjana Gupta)
8. 'Curatorial Mistakes and Mediated Corrections: The 'Scaffold' Controversy of the Walker Arts Centre, Minneapolis', a lecture by Dr. Arshiya Sethi, Fulbright-Nehru Postdoctoral Scholar and Managing Trustee of Kri Foundation. Jadavpur University, 26 March, 2019.

Workshops/presentations/radio programmes/short videos by the Youth Community Reporters Project (funding agency: UNICEF)

1. Workshop on 'Online Security', Jadavpur University, 25 May 2018.
2. Workshop on 'Voice of Boys', Jadavpur University, 31 May 2018.
3. Workshop on 'Value of Girls', Jadavpur University, 2 June 2018.
4. Workshop on 'Menstrual Health & Hygiene', Jadavpur University, 21 June 2018.
5. Workshop on 'Quality Education for Specially Abled Children', Jadavpur University, 31 October 2018.
6. Workshop on 'Adolescent Health and Nutrition', Jadavpur University, 30 November 2018.
7. Learning Visit Programme, Jadavpur University, 18, 19 and 20 December, 2018.
8. Final Workshop and Review Meeting, Jadavpur University, 12 March, 2019.
9. Recording sessions were conducted every month between April 2018 and March 2019 (total 60 recording sessions). Programmes based on these recordings were played every Sunday on 90.8 Community Radio JU.
10. Video-making workshops were conducted during 18 and 19 March, 2019. One short video was made out of these workshops. The theme was 'Menstrual Hygiene' (7 minutes 3 seconds)
11. Review Workshop, Jadavpur University, 25 March, 2019.

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12. Special Presentation for Alexandra Westerbeek, Chief, Advocacy, Communication and Partnerships, UNICEF India. Jadavpur University, 27 March, 2019.

D. Orientation Courses/ Refresher Courses Attended: (Name of the Teachers, Title of the Course, Duration, Place)

Dr. Suchetana Chattopadhyay

1. One week skill development course on 'Digital libraries of the future', Department of Library and Information Science, Jadavpur University, 24-31 August 2018.

4. A. Books/ Monographs etc. Published (Name of the Teacher, Name of the Book, Name of the Publisher):

Prof. Nilanjana Gupta

1. *English for All*, Macmillan India, Chennai, 1998. Reprinted 13 times, 3rd Edition, 2018 (Coordinating Editor)
2. *Dance Matters Too: Markets, Memories, Identities*, Routledge, New Delhi and London, 2018 (Edited with Pallabi Chakraborty).

Prof. Partha Pratim Basu

1. *West Bengal under the Left, 1977-2011*, Levant Press, Kolkata, 2018 (Co-edited with Rakhahari Chatterji).

Dr. Suchetana Chattopadhyay

1. *Voices of Komagata Maru: Imperial Surveillance and Workers from Punjab in Bengal*, Tulika Publishers, New Delhi, 2018

Dr. Kaustav Bakshi

1. *Queer Studies: Text, Context, Praxis*, Orient Blackswan, New Delhi, 2019 (co-authored with Rohit K Dasgupta).

B. Articles Published in Journals (Name of the Teacher, Name of the Articles, Name of the Journal, Date of Publication, Volume):

Dr. Sayantan Dasgupta

1. 'Bharatiyo ingreji sahityo: Sahityer itihās, naki itihāser sahityo', *Parikatha*, May 2018.
2. 'Rethinking Indian Literature, Reinventing Comparative Literature', in *Indian Literature* 306, New Delhi: Sahitya Akademi, July-August 2018, pp. 220-223.
3. 'Engaging with the Oral: Translating Lepcha and Tamang Traditions' (Co-authored with Shradhanjali Tamang) in Anvita Abbi ed. *Route to Oral Literature*. Sahitya Akademi, New Delhi, 2018, pp. 91-102.

Prof. Nilanjana Gupta

1. 'Digital Capitalism and Surveillance on Social Networking Sites: A Study of Digital Labour, Security & Privacy for Social Media Users' (with Rianka Roy) in Arpan Kumar Kar, Shuchi Sinha and M. P. Gupta (eds.) *Digital India: Reflections and Practice*, Springer, 2018.
2. 'Ganashakti "The Enormous Pair of Bellows": Tracing the History of the Party Organ' in Rakhahari Chatterji and Partha Pratim Basu (eds.), *West Bengal Under the Left, 1977-2011*, Levant Press, Kolkata, 2018.

Prof. Partha Pratim Basu

1. 'Agriculture under the Left Front Regime in West Bengal', in Chatterji and Basu (eds.), *West Bengal under the Left, 1977-2011*, Levant Press, Kolkata, 2018.

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2. 'Industry in West Bengal during the Left Front Regime' (co-authored) in Chatterji and Basu (eds.), *West Bengal under the Left, 1977-2011*, Levant Press, Kolkata, 2018.
3. 'The Left Front in West Bengal: From Movement to Government' (co-authored), in Chatterji and Basu (eds.), *West Bengal under the Left, 1977-2011*, Levant Press, Kolkata, 2018.

Dr Suchetana Chattopadhyay

1. 'Workers and Militant Labour Activists from Punjab in Bengal (1921-1934)', *Socialist Studies/Etudes Socialistes* (Special Issue: The Ghadar Movement), ISSN: 1918-2821, Fall 2018, Vol.13 (2), pp.97-113.

Prof Amites Mukhopadhyay

1. 'The Schism between Teaching Theory and Doing Method: The Practice of Sociology' in M. Chaudhuri and M. Thakur (eds.), *Doing Theory: Locations, Hierarchies and Disjunctions*. Orient Blackswan, New Delhi.

Dr. Kaustav Bakshi

1. 'Rituparno Ghosh, Sartorial Choices and the Queer Bengali Youth' (co-authored with Rohit K Dasgupta) in L. Begum, R. K Dasgupta and Reina Lewis (eds.) *Styling South Asian Youth Cultures: Fashion, Media, Society*, I B Tauris, London and New York, 2018, pp. 65-85.

5. Collaborative Programmes:

1. 4-day colloquium/multimedia exhibition on 'New Cities: Imagining and Imaging the Global City in India' organized by the School in collaboration with the Indian Council for Cultural Relations (ICCR) with support from UPE phase-II and the Indian Council for Social Science Research. ICCR Nandalal Bose Gallery, Kolkata. 14-17 February, 2019. Coordinator: Prof. Nilanjana Gupta.
2. 'Building Bridges: Visual Storytelling to Allow Urban Youth Explore Possibilities Beyond Borders of Circumstance', Fulbright-Nehru project (involving JU students and students and young workers from adjoining areas) conducted by Professor Sanjeev Chatterjee, School of Communication, University of Miami, in collaboration with School of Media, Communication and Culture, December 2018—March 2019; Funding agency: United States-India Educational Foundation; Academic Coordinator & Creative Consultant: Prof. Abhijit Roy. <https://porouscity.otherindias.com>
3. The School in collaboration with the British Council, Kolkata, commemorated the centenary of the First World War Armistice. The event hosted the India premiere of the film *They Shall Not Grow Old* (Peter Jackson, 2018, a film based on restored footage from the Imperial War Museums' collection on the First World War), followed by a panel discussion (Speakers: Professor Moinak Biswas, Department of Film Studies, JU, and Dr. Suchetana Chattopadhyay, Department of History, JU). Jadavpur University, 20 November 2018.
4. The 'Youth Community Reporters' project organized 9 workshops and 60 radio recordings; made 1 presentation and produced 1 short video with support from the UNICEF. May 2018 to March 2019.
5. 90.8 Community Radio JU successfully organized visits by students from various institutions to its studio and helped them understand practical and theoretical aspects of radio production and programming. Some of these institutions are: Fu Jen Catholic University, Taiwan; Panchanan Barma University, Coochbehar; Vidyasagar University, Midnapore; Burdwan University. Radio-based classes have been conducted for the students of the MA programme in Journalism and Mass Communication, Jadavpur University. Army personnel from Shashastra Sima Bal also visited the Community Radio.

6. Major Achievements:

1. 90.8 MhZ Community Radio JU won the 3rd prize at the national competition titled 'Radio Saving Lives' organized along with a national conference on disaster management by the UNICEF in New Delhi, 25 and 26 February 2019.

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2. Community Radio JU participated in the Election Awareness Programme organized by the Election Commission of India and made 5 election awareness programmes which were highly appreciated by the Election Commission of India (ECI). The programmes were shared on the ECI's national portal.
3. Community Radio JU launched some programmes this year which are currently high on popularity chart: *Ebong Rabindranath, Amar Nazrul, On-Spot Adda, Roshe Boshe*.
4. Dr. Sayantan Dasgupta has become member of the Advisory Board (English) of Central Sahitya Akademi, New Delhi.
5. The 4-day colloquium/multimedia exhibition on 'New Cities: Imagining and Imaging the Global City in India' organized by the School in collaboration with Indian Council for Cultural Relations (ICCR) with support from UGC-UPE phase-II and Indian Council for Social Science Research (14-17 February, 2019) was highly appreciated by researchers, activists, artists and the media. A booklet was published on the occasion.
6. The School successfully completed its seven UGC-UPE projects and is currently preparing a website where the output of the UPE projects would be selectively showcased. The resources generated from the UPE projects are currently being systematically preserved for use by researchers.

MOBILE COMPUTING & COMMUNICATION

Phone : + 91-33-2335-6122
Director. : Dr. Punyasha Chatterjee
E-mail : dir.mobilecomputing@jadavpuruniversity.in

- 1. A. Courses Offered:** M. Tech in Distributed and Mobile Computing
Duration: 2 years
Intake: 15

B. Number of Faculty Members : 03 (02 – Permanent, 01 – Contractual)

2. A. Area of Research Activities:

Distributed and Parallel Computing, Wireless Sensor Networks, Social Network Analysis, Wireless and Mobile Computing, Computation Offloading, Smart Health Care, High Performance Computing, Internet of Things, Big Data and Cloud Computing, Pervasive Computing Distributed Algorithms, Big Data Storage and Management

2. B. Major Research Project:

1. Title: Remote Health: A Framework for Health-care Services using Mobile and Sensor-cloud Technologies. Funded by Information Technology Research Academy, Media Lab Asia, Ministry of Electronics and Information Technology, (MeitY), Govt. of India. Duration : 2013 – 2018. - **Prof. Nandini Mukherjee**, Role – Lead PI of a team of six collaborating institutions and PI of Jadavpur University.
2. Title: Environmental Monitoring: Testbed of Mixed Wireless Sensor Networks
Funding agency: Department of Science and Technology, Promotion of University Research and Scientific Excellence (DST, PURSE Phase-II), Govt. of India
Period: 4 years w.e.f. 2015

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Role: One of the investigators

(Investigators: **Dr. Sarbani Roy, Dr. Chandreyee Chowdhury, Dr. Nandini Mukherjee, Dr. Sarmistha Neogy**)

3. Title: Participatory and Real Time Pollution Monitoring system for Smart City

Funding agency: Higher Education, Science & Technology and Biotechnology, Department of Science & Technology, Government of West Bengal

Sanctioned amount: Rs. 13,20,800

Period: 3 years w.e.f. July 2018

Role: Principal Investigator (**Dr. Sarbani Roy**) (Co-PI: **Dr. Chandreyee Chowdhury**)

3. A. Invited Lectures Delivered/Sessions Chaired :

1. Invited talk on “Introduction to Internet of Things” in the Seminar on Recent Advancement in Science and Technology, at Netaji Nagar Day College, 28th Feb, 2019 – **Dr. Punyasha Chatterjee**.
2. Invited talk on “IoT & Smart City” at University of Engineering & Management, 1st Feb, 2019 – **Dr. Punyasha Chatterjee**.
3. Invited talk on “Applications of Internet of Things in Day-to-Day Life” in the Workshop on Arduino Microcontrollers & IoT, at MCKV Institute of Engineering, 4th June, 2018 – **Dr. Punyasha Chatterjee**.
4. Invited talk on “Energy Efficient Data Gathering in Green Wireless Sensor Networks” in the short-term course on Smart & Green ICT, Department of Information Technology, JU, 21st May, 2018 – **Dr. Punyasha Chatterjee**.
5. Invited lecture in a workshop on “UNCERTAINTY MANAGEMENT IN HEALTH INFORMATICS” held between 31st July and 5th August 2018 at IEST, Shibpur. Delivered lecture on 2nd July 2018. - **Prof. Nandini Mukherjee**
6. Delivered a lecture in a seminar on “INTERNET OF THINGS (IOT) -TECHNOLOGIES AND APPLICATIONS” organized by The Institution of Engineers (India) West Bengal State Centre, Electronics & Telecommunication Engineering Division held on 21st June 2018. - **Prof. Nandini Mukherjee**
7. Delivered two lectures in TEQIP-III sponsored two days Short Term Training Programme (STTP) on “IoT: Related Technologies and Applications” at RTU, Kota, Rajasthan, 17-18 Sept., 2018 – **Dr. Sarbani Roy**.
8. Delivered a keynote talk on “IoT and its Applications” in 5th International Conference on Mathematics and Computing (ICMC 2019), at KIIT, Bhubaneswar, Odisha, 8th February 2019 – **Dr. Sarbani Roy**.
9. Delivered two lectures on “Communications in IoT: WiFi” and “Communications in IoT:Bluetooth” in TEQIP-III sponsored two-day Short Term Training Programme (STTP) on “IoT:Related Technologies and Applications” at RTU, Kota, Rajasthan, 17-18 Sept., 2018 – **Dr. Chandreyee Chowdhury**.

3. B. Seminar/ Workshop/ Conference/ Symposium Attended:

1. 3rd International Conference of Data Management, Analytics and Innovation (ICDMAI 2019), Kuala Lumpur, Malaysia, Date: 18 - 20 January, 2019 – **Dr. Punyasha Chatterjee**.
2. 47th International Conference on Parallel Processing (ICPP 2018) held at University of Oregon, Eugene, Oregon, USA from 13th August to 16th August 2018. - **Prof. Nandini Mukherjee**
3. 2018 IEEE SENSORS held in New Delhi between 28th October to 31st October 2018.- **Prof. Nandini Mukherjee**
4. 20th International Conference on Distributed Computing and Networking (ICDCN 2019) held at IISc, Bangalore from 4th January to 7th January 2019. - **Prof. Nandini Mukherjee**.

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5. Participated and presented the paper entitled “Automated Real-time Parking Management for Smart Cities” at the 2nd International Conference on Communication, Devices and Computing (ICCDC 2019), 14 -15 March, 2019, Haldia Institute of Technology, Haldia, India. - **Dr. Pampa Sadhukhan**.
6. Participated in the three-day Workshop “Wireless Communication & Computing, IOT and Data Analytics” during 14 – 16 February 2019, organized by Mobile and Innovative Computing Project Group, Jadavpur University, Kolkata, India. - **Dr. Pampa Sadhukhan**.
7. Participated in and presented the paper entitled “A Novel Real-time Collision Avoidance System for On-road Vehicles,” at the 2018 Fourth IEEE International Conference on Research in Computational Intelligence and Communication Networks (ICRCICN 2018), 22 – 23 November, 2018, RCCIIT, Kolkata, India.- **Dr. Pampa Sadhukhan**

3. C. Seminar/ Workshop/ Conference/Symposium Organized:

1. Five Day Workshop on Paradigm of Open Source Software (POSS 2018) June 22-27, 2018, organized by Department of Computer Science and Engineering and School of Mobile Computing and Communication, Jadavpur University – **Dr. Punyasha Chatterjee** and **Prof Nandini Mukherjee**
2. Organised 2nd International Workshop On Networking Women In Distributed Computing And Networks (In Conjunction With ICDCN 2019) at IISc Bangalore on 4th January 2019. - **Prof. Nandini Mukherjee**

3. D. Orientation Courses/ Refresher Courses Attended:

- (1) Participated in UGC Sponsored Inter-disciplinary Refresher Course on *Advances in Instrumentation and Automation: Role of ICT* during December 3 – 22, 2018 held at Dept. of IEE, Jadavpur University, Kolkata. - **Dr. Pampa Sadhukhan**

4. A. Books/ Monographs etc. Published:

1. Big Data in e-healthcare: Challenges and Perspectives: Authored by **Nandini Mukherjee, Sarmistha Neogy, Samiran Chattopadhyay**, Publisher – CRC Press, ISBN 9780815394402.

4. B. Articles Published in Journals : (National/International/Peer-reviewed)

JOURNAL:

1. A. Gupta and N. Mukherjee, “A Cloudlet Platform with Virtual Sensors for Smart Edge Computing,” in *IEEE Internet of Things Journal*.doi: 10.1109/JIOT.2019.2918405
2. Safikureshi Mondal, Nandini Mukherjee, “An efficient reachability query based pruning algorithm in e-health scenario”, *Journal of Biomedical Informatics*, Volume 94, 2019, 103171, ISSN 1532-0464
3. Sunanda Bose, Debangana Sarkar and Nandini Mukherjee, “A Framework for Heterogeneous Resource Allocation in Sensor-Cloud Environment”, *Wireless Personal Communication* Volume 108: 19, 2019, <https://doi.org/10.1007/s11277-019-06383-1>
4. Srimoyee Bhattacharjee, Rituparna Das, Sunirmal Khatua, **Sarbani Roy**, “Energy-efficient migration techniques for cloud environment: a step toward green computing”, *Journal of Supercomputing*, Springer, 26 March 2019.
5. Binay Ray, Avirup Saha, Sunirmal Khatua and **Sarbani Roy**, “Towards Maximization of Profit and Quality of Cloud Federation: Solution to Cloud Federation Formation Problem”, *Journal of Supercomputing*, Springer, 26 September 2018.
6. Binay Ray, Avirup Saha and **Sarbani Roy**, “Migration Cost and Profit Oriented Cloud Federation Formation: Hedonic Coalition Game Based Approach”, in *Cluster Computing*, Springer, 25 August 2018.
7. Joy Dutta, **Sarbani Roy, Chandreyee Chowdhury**, “Unified framework for IoT and smartphone based different smart city related applications”, *Microsystem Technologies*, Springer, PP 1- 14, 14 May 2018.
8. Binay Ray, Avirup Saha, Sunirmal Khatua and **Sarbani Roy**, “Quality and Profit Assured Trusted Cloud Federation Formation: Game Theory Based Approach”, in *IEEE Transactions on Services Computing*, 08 May 2018.

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9. P. Roy, **C. Chowdhury**, D. Ghosh, S. Bandyopadhyay (2019). "JUIndoor Loc: A Ubiquitous Framework for Smartphone-Based Indoor Localization Subject to Context and Device Heterogeneity", 106(2): 739–762, *Wireless Personal Communications*, Springer, <https://doi.org/10.1007/s11277-019-06188-2>
10. M. Roy, **C. Chowdhury**, N. Aslam (2018) "Designing Transmission Strategies for Enhancing Communications in Medical IoT Using Markov Decision Process", *MDPI Sensors*, 18(12), 4450, December 2018.
11. J. Saha, **C. Chowdhury**, S. Biswas (2018) "Two phase ensemble classifier for smartphone based human activity recognition independent of hardware configuration and usage behavior", *Journal of Microsystem Technologies*, Springer, DOI: 10.1007/s00542-018-3802-9, 24(6), pp. 2737-2752. June 2018.
12. J. Saha, **C. Chowdhury**, I. Roy Chowdhury, S. Biswas, N. Aslam (2018) "An Ensemble of Condition Based Classifiers for Device Independent Detailed Human Activity Recognition Using Smartphones", *Information*, MDPI, 9(4), 94, pp. 1-22. April 2018
13. **P. Sadhukhan**, "Performance Analysis of Clustering-based Fingerprinting Localization Systems", *Wireless Networks* (Impact Factor 1.981), Vol. 25, Issue 5, pp. 2497–2510, July 2019, Springer US.

CONFERENCE:

1. P. Mukhopadhyay, H. S. Roy and **N. Mukherjee**, "E-healthcare delivery solution," 2019 11th International Conference on Communication Systems & Networks (COMSNETS), Bengaluru, India, January 2019, pp. 595-600. doi: 10.1109/COMSNETS.2019.8711429
2. A. Gupta, A. Nag and **N. Mukherjee**, "Approach for Uncertainty Reduction in Sensors of Remote Health," 2018 *IEEE SENSORS*, New Delhi, October 2018, pp. 1-4. doi: 10.1109/ICSENS.2018.8589721
3. Atreya Bandyopadhyay and **Nandini Mukherjee**, "An Approach to Predict Desktop Uptime for Job Allocation in Ad-Hoc Cloud", *Proceedings of the 47th International Conference on Parallel Processing Companion*, 978-1-4503-6523-9, Eugene, Oregon, USA, pp. 1-7, 2018, 10.1145/3229710.3229743, ACM
4. K. Ray, S. Bose and **N. Mukherjee**, "A Load Balancing Approach to Resource Provisioning in Cloud Infrastructure with a Grouping Genetic Algorithm," 2018 *International Conference on Current Trends towards Converging Technologies (ICCTCT)*, Coimbatore, 2018, pp. 1-6. doi: 10.1109/ICCTCT.2018.8550885
5. P. Mandal, M.K. Rana, **P. Chatterjee**, A. Debnath, ns-3 Implementation of Network Mobility Basic Support (NEMO-BS) Protocol for Intelligent Transportation Systems, accepted for inclusion in the 3rd International Conference of Data Management, Analytics and Innovation (ICDMAI 2019), Kuala Lumpur, Malaysia, Date: 18 - 20 January, 2019
6. B. K. Ray, O. Ghosh, S. Bhattacharjee, **S. Roy** and S. Khatua, "OCPDA: A novel approach towards detection of overloaded cloud providers in a federated environment," 2018 *IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS)*, Indore, India, 16-19 December 2018, pp. 1-6. doi: 10.1109/ANTS.2018.8710148
7. **A. Ray**, S. Mallick, S. Mondal, S. Paul, **C. Chowdhury** and **S. Roy**, "A Framework for Mobile Crowd Sensing and Computing based Systems," 2018 *IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS)*, Indore, India, 16-19 December 2018, pp. 1-6. doi: 10.1109/ANTS.2018.8710083
8. P. Roy, M. Kundu, **C. Chowdhury** (2019) "Indoor Localization using Stable Set of Wireless Access Points Subject to Varying Granularity Levels", *International Conference on Wireless Communications, Signal Processing and Networking (WiSPNET 2019)*, March 21-23, 2019, to be published in *IEEE Proceedings*.
9. A. Nandy, J. Saha, **C. Chowdhury**, K.P.D. Singh (2019) Detailed Human Activity Recognition using Wearable Sensor and Smartphones, *OPTRONIX 2019*, March 18-20, 2019, to be published in *IEEE Proceedings*.

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10. M.N.Anjum, **C.Chowdhury**, **S. Neogy** (2019), "Implementing Mobile Agent based Secure Load Balancing Scheme" for MANET, OPTRONIX- 2019, March 18-20, 2019, to be published in *IEEE Proceedings*.
11. M. N. Anjum, **C. Chowdhury**, **S. Neogy** (2018) Assisting Vehicles Using Cyber-Physical Systems. In: Satapathy S., Tavares J., Bhateja V., Mohanty J. (eds) *Information and Decision Sciences. Advances in Intelligent Systems and Computing*, vol 701. Springer, pp. 399-408 ISBN: 978-981-10-7562-9, April 2018.
12. M. K. Pal, N. Debabhuti, **P. Sadhukhan** and P. Sharma, "A Novel Real-time Collision Avoidance System for On-road Vehicles," (2018) *Fourth International Conference on Research in Computational Intelligence and Communication Networks (ICRCICN)*, Kolkata, India, 22-23 November, 2018, pp. 141-146, DOI: 10.1109/ICRCICN.2018.8718724.

5. Collaborative Programmes :

1. **Prof Nandini Mukherjee**- Lead investigator of a collaborative project titled "Remote Health: A Framework for Healthcare Services using Mobile and Sensor-Cloud Technologies" in which six institutions are participating and Jadavpur University is playing the lead role. The project is funded by ITRA, Media Lab Asia.

7. PhD Guidance:

1. Prof. Nandini Mukherjee - Registered: 08
2. Dr. Sarbani Roy - Awarded: 03, Submitted: 02, Registered: 05 (2 new registrations in 2018-2019)
3. Dr. Chandreyee Chowdhury - Registered: 04

NATURAL PRODUCT STUDIES

Telefax : +91 33 2414-6046

Int. : 2457-2036

Director.: Prof.Pulok K Mukherjee

E-mail : dir.naturalproduct@jadavpuruniversity.in

1. A. Courses offered: Nil

1. B. Number of faculty members: 02

2. A. Area of Research Activities:

School of Natural Product Studies (SNPS, J.U) has been working on evidence based scientific studies for evaluation of the medicinal plants used in the traditional practices medicine based drug discovery programme so as to make them available from 'Farm to Pharma'. The major area of research highlights on leveraging innovations in botanical research, particularly on rationally designed, carefully standardized, synergistic traditional formulations and botanical drugs for their scientific validation on several evidence based approaches. SNPS, J.U has made significant contributions on metabolomic studies of medicinal and aromatic plants (MAPs) for chemo-profiling, marker analysis, quality control, safety surveillance and related aspects, which are useful bio-prospecting tools to make them available from 'Farm to Pharma'. The works on metabolite profiling for validation of MAPs for Alzheimer's diseases, anti-allergy, anti-infective, metabolic and lifestyle related disorder are very important and have a worldwide impact for the adoption of the therapeutic approaches available in MAPs. It has established the safety profile of MAPs and developed value added products through CYP 450 mediated interaction study. Our work highlights on several parameters for quality evaluation and validation of MAPs along with development of high-throughput screening methodologies for drug screening and evaluation. SNPS, J.U works on systematic data mining of the existing formulations and single herbs can certainly help the drug discovery from MAPs.

SNPS, J.U has more than 200 publications, several patents, 5 books, 17 book chapters. SNPS, J.U has research publications with cumulative Impact Factor 242; h-Index- 60, i10-index - 205; citation over 16700 times. SNPS, J.U has been appreciated by several industries and various products have been developed; technology transferred through University-Industry collaborations and the products / the process developed are being marketed.

SNPS, J.U has been engaged with the development of international collaboration and coordination in the field of medicinal plant research and has organized several international and national conferences, workshops, seminars at Jadavpur University and other states of India as well to disseminate knowledge for promotion and development of MAPs.

Major contributions of SNPS, J.U on Traditional medicine inspired drug development from MAPs are as follows:

Metabolomics, Quality control and standardization of herbal drugs

SNPS, J.U has contributed a lot for the development of marker profiles of herbs related to analytical, bio-analytical techniques for MAPs with therapeutic importance. These works have been reported through books on *Quality Control and evaluation of Herbal Drug* [ISBN 978-0-12-813374-3], edited volume *GMP for botanicals* [ISBN 81-900788-5-2] and edited volume *Evidence based validation of herbal medicine* [ISBN978-0-12-800874-4] which has received worldwide impact. The school has been working since then in this field for development of quality control profile of herbal medicine through HPTLC, HPLC, LC-MS/MS, GC/MS and different other analytical and bio-analytical techniques. SNPS, J.U has performed metabolomics study for metabolite profiling of MAPs. Several works on UPLC-QTOF-MS analysis of *Luffa acutangula*, identification of bioactive constituents of *Momordica charantia* fruits has been published in reputed impact journals. Researchers of SNPS, J.U have worked on the development of marker and biomarker profiles of the MAPs for the standardization and evaluation have resulted several impact publications. [Biswas et al., 2019, *Journal of Planar Chromatography*, 32: 1 (1-6); Chanda et al., 2019, *Biomedical Chromatography*, 33(4): e4463; Chanda et al., 2018, *Phytochemical Analysis*, 30(2):148-155; Nag et al., 2017, *Indian Journal of Pharmaceutical Education and Research*, 51(2):337-342; Mukherjee et al., 2016, *Current Science*, 111 (1624-1630); Chanda et al., 2014, *Natural Product Research*, 28;21 (1926-1928); Mukherjee et al., 2013, *Fitoterapia*, 84, 227–236; Mukherjee et al., 2012, *Journal of Ethnopharmacology* 2012, 143, 424-434; Mukherjee et al, 2011, *Drug Information Journal*, 45: 1-14; Mukherjee et al, 2010 *Phytochemical Analysis* (in press); Pandit et al, 2010; *Biomedical Chromatography*, 2011, 25, 959-962, Gantait et al, 2010. *J AOAC International* 93(2):492-5].

Bio-prospecting of MAPs for development of therapeutically potent lead

● **Exploring anti-ageing leads from MAPs:**

SNPS, J.U have been working on development of leads from natural resources like antiaging. Several components have been screened and evaluated in this context for their hyaluronidase, elastase and matrix-metalloproteinase inhibitory activities. This work has been explored by the industrial partner Parker Robinson Ltd, Kolkata through Department of Science & Technology, Govt. of India and Industry sponsored project at the Jadavpur University. Several research work has been reported in details in this aspects (Maity et al, 2012, *Natural Product Research*, 26, 1939–1941, Mukherjee et al, 2011, “Natural Matrix-Metalloproteinase Inhibitors-Leads from Herbal Resources” in: *Bioactive Natural Products*, Elsevier Science Publishers, Amsterdam; Mukherjee et al, 2011, *Phytomedicine* 19, 64-73; Nema et al, 2011, *Archives of Dermatological Research* 303, 247–252; Maity et al, 2011, *Journal of Ethnopharmacology* 137, 1300–1305.

● **Evaluating of anti-tyrosinase inhibitory potential of MAPs:**

SNPS, J.U and its research team have been working on the development lead from botanicals and formulate value added product for skin whitening. Several medicinal plants have been screened in

respect to their anti-tyrosinase enzyme inhibition potential. These findings are being explored by Industrial partner Emami Ltd., Kolkata through a collaborative research project on “Varnya formulation” leading to product development. Several research findings have been published in several reputed impact journals. [Mukherjee et al., 2018, *Journal of Herbal Medicine*, doi.org/10.1016/j.hermed.2018.09.002; Biswas et al., 2017, *Food Chemistry*, 232 (689-696); Biswas et al., 2016, *Journal of Ethnopharmacology*, 192 (283-291); Biswas et al., 2016, *Natural Product Research*, 30 (1451-54); Biswas et al., 2015, *Industrial Crops and Products*, 74 (319–326)]

- **Exploring anti-infective, immunomodulatory potential of MAPs:**

SNPS, J.U has performed a well-defined scientific works on “Studies on Rhizomes of *Nelumbo nucifera* Gaertn. (Family-Nymphaeaceae)” relating to phytochemical, pharmacological, antimicrobial studies on its rhizomes leads to several potential publications and patent. Works on isolation and quantification of ‘Betulinic acid’ from the rhizome of *Nelumbo nucifera*, which is a potential steroidal triterpenoid compound possessing antitumor, anti-HIV activity and found to possess significant anti-inflammatory activity against different edema model. An international patent has been made by CSIR (International patent – No- WO03011891) entitled “A Process for Isolation of Betulinic Acid useful as Anti-HIV, Anti-tumoral and Melanoma-Specific Cytotoxic Agent”. Based on the traditional and folklore uses, many pharmaco-therapeutic activities of the constituents and different extracts of rhizomes have been evaluated. SNPS, J.U has been contributed in the field of medicinal plant research which includes phytochemical, phyto-pharmacological, antimicrobial, antiviral, anti-leishmania, hypoglycaemic, antiallergic and immune modulatory evaluation of different plant species including *Moringa oleifera*, *Cassia tora*, *Azadirachta indica*, *Dilenia indica*, *Boswellia serrata*, *Leucas lavandulaefolia*, *Drymaria cordata*, *Cassia fistula*, *Ficus recemosa*, *Asparagus recemosus*, *Baliospermum montanum*, *Curculigo orchioides*, *Albizia lebbeck*, Indian *Hypericum* species and different other plant species along with their formulation of Indian folklore and traditional medicine; all these phytotherapeutic research findings has been published in reputed peer reviewed impact journals [Goswami et al., 2019, *Phytomedicine*, 51(94–103); Goswami et al., 2016, *Indian Journal of Traditional Knowledge*, 15 (474-481); Sill et al., 2016, *International Immuno-pharmacology*, 30 (18-26); Sarkar et al., 2014, *Journal of Ethnopharmacology*, 154 (170-175); Sarkar et al., 2015, *Journal of Pharmacy and Pharmacology*, 67 (951-962); Thakur et al., 2015, *Indian Journal of Traditional Knowledge*, 14 (658-663); Mukherjee et al., 2013, *Microbiological Research*, 168 (238–244); Venkatesh et al 2011, *Planta Medica*, 77: 1–3; Venkatesh et al 2010 *Pharmaceutical Biology*, 2010, 48(11): 1213-7; Venkatesh et al 2009, *Journal of Ethnopharmacology*, 126: 434-436; Venkatesh et al 2010, *Immunopharmacology and Immunotoxicology* 32(2): 272-276; Venkatesh et al 2010, *Pharmaceutical Biology*, 1-5], Nurul, et al., 2011, *International Immuno pharmacology* 11 (11), 1766-1772, Maity et al., 2012, *Natural Product Research*, 26 (20), 1939–1941; Mukherjee et al, 2010, *Phytochemical Analysis*, 21: 556-560; Mukherjee et al, 2010, *Journal of Ethnopharmacology*, 128 (2), 490–494; Mukherjee et al, 2010, *Immunopharmacology and Immunotoxicology*, 2010, 32(3): 466-472]; [Mukherjee et al, 2009, *Pharmacy and Pharmacology*, 61(4): 407–422; Mukherjee et al., 1997, *J. Ethnopharmacology* 58: 207-213].

- **Exploring antiallergic leads from natural products:**

SNPS, J.U have been working to identify the potentially active anti-allergic molecules from medicinal plants for clinically approved lead in collaboration with scientists at School of Health science, Tokushima University, Japan . The school has been working in search of novel lead, including the investigation of different parameters including α -hexosaminidase inhibition release, estimation of interleukins expression in RBL-2H3 cells followed by the mRNA expression profile and suppression of HDC gene. The work has been further carried forward to the DST-JSPS joint research program between SNPS, J.U group in India and Tokushima University, Japan through support from Department of Science and Technology, India and JSPS, Japan. [Venkatesh et al 2011, *Planta Medica*, 77: 1–3; Venkatesh et al 2010 *Pharmaceutical Biology*, 2010, 48(11): 1213-7; Venkatesh et al 2009, *Journal of Ethnopharmacology*, 126: 434-436; Venkatesh et al., 2010, *Immunopharmacology and Immunotoxicology* 32(2): 272-276; Venkatesh et al., 2010, *Pharmaceutical Biology*, 1-5].

- **Drug development for Alzheimer's diseases as AChE inhibitors:**

SNPS, J.U has been working on cognitive disorder especially acetyl cholinesterase [AChE] inhibitors from MAPs for development of leads for Alzheimer's disease (AD). It has developed several bioactivity guided isolation techniques for natural AChE inhibitors. The school has worked on evaluation and exploration of acetyl cholinesterase activity for several Indian medicinal plants which has been reported in reputed impact journals. SNPS, J.U have established screening techniques for the development of acetyl cholinesterase inhibitors from MAPs and have screened a group of medicinal plants and spices for their potential therapeutic efficacy. Screening of various Indian medicinal plants has been reported in high impact journals. [Dalai et al., 2013, *Oriental Pharmacy and Experimental Medicine*, 14 (31-35), Bhadra et al 2012, *Natural Product Research*, 26 (16): 1519-1522; Bhadra et al 2011, *Fitoterapia* (82): 342-346; Satheesh et al 2009, *Phytotherapy Research*, 24 (4): 629-631; Satheesh et al 2009, *Phytomedicine*, 17 (3): 292-295). This may be helpful in exploring natural health products effective against Alzheimer's disease [Mukherjee et al 2011, *Mini Reviews in Medicinal Chemistry* (11), 247-262; Mukherjee et al 2007, *Behavioural Brain Research*, 178 (2):221-228; Mukherjee et al 2007, *Planta Medica*, 73: 285-288; Mukherjee et al 2007, *Phytomedicine* 14(4): 289-300; Mukherjee et al 2007, *Phytotherapy Research*, 21(12), 1142-1145; Bhadra, et al., 2012, *Natural Product Research* 26 (16), 1519-1522].

- **Development of value added herbal formulation and evaluation:**

SNPS, J.U has developed and patented the techniques for value added herbal formulation – 'Herbosomes' to increase the bioavailability of therapeutically potent plant secondary metabolites with lower half life. Herbosomes are a value added herbal formulation for better absorption and therapeutic potentials have been developed by SNPS, J.U and patented. This is a concept on metabolomic approaches for herbal formulation development, which is unique in its nature as most of the secondary metabolites have very less half-life. SNPS, J.U has developed an improved process of preparing herbosomes, which is a value added herbal drugs delivery system to sustain the action and also to increase the bioavailability of several therapeutically important phytomolecules like betulinic acid, ursolic acid, catechine, ferulic acid, curcumin, quercetin, naringenin, hesperetin etc which have been published in reputed journals. [Biswas et al., 2019, *Drug Development and Industrial Pharmacy* 45(6), 946-958, Harwansh et al., 2017, *Journal of Molecular Liquids*, 237, 361-37; Harwansh et al., 2016, *Journal of Photochemistry & Photobiology, B: Biology*, 160 (318-329); Harwansh et al., 2015, *Life Sciences* 141(202-211); Bhattacharyya et al., 2014, *Journal of Photochemistry and Photobiology B: Biology*, 130 (293-298), Bhattacharyya et al., 2013, *Journal of the Science of Food and Agriculture*, 94 (1380-1388), Mukherjee et al., 2011, *Food Research International*, 44: 1088-1093; Maiti et al 2010, *Journal of Science and Food Agriculture*, 90: 43-51; Maiti et al. 2006, *J. Pharmacy and Pharmacology* 58: 1227-1233; Maiti et al., 2007, *International J. Pharmaceutics* 330: 155-163; Mukherjee et al, 2009, *J. Pharmacy and Pharmacology* 61: 407-422; Maiti et al., 2009, *AAPS Pharm SciTech.*, 10 (3) : 943-950 ; Venkatesh et al., 2009, *Food Chemistry* 57 (11): 4559-4565; Mukherjee Patent No: 00056/KOL/2006].

Safety evaluation of herbal medicine

SNPS, J.U has been working on various parameters related to drug safety with special emphasis to botanicals including an overview on pharmacovigilance, safety study, risk management on drug and pharmaceuticals including natural health products and dietary supplements. The school has been working on safety evaluation of herbs and polyherbal formulation through metabolism mediated herb-drug interaction, which is one of the potential approaches in the field of pharmacovigilance study on herbal medicines. These safety prospects include the CYP450 modulating enzyme mediated interaction of herbal medicine and presence of contaminants such as heavy metals, persistent pesticides and aflatoxins and mostly for the evaluation of CYP450 enzyme predominance. SNPS, J.U are involved in assessing the safety of herbs through various models on drug modulating enzymes. Some potential publications has been made in this area by the researchers of SNPS, J.U (Bahadur et al., 2017, *Synergy*, 4 (1-7); Bahadur et al., 2016, *Indian Journal of Pharmacology*, 48 (576-81), Ahmmed et al., 2016, *Journal of Ethnopharmacology*, 78

(34–39). Kar et al., 2017, *Journal of the Science of Food and Agriculture*, 97 (333-340); Ahmmed et al., 2015, *Indian Journal of Traditional Knowledge*, 14 (614-619); Ahmed et al., 2015, *Indian Journal of Traditional Knowledge*, 14 (614-619); Bahadur et al., 2015, *Indian Journal of Traditional Knowledge*, 14 (643-649); Kar et al., 2015, *Indian Journal of Traditional Knowledge*, 14 (626-631); Harwansh et al., 2014, *Journal of Ethnopharmacology*, 153 (674–681); Pandit et al 2012, *Food Research International*, 45 (1): 69–74; Pandit et al 2012 *Phytotherapy Research*, [In Press] doi: 10.1002/ptr. 3426; Pandit et al 2011, *JPC - Journal of Planar Chromatography - Modern TLC*; Ponnusankar et al 2011, *Journal of Ethnopharmacology* 133 (1), 120-125; Ponnusankar et al 2011 *Phytotherapy Research* 25, 151–154. Mukherjee et al 2011, *Drug Information Journal*, 45: 1–14; Mukherjee et al 2010, *Chinese Herbal Medicines*, 2(1): 1-15; Mukherjee et al 2010, *Drug Information Journal*, 40: 131–139; Mukherjee et al 2008, *Indian Journal of Traditional knowledge*, 7 (3): 379-383; Mukherjee and Houghton, 2009. “Evaluation of Herbal Medicinal Products - Perspectives of Quality, Safety and Efficacy” *Pharmaceutical Press*, Royal Pharmaceutical Society of Great Britain, UK), Pandit, et al., 2012, *Food Research International* 2012, 45 (1), 69–74, Mukherjee et al., 2011, *Phytomedicine* 9 (1), 64-73.

Exploring Synergy in MAPs research

Multi-target approaches are increasingly applied to treat complex diseases in different disciplines of medicine – mainly based on empirical knowledge. There is a need to elucidate further the combinatory actions in the context of the theoretical basis, experimental design and quantification of synergy at different dose and effect levels. Thus exploring synergistic actions/effects of specified Medicinal and aromatic plants and their active compounds, including the “mechanistic” principles of synergy and the use of network analysis and suitable modern bioinformatics approaches to develop phytopharmaceuticals from botanicals. SNPS, J.U working on synergy research approach in terms of exploring and determining combinatory and synergistic (inter)actions of compounds and drugs made from traditional Indian medicinal plants through network pharmacology, validation of biological activity, omics techniques, multilevel systemic interaction with targets gene, protein, pathways. Based on this concept SNPS, J.U have published few articles in reputed journals. SNPS, J.U is also associated with the Synergy forum, University of Bonn, Bonn, Germany for promotion of medicinal plants through metabolomic studies with their chemical and biological perspectives. [Banerjee et al., 2019, *Phytomedicine* (accepted); Mukherjee et al., 2018, *Synergy*, 7:30-33]

Dissemination of Knowledge for promotion and development of MAPs:

SNPS, J.U has been working extensively on dissemination of knowledge for promotion of ethnopharmacology, ethno-medicine and Medicinal and aromatic plant research at large. SNPS, J.U has organized several very effective and successful International/National conferences/ workshops/ symposiums with the involvement of the renowned scientists and resource persons all over the world to develop national international collaborations and coordination. SNPS, J.U is working on the development of therapeutic leads from natural resource and has been working with several projects from DST, DBT and others.

2. B. Major Research Project: (Name of the Teacher–Name of the Project-Funding Agency–Sanctioned order no. & date)

Prof. Pulok K. Mukherjee–“Medicinal plants of Cucurbitaceae family – Metabolomic Study and Therapeutic Evaluation”.–Department of Science and Technology (DST) Science & Engineering Research Board–Sanction order No: EMR/2016/007037 dated 18.06.2018

Dr. Pallab Kanti Halder–“Zebrafish: a model for drug discovery”–JU-RUSA 2.0 Departmental support towards upgradation in research–R-11/736/19 dated: 27.06.19

Prof. Pulok K. Mukherjee–“Development of sensor probes for quantification of active constituents in *Andrographis paniculata* and *Piper nigrum* using Near Infrared Spectroscopy”–National Medicinal Plants Board–Sanction order No.Z.18017/187/CSS/R&D/WB-02/2017-18-NMPB-IV A dated 8.01.2018

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Prof. Pulok K. Mukherjee–“Development of test protocol, standardization and method validation of ADLIV Forte capsules and individual plant extracts”.–Albert David Limited, Kolkata–Sanction order No. HPK/km/ Date 10-1-2017

Prof. Pulok K. Mukherjee–“Investigation of traditional medicines used as anti-infectives and against neurodegenerative Disease”–Department of Science and Technology (DST), New Delhi–Sanction order No - DST/INT/South Africa/P-17/2016, dated 15.12.2016

Prof. Pulok K. Mukherjee–“Metabolomic study: tools for quality evaluation and validation of Medicinal plants used in Indian systems of medicine”–TATA Innovation Fellowship, Department of Biotechnology (DBT), New Delhi–Sanction order No - BT/HRD/35/01/04/2014

Prof. Pulok K. Mukherjee–“Development and evaluation of ‘Varnya’ formulations from the medicinal plants of Ayurvedic importance”–Emami Ltd., Kolkata–Sanction order No -R&D/CKK/CG/PRO/2015, Dated 27.10.2015

3. A. Invited Lectures Delivered/ session Chaired:(Name of the Teacher–Name of the seminar–Duration and place)

Prof. Pulok Kumar Mukherjee–WHO Consultation Meeting Traditional, Complementary and Integrative Medicine (TCI), Service Delivery and Safety Department (SDS) , World Health Organization (WHO) – 16-18 October 2019 Beijing China

Prof. Pulok Kumar Mukherjee–International conference on 1st International Conference on Integrative Medicine–7 - 8 October 2019 Mae Fah Luang University, Chiang Rai, Thailand

Prof. Pulok Kumar Mukherjee–Annual General meeting of the Japan Society for Cookery Science (JSCS) –August 26-27, 2019 Nakamura Gakuen University, Fukuoka,814-0198,Japan

Prof. Pulok Kumar Mukherjee–19th International ISE Congress “Ethnopharmacology – bridging cultures and continents”.–June 12-14, 2019, The Technische Universität Dresden, Germany

Prof. Pulok Kumar Mukherjee–International Frontiers Forum on Traditional Chinese Medicine & 2nd Editorial Board Meeting of World Journal of Traditional Chinese Medicine–June 29 – 2, 2019. Shenzhen, China

Prof. Pulok Kumar Mukherjee–International conference on Modernization of Chinese Medicine & Health Products (ICMCM)–August 16-17, 2018Hong Kong Convention and Exhibition Centre, Hong Kong

Prof. Pulok Kumar Mukherjee–4th International Toxicology Conclave (ITC-2018)–CSIR-Indian Institute of Toxicology Research (CSIR-IITR), Lucknow, Nov 2-3, 2018.

Prof. Pulok Kumar Mukherjee–National conference & 3rd International Conference on Academic and Industrial Innovations: Transitions in Pharmaceutical, Medical and Biosciences–Goa, India, Oct 22-23, 2018

Prof. Pulok Kumar Mukherjee–National conference on “ethno-medicine and traditional health practices in northeast region of india”.–National Institute of pharmaceutical Education and Research (NIPER-Guwahati), India, August 25, 2018

Prof. Pulok Kumar Mukherjee–CEP Program–Calcutta Institute Of Pharmaceutical Technology & AHS, Uluberia, 29th September 2018

3. B. Seminar/Workshop/Conference/Symposium Attended: (Name of the Teacher–Name of the Seminar–Duration and place)

Prof. Pulok Kumar Mukherjee–WHO Consultation Meeting Traditional, Complementary and Integrative Medicine (TCI), Service Delivery and Safety Department (SDS) , World Health Organization (WHO) –16-18 October 2019 Beijing China

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Prof. Pulok Kumar Mukherjee–International conference on 1st International Conference on Integrative Medicine–7 - 8 October 2019 Mae Fah Luang University, Chiang Rai, Thailand

Prof. Pulok Kumar Mukherjee–Annual General meeting of the Japan Society for Cookery Science (JSCS) –August 26-27, 2019 Nakamura Gakuen University, Fukuoka, 814-0198, Japan

Prof. Pulok Kumar Mukherjee–19th International ISE Congress “Ethnopharmacology – bridging cultures and continents”.–June 12-14, 2019, The Technische Universität Dresden, Germany

Prof. Pulok Kumar Mukherjee–International Frontiers Forum on Traditional Chinese Medicine & 2nd Editorial Board Meeting of World Journal of Traditional Chinese Medicine June 29 – 2, 2019. Shenzhen, China

Prof. Pulok Kumar Mukherjee–6th International congress of Society for Ethnopharmacology (SFEC–2019) on Medicinal plants and traditional medicine – Ethnopharmacology at the interface of local and global needs–Manipal, Karnataka, Feb 8-10, 2019.

Prof. Pulok Kumar Mukherjee–4th International Toxicology Conclave (ITC-2018)–CSIR-Indian Institute of Toxicology Research (CSIR-IITR), Lucknow, Nov 2-3, 2018.

Prof. Pulok Kumar Mukherjee–National conference & 3rd International Conference on Academic and Industrial Innovations: Transitions in Pharmaceutical, Medical and Biosciences–Goa, India, Oct 22-23, 2018

Prof. Pulok Kumar Mukherjee–CEP Program–Calcutta Institute Of Pharmaceutical Technology & AHS, Uluberia, , 29th September 2018

Prof. Pulok Kumar Mukherjee–National conference on “ethno-medicine and traditional health practices in northeast region of India”.–National Institute of pharmaceutical Education and Research (NIPER-Guwahati), India, August 25, 2018

Prof. Pulok Kumar Mukherjee–International conference on Modernization of Chinese Medicine & Health Products (ICMCM)–August 16-17, 2018 Hong Kong Convention and Exhibition Centre, Hong Kong

3. C. Seminar/Workshop/Conference/Symposium Organized: (Name of the Teacher–Name of the Seminar–Duration and place)

Prof. Pulok Kumar Mukherjee Organising Secretary–National Symposium on Promotion and development of Indian medicinal plants with special reference- Guduchi (*Tinospora cordifolia*)–School of Natural Product Studies, Jadavpur University, Kolkata, September 7-8, 2019.

Prof. Pulok Kumar Mukherjee Organising Secretary–National Symposium on Promotion and development of Indian medicinal plants with special reference- Brahmi (*Bacopa monerii*)–School of Natural Product Studies, Jadavpur University, Kolkata, September 7-8, 2018.

Prof. Pulok Kumar Mukherjee Co-ordinator–UK India Newton Bhabha Reseracher Links workshop on Scopes and challenges for the development of novel antimicrobial agents from Ayurvedic medicinal plants to combat the problem of antimicrobial resistance–School of Natural Product Studies, Jadavpur University, Kolkata, September 4-7, 2018.

Orientation Courses/Refresher Courses Attended: (Name of the Teacher–Title of the Course–Duration and place)

Prof. Pulok Kumar Mukherjee–Phyto-pharmaceutical and dietary supplementary - Quality related safety issues, Refresher course for Registered pharmacists–IPA Bengal Branch, February 3, 2018

Books/Monographs etc. Published: (Name of the Teacher–Name of the Book–Name of the Publisher)

Prof. Pulok Kumar Mukherjee–*Quality Control and Evaluation of Herbal Drugs*–Elsevier Science, USA, 2019, 784 pages, ISBN 978-0-12-813374-3.

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Prof. Pulok Kumar Mukherjee–“*Nelumbo nucifera*: pharmacological profile, metabolite profile and therapeutic uses” in book titled *Natural Medicines: Clinical Efficacy, Safety and Quality*–CRC Press, Taylor and Francis group-. - 605 pages, ISBN 9781138733060

Prof. Pulok Kumar Mukherjee–“Globalization of traditional medicine under the modern medicine portfolio” in book titled *Natural Medicines: Clinical Efficacy, Safety and Quality*–CRC Press, Taylor and Francis group-. - 605 pages, ISBN 9781138733060

Prof. Pulok Kumar Mukherjee–“Ayurveda: Evidence based approach for drug development” in book titled *Natural Medicines: Clinical Efficacy, Safety and Quality*–CRC Press, Taylor and Francis group-. - 605 pages, ISBN 9781138733060

Prof. Pulok Kumar Mukherjee–Drugs from Our Ancestors: Tradition to Innovation in book titled *Herbal Medicine in India: Indigenous Knowledge, Practice, Innovation and its Value* –Springer Singapore, 2019 620 pages ISBN 978-981-13-7247-6

Articles Published in Journals: (Name of the Teacher–Name of the Article–Name of the journal, Date of publication and volume)

Banerjee S, Bhattacharjee P, Kar A, **Mukherjee Pulok K.**– “LC-MS/MS analysis and Network Pharmacology of *Trigonella foenum-graecum*- a plant from Ayurveda against Hyperlipidemia and Hyperglycemia with combination synergy”–*Phytomedicine*, 2019 60:152944. doi: 10.1016/j.phymed.2019.152944

Chanda J, **Mukherjee Pulok K**, Biswas R, Malakar D, Pillai M –”Study of pancreatic lipase inhibition kinetics and LC-QTOF-MS based identification of bioactive constituents of *Momordica charantia* fruits”–*Biomedical Chromatography* (2019);33(4): e4463

Biswas S, **Mukherjee Pulok K**–”Validated High-Performance Thin-Layer”Chromatographic–Densitometric Method for the Isolation and Standardization of Ayapanin in *Ayapana triplinervis*”–*Journal of Planar Chromatography* (2019) 32: 1 (1-6)

Biswas S, Harwansh R K, Kar A, **Mukherjee Pulok K**– “Validated High-Performance Thin-Layer Chromatographic Method for the Simultaneous Determination of Quercetin, Rutin, and Gallic Acid in *Amaranthus tricolor* L”.–*Journal of Planar Chromatography* 32 (2019) 2, 1–6

Biswas S, **Mukherjee Pulok K.**, Harwansh R K., Banerjee S, Bhattacharjee P – “Enhanced bioavailability and hepatoprotectivity of optimized ursolic acid–phospholipid complex”–*Drug Development and Industrial Pharmacy* 45(6), 946-958

Chanda J, **Mukherjee Pulok K**, Biswas R, Biswas S, Tiwari AK, Pargaonkar A.–”UPLC-QTOF-MS analysis of a carbonic anhydrase inhibiting extract and fractions of *Luffa acutangula* (L.) Roxb (ridge gourd)”–*Phytochemical Analysis* (2018), 30(2):148-155doi.org/10.1002/pca.2800

Mukherjee Pulok K, Banerjee S, Kar A– “Exploring Synergy in Ayurveda and Traditional Indian Systems of Medicine”–*Synergy*, 7 (2018), 30-33

Goswami D., Mahapatra, AD, Banerjee S, Kar A, Ojha D, **Mukherjee Pulok K**, Chattopadhyay D– “*Boswellia serrata* oleo-gum-resin and α -boswellic acid inhibits HSV-1 infection in vitro through modulation of NF- κ B and p38 MAP kinase signaling”–*Phytomedicine* 51 (2018) 94–103

Mukherjee Pulok K, Biswas R., Sharma A., Banerjee S, Biswas S, Katiyar CK.– “Validation of medicinal herbs for anti-tyrosinase potential”–*Journal of Herbal Medicine*, 14 (2018) 1-16

Collaborative Programmes:

Several potential collaborations have been made with reputed institutions and industries for academic exchange and product development from natural resources through the quality research work. In this context some memorandum of understanding [MOUs] has been signed with the respective organizations and School of Natural Product Studies, Jadavpur University as follows:

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- University of Bonn, Germany Regina- Pacis- Weg 3, 53113, Bonn, Germany, for its AG Synergy Research within the Medicinal Clinic III of the Faculty of Medicine, 2018
- University of the Free State, Bloemfontein, Republic of South Africa at the Department of Pharmacology, of Health Science for joint research and exchange programs between both the institutes in the field of natural product research.
- Indian Institute of Technology, Roorke, Uttarakhand at Department of Biotechnology for joint research collaboration between both the institutes in the field of medicinal plant research.
- ICMR-National Institute of Traditional Medicine, Balagavi, Karnataka & Jadavpur University, School of Natural Product Studies, for joint research collaboration between both the institutes in the field of medicinal plant research and drug development since 2017.
- Emami Limited, 13, BT Road, Kolkata, West Bengal, India, collaborative project on “Development and evaluation of ‘Varnya’ formulations from the medicinal plants of Ayurvedic importance” through the Industry Institute Partnership cell of Jadavpur University.

Major Achievements:

- Birbal Sahni Birth Century Award (2019) from Indian Science Congress Association, Kolkata, India awarded to Prof. Pulok Kumar Mukherjee during the 106th Science Congress at Jalandhar, Punjab.
- Fellow of National Academy of Sciences, India [FNASc.] (2018) awarded to Prof. Pulok Kumar Mukherjee by the National Academy of Science India, Allahabad.
- NASI - Reliance Industries Platinum Jubilee Award (2018) in Biological Sciences awarded to Prof. Pulok Kumar Mukherjee by the National Academy of Science India, Allahabad for his outstanding contribution in translational research on medicinal plants.
- Dr Pulok K Mukherjee has been selected as a member of the WHO Expert committee for safety evaluation of herbal medicine and their interaction, 2019 by World health organisation, Geneva.
- Best poster presentation award given to Mr. Amit Kar in 6th International congress of Society for Ethnopharmacology (SFEC–2019) on Medicinal plants and traditional medicine-Ethnopharmacology at the interface of local and global needs, Manipal, Karnataka, Feb 8-10, 2019.
- Best poster presentation award given to Mr. Amit Kar in 18th International congress of International Society for Ethnopharmacology (ISE) and 5th International congress of Society for Ethnopharmacology (SFE INDIA) on Ethnopharmacology and Drug Development: Innovation meets tradition at University of Dhaka, Bangladesh during January 13-15, 2018.
- Best oral presentation award given to Mr. Amit Kar in International Congress of the Society for Ethnopharmacology, India (SFEC-2017), Surat, on “Healthcare in 21st century: Prospectives of Ethnopharmacology & Medicinal Plant Research” being organized by Uka Tarsadia University, Bardoli, Surat, Gujarat, India during February 23-25, 2017.
- Newton Bhabha fellowship awarded to Mr. Joydeb Chanda in Newton-Bhabha PhD placements programme 2016-17 British Council, Department of Science and Technology(DST) and Department of Biotechnology(DBT) for 3 months doctoral visit to University of East London, London UK. His research visit was associated with development of lead molecules from natural products against MDR strains of bacteria.
- Best oral presentation award given to Mr. Joydeb Chanda in International Conclave on Ethnopharmacology in 7th World Ayurveda Congress & Arogya Expo, Kolkata, on “International Conclave on Ethno Pharmacology Traditional Health Practices”, being organized by Vigyan Bharti Foundation, Bangalore, India during December 02-03, 2016.

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- Best poster presentation award given to Mr. Debayan Goswami in 2nd International Congress of the Society for Ethnopharmacology, India (SFEC - 2015), on “Validation of Medicinal Plant and Traditional Medicine –Global Perspectives” was organized Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur, Maharashtra, India, during February 20-22, 2015.

NUCLEAR STUDIES AND APPLICATION

Phone : +91 33 2335-5813
Int. : 6159 (SL Campus)
Director. : Prof. Amitava Gupta
E-mail : dir.nuclearstudies@jadavpuruniversity.in

- 1. A. Courses Offered :** (Name of the Course, Duration of the Course, No of Students Enrolled)
Master of Nuclear Engineering: 2 years, Total No. of Students = 36
PhD(Engg.): Presently all registered research scholar have graduated
- 1. B. Number of Faculty Members :** 4 sanctioned (Assoc. Professor – 01; Assistant Professor – 2. Assistant Professor, Contractual -01)
- 2. A. Area of Research Activities:** (Broad Areas)
 - a. Reactor Thermal Hydraulics
 - b. Reactor Control
 - c. Instrumentation for Nuclear Security
- 2. B. Major Research Project:(Departmental / Individual along with the names of Co-ordinator(s)/ Investigator(s)–Name of the Project–Funding Agency**
Prof. Amitava Gupta– “Indigenously Developed Spectroscopic Radiation Portal Monitors for National Security”–MHRD/DRDOIMPRINT PROGRAM(with IIT Kanpur)
- 3. A. Invited Lectures Delivered/Sessions Chaired: [Name of the Teacher–Type of Participation (Invited Lecture/Session chaired/Panel expert/Keynote address)–Name of the Seminar/ Conference–Place–Duration]**
Prof. Amitava Gupta–Keynote Speaker–ICIET 2019–Dhaka University, Bangladesh–December 2018
Prof. Amitava Gupta–Invited Speaker–Indo-US Science and Technology Forum (IUSSTF) Symposium on Advanced Sensors and modelling Techniques on Nuclear Reactor Safety–Indian Institute of Technology, Bombay–December 2018
Prof. Swarnendu Sen–Invited Speaker–3rd International Conference on Sustainable Energy and Environmental Challenges” (3rd SEEC)–Indian Institute of Technology Roorkee–December 2018
Prof. Swarnendu Sen–Invited Speaker–International Workshop on Energy, Power and Environment–National Institute of Technology Kurukshetra–March 2019

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- 3. B. Seminar/Workshop/Conference/Symposium Attended: (Name of the Teacher–Title of the Paper Presented–Name of the Seminar–Place –Duration)**
Prof. Amitava Gupta– “Nuclear Security: Deployable System Research in Indian University–Discussion Meeting on Nuclear Security Best Practices–Indian Institute of Technology”, Bombay–February 26th-28th IIT Bombay
- 3. C. Seminar/Workshop/Conference/Symposium Organized:(Name of the Teacher–Name of the Seminar/Conf/Workshop–Place–Duration)**
Prof. Amitava Gupta–DAAD Falling Walls Lab 2018–Jadavpur University Kolkata–April 2018
- 4. B. Articles Published in Journals: (Name of the Authors, Title of the Article, Name of the Journal, Volume (Issue), Pages from-To, Year)**
 1. Kaushik Halder, Debayan Bose, and Amitava Gupta, “Stability and Performance Analysis of Networked Control Systems: A Lifted Sample-Time Approach with L2 Induced Norm”, *ISA transactions* vol. 86, pp.: 62-72, March 2019.
 2. Aranyak Chakravarty, Priyanka Datta, Koushik Ghosh, Swarnendu Sen: “Pressure dependence of dryout in a heat-generating porous debris bed”. (Accepted for publication in *Sadhana*), Jan, 2019
 3. Priyanka Datta, Aranyak Chakravarty, Koushik Ghosh, Achintya Mukhopadhyay, Swarnendu Sen, Anu Dutta, Priyanshu Goyal, I. Thangamani: “Modelling and analysis of condensation induced water hammer”. *Numerical Heat Transfer Part A* 74(2),975-1000, 2018

OCEANOGRAPHIC STUDIES

Telefax : +91 33 2867-1048
Int. : 2457-2217
Director. : Prof. Sugata Hazra
E-mail : dir.oceanography@jadavpuruniversity.in

Courses offered:

- M. Phil in Oceanography & Coastal Management (Four Semester Course) **intake 10**
- P.G. Diploma in Remote Sensing GIS (2 Semester Course) **intake 30**
- Ph.D. level coursework
- Subject oriented courses offered to various Departments and Universities/Govt. Institutes/Departments

Ph.D. (2018-19) Awarded 2: Submitted : , Ongoing 18

Number of Faculty Members :

Sanctioned: 6 (Professor: 2, Associate Professor: 1, Assistant Professor: 3)
Vacant: 2 (Professor: 1, Associate Professor: 1)
Emeritus Scientist: 1 Visiting Scientist: 1

Awards/ Service to Govt/Expert Committees etc.

Prof. Sugata Hazra

- Member, State Coastal Zone Management Authority, nominated by Govt. of India
- Member, National Preparatory Committee on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction to UNCLOS

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Prof. A. D. Mukherjee (Emeritus Professor)

- Chairperson, NAAC Peer Team
- General Secretary, National Council of Education, Bengal

Dr. Tuhin Ghosh

- IPCC Lead Author for “Chapter 4: Sea Level Rise and Implications for Low Lying Islands, Coasts and Communities” of the *IPCC Special Report on the Ocean and Cryosphere in a Changing Climate*

Research projects (2018-19)

Names (P.I.)–Name of the Project–Year–Funding agency–Grant in Lakh

Prof. Sugata Hazra

- Opportunities and tradeoffs between the SDGs for food, welfare and the environment in the Deltas – 2019-21–DBT-UKIERI–107.628 Lakhs
- Geospatial assessment of mangrove’s species discrimination in Indian Sundarbans, their health and its effect on environment and climate using airborne hyperspectral (AVIRIS NG) and RISAT-I remote sensing data–2017-2020–SAC, Govt. of India–50 Lakhs
- Identification of Potential Hydrocarbon Bearing Traps in Nagaland Using Airborne Radar Imaging and Risat-1 Satellite Data–2018-2020–SAC, Govt. of India–23 Lakhs
- Vulnerability Assessment of Mangroves and Corals of West Bengal, Odisha and Andaman Islands 2017-2020–DST, Govt. of India–70 Lakhs
- Study of Carbon dynamics in Estuarine and near shore waters of Hugli estuary and East Kolkata wetlands 2013-2020–NRSC, Govt. of India–100 Lakhs
- Enhancing adaptive capacity and resilience to climate change of small and marginal farmers in Purulia and Bankura district West Bengal –2015-2019–NABARD (through DRCSC)–27 Lakhs
- Tidal energy for village electricity supply in Indian Sundarban biosphere–2017-2020–DST-UKIERI–23 Lakhs

Prof. Tuhin Ghosh

- Deltas, vulnerability and Climate Change: Migration and Adaptation (DECCMA)–2014-2019–IDRC Canada and DfID-UK–Approx. 15 Crores
- ‘Living Deltas’–2019-2024–UKRI-GCRF Research Funding–Approx. 5.5 Crores
- ‘Synergy between Population and Development in adjoining Mainland-Island Community Development Blocks (Basanti and Gosaba) within Indian Sundarban Delta’–2019-2020 –JU-RUSA 2.0 –4.14 Lakh

Bijon Kumar Saha

- Book writing project on “Marine Geology of the Andaman Sea”–2012-2017–MoES, GoI–15 Lakhs

Dr. Abhra Chanda

- Role of Sundarban Mangrove Sediments in Phytoremediation of Heavy Metals–2019-2020–JU-RUSA 2.0–1.7 Lakhs

Dr. Rahi Soren

- Resource Mapping the Early Recordings of Traditional Santali Songs–2019-2020 JU - R U S A 2 . 0 – Approx. 5.18 Lakhs

Publication (2017-18) in Alphabetical Order:

Bhattacharyya, S., Chanda, A., Das, S., Akhand, A., Pattanaik, S., Choudhury, S. B., Dutta, D., Hazra, S., 2018 ‘Nutrient removal vis à vis change in partial pressure of CO₂ during post-monsoon season in a tropical lentic and lotic aquatic body: a comparative study’, *Earth Systems and Environment*, <https://doi.org/10.1007/s41748-018-0045-y>

- Bhattacharyya, S., Hazra, S., Das, S., Samanta, S., Mukhopadhyay, A., Dutta, D., Choudhury, S. B., Chanda, A (2019), Characterizing nutrient dynamics with relation to changes in partial pressure of CO₂ in a tropical sewage-fed aquaculture pond situated in a Ramsar wetland. *Water and Environment Journal*, <https://doi.org/10.1111/wej.12459>
- Biswas, P. Bhattacharya, T. Chanda, A. Das, S. Hazra, S. (2018). 'Urban wetlands – CO₂ sink or source? a case study on the aquaculture ponds of East Kolkata wetlands', *International Journal of Recent Scientific Research*, Vol. 9, Issue, 2(F), pp. 24158-24165.
- Brown, S. Nicholls, R. J. Lázár, A. N. Hornby, D. D. Hill, C. Hazra, S. Addo, K.A. Haque, A. Caesar, J. Tompkins, E. (2018). 'What are the implications of sea-level rise for a 1.5°C, 2°C and 3°C rise in global mean temperatures in the Ganges-Brahmaputra-Meghna and other vulnerable deltas?', *Regional Environmental Change*, <https://doi.org/10.1007/s10113-018-1311-0>
- Chakraborty, P., Hazra, S., Chanda, A., Das, S., 2018 'Variability of Na⁺, K⁺-ATPase activity and location of chloride cells in the gills of *Tenualosa ilisha* in response to different salinity zones of Bhagirathi-Hooghly river system, West Bengal, India', *International Journal of Recent Scientific Research*, vol. 9, no. 3, pp. 25110-25114, <https://doi.org/10.24327/IJRSR>.
- Chanda, A., Das, S., Bhattacharyya, S., Das, I., Giri, S., Mukhopadhyay, A., Samanta, S., Dutta, D., Akhand, A., Choudhury, S. B., Hazra, S. (2019) CO₂ fluxes from aquaculture ponds of a tropical wetland: Potential of multiple lime treatment in reduction of CO₂ emission. *Science of the Total Environment*, 655, 1321-1333, <https://doi.org/10.1016/j.scitotenv.2018.11.332>
- Chanda, A., Das, S., Mukhopadhyay, A., Ghosh, A., Akhand, A., Ghosh, P., Ghosh, T., Mitra, D., Hazra, S., 2018. Sea surface temperature and rainfall anomaly over the Bay of Bengal during the El Niño-Southern Oscillation and the extreme Indian Ocean Dipole events between 2002 and 2016. *Remote Sensing Applications: Society and Environment*, 12, 10-22. (IF: 1.342) <https://doi.org/10.1016/j.rsase.2018.08.001>
- Das S. and Hazra S. (2019) "Vertical distribution of optically active substances (OAS) in the coastal sea off Indian Sundarban during post monsoon", *Marine Biology Research* DOI: 10.1080/17451000.2019.1607387 (Taylor & Francis)
- Das S. Chanda A. and Hazra S. (2019) "Comparing the remotely sensed Chromophoric Dissolved Organic Matter (CDOM) product with in-situ CDOM in the northern Bay of Bengal", *Journal of Advanced Scientific Research*, 10(2):33-36.
- Das, I. Hazra, S. Das, S. Giri, S. Maity, S. Ghosh, S. (2018). 'Present status of sustainable fishing limits for Hilsa shad in the northern Bay of Bengal, India', *Proc. Natl. Acad. Sci., India*, <https://doi.org/10.1007/s40011-018-0963-3>.
- Das, I., Hazra, S., Das, S., Giri, S., Chanda, A., Maity, S., Ghosh, S 2018. Trophic level modelling of the coastal waters of the northern Bay of Bengal, West Bengal, India, *Fisheries Science*, <https://doi.org/10.1007/s12562-018-1246-x>
- Datta Majumdar S. Hazra S. Giri S. Chanda A. Gupta K. Mukhopadhyay A. Dam Roy S. (2018). 'Threats to coral reef diversity of Andaman Islands, India: A review,' *Regional Studies in Marine Science*, 24, 237–250
- Ghosh, A. Das, S. Ghosh, T. Hazra, S. (2019) "Risk of extreme events in delta environment: A case study of the Mahanadi delta". *Science of the Total Environment*, Elsevier, Volume 664, pp. 713-723 <https://doi.org/10.1016/j.scitotenv.2019.01.390> (IF: 4.89)
- Giri, S. Hazra, S. Ghosh, P. Das, S. Chanda, A. Das, I. Chakraborty, K. Ghosh, A. Mukhopadhyay, A. Maity, S. (2019) Role of lunar phases, rainfall and wind in predicting Hilsa shad (*Tenualosa ilisha*) catch in the northern Bay of Bengal, *Fisheries Oceanography*, <https://doi.org/10.1111/fog.12430>
- Guha T, Hazra S, Das S (2019) Drought and migration in the context of climate change – a review *International Journal of Social Science and Economic Research* (UGC Journal no. 63200)

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- Gupta, K., Mukhopadhyay, A., Giri, S., Chanda, A., Datta Majumdar, S., Samanta, S., Mitra, D., Samal, R. N., Pattnaik, A.K., Hazra, S. (2018). “An Index for discrimination of mangroves from non-mangroves using LANDSAT 8 OLI imagery”. *MethodsX*, 5, 1129-1139. <https://doi.org/10.1016/j.mex.2018.09.011>
- Hajra, R. and Ghosh, T. (2018) Agricultural productivity, household poverty and migration in the Indian Sundarban Delta. *Elem Sci Anth*. 6(1):3. DOI: <http://doi.org/10.1525/elementa.196>
- Karar S, Hazra S and Das S (2019) “Assessment of the heavy metal accumulation in the Blue Swimmer Crab (*Portunus pelagicus*), northern Bay of Bengal: Role of salinity” *Marine Pollution Bulletin* (Elsevier) <https://doi.org/10.1016/j.marpolbul.2019.04.033>
- Mortreux, C., Campos, R.S., Adger, W.N., Ghosh, T., Das, S., Adams, H., Hazra, S. (2018) “Political economy of planned relocation: A model of action and inaction in government responses”. *Global Environmental Change*, Elsevier Vol 50, p.123-132. <https://doi.org/10.1016/j.gloenvcha.2018.03.008>
- Mukherjee, J., Padmavati, G. and Ghosh, T. (2018) Spatial and Diurnal Variability in Primary Productivity and Composition of Phytoplankton in the Coastal Waters of South Andaman. *IJRASET*, Vol. 6, Issue III. p. 3407-3417
- Mukhopadhyay, A. and Ghosh, T. (2019) “Dynamics of the Sundarbans Forested Islands in the Context of Erosion-Accretion and Sea Level Rise” in H.Sen (Ed) *The Sundarbans: A Disaster-Prone Eco-Region*, Springer, pp. 493-508
- Mukhopadhyay, A., Ghosh, P., Chanda, A., Ghosh, A., Ghosh, S., Das, S., Ghosh, T. and Hazra, S. (2018) Threats to coastal communities of Mahanadi delta due to imminent consequences of erosion – Present and near future. *Science of the Total Environment*, Elsevier, Vol 637-638 p. 717-729.
- Mukhopadhyay, A., Hornby, D. D., Hutton, C. W., Lázár, A. N., Johnson, F. A., and Ghosh, T. (2018) “Land Cover and Land Use Analysis in Coastal Bangladesh”. in Robert J. Nicholls et al (Ed) *Ecosystem Services for Well-Being in Deltas*. Palgrave Macmillan, Switzerland, pp. 367-381. ISBN 978-3-319-71092-1 ISBN 978-3-319-71093-8 (eBook) <https://doi.org/10.1007/978-3-319-71093-8>
- Sampath Kumar, G., Srinivas T. N. R. and Ghosh, T. (2019) “Ecological perspective of marine microbial enzymes”. *Journal of Emerging Technologies and Innovative Research* 6 (3), 210-230
- Shaher S, Chanda A, Hazra S, Mukherjee A D (2018) “Status of Methane Emission from Indian Wetlands (Saline vs. Freshwater): A Mini Review”. *Proc. Natl. Acad. Sci., India, Sect. B Biol. Sci.* <https://doi.org/10.1007/s40011-018-1005-x>
- Sinha, R., Das, S. and Ghosh, T. (2018) “Pollution and its consequences at Ganga Sagar mass bathing in India”. *Environment, Development and Sustainability* (Springer). <https://doi.org/10.1007/s10668-018-0255-3>
- Sinha, R., Das, S. and Ghosh, T. (2018) “Pollution and its consequences at Ganga Sagar mass bathing in India”. *Environment, Development and Sustainability* (Springer). <https://doi.org/10.1007/s10668-018-0255-3>
- Suckall, N., Tompkins, L E, Nicholls, R J, Kebede, S A, Lazar, N A, Hutton, C, Vincent, K, Allan, A, Chapman, A, Rahman, R, Ghosh, T, Mensah, A. (2018) “A framework for identifying and selecting long term adaptation policy directions for deltas”. *Science of the Total Environment*, Elsevier, Vol 633, p. 946-957.
- Thakur, S., Ghosh, A., Hazra, S. and Ghosh, T (2019) “Biomass Burning and Natural Vegetation Loss as a Consequence to Government Policy: A Case Study of Satjelia Island, Indian Sundarban Delta”. *International Journal of Research and Analytical Reviews* 6 (1), 338-345

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Books/Monographs:

Dr. Tuhin Ghosh

Book published: Natural Hazards Management in Asia; Sage Publishing (along with Dr. Indrajit Pal from Asian Institute of Technology, Bangkok, Thailand.

Dr. Tuhin Ghosh

International Conference/Invited lectures:

- Panel member in the 'Global Challenge Summit' in July 2019 at University of Newcastle, UK
- Thematic talk on "Topsy-turvy in migration decisions: Evidences from Indian Sundarban Delta" in the International Conference on 'Environmental Non-Migration: Frameworks, Methods and Cases', June 2019 at Technische University Dresden, Dresden, Germany
- Session Chair on "Methodological approaches in Environmental Non-Migration studies" in the International Conference on 'Environmental Non-Migration: Frameworks, Methods and Cases', June 2019 at Technische University Dresden, Dresden, Germany
- UKRI GCRF *LIVING DELTAS* Workshop, February-March 2019, Hanoi, Vietnam.
- Panel member at the 'International Symposium on 'Disaster Resilience and Sustainable Development', March 2019 on "Education, Capacity Development and Disaster Resilience" at AIT-Thailand
- The 11th GEOSS Asia-Pacific Symposium, October 2019, Kyoto, Japan

Prof. Sugata Hazra

- Visited University of Southampton (UK) in January 2019 the DECCMA project Writeshop
- Visited University of Edinburg (UK) and NIO Goa for review of the progress of UKIERI-DST project
- Invited lectures
- Popular lectures in Radio and TV on Oceanic Resource and Hazard
- Refresher Courses on Disaster Management in /outside University

STUDIES IN ENVIRONMENTAL RADIATION AND ARCHAEOLOGICAL SCIENCES

Int. : 2457-2527
Director : Prof. Argha Deb
E-mail : dir.eras@jadavpuruniversity.in

1. A. Courses Offered: Nil

1. B. Number of Faculty Members : 4 (four), No permanent faculty

2. A. Area of Research Activities:

- (I) Study on alpha radioactivity in natural media
- (II) Real time radon monitoring in air, water, soil for seismic surveillance
- (III) Studies on Radiation resistant microbes

2. B. Major Research Projects:

Project Title	Funding Agency
(Ongoing)	
1. Real Time Radon Monitoring for Seismic Surveillance	UGC (UPE-II)
2. Multi-station Soil Radon Monitoring for Earthquake Prediction	RUSA-2.0

3. B. Seminar/Workshop/Conference/Symposium Attended:

- i. International Conference on Nuclear, Particle and Accelerator Physics (ICNPAP-2018). Central University of Jharkhand, Ranchi. 23-26 October, 2018.
- ii. 27th West Bengal State Science and Technology Congress, 2019. Science City Auditorium, Kolkata 28 February – 01 March, 2019.

4. B. Articles published in Journals

- i. Deb A., Gazi M., Ghosh J., Chowdhury S., Barman C., “Monitoring of soil radon by SSNTD in Eastern India in search of possible earthquake precursor”. *Journal of Environmental Radioactivity*, 184-185 (2018) pp. 63-70.
- ii. Arindam Kumar Naskar, Mahasin Gazi, Chiranjib Barman, Saheli Chowdhury, Mitali Mondal, Debasis Ghosh, Bikash Sinha, Argha Deb. “Estimation of underground water radon danger in Bakreswar and Tantloi Geothermal Region, India”. *Journal of Radioanalytical and Nuclear Chemistry* 315 (2) (2018) 273-283.
- iii. Chowdhury S., Barman C., Deb A., Raha S., Ghose D., Study of variation of soil radon exhalation rate with meteorological parameters in Bakreswar-Tantloi Geothermal Region of West Bengal and Jharkhand, India. *Journal of Radioanalytical and Nuclear Chemistry*. 319(1) (2019) 23-32.
- iv. Nayak T., De D., Barman C., Karmakar P., Deb A., Dhal P.K. Characterization of indigenous bacteria from radon-rich groundwater and their tolerance to physicochemical stress. *International journal of Environmental Science and Technology* (2019). DOI: 10.1007/s13762-019-02445-w.

4. C. Papers Presented in Conference:

- i. **Chowdhury S., Deb A., Nurujjaman Md., Barman C.** “Application of radioactive gas radon as earthquake precursor in Eastern Himalayas”. International Conference on Nuclear, Particle and Accelerator Physics (ICNPAP-2018). Central University of Jharkhand, Ranchi. 23-26 October, 2018.
- ii. **Arindam Kumar Naskar, Javed Akhter, Saheli Chowdhury, Mitali Mondal, Argha Deb.** “A study of seasonal variation of radon levels in tube well water of Susunia Hill region, West Bengal”, International Conference on Nuclear, Particle and Accelerator Physics (ICNPAP-2018). Central University of Jharkhand, Ranchi. 23-26 October, 2018.
- iii. **Chowdhury S., Deb A., Barman C., Nurujjaman Md., Bora D., Ghose D.** “Study of Anomalies in Soil Radon Time Series as Earthquake Precursor in Eastern Himalayas and Geothermal Region of Eastern India”. 27th West Bengal State Science and Technology Congress, 2019. Science City Auditorium, Kolkata. February 28-March 01, 2019.

5. Collaborative Programmes

Jadavpur – N.I.T. Sikkim Collaboration
 Jadavpur – Diphu Govt. College Collaboration

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WATER RESOURCES ENGINEERING

Phone : + 91-33-2414-6161
 Int. : 2457 2485
 Director: Prof. Asis Mazumdar
 E-mail : dir.waterresource@jadavpuruniversity.in

1. A. Courses offered: (Name of the course, Duration of the course, No. of students enrolled)

Programme	Level of study	Total no. of students	Year of Commencement
4 Semester M.E. (Water Resources and Hydraulic Engineering)	Postgraduate	18 per year[GATE: 10(Gen)+ 3(SC/ST) Sponsored: 5]	2003(Approved by AICTE in 2003)
6 Semester M.E. (Water Resources and Hydraulic Engineering)	Postgraduate	18 per year AICTE in 2010)	2011(Approved by [All Self Sponsored]
Ph.D. (Engineering /Science)	Doctoral	23 (at present)	1987

B. Number of Faculty Members : Five (6) : 4 (Permanent) + 2 (Contractual) + 1 (Professor Emeritus)

2. A. Area of Research Activities: (Broad Areas)

1. Development of Model for Arsenic Sludge Safe Disposal
2. Artificial Recharging of Aquifer
3. Limnological Study with special emphasis on Thermal Stratification in Turbulent Structure
4. Riverine Bank Stability Analysis
5. Soil Moisture Conservation
6. Soil Water Plant Relationship
7. Surge Profiles for Water Intake Pump System of a Thermal Power Plant
8. Sedimentation Transport Mechanism
9. Fluvial Hydraulics
10. Impact of Forested Watershed on Stream Flow and Water Quality
11. Impact of Leaching from Municipal Solid Waste Dumping Station on an Urban Watershed
12. Pressure Transients Analysis in a Metro City Water Supply System
13. Simulation and Water Assessment of Indian River Basins with Distributed and Lumped Modeling
14. Artificial Neural Network Analysis (ANN) for Riverine and Channel Flow Systems
15. Groundwater Flow Simulation by Ground Water Modeling System (GMS) and in situ Validation by Vertical Electrical Sounding (VES)
16. Development of Low Cost Model for Filtration Unit in a Rural Community
17. Impact of Climate Change on Water Resources
18. Urban Hydrology including Storm Drainage
19. Rainwater Harvesting
20. Irrigation and Drainage Development Plan
21. Sewer Transport System
22. River Basin Development

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23. Wetland Management and Development
24. Investigation of Feasibility of Inland Water Transport
25. Development of Alternative Energy Sources, e.g., Tidal Power, Pump Storage Plants, Micro Hydel Plants etc.
26. Investigation of the Drinking Water Supply System.
27. Investigation of the Contamination of Groundwater Sources in West Bengal
28. Design and Development of Source and Water Intake System for Drinking Water Supply and Treatment Plant.
29. Development of Low Cost Potable Water Supply System
30. Watershed Management
31. Initiation of Benchmarking of Irrigation Projects for Performance Improvement
32. Study of Travel of Pollutant from onsite Sanitation Leach Pits

2. B. Major Research Project/Consultancy Project: (Departmental/Individual-Name of the Project-Funding Agency)

School of Water Resources Engineering-Scientific Assessment of Coastal Vulnerability and Sustainable Ecosystem management under Climate Change Scenario -Ministry of Science,Department of Science and Technology, NRDMS

School of Water Resources Engineering-Indian-European Union Research Project Energy Efficient, community-based water and wastewater treatment systems for deployment in India-DST, India -EU collaborative research project Govt. of India

Collaborative-Study on Improving Benefit Transfer for Wetland Valuation: Water Environment and Economic Value of Ecosystem Services through People Participation in Bhagirathi-Hooghly Basin-UGC, Govt. of India

School of Water Resources Engineering-Study To Develop Appropriate Methods For Safe Disposal Of Arsenic-Rich Sludge-DST Govt. of West Bengal

School of Water Resources Engineering-Proof Checking of STP, LS and Sewerage Network for Halisahar & Budge Budge Municipal Town-Simplex Infrastructures Ltd.

School of Water Resources Engineering-Environmental Impact Assessment for the Proposed Elevated Corridor from E.M. By-Pass to New Town-West Bengal Housing Infrastructure Development Corporation Ltd., Govt. of West Bengal

School of Water Resources Engineering-Feasibility Study of Canopy Walk at Sundarban Wild Animal Park, Jharkhali-West Bengal Zoo Authority, Govt. of West Bengal

School of Water Resources Engineering-Performance evaluation of Arsenic and Iron Removal Plants (AIRPs)-PHED, Govt. of West Bengal

School of Water Resources Engineering-Performance Evaluation of seven nos. Sewage Treatment Plant under the control of KMW & SA-KMW & SA, Govt. of West Bengal

School of Water Resources Engineering-Appraisal of DPR for Renovation, Rehabilitation & Conservation and Lake Front Development of Motijheel in Motihari Nagar Parishad-NRCD, MoEFCC, Govt. of India

School of Water Resources Engineering-Monitoring of Grossly Pollution Industries (GPIs) discharging into the River Ganga and its Tributaries for compliance verification-CPCB, Govt. of India

School of Water Resources Engineering-Design of Effluent Treatment Plant of Capacity 0.1 MLD For Haringhata Dairy, Mohonpur, Nadia-Kolkata Metropolitan Development Authority

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School of Water Resources Engineering–Environmental Impact Assessment (EIA) and Environmental Management Plan (EMP) of KMC Project for utilizing KMC land on the eastern side of E.M. By-pass opposite Silver Spring Housing Complex–Kolkata Municipal Corporation

School of Water Resources Engineering–Faecal Sludge Management: Optimization Of Pit Life Extender –Water for People

School of Water Resources Engineering–ETP Adequacy Assessment Report–Krishna Tissues Pvt. Ltd.

School of Water Resources Engineering–Appraisal of Sewerage Network of Zone-III of Gangtok town of Sikkim under National River Conservation Plan–NRCD, MoEFCC, Govt. of India

School of Water Resources Engineering–Analysis of sediment transport mechanism in connection to reservoir life and dam safety under “Energy, Environment and Climate Change”–University with Potential for Excellence (UPE)–Phase II”, UGC

School of Water Resources Engineering–Hydrological Study including Drilling of Boreholes, Pumping Test (Yield and Recuperation tests) for one cement grinding unit at Parbatpur and Digha villages under Nituria block in Purulia district, West Bengal for proposed Clinker Grinding Unit of 5 MTPA and CPP 20–Shree Cement Limited

School of Water Resources Engineering–Analysis of sediment transport mechanism in connection to reservoir life and dam safety under “Energy, Environment and Climate Change”–University with Potential for Excellence (UPE) – Phase II”, UGC

School of Water Resources Engineering–Study on impact of water harvesting structures created under CAMPA–Forests, Environment and Climate Change Department, Govt. of Jharkhand

School of Water Resources Engineering–Feasibility Study for Construction of Infiltration gallery/ Radial Collector Well to withdraw 45.46 MLD (10 MGD) water in River Damodar near Zuzuty under AMRUT Programme–Study Sponsored by Burdwan Municipality for Implementation by Municipal Engineering Directorate Govt. of West Bengal

School of Water Resources Engineering–Study the Drainage System in the Chinar Park to VIP Road along with Recommendations for Removal of Water Logging–HIDCO, Govt. West Bengal

School of Water Resources Engineering–Monitoring of grossly polluting Industries (9 nos GPIs) discharging into the river Ganga and its tributaries for compliance verification (2018)–Central Pollution Control Board Govt.of India

3. A. Invited Lecturers Delivered/Sessions Chaired:(Name of the Teacher–Type of Participation –Name of the Seminar Conference etc.–Place–Duration)

Prof. Dr. Asis Mazumdar–Delivered invited lecture–On Engineering Challenges for Knowledge Era The Institute of Engineers India–Kolkata–15th September 2018

Prof. Dr. Asis Mazumdar–Delivered invited lecture–Rainwater Harvesting Organized by Indian Plumbing Association–Hyderabad–8th September 2018

Prof. Dr. Asis Mazumdar–Delivered invited lecture–On “Green Buildings Concept Through Water Conservation” organized by Indian Plumbing Association–UEM, Kolkata–11th March, 2019

Prof. Pankaj Kumar Roy–Invited Speaker–Recent Trends on Remediation of Contaminated Water Bodies and Soil–NIT Durgapur–March 2019

Prof. Pankaj Kumar Roy–Invited Speaker–Ceramic membrane based decentralized water treatment technology by CSIR-CGCRI in West Bengal: Success Story–Civil Engineering Department, Jadavpur University–2019

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Prof. Pankaj Kumar Roy–Invited Speaker–Stillness, Motion, Film: Distant Relations–Department of Film Studies, Jadavpur University–March 2019

Prof. Pankaj Kumar Roy–Invited Speaker–10th International Conference on Hydrogrameen–Satyapriya Roy College of Education–9th March 2019

Prof. Pankaj Kumar Roy–Invited Speaker–Intersectionality–Beyond Epistemic Anxiety and towards a Politics of Radical Justice–Vivekananda Hall, Subarnajayanti Bhavan, Jadavpur University–November 2018

Prof. Pankaj Kumar Roy–Invited Speaker–Rethinking the Politics of Interculturalism in dance:Possibilities, traps and a search –Vivekananda Hall, Jadavpur University–2018

Prof. Pankaj Kumar Roy–Invited Speaker–The Howrah Bridge’ – the Icon of Kolkata–Civil Engineering Department, Jadavpur University–August 2018

Prof. Pankaj Kumar Roy–Invited speaker–Different Methods of Disinfection and Antibacterial Resistance –School of Water Resources Engineering, JU–One day20th April, 2018

Dr. Subhasish Das–Delivered invited lectures–On “Soil Moisture Conservation by Rainwater Harvesting” for the Course on “Rain Water Harvesting along with Water Recovery Process” organised by Ordinance Factories Institute of Learning, Ministry of Defence, Govt. of India–Ishapore–24 May, 2018

Dr. Subhasish Das–Delivered invited lecture – “Status of the Water Harvesting Structures created under CAMPA in Giridih West” organised by Giridih West Forest Division, Govt. of Jharkhand–Jamua Range Office –5 February, 2019

3. B. Seminar/Workshop/Conference/Symposium Attended: (Name of the teacher–Name of the paper presented (if any)–Name of the Seminar–Place–Duration)

Prof. Pankaj Kumar Roy–Talk on Medicinal plants–Regional Workshop cum Buyer- Seller Meet on Medicinal Plants–Gandhi Bhawan, Jadavpur University–25th April,2019

Prof. Pankaj Kumar Roy–Future India: Science and Technology 106th Indian Science Congress–Manipur University–January 2019

Dr. Subhasish Das–Optimized Hydraulic Design of an Water Distribution Network at West Medinipur in West Bengal: A Case Study–National Conference on Trends and Advances in Mechanical Engineering (TAME-2019) organized by the Association of Engineers, India; Kalyani Govt. Eng. College and Global Inst. of Manage. and Tech. –Kalyani, West Bengal–15-16 February, 2019

Dr. Subhasish Das and Prof. (Dr.) Asis Mazumdar–Comparison of Flow Fields around a Horizontal Cylinder placed at Different Depths in Water Channel–National Conference on Trends and Advances in Mechanical Engineering (TAME-2019) organized by the Association of Engineers, India; Kalyani Govt. Eng. College and Global Inst. of Manage. and Tech.–Kalyani, West Bengal–15-16 February, 2019

Dr. Subhasish Das–Stress Analysis of Smart Support for Process Pipeline Systems by CAESAR Software –National Conference on Trends and Advances in Mechanical Engineering (TAME-2019) organized by the Association of Engineers, India; Kalyani Govt. Eng. College and Global Inst. of Manage. and Tech.–Kalyani, West Bengal–15-16 February, 2019

Dr. Subhasish Das and Prof. (Dr.) Asis Mazumdar–Design and Development of Micro Irrigation Model for Tea Plantation in Central Dooars of West Bengal, India through Software Simulations and Analysis–9th International Micro Irrigation Conference (9IMIC) organized by Indian National Committee on Surface Water (INCSW) - CWC, India–Aurangabad, Maharashtra–16-18 Jan, 2019

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Dr. Anasua Sarkar, Dr. Rajib Das and Dr. Subhasish Das–Land Use Land Cover Map Segmentation using Remote Sensing: A Case Study of Ajoy River Watershed, India–International conference on Materials, Applied Physics and Engineering (ICMAE 2018)–Indore, Madhya Pradesh–3-4 June, 2018

Dr. Subhasish Das–Attended Seminar–“Challenges and Prospects of Engineering Professionals in India” organised by The Association of Engineers, India and Govt. College of Eng. & Ceramic Tech.–Govt. College of Eng. & Ceramic Tech., Kolkata –17 November, 2018

3. C. Seminar/Workshop/Conference/Symposium Organized: (Name of the teacher–Name of the Seminar–Place–Duration)

Prof. (Dr.) Asis Mazumdar, Dr. Subhasish Das and Dr. Gourab Banerjee –India-UK Workshop on “Knowledge Transfer on the Sustainability of Innovative Water Quality Monitoring Technologies to India: Circular Economy, Graphene Based and Remote Sensing Data Analysis Technologies” jointly organized with University of Exeter, UK –School of Water Resources Engineering, JU –8 March, 2019

3. D. Orientation Courses/Refresher Courses Attended: (Name of the Teacher–Title of the Course–Place–Duration)

Dr. Subhasish Das–Three Weeks Training Programme on “Disaster Management: Water and Environmental Sanitation (Inter-disciplinary)–School of Water Resources Engineering, JU–07-30 January, 2019

3. E. Orientation Courses/Refresher/ Course Organized: (Name of the Teacher–Name of the Seminar–Place–Duration)

Prof. Asis Mazumdar–Training Workshop on “Disinfection Strategy & Methodology for Public Water Supply in Rural areas of West Bengal”–Jadavpur University–20th April 2018

Prof. Asis Mazumdar–Training & Quiz program on plumbing Indian Plumbing Professionals League–Jadavpur University–September, 2018

Prof. Pankaj Kumar Roy (Co-coordinator)–Disaster Management: Water and Environmental Sanitation–Jadavpur University–07.01.2019-30.1.2019

Prof. Pankaj Kumar Roy (Co-coordinator)–Institutional Strengthening of Gram Panchayet Program- II–School of Water Resources Engineering, Jadavpur University–2018

4. A. Books/Monographs etc. Published:(Name of the Teacher–Name of the Book–Name of the Publisher)

Dr. Rajib Das, Dr. Subhasish Das and Dr. Anasua Sarkar– “Landcover Change Detection Using PSO-Evaluated Quantum CA Approach on Multi-Temporal Remote-Sensing Watershed Images”. *Quantum-Inspired Intelligent Systems for Multimedia Data Analysis*, Chap. 6, pp. 178-212.–IGI Global: USA

Prof. Pankaj Kumar Roy, Prof. Arunabha Majumder, Prof. Asis Mazumdar– “Development of an Environmentally Sustainable Approach for Safe Disposal of Arsenic Rich Sludge”, *Handbook of Environmental Material Management* (Section III)–Springer International Publication

Prof. Pankaj Kumar Roy, Prof. Arunabha Majumder, Prof. Asis Mazumdar– “A Decentralized Integrated Approach of Water and Waste Water Management in Rural West Bengal”, *Handbook of Environmental Material Management (Section I)*–Springer International Publication

Prof. Pankaj Kumar Roy Prof. Arunabha Majumder–*Bottled and Packaged Water (Beverages)* (Chapter 3)–Elsevier

Prof. Pankaj Kumar Roy, Prof. Susanta Ray, Prof. Arunabha Majumder– *Study of Water Quality of Packaged and Municipal Supply Drinking Water with Performance Evaluation of Stand-Alone Filter*–Elsevier

4. B. Articles Published in Journals: (Name of the Teacher–Co-authors–Name of the Article–Name of the Journal–Volume (no.) and Page no.–Date of publication)

International:

Prof. Pankaj Kumar Roy–A. Kumar, M. B. Roy, P. Kumar Roy and J.M Wallace– “Assessment of Arsenic Removal Units in Arsenic-Prone Rural Area in Uttar Pradesh, India”–*Journal of the Institution of Engineers (India): Electrical Engineering Division* (Springer) –Volume 100, Issue 2, pp 253–259–January 2019

Prof. Pankaj Kumar Roy–A. Majumdar, S. Pal, G. Banerjee, M.B. Roy, J. Debbarma – “Development of an Environmentally Sustainable Approach for Safe Disposal of Arsenic-Rich Sludge”–*Handbook of Environmental material Management*–Volume-3, Page no 1-4–2018

Prof. Pankaj Kumar Roy–M. Ghosh, and M.B. Roy– “Selection of Multi Drug Resistant Bacteria from Water Treatment Plants”–*Desalination and Water Treatment*–Volume- 107pg no- 279-284 –2018

Dr. Subhasish Das and Prof. (Dr.) Asis Mazumdar– “Evaluation of Hydrodynamic Consequences for Horseshoe Vortex System developing around two eccentrically arranged Identical Piers of Diverse Shapes” –*KSCE Journal of Civil Engineering*, Springer, –Vol. 22, No. 7, pp. 2300-2314–July, 2018

Dr. Subhasish Das–Sambaran Jana, Sourav Dutta and Dr. Debasri Roy– “Uncertainty in Hydrologic Response of a River Basin in India to Changed Climate Scenario”–*Water and Energy International* – Vol. 61/RNI, No. 6, pp. 68-75–September, 2018

Dr. Rajib Das, Dr. Subhasish Das and Prof. (Dr.) Asis Mazumdar–Hasanur Jaman–Impact of Upstream Bridge Pier on the Scouring Around Adjacent Downstream Bridge Pier–*Arabian Journal for Science and Engineering*, Springer–Vol. 44, Issue 5, pp. 4359–4372–July, 2018

National:

Prof. Pankaj Kumar Roy–M.B. Roy, A. Ghosh, and D. Chatterjee– “An Overview of River Morphology Research: A Bibliometric Analysis”–*Journal for Advance Research in Applied Sciences*–Voulme-5, issue-2–2018

Prof. Pankaj Kumar Roy–S. Halder, S. Nag, M.B. Roy– “Study of Ganga River Health Condition Based on Water Quality Indicators with Environmental Aspects and Adaptation Strategies Thereof”–*Indian Journal of Environmental Protection*–Volume- 38, No- 8, Pg no- 659-670 2018

Prof. Pankaj Kumar Roy–S. Chatterjee,M.B.Roy, P. Kumar Roy and A. Majumdar– “Health risk assessment of humans through fishes”–*Contemporary environmental issues and perspective*–June 2018

Prof. Pankaj Kumar Roy–D.Chatterjee, M. B. Roy and P. Kumar Roy– “Comparison of Valuation of Forests between North and South West Bengal Using Contingent Valuation Technique-Case Studies”–*Contemporary environmental issues and perspective*–PP:188-196ISBN No9787382623854–June 2018

Prof. Pankaj Kumar Roy–A.Ghosh, M.B. Roy and P.K.Roy–”Study on Environmental Ethics-An Overview of Implication Scenario, A Review Analysis”–*Contemporary Environmental Issues and Perspective* PP:165-176ISBN No9787382623854–June 2018

Prof. Pankaj Kumar Roy–M.B. Roy, A. Kumar and P.K.Roy– “Study of Water Quality Scenario for Wetland Fisheries in West Bengal :Case Studies”–*Sustainable Management of Aquatic Resources* – Pg-565-573 –May 2018

5. Collaborative Programmes:

- i. India-UK Workshop on “Knowledge Transfer on the Sustainability of Innovative Water Quality Monitoring Technologies to India: Circular Economy, Graphene Based and Remote Sensing Data Analysis Technologies” jointly organized with University of Exeter, UK.

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- ii. Indian Plumbing Professional League, Kolkata Chapter jointly organized by School of Water Resources Engineering, Jadavpur University and Indian Plumbing Association, Kolkata Chapter.

6. Major Achievements:

Prof. Asis Mazumdar

- i. External Member of the Ph.D. Committee of the Department of Civil Engineering, IEST, West Bengal.
- ii. Member, Arsenic Task Force, Govt. of West Bengal.
- iii. Member of the Governing Body, Indian Plumbing Skill Council.
- iv. Chairman of State Expert Appraisal Committee (SEAC), Govt. of Mizoram, Aizawl selected by Ministry of Environment, Forests & Climate Change, Govt. of India through its notification in the Gazette of India, Extra ordinary dated April 30, 2015.
- v. Chairman, Indian Plumbing Association, Kolkata Chapter
- vi. Member of Corporation Level Authority on Groundwater Resources Development, Kolkata Municipal Corporation
- vii. Member of the National Expert Committee, Green Technology Watch Group (GTWG), Govt. of India, Department of Science & Technology
- viii. Peer Team Member of NAAC
- ix. Regular reviewer of many reputed international and national journals

Prof. Arunabha Majumder

- i. Member, Arsenic Task Force, Govt. of West Bengal
- ii. Member, Fluoride Task Force, Govt. of West Bengal
- iii. Member, State Level Committee on Solid and Liquid Waste Management in Rural West Areas, West Bengal
- iv. Member, Advisory Group, Water Technology Initiatives, Ministry of Science & Technology, Govt. of India.
- v. Member, National Advisory Committee on EU-India Research Project, DST
- vi. Governing Body Member, Institute of Environmental Studies & Wetland Management
- vii. Chairman, Environmental Committee Thakurpukur Cancer Hospital
- viii. Vice President, Institute of Public Health Engineers (India)
- ix. Member, Heritage Conservation Committee, KMC
- x. Member, State Level Clean Clearness Committee on Water & Sanitation, Tripura
- xi. Member, West Bengal State Level Ganga Monitoring Committee

Dr. Pankaj Kumar Roy

- i. Selected as the Dean of Faculty Of Interdisciplinary Studies Law and Management, Jadavpur University in January 2019.
- ii. Selected as a Recorder of section of “Engineering Sciences for 2018-2019 & 2019-2020 (106th & 107th Session) of the Indian Science Congress.
- iii. Regular reviewer of many reputed international and national journals.
- iv. Member of Individual Research Committee for Ph.D. in Civil Engineering Department, IEST, Shibpur.
- v. Member of Individual Research Committee for Ph.D. in Civil Engineering Department, Jadavpur University
- vi. Member of Individual Research Committee for Ph.D. in Architectural Department, Jadavpur University
- vii. Member of School Research Committee of School of Environmental Studies
- viii. Life Member- No. L28414, The Indian Science Congress Association

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WOMEN'S STUDIES

Phone : + 91-33-2414-6531/6014
Telefax : +91-33-2414-6531
Int. : 2457-2445/2165/2872
Director. : Dr. Aishika Chakraborty
E-mail : swsju@rediffmail.com/swsju@yahoo.com
director.sws@jadavpuruniversity.in

A. Courses Offered: (Name of the Course, Duration of Courses, No. of Students Enrolled)

i) Name of the Course: PhD in Women's Studies

No. of Students: There were 2 students enrolled for PhD in 2006, the number has risen to 37 in 2016-17. In 2017-2018 the School has registered 5 PhD students. In the last academic year, 1 student has been awarded his PhD degree and 3 of them have submitted their thesis and will appear for their viva-voce in the coming months.

ii) Name of the Course: M. Phil in Women's Studies

Duration of the Course: 2 years

No. of Students: 18

a) Name of the Course: Extra Departmental Course (ED Course) in Women's Studies (offered to BA students of Jadavpur University since July 2010)

Duration of the Course:

6 months (2nd year, 3rd semester/ ED 3.19) (Teaching period: July-Dec.)

6 months (2nd year, 4th semester/ ED 4.32) (Teaching period: Jan-May)

The ED course will now be replaced with a General Elective course in Women's Studies. School has formulated a new syllabus for the **General Elective** course in Women's Studies for the undergraduate level to be implemented from 2020. The syllabus has been formulated between November 2018 and January 2019. The details are as follows.

General Elective in Women's Studies:

- a. General Elective Course 1—Introduction to Women's Studies: Theories and Practices I
- b. General Elective Course 2—Introduction to Women's Studies: Theories and Practices II

b) Name of the Course:

- **Extra Departmental Course (ED Course) titled 'A New Femininity: Rabindranath Then and Now' (ED 4.31)** (designed by the School of Women's Studies, Jadavpur University and offered by the Rabindranath Studies Centre at the Faculty of Arts)

Duration of the Course: 6 months (ED 4.31) (Teaching period: Jan-May 201)

Number of Students: 61 undergraduate students

B. Number of Faculty/Staff Members: 1 Professor in Women's Studies (Vacant since November 2018), 1 Associate Professor, 2 Assistant Professors (1 Contractual; till December 2018), 1 Coordinator, Teaching and Learning Materials (Contractual), 1 Senior Research Officer, 1 Publication Officer, 1 Assistant Librarian Gr. II, 1 Senior Assistant, 1 Peon to Senior Research Officer, SWS, JU.

Staff (Contractual) Employed for the Year 2018-2019: 1 Professional Assistant, 1 Data Entry Operator (till October 2018), 1 Attendant.

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Project Staff: 1 District Coordinator (CHILDLINE Project), 1 Project Coordinator (AJWS Project; till September 2018), 1 Research Assistant (AJWS Project; Qualitative Part-time; till May 2018); 4 Rajiv Gandhi National Fellows (PhD); 1 NET/SRF Fellow.

Faculty/Staff Profiles

1. **Name: Samita Sen**
2. **Designation: Professor (School of Women's Studies) and Dean (Faculty of Interdisciplinary Studies, Law and Management)**
3. **Years in School of Women's Studies: Since 2006**

From	To	Designation
2006	2013	Professor
2015	2018	Professor

4. **Teaching (April 2017-March 2018):**

4a. School of Women's Studies:

Name of Programme	Name of Course/s	No. of Classes or Lectures
E.D. (B.A.)	Women's Studies: Concepts and Contexts (Course II) (E.D. 4.32)	4 (45 minutes class)
M. Phil	Research Methodologies	1 (2 hours class)
	Feminist Thoughts and Practices: An Introduction (CC 102) (Sem. 1)	3 (2 hours class)

5. **Supervision:**

Name of the Course	Completed	Ongoing
M. Phil	10	2
PhD (only registered students)	10	7

6. **Workshops/Conferences/Lectures/Seminars:**

6a. National:

Year-Name of Conference-Title of Paper-Organizer/ Place-Invited/ Selected/ Coordinated

10 March 2018-Consent and Agency: Sexual Harassment on Campus-Indian Institute of Science Education and Research, Mohali (India)-Lecture delivered

8 and 9 March 2018-Autonomy in Higher Education-Gender, Caste and Employment: Women in Higher Education-National University for Education Planning and Administration, New Delhi-Keynote lecture delivered at the national workshop

22-23 February 2018-Nineteenth-Century Synergies: Ventures at Home and (Ad)Ventures Abroad (Conference)-"Revolution in the Rearview Mirror: Irish Autobiographies of the Revolutionary Years" by Professor Karen Steele-Department of English, Presidency University-Discussant for keynote lecture

12 February 2018-Research Methods in International Relations and Related Social Sciences (5-16 Feb. 2018)-Gender and Social Science Research-School of Media Communication and Culture, JU-Lecture delivered

30 and 31 January 2018-Capital in the East (Conference)-The Problem of Reproduction: Waged and Unwaged Domestic Work-MCRG-RLS, Swabhumi, Kolkata-Paper presented

29 January 2018-Future of Work-Department of Sociology, Presidency University-Round table presentation

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31 December 2017–‘Remembering Sister Nivedita’ to commemorate the tercentenary birth anniversary of Sister Nivedita–RKSM Sister Nivedita School Alumnae Association, Kolkata

19 September 2017–Feminist Methodology Workshop–Delhi University–Lecture delivered

7 April 2017–Women’s Journey towards Empowerment: A Myth or a Reality–Ramakrishna Sarada Mission Vivekananda Vidya Bhavan–Inaugural speech at UGC two-day national seminar

7 April 2017–Conceptualising Women Empowerment–Ramakrishna Sarada Mission Vivekananda Vidya Bhavan –Chairing a session

6b. International:

(Year–Name of Conference/Workshop–Title of Paper–Organizer/ Place–Invited/ Selected/ Coordinated)

19-20 March 2018–Gender, Civil Society and the Role of the State–Women, Identity and Politics (ICAS: MP) held at CSDS, New Delhi–Presentation at the international workshop

18-19 December 2017–Time and Money: Themes in Labour Relations (Workshop)–Work and Beyond: Rewarding Work, Measuring Care–CeMIS, Goettingen University, (Germany)–Keynote address

30 November and 1 December 2017–Women and Peace (Workshop)–Prevent, Protect, Participate! Women’s Role in Peace and Security–Department of Political Science, University of Wurzburg (Germany)–Plenary speaker

28 November 2017–Post-colonial Mobility: Migration and Domestic Work–Department of Indology, University of Wurzburg, (Germany) –Seminar presentation

14-16 November 2017–Workshop on Migration–Migration and Domestic Workers–Rosa Luxemburg Stiftung, Beirut–Paper presented

7-8 September 2017–Beyond the Home: New Histories of Domestic Servants (Conference)–Maids in Movement: Domestic Workers and Collective Action–Radcliffe Humanities Building, University of Oxford

7. Refresher Course/ Orientation Course: (Year–Institution–Title of Course–Coordinator/ Participant)

3 March 2018–WSRC, Calcutta University–Refresher Course in Women’s Studies–‘Women and Law’, lecture delivered at the Refresher Course in Women’s Studies

23 February 2018–Department of Economics, Calcutta University–Short-term course on Gender Sensitizing –‘Gender and Violence: Domestic and Public’, lecture delivered

7 January 2018 –Gauhati University–Short course on Gender Sensitization–‘Gender and Violence’, lecture delivered

6 January 2018–Department of Sociology, Jadavpur University–Refresher Course–‘Love, Law and Labour: Child Marriage in West Bengal’, lecture delivered for Refresher Course

6 December 2017–School of International Relations and Strategic Studies, Jadavpur University–Peace and Conflict Studies–‘Gender, Violence and Peace’, lecture delivered at Refresher Course

20 November 2017–Jadavpur University, HRDC–Qualitative Methods of Research–Lecture on Qualitative Methods of Research at the Orientation Programme

8. Awards/ Grants/ Prizes/ Research projects:

Grants awarded for projects of research, advocacy, and institutional development:

Research project on ‘Women and Trafficking in South 24 Parganas’ (PI), funded by UNICEF, 2017-2018 (appx. Rs. 15,00,000), ongoing.

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Research project on 'Love, Law and Labour: Child Marriage in West Bengal' (PI) funded by American Jewish World Service, 2016-2018 (appx. Rs. 60,00,000) ongoing.

Research project on 'Women's Studies in West Bengal', UPE II (PI), 2016-2018, (appx. 10,00,000) ongoing.

9. Membership of committees, professional associations, journal committees, learned societies, academic bodies:

JU:

Executive Council, Finance Committee, Tender Committee, Purchase Committee (University and School), Development Committee, UGC related committees, Faculty Council, Academic Committee, Admission Committee, PhD Committee (Faculty), SRC, Deans' Committees, Student Welfare Committee, TEQIP Committee, Fire Safety Committee etc.

External:

Member, Editorial Board, *Modern Asian Studies* (Cambridge); *Journal of Gender Studies* (CWDS, New Delhi); *Journal of History* (Jadavpur University); and Editorial Consultancy Board, *South Asian History and Culture* (Routledge).

M. Phil Committee, South and South-east Asia, University of Calcutta

Sub-Committee, Family Counselling Centre, Association for Social Health in India (W.B.)

Governing Body, Calcutta Mahanirvan Research Centre

Member, Advisory Committee of various Women's Studies Centres

General Body, Institute of Development Studies Kolkata

10. Publication:

a. Essays in edited volumes/ chapters in books

1. 'Slaves, Servants and Concubines: Domestic Workers in Nineteenth-Century Bengal' in Arun Bandopadhyay and Sanjukta Dasgupta (eds.) *In Quest of the Historian's Craft: Essays in Honour of Professor B.B. Chaudhuri*, Manohar Publications, New Delhi, 2018.
2. 'Dasi, Paricharika, Grihakarmi: Banglaly Grihasramer Bibartan' in Gautam Neogi, Nirban Basu and Soumitra Sreemani (eds) *Itihascher Baichitra: Essays in Honour of B.B. Chaudhuri*, Bangiya Itihas Samiti, Kolkata 2017. ISBN: 978-81-91293-862-2

11. Any other activities (Extension/Outreach):

Period	Organisation	Type of Activity	Role in Activity
13-19 January 2018	German Historical Institute London	Visiting fellowship	Visiting fellowship

Profile (April 2018-July 2019)

1. **Name:** Aishika Chakraborty
2. **Designation:** Professor and Director, School of Women's Studies, Jadavpur University
3. **Years in Women's Studies:**

From	To	Designation
April 2013	Present	Associate Professor
December 2013	August 2014	Joint Director
September 2014	September 2016	Director
October 2016	September 2017	Associate Professor
September 2017	Till date	Director

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4. Teaching (April 2018-March 2019):

4a. School:

Name of Programme	Name of Course/s	No. of Classes or Lectures
E.D. (B.A.)	Women's Studies: Concepts and Contexts (Course II) (ED 4.32) [Gender and Body]	4
M.Phil	Women's Movements in the Indian Context: Cultural Construction of Gender	10

4b. Outside School (both JU and External):

Department/Institution	Name of Programme	Name of Course/s	No. of Classes or Lectures
Rabindranath Studies Centre, Faculty of Arts, Jadavpur University	B.A. (including E.D.)	A New Femininity: Rabindranath Then and Now(Dance of Tagore)	6

4c. Course coordination:

(Period -till date)	Institution	Name of Programme	Name of Course/s)
May 2013	School of Women's Studies, Jadavpur University	PhD course	
	School of Women's Studies, Jadavpur University	MPhil Course	Optional course on Cultural Constructions of Gender
	Rabindranath Studies Centre, Faculty of Arts, Jadavpur University	BA (including ED) (jointly coordinator)	A New Femininity: Rabindranath Then and Now

5. Workshops/ Conferences/ Lectures/ Seminars:

5a. National:

(Year–Name of Conference–Title of Paper–Organizer/ Place–Invited/ Selected/ Coordinated)

7 June 2019–Focus group discussion–With Moloy Rakshit, Burdwan University, West Bengal

3 June 2019–Focus group discussion–With Putul Sathe, Director, Women's Studies Centre, SNDT Women's University, Mumbai

1 March 2019–Collaborative conference on “Explorations in Women's Studies: Identities and Intersectionalities”,–‘Discipline, Desire and Dissent: Re-writing Tagore's Dance Dramas’–Centre for Women's Studies, Visva Bharati and School of Women's Studies, Jadavpur University, at Visva Bharati–Presented paper

30 July 2018–‘Mirror, Mirror on the Wall: Reflection of Women in Media, Our Voice, Our Journey VIII’ –American Centre, Kolkata–Moderator of a panel

12 April 2018–Seminar–‘Dancing Off-Shore: Dancing Indian in America’ –American Consulate Historical Society, American Centre, Calcutta–Invited lecture

3-4 March 2018– “*Samabhabana*”, National Conference on Contemporary Dance–New Directions in Indian Dance–Sapphire Creations in association with Ministry of Culture and collaboration with ICCR, Kolkata –Invited lecture

25 January 2018–Annual Conference of *Paschimbanga Itihas Sansad*– “*Nari, Dharma, Rastra–Paschimbanga Itihas Samsad*,–Abdul Kuddus Memorial Lecture” chaired a panel

5b. International: (Year–Name of Conference–Title of Paper–Organizer/ Place–Invited/ Selected/ Coordinated)

13 July 2019– “Dancing Dirty at Sacral Theatre: Cabaret in Calcutta”–International Council for Traditional Music, ICTM, Chulalongkorn University, Bangkok, Thailand

10 July 2019–International Conference of the International Federation of Theatre Research – “Politics, Performance and Urbanism: The Cabaret Queen of Calcutta”–Shanghai Theatre Academy, Shanghai

22 June 2019– “Chandalika: *Ek sariri spadhar uccharoan*”–*Bangladesh Itihas Parishad*, Dhaka University–Invited Speaker

14 March 2019–Sufia Kamal Memorial Lecture Series –Department of Women and Gender Studies, University of Dhaka, Bangladesh–Invited speaker

5 March 2019–International Theatre Institute, Dhaka, Bangladesh–Invited speaker

3 October 2018–”*Nacher Nokshi-Kantha: Kolkatar Nritya Katha*”–Central Women’s University, Dhaka, Bangladesh

4 October 2018–”*Navanritya: Gender, Body and Dance*”–International Theatre Institute, Dhaka, Bangladesh

9-13 July 2018– “Partition, Migration, Independence: Refugee Dancers of Bengal”–International Federation of Theatre Research, University of Arts, Belgrade

6. Refresher Course/ Orientation Course: (Year–Institution–Title of Course–Coordinator/ Participant)

27 November 2018–School of Women’s Studies, in association with UGC-HRDC –Interpreting Gender at Its Intersections’–Coordinator and a Resource Person at the Gender Sensitization course

16 November 2018–Sri Sikhsayatan College, Calcutta –Gender Sensitization Workshop–Resource Person at

24 May 2018–Rabindra Bharati University–Seventh Research –week of the PhD Scholars–Resource Person

5 April 2018–Rabindra Bharati University supported by Indian Council of Social Science Research-Eastern Regional Unit–Feminist Research Methodology Workshop on ‘Performing auto bio-graphs’–Resource person. Delivered lecture on ‘Reading Autobiographies of Dancers’

7. Research Projects:

1. Major Research Project

Funded by RUSA: 2.0 Jadavpur University

Project Title: Culture, Migration and Identity: The Barred World of Indian Dance

Intertwining life-stories, interviews, press clippings and police files this project will investigate the illicit world of Indian dance where bodily performance is embedded within patterns of migration, trafficking and transactional sex with multiple layers of power politics played upon the subaltern dancers.

Within abroad rubric of Studies in the Global South the project will critically examine a particular aspect of public culture in urban centres of India and investigate the phenomenon of human trafficking across borders.

Based on historical and on-the-ground study, my work will foreground the gendered experience of performance entwining it with migration, labour and sexuality. Using this interdisciplinary methodology of multiple methods, the research will capture the journeys of refugees, migrants, victims of trafficking to chronicle the precocities of their existence.

2. Major Research Project: School of Women’s Studies

Funded by RUSA 2.0 Jadavpur University

Project Title: Memories, Cultures, Movements: Archiving Women's Histories

The archive will preserve and showcase women's narratives both written and oral pertaining to their lives, movements and cultural practices, in physical and digitized manner, written documents (published and unpublished), photographs, voice and video recordings, newspaper clippings, artefacts. The material, collected during the course of the research can be used as primary materials by future researchers by generating resources for women's studies. The documentation will make critical feminist scholarship more visible and exciting within the wider field of studies in global south, creating new knowledge base in social and bodily practice.

3. Project completed

Bengal Breaks Through: History, Legacy and the Politics of Gender in Indian Dance

Funded by India foundation for Arts (IFA, Bangalore) November 2015- April 2017

Arts Research Programme

For research into the history of contemporary dance in Bengal, through the journeys of feminist dancer-choreographers Manjusri Chaki Sircar and Ranjabati Sircar. Focusing on the social, political and personal histories of the dancers, the study will explore their interventions in the practice as they drew from medieval inheritances, colonial legacies and postcolonial promises to create new languages for dance. The outcome of this project was a monograph.

8. Organizing Conference and Short Term Courses

1. "Jadavpur University Women's Conclave", organized in collaboration with Department of International Relations, 6-7 March 2019.
2. "International Women's Day", School of Women's Studies, Jadavpur University, 8 March 2018.
3. Conference on "Explorations in Women's Studies: Identities and Intersectionalities", in collaboration with Centre for Women's Studies, Visva Bharati and School of Women's Studies, Jadavpur University, 1 March 2019.
4. Organizer and joint coordinator (with Nandita Dhawan) of Gender Sensitization Course, 'Interpreting Gender at Its Intersections', 27 November -3 December 2018.
5. Annual Conference of *Pashchimanga Itihas Samsad*, (West Bengal History Congress) in collaboration with *Pashchimanga Itihas Samsad*, 24-26 January 2018.

9. Seminars/Conferences/ Lectures/Workshops organized and coordinated (at School of Women's Studies, JU)

1. The First Radharani Debi Memorial National Lecture by Gaytri Chakravorty Spivak on "Inaugurating Gender", 15 July 2019
2. Annual Pritlata Waddedar Memorial Lecture by Professor Ayesha Banu, Department of Women and Gender Studies, Dhaka University, Bangladesh, 11 June 2019
3. Invited Lecture (RUSA 2.0 sponsored) by Dr Rakhee Kalita Moral, Associate Professor, Department of English, Cotton University, Guwahati on 'Feminists, Deviants, Historians: Writing beyond Violence', 11 June 2019
4. Invited Special Lecture (RUSA 2.0 sponsored) by Professor Maleka Begum, Chairperson, Sociology and Gender Studies, Central Women's University, Dhaka, Bangladesh on *Nari Andolonar Sekal-Ekal: Antorjatik Prekshapat*, 24 May, 2019
5. Annual Ranjabati Sircar Memorial Lecture by Prof. Moinak Biswas, 29 March 2019.
6. Annual Pritlata Waddedar Memorial Lecture by Prof. Paula Banerjee, 29 March 2019.
7. Annual Sulekha Dasgupta Memorial Lecture by Samik Badyopadhaya, 16 January 2019
8. Annual Sukhalata Rao Memorial Lecture by V Geetha, 27 November 2018

10. Membership of Committees/Professional Associations, Journal Committees, Learned Societies, Academic Bodies:

Membership of Committees/Professional Associations

1. External Expert of the Doctoral Research Committee, Department of Dance, Rabindra Bharati University
2. Doctoral and Research Committee, School of Women's Studies, Jadavpur University
3. Publication Committee, School of Women's Studies, Jadavpur University
4. Member of the Working Committee of Tagore Cultural Centre, Jadavpur University
5. Member of the Syllabus Committee, Diamond Harbor Women's University, Kolkata.
6. Member of the Syllabus Committee, Department of Performing Arts, Presidency University, Kolkata
7. Editor, Newsletter of School of Women's Studies, Jadavpur University (since September 2014)
8. Editorial Board, Silver Jubilee Volume, School of Women's Studies, Jadavpur University
9. Examiner of Doctoral and MPhil dissertations of Jawaharlal Nehru University, New Delhi

Reviewer

1. Book Review: *Indian Journal of Gender Studies*
2. JEDS (Journal of Emerging Dance Scholarship), School of Arts and Aesthetics, Jawaharlal Nehru University
3. *Rivistadegli Studi Orientali*, Journal of the Dipartimento di Studi Orientali of Sapienza University of Rome, Italy.
4. Reviewer of Oxford Handbook on Indian Dance.

Association with Learned Societies/Performing Institutions/Academic Bodies

1. Life Member and Member of the Executive Committee, Indian Association of Women's Studies
2. Life Member, Indian History Congress
3. Member of International Federation of Theatre Research
4. Member of Society of Dance History Scholars and Congress on Research in Dance (USA)
5. Member of *Sachetana*, NGO, A Woman's Organization, Kolkata
6. Member of *Paschimbanga Itihas Samsad*
7. Member of World Dance Alliance, Asia Pacific

11. Publication:

Books:

1. *Kolkatar Nach: Samakaleen Nagarnritya* (Monograph), Gangcheel, Kolkata, 2019.
2. *The Moving Space: Women in Dance*, Primus Publishing, New Delhi (co-edited with Urmimala Sarkar Munsu), 2018.

Select Chapters in Books (National/International Publishers)

1. 'Dancers and Critics: Re-viewing Tagore', Pallabi Chakravorty and Nilanjana Gupta ed., *Dance Matters Too: Memories, Markets and Identities*, Routledge: New York, 2018. ISBN 9781136 106376
2. 'Writing her *Dance*, Dancing her *Self*: Auto-Choreographs from Bengal', in *The Moving Space: Women in Dance*, Primus: New Delhi, 2018. ISBN 978-93-86552-50-1
3. 'Moving with a Purpose: Women Dancers in Dialogue with Empowerment, Rehabilitation and Therapy' (with Urmimala Sarkar Munsu), *The Moving Space: Women in Dance*, Primus: New Delhi, 2018. ISBN 978-93-86552-50-1
4. Introduction (with Urmimala Sarkar Munsu), *The Moving Space: Women in Dance*, Primus: New Delhi, 2018.

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5. 'Dance of Dissent: Dancing Tagore in the Age of Nationalism', Panchali Ray ed., *Women Speak Nation: Gender, Culture and Politics*, Routledge: New York, forthcoming

Others

1. 'Alexander, Cleopatra, Sayed Darwish, Muhammad Ali...ar Rabi Thakur', *Newsletter*, School of Women's Studies, Volume 35, September 2018.
2. 'Naribad theke shilpo bhabna ekakar tar lekhai' (with Rajlaxmi Ghosh) *Ananda Bazar Patrika*, 17 September 2017

Profile (April 2018-March 2019)

1. **Name:** Nandita Banerjee Dhawan
2. **Designation:** Assistant Professor
3. **Years in Women's Studies:**

From	To	Designation
10/09/2012	Present	Assistant Professor

4. **Teaching (April 2018-March 2019):**

4a. **School:**

Name of Programme	Name of Course/s	No. of Classes or Lectures
E.D. (B.A.)	ED 4.32 (Group B), Women's Studies: Concepts and Contexts, Course II	9
M.Phil	Feminist Thoughts & Practices I	9
	Research Methodologies	5
	Feminist Thoughts & Practices II	9

4b. **Course coordination:**

Year	Institution	Name of Programme	Name of Course/s	Period
2018	JU	M.Phil in Women's Studies	Research Methodologies	July 2018 to December 2018
		M.Phil in Women's Studies	Feminist Thoughts & Practices II	January 2019 to March 2019

- 4c. Jointly coordinated a short term course on gender sensitization, UGC-HRDC, JU titled, 'Gender at its Intersections' from 27 November to 3 December 2018

- 4d. Resource Person in short term course on gender sensitization, titled, 'Gender at its Intersections' from 27 November to 3 December 2018

5. **Supervision:**

Name of the Course	Completed	Ongoing
M.Phil	1	1
PhD (only registered students)		3

6. **Membership of committees, professional associations, journal committees, learned societies, academic bodies:**

JU:

Member of anti-ragging committee

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External:

Member of Ethics Committee of Institute of Development Studies Kolkata (IDSK)

Member of Internal Complaints Committee in NIT Durgapur,

Member of Indian Association for Women's Studies

7. Publication:

a. Essays in edited volumes/ chapters in books

Dhawan, Nandita Banerjee, 2019. "The Hindutva Politics of Uma Bharati: Challenges to Women's Movements" in Supurna Banerjee & Nandini Ghosh (eds), *Caste and Gender in Contemporary India: Power, Privilege and Politics*, Routledge.

8. RESEARCHPROJECTS

- Principal Investigator of a project titled, 'Transformation towards Sustainability in Higher Education: Interactional Dynamics in Gender and Intersectionality' in collaboration with Queen's University, Belfast and University of Johannesburg, South Africa.
- Principal Investigator of a project titled, 'A Room of One's Own: Challenging Poor Women's Marginalisation in Urban Housing Regimes in India' in collaboration with Goldsmiths College, University of London, Rabindra Bharati University, Kolkata and Centre for Health and Social Justice, New Delhi
- Principal Investigator of a project titled, 'Dip stick Assessment on Impact of Domestic Violence on Children' in collaboration with West Bengal State Commission for Protection of Child Rights (WBSCPCR).

9. PARTICIPATIONINSEMINARS/CONFERENCES/WORKSHOPS

- Presented a paper titled, "Does Representation Matter: Uma Bharati in Hindutva Politics in India" at a conference titled, "Voices and Choices: Intersecting Global Feminisms" at Ulster University, Belfast, UK from 16-17 November 2018.
- Presented a paper titled, "Gender and Caste Equalities in Higher Education in India" in a seminar organized by School of Social Sciences, Education and Social Work, Queen's University, Belfast on 13 November 2018.
- Presented a paper titled, "Indian Women and Violence at Workplace" at a Seminar organized on "Indian Women: Issues at Workplace", organized by National Institute of Technology, Durgapur from 18-19 August 2018.
- Presented a paper titled, "Feminist Philosophy and Ethics" at a Seminar organized on "Feminism is not about Gender Alone: It is a Philosophy", organized by Manushi, Kolkata on 18 August 2018.

Profile (April 2018-December 2019)

1. **Name:** Dr. Panchali Ray
2. **Designation:** Assistant Professor (contractual)
3. **Years in School of Women's Studies:**

From	To	Designation
2007	2012	JRF/SRF/NET fellow
2013	2018 (December)	Assistant Professor (contractual)

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4. Teaching (April 2018-Dec 2018):

4a. School of Women's Studies:

Name of Programme	Name of Course/s	No. of Classes or Lectures
E.D. (B.A.)	1. Concepts and Contexts I	5
	2. Concepts and Contexts II	
M.Phil	1. Core Course 102	10
	2. Core Course 201	
	3. Optional Course OP 201	

4b. Course coordination:

Period	Institution	Name of Programme	Name of Course/s
2018-2019	SWS	MPhil	Core Course 102

5. Supervision:

Name of the Course	Department/Institution	Completed	Ongoing
PhD (only registered students)	SWS		1

6. Workshops/ Conferences/ Lectures/ Seminars:

6a. National:

Period	Name of Conference	Title of Paper	Organizer/ Place	Invited/ Selected/ Coordinated
2018	Panel on Sensitization and Discussion on Transgender Basic Healthcare Issues	<i>Trans* and the Politics of Visibility</i>	Civilian Welfare Foundation, Kolkata	Invited

7. Membership of committees, professional associations, journal committees, learned societies, academic bodies:

JU:

External: Life member of Indian Association of Women's Studies

8. Publication:

a. Journal:

International:

With ISSN:

- Ray, Panchali, 2019. 'Towards a Politics of Pain: Building Solidarities, Breaking Silences in Contemporary Chhattisgarh, India', *Journal of International Women's Studies*, 20(2), 271-284.
- Ray, Panchali, 2018. 'Political Motherhood and a Spectacular Resistance: (Re) examining the Kangla Fort Protest, Manipur', *South Asian History and Culture*, 9(4): 435-448.
- Ray, Panchali, 2018. 'Thinking Gender, Thinking Nation: An Introduction', *South Asian History and Culture*, 9(4): 373-379.

b. Others:

- Ray, Panchali (ed), 2018. Special Issue on Thinking Gender, Thinking Nation: Ideology, Representations and Women's Movements, *South Asian History and Culture: Volume 9, Issue 4*.
- Ray Panchali. 2018. 'Nursing Labour, Employment Regimes, and Affective Spaces: Experiencing Migration in the City of Kolkata' in S. Irudaya Rajan and N. Neetha (eds). *Migration, Gender and Care Economy*. 47-68. London and New York: Routledge.

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- Ray, Panchali. 2018. 'The Dilemma of Women's Studies: Contradictions and Institutionalisation' *Newsletter*, School of Women's Studies, Volume 35: 16-19.

Profile

1. **Name:** Hardik Brata Biswas
2. **Designation:** Coordinator, Teaching and Learning Materials
3. **Years in School of Women's Studies:** 12

From	To	Designation
2005	2007	M. Phil candidate (M. Phil awarded in 2007)
2008	2011	Sir Ratan Tata Trust PhD Fellow/ SEPHIS-FORD Fellow
2011	2013 March	M. Phil Programme coordinator (Part-time)
2013	March 2018	Coordinator, Teaching and Learning Materials (UGC Teaching)

4. Teaching (April 2017-March 2018):

4a. School of Women's Studies:

Name of Programme	Name of Course/s	No. of Classes or Lectures
E.D. (B.A.)	Women's Studies: Concepts and Contexts 1	5 (45 minutes class)
M. Phil	Core Course 1	5 (2 hours class)
	Cultural Construction of Gender (OP 201)	3 (2 hours class)
	Research Methodologies (Sem.1)	7 (2 hours class)
	Feminist Thoughts and Practices: An Introduction (CC 201)	6 (2 hours class)

4b. Outside School (both JU and External):

(Department/Institution–Name of Programme–Name of Course/s–No. of Classes or Lectures)

Rabindranath Studies Centre, Faculty of Arts, Jadavpur University–B.A. (including E.D.)–A New Femininity: Rabindranath Then and Now–15 (45 minutes class)

Diamond Harbour Women's University, West Bengal–M.A. in Women's Studies–Feminisms: Theories and Issues –8 (1 hour class)

Diamond Harbour Women's University, West Bengal–M.A. in Women's Studies–Literature, Text, Representation–10 (1 hour class)

Diamond Harbour Women's University, West Bengal–M.A. in Women's Studies–Women, Science Gender, –5 (1 hour class)

School of Cultural Texts and Records, Jadavpur University–Post Graduate Certificate Course–Digital Humanities–8 (1 hour class)

Department of Sociology, Rabindra Bharati University–M.A. in Sociology–Special lecture on Caste and Gender–1 (1 hour class)

4c. Course coordination:(Period–Institution–Name of Programme–Name of Course/s)

February 1-7, 2018–Jadavpur University UGC-HRDC short term course on gender sensitization.– Thinking through Gender. Joint coordination with Dr. Kakoli Sengupta, Department of International Relations, JU.

5. Supervision: (Name of the Course–Department/Institution–Completed–Ongoing)

M. Phil–School of Women's Studies, Jadavpur University–From *Tawaif* to the Neo Liberal Sex Model: Inscribing Cinesexuality on the Figures of Performing Women (Sonia Bhattacharya 2014)

M. Phil (joint supervision)–School of Women’s Studies, Jadavpur University–*Bangla Shahitye Prantik Jounotar Uposthapon* (Anwasha Biswas)

M. Phil (joint supervision)–School of Women’s Studies, Jadavpur University–*Women Write Madness: Madness and Femininity in English Literature* (Anandi Mukherjee)

M. Phil (joint supervision)–School of Women’s Studies, Jadavpur University–*Women, Partition and Nation in Popular Hindi Films, 1990s-2010s* (Supriyo Pramanik)

M. Phil (joint supervision)–School of Women’s Studies, Jadavpur University–*Jiban Charjay Baul Samaj o Sadhan Sangini: Ekti Parjalocna o Mulyayon*. (Abhimanyu Mal)

M. Phil (joint supervision)–School of Women’s Studies, Jadavpur University–*Representation of Women in the Adventures of Tintin and Asterix* (Satyarupa Halder)

M. Phil (joint supervision)–School of Women’s Studies, Jadavpur University–*Gorkhaland Movement: Exploring the issue of Gender and Class* (Gunjan Rana)

M. Phil (joint supervision)–School of Women’s Studies, Jadavpur University–*Feminism(s) in India: Challenges and Threats* (Gaurav Singh)

M. Phil (joint supervision)–School of Women’s Studies, Jadavpur University–*Deshvag o Deshtyager Fole Rochito Golpe Naribadi Drishtikon* (Sajidul Mondal)

PhD (only registered students)

6. Workshops/ Conferences/ Lectures/ Seminars: (Period–Name of Conference–Title of Paper–Organizer/ Place–Invited/ Selected/ Coordinated)

6a. National:

29th March-1st April, 2017–*Rethinking Marginality: Conjunctions & Contradictions–Image, sexuality and thinking the body of the marginal woman in times of development*–Rabindra Bharati University. Centre for Women’s Studies, Department of Human Rights and Human Development, Dr B R Ambedkar Studies Centre –Invited

16 March 2018–*International conference on Empowerment of Women in India–Work of writing as empowerment*–Sabang Sajanikanta Mahabidyalaya, Sabang, Medinipur–Invited

7. Awards/Grants/Prizes/Research projects: N. A.

8. Membership of committees, professional associations, journal committees, learned societies, academic bodies:

JU:

- Academic Committee (School of Women’s Studies)
- Publication Subcommittee, Convener (School of Women’s Studies)
- Silver Jubilee Celebrations Committee, Joint-Convener (School of Women’s Studies)
- Moderation Committee (School of Women’s Studies)
- Member, Editorial Board, Newsletter, School of Women’s Studies (ISSN: 2394-2142)
- Coordinator, M. Phil programme in Women’s Studies

External:

- Moderation Committee, Diamond Harbour Women’s University
- Bangiya Sahitya Parishat
- Little Magazine Libaray O Gabeshana Kendra

9. Publication

- a. Journal: Hardik Brata Biswas ed., *Alochonachakra*, Vol. 41, Special supplement on Women's Issues, April 2017, Kolkata

National:

With ISSN: RN 69543/87 — ISSN: 2231-3990

- b. **Essays in edited volumes/chapters in books:** Four [forthcoming 2017/18]

2. A. Area of Research Activities: (Broad Areas): See 2B

2. B. Major Research Project: (Departmental/Individual, Name of the Project/Funding Agency)

The School of Women's Studies, Jadavpur University has taken up research through various action-oriented projects. It has also taken up a project on reprinting Bengali Women Writers as extended research. The research projects undertaken by the School in the academic period April 2018-March 2019 are listed below.

Research Projects:

1. Love, Law and Labour: Child Marriage in West Bengal

Principal Investigator: Professor Samita Sen

Project Coordinator: Dr. Anindita Ghosh

Project Staff:

Ishita Savina Chowdhury, Research Assistant (Qualitative) [March 2017-October 2017]

Utsarjana Mutsuddi, Research Assistant (Qualitative) [March 2017-October 2017]

Kaushik Mukherjee, Research Assistant (Part-time) [March 2017–May 2017]

Avirup Jana, Research Assistant (Qualitative)

Rubina Khatun, Research Assistant (Quantitative)

Biswajit Prasad Hazam, Research Assistant (Part-time)

Introduction

The School of Women's Studies, Jadavpur University completed in the year under report a project on Child Marriage in West Bengal. This project was funded by the American Jewish World Service. In this project we have focused on child or underage brides as well as grooms in the last 5 years, in 7 districts in West Bengal (including the city of Kolkata). Another part of this project deals with Bangladeshi women, usually in their teens who get married to Indian men after illegally crossing the national border. This part of the project focuses on how these young women negotiate, subvert and resist various norms of law and family and state that are imposed upon them. We started this project on March 2016 and finished one term of the project in February 2017. We started a second term for this project in April 2017. The project was completed in August 2018 and the report submitted.

Purpose of the Project

The purpose of this project is to map emerging trends related to early and child marriage in West Bengal. We have moved away from a cause-consequence approach to examine various aspects such as legalities and labour arrangements. One major thrust of the project was to try and understand the steady increase in elopements of underage men and women in the countryside.

Activities

- Field work in Purba Medinipur, Purulia and Murshidabad.
- Data Analysis
- A two-day workshop organized for dissemination of findings in February 2018.

The report is not currently available, since the papers are in process of revision for an edited volume to be published by Stree Publications.

2. Jadavpur University Women's Studies UNICEF Programme: (Swayamsiddha) against Women Trafficking

Funded by: UNICEF

Time Period: June 2017—August 2018

Principle Investigator: Professor Samita Sen

Co Investigator: Dr. Iman Kalian Lahiri

Research Fellows: Pritika Datta, Kaushik Mukherjee, Kathakali Biswas

Field Workers: Arunima Sarkar, Utkalika Saha, Debsumita Chowdhury, Rituraj Banerjee, Roumya Chandra, Rubina Khatun, Amrita Mukherjee, Madhuria Guha

Incidents of human trafficking are in the news almost every day. These stories typically focus on the horrors endured by the victim and the drama of their rescue. South Asia has emerged as a major source and transit for trafficking of women and children. Within India, West Bengal has a very high rate of trafficking. Professor Sen began an anti-trafficking project along with UNICEF and police in South 24-Parganas, West Bengal. This project began in June 2017.

The project focuses on South 24-Parganas, which has a high incidence of human trafficking, especially of women. The district has numerous pockets, where communities are facing acute poverty; young women from these areas are lured to metropolitan cities with the promise of jobs or a better lifestyle and then sold into sex work or labouring arrangement resembling bondage. It has been seen that most of the traffickers are people known to the victim. There are heartbreaking stories of women being sexually assaulted and having to go through the ordeal for years in an alien environment after falling prey to traffickers.

In response to these problems, the South 24 Parganas police launched an anti-trafficking initiative named 'Swayamsiddha'. This came after their involvement in the rescue of a teenage girl reported missing with help from their counterparts in Delhi and an NGO based in the NCR. At the time of the rescue, the girl was found to be extremely ill 25 litres of puss had to be extracted from her body and she was found to be HIV positive. The incident prompted the South 24-Parganas police to form a team to combat the menace of trafficking. 'Swayamsiddha' is meant to build capacity within communities to combat trafficking, to create rings of protection around young girls through awareness, information and access to services.

There were two rounds of field work—data was collected from three blocks within the district in the first phase. In the second phase, rescued victims were interviewed on a one on one basis. The report has been written and submitted in August 2018. The report is not as yet available to the public for confidentiality reasons. Further conversations with the UNICEF will be under way to consider publication possibilities.

3. Gender Audit of Higher Education in West Bengal (UPE II)

Principal Investigator: Professor Samita Sen

Time Period: August 2017 to August 2018

Project Staff: Dr. Parama Ukil, Madhurima Mazumder

This project was initially designed to take stock of the progress in institutional development of Women's Studies as a field of teaching/learning and research in West Bengal. However, the project began in August 2017, when there was a crisis. Given that the WS programme of the UGC was under the Plan Head, there was no clarity about its future when the Plan structure was dismantled. As it now appears, the panic was perhaps premature. However, there was considerable uncertainty and an attempt to mobilise to ensure the continuity of the programme. It is in this atmosphere that this project was undertaken and it changed the orientation as well as the data collected. We visited Women's Studies centres and departments in 7 universities and 7 colleges. The report is still to be completed but one paper from it has already been published.

4. CHILDLINE

Coordinator: Indrani Banerjee

The CHILDLINE is a project of the Ministry of Women and Child Development, GOI. A phone number that is 1098 spells hope for millions of children across India, CHILDLINE is India's first 24-hour, free, emergency phone service for children in need of aid and assistance. CHILDLINE turned twenty two on June 2018. The School of Women's Studies, Jadavpur University has been acting as the nodal organization for CHILDLINE 24 Parganas (South) unit, which successfully completed 15 years in June 2018.

On the eve of completing fourteen years, CHILDLINE South 24 Parganas has been able to increase the number of partners in the year 2016. The Ministry of Women and Child Development, Government of India sanctioned grants for appointing two more sub-centres for the District CHILDLINE. Since November 2016, Digambarpur Angikar and Sundarban Social Development Centre joined as the partners of CHILDLINE South 24 Parganas. Till now CHILDLINE South 24 Parganas could not provide direct services at Kakdweep sub division in West Bengal. Now these two partners are catering CHILDLINE services at Kakdweep and Canning sub divisions.

Purpose of the project:

- To respond to children in emergency situations and refer them to relevant Governmental and Non-Governmental Organizations.
- To create a structure that ensures the protection of the rights of the child as ratified in the UN Convention on the Rights of the Child and The Juvenile Justice (Care and Protection of Children) Act, 2000.
- To provide a platform for networking amongst organizations and to strengthen the support systems which facilitate the rehabilitation for children in especially difficult circumstances.
- To sensitize agencies such as the public, hospitals, municipal corporations and the railways towards the problems faced by these children.
- To provide an opportunity to the public to respond to the needs of children in difficult circumstances.

Target groups covered:

The children 0-18 years of age and who are in need of care and protection is the target group of the CHILDLINE project.

Time frame:

This is an ongoing project of the Ministry of Women and Child Development Govt. of India since 1995.

Methodology:

The operational procedures of CHILDLINE start with dialing 1-0-9-8 (Ten- Nine-Eight). Either a child herself/himself or any concerned adult can call at CHILDLINE. The person then gets connected to the Childline Contact Centre (CCC) and a team responds to the calls.

Activities Involved in Dealing with CHILDLINE Cases:

Crisis Management

- Direct assistance: CHILDLINE Rushes to Aid the Child- Medical, Shelter, protection from abuse, repatriation, death, missing children, intensive counseling.
- On phone: Emotional support and guidance, information and referral to services for the caller, information about CHILDLINE, silent calls.

Long-term Rehabilitation

After the emergency needs of the child have been addressed, the child is provided with rehabilitation and regular follow up .

Advocacy and Prevention

- In the year 2017-18 the school takes several initiatives for protecting the child rights in the district.

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- School awareness programme at different subdivisions like Canning, Diamond Harbour, Baruipur and Kakdwip have helped in preventing child marriage and child trafficking.
- The Police Department, which is also responsible to protect the rights of the children, supports the CHILDLINE. To acknowledge the service of CHILDLINE the Superintendent of police of South 24 Parganas District organized several meetings with the CHILDLINE and promised to help CHILDLINE to expedite their services.
- The Police Department has taken an initiative to prevent child trafficking by conducting several school awareness programmes where CHILDLINE South 24 parganas has taken active role. The name of the project is *Swayangsiddha*.
- The regular meeting with District Level Child Protection Unit has helped the school to intervene several critical cases.
- The Department of Social Welfare, South 24 Parganas district printed posters for sensitizing the children on right to education, child marriage and child trafficking as CHILDLINE advocates these issues and brought the real scenario of the vulnerability of the children in front of the district authority.
- The CHILDLINE organized several workshops for the stakeholders of the child protection system.

Impact-success, obstacles, challenges:

The CHILDLINE team faces several challenges including insufficient shelter homes, lack of awareness among community members, staff strength etc. In spite of that, the CHILDLINE team hopes to see a child friendly society where every child will execute his/her rights without hesitation and the society will also come forward to ensure the protection of the children who are the future of the nation.

Meetings and Workshops:

1. The CHILDLINE team has participated and organized different sensitization workshops on child protection mechanisms to sensitize the secondary schools of different blocks of South 24 Parganas.
2. As a result of organizing several outreach and awareness programmes, the CHILDLINE team has received a number of phone calls regarding child marriage, missing children (specially girl children) etc. CHILDLINE team has stopped more than 120 child marriages with the help of local administration, police and Government officials.
3. The Coordinator of the CHILDLINE participated in a three-day training programme organized by the CHILDLINE India Foundation on 'Assessing the Need of Child Protection Service in the Society' from 1 November 2018 to 3 November 2018.
4. The 17th CHILDLINE Advisory Board Meeting was organized on 7 March 2019 at the Minority Bhavan, Alipore, Kolkata.

The CHILDLINE South 24 Parganas has an endeavour to reach out to every children who are in distress and will provide them a child friendly environment.

5. Faculty Research:

The teachers of the School have been involved in diverse areas of research in the field of Women's Studies.

- Professor Aishika Chakraborty has completed her Arts Research Documentation research programme funded by the Indian Foundation for the Arts entitled, 'Bengal Breaks through: History, Legacy and the Politics of Gender in Indian Dance'. She has researched into the history of contemporary dance in Bengal, through the journeys of feminist dancer-choreographers Manjusri Chaki Sircar and Ranjabati Sircar. Focusing on the social, political and personal histories of the dancers, the study has explored their interventions in the practice as they drew from medieval inheritances, colonial legacies and postcolonial promises to create new languages for dance. Professor Aishika Chakraborty has published her monograph in Bengali (*Kolkatar Nach: Samakaleen Nagarnitya*) as the output of the research.

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- Professor Aishika Chakraborty is now working on a project titled, 'Culture, Migration and Identity: The Barred World of Indian Dance'. The project is funded by RUSA 2.0 as it focuses on the studies in global south. A historical and on-the-ground study, this work will focus on the gendered experience of performance, entwining it with labour, gender and sexuality as it seeks to complicate the dichotomies between migration and trafficking, agency and exploitation. Intertwining life-stories, interviews, press clippings and police files, this project will investigate the illicit world of Indian dance foregrounding the politics of performance embedded in changing dynamics of migration, trafficking and transactional sex. The research will look at inter-and intra-national and regional networks to examine the subaltern existence of bar dancers in a globalized economy. The project aims at establishing the linkage between human trafficking and recruitment of public performers in entertainment industry (based on the protocol of UN Convention against Transnational Organised Crime 2000 and trafficking statistics of UNICEF India). There will be a comparative analysis of patterns of migration and trafficking of bar dancers concentrated in cities of Mumbai and Kolkata, based on existing academic research and legal debates.
- Professor Aishika Chakraborty is the Principal Investigator of a project titled, 'Memories, Cultures, Movements: Archiving Women's Histories' which focuses on archiving women's history, movements, culture and politics in the eastern states of India. The research exemplifies collaborative academic work with universities in the north-east as well as Dhaka University, Bangladesh. The project will digitize materials and harvest metadata for future uses by researchers and others as resource repository for reading into women's history in eastern India and Bangladesh. There will be extensive field work with a focus on collecting, documenting and annotating, as necessary, materials pertaining to women's lives in form of voices, memories, cultures or movements.
- Dr. Nandita Banerjee Dhawan is working on a research project titled, 'Transformation towards Sustainability in Higher Education: Interactional Dynamics in Gender and Intersectionality'. The research considers the relation between policy-practice in the participation of the diverse academic staff (across markers of difference including gender, race, caste/ ethnicity, religion, ability, etc.) in Higher Education in India and South Africa, to study the interconnectedness of sustainability and the transformation agenda in teaching, research and governance within 4 institutions each in the two countries. This project is an international academic collaboration between Jadavpur University, India, Queen's University, Belfast, United Kingdom and University of Johannesburg, South Africa.
- Dr. Nandita Banerjee Dhawan is the Principal Investigator of a research funded by Global Challenges Research Funds, titled, 'A Room of One's Own: Challenging Poor Women's Marginalisation in Urban Housing Regimes in India'. The study enables gender-specific analysis and mobilisation around questions of housing and property and charts future vulnerabilities faced by poor women. The study will enhance our understanding of the impact of the financialisation of family life and the impact of emerging ideologies of propertied citizenship amongst the urban poor. It will create pathways to impact and raise public awareness and inform policy on gender and age equality in relation to housing and women's access to property. The project is in collaboration with both national and international organisations between Jadavpur University, Kolkata, Goldsmiths' College, University of London, Rabindra Bharati University, Kolkata and Centre for Health and Social Justice, New Delhi.
- Dr. Nandita Banerjee Dhawan is doing a research project titled, 'Dipstick Assessment on Impact of Domestic Violence on Children' in collaboration with West Bengal State Commission for Protection of Child Rights (WBSCPCR), which aims to look at possible impacts of domestic violence on lives of children, the existing support systems and coping mechanisms and how best can they be supported to deal with such situations. The study feeds into the research that we have done on issues of girl child and child marriage and is in addition to the work done by the School as the nodal organization for the CHILDLINE 24 Parganas (South) unit.

3. A. Invited Lectures Delivered/Session Chaired:

(Name of the Teacher, Type of Participation, Name of the Seminar/Conference etc., Place, Duration): See 1B (Staff Profile)

3. B. Seminar/Workshop/Conference/Symposium Attended:

(Name of the Teacher, Name of the Paper Presented (if any), Name of the Seminar, Place, Duration): See 1B (Staff Profile)

3. C. Seminar/Workshop/Conference/Symposium Organized: (Name of the Teacher, Name of the Paper Presented (if any), Name of the Seminar, Place, Duration)

Seminars/Workshops/Conferences

The events in the form of seminars/workshops/conferences have helped in networking at different levels for a range of purposes. This includes twinning between women's studies centres to provide support to the new centres; conducting joint programmes to utilize the strength from various centres; initiate dialogues between areas of research of different centres to build newer perspectives of research and documentation; and also to expose the students to local, national and international levels of research in women's studies.

- A seven-day short-term gender sensitisation course entitled 'Interpreting Gender at Its Intersections' was organized by the School of Women's Studies, Jadavpur University in collaboration with UGC-HRDC organised from 27 November to 3 December 2018. Dr V. Geetha, Feminist Historian, Writer and Publisher was the keynote speaker on the opening day of the workshop. The participants of the workshops were college teachers from national and regional levels who gained feminist methodology perspectives on intersectionality.
- The School of Women's Studies, Jadavpur University organized a talk entitled 'The Housewife Goes to Market: Gender, Domestic Work and Consumer Citizenship' by Professor Henrike Donner, Goldsmiths, University of London on 28 December 2018 at Vivekananda Hall, JU.
- The School of Women's Studies, Jadavpur University organized a formal book release of Professor Aishika Chakraborty's book কলকাতার নাচ:সমকালীন নগরনৃত্য (*Kolkata Naach: Samakalin Nagarnritya*) by Sri Samik Bandyopadhyay on 17 January 2019 at Vivekananda Hall, JU. This was followed by a book discussion between the author and Sri Samik Bandyopadhyay.
- The School of Women's Studies, Jadavpur University organized a panel discussion on 'Gender, Performance, Urbanity' on 17 January 2019 at Vivekananda Hall, JU. The panelists were Epsita Halder (Assistant Professor, Department of Comparative Literature, JU), Trina Nileena Banerjee (Assistant Professor in Cultural Studies, Centre for Studies in Social Sciences Calcutta), Debaroti Chakraborty (Assistant Professor, Department of English, Techno India University).
- The School of Women's Studies in collaboration with Centre for Women's Studies, Visva Bharati University organized a two-day Students' seminar on 'Explorations in Women's Studies: Identities and Intersectionalities' on 1-2 March 2019 at Visva Bharati campus, Santiniketan.

The conference was inaugurated by Professor Asha Mukherjee and Professor Aishika Chakraborty, directors of CWS, Visva Bharati and SWS, Jadavpur University respectively. On the 1st of March, 2019 the directors introduced the concept of intersectionality in feminism through their work related to women's movements in India and how art and its representations intersect and work in harmony with gender in order to establish a feminist narrative. The evolution of Women's Studies as a discipline in India and abroad was discussed in the context of the various movements that shaped it.

On the 2nd of March, 2019, MPhil and PhD students from both Visva Bharati and Jadavpur University presented papers on their course-related research. Topics ranged from Caste Based occupational division in districts to analysis of how SHGs operate in various spaces, the actual living conditions of Tibetan Female Refugees and their references in literature to women within Criminal Tribes of India, from women in Mahashweta Devi's body of literature to women in Rabindranath Tagore's body of literature. From how geographical changes in topography affect women to how historical injustices affect women, this conference covered a wide range of topics.

- The School of Women's Studies in collaboration with the Women's Studies Centre, Rabindra Bharati University organized a one-day Students' seminar on 'Women and Gender: Issues at Stake' on 20 March 2019 at the Jorasanko campus of Rabindra Bharati University. Professor Swati Ghosh, Director, Women's

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Studies Centre, Rabindra Bharati University, Dr Nandita Banerjee Dhawan, Assistant Professor, SWS, JU and Dr Hardik Brata Biswas, Coordinator, Teaching and Learning Materials, SWS, JU coordinated the programme. Students of MPhil programme from the School presented papers in the first session. This was followed by students from MA programme in Human Rights presenting their papers in the second session. The third session had PhD scholars from both SWS and Rabindra Bharati University presenting papers. The seminar was characterized by rich discussions and debates which enriched the research of individual scholars.

Seminars/Workshops/Events/Outreach Activities Related to Specific Projects Conducted by the School

- **Project:** Love, Law and Labour: Child Marriage in West Bengal

A two-day workshop was organized for dissemination of findings in February 2018.

- **Project:** CHILDLINE supported by the Ministry of Women and Child Development, Government of India
The School is the nodal organization for the CHILDLINE South 24 Parganas unit. The CHILDLINE organized the following workshops in the period of the report:

A Police Training Programme for the police personnel of Sundarban Police District was organized on Child Protection issues by the School of Women's Studies on 12 September 2018 at the Sundarban Police District. OCs and other inspectors were present in the programme. The programme was inaugurated by the SP Sundarban.

The School of Women's Studies organized an in house training programme for the CHILDLINE team of the District of South 24 Parganas on 22 January 2019. All the four coordinators and the team members participated in the Programme. This orientation programme dealt with the documentation process of the CHILDLINE project. The entire session was conducted by the Nodal Coordinator of CHILDLINE South 24 Parganas.

The School of Women's Studies organized a workshop on Child Protection Mechanism for the Juvenile Justice Homes of the District of South 24 Parganas on 13 February 2019. The representatives of different homes of South 24 Parganas district participated in the programme. The resource persons were Sri Dilip Bose and Sm Srabasti Majumder.

The School of Women's Studies organized a half day orientation programme for the Child Welfare Committee of South 24 Parganas on 26 March 2019. The members along with the chairperson and the coordinators of the CHILDLINE team were present in the programme. The programme was interactive and the CWC assured the district CHILDLINE to cooperate in each and every case for rehabilitating the children who are in need of care and protection.

- **Project:** *Dip Stick Assessment on Impact of Domestic Violence on Children*

The School of Women's Studies, Jadavpur University organized the following workshops under this project:

The School of Women's Studies, Jadavpur University organized a workshop on 'Impact of Domestic Violence on Children: Issues and Concerns' on 9 April 2019.

The School of Women's Studies, Jadavpur University organized a 'Roundtable Discussion on the Impact of Domestic Violence on Children' on 30 April 2019.

- **Project:** *A Room of One's Own: Challenging Poor Women's Marginalisation in Urban Housing Regimes in India*

The School of Women's Studies, Jadavpur University, in collaboration with Centre for Women's Studies, Rabindra Bharati University, and Parichiti, Kolkata and supported by Goldsmiths, University of London, organized a two-day workshop on "A 'Home' of One's Own: Experiences and Negotiations of Poor Women" on 31 July to 1 August 2019 at Vivekananda Hall, Subarnajayanti Bhavan, Jadavpur University. On day 1 the inaugural address by Professor Henrike Doner, Goldsmiths, University of London was followed by a presentation and discussion by Professor Swati Ghosh, Director, Centre for Women's Studies, Rabindra Bharati University. The speakers of Panel I were 1) Ms. Manisha Priyam, National University for Educational

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Planning and Administration, New Delhi; 2) Ms. Sandhya Gautam, Centre for Health and Social Justice, New Delhi. The title of their papers were a) “Work, Water and Dignity: Understanding Everyday Lives of Women in an Unauthorised Colony of Delhi” and b) ‘A Mobile Application for Engaging Community for Accountability in Health System’ respectively. The Chair of this session was Professor Henrike Doner. In post lunch session there was another presentation and discussion by Dr Nandita Banerjee Dhawan, Jt. Director, SWS, JU and PI of the project and Sayana Basu, the project fellow of this project. In this session the speakers of of Panel II were 1) Ms. Nishi Mitra, TISS, Mumbai and 2) Ms. Neera Adarkar, Women Architects Forum, Mumbai (Title of the paper: “Gender and City”) and 3) Ms. Jameela Begum Eathakula, Ghar Bachao Ghar Banao Andolan, Mumbai. The Chair was Ms. Anchita Ghatak, Parichiti, Kolkata. On Day 2 the session began with the presentation and discussion by Ms. Anchita Ghatak, which was followed by a panel discussion by Ms. Mirna Guha, Anglia Ruskin University, UK and Dr. Rimple Mehta, TISS, Mumbai. The titles of the papers presented were a) “Sex work, ‘family’, and the City: An analysis of the household compositions of full-time female sex workers in Kalighat and Sonagachi” respectively. This session was chaired by Professor Swati Ghosh.

Memorial Lectures

The School organizes four memorial lectures every year:

- The School of Women’s Studies organized the XIX Sukhalata Rao Memorial Lecture on ‘Intersectionality—Beyond Epistemic Anxiety and towards a Politics of Radical Justice’ by Dr V. Geetha, Feminist Historian, Writer and Publisher on 27 November 2018 at Vivekananda Hall, JU. The lecture was chaired by Professor Kavita Panjabi, Department of Comparative Literature, Jadavpur University.
- The School of Women’s Studies organized IXth Sulekha Dasgupta Memorial Lecture on “Theatre: Profession, Entertainment or Art?” (থিয়েটার: বৃত্তি, মনোরঞ্জন অথবা শিল্প?) by Sri Samik Bandyopadhyay, Eminent Book Editor and Critic of Indian Art, Theatre and Film on 17 January 2019 at Vivekananda Hall, JU. The lecture had been chaired by Professor Malini Bhattacharya, former director of School of Women’s Studies and former chairperson of West Bengal State Commission for Women.
- The School of Women’s Studies in collaboration with Biplabtirtha Chattagram Smriti Sanstha organized XXI Pritilata Waddedar Memorial Lecture on ‘Panchasher Dashake Udbastu Mahilara’ (in Bengali) by Professor Paula Banerjee, Vice Chancellor, Sanskrit College and University on 29 March 2019 at Vivekananda Hall, JU. The lecture was chaired by Professor Aishika Chakraborty, Director, SWS, JU.
- The School of Women’s Studies organized IV Ranjabati Sircar Memorial Lecture on “Stillness, Motion, Film: Distant Relations” by Professor Moinak Biswas, Department of Film Studies, Jadavpur University on 29 March 2019 at Vivekananda Hall, JU. The lecture was chaired by Professor Malini Bhattacharya, former Professor in English, Jadavpur University and former Director, SWS, JU.

Exchange with other Universities

Faculty members of the School have been invited to participate in conferences and seminars of international universities. This has also resulted in fruitful research collaborations.

- Professor Aishika Chakraborty was invited as a visiting scholar and delivered a lecture on “Nation Re-choreographed: Dancing against the Nation in the Age of Nationalism” at the Royal Holloway University of London. She presented a paper in the Annual Conference of British Association of South Asian Studies at the University of Nottingham on ‘Nationalism Off-stage: Performing Resistance with Tagore’.
- Dr. Nandita Banerjee Dhawan was invited by School of Social Sciences, Education and Social Work, Queen’s University, Belfast to present a paper titled, “Gender and Caste Equalities in Higher Education in India” in a seminar organized on 13 November 2018. She also visited Goldsmiths College, University of London to discuss future research collaborations. These visits resulted in research collaborations mentioned above on issues of Higher Education and Sustainability and Poor Women and Slum Housing.

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The School has build up strong networks with universities of regional and national importance. We invite scholars of repute from these institutions and our faculty members have also actively participated in events of these organizations.

- The teachers have acted as resource persons in Refresher Course organized by different universities. Professor Aishika Chakraborty delivered lecture on “Steps of Transgressions: Women Dancers of Bengal” in UGC-HRDC sponsored Orientation Course at University of Burdwan.
- Professor Aishika Chakraborty chaired a panel at Abdul Wahab Memorial Lecture at the Annual Conference of *Paschimbanga Itihas Sansad on Nari, Dharma, Rastra* organized by *Paschimbanga Itihas Sansad* in collaboration with School of Women’s Studies, Jadavpur University.

Event: Commemorating International Women’s Day

The School of Women’s Studies celebrated the International Women’s Day on 8 March 2019 at the Vivekananda Hall, JU. The welcome address by Professor Aishika Chakraborty, Director, SWS, JU was followed by a Students’ Panel chaired by Dr Nandita Dhawan, Joint Director, SWS, JU and a performance by Dancers’ Guild entitled ‘Ami—A Dance Story’. At the post lunch session there was the screening of a documentary film ‘Period— the end of a sentence (2018)’, a talk by Dr Senjuti Dutta of St. Xavier’s University and a dance theatre titled ‘Re: Strange Fruit’. The programme ended with vote of thanks.

Event: Jadavpur University Women’s Conclave

In March 2019, the School of Women’s studies organized Jadavpur University Women’s Conclave and partnered with State Legal Services Authority, West Bengal, Ashoka University, Indian Association for Women’s Studies and Department of International Relations, Jadavpur University. The event titled, “Students Speak” in the conclave was organized with the purpose to start a conversation; to make academic discourses regarding gender violence and marginalization accessible to a greater audience; to foster the spirit of challenging existing power structures in society and to question the things that pass off as the “norm”. We were filled with pride and respect to see young and old individuals from across the country participating in this event. All of them left us with pertinent questions, while also pointing us in the direction of their answers.

D. Orientation Courses/Refresher Courses Attended: (Name of the Teachers, Title of the Course, Duration, Place): See 1B (Staff Profile of Professor Samita Sen and Professor Aishika Chakraborty)

4. A. Books/Monographs etc. Published: (Name of the Teacher, Name of the Book, Name of the Publisher) See 1B (Staff Profile) for books/monographs published by the faculty of the school.

Publications of the School

- We have a consistent publication programme. The Bengali Women Writers Reprint Series, which we continue to expand every year, is one major contribution of the School. This is significant in terms of recovery and translations of lost writings by women in Bengali, another important focus of research mentioned in the UGC twelfth plan guidelines. Through our publications we continue to disseminate information around various issues.
- The School has undertaken seminal projects on gender and performance and brought out cutting edge publications on gendered constructions of dancers. The following list also provides important study material for our MPhil course on cultural construction of gender.
 1. Aishika Chakraborty ed., *Ranjabati: A Dancer and Her World* (2008)
 2. Urmimala Sarkar Munsri and Aishika Chakraborty ed., *The Moving Space: Women in Dance*, Primus, New Delhi., 2018
 3. Aishika Chakraborty, *KolkatarNach: SamakalenNagarnritya*, Gangchil, 2019

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- The School has published 35 volumes of Newsletter and 36 occasional papers. The newsletter highlights School's activities, faculty research and teaching, and features by students and faculty members.

Newsletter:

1. Volume 35: September 2018: 152 pages. ISSN 2394-2142

B. Articles Published in Journals: (Name of the Teacher, Name of the Article, Name of the Journal, Date of Publication, Volume): See 1B (Staff Profile)

5. Collaborative Programmes:

The School having gained the status of an Advanced Centre in June 2011 has been a nodal centre in the Eastern Region. It has been involved in clustering and twinning activities of other women's studies centres in the region. Being a more experienced centre, it has been able to provide support to upcoming and existing women's studies centres in other universities and colleges. The School has maintained institutional exchange programmes with women's studies centres of other Universities in West Bengal such as Rabindra Bharati, Visva Bharati, Burdwan University, Calcutta University and Diamond Harbour Women's University. The individual members of the School have also been a part of statutory and academic bodies of different departments of other Universities and colleges. They have also participated in and collaborated with in teaching and research activities with many regional, national and international universities and organizations. They have also been involved in teaching and academic and research activities of other departments within the University.

Universities and Academic Institutions

National

- SNDT University, Mumbai
- Jawaharlal Nehru University, New Delhi
- Visva Bharati University, Santiniketan
- West Bengal State University, Barasat
- Rabindra Bharati University, West Bengal
- Diamond Harbour Women's University, West Bengal
- Burdwan University
- University of Gaur Banga
- Kalyani University
- Guwahati University
- Cotton University, Guwahati
- The Asiatic Society
- Jayprakash Institute of Social Work

International

- Queen's University, Belfast
- University of Johannesburg, South Africa
- Goldsmiths', University of London
- Cornell University, USA
- University of California, Riverside
- University of Warsaw, Poland
- Humboldt University, Berlin
- Gottingen University, Germany
- Royal Holloway University of London
- Tagore Centre, London
- Nottingham University, UK

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- University of Arts, Belgrade
- Dhaka University, Bangladesh
- Central Women's University, Dhaka

The School has continued to strengthen its network with national and international bodies, both Government and Non-Governmental, through its research and action projects. The following list highlights some of the key partners of collaboration through these years.

Government

- Ministry of Women and Child Development, Govt. of India
- State Women's Resource Cell
- West Bengal State Commission for Women
- West Bengal State Commission for Protection of Child Rights (WBSCPCR)

Non-Government

- Sramik Sahayata Kendra
- Mahanirban Calcutta Research Group
- Jeevika
- Parichiti
- Trade Union Coordination Committee, Pashchimbanga Agragami Domestic Workers' Union
- Sristy for Human Society
- Durbar Mahila Samity
- Kolkata Sanved
- ActionAid
- UNICEF
- AJWS
- Durbar Disha Mahila Grihasramik Samanvay Committee
- All India Central Council of Trade Unions's Shara Bangla Sangrami Paricharika Union affiliated to CPI(ML)
- All India United Trade Union Centre's Shara Bangla Griha Paricharika Samiti affiliated to SUCI(C).
- Paschimbanga Itihas Sansad
- Centre for Health & Social Justice, New Delhi
- All Bengal Women's Union
- South Kolkata Hamari Muskaan

Engaging with women's organizations and movements:

The research projects pursued in the School have throughout had an interface with members of the autonomous women's groups and with individuals from non-governmental organisations. There have been engagements with domestic workers movements, collaborations with organisations working on child marriage and trafficking. Faculty members of the School have been part of organisations namely, Sachetana and Maitree network.

Partnerships with other Departments of the University

The School continues to collaborate with the Rabindranath Studies Centre, Faculty of Arts, Jadavpur University to conduct an undergraduate (ED) teaching programme titled, 'A New Femininity: Rabindranath Then and Now' which is popular among the undergraduate students of the University. Two of our faculty members, Professor Aishika Chakraborty and Dr Hardik Brata Biswas take regular classes in the course.

Partnerships with UGC Women's Studies Centres

- Professor Samita Sen is a member of the Advisory Committee of various Women's Studies Centres in various parts of the country.
- Professor Aishika Chakraborty was the member of the Editorial Committee of the *The Other Universe, Anthology on Women's Studies*, Lady Brabourne College. She is the member of the Syllabus Committee, Diamond Harbour Women's University, Kolkata. She is also the member of the syllabus committee of the

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Department of Performing Arts, Presidency University, Kolkata. She is also the Examiner of MPhil and PhD dissertations of a) Jawaharlal Nehru University, New Delhi; b) Rabindra Bharati University, c) Kalyani University.

Partnerships with other Universities

- The School has also invited academics from different national and international universities to present their memorial lectures. XXI Pritilata Waddedar Memorial Lecture was delivered by Professor Paula Banerjee, Vice Chancellor, Sanskrit College and University on 29 March 2019.
- Dr Hardik Brata Biswas has been teaching in the M.A course in Women's Studies at the Diamond Harbour Women's University, West Bengal and is a member of their moderation committee as well.

Partnerships with Colleges within the University and outside the University

The School has partnered and collaborated with various colleges outside the University to conduct conferences, workshops and seminars.

6. Major Achievements: Centre of Advanced Studies:

The School of Women's Studies, Jadavpur University, was formed in the late 1980s under the visionary leadership of Professor Jasodhara Bagchi with a mandate to develop feminist scholarship, develop the emerging field of Women's Studies and strengthen its interface with women's movements. Since then the School has come a long way and was granted the status of Advanced Centre in Women's Studies by the UGC in June 2011. The status of Centre of Advanced Studies and the granting of several new posts (teaching and non-teaching) by the UGC enabled the consolidation of the process.

Faculty:

- Our faculty members have been successfully working on research projects funded by organisations such as AJWS, India Foundation for Arts, ICSSR. They are members of distinguished associations and organisations including editorial boards of feminist journals. Professor Samita Sen is member of the editorial board of various important journals such as *Modern Asian Studies* (Cambridge), *Journal of Gender Studies* (CWDS, New Delhi); *Journal of History* (Jadavpur University). She is in the Editorial Consultancy Board of *South Asian History and Culture* (Routledge). Professor Aishika Chakraborty is the reviewer of a) JEDS, *Journal of Emerging Dance Scholarship*, online journal of World Dance Alliance, b) the papers presented at International Conference of World Dance Alliance, 2015-2016 and c) *Rivistadegli Studi Orientali*, published by the Dipartimento di Studi Orientali of Sapienza, University of Rome, Italy. Dr Hardik Brata Biswas has edited April 2017 issue of the journal *Alochonachakra*, Vol. 41, Special supplement on Women's Issues.
- The Annual National Conference organized by the School of Women's Studies, has culminated in a publication project 'Women Speak Nation: Gender, Culture and Politics' a trans-disciplinary volume on the relationship between gender, nationalism, culture and politics to be published by Taylor and Francis in 2018. Further the editors, Dr Panchali Ray and Professor Aishika Chakraborty were awarded a small travel grant from the School to enable them to interview women in democratic movements facing and resisting sexual violence and state repression in Manipur and Chhattisgarh. Their research, including interviews with activists, such as Irom Sharmila, Soni Sori, and members of the Meira Paibis will be published in the said volume.
- The faculty members have acted as resource persons in various regional and national colleges and Universities.
- The faculty members have significant contribution to publication in the field of Women's Studies. They have contributed to important national and international journals on issues of labour, domestic work, working

class politics, nation and politics of performance, nursing care and stigmatized labour, care regimes and transnational migration, borders, unpaid work and missing women, etc.

PhD in Women's Studies

The School had initiated its PhD programme in 2004. The programme has expanded rapidly. However, the number of PhD admissions has become limited now given the restrictions on the number of research scholars teachers can supervise. While there were only 2 students enrolled for PhD in 2006, the number has risen to 37 in 2016-17. In 2017-18, the School has registered 5 PhD students. In the last academic year, 1 student has been awarded his PhD degree and 3 of them have submitted their thesis and will appear for their viva-voce in the coming months. The PhD students are working on varied areas ranging from gender and informal labour, women in higher education, women in diasporic films, women's political participation, domestic violence, education, self-help groups, migration, imprisoned women foreigners, women's movements, empowerment, and surrogacy to travel accounts, visual culture, representations of masculinity and textuality, women entrepreneurs in handloom sector, kanyasree project in West Bengal, etc.

Research scholars contribute towards planning and organizing different academic and research programmes of the School. They enthusiastically participate in various seminars, conferences and workshops nationally and internationally. This helps them in developing their expertise on aspects related to the field of women's studies. The School has involved their students and research scholars extensively in their research projects as well. This provides the students and/or scholars a strong basis for applying their learning into practice and they gain in terms of research methodology, field work, report writing and community engagement. They further expand their knowledge and learn to take administrative responsibilities in the projects.

M. Phil in Women's Studies

The MPhil programme in Women's Studies was initiated in 2000 and we have successfully completed 19 years of this programme. The programme was affiliated under the Faculty of Arts until 2013, when it shifted to the Faculty of Interdisciplinary Studies, Law and Management. In 2016, MPhil seats increased on a supernumerary basis for OBC students from 15 to 18. The students of MPhil at the School have always been from various disciplines namely humanities, social sciences, physical science, medical science, social work, technology and commerce as well. In the period between April 2018 and March 2019, three batches of MPhil were running successfully– 2016-18, 2017-19, 2018-20. The classes of the new batch of MPhil (**2019-2021**) is about to start in August-September 2019.

E.D. (Extra Departmental) Course in Women's Studies

The School has been running the course successfully since the past eight years and students register from various departments of the University namely English, Comparative Literature, History, International Relations, etc. We have also noticed a rise in enrolment in the ED course (ED 4.32) with numbers in the January to May 2018 session having increased from 39 to 59. The session from July to December 2017 (ED 3.19) had 50 students enrolled in the course, a sharp increase from 26 admitted in the course in 2015. The School has formulated a new syllabus for the **General Elective** course in Women's Studies for the undergraduate level in 2020.

E.D. (Extra Departmental) Course at the Rabindranath Studies Centre, Faculty of Arts

The Extra Departmental course titled 'A New Femininity: Rabindranath Then and Now' (ED 4.31) designed by the School of Women's Studies and offered at the Rabindranath Studies Centre at the Faculty of Arts had subscriptions from 61 undergraduate students from the departments of Bengali, International Relations, English, Comparative Literature and Philosophy. The course has been taught by faculties from the School as well as from the department of Comparative Literature and Rabindranath Studies Centre. The usual internal assessment examinations have been conducted, question paper for the end semester examinations have been set and moderated and students appeared for their end semester examination in May 2018.

Developing Our Own Teaching and Research Materials

- The School has always realised the need to generate their own teaching and research materials to cater to the learning requirements of their students. In this process, we have already published four readers which have become popular at a national level among the different women's studies centres. The four readers published from the School are as follows:
- *Mapping the Field: Gender Relations in Contemporary India* (Vol. I + II) edited by Nirmala Banerjee, Samita Sen, Nandita Dhawan (2011)
- *Cultural Constructions of Gender*, edited by Kavita Panjabi and Paromita Chakravarti (2012)
- *Shaping the Discourse: Women's Writings in Periodicals 1865-1947* (Readings in Gender Studies 3) edited by Ipsita Chanda, Jayeeta Bagchi (2014)
- *Voices of the Talking Stars: Women of Indian Cinema and Beyond*, edited by Madhuj Mukherjee (2017)
- The translation of select essays from English to Bengali for the Reader *Mapping the Field: Gender*
 1. *Mapping the Field: Gender Relations in Contemporary India* (Vol. I + II) edited by Nirmala Banerjee, Samita Sen, Nandita Dhawan (2011)
 2. *Cultural Constructions of Gender*, edited by Kavita Panjabi and Paromita Chakravarti (2012)
 3. *Shaping the Discourse: Women's Writings in Periodicals 1865-1947* (Readings in Gender Studies 3) edited by Ipsita Chanda, Jayeeta Bagchi (2014)
 4. *Voices of the Talking Stars: Women of Indian Cinema and Beyond*, edited by Madhuj Mukherjee (2017)
- The translation of select essays from English to Bengali for the Reader *Mapping the Field: Gender Relations in Contemporary India*, Readings in Gender Studies Vol. I and Vol. II, (eds.). Nirmala Banerjee, Samita Sen, Nandita Dhawan is in progress.
- The Library's collection is enriched by some audio-visual materials on dowry, women's right on different issues, domestic violence, gender sensitization, women's empowerment, songs of scroll painters, women and folk culture, right to legal aid and different types of movies on feminist perspectives. In the period under consideration, the School of Women's Studies with active participation and voluntary professional guidance from feminist activist and filmmaker MsMadhusreeDutta organized a professional broadcast quality video film based on lectures by the eminent historian of gender and art, Professor RatnabaliChatterjee. The video has been edited by MadhusreeDutta in Mumbai and in Kolkata and it has come out as one educational lecture on art and gender; first of its kind in the region. The copies are at the library at SWS, JU for use by faculties, researches and students.

Students' Achievements

NET/ JRF Scholars and other Fellows

- The School has always had students with MPhil and PhD fellowships who have engaged in meaningful research. At present, the School has 4 NET scholars (JRF or SRF), and 5 students who have been awarded the Rajiv Gandhi National Fellowship. These scholarships, especially for students from marginalized sections of the society, help in emphasizing equity and inclusiveness which has been the focus of the UGC's XII plan.
- Our students' research interests cover a wide range of issues from social marginality to empowerment, female subjectivity in films and literature, feminist reading of Ismat Chughtai, women in Khasi tribe, empowerment of Muslim women, gender issues in informal sector, feminist philosophy, Masculinities Studies, news culture, techno culture and gender, women's role in handloom enterprise, gender and labour law, Indian writing in English, Cultural Studies, Science Studies, new materialism, object oriented ontology etc. They have also participated in workshops on oral history, research methodology, ecofeminism and counter

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revolution. Many MPhil students have registered in the School's PhD programme and have also joined as teachers in colleges and Universities after completing their MPhil programme.

The students and research scholars of the School have made their academic presence felt nationally as well as internationally. They have participated in different regional, national and international conferences. The MPhil students and research scholars also have publications in edited volumes and journals with ISBN and ISSN numbers respectively. Some of their achievements are as follows:

- Ahana Sinha has presented a paper titled, "Analyzing the Impact of Electoral Violence on Women through the Capability Approach" in the XIX Annual Conference of the Indian Association of Social Science Institutions held during 11-13 Jan 2019 at National Institute of Rural Development and Panchayati Raj, Hyderabad.
- Sayana Basu, a PhD scholar has been teaching in the BA programme on 'Human Rights and Duties' at St. Xavier's College, Kolkata. Her paper titled, "Challenges to the Handloom Sector: Insights from a study in Birbhum District of West Bengal" has been published by the Indian Society of Labour Economics (ISLE) committee in 2018. She is currently working as a Research Assistant for the project on West Bengal Commission for Protection of Child Rights titled, 'Dip Stick Assessment of Impact of Domestic Violence on Children' being conducted in School of Women's Studies, Jadavpur University.
- MPhil students of the School have presented papers in students seminar organized by the School in collaboration with Visva Bharati University and Rabindra Bharati University in January and March 2019 respectively.
- Basundhara Chakraborty, PhD scholar, has joined the department of English as a Research Fellow under RUSA 2.0 scheme. She has published the following:
- "Deconstructing the Patriarchal Construction of Epic: A Feminist Rereading of Mahabharata in Kavita Kane's Karna's Wife and The Fisher Queen's Dynasty" in September 2018 Special Issue of GNOSIS Journal.
- "Dreams, Landscape and Solitude in Emily Bronte's Poetry" in Vol 4, Sept. 2018 of *The Confidential Clerk* (Journal of the Dept. of Eng. JU). "The Other in Democracy: (In) Tolerance, Terrorism, Islam and Stereotype in Selected Contemporary American Fiction" in No. 15, Sept. 2018 of *Journal of Humanities and Social Sciences*.
- "Revisiting Modernity through Feminist Lens: Reading Ismat Chughtai's The Crooked Line" in Vol. 7, No. 1, Nov. 2018 of the journal *Middle Flight*.
- "Missing The 'I' in Padmavat(i): A Retrospection" in Vol. 9, March 2018 issue of *Newsletter*, Women's Studies Centre, Lady Brabourne College.

Roopleena Banerjee, PhD scholar has published a paper titled, "The Taboo of Menstruation: A Tool of Social Exclusion". In *Tabous*. Edited by Bana Barka and Lozzi Martial Meutem Kamtchueng. University of Cameroon, Africa. Miraclaire Publication. 2018.

Newsletter:

The School has a series of occasional papers as well as a regular Newsletter published tentatively thrice a year since 1992. Till date we have 35 volumes of the Newsletter published highlighting the Schools' activities, faculty research and teaching, and features by students and faculty members. The journey covered by these thirty-five Newsletters is an exciting one. The different sections of the Newsletter covering the editorial, activity report, project report, library holding, section on articles focusing on specific issues, obituary, book review have greatly facilitated the networking objectives of the school and have acted as a catalyst for generating research and discussion on Women's Studies among faculty and students within and outside Jadavpur University throughout its journey. The School had successfully brought out the Index of the Newsletter from 1992 to 2008 in two phases.

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The decadal Newsletter published in the year 2000 adequately cover activities and the involvements of the school in the first phase of its existence. The second phase of the Newsletter beginning from September 2000 till date shows a trend towards greater maturity reflecting a more cohesive reporting of the activities of the school. An indexing of women writers' work in different magazines during late nineteenth century and early twentieth century continued to occupy a section of the newsletter for a considerable period of time. The reprint section of the Newsletter is carrying on the tradition, as is the flourishing continuity of our reprint series. The School has the provision of circulating the Newsletters to different women's studies centres all over India and also possesses a mailing list. The Newsletter which records an ever-expanding horizon of action and research has been given a new dimension in 2015 with the achievement of an ISSN number in its 33rd volume. The latest volume (35) of the newsletter, published in September 2018, documents our various activities in 2018.

ADVANCED RESEARCH IN PHARMACEUTICAL SCIENCES

(Dr. V. Ravi Chandran Endowment Fund)

[Dept. of Pharmaceutical Technology]

Int. : 2457-2495

Coordinator : Prof. Biswajit Mukherjee

E-mail : vrccps.centre@jadavpuruniversity.in

1. **Name of the coordinator (s):** Prof. (Dr.) Biswajit Mukherjee, Department of Pharmaceutical Technology

Name of the Emeritus scientists working;

Prof. Mrinal Kanti Poddar, PhD, DSc. (funded by ICMR)

Name of the Fellows working;

Dr. Soumyabrata Banerjee, Post Doctoral researcher (DST)

Ms. Apala Chakraborty, SRF, ICMR

Mrs. Tushi Chakraborty, SRF, CARPS, JU

ICMR emeritus Scientist, Prof. Mrinal Kanti Poddar, PhD, DSc has joined the centre, and engaged in conducting research on the area of neuropharmacology. One Post Doctoral Researcher and two research fellows are working to fulfil the research objectives of the centre. This team along with Prof. (Dr.) Biswajit Mukherjee, coordinator, CARPS JU have been working in the area of nanotechnology, nanomedicine and drug targeting.

2. Area of Research activities:

The centre has been working in the area of formulation development with a special emphasis on nanocarrier-mediated drug delivery against different types of malignancy, delivery of drug to the brain across the blood-brain barrier (BBB), and to lungs for the treatment of fatal fungal infections in lungs. With the view in recent development in treatment of fatal metabolic disorders (such as diabetes, cancer) and fungal infections, the centre has engaged its focus towards the site-specific targeting to the origin of the disease for better therapeutic outcome by conventional and non-conventional approaches.

Newer formulation development, site-specific drug targeting by conventional and non-conventional approaches, cancer chemoprevention and diabetes control using newer approaches, neuropharmacology especially related to the mechanism and control of ageing process, CNS and peripheral nerve targeting to control neurological disorders.

Other Activities:

Further, to assist poor but meritorious students, the centre provides fellowships to U.G. students by merit-cum-means basis each year.

To develop the centre as a unique formulation research unit in the Eastern India to conduct research to resolve the industrial and scientific issues to assist pharma-industries and institutional researchers regarding the technology of newer formulation development and drug targeting related area

To build up national and international cooperation to strengthen the collaborative research for mutual exchange of knowledge and skill.

To develop human resources by funding and recruiting young student researchers for PhD work in the centre to develop the skill and knowledge in the field. Financial assistance is provided in terms of fellowship to PhD scholars to carry out research work in area as mentioned above.

To invite scientists, academicians and people from industries to deliver invited lectures/guest lectures to exchange knowledge and to provide exposure to the researcher and students of the department.

To provide opportunity to the national and international visitors to provide exposure in the laboratory

Major Research Project:

1. **Name of the project title:** 'The role of brain on the age-induced changes of brain regional serotonin and amyloid beta peptide'. The work has been funded by DST-SERB (ref. no. PDF/2016/002126).

Brief outline: The objective of study is to estimate the role of carnosine on aging-induced changes of brain regional steady state level of amyloid beta peptide, morphological changes of neuron including serotonin specific neuron and the endogenous carnosine status in relation to rearing count, open field locomotion activity and cognitive performance of male albino wistar strain rats of different age group (4 months young and 18 & 24 months aged).

2. **Name of the project title:** 'Neurochemical and behavioural studies on the role of calorie restriction in ageing, GABAERGIC activity and immune response'. The work has been funded by Indian Council of Medical Research (ICMR) [ref. no. 74/8/2016-Pers (EMS)].

Brief outline: The objective of the study is to investigate the ameliorating effect of aging related to cognitive as well as down regulation of immune response with aging through manipulation of calorie intake in relation to inhibitory neurotransmitter activity and immune response parameters. The study implements biochemical estimation, immune assay and behavioural studies performed over male albino wistar strain rats of different age groups.

External agencies at present supporting our research program are:

- Indian Council of Medical Research (ICMR), [ref. no. 74/8/2016-Pers (EMS)]
- DST-SERB (Govt. of India): DST-SERB (ref. no. PDF/2016/002126).

Name (s) of the undergraduate students received/receiving fellowships

1. Soumyadip Roy
2. Chandan Kumar
3. Avijit Paria
4. Rituparna Kirtania

The latest outcome of research in terms of publications (with impact factor), patents are listed below:

Dutta D, Paul B, Mukherjee B, Mondal L, Sen S, Chowdhury C, Debnath MC.

'Nanoencapsulated betulinic acid analogue distinctively improves colorectal carcinoma *in vitro*' and *in vivo*. *Sci Rep*. 2019 Aug 8;9 (1):11506. doi: 10.1038/s41598-019-47743-y. [Impact factor 4.525].

Paul B, Gaonkar RH, Mukhopadhyay R, Ganguly S, Debnath MC, Mukherjee B. 'Garcinol-loaded novel cationic nanoliposomes: *in vitro* and *in vivo* study against B16F10 melanoma tumor model'. *Nanomedicine (Lond)*. 2019 Aug;14(15):2045-2065. doi: 10.2217/nmm-2019-0022. [Impact factor 4.727].

Chakraborty S, Ehsan I, Mukherjee B, Mondal L, Roy S, Saha KD, Paul B, Debnath MC, Bera T. 'Therapeutic potential of andrographolide-loaded nanoparticles on a murine asthma model'. *Nanomedicine*. 2019 Aug;20:102006. doi: 10.1016/j.nano.2019.04.009. [Impact factor 6.5].

Sengupta S, Paul P, Mukherjee B, Gaonkar RH, Debnath MC, Chakraborty R, Khatun N, Roy S. 'Peripheral nerve targeting by procaine-conjugated ribavirin-loaded dual drug nanovesicle'. *Nanomedicine (Lond)*. 2018 13(23):3009-3023. doi: 10.2217/nmm-2018-0192. [Impact factor 4.727].

Bhattacharya S, Mondal L, Mukherjee B, Dutta L, Ehsan I, Debnath MC, Gaonkar RH, Pal MM, Majumdar S. 'Apigenin loaded nanoparticle delayed development of hepatocellular carcinoma in rats'. *Nanomedicine*. 2018 14(6):1905-1917. doi: 10.1016/j.nano.2018.05.011. [Impact factor 6.5].

Dutta L, Mukherjee B, Chakraborty T, Das MK, Mondal L, Bhattacharya S, Gaonkar RH, Debnath MC. 'Lipid-based nanocarrier efficiently delivers highly water soluble drug across the blood-brain barrier into brain'. *Drug Deliv*. 2018 25(1):504-516. doi: 10.1080/10717544.2018.1435749. [Impact factor 3.829].

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Mandal D, Shaw TK, Dey G, Pal MM, Mukherjee B, Bandyopadhyay AK, Mandal M.

Preferential hepatic uptake of paclitaxel-loaded poly-(d-l-lactide-co-glycolide) nanoparticles - A possibility for hepatic drug targeting: Pharmacokinetics and biodistribution. *Int J Biol Macromol*. 2018 112:818-830. doi: 10.1016/j.ijbiomac.2018.02.021. [Impact factor 4.784].

Paul P, Sengupta S, Mukherjee B, Shaw TK, Gaonkar RH, Debnath MC. 'Chitosan-coated nanoparticles enhanced lung pharmacokinetic profile of voriconazole upon pulmonary delivery in mice'. *Nanomedicine (Lond)*. 2018;13(5):501-520. doi: 10.2217/nmm-2017-

[Impact factor 4.727].

Ghosh S, Mukherjee B, Chaudhuri S, Roy T, Mukherjee A, Sengupta S. 'Methotrexate Aspasomes Against Rheumatoid Arthritis: Optimized Hydrogel Loaded Liposomal Formulation with In Vivo Evaluation in Wistar Rats'. *AAPS PharmSciTech*. 2018; 19(3):1320-1336. doi: 10.1208/s12249-017-0939-2. [Impact factor 2.608].

Books/ Book chapters:

1. Biswajit Mukherjee, Iman Ehsan, Debasmita Dutta, Moumita Dhara, Lopamudra Dutta, and Soma Sengupta. 'Nanomedicinal Genetic Manipulation: Promising Strategy to Treat Some Genetic Diseases'. *Nanomedicine for the treatment of Disease from concept to application*. Edited by Sarwar Beg, Mahfoozur Rahman, Md. AbulBarkat, Farhan J. Ahmad. Publisher: Apple Academic Press, CRC press., Florida, USA, (2019) Chapter: 5, Page no. 103-140, ISBN no. 13: 978-0-42942-571-4
2. Biswajit Mukherjee, Ashique Al Hoque, Shreyasi Chakraborty, Leena Kumari, Somdatta Roy, and Paramita Paul. *Nanomedicine: Could It Be a Boon for Pulmonary Fungal Infections*. *Nanomedicine for the treatment of Disease from concept to application*. Edited by Sarwar Beg, Mahfoozur Rahman, Md. AbulBarkat, Farhan J. Ahmad. Publisher: Apple Academic Press, CRC press., Florida, USA (2019) Chapter: 6, Page no. 141-164, ISBN no. 13: 978-0-42942-571-4

Patent Published and in Process

Mukherjee Biswajit, Sengupta Soma, Paul Paramita. Process and carrier for targeting drugs/diagnostics of peripheral and central nervous system. Application No: 201731033454; Dated: 21.09.2017. (Revised on 4.09.2019)

3. No. of seminars/workshop held

1. A National Seminar on Drug Formulary conducted by Community Development Medical Unit in collaboration with Shramajibi Swasthya Udyog and CARPS JU held on 25th May 2018 at Dr. H.L. Roy Building, Jadavpur University, Kolkata

[Nearabout 300 participants from different communities such as pharmacists, doctors, nursing staff and other health care professionals attended the seminar. The seminar was inaugurated by Dr. Ajay Chakraborty (Director Health Services, Govt. of West Bengal), Dr. Asish Swarup Verma (former. Pro-Vice-Chancellor. JU). Prof. Chiranjib Bhattacharjee, Dean, FET, JU, Participants were enriched with the talks of different eminent scientists, doctors etc.

Dr. S. K. Todi, Dr. N. Udupa, Dr. Arghya Majumdar, Higher specialty training in Nephrology (UK) Director & Head of Nephrology, AMRI Hospital, President, ISN East Zone, Dr. Subrata Chakraborty, Director and Professor, Dr. B. C. Roy College of Pharmacy & Allied Health Sciences, Durgapur and many more delivered lectures in the seminar.

Invited Lectures conducted:

1. A lecture by Prof. Norio Miyoshi, Research Centre for Development in Far-infrared Region, University of Fucui, Japan.
2. Invited lecture given Dr. Swati Biswas, BITS, Hyderabad

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3. Invited lecture delivered by Dr. Sandeep Roy, Novartis, USA
4. Invited lecture delivered by Bedyuti Chakraborty, Head, Biotechnology Division, Dr.Reddy's laboratory, USA.
5. Invited lecture delivered by Dr. Chinmoy Mahapatra, Research Scientist, Agarkar Research Institute, Pune, India

Visits:

1. A visit by a group of undergraduate students and faculty members from East West University, Dhaka.
2. A visit by a group of undergraduate and postgraduate students, research scholars, faculty members from Jashore University, Bangladesh.
3. A visit by a group of undergraduate and postgraduate students, research scholars, faculty members from University of Dhaka, Bangladesh.

4. Is the centre receiving financial support from any funding agency ? (provide details)

External agencies at present supporting our research program are:

- Indian Council of Medical Research (ICMR), [ref. no. 74/8/2016-Pers (EMS)]
- DST-SERB (Govt. of India): DST-SERB (ref. no. PDF/2016/002126).

Invited Lectures delivered:

- (a) Prof. Biswajit Mukherjee delivered an invited talk and chaired a session at the International Conference on Biotechnological Innovations in Food and Health Care on 27th and 28th January, 2019, Dubai.
- (b) Prof. Biswajit Mukherjee delivered an invited talk and chaired a session at the 44th Annual Conference of the European Radiation Research Society in Pecs, Hungary. The travelling allowance, hospitality have been sponsored by DST-SERB and organiser, respectively (2018)
- (c) Prof. Biswajit Mukherjee delivered an invited talk and chaired a session at the International Conference on Asian Symposium on Medicinal Plants, Spices and other Natural products XVI (ASOMPS) on 11th - 16th December, 2018, Colombo, Sri Lanka.
- (d) Prof. Biswajit Mukherjee delivered an invited talk at a National conference in Guru Ghasidas Vishwavidyalaya (A Central University), Bilaspur, 2017.
- (e) Prof. Biswajit Mukherjee delivered an invited talk at the Pharmacy Council of India (PCI) sponsored Continuing Education Programme organized by Gupta College of technological Sciences, Trinity Trust, Asansol, India (2018)
- (f) Gayatri College of Science and Technology, Odisha acknowledges Prof. Biswajit Mukherjee's outstanding contribution to Pharmacy education, research and the transfer of technology to society at the National Seminar, March, 2019.

A. Achievements of Scholars

Dr. Soumyabrata Banerjee and Ms. Apala Chakraborty received 2nd and 3rd prize respectively, at the 3rd International Conference on MOLECULAR MECHANISM OF DISEASES AND NOVEL THERAPEUTIC APPROACHES on 19-20 January 2019, at Centurian University, Bhubaneswar, Odisha
Fellow: Apala Chakraborty, Ph.D. Scholar and Senior Research Fellow (ICMR From: 25.05.2017-02.07.2019) under the research project of Prof M.K.Poddar, ICMR EMS.

International seminar attended by fellows:

1. Name of the program (Organiser): Asian symposium of Medicinal plant, species and other natural products XVI, Colombo, Srilanka.
Abstract Name: Aptamer conjugated nano-liposomal drug carrier- an approach to target glioma
Presented on: December 12-14, 2018.
Mode of presentation: Oral.
Funded by: University travel grant, Jadavpur University

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Name: Dr. Soumyabrata Banerjee

Designation: SERB-National Post Doctoral Fellow, Govt. of India

Date of joining: April 12, 2017

Participated in National and International Conferences:

1. Soumyabrata Banerjee, Biswajit Mukherjee, Mrinal K. Poddar. 2018. Brain regional amyloid beta in relation to plasma and adrenal corticosterone: role of aging and carnosine. Neuro Update 2018 held at the Indian Institute of Chemical Biology, Kolkata, India on November 24, 2018.
2. Soumyabrata Banerjee, Biswajit Mukherjee, Mrinal K. Poddar. 2019. Treatment with carnosine: a novel approach to attenuate the aging-induced changes in Brain and blood platelet MAO-A activity. 3rd Pharm. Tech. IAPST International Conference on Molecular Mechanism of Diseases and Novel Therapeutic Approaches organized jointly by School of Pharmacy and Life Sciences, Centurion University of Technology and Management, Bhubaneswar, India and the Indian Association of Pharmaceutical Scientists and Technologists (IAPST), Kolkata, India at Centurion University of Technology and Management, Bhubaneswar, Odisha, India on January 19-20, 2019. [Awarded for the 2nd best oral presentation]
3. Soumyabrata Banerjee, Biswajit Mukherjee, Mrinal K. Poddar. 2019. Aging-induced neurodegeneration in relation to brain regional A β deposition, locomotor and cognitive function: role of carnosine. 2019 ISN-ASN Meeting organized by the International Society for Neurochemistry (ISN) jointly with the American Society for Neurochemistry (ASN) held at Montréal, Canada on August 04-08, 2019.

COMPUTER AIDED DESIGN CENTRE

[Department of Computer Science & Engg.]

Tel.: 2414-6844

Int. : 2457-2960

Director : Prof. Chiranjib Bhattacharjee

1. A. Courses Offered:

Name of the course	Duration of course	No. of courses offered	Total no. of the students
P.G. Diploma in Applied Remote Sensing and GIS (Geoinformatics)	One year	4	114
Diploma in Multimedia and Animation	One year	3	75
AutoCAD with AutoLISP	11 weeks	6	175
Structural Analysis And Design	10 weeks	2	55
Advanced 3D Modelling	10 weeks	1	9
Summer/Winter Training Course on AutoCAD for JU students	5 days	2	60
Corporate training on AutoCAD for GRSE Ltd.	5 days	1	29
Corporate Training on AutoCAD for Defence Estate (Eastern Command)		1	23
		Total	540

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1. **B. No. of Faculty Members:** The Centre is conducting various professional short-term courses with the help of 11 visiting faculties.
2. **A. Area of Research Activities (Broad Areas):** CAD and Geoinformatics
3. **A. Invited lectures delivered:** 7 Nos.

(Name of the Teacher, Topic, Type of Participants, Name of the Seminar/Conference/Workshop, Place, Duration)

Dr. Basudeb Bhatta– ‘Mapping and Monitoring of Urban Growth from Remote Sensing Data: A General Review’–Graduate students, JRF–National Conference on Advancement in Civil Engineering Practice and Research–Haldia Institute of Engineering–5-6 April, 2018

Dr. Basudeb Bhatta– ‘LanDuse Projection Modelling and Geosimulation’–JRF and SRF–Workshop on Geospatial data analysis using open source software–Adamas University–17-19 April, 2018

Dr. Basudeb Bhatta– ‘Geosimulation in GIS’–JRF and SRF–Workshop on Application of Quantitative Techniques in Spatial Planning–Centre for Human Settlement Planning, Department of Architecture, JU 21-28–Dec, 2018

Dr. Basudeb Bhatta– ‘Application of Remote Sensing and GIS in Disaster Management : A General Discussion’–College and University Teachers–Refresher Course on Disaster Management–University of Calcutta (Ballygunj Campus), Kolkata–11 January, 2019

Mr. Biswajit Giri –1. Implementation of Web mapping, 2. Vector data processing–Under Graduate students–Geospatial data analysis using open source software organized by department of Geography, Adamas University–Department of Geography, Adamas University–17th – 19th April, 2018

Mr. Biswajit Giri– ‘Advanced geospatial analysis and spatial analysis, arscan, network analysis etc’.–School & college teachers, Lecturers, research scholars–Seven Day Workshop-cum-Hands-on training programme on ArcGIS software in research methodology–Centre for Environment and Economic development (CEED), New Delhi and PG Dept. of Geography, Vivekananda college for Woman, Barisha, Kolkata–29th Oct - 04th Nov, 2018, dept. Of geography, Vivekananda college for women, Barisha, Kolkata

Mr. Biswajit Giri–Hands on Training on QGIS–JRF and SRF–Workshop on Application of Quantitative Techniques in Spatial Planning–Centre for Human Settlement Planning, Department of Architecture, Jadavpur University–21-28 Dec, 2018

C. Seminar/Workshop/Conference/Symposium organized:

Organized a two-day National Conference from 27th to 28th December 2018.

6. Major Achievements:

In the last 34 years, the Centre has trained more than 10,000 industry professionals, students and researchers in Computer Aided Design, Geographic Information System, Remote Sensing, Multimedia, and related areas. The Centre has also executed several R&D and Industrial projects since 1987. Recently the Centre is focusing to offer several cutting edge technologies to the industry professionals and higher education students.

Section-1 & III

Director of the Centre : Prof. Chiranjib Bhattacharjee, Dean, Faculty Council of Engineering and Technology, Jadavpur University

COUNSELLING SERVICES AND STUDIES IN SELF-DEVELOPMENT

[Dept. of Philosophy]

Int. : 2457-2481

Coordinator : Professor Samar Kumar Mondal

Joint Coordinator : Professor Sanjib Mridha

E-mail : ccsssju@gmail.com

1. A. Courses Offered:

Name of the Course - P.G Diploma Course in Counselling and Stress Management

Duration of the Course – 2 years

No. of Students Enrolled – 30

1. B. Number of Faculty: 10 including Coordinators (All are Guest Faculty Member)

2. A. Area of Research Project : Counselling, Stress Management and Self Development (Bord Areas)

2. B. Major Research Project : , UPE II, UGC

Individual : Professor Sadhan Chakraborti

Name of the Project - Management of Stress of Students in Higher Educational Institutions of West Bengal, UPE II

Funding Agency – UGC

3. C. Seminar/Workshop/Conference/Symposium Organized :

Name of the Teacher : Professor Samar Kumar Mondal

Name of Paper Presented, if any : 1) Professor Soumitra Basu, 2) Dr. Subhrangsu Aditya, 3) Professor Pushpa Misra, 4) Mr. Mohit Ranadip.

Name of the Seminar : STRESS OF CAREGIVERS IN MENTAL HEALTH

Place : Darshan Bhavan Auditorium, Jadavpur University (Main Campus)

Duration : One Day (24th March, 2019)

3. E. Oriented Courses/ Refresher Courses/ STC Organized:

Name of the Teacher : Professor Samar Kumar Mondal Title of the Course : UGC sponsored Short Term Course in “Counselling and Stress Management” Place : Darshan Bhavan Auditorium, Jadavpur University (Main Campus) Duration : One Week (12th Sept.—18th Sept. 2019)

4. B. Articles Published in Journals : (Including National/ International & Peer-reviewed Journal)

Name of the Teacher - Professor Sadhan Chakraborti

Name of the Article(s) - Genesis of Stress : AIEDR Model

Name of the Journal - *Wisdom Speaks*, Date of Publication - October, 2017 Volume -2 (I)

5. Collaborative Programme :

1. Basanti Devi College,

a) Certificate course in Basic Skills in Psychological Counselling

b) Advance Certificate course in Psychological Counselling

2. Ramkrishna Sarada Mission Vivekananda Vidyabhavan

a) Certificate course in Basic Skills of Counselling and Stress Management

6. Major Achievements:

1. The students of every batch of the 2 year P.G. Diploma course in Counselling and Stress Management assigned shortly in Calcutta Medical College and Nil Ratan Sircar Medical College and Hospital for internship.

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2. Professor Samar Kumar Mondal (Joint Coordinator of the Centre) is working on a project entitled 'The Effects of Stress on Young Adults in West Bengal' from RUSA 2.0 fund.

Outreach Activities:

Anti-Ragging awareness Programme – Department of Electronics, Food Technology, Architecture, Farm. Tech. and Mechanical Eng etc.

Other Activities of the Centre (2018-19)

1. Conducted a One-Week workshop on 'Management of Stress of Adolescents' with Ramakrishna Sarada Mission Vivekananda Vidyabhavan, Dum Dum on 04.05.2018 to 11.05.2018.
2. Conducted a Two-Days' workshop with Trivenidevi Bhalotia College, Raniganj on 11.10.2018 and 13.10.2018 .
3. Conducted a One-Day Faculty Development Programme with Midnapore College (Autonomous) in the Department of Philosophy on 10.12.2018.
4. Conducted a One-Day workshop with Ramakrishna Sarada Mission Vivekananda Vidyabhavan, Dum Dum on 18.01.2019.
5. Conducted a One-Day workshop with Jogesh Chandra Chaudhuri College on 25.02.2019.

DISABILITY STUDIES AND REHABILITATION

Tel. : 2414-6102

Int. : 2457-2347

Jt. Coordinators : Dr. Muktipada Sinha
Sri Manojit Mondal

E-mail : spedju.2010@gmail.com

The 'Centre for Studies in Cultural Diversity and Wellbeing' (formerly known as Special Education & HEPSN Cell) had started its journey in 2002 with financial support from the UGC 'Higher Education for persons with Special Needs' (HEPSN) project. Supported by the UGC UPE-I programme during 2003 to 2008, the Cell was included in the UGC UPE II programme since December 2012. On June, 2014 it was renamed into 'Centre for Studies and Rehabilitation of Differently Abled Persons' which was further renamed into 'Centre for Disability Studies and Rehabilitation' on and from November 2017. For a brief period, it was rechristened as 'Centre for Disability Studies'. At present, the Centre is known as 'Centre for Studies in Cultural Diversity and Wellbeing'. 'Centre for Studies in Cultural Diversity and Wellbeing' aims to prepare Audio Books for the University so that they can be used when and as required in the academic progress of disabled students, conduct research works in and around West Bengal to acquire knowledge regarding the educational progress of disabled children and identify their problems and work on it and help the government to take necessary actions in this regard. The Center also wishes to make the University environment more accessible and disability friendly.

1. A. Courses Offered:

Counselling Course: The Centre continues the one-year Post Graduate Diploma course in "Guidance, Psychological Counselling & Family Therapy" (passed by Executive Council of Jadavpur University) on and from 2nd May 2013 with a dozen of Resource Persons and Faculties from different universities and some Psychiatrists as well as Psychological Counselors. This year too 40 new candidates have taken admission. At present, the Centre is successfully running its sixth batch.

The Centre has started two new courses:

1. One year Diploma in Psychological Counselling in collaboration with ‘Caring Minds Psychological wellness Centre’, Kolkata in 2018. The course is centered around providing in-depth knowledge of human psychology, and special emphasis given on skills and techniques of Counselling, Interactive sessions, group discussions and role plays. It is a practice-oriented course with regular mock sessions and project work. The main benefits of the course are:
 - Generating self-awareness.
 - Better understanding of others.
 - Building the basic counselling skills of empathy, acceptance, and unconditional positive regard.
 - Personal growth.
2. Six month certificate course on Psychotherapy in collaboration with ‘Caring minds Psychological Wellness Centre’, Kolkata. The course focuses on: Behaviour Therapy, Ellis’s Rational Emotive Behaviour Therapy, Beck’s Cognitive Therapy, Third Wave Therapies – Mindfulness-based Cognitive Therapy, Dialectical Behaviour Therapy and Acceptance & Commitment Therapy, Interpersonal Therapy, Humanistic and Existential Therapy.

The key benefits of the course are:

- a) Centred around providing in-depth knowledge of various forms of Psychotherapy.
- b) Training in an integrative approach to a level appropriate for safe, ethical and effective practice.
- c) Interactive sessions, group discussions and role plays.
- d) Practice-oriented course with regular mock sessions and project work.

The Centre has also signed a MOU with PRADIP CENTRE FOR AUTISM MANAGEMENT, to start a course on Autism in 2019.

1. B. Number of Faculty members: N.A.

2. A. Area of Research activities:

The Centre aims at exploring the intrinsic realities of different cultures which are often overlooked or homogenized in overarching categories such as ‘culture’. This Centre is also working towards creating an awareness concerning the role of physical and mental health in the sustenance of a community.

Education and Awareness among Persons with Disability in Jangalmahal Areas

The Centre completed a field survey on the above mentioned topic at two blocks in the Barasat area under the supervision of Dr. Muktipada Sinha & Dr. Manojit Mandal, Jt. Coordinators of the Centre. The detailed survey report of the project has been prepared.

The next field survey in Jangalmahal area is already in progress. We have finished collecting the data and are preparing the final report based on the data collected.

2. B. Major Research Projects:

I. “Rabijiboni” (Life of Tagore) in English: Translation, Transnationalism and Global South

This project proposes to undertake the translation into English of the nine volume biography of the celebrated poet and thinker Rabindranath Tagore, *Rabijiboni* authored in Bengali by Prashanta Kumar Pal. Despite being an iconic figure of South Asian socio-political thoughts, biographies of Tagore are not accessible in any mainstream global languages to showcase his deep engagement with anticolonial movements. It is thus crucial that Prasanta Kumar Pal’s *Rabijiboni* (a nine volume biography in Bengali), demonstrating how contemporary socio-historical issues were profoundly imbricated in Tagore’s life and works, reaches English speaking readers both within and outside India. The project, if completed successfully, would add not just to the knowledge repository of studies in the Global South, but would also address the huge contingent of Tagore’s lovers at the transnational global spaces in understanding him as the early proponent of radical decolonization.

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Panchanan Barma University, was present as a chief guest and Prof. Basab Choudhury, Vice Chancellor West Bengal State University, delivered the Keynote address in the Seminar.

6. On 7th & 8th March 2019, the Centre organized a two day UGC Sponsored International Seminar on “Society, Education and Culture: Discourse on Disabilities in Rural Bengal”, in collaboration with Byanjanbarna Foundation, Kolkata and Department of Political Science, Sidho-Kanho-Birsha University, Purulia.
7. On 14th & 15th March 2019, the Centre organized a two day UGC Sponsored International Seminar on “Narratives of Disability: Contemporary Barriers and Belongings”, in Collaboration with Department of Film Studies, West Bengal State University and Byanjanbarna Foundation, Kolkata.
8. On 20th march the Centre organized an UGC Sponsored International seminar on “Happiness for All” to celebrate International Happiness Day.

4. A. Books/Monographs etc. Published

1. International Research Journal, Volume IV, ‘Persons with Special Needs and Rehabilitation Management’, (ISSN: 2321-9254), enlisted in UGC list of Journals, 2018.
2. Education and Awareness among the Persons with Disability in the Barasat Region: A Survey Report.
3. Newsletter 5th Issue.

5. Collaborative Programmes

1. On 3rd December 2018, the Centre Organized a cricket match between physically challenged Bengal Cricket team v/s Bengali movie/tv Stars to celebrate World Disability Day. Dr. Shashi Panja, Hon’ble Minister, State for Women & Child Welfare and Social Welfare was present at the stadium, Jadavpur University Salt Lake Campus along with Professor Snehamanju Basu, Registrar Jadavpur University and other dignitaries. The Centre received a proposal from physically challenged cricket association (Bengal) to arrange this match to celebrate the World Disability day and appealed to the Vice Chancellor of Jadavpur university through the Centre for Disability studies to make necessary arrangements.
2. On 21st February 2019 the Centre celebrated “Bhasha Dibas” jointly with Department of Education, Jadavpur University. The programme was inaugurated by Dr. Muktipada Sinha and Prof. Manojit Mandal, joint coordinators Centre for Disability Studies .The programme was attended by, Professor Snehamanju Basu, Registrar Jadavpur University, Professor Partha Pratim Lahiri, Jt. Registrar, Jadavpur University Pro Vice Chancellor Prof. Pradip Kumar Ghosh and other dignitaries.

6. Major Achievements

The centre has been successfully conducting a course entitled “Guidance, Psychological Counselling and Family Therapy” for six consecutive years. Projects worth Rs. 60 Lacs undertaken by this centre as part of UGC-UPE II, Jadavpur University have been completed. Two ongoing projects *Rabijiboni* (Life of Tagore) in English: Translation, Transnationalism and Global South’ and ‘Changing Scenario of Bhadu and Tusu: A Study on Festivity of Rarh Bengal’ have made satisfactory progress.

DISTRIBUTED COMPUTING

[Department of Computer Science & Engg.]

Int. : 2457-2952

Coordinator: Prof. Chandan Mazumdar

E-mail : chandan.mazumdar@gmail.com

1 A. Name: Centre for Distributed Computing

2 A. Area of Research Activities: Theory and Modeling of Distributed Systems, Synchronization Issues, Distributed Systems Security, Fault Tolerance in Distributed Systems, Real-Time Distributed Systems, Embedded Distributed Systems, Reliable Communication Protocols for Distributed Systems, Mobility and Management of mobility in Distributed Systems, Software Life Cycle Management for Distributed Systems, Web-based Systems, Reliability Issues, Digital Forensics, Disaster Management, IT for the under-privileged and handicapped, Enterprise Information Security, Data Privacy.

2. B. Major Research Projects:

- i) Enhancement of PoliComp Tool - Information Security Policy Compliance Checker Tool based on Log Records, funded by SAG, DRDO.
- ii) Development of Indigenous Technologies for Secure Software Defined Network, funded by SPIC, DRDO.
- iii) Development of PDP Framework, funded by NICSI, MeiT.
- iv) Development of Jadavpur University Management System (JUMS), funded by Jadavpur University under UPE-II.

3. B. Seminar/Workshop/Conference/Symposium Attended:

Prof. Chandan Mazumdar, 14th International Conference on Information Systems Security (ICISS), at IISc., Bangalore, during 17-19 December, 2018.

4 A. Books/Monographs etc. Published: i) Bhattacharjee, J., Sengupta, A., Barik, M. S., & Mazumdar, C. (2018). 'An Analytical Study of Methodologies and Tools for Enterprise Information Security Risk Management'. In *I. Management Association (Ed.)*, Global Business Expansion: Concepts, Methodologies, Tools, and Applications (pp. 964-979). Hershey, PA: IGI Global, 2018.

4. B. Articles Published in Journals: i) Mukherjee N., Paul G., and Saha S. K., "An efficient multi-bit steganography algorithm in spatial domain with two-layer security Multimedia Tools and Applications", July, 2018. ii) Bandyopadhyay A., Ganguly D., Mitra M., Saha, S.K. Gareth J. F. Jones: "An Embedding Based IR Model for Disaster Situations". *Information Systems Frontiers*, 20(5): 925-932, Oct., 2018. iii) Manna A., Sengupta A., and Mazumdar C., "A Quantitative Methodology for Business Process-Based Data Privacy Risk Computation", In: Chaki R., Cortesi A., Saeed K., Chaki N. (eds) *Advanced Computing and Systems for Security. Advances in Intelligent Systems and Computing*, vol 996, 2019, pp. 17-33, Published by Springer, Singapore.

C. Articles Published in Conferences:

- i) Chatterjee D., Chowdhury A., Sinha A., Saha S. K., "Assessment of Cognitive Load and Confidence Level using Low Resolution EEG device", IJCAI workshop CompPsy, 2018.
- ii) Mukherjee N., Paul, G. and Saha, S.K., "A novel position concealment audio steganography in insensible frequency", 5th International Conference on Computational Intelligence in Data Mining (ICCIDM-2018)
- iii) Sinha A., Saha S. K., Basu A., "Assessment of Reading Material with Flow of Eyegaze using low cost Eye Tracker", CIPR-2019.
- iv) Sinha A., Saha S. K., Basu A., "Determining Perceptual Similarity Among Readers Based on Eyegaze

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Dynamics”, 6th International Doctoral Symposium on Applied Computation and Security Systems, 2019.

- v) Manna, A., Sengupta, A., and Mazumdar, C., “EDPRL: A Language for Specifying Data Privacy Requirements of Enterprises”, Second International Conference on Advanced Computational and Communication Paradigms (ICACCP 2019), Sikkim, India, February 25 – 28, 2019.

6 Major Achievements:

- i) Successful development and implementation of Jadavpur University Management System (JUMS), with comprehensive modules for Student Admissions / Information, Muster Roll Section, end-to-end Examination management, Post-Graduate (Engineering & Technology) Application/Admission, Under-Graduate (Engineering & Technology) Decentralized Counseling, Convocation Application, PhD Application, Non-NET Fellowship Application, Chief Librarian and Librarian Recruitment, and Finance Management (including receipts management, fund management, RUSA fund tracking system etc.). The Centre has provided support and handholding services to officers, staff, teachers, students and applicants from August 2016 till March 2019. This has been carried out in person as well as via E-mails, messages and phone calls. The Centre’s personnel remained present during all admissions at the designated venues (Aug 2016-Mar 2019). They helped personnel of the faculty councils in performing various admission activities. The Centre also entered the backlog data of students of Salt Lake campus of 2014-15 and 2015-16 within the Student Information System. Training (pertaining to JUMS usage) has been provided to all staff of the faculty councils, FO’s office, Cash section, MR Section and Examination Section.
- ii) Prof. Sanjoy Kumar Saha is Research advisor for Signal Processing group of TCS Innovation Lab, Kolkata

EXPERIMENTS IN SOCIAL AND BEHAVIOURAL SCIENCES

[Department of Economics]

Int. : 2457-2942

Coordinator: Prof. Sanmitra Ghosh

E-mail : sanmitra.ghosh@jadavpuruniversity

- 1) Name of the Centre: Centre for Experiments in Social and Behavioural Sciences
- 2) Name of the Department: Department of Economics
- 3) Name of the Coordinator: Dr. Sanmitra Ghosh
- 4) Funding from University: The Centre has not received any fund from the University during the financial year
- 5) Academic activities undertaken by the Centre in last financial year:2018-19:
 - i. Dr. Sanmitra Ghosh has worked on an experimental project entitled “Reputation Formation With Decisiveness: Evidence from Dictator Game” funded by CAS, Department of Economics, Jadavpur University

Note: The Art Science Computer Laboratory, out of which the Centre operates, was under renovation from August 2018 till January 2019. As a result the normal activity of the Centre was severely affected in the 2018-19 financial year.

HUMAN SETTLEMENT PLANNING

[Department of Architecture]

Int. : 2457-2425

Coordinator: Prof. Suchandra Bardhan

Jt. Coordinator: Dr. Jayita Guha Niyogi

E-mail : hsp.centre@jadavpuruniversity.in

1. A. Courses offered:

Name of the course	Duration of course	No. of Students enrolled
Short term courses/workshops on Planning related topics	One week	Varies with a minimum of 30 and max. of 75 so far.

1. B. Number of Faculty Members:

Following two faculty members of Dept. Of Architecture are acting as Joint Coordinators:

2. A. Area of Research Activities:

- Prof. Dr. Jayita Guha Niyogi: Town and Regional Planning, Transportation Planning, Integrated Land use and Traffic System
- Prof. Dr. Suchandra Bardhan: Landscape Planning, Green Infrastructure, Buildings and climate change & sustainability; Historic, regional & urban landscapes

2. B. Major Research Project: (Departmental/Individual–Name of the Project–Funding Agency)

At the level of Centre–Land Use & Transportation planning, Heritage mapping and Landscape studies of select areas in West Bengal –Self-funded

3. C. Seminar/Workshop/Conference/Symposium organized:(Name of the teacher–Name of the Paper presented–Name of the Seminar/ Conference/Workshop–Place–Duration)

Prof. Jayita Guha Niyogi & Prof. Suchandra Bardhan–One-week Workshop on ‘Application of Quantitative Techniques in Spatial Planning’–Dept. of Architecture, JU–21st – 28th December 2018

A one-week workshop was sponsored by DST PURSE II and organised on ‘Application of Quantitative Techniques in Spatial Planning’ by the Centre for Human Settlement Planning (CHSP) in the Audio-Visual Room of Department of Architecture from 21-28 December 2018. A total of 72 participants comprising of faculty members, research scholars and post-graduate students of colleges and Universities across West Bengal attended the course.

The Inaugural session was presided by our Hon’ble Vice Chancellor Prof. Suranjan Das, who mesmerized everyone by his very erudite Presidential address on the subject. Dr. Debashish Das, Convenor of the workshop welcomed everyone, followed by Prof. Jayita Guha Niyogi’s (Joint Coordinator, CHSP) Welcome Address. Registrar Dr. Snehamanju Basu delivered the keynote address. Prof. Chiranjib Bhattacharjee, Dean, FET and Prof. Sanjib Nag, HOD, Architecture also addressed the audience. Prof. Suchandra Bardhan (Joint Coordinator, CHSP), delivered Vote of Thanks.

The learning sessions and topics were scheduled and held according to the following:

Date Day 1 21/12/2018

11:00 am –12 pm Inauguration and Keynote Address by Dr. Snehamanju Basu, Registrar, JU

12 pm– 01:30 pm Application of SPSS Software in Spatial Planning: Dr. Debajit Dutta JU

02.30 pm–05:00 pm Application of R Software in Statistical Analysis: Dr. Rahul Bhattacharya, University of Calcutta

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Day 2 22/12/2018

11:00 am & 12 pm– 01:30 pm–Statistical Inferences and Multivariate Analysis in Regional Planning: Prof. Sanat Guchhait, Burdwan University

02.30 pm–05:00 pm–Multi-Criteria Decision making Tools in Urban Planning & Pollution Projection Methods: Dr. Soumen Mitra, IEST, Shibpur

Day 3 24/12/2018

1:00 am & 12 pm–Third Dimension in Spheroidal System: Dr. Arijit Majumder, Aliah University

12 pm– 01:30 pm–Hands on Training on QGIS: Dr. Biswajit Giri, CAD Centre, Jadavpur University

02.30 pm–05:00 pm–Hands on Training on QGIS: Dr. Biswajit Giri, CAD Centre, Jadavpur University

Day 4 26/12/2018

11:00 am-12pm & 12 pm– 01:30 pm–Landuse Projection Modelling and its application in Spatial Planning: Prof. Basudeb Bhatta, JU

02.30 pm–05:00 pm–Geo–Simulation in GIS: Prof. Basudeb Bhatta, JU

Day 5 27/12/2018

11:00 am-12pm & 12 pm– 01:30 pm–Shape and Directional Analysis and its Application in Regional Science: Prof. (Retd.) Ashis Sarkar, Presidency University

02.30 pm–05:00 pm–Multivariate Analysis with XL STAT: Dr. Asis Kr. Sen (Retd.) Presidency University

Day 6 28/12/2018

11:00 am-12pm & 12 pm– 01:30 pm–Linear Programming in Urban Planning & Research: Dr. Asis Kr. Sen (Retd.) Presidency University

02.30 pm–05:00 pm–Valedictory Session and Valedictory address by Prof. L.N. Satpati

Prof. L. N. Satpati, Professor of Geography, Calcutta University gave the Valedictory address and encouraged the participants in the Valedictory session. Ar. Surojit Dass, practising Architect-Planner also graced the occasion as an honoured Guest, who also shared his experience in the subject. Both of them presented Certificates to the participants of the program.

Feedback received from the participants was very encouraging, with requests for repeat workshops at regular intervals.

IC DESIGN & FABRICATION

(Department of Electronics & Telecommunication Engineering)

Phone : 2414-6217

Int. : 2457-2406

Co-ordinator: Prof. Subir Kumar Sarkar

E-mail: juicentre@gmail.com

E-mail : icdf.centre@jadavpuruniversity.in

1. A) Courses Offered:

- i) **Name of the Course:** Short term course on “Microelectronics Technology and VLSI Design”
- ii) **Duration of the Course:** 6 weeks.

iii) **Number of students enrolled:** 120 per year

B) **Number of Faculty Members:** 7 Numbers

2. A) **Area of Research Activities:**

1. Electronic Devices including Semiconductor Nanodevices : Modeling and Simulation.
2. Photonics Devices
3. Porous Silicon Formation by Alumina Template
4. Single electron & spintronics devices and their applications in VLSI circuits
5. Perovskite Solar Cells based on Titanium, Nickel and Cadmium doped BiFeO₃ active material.
6. Organic and Inorganic Dyesensitized Solar Cell
7. VLSI Circuit Design and RF VLSI
8. VLSI interconnect delay optimization.
9. CMOS MEMS integration and signal conditioning of gas sensor.
10. Porous silicon low pressure sensors
11. Study of nanocrystalline silicon, Zine Oxide TiO₂ and its application on Solar Cells and gas sensors.
12. Design and simulation of RF MEMS based capacitive switch.
13. Nano-devices and Low power VLSI circuits
14. MEMS, NEMS, RF MEMS and Gas Sensors
15. Microwave passive device
16. Antenna optimization
17. Substrate integrated waveguide
18. Microwave and millimeter wave antennas
19. Dielectric resonator antennas (DRA)
20. Antennas for 5G systems
21. Antenna Optimization
22. Digital watermarking and data security
23. Security and Cryptography
24. RFID and its applications
25. Wireless communication
26. Digital signal processing
27. Error correcting coding techniques
28. Mobile Ad-hoc networks (MANET)
29. Wireless sensor networks (WSN)
30. Organic Field effect transistor.

B) **Major Research Project:** Major Research Project of Prof. Subir Kumar Sarkar, Co-ordinator IC Design & Fabrication Centre, JU

1. Title of the project: Development of efficient solar cell structures with the exploration of suitable material in software domain and characterization of such solar cells
Role: Principal Investigator

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Funding Agency: RUSA
Amount (Rs.):4.496 lakhs+1 scholar
Status (Project completed on/ongoing): Ongoing
Duration: (2019-2020)

2. Title of the project: Cost Effective and Manpower Efficient Real-Time Implementation of RFID Based Surveillance System for Poultry Based Industry in Rural/ Urban Region to Solve the Avian Influenza/Bird Flu Problem
Role: Principal Investigator
Funding Agency:DST-WB
Amount (Rs.):15.908 lakhs+1 scholar
Status (Project completed on/ongoing): Ongoing
Duration:(2018-2020)
3. Title of the project: Analytical Modeling and Simulations of SOI/SOI MOSFETs: a Comparative Analysis to get Better Device for Next Generation Integrated circuits
Role: Principal Investigator
Funding Agency : UGC MRP-MAJOR-ELEC-2013-19144
Amount (Rs.) : 8.325 lakhs +1 scholar
Status (Project completed on/ongoing): Completed
Duration : (2016-2018)
4. Title of the project: Analytical Modeling and Simulation Based Verification for Low Dimensional Devices suitable for Low Power Application
Role : Principal Investigator
Funding Agency : UGC UPE Phase-II
Amount (Rs.) : 7.32 lakhs + 1 scholar
Status (Project completed on/ongoing) : Completed
Duration : (2016-2019)
5. Title of the project: Low Power ASIC-VLSI Implementation of Secure and Authentication Algorithms for Defence Application
Role: Principal Investigator
Funding Agency: UGC UPE Phase-II
Amount (Rs.): 7.82 lakhs +1 scholar
Status (Project completed on/ongoing):Completed
Duration:(2016-2019)
6. Title of the project: PURSE II
Role: Co-ordinator
Funding Agency: DST
Amount (Rs.):85 Lakhs
Status (Project completed on/ongoing):Completed
Duration: 2015-2018

Prof. Bhaskar Gupta

1. Title of the Project – Antenna System Design for Proximity Sensor
Funding Agency – ARDE, DRDO
Amount (Rs.) – 24.725 lakhs

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Duration – 2016-2018

Status (Completed / Ongoing) – Ongoing

2. Title of the Project – Advanced Materials and Systems (Devices and Systems Subgroup) (Jointly with Prof. S. K. Sarkar)
Funding Agency – UGC under UPE II scheme
Amount (Rs.) – 26.032 lakhs
Duration – 2016-2018
Status (Completed / Ongoing) – Ongoing
3. Title of the Project – Investigation on Electromagnetic Energy Absorption in Plants and Fruits along-with Consequent Effects
Funding Agency – JU-RUSA 2.0 Departmental support towards up-gradation in research
Amount (Rs.) – 4.99 lakhs
Duration – 2019-2020
Status (Completed / Ongoing) – Ongoing
4. Title of the Project – Propagation Channel Characterization for 5G Applications
Funding Agency – JU-RUSA 2.0 Departmental support towards up-gradation in research
Amount (Rs.) – 22.41 lakhs
Duration – 2019-2020
Status (Completed / Ongoing) – Ongoing

Dr. Sayan Chatterjee

1. Title of the Project – Design and Development of X band Dual Polarized Waveguide Slotted Array Antenna
Funding Agency – Indian Space Research Organization under RESPOND scheme
Amount (Rs.) – 20.46 lakhs
Duration – 2017–2019
Status (Completed / Ongoing) – Ongoing
2. Title of the Project – Establishment of Special Manpower Development Facility (SMDP- C2SD)
Funding Agency – MeITY, India
Amount (Rs.) – 136 lakhs
Duration – 2015–2020
Status (Completed / Ongoing) – Ongoing

Dr. Chandrima Mondal

1. Title of the Project – Establishment of Special Manpower Development Facility (SMDP- C2SD) (Jointly with Dr. Sayan Chatterjee)
Funding Agency – MeITY, India
Amount (Rs.) – 136 lakhs
Duration – 2015–2020
Status (Completed / Ongoing) – Ongoing
2. Title of the Project – Advanced Gate, Channel and Source/Drain Materials for Future Nanoelectronic Devices
Funding Agency – JU-RUSA 2.0
Amount (Rs.) –
Duration – 2019
Status (Completed / Ongoing) – Ongoing

3. A) Invited Lectures Delivered/Sessions Chaired:

Prof. Subir Kumar Sarkar, Co-ordinator IC Design & Fabrication Centre, JU
IEEE Distinguished Lectures

5. Prof. Subir Kumar Sarkar delivered an IEEE Distinguished Lecture on “Renovative and Innovative device structures suitable for ultra low power VLSI circuits”, on 1st March, 2019, in 9th IEEE EDS Mini Colloquium (MQ) organized by National Institute of Science & Technology (NIST), Berhampur, Orissa.
4. Prof. Subir Kumar Sarkar delivered an IEEE Distinguished Lecture on “Computation without Power Dissipation”, on 31st July, 2018 in IEEE EDS Distinguished Lecture organized by ED MSIT Student Branch Chapter, IEEE MSIT Student Branch, in association with the Department of Electronics and Communication Engineering, Meghnad Saha Institute of Technology, Kolkata
3. Prof. Subir Kumar Sarkar delivered an IEEE Distinguished Lecture on “Renovation and innovation in nano device structures for performance improvement”, on 31st July, 2018 in IEEE EDS Distinguished Lecture organized by ED MSIT Student Branch Chapter, IEEE MSIT Student Branch, in association with the Department of Electronics and Communication Engineering, Meghnad Saha Institute of Technology, Kolkata
2. Prof. Subir Kumar Sarkar delivered an IEEE Distinguished Lecture on “MOSFET scaling”, on 23rd July, 2018, at IEEE ED Mini Colloquium (MQ) in association with Student Branch Chapter of IEEE EDS Society organized by Department of Electronics and Communication Engineering, Kalyani Government College, Kalyani, West Bengal
1. Prof. Subir Kumar Sarkar delivered an IEEE Distinguished Lecture on “Impacts of MOSFET Device scaling”, on 10th July, 2018, in IEEE EDS Distinguished Lecture organized by Department of Electronics and Communication Engineering in association with student chapter of IEEE EDS Society organized by RCCIIT, Kolkata.

Invited Speech delivered by Prof. Subir Kumar Sarkar, Co-ordinator IC Design & Fabrication Centre, JU In India:

1. Prof. Subir Kumar Sarkar delivered an Invited speech on “Trust Management Systems for Wireless Self-Organizing Networks” in International Conference on Communication Devices and Networking (ICCDN) – 2018, organized by Department of Electronics and Communication Engineering, SMIT, Majitar, Sikkim on 03rd June, 2018
2. Prof. Subir Kumar Sarkar delivered an Invited speech as Guest Lecturer on “Scaling Approaches in MOSFET” in Nalla Narasimha Reddy Education Society, Hyderabad, Telangana, India on 26th July, 2018
3. Prof. Subir Kumar Sarkar delivered an Invited speech as Guest Lecturer on “Wireless Sensor Networks” in Nalla Narasimha Reddy Education Society, Hyderabad, Telangana, India on 26th July, 2018
4. Prof. Subir Kumar Sarkar delivered an Invited speech on “VLSI circuits design for computation without power dissipation” in JB Institute of Engineering and Technology (Autonomous) , Hyderabad, Telangana, India on 28th July, 2018
5. Prof. Subir Kumar Sarkar delivered an Invited speech on “Digital Piracy: Watermarking scheme is a Potential solution” in JB Institute of Engineering and Technology (Autonomous) , Hyderabad, Telangana, India on 28th July, 2018
6. Prof. Subir Kumar Sarkar delivered an Invited speech on “Evolutionary and Revolutionary FET Structures for Application in Efficient and Ultra Low Power VLSI Circuits” in 2018 IEEE Electron Device Kolkata Conference (EDKCON) organized by IEEE EDS Kolkata Chapter, in Pride Hotel, Kolkata on 25th November, 2018
7. Prof. Subir Kumar Sarkar delivered an Invited speech on “Industry- Institute Collaboration for the Survival: Research and product Development” in Srinix College of Engineering, Balasore , Orissa on 1st December, 2018

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8. Prof. Subir Kumar Sarkar delivered an Invited speech as Guest Lecturer on “Bridging the Gap in our knowledge on nanodevices and VLSI Design Issues” in Srinix College of Engineering, Balasore , Orissa on 1st December , 2018

In Abroad:

1. Prof. Subir Kumar Sarkar delivered an Invited seminar presentation on “Computation without power dissipation: searching possibilities” on 11th March 2019, organized by Macquarie University, Sydney, Australia
2. Prof. Subir Kumar Sarkar delivered a Guest Seminar lecture on “Trust Management system in Wireless Self-organizing networks” on 12th March 2019, organized by the School of Electrical and Data Engineering, Faculty of Engineering and IT of University of Technology Sydney, Australia.
3. Prof. Subir Kumar Sarkar delivered an Invited seminar on “Trust Management and energy efficient schemes in Wireless Self-organizing networks” on 18th March 2019, organized by the School of Computing, Engineering and Mathematics of Western Sydney University, Australia.

Tutorial talks delivered by Prof. Subir Kumar Sarkar, Co-ordinator IC Design & Fabrication Centre, Centre, JU

1. Prof. Subir Kumar Sarkar delivered an one and half hours tutorial on “Advanced VLSI Design: Issues and Challenges (Part-II)”, 23rd June 2018 in the short term course sponsored by TEQIP Phase-III in the Department of Electronics and Telecommunication Engineering, Jadavpur University.
2. Prof. Subir Kumar Sarkar delivered a one and half hours tutorial on “Advanced VLSI Design: Issues and Challenges (Part-I)” , 21st June 2018 in the short term course sponsored by TEQIP Phase-III in the Department of Electronics and Telecommunication Engineering, Jadavpur University.

Session chaired by Prof. Subir Kumar Sarkar. Co-ordinator IC Centre, JU

1. Prof. Subir Kumar Sarkar chaired the technical session on 3rd June, 2018 in International Conference on Communication Devices and Networking (ICCDN) – 2018, organized by Department of Electronics and Communication Engineering, SMIT, Majitar, Sikkim on 03rd June, 2018
2. Prof. Subir Kumar Sarkar chaired the technical session on “Circuit and Device Interactions” on 25th November, 2018 in IEEE Electron Device Kolkata Conference (EDKCON) organized by IEEE EDS Kolkata Chapter, in Pride Hotel, Kolkata

Invited Lectures of Prof. Bhaskar Gupta

1. Invited lecture at Antenna Test and Measurement Symposium, Pune, 2018.
2. Invited lecture on Electromagnetics and Antenna Design, May 23-27, 2018 at IIT, BHU.
3. Invited lecture at International Microwave and RF Conference (IMaRC) held from November 28 to 30, 2018 in Kolkata, India.]
4. Invited lecture at Microwave Integrated Circuits, Photonics and Wireless Networks (IMICPW-2019), NIT Trichy, 22-24 May 2019.
5. Invited Lecture at National Council of Education, 28th April at Kolkata.
6. Keynote speaker at “Summer School on Antenna and Microwave Engineering (SUSAME) 2018,” sponsored by TEQIP III, NIT Silchar, 23-27 July 2018.

Invited Lectures of Dr. Sayan Chatterjee

1. Delivered lecture on “Substrate Integrated Waveguide in Future Communication” in one day seminar on Revolution in Communication at Sir R N Mookerjee Hall, Institute of Engineers, Kolkata, on 11th April, 2018.
2. Delivered two lectures on “Phase Locked loop” and “Receiver Architecture” at short term course on Digital Systems and Digital Communications at Rajasthan Technical University, Kota, during June 27-29, 2018.

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3. Delivered one day lecture on “IEEE Student Activities,” organized by IEEE WIE branch chapter, NIT Shilchar, on 15th February, 2019.

Prof. Bhaskar Gupta

1. Chaired a session in 9th Annual IEEE Information Technology; Electronics and Mobile Communication Conference (IEEE IEMCON 2018) University of British Columbia, Vancouver, Canada 1st -3rd November 2018.
2. Chaired a session in MMS 2018, The 18th Mediterranean Microwave Symposium, Istanbul, Turkey from 31 October -2 November 2018.
3. Chaired a session in International Microwave and RF Conference (IMaRC) held from November 28 to 30, 2018 in Kolkata, India

Dr. Sayan Chatterjee

2. Chaired a session on “Receiver and Transmitter Components, RF MEMS and Microsystems” on 30th November in IEEE International Microwave and RF conference (IMaRC-2018) in Kolkata, India.
1. Chaired a session on “MWCD-3” on 31st October, 2018 in IEEE MMS- 2018 in Istanbul, Turkey.

Prof. Sudipta Chattopadhyay

1. Delivered a lecture on “The Journey of IEEE Women in Engineering” at the inauguration ceremony of the Women in Engineering Student Branch, Assam, on February 15, 2019.
2. Delivered a lecture on “Binary Sequences in Spread Spectrum Multiple Access Communication” at faculty development program on Analog and Digital Communication System at Tripura Institute of Technology, Agartala, during December 05-07, 2018.
3. Delivered a lecture on “Binary Sequences in Spread Spectrum Multiple Access Communication” at short term course on Digital Systems and Digital Communications at Rajasthan Technical University, Kota, during June 27-29, 2018.

B) Seminar/Workshop/Conference/Symposium Attended:

Prof. Subir Kumar Sarkar, Co-ordinator IC Design & Fabrication Centre, JU

In India:

1. Prof. Subir Kumar Sarkar attended as Chairperson of the technical session in International Conference on Communication Devices and Networking (ICCDN) – 2018, on 3rd June, 2018, organized by Department of Electronics and Communication Engineering, SMIT, Majitar, Sikkim on 3rd June, 2018
2. Prof. Subir Kumar Sarkar attended as Chairperson of the technical session on “Circuit and Device Interactions” on 25th November, 2018 in IEEE Electron Device Kolkata Conference (EDKCON) organized by IEEE EDS Kolkata Chapter, in Pride Hotel, Kolkata
3. Prof. Subir Kumar Sarkar attended as invited speaker in International Conference on Communication Devices and Networking (ICCDN) – 2018 to deliver an invited speech on “Trust Management Systems for Wireless Self-Organizing Networks”, organized by Department of Electronics and Communication Engineering, SMIT, Majitar, Sikkim on 03rd June, 2018
4. Prof. Subir Kumar Sarkar attended as Guest Lecturer to deliver invited speech “Scaling Approaches in MOSFET” in Nalla Narasimha Reddy Education Society, Hyderabad, Telangana, India on 26th July, 2018
5. Prof. Subir Kumar Sarkar attended as Guest Lecturer to deliver invited speech on “Wireless Sensor Networks” in Nalla Narasimha Reddy Education Society, Hyderabad, Telangana, India on 26th July, 2018
6. Prof. Subir Kumar Sarkar attended as invited speaker to deliver an invited speech on “VLSI circuits design for computation without power dissipation” in JB Institute of Engineering and Technology (Autonomous), Hyderabad, Telangana, India on 28th July, 2018
7. Prof. Subir Kumar Sarkar attended as invited speaker to deliver an invited speech on “Digital Piracy : Watermarking scheme is a Potential solution” in JB Institute of Engineering and Technology (Autonomous), Hyderabad, Telangana, India on 28th July, 2018

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8. Prof. Subir Kumar Sarkar attended as Invited speaker in 2018 IEEE Electron Device Kolkata Conference (EDKCON) to deliver invited talk on “Evolutionary and Revolutionary FET Structures for Application in Efficient and Ultra Low Power VLSI Circuits” organized by IEEE EDS Kolkata Chapter, in Pride Hotel, Kolkata on 25th November, 2018
9. Prof. Subir Kumar Sarkar attended as Invited speaker on “Industry- Institute Collaboration for the Survival: Research and product Development” in Srinix College of Engineering, Balasore, Orissa on 1st December, 2018
10. Prof. Subir Kumar Sarkar attended as Guest Lecturer on “Bridging the Gap in our knowledge on nanodevices and VLSI Design Issues” in Srinix College of Engineering, Balasore, Orissa on 1st December, 2018

In Abroad:

1. Prof. Subir Kumar Sarkar attended a seminar as invited speaker to deliver presentation on “Computation without power dissipation: searching possibilities” on 11th March 2019, organized by Macquarie University, Sydney, Australia.
2. Prof. Subir Kumar Sarkar attended a seminar as Guest Lecturer to deliver lecture on “Trust Management system in Wireless Self-organizing networks” on 12th March 2019, organized by the School of Electrical and Data Engineering, Faculty of Engineering and IT of University of Technology Sydney, Australia.
3. Prof. Subir Kumar Sarkar attended a seminar as invited speaker on “Trust Management and energy efficient schemes in Wireless Self-organizing networks” on 18th March 2019, organized by the School of Computing, Engineering and Mathematics of Western Sydney University, Australia.

Prof. Bhaskar Gupta

1. Keynote Speaker at “Summer School on Antenna and Microwave Engineering (SUSAME) 2018”, sponsored by TEQIP III, NIT Silchar, 23-27 July 2018.
2. Advanced School of Antennas, Lecture on “Antenna Array Synthesis”, KIIT Bhubaneswar, 22-26 June 2018.

Dr. Sayan Chatterjee

1. Attended “DAAD Falling Walls Lab” at Gandhi Bhavan, Jadavpur University on 7th April, 2018. Sponsored jointly by TEQIP-III, Jadavpur University, DAAD - German Academic Exchange Service and DWIH - German House for Research and Innovation New Delhi.
2. Attended “One Day Workshop on Entrepreneurship Development Centre Network (EDCN)” at IIM Kolkata on 23rd April, 2018.
3. Participated in “In-class Entrepreneurship Faculty Development Program” in Jadavpur University from 30th July to 7th August 2018 sponsored by Wadhvani Foundation and technically sponsored by TEQIP-III, JU.
4. Participated in IEEE Region 10 Student Young Professional WIE Congress 2018 in Bali, Indonesia from 30th August to 2nd September, 2018.

Prof. Sudipta Chattopadhyay

All India Student – YP –WIE Congress (AISYWC’18) and presented the activity report of IEEE WIE Kolkata Section in the WIE Track held at Vidya Vikas Institute of Engineering and Technology, Mysore during September 28 - 30, 2018.

C) Seminar/Workshop/Conference/Symposium Organized:

Prof. Subir Kumar Sarkar Organized a short term course on “Fabrication of Microelectronic Devices for VLSI Circuits and MEMS Based Sensors” during 21st -23rd June, 2018 sponsored by TEQIP Phase-III in the Department of Electronics and Telecommunication Engineering, Jadavpur University

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Prof. Bhaskar Gupta

Organized a short term course on “Engineered Materials for Future Electromagnetic Research and Antenna Applications” at Department of Electronics and Telecommunication Engineering, Jadavpur University, during February 6-9, 2019, sponsored by TEQIP Phase III (A Twinning Programme).

Dr. Sayan Chatterjee

1. Organized “E-summit” at Jadavpur University from 6th April to 8th April, 2018 in collaboration with TEQIP-III, JU and Entrepreneur Cell, JU.
2. Financial Co-Chair of IMARC-2018 at Kolkata.
3. Technical Programme Committee Co-Chair of IEEE R-10 annual conference TENSYP-2019 at Kolkata.

Prof. Sudipta Chattopadhyay

1. Organized a one-day computer literacy program on “Computer is Fun” in collaboration with IEST Shibpur, held at Begum Rokeya Sabhaghar, 3rd Floor, Main Building, HSS Department, IEST Shibpur, on August 11, 2018, under the banner of IEEE Women in Engineering, Kolkata Section.
2. Organized one-day workshop on “Fundamentals of MATLAB”, held at Digital Signal Processing Laboratory, Dept. of ETCE, Jadavpur University, on June 25, 2018, as under the banner of IEEE Women in Engineering, Kolkata Section.
3. Organized the one-day workshop on “Application of MATLAB in Signal Processing”, held at Digital Signal Processing Laboratory, Dept. of ETCE, Jadavpur University on April 06, 2018, under the banner of IEEE Women in Engineering, Kolkata Section.

Dr. Chandrima Mondal

Local Executive Member of 5th International Conference on Microelectronics, Circuits and Systems held on 19th and 20th May, 2018, in Bhubaneswar, Odisha, India.

D) Orientation Courses/Refresher Courses Attended: (Name of the teachers, Title of the Course, Duration Place)

Prof. Bhaskar Gupta

Advanced School of Antennas, Lecture on “Antenna Array Synthesis”, KIIT Bhubaneswar, 22-26 June 2018.

“Summer School on Antenna and Microwave Engineering (SUSAME) 2018”, sponsored by TEQIP III, NIT Silchar, 23-27 July 2018.

4. A) Books/Monographs etc. Published:(Name of the Teacher, Name of the Book, Name of the Publisher)

Prof. Subir Kumar Sarkar, Co-ordinator IC Design & Fabrication Centre, JU, Book Chapter:

Bijoy Goswami, Disha Bhattacharjee, Dinesh Kumar Dash, Ayan Bhattacharya and Subir Kumar Sarkar, *Drain Doping Engineering and its influence on Device Output Characteristics and Ambipolar Conduction on a Splitted-Drain TFET model* International Conference in Communication, Devices and Networking (ICCDN 2018), Sikkim Manipal Institute of Technology, Sikkim, 2-3rd June 2018. Published as book chapter in *Advances in Communication, Devices and Networking in Lecture Notes in Electrical Engineering*, pp-21-27, Vol.537, 978-981-13-3450-4

Prof. Bhaskar Gupta

Gandhi's thoughts on Pakistan (In Press)

Ekok Matra Magazine “Amar Gandhi Darshan” January 2019 issue.

Prof. Sudipta Chattopadhyay

Subhabrata Banerjee, Sudipta Chattopadhyay, "A Novel Modified Ant Lion Optimizer Algorithm: Extension to Proposed 4D-TC", Chapter 6, *Swarm Intelligence*, vol. 2: Innovation, New Algorithms and Methods, 2018, IET, ISBN 978-1-78651-629-7, pp. 145-184, 2018.

B) Articles Published in Journals:

Prof. Subir Kumar Sarkar, Co-ordinator IC Design & Fabrication Centre, JU

JOURNAL

- 1) Arpita Ghosh and Subir Kumar Sarkar, "Improved Small-Signal Model of Single-Electron Transistor," in *IEEE Transactions on Nanotechnology*, vol. 17, no. 6, pp. 1244-1251, Nov. 2018. doi: 10.1109/TNANO.2018.2871690
- 2) Anup Dey, Bikram Biswas, and Subir Kumar Sarkar, "Fabrication of Au-Modified Mixed Metal Oxide Methane Gas Sensor and Experimentation for Better Performance", *Sensor Letters, ASP*, Vol. 17, No.2, pp-250-255, March 2019
- 3) Dinesh Kumar Dash, Priyanka Saha, Aman Mahajan, Tripty Kumari and Subir Kumar Sarkar, "3D Analytical Modeling and Electrical Characteristics Analysis of Gate Engineered SiO₂/HfO₂ stacked Trigate TFET", *Indian Journal of Physics*, Springer, DOI: 10.1007/s12648-019-01446-2, March 2019
- 4) Priyanka Saha, Saheli Sarkhel and Subir Kumar Sarkar, "Two-Dimensional Potential and Threshold Voltage Modeling of Work Function Engineered Double Gate High-k Gate Stack Schottky Barrier MOSFET", *Journal of Electronic Materials*, Springer, doi.org/10.1007/s11664-019-07133-6, March 2019
- 5) Pritha Banerjee and Subir Kumar Sarkar, "Performance Analysis and Investigation of Subthreshold Short-Channel Behavior of a Dual-Material Elliptical Gate-All-Around MOSFET", doi.org/10.1007/s11664-019-07082-0, *Journal of Electronic Materials*, Springer, March 2019
- 6) Pritha Banerjee and Subir Kumar Sarkar, "Analysis of short channel characteristics in Graded Channel Dual-Material Elliptical Gate-All-Around (GC DM EGAA) MOSFET", DOI: 10.1088/1361-6641/aafc86, *Semiconductor Science and Technology*, IOP, January 2019
- 7) Tapas Chakrabarti, Abir Jana, Komal Kumari and Subir Kumar Sarkar, "Dye-Sensitized Solar Cells using Natural Pigments", *International Journal of Innovations in Engineering and Technology (IJJET)*, Volume 12 Issue 2 January 2019
- 8) Komal Kumari, Tapas Chakrabarti, Abir Jana, Disha Bhattachartjee, Bhaskar Gupta and Subir Kumar Sarkar, "Comparative Study on Perovskite Solar Cells based on Titanium, Nickel and Cadmium doped BiFeO₃ active material", *Optical Materials*, Elsevier, Vol. 84, pp.681-688, August 2018
- 9) Pritha Banerjee and Subir Kumar Sarkar, "Modeling and Analysis of a Front High-k gate stack Dual-Material Tri-gate Schottky Barrier Silicon-on-Insulator MOSFET with a dual-material bottom gate", DOI: 10.1007/s12633-018-9940-y, *Silicon*, Springer, August 2018
- 10) Priyanka Saha and Subir Kumar Sarkar, "Threshold Voltage Modeling of Linearly Graded Binary Metal Alloy Gate Electrode with DP MOSFET", *IETE Journal of Research*, Taylor & Francis, DOI 0.1080/03772063.2018.1508374, August 2018
- 11) Priyanka Saha and Subir Kumar Sarkar, "Exploring the Threshold Voltage Characteristics and Short Channel Behavior of Gate Engineered Front Gate Stack MOSFET with Graded Channel", *Silicon*, Springer, DOI 10.1007/s12633-018-9950-9, pp-1-8, August 2018
- 12) Tapas Chakrabarti, Anup Dey and Subir Kumar Sarkar, "Comparative analysis of Physical Organic and Inorganic Dyesensitized Solar Cell", *Optical Materials*, Elsevier, Volume 82, Pages 141-146, August 2018
- 13) Tapas Chakrabarti and Subir Kumar Sarkar, "Analytically Performance Study of Newly Modelled HIT solar cell with different materials", *International Journal of Latest Technology in Engineering, Management & Applied Science (IJLTEMAS)*, Volume VII, Issue IV, April 2018, ISSN 2278-2540.

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- 14) Tiya Dey Malakar, Partha Bhattacharyya and Subir Kumar Sarkar, "Study of device parameters for work function engineered gate recessed S/D SOI MOSFET incorporating quantum mechanical effects" *Microsystem Technologies*, (DOI. 10.1007/s00542-018-3904-4), April 2018
- 15) Sanjeev Narayan Bal, Manas Ranjan Nayak and Subir Kumar Sarkar, "On the implementation of a secured watermarking mechanism based on cryptography and bit pairs matching", *Journal of King Saud University – Computer and Information Sciences*, Elsevier, April 2018

Prof. Bhaskar Gupta

- 1] Suman Pradhan, and Bhaskar Gupta, "Multiport network model of double-stub loaded microstrip ring antenna for tri-band operation," *Radio Engineering Journal*, accepted for publication.
- 2] Sudipta Maity, Malay Gangopadhyaya, and Bhaskar Gupta, "Theory and experiment on horizontally inhomogeneous rectangular microstrip antenna," *IET Microwaves Antennas & Propagation*, vol. 13, no. 3, February 2019, pp. 352-359.
- 3] Buddhadev Pradhan, and Bhaskar Gupta, "A miniaturized band-reject filter using metamaterial structures on silicon substrate for X-band application," *IETE Journal of Research*, accepted for publication in Nov. 2018.
- 4] "45°–45°–90° Triangular Dielectric Resonator Antenna with Broadside Radiation Patterns," by Sudipta Maity, Malay Gangopadhyaya and Bhaskar Gupta, *AEÜ International Journal of Electronics and Communications*, vol. 94, pp. 51–54, Sept. 2018 .
- 5] Sudipta Maity, Rinki Ghosal, Malay Ganguly, and Bhaskar Gupta, "The complete model chart of cylindrical dielectric waveguide," *IET Electronic Letters*, vol. 54, no. 19, Sept. 2018.
- 6] Kaushik Patra, Sayantan Dhar, and Bhaskar Gupta, "Analysis of arbitrarily curved microstrip lines for radiated emission," *IEEE Transactions on Electromagnetic Compatibility*, vol. 60, no. 3, June 2018, pp. 572-579.
- 7] R. P. Ghosh, K. Patra, B. Gupta, and A. K. Chowdhury, "Accurate formula to determine resonant frequency of double sided printed dipole antenna," *IETE Journal of Research*, vol. 64, no. 3, May 2018, pp. 331-336.
- 8] Sudipta Maity, and Bhaskar Gupta, "Approximate theoretical investigations on isosceles triangular dielectric resonator antennas and experimental validation," *IEEE Transactions on Antennas and Propagation*, vol. 66, May 2018, pp. 2640-2643.

Dr. Sayan Chatterjee

- 1] Sourav Das Chowdhury, Subrata Manna, Sayan Chatterjee, Ranjan Sen, and Mrinmay Pal, "Mega-Hertz repetition rate broadband nano-second pulses from an actively mode-locked Yb-fiber laser," *Laser Phys*, vol. 29, 12th February, 2019, pp. 1-5.
- 2] Sourav Das Chowdhury, Atasi Pal, Sayan Chatterjee, Ranjan Sen, and Mrinmay Pal, "Multipulse dynamics of dissipative solution resonance in an all-normal dispersion mode locked fiber laser", *IEEE/OSA Journal of Lightwave Technology*, vol. 36, no. 24, December 15, 2018, pp. 5773- 5779.

Prof. Sudipta Chattopadhyay

- 1] Prabhat Kumar Panda, and Sudipta Chattopadhyay, "A modified PKM environment for the security enhancement of IEEE 102.16E," *Computer Standards and Interfaces, Elsevier*, vol. 61, 2018, pp. 107-120.
- 2] Prabhat Kumar Panda, and Sudipta Chattopadhyay, "An improved authentication and security scheme for LTE/LTE-A networks," *Journal of Ambient Intelligence and Humanized Computing, Springer*, vol. 61, 2018, pp. 1-23.

Dr. Chandrima Mondal

- 1] Jayanti Paul, Chandrima Mondal, and Abhijit Biswas, "Enhancing digital performance of nanoscale GeOI MOSFETs through optimization of buried oxide properties and channel thickness," *Microsystem Technologies, Springer*, vol. 1, September 2018, pp. 1–7.

CONFERENCE:

Prof. Subir Kumar Sarkar, Co-ordinator IC Design & Fabrication Centre, JU

- 1) Bijoy Goswami, Debadipta Basak, Ayan Bhattacharya, Sutanni Bhowmick, Koelgeet Kaur and Subir Kumar Sarkar, “Analytical Modeling and Simulation of Low Power Salient Source Double Gate TFET”, in 3rd International Conference, 2019 Devices for Integrated Circuits (DevIC), Kalyani Government Engineering College, West Bengal, India, March 23rd-24th, 2019.
- 2) Pritha Banerjee, Priyanka Saha, Dinesh Kumar Dash and Subir Kumar Sarkar, “Surface potential based Analytical Modeling of Graded Channel Strained High-k Gate stack Dual-Material Double Gate MOSFET” in 3rd International Conference, 2019 Devices for Integrated Circuits (DevIC), Kalyani Government Engineering College, West Bengal, India, March 23rd-24th, 2019.
- 3) Savio Sengupta, Dipanjan Sen, Subhashis Roy, Sudhabindu Ray and Subir Kumar Sarkar, “Analysis of Four-Stage Charge Pump Circuit for UHF RFID Tag Design” in 3rd International Conference, 2019 Devices for Integrated Circuits (DevIC), Kalyani Government Engineering College, West Bengal, India, March 23rd-24th, 2019.
- 4) Priyanka Saha, Pritha Banerjee, Dinesh Kumar Dash and Subir Kumar Sarkar, “Impact of trapped interface charges on short channel characteristics of WFE high-K SOI MOSFET” in 3rd International Conference, 2019 Devices for Integrated Circuits (DevIC), Kalyani Government Engineering College, West Bengal, India, March 23rd-24th, 2019.
- 5) Dipanjan Sen, Savio Jay Sengupta, Subhashis Roy, Sudhabindu Ray and Subir Kumar Sarkar, “Impact Analysis of Dual Material Double Gate Oxide Stack Junction-Less MOSFET in RFID Memory Cell Realisation” in 3rd International Conference, 2019 Devices for Integrated Circuits (DevIC), Kalyani Government Engineering College, West Bengal, India, March 23rd-24th, 2019.
- 6) Saptarshi Biswas, Subhrapratim Nath, Jamuna Kanta Sing and Subir Kumar Sarkar, “Storing Digital Data in Nucleic Acid Memory with Extended Genetic Alphabet” in 3rd International Conference, 2019 Devices for Integrated Circuits (DevIC), Kalyani Government Engineering College, West Bengal, India, March 23rd-24th, 2019.
- 7) Bikram Biswas, Anup Dey, Subhashis Roy, Sudhabindu Ray and Subir Kumar Sarkar, “Pd Doped TiO₂ – CuO Mixed Metal Oxide Thin Film Sensor for H₂ Sensing Application” in 3rd International Conference, 2019 Devices for Integrated Circuits (DevIC), Kalyani Government Engineering College, West Bengal, India, March 23rd-24th, 2019.
- 8) Savio Jay Sengupta, Dipanjan Sen, Subhashis Roy, Bikram Biswas, Sudhabindu Ray and Subir Kumar Sarkar, “A Novel Approach for RFID Based Distributed Security against Physical Access of University Data” International Conference in Recent Trends on Electronics And Computer Science (ICRTECS) , NIT Silchar, Assam, India. March 18-19, 2019.
- 9) Goutika Paul, Bijoy Goswami and Subir Kumar Sarkar, “H-Shaped Double Gate Tunnel FET For Low Power Applications”, in International conference on Recent Trends in Electronics & Computer Science (ICRTECS-2019) National Institute of Technology(NIT) Silchar, Assam, India. March 18-19, 2019.
- 10) Mandira Biswas, Goutika Paul, Bijoy Goswami and Subir Kumar Sarkar, “PPV Based Bottom Gate Organic Field Effect Transistor (BGOFET)”, in International conference on Recent Trends in Electronics & Computer Science (ICRTECS-2019) National Institute of Technology(NIT) Silchar, Assam, India. March 18-19, 2019.
- 11) Bijoy Goswami, Sutanni Bhowmick, Arindam Haldar, Debadipta Basak, Goutika Paul and Subir Kumar Sarkar, “Implementation of L-shaped Double Metal Dual Gate TFET towards Improved Performance Characteristics and Reduced Ambipolarity” in Information, Photonics and Communication 2019 (IPC’19) 1st-3rd February, 2019, organized by Department of Electronics and Communication Engineering in association with SPIE Student Chapter, B. P. Poddar Institute of Management and Technology (BPPIMT), Kolkata (WIE Best Student/Research Scholar Paper Awarded)

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- 12) Pritha Banerjee, Priyanka Saha, Dinesh Kumar Dash, Ankush Ghosh and Subir Kumar Sarkar, “Analytical Modeling and Performance Analysis of Graded Channel Strained Dual-Material Double Gate MOSFET”, 4th International Conference on Computing Communication and Automation 2018 (ICCCA 2018), 14th-15th December, 2019, organized by IEEE UP Section, 14th-15th December, 2018, Galgotias University, Greater Noida, NCR-New Delhi, India.
- 13) Sudipta Ghosh, Subhrapratim Nath, Rajarshi Biswas, P Venkateswaran, Jamuna Kanta Sing and Subir Kumar Sarkar, “PSO Variants and Its comparison with Firefly Algorithm in solving VLSI Global Routing Problem” in 2018 IEEE Electron Device Kolkata Conference (EDKCON), 24-25th November 2018, organized by IEEE EDS Kolkata Chapter, in Pride Hotel, Kolkata
- 14) Anup Dey, Bikram Biswas and Subir Kumar Sarkar, “Comparative Study of Unmodified WO₃-ZnO and Au-Modified WO₃-ZnO Based thin film Sensor Fabrication for Enhanced CH₄ Gas Sensing Performance” in 2018 IEEE Electron Device Kolkata Conference (EDKCON), 24-25th November 2018, organized by IEEE EDS Kolkata Chapter, in Pride Hotel, Kolkata
- 15) Priyanka Saha, Pritha Banerjee, Dinesh Kumar Dash and Subir Kumar Sarkar, “Modeling short channel behavior of proposed Work Function Engineered High-k gate stack DG MOSFET with vertical Gaussian doping”, in 2018 IEEE Electron Device Kolkata Conference (EDKCON), 24-25th November 2018, organized by IEEE EDS Kolkata Chapter, in Pride Hotel, Kolkata
- 16) Ayan Bhattacharya, Debadipta Basak, S. Reddy and Subir Kumar Sarkar “Impact of Source Engineering in Split Drain Tunnel Field Effect Transistor” in 2018 IEEE Electron Device Kolkata Conference (EDKCON), 24-25th November 2018, organized by IEEE EDS Kolkata Chapter, in Pride Hotel, Kolkata
- 17) Bikram Biswas, Sutanni Bhowmick, Mandira Biswas, Subhashis Roy, Anup Dey and Subir Kumar Sarkar, “IoT-Based Smart Heart-Health Monitoring System”, in IEEE-International Conference on New Trends in Engineering & Technology (ICNTET), Chennai, India, 7-8th September 2018
- 18) Saheli Sarkhel, Priyanka Saha, Pritha Banerjee and Subir Kumar Sarkar, “Two Dimensional Analytical Modeling based Threshold Voltage Characteristics of Proposed Linearly Graded Work Function Engineered Gate all around SB MOSFET” in IEEE International Conference on Computing, Power and Communication Technologies (GUCON) 2018, 28th-29th September, 2018, Greater Noida, Uttar Pradesh, India
- 19) Pritha Banerjee, Priyanka Saha, Dinesh Kumar Dash and Subir Kumar Sarkar, “A Study of Short Channel Performance of Dual Material strained silicon Trigate (DM Strained-Si TG) SOI MOSFET”, in IEEE International Conference on Computing, Power and Communication Technologies (GUCON) 2018, 28th-29th September, 2018, Greater Noida, Uttar Pradesh, India
- 20) Dinesh Kumar Dash, Priyanka Saha, Pritha Banerjee and Subir Kumar Sarkar, “Analytical Modeling of Graded Metal Graded Dielectric Silicon-On-Nothing TFET – A Comparative Study” in IEEE International Conference on Computing, Power and Communication Technologies (GUCON) 2018, 28th-29th September, 2018, Greater Noida, Uttar Pradesh, India. Best Paper Awarded
- 21) Tapas Chakrabarti and Subir Kumar Sarkar, “Impact of Small AC Signal Superimposed on DC bias on the Performance of Nanoscale SON MOSFETs” International Conference On Recent Innovations In Electrical, Electronics & Communication Engineering – (ICRIEECE-2018) at Kalinga Institute of Industrial Technology, 27 Jul – 28 Jul 2018, Bhubaneswar.
- 22) Disha Bhattacharjee, Bijoy Goswami, Dinesh Kumar Dash, Ayan Bhattacharya and Subir Kumar Sarkar, “Influence of Drain Doping Engineering in Triple Splitted-Drain TFET model”, IEEE International Conference on Recent Innovations in Electrical, Electronics & Communication Engineering (ICRIEECE), Kalinga Institute of Industrial Technology (KIIT), Bhubaneswar, 27-28th, July 2018
- 23) Prasenjit Saha, Bijoy Goswami and Subir Kumar Sarkar, “Design and Simulation of a moduled MOSFET having a Doped Pocket Region in the Substrate “IEEE International Conference on Recent innovations in Electrical, Electronics & Communication Engineering – ICRIEECE”, School of Electrical Engineering, Kalinga institute of Industrial Technology (KIIT), Bhubaneswar, India, July 27th and 28th 2018.

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- 24) Subhadeep Koley, Manas Ranjan Nayak and Subir Kumar Sarkar, "On Implementation of a Feature Adaptive Colour Image Copyright Protection Scheme", International Conference on Communication Devices and Networking (ICCDN) 2018, Sikkim Manipal Institute of Technology, Majhitara, Sikkim, 2nd -3rd June, 2018
- 25) Bijoy Goswami, Disha Bhattacharjee, Dinesh Kumar Dash, Ayan Bhattacharya and Subir Kumar Sarkar "Demonstration of T-shaped channel Tunnel Field-Effect Transistors" 2nd IEEE International Conference on Electronics, Materials Engineering and Nano-Technology (IEMEN Tech 2018), IEM Gurukul Campus, Kolkata, West Bengal, 4-5th May 2018.

Prof. Bhaskar Gupta

- 1) Arka Bhattacharyya, and Bhaskar Gupta, "On the size reduction of slotted finite ground plane of a circularly polarized microstrip patch antenna using substructure characteristic modes," in the 13th European Conference on Antennas and Propagation 2019 (EuCAP 2019), Krakow, Poland.
- 2) Arka Bhattacharyya, and Bhaskar Gupta, "Circularly polarized annular slot antenna design on deformed ground plane with top loading using characteristic modes," in the 13th European Conference on Antennas and Propagation 2019 (EuCAP 2019), Krakow, Poland.
- 3) Sayan Sarkar, and Bhaskar Gupta, "Characteristic mode analysis of a few symmetric English alphabet shaped antennas," in URSI Asia Pacific Radio Science Conference, New Delhi, India, 9-15 March, 2019.
- 4) Suman Pradhan, and Bhaskar Gupta, "Wideband circularly polarized microstrip antenna with enhanced beamwidth," in URSI Asia Pacific Radio Science Conference, New Delhi, India, 9-15 March, 2019.
- 5) Suman Pradhan, and Bhaskar Gupta, "Estimation of ground footprint for airborne antenna systems," in URSI Asia Pacific Radio Science Conference, New Delhi, India, 9-15 March, 2019.
- 6) Sayan Sarkar, Amartya Banerjee, and Bhaskar Gupta, "A balanced feed triple frequency patch loaded printed dipole antenna for WiMAX/WLAN applications," in IEEE International RF & Microwave Conference, Penang, December, 2018
- 7) R. Ghosal, and B. Gupta, "Design of dual wide band dielectric resonator antenna using Sierpienski fractal geometry," in 2018 18th Mediterranean Microwave Symposium (MMS), Istanbul, 2018, pp. 75-78.
- 8) A. Kundu, and B. Gupta, "Inconsistency in worldwide radio frequency exposure guidelines with reference to specific absorption rate measurement protocol," in National Conference on Engineering & Technology for Rebuilding India, at CSIR-Central Glass & Ceramic Research Institute, Kolkata, India, June 2018.

Dr. Sayan Chatterjee

- 1] Moumita Das, Posiba Mostafa, and Sayan Chatterjee, "A comparison study of on-chip and optimized gate inductor of an LNA," in 2nd International conference on Innovations in Electronics, Signal processing and Communication (IESC- 2019), March 2019.
- 2] Shrabanti Das, and Sayan Chatterjee, "Performance comparison of 2.5GHz LC voltage controlled oscillator for three different technology nodes," in 3rd International conference on Devices for Integrated Circuit (DevIC) 2019, March 2019.
- 3] Posiba Mostafa, and Sayan Chatterjee, "A ditherless 2.4 GHz high resolution LCDCO," in 2nd International conference on Innovations in Electronics, Signal processing and Communication (IESC- 2019), March 2019.
- 4] Swarup Dandapat, and Sayan Chatterjee, "Low phase noise 2.45 GHz LCVCO based on current reuse technique in 180nm CMOS technology," in 2nd International conference on Innovations in Electronics, Signal processing and Communication (IESC- 2019), March 2019.
- 5] Souma Guha Mallick, G. Arun Kumar, Sayan Chatterjee, Bijit Biswas, and D. R. Poddar, "Transitions from SIW to various transmission lines for substrate integrated circuits," in 2019 URSI Asia-Pacific Radio Science Conference (AP-RASC), New Delhi, India, 2019.

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- 6] Arindam Ray, Soumyo Chatterjee, and Sayan Chatterjee, "Pattern synthesis of non-uniformly excited circular array using differential evolution algorithm," in International Microwave and RF conference (IMaRC-2018), 28th November-30th November, 2018, Kolkata, India.
- 7] Baisakhi Bandyopadhyay, Amartya Banerjee, Sayan Chatterjee, and Arijit Majumder, "Dual band edge wall slotted array antenna with reduced cross polarization at X-band," in Mediterranean Microwave Symposium, Istanbul, November, 2018.
- 8] T. K. Das, Sayan Chatterjee, "Multispurious harmonic suppression in compact coupled-line bandpass filters by trapezoidal corrugations", in 18th Mediterranean Microwave Symposium (MMS), 31st October -2nd November 2018, Istanbul, Turkey.

Prof. Sudipta Chattopadhyay

- 1] P. K. Panda and S. Chattopadhyay, "An enhanced authentication and secure key agreement scheme for LTE networks", in IEEE International Conference on Contemporary Computing and Information, October 10 – 12, 2018, Delhi, India.
- 2] Chandrima Thakur and Sudipta Chattopadhyay, "A novel interference-aided energy harvesting scheme for cooperative network", in The IEEE Region 10 Symposium TENSYPMP 2019, June 07 – 09, 2019, Kolkata, India.

5. Collaborative Programmes:

Collaborative Programmes of Prof. Subir Kumar Sarkar, Co-ordinator IC Centre, JU

- 1) Prof. Subir Kumar Sarkar has collaborative research activities in the field of Spintronics with Prof. Supriyo Bandyopadhyay of Virginia Commonwealth University, USA.
- 2) Prof. Subir Kumar Sarkar is presently continuing collaborative research activities in nanodevices with Dr. Partha Bhattacharya of Indian Institute of Engineering Science and Technology, Shibpur (former BESU).
- 3) Prof. Subir Kumar Sarkar is presently continuing collaborative research work with Dr. Ashish Kumar De and Prof. B. Maji of National Institute of Technology, Durgapur.
- 4) Prof. Subir Kumar Sarkar is presently continuing collaborative research activities with Mr. Pranab Kishore Dutta and Mr. Swanirbhar Majumder of North Eastern Regional Institute of Science and Technology (NERIST).
- 5) Prof. Subir Kumar Sarkar is presently continuing collaborative research activities with Dr. N. B. Singh of Manipur Institute of Technology.

Prof. Bhaskar Gupta

- 1) National Symposium/ Workshop on "Applications of Engineering and Technology towards Sustainable Growth" (The Event is a curtain-raiser of World Environment Day Programme) in collaboration with Vivekananda Institute of Environment & Management held on 4th June, 2019

6. Major Achievements:

Major Achievements of Prof. Subir Kumar Sarkar, Co-ordinator IC Design & Fabrication Centre, JU

- 1) Prof. Subir Kumar Sarkar has been selected as IEEE Electron Device Society Distinguished Lecturer (Region 10).
- 2) Prof. Subir Kumar Sarkar has guided 54 PhD scholars and PG thesis of 86 M.E/M.Tech students. Presently, 8 more scholars have been registered for PhD.
- 3) Prof. Subir Kumar Sarkar has been invited several times as one of the expert members in various National Level Accreditation Board.

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Prof. Subir Kumar Sarkar has 3 foreign Invitation being invited by :

- 1) School of Computing, Engineering and Mathematics of Western Sydney University, Australia to deliver an invited speech in a seminar on 18th March 2019
- 2) School of Electrical and Data Engineering, Faculty of Engineering and IT of University of Technology Sydney, Australia to deliver a guest seminar lecture on 12th March 2019
- 3) Macquarie University, Sydney, Australia to deliver seminar presentation on 11th March 2019

Best Paper Awards :

- 1) Sutanni Bhowmick, M.Tech student, under the supervision of Prof. Subir Kumar Sarkar, has been awarded Best Paper Award for the paper entitled, "Implementation of L-shaped Double Metal Dual Gate TFET towards Improved Performance Characteristics and Reduced Ambipolarity" in Information, Photonics and Communication 2019 (IPC'19) 1st-3rd February, 2019, organized by Department of Electronics and Communication Engineering in association with SPIE Student Chapter, B. P. Poddar Institute of Management and Technology (BPPIMT), Kolkata (WIE Best Student/Research Scholar Paper Awarded)
- 2) Dinesh Kumar Dash, PhD Research Scholar (QIP Engg.) under the supervision of Prof. Subir Kumar Sarkar, has been awarded Best Paper Award for the paper entitled "Analytical Modeling of Graded Metal Graded Dielectric Silicon-On-Nothing TFET –A Comparative Study" in IEEE International Conference on Computing, Power and Communication Technologies (GUCON) 2018, 28th-29th September, 2018, Greater Noida, Uttar Pradesh, India.

PhD guidance:

Ph.D. awarded or submitted (April 2018 to March 2019)

Seven Research Scholars have been awarded PhD and two Research Scholars have submitted PhD theses under the guidance of Prof. Subir Kumar Sarkar in the duration 2018-2019 with the following details:-

(Name of the Research Scholar–Name of the Guide–Title of the PhD thesis–Present Status)

Dr. Khomdram Jolson Singh–Prof. Subir Kumar Sarkar–Modeling Approach and Simulation of High Performance and Cost Efficient Solar Cell–Awarded

Dr. Kousik Naskar–Prof. Subir Kumar Sarkar–To Study Power Efficient Low Dimensional Devices and VLSI Circuits Suitable for Wireless Mobile Communication–Awarded

Dr. Tapas Chakrabarti–Prof. Subir Kumar Sarkar–Modelling and Simulation of Efficient Nano-scale MOSFET and Photovoltaic Devices–Awarded

Dr. Saheli Sarkhel–Prof. Subir Kumar Sarkar–Exploring the novel characteristics of hetero-material gate Field Effect Transistors–Awarded

Dr. Arpita Ghosh–Prof. Subir Kumar Sarkar–Nanodevices and their application in circuits with emphasis on circuit reliability and stability–Awarded

Dr. Anup Sarkar–Prof. Subir Kumar Sarkar–Performance Improvement of low dimensional devices and explore some of their applications–Awarded

Dr. Tiya Dey Malakar–Prof. Subir Kumar Sarkar–Analytical Modeling and characterization of nano MOSFET Structures for better future devices–Awarded

Mr. Subhashis Roy–Prof. Subir Kumar Sarkar–Design and Realization of sensors and sensor based systems –Submitted (March 2019)

Mr. Manas Ranjan Nayak–Prof. Subir Kumar Sarkar–Information Hiding and system design for copyright protection–Submitted(March 2019)

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Prof. Bhaskar Gupta

- 1) Participated in Academic Audits of NIT Durgapur and NIT Patna

Dr. Sayan Chatterjee

- 1) Appointed as IEEE EXECOM member in January 2019
- 2) Appointed as member of Institutional innovation Council , Jadavpur University
- 3) Member of TEQIP –III Internal core committee, Jadavpur University
- 4) Member of Improved Student learning Central committee under TEQIP-III, Jadavpur University

Prof. Sudipta Chattopadhyay

- 1) Chairperson, IEEE WIE Kolkata Section since 2017
- 2) Secured the 1st Place as Chairperson, WIE Kolkata Section under the WIE Track in the All India Student – YP –WIE Congress (AISYWC'18) organized by IEEE India Council and IEEE Bangalore Section held at Vidya Vikas Institute of Engineering and Technology, Mysore, during September 28 - 30, 2018
- 3) Member of Academic Council, Siksha 'O' Anusandhan Deemed to be University, Bhubaneswar

KNOWLEDGE BASED SYSTEMS

[Department of Electrical Engg.]

Int. : 2457-2825

Co-ordinator: Prof. Smita Sadhu

E-mail : kbs.centre@jadavpuruniversity.

Area of Research Activities:

Design and research in the areas of estimation and filtering techniques, fault detection and identification of nonlinear hybrid systems, real time computer control systems and safety critical and high consequence software, design review and audit of aero engine control system, aircraft stabilization, railway signaling and interlocking systems.

Major Research Projects:

1. Robustness Analysis of AFADEC Control Laws Covering Redundancy Management, sponsored by Gas Turbine Research Establishment, (DRDO, Ministry of Defense), Bengaluru, Rs. 24.78 lakhs. Members involved: Prof. Smita Sadhu (PI), Dr. Gautam Sarkar, Mr. Susanta Ray, Prof. T.K.Ghoshal (Hon. Adv.), Prof. K.Majumdar (Hon. Adv.), Prof. P.N.Basu (Hon. Adv.).
2. Development and Validation of Algorithm for Estimation and Tracking of High Velocity Manoeuvring Targets sponsored by Program AD, (DRDO, Ministry of Defense), Hyderabad, Rs. 21.53 lakhs. Members involved: Prof. Smita Sadhu (PI), Dr. Gautam Sarkar, Mr. Susanta Ray, Prof. T.K.Ghoshal (Hon. Adv.), Prof. P.N.Basu (Hon. Adv.).

Organization matters

- The Administrative Committee for the Centre for Knowledge Based Systems (CKBS), EE Dept., JU was augmented by the inclusion of two additional faculty members as approved by the BOS EE Department and the university.
- The existing facilities of the Centre for Knowledge Based Systems is being augmented with funding received from two projects sponsored by DRDO laboratories. The funds of the projects are being managed by the Research Section.

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- Savings made from an earlier project funding (sponsored by ASL, DRDO, and maintained as a separate bank account) has been transferred to the university fund with approval from the Finance Officer. The separate account has now been closed by the Principal Investigator and the Finance Officer.

Articles Published:

International Journals

1. Aritro Dey, Smita Sadhu, Tapan Kumar Ghoshal, "Square Root Quadrature Information Filters for Multiple Sensor Fusion", *Advances in Intelligent Systems and Computing*, vol 749, 2019 Springer, Cham. DOI: 10.1007/978-3-319-74808-5_46
2. Nilanjan Patra, Smita Sadhu, Tapan Kumar Ghoshal, "Adaptive state estimation for tracking of civilian aircraft," *IET Science, Measurement & Technology*, Volume: 12, Issue: 6, 2018, pp. 777 - 784, DOI: 10.1049/iet-smt.2017.0529

International Conferences

3. Sudeshna Dasgupta, Smita Sadhu, and Tapan Kumar Ghoshal. "Disturbance Observers for Nonlinear MIMO Systems-An Alternative Design Approach." In *2019 53rd Annual Conference on Information Sciences and Systems (CISS)*, 20-22 March 2019, Baltimore, USA, pp. 1-6. IEEE, 2019. DOI: 10.1109/CISS.2019.8693041
4. Sudeshna Dasgupta, Smita Sadhu, T. K. Ghoshal, "A Modified Active Anti-Disturbance Control for a Nonlinear CSTR Model", *ASME Dynamic Systems and Control Conference (DSCC-2018)*, Atlanta, Georgia, USA, September 30 – October 3, 2018.

Interaction with other institutions/organizations

1. Prof Smita Sadhu delivered a talk on "Verification & Validation of Flight Control Law for a Combat Aircraft" at the workshop Advanced Control Applied to Various Field of Engineering (ACAVFE 2018) held at Electrical Engineering Department, NIT Durgapur, during August 28-Sept. 01, 2018.
2. Prof. T.K. Ghoshal is Distinguished Visiting Professor, Department of Aerospace Engineering, IIT Kanpur.
3. Prof. T.K. Ghoshal is member of the VTOL UAV Project Team, IIT Kanpur.
4. Prof Smita Sadhu acted as External Examiner for evaluation of M.E. theses at the Department of Electrical Engineering, IEST, Howrah in April, 2019.
5. Prof Smita Sadhu is an External expert for the Ph.D. Committee of two candidates enrolled at the Department of Electrical Engineering, IEST, Howrah.
6. Prof T.K. Ghoshal delivered a Keynote Lecture at the workshop Advanced Control Applied to Various Field of Engineering (ACAVFE 2018) held at Electrical Engineering Department, NIT Durgapur, during August 28-Sept. 01, 2018.
7. Prof T.K. Ghoshal delivered a talk on "Some Interesting Control Applications and Experiments" at the workshop Advanced Control Applied to Various Field of Engineering (ACAVFE 2018) held at Electrical Engineering Department, NIT Durgapur, during August 28-Sept. 01, 2018.
8. Prof. T.K. Ghoshal is a Member of Evaluation Committee for Institute Challenge Grants of IIT Kharagpur.
9. Prof. Smita Sadhu acted as reviewer for IEEE Transactions on Aerospace and Electronic Systems, IEEE Transactions on Control Systems Technology, Elsevier Aerospace Science and Technology and many IEEE conferences.

Major Achievements

1. One doctoral student has submitted his PhD thesis and evaluation has been completed (awaiting viva voce) in 2019. The candidate has utilized the facilities of CKBS.
2. One Post Graduate student thesis has been awarded under the supervision of the Coordinator. The candidate has utilized the facilities of CKBS.

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MATHEMATICAL BIOLOGY AND ECOLOGY

[Department of Mathematics]

Tel.: 2414-6716

Int. :2457-2743

Coordinator – Prof. Nandadulal Bairagi

Joint Coordinator – Prof. Dipak Kumar Kesh

E-mail: nbairagi@math.jdvv.ac.in

1. Courses offered: Centre for Mathematical Biology and Ecology, Department of Mathematics, offers Mathematical Biology as a special paper in the Final M.Sc.

2. Areas of Research Activities (Broad Areas):

- (a) Mathematical Ecology
- (b) Epidemiology
- (c) Bioeconomic modeling of exploitation of natural resources
- (d) Marine ecosystems
- (e) Pest management
- (f) Physiology
- (g) Systems Biology
- (h) Environment & sustainable development.

3. Major Research Project:

Prof. Nandadulal Bairagi

- 1. Title: Modelling and analysis of stochastic HIV infection with linear and nonlinear incidence.
Funding Authority: CSIR
Duration of the project: 2018-2021
- 2. Title: Emergent dynamics in ecological networks: Spreading of disease and its control study.
Funding Authority: SERB, DST (P.I).
Duration of the project: 2017-2020
- 3. Title: Dynamics preserving discretization technique for nonlinear system of differential equations.
Funding Authority: MATRICS (SERB, DST).
Duration of the project: 2018-2021
- 4. Title: Modelling and analysis of stochastic ecological and eco-epidemiological systems with nonlinearity
Funding Authority: Indo-French Centre for Applied Mathematics (IFCAM)
Duration of the project: 2018-2021

Prof. Priti Kumar Roy

- 1. Title: Exploring uncertainties for production bottlenecks of biodiesel in SCEM: Deterministic and Stochastic studies with dynamic optimization.
Funding Authority: SERB
Duration of the project: March 16 – Till Date.
- 2. Title: Development of Models of Immune-Dependent Disorders and Finding Optimal Strategies for Their Treatment: Analytical and Computational Approaches.
Funding Authority: DST-RFBR
Duration of the project: 2018-2020.

4. Invited lectures delivered/Session chaired:

Prof. Nandadulal Bairagi

- 1) Given series of talks in the Training Programme on Dynamical Systems: Theory and Applications (DSTA 2018) organized by Indian Institute of Technology (ISM) Dhanbad during April 02-06, 2018
- 2) Given Seminar on Mathematical Biology organized by Czech Academy of Sciences, Prague, Czech Republic on 17th June 2018.
- 3) Given Seminar on population dynamics at ICT SAI FR, Brazil on 14th August 2018.
- 4) Invited talk delivered in the National Seminar Future India: Science and Technology organized by DAV College, Kanpur during 23-25th November 2018.
- 5) Invited talk delivered in the Emerging Applications of Nonlinear Dynamics and Chaos in Science and Engineering held at IIT Jodhpur during 13-15th December 2018.
- 6) Delivered Precedential Talk in the Mathematical Sciences (including Statistics) at the 106th Indian Science Congress 2019 held at Lovely Professional University, Jalandhar, Punjab organized during 3-7th January 2019.
- 7) Invited talk delivered in the National Conference on Ancient and Modern Mathematics (NCAMM 2019) organized by Maharaja Bir Bikram University during 23-24 February 2019.
- 8) Given Seminar on dynamical system at Beijing Technology and Business University, Beijing, China on 6th March 2019.
- 9) Invited talk delivered in the National Conference on Recent Trends in Differential Equation: Theory, Modelling and Computation (NCDE) held at Indian Institute of Technology, Patna from 29-30 March 2019.

Prof. Priti Kumar Roy

- 1) Delivered an invited talk at Xinyang Normal University, in Xinyang City, Henan 464000, P.R. China, 3rd April, 2018.
- 2) Delivered an invited talk at Henan Normal University, in Xinxiang Shi, Henan Sheng, China, 453002, 4th April, 2018.
- 3) Poster Presentation of the research work “Effect of Early Treatment on Cervical Cancer through Diagnosis” in International Congress of Mathematicians held at Rio de Janeiro, Brazil from August 1st to 9th, 2018.

Paper Published in Journals and Books:

Prof. Nandadulal Bairagi

1. Mondal, S., Bairagi, N. and N'Guerekata, G. M. “Global stability of a Leslie-Gower-type fractional order tritrophic food chain model”, *Fractional Differential Calculus*, 9(1) 149-161, 2019.
2. Biswas, M. and Bairagi, N. “On the dynamic consistency of a two-species competitive discrete system with toxicity: Local and global analysis”, *Journal of Computational and Applied Mathematics*, DOI: 10.1016/j.cam.2019.06.005mma, 2019.
3. Adak, D. and Bairagi, N. “Bifurcation analysis of a multi-delayed HIV model in presence of immune response and understanding of in-host viral dynamics”, *Mathematical Analysis in Applied Sciences*, DOI: 10.1002/mma.5645, 1-17, 2019.
4. Saha, S., Bairagi, N. and Dana, S. K. “Chimera states in ecological network under weighted mean-field dispersal of species”. *Frontiers in Applied Mathematics and Statistics* 5:15, doi: 10.3389/fams.2019.00015, 2019.
5. Bairagi, N., Saha, S., Chaudhuri, S. and Dana, S. K. “Zooplankton selectivity and nutritional value of phytoplankton influences a rich variety of dynamics in a plankton population model”. *Physical Review E*, 99, 012406, 2019.
6. Chakraborty, B. and Bairagi, N. “Complexity in a prey-predator model with prey refuge and diffusion”. *Ecological Complexity*, 37, 11–23 2019.

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7. Saha, P. and Bairagi, N. “Dynamics of vertically and horizontally transmitted parasites: continuous vs discrete models”. *International Journal of Difference Equations*, 13(2), 139-156, 2018.
8. Biswas, M., Lu, X., Cao, X. and Bairagi, N. “On the dynamic consistency of a delay-induced discrete predator-prey model”. *International Journal of Difference Equations*, 13(1), 1-17, 2018.
9. Adak, D and Bairagi, N. “Analysis and computation of multi-pathways and multi-delays HIV-1 infection model”, *Applied Mathematical Modelling*, 54, 517-537, 2018.

Prof. Priti Kumar Roy

1. Roy Priti Kumar, Saha, S.: “Predicting the effectiveness of drug interventions with „HIV counseling & testing (HCT) on the spread of HIV/AIDS: a theoretical study”. *Advances in Difference Equations*, 2018(1), pp.1-20, 2018, <https://doi.org/10.1186/s13662-018-1877-3>.
2. Saha, S., Roy Priti Kumar, Smith R.: “MODELING MONOCYTE-DERIVED DENDRITIC CELLS AS A THERAPEUTIC VACCINE AGAINST HIV”. *Journal of Biological Systems*, 26(04), pp.579 601, 2018, DOI: 10.1142/S0218339018500262.
3. Basir F Al, Roy Priti Kumar: “Study on enzyme inhibition in biodiesel synthesis: Effect of stepwise addition of methanol and removal of glycerol”, *Energy Ecology and Environment*, Volume 4, Issue 2, pp. 75–84, 2019, DOI <https://doi.org/10.1007/s40974-019-00112-x>.
4. Chowdhury J, F A Basir, Y. Takeuchi, M. Ghosh, Roy Priti Kumar: “A mathematical model for pest management in *Jatropha curcas* with integrated pesticides - An optimal control approach”, *Ecological Complexity*, Vol. 37, pp 24-31, 2019, DOI: 10.1016/j.ecocom.2018.12.004.
5. Roy A K, F Al Basir, Roy Priti Kumar: “A vivid cytokines interaction model on psoriasis with the effect of impulse biologic (TNF “ á inhibitor) therapy”, *Journal of Theoretical Biology*, Vol. 474, pp. 63–77, 2019, <https://doi.org/10.1016/j.jtbi.2019.04.007>
6. J Chowdhury, Roy Priti Kumar, Datta S: “Comparative study on biodiesel production from *Jatropha Curcas* oil by supercritical and chemical catalytic method: a mathematical approach”, *ENERGY SOURCES, PART A: RECOVERY, UTILIZATION, AND ENVIRONMENTAL EFFECTS*, pp. 1-15, 2019 doi.org/10.1080/15567036.2019.1604860.
7. Chakraborty S, Roy Priti Kumar: “Therapeutic Control of HPV Associated Cervical Cancerous Cell and Its Possible Extinction”, *Nonlinear Studies*, Vol. 26, No. 2, pp 343-364, 2019.
8. Sengupta A, Chowdhury J, Biswas D, Roy Priti Kumar: “Effect of temperature and molar ration on bio-diesel production in supercritical-carbon dioxide medium”, *Nonlinear Studies*, Vol. 26, No.2, pp 327-341, 2019.
9. Chakraborty S, Xue-Zhi Li, Roy Priti Kumar: “How HPV Induced Cervical Cancer can be Controlled by a Combination of Drug Therapy”, *International Journal of Biomathematics* <https://doi.org/10.1142/S1793524519500700>, 2019.
10. Mondal S, Ghosh P, Biswas D, Roy Priti Kumar: “Effect of Alcohol Consumption during Antiretroviral Therapy on HIV-1 Replication: Role of Cytochrome P3A4 Enzyme”, *International Journal of Mathematical Engineering and Managment Sciences*, Vol. 4, No. 4, 922–935, 2019, <https://dx.doi.org/10.33889/IJMEMS.2019.4.4-073>.
11. Xianbing Cao, Saha, S. Roy Priti Kumar: “A statistical inference in an epidemic model with combinational drug treatment: HIV as a case study”, *Results in Applied Mathematics* 3 (2019) 100066, <https://doi.org/10.1016/j.rinam.2019.100066>
12. Chakraborty S, Xianbing Cao, Bhattacharya S, Roy Priti Kumar: “The Role of HPV on Cervical Cancer with Several Functional Response: A Control Based Comparative Study”, *Computational Mathematics and Modeling* (Accepted), 2019.

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Prof. Dipak Kesh

1. Maji C., Kesh D., Mukherjee D. (2017), "Bifurcation and global stability in an eco-epidemic model with refuge", *Energy, Ecology and Environment*, 4(3) 103-115.

Major Achievements:

Prof. Nandadulal Bairagi

1. Acted as the Sectional President, Mathematical Sciences (including Statistics) in 106th Indian Science Congress held on 3-7th January 2019 at Lovely Professional University, Jalandhar, Punjab.
2. Received NBHM full support for attending International Congress of Mathematicians held in Rio De Janeiro, Brazil from 1-9th August 2018.
3. Visiting Faculty ICTP SAIER, Sao Paulo, Brazil from 10-18 August 2018.

Prof. Priti Kumar Roy

1. Open Arms Travel Grant Awardee in Asia-Pacific Region, ICM 2018 by IMPA and the Brazilian Mathematical Society held in Rio De Janeiro, Brazil from 1-9th August 2018.

MICROPROCESSOR APPLICATIONS FOR TRAINING

[Department of Computer Science & Engg.]

Phone : 2414-6766

Int. : 2457-2367/2407

Coordinator: Prof. Mita Nasipuri

E-mail : mita.nasipuri@jadavpuruniversity.in

1. A. Courses offered

Name of the Course (short term)	Duration of the course	No. of students
1 Introduction to Linux and C Programming	88 hrs	30
2 Object Oriented Programming with C++ and JAVA	70 hrs	30
3 Python Programming	40hrs	30
4 Android App Development	40hrs	30

1. B. Number of Faculty Members:

Professor – 06

Associate Professor - 02

2. A. Area of Research Activities (Broad Areas):

AI, Pattern Recognition & Image Processing, High Performance Computing, IoT, Soft Computing, Artificial Neural Networks, Evolutionary Computation, Bio-Medical Image Processing, Multimedia Technology Development, OCR of Handwritten Bengali Text, Bioinformatics, Face Processing, Machine Learning, Deep learning.

2. B. Sponsored Projects carried out/ongoing (2018-19):

Subhadip Basu

(Project Title–PI and Co-PI–Funding Agency–Amount–Period)

Hand Gesture Recognition in Video for Speech and Hearing Disabled–PI: Subhadip Basu–RUSA-2, MHRD, Govt. of India–Rs.5,70,000/–2019-20

Development of some analytical tools for analysis of large-scale protein-protein interaction networks–PI: Subhadip Basu–DBT, Govt. of India–Rs.48,22,125/–2017-20

Multispectral Image Analysis for Various Security and Medical Applications–PI: Mita Nasipuri Co-PI: Mahantapas Kundu, Debotosh Bhattacharjee, Subhadip Basu, Ram Sarkar, Nibaran Das–PURSE-II, DST, Govt. of India–Rs.37,00,000–2015-19

Design of a Multimodal Biometric System for Various Security and Forensic applications (Phase-II)–PI: Subhadip Basu Co-PI: Mita Nasipuri, Mahantapas Kundu, Debotosh Bhattacharjee, Ram Sarkar, Nibaran Das–UPE-II, UGC, Govt. of India–Rs.13,70,000–2015-19

Development of a new morphological operator for multi-scale opening of conjoined objects–PI: Subhadip Basu (Research Award)–UGC, Govt. of India Rs.3,00,000/-(excluding salary component)–2016-18

Multi-lingual Text Analytics for Camera-based Handheld Devices–PI: Ram Sarkar, Co-PI: Subhadip Basu–DST, SERB, Govt. of India–Rs.25,96,440/–2017-20

Environmental Monitoring: Testbed of Mixed Wireless Sensor Networks–Co-PI: Sarbani Roy–DST, PURSE Phase-II, Govt. of India–2015-19

Participatory and Real Time Pollution Monitoring system for Smart City–PI: Sarbani Roy–Higher Education, Science & Technology and Biotechnology, DST, WB–Rs. 13,20,800–2018-2021

Performance based Resource Management and Load balancing in Cloud Environment–PI: Sarbani Roy–UGC UPE (II)–2015-2019

Fuzzy Set Theoretic Approach for Moving Object Detection and Tracking - DST-PURSE II Project –PI: Susmita Ghosh–DST, PURSE Phase-II, Govt. of India–2015-2019

Development of object detection techniques from degraded complex video sequences due to dynamic variations of scenes by different atmospheric conditions for security and surveillance–PI: Debotosh Bhattacharjee–DRDO, Govt. of India–Rs. 64,77,000–2018-2021

Prediction of diseases through computer assisted diagnosis system using images captured by minimally-invasive and non-invasive modalities–Co-PI: Debotosh Bhattacharjee–SPARC, MHRD, Govt. of India–Rs. 47,68,775–2019-2020

Development of a computer-assisted diagnosis system for segmenting and detecting abnormalities and disease diagnosis–PI: Debotosh Bhattacharjee–International Bilateral Cooperation Division, DST Govt. of India–Rs. 8,83,000 and Euro 13,800–018-2020

Development of knowledge graph from images using Deep learning–PI: Nibaran Das–Extra Mural Research Project, SERB, Govt. of India–Rs. 33,00,000–2016-2019

Automatic Generation of Cytological Images to Augment Data for Diagnosis of Ductal Carcinoma Using Deep Learning–PI: Nibaran Das–SERB, Govt. of India–Rs. 26,93,500–2019-2022

3. A. Invited Lectures delivered by Faculty Members

Subhadip Basu

International:

1. “Bioimage Informatics@JU– Methods & Applications”, Hannover Medical School, Germany, May 15, 2018

National:

2. Invited talk in the TEQIP sponsored one day seminar “Biomedical Engineering in Human Welfare” on 3rd August, 2018, arranged by the School of Bioscience and Engineering, Jadavpur University.

Nandini Mukherjee

1. Invited lecture in a workshop on “UNCERTAINTY MANAGEMENT IN HEALTH INFORMATICS” held between 31st July and 5th August 2018 at IEST, Shibpur. Delivered lecture on 2nd July 2018.
2. Delivered a lecture in a seminar on “INTERNET OF THINGS (IOT) -TECHNOLOGIES AND APPLICATIONS” organised by The Institution of Engineers (India) West Bengal State Centre, Electronics & Telecommunication Engineering Division held on 21st June 2018.

Sarbani Roy

1. Invited two lectures in TEQIP-III sponsored two days Short Term Training Programme (STTP) on “IoT: Related Technologies and Applications” at RTU, Kota, Rajasthan, 17-18 Sept, 2018.
2. An invited keynote talk on IoT and its Applications in 5th International Conference on Mathematics and Computing (ICMC 2019), at KIIT, Bhubaneswar, Odisha, 8th February 2019.

Susmita Ghosh

1. Guest Lecture at Vellore Institute of Technology, Vellore, February 21, 2019.
2. Delivered a lecture at the National Level Workshop entitled “Remote Sensing and Signal Processing” on “Semi supervised Neural Networks for Change Detection of Remotely Sensed Images,” Guwahati University, December 27, 2018.
3. Special Classes on “Soft Computing” at Tripura Institute of Technology under Twinning Plan of TEQIP III, October 11-12 and November 17-19, 2019.
4. Series of lectures on a Workshop on “Neural Networks and Learning Systems” School of Information Technology, King Mongkut’s University of Technology, Thonburi, Thailand, September 24-28, 2018.
5. Delivered a lecture at an Induction Program entitled “Machine Learning and Soft Computing” on “Evolutionary Computation and its Applications,” Seemanta Engineering College, Odisha, July 09, 2018.
6. Delivered a series of lectures on “Neural Networks and Learning Machines” at IDRBT, Hyderabad, June 04-06, 2018.
7. Delivered a lecture at an FDP entitled “Machine Learning” on “Evolutionary Computation” at GITAM University, Hyderabad, June 03, 2018.
8. Session Chair: CoDS-COMAD - Jan 03, 2019.

Nibaran Das

1. Acted as an invited speaker for the workshop on Pattern Analysis and Machine Intelligence (PAMI): Document understanding to healthcare in the conference RTIP2R-2018, organized by Solapur University, Solapur, Maharashtra on December 20, 2018.
2. Acted as an invited speaker on the tutorial session in the Second International Conference on Advanced Computational and Communication Paradigms (ICACCP-2019) during February 25-28 2019 organized by SMIT, Sikkim.

DebotoshBhattacharjee

1. Presented a paper entitled, “A Transfer-learning Based Deep Learning Framework for Automated Classification of Pap Smear Cervical Images,” at ICMMI 2019 held in Tokyo, Japan from 22-24 March 2019
2. Keynote on “Medical Image Analysis for Computer-Assisted Diagnosis System” at International Conference on Emerging Technologies for Sustainable Development (ICETSD '19) on March 5-6, 2019 at GCELT, Kolkata, West Bengal, India

3. B. Seminar/Workshop/Conference/Symposium Attended

Susmita Ghosh

1. Attended “MIU Annual Workshop on Machine Intelligence and Applications 2019”, Kolkata, March 29, 2019.

Nibaran Das

1. International Conference on Recent Trends in Image Processing & Pattern Recognition RTIP2R-2018, organized by Solapur University, Solapur, Maharashtra on December 20, 2018.
2. Second International Conference on Advanced Computational and Communication Paradigms (ICACCP-2019) during February 25-28 2019 organized by SMIT, Sikkim.

Nandini Mukherjee

1. 47th International Conference on Parallel Processing (ICPP 2018) held at University of Oregon, Eugene, Oregon, USA from 13th August to 16th August 2018.
2. 2018 IEEE SENSORS held in New Delhi between 28th October to 31st October 2018.
3. 20th International Conference on Distributed Computing and Networking (ICDCN 2019) held at IISc, Bangalore from 4th January to 7th January 2019.

DebotoshBhattacharjee

1. Debotosh Bhattacharjee, Seminar on “Breast Cancer Detection using Thermal Imaging” at Northumbria University, United Kingdom on 30th November 2018

3. C. Seminar/Workshop/Conference/Symposium Organized

Nandini Mukherjee

1. Organised 2nd International Workshop on Networking Women In Distributed Computing And Networks (In Conjunction With ICDCN 2019) at IISc Bangalore on 4th January 2019.

Sarbani Roy

1. Three day Workshop on Machine Learning and Data Analytics. Computer Science & Engineering, Jadavpur University, Kolkata, India, March 26–28, 2019.

Susmita Ghosh

1. 3-day Workshop on Machine Learning and Data Analytics, March 26-28, 2019

Mita Nasipuri

1. UGC- Human Resource Development Centre, Jadavpur University, Workshop on MOOCs & E-Learning-Issues, Prospects, Problems (15.01.2019 – 21.01.2019), Organized by SCTR, Jadavpur University & CMATER, Jadavpur University

4. A. Books/Monographs etc. Published:

1. Nandini Mukherjee, Sarmistha Neogy and Samiran Chattopadhyay, *Big Data in ehealthcare: Challenges and Perspectives*, CRC Press, January 2019

B. Book Chapters:

1. M. Ghosh, S. Malakar, S. Bhowmik, R. Sarkar, M. Nasipuri, "Feature Selection for Handwritten Word Recognition Using Memetic Algorithm," in *Advances in Intelligent Computing*, Springer, pp. 103–124, 2019.
2. H Roy, D Bhattacharjee, "Heterogeneous Face Matching Using Robust Binary Pattern of Local Quotient: RBPLQ," *Advanced Computing and Systems for Security*, pp. 159-173, *Advanced Computing and Systems for Security: Volume Four*, Springer, 2019.
3. K Dutta, D Bhattacharjee, M Nasipuri, A Poddar, "3D Face Recognition Based on Volumetric Representation of Range Image," *Advanced Computing and Systems for Security*, pp. 175-189, *Advanced Computing and Systems for Security: Volume Four*, Springer, 2019
4. S Pramanik, D Banik, D Bhattacharjee, M Nasipuri, "A Computer-Aided Hybrid Framework for Early Diagnosis of Breast Cancer," *Advanced Computing and Systems for Security*, pp. 111-124, *Advanced Computing and Systems for Security: Volume Four*, Springer, 2019
5. Ayan Seal, Debotosh Bhattacharjee, Mita Nasipuri, Dipak Kumar Basu, "Thermal Human Face Recognition for Biometric Security System", *Computer Vision: Concepts, Methodologies, Tools, and Applications*, 1838-1863, 2018.
6. AsishBera, Debotosh Bhattacharjee, Mita Nasipuri, Hand Biometric Verification with "Hand Image-Based CAPTCHA", *Advanced Computing and Systems for Security*, 3-18, 2018.
7. Hiranmoy Roy, Debotosh Bhattacharjee, "Heterogeneous Face Matching Using ZigZag Pattern of Local Extremum Logarithm Difference: ZZPLELD", *Advanced Computing and Systems for Security*, 121-135, 2018.

E. Articles Published in Journals:

1. S Paul, S Saha, S Basu, PK Saha, M Nasipuri, "Text localization in camera captured images using fuzzy distance transform based adaptive stroke filter," *Multimedia Tools and Applications*, DOI: 10.1007/s11042-019-7178-3, *in press*
2. S Basu, D Plewczynski, "Emerging and threatening infectious diseases," *Briefings in Functional Genomics* 17 (6), 372-373, 2018.
3. Sovan Saha, A. Prasad, Piyali Chatterjee, Subhadip Basu, Mita Nasipuri, "Protein function prediction from protein-protein interaction network using gene ontology based neighborhood analysis and physico-chemical features," *Journal of Bioinformatics and Computational Biology*, DOI: 10.1142/S0219720018500257, *in press*.
4. Halder, A.K., Chatterjee, P., M., Nasipuri, Plewczynski, D., Basu, Subhadip, "3gClust: Human Protein Cluster Analysis," *IEEE/ACM Transactions on Computational Biology and Bioinformatics*, 2018, DOI: 10.1109/TCBB.2018.2840996, *in press*.
5. S Bhowmik, S Malakar, R Sarkar, S Basu, M Kundu, M Nasipuri, "Off-line Bangla handwritten word recognition: a holistic approach," *Neural Computing and Applications*, 1-16, DOI: 10.1007/s00521-018-3389-1.
6. P. Dutta, S. Basu and M. Kundu, "Assessment of semantic similarity between proteins using information content and topological properties of the Gene Ontology graph", *IEEE/ACM Transactions on Computational Biology and Bioinformatics* Volume: 15, Issue: 3, pp. 839-849, 2018.
7. PK Singh, R Sarkar, N Das, S Basu, M Kundu, M Nasipuri, "Benchmark databases of handwritten Bangla-Roman and Devanagari-Roman mixed-script document images", *Multimedia Tools and Applications*, Springer, Volume 77, Issue 7, pp 8441–8473, 2018.
8. Srimoyee Bhattacharjee, Rituparna Das, Sunirmal Khatua, Sarbani Roy, "Energy-efficient migration techniques for cloud environment: a step toward green computing", *Journal of Supercomputing*, Springer, 26 March 2019.

9. Binay Ray, Avirup Saha, Sunirmal Khatua and Sarbani Roy, "Towards Maximization of Profit and Quality of Cloud Federation: Solution to Cloud Federation Formation Problem", *Journal of Super computing*, Springer, 26 September 2018.
10. Binay Ray, Avirup Saha and Sarbani Roy, "Migration Cost and Profit Oriented Cloud Federation Formation: Hedonic Coalition Game Based Approach", in *Cluster Computing*, Springer, 25 August 2018.
11. Joy Dutta, Sarbani Roy, Chandreyee Chowdhury, "Unified framework for IoT and smartphone based different smart city related applications", *Microsystem Technologies*, Springer, PP 1- 14, 14 May 2018.
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14. R. Roy, S. Ghosh and A. Ghosh, "Speckle De-noising of Clinical Ultrasound Images based on Fuzzy Spel Conformity in its Adjacency", *Applied Soft Computing*, vol 73. pp. 394-417, 2018.
15. A. Mondal, S. Ghosh and A. Ghosh, "Scaled and Oriented Object Tracking using Ensemble of Multilayer Perceptrons," *Applied Soft Computing*, vol. 73. pp. 1081-1094, 2018.
16. M. Ghosh, T. Kundu, D. Ghosh, R. Sarkar, "Feature Selection for Facial Emotion Recognition using Late Hill-Climbing based Memetic Algorithm", *Multimedia Tools and Applications*, Springer, 2019
17. S. Kundu, S. Paul, P. K. Singh, R. Sarkar, M. Nasipuri. "Understanding NFC-Net: A deep learning approach to Word-level Handwritten Indic Script Recognition", *Neural Computing and Applications*, Springer, 2019
18. M. Ghosh, R. Guha, R. Sarkar, A. Abraham, "A Wrapper-Filter Feature Selection technique based on Ant Colony Optimization", *Neural Computing and Applications*, Springer, 2019
19. S. Sen, M. Mitra, A. Bhattacharyya, R. Sarkar, F. Schwenker, K. Roy, "Feature Selection for Recognition of Online Handwritten Bangla Characters", *Neural Processing Letters*, Springer, 2019
20. R. Kar, S. Saha, S. Bera, E. Kavallieratou, V. Bhateja, R. Sarkar, "Novel Approaches towards Slope and Slant Correction for Tri-script Handwritten Word Images", *Imaging Science Journal*, Taylor and Francis, vol. 67, issue 3, pp. 159-170, 2019, <https://doi.org/10.1080/13682199.2019.1574368>
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25. M. Ghosh, S. Begum, R. Sarkar, D. Chakraborty, U. Maulik, "Recursive Memetic Algorithm for Gene Selection in Microarray Data", *Expert Systems with Applications*, Elsevier, vo. 116, pp. 172-185, Feb 2019, <https://doi.org/10.1016/j.eswa.2018.06.057>
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40. Kaushiki Roy, Debapriya Banik, Debotosh Bhattacharjee, Mita Nasipuri, "Patch-based system for Classification of Breast Histology images using deep learning," *Computerized Medical Imaging and Graphics, Elsevier*, Impact Factor 2.435.
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44. Shawli Bardhan, Mrinal Kanti Bhowmik, Tathagata Debnath, Debotosh Bhattacharjee, "RASIT: Region shrinking based accurate segmentation of inflammatory areas from thermograms," *Biocybernetics and Biomedical Engineering*, 2018. Impact Factor 1.374.
45. Shib Sankar Bhowmick, Indrajit Saha, Debotosh Bhattacharjee, Loredana M Genovese, Filippo Geraci, "Genome-wide analysis of NGS data to compile cancer-specific panels of miRNA biomarkers", *PloS one* 13(7), e0200353. Impact Factor 2.766.
46. Abul Hasnat, Atanu Dey, Santanu Halder, Debotosh Bhattacharjee, "Square Root and Inverse Square Root Computation Using a Fast FPGA Based Architecture." *Journal of Active & Passive Electronic Devices* 13.
47. H Roy, D Bhattacharjee, "A ZigZag Pattern of Local Extremum Logarithm Difference for Illumination-Invariant and Heterogeneous Face Recognition," *Transactions on Computational Science XXXI*, 1-19, 2018.
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49. A. Gupta and N. Mukherjee, "A Cloudlet Platform with Virtual Sensors for Smart Edge Computing," in *IEEE Internet of Things Journal*.doi: 10.1109/JIOT.2019.2918405.
50. Safikureshi Mondal, Nandini Mukherjee,"An efficient reachability query based pruning algorithm in e-health scenario", *Journal of Biomedical Informatics*, Volume 94, 2019, 103171, ISSN 1532-0464
51. Sunanda Bose, Debangana Sarkar and Nandini Mukherjee, "A Framework for Heterogeneous Resource Allocation in Sensor-Cloud Environment", *Wireless Personal Communication* Volume 108: 19, 2019, <https://doi.org/10.1007/s11277-019-06383-1>

F. Articles Published in International Conferences:

1. M Jajoo, N Chakraborty, AF Mollah, S Basu, R Sarkar, "Script Identification from Camera-Captured Multi-script Scene Text Components", *Recent Developments in Machine Learning and Data Analytics*, 159-166, 2018.
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3. S. Basu, P. Saha, E. Baczynska, N.Das, I, Saha, P. Rakshit, M. Roszkowska, J. Wlodarczyk, "Segmentation and assessment of structural plasticity of hippocampal dendritic spines from 3D confocal light microscopy", in *SPIE Medical Imaging*, 2018.
4. B Barai, D Das, N Das, S Basu, M Nasipuri, "Closed-Set Text-Independent Automatic Speaker Recognition System Using VQ/GMM", *Intelligent Engineering Informatics*, 337-346, 2018.
5. K Sengupta, S Saha, P Chatterjee, M Kundu, M Nasipuri, S Basu, "Ranked Gene Ontology Based Protein Function Prediction by Analysis of Protein-Protein Interactions", *Information and Decision Sciences*, 419-427, 2018

6. P Rakshit, N Das, M Nasipuri, S Basu, "Hemodynamic Analysis on Human Cerebrovascular Phantoms with and Without Aneurysm", *Proceedings of the International Conference on Computing and Communication Systems*, 2018
7. P Rakshit, N Das, M Nasipuri, S Basu, "A Qualitative Hemodynamic Analysis on Human Cerebrovascular Phantom", *Progress in Advanced Computing and Intelligent Engineering*, 219-229, 2018.
8. I Guha, N Das, P Rakshit, M Nasipuri, PK Saha, S Basu, "Design of Cerebrovascular Phantoms Using Fuzzy Distance Transform-based Geodesic Paths", *Progress in Intelligent Computing Techniques: Theory, Practice, and Applications*, 2018
9. B. K. Ray, O. Ghosh, S. Bhattacharjee, S. Roy and S. Khatua, "OCPDA: A novel approach towards detection of overloaded cloud providers in a federated environment," *2018 IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS)*, Indore, India, 16-19 December 2018, pp. 1-6. doi: 10.1109/ANTS.2018.8710148
10. A. Ray, S. Mallick, S. Mondal, S. Paul, C. Chowdhury and S. Roy, "A Framework for Mobile Crowd Sensing and Computing based Systems," *2018 IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS)*, Indore, India, 16-19 December 2018, pp. 1-6. doi: 10.1109/ANTS.2018.8710083
11. D. Kar, R. Sarkar, "A Case Study on the Impact of Different Texture based features to Classify Breast Histopathology Images", *International Conference on Emerging Technologies for Sustainable Development (ICETSD '19)*, pp. 498-503, March 5-6, 2019, Kolkata, India.
12. S. Ghosh, K. K. Ghosh, S. Chakraborty, S. Bhowmik, R. Sarkar, "A Filter Ensemble Feature Selection Method for Handwritten Numeral Recognition", *International Conference on Emerging Technologies for Sustainable Development (ICETSD '19)*, pp. 394-398, March 5-6, 2019, Kolkata, India.
13. M. Ghosh, S. K. Bera, R. Guha, R. Sarkar, "Contrast Enhancement of Degraded Document Image using Partitioning based Genetic Algorithm", *International Conference on Emerging Technologies for Sustainable Development (ICETSD '19)*, pp. 431-435, March 5-6, 2019, Kolkata, India.
14. S. Sen, J. Chakraborty, S. Chatterjee, R. Mitra, R. Sarkar, K. Roy, "Online Handwritten Bangla Character Recognition using FD and Distance based Features", *4th Workshop on Document Analysis and Recognition (DAR)*, 18 December 2018, IIIT Hyderabad, India.
15. S. Ghosh, R. Bhattacharya, S. Majhi, S. Bhowmik, S. Malakar, R. Sarkar, "Textual content retrieval from Filled-in Form Images", *4th Workshop on Document Analysis and Recognition (DAR)*, 18 December 2018, IIIT Hyderabad, India
16. S. Panda, S. Ash, N. Chakraborty, S. Basu, R. Sarkar, A. F. Mollah, "Parameter Tuning in MSER for Text Localization in Multi-lingual Camera-captured Scene Text Images", in *International Conference on Computational Intelligence in Pattern Recognition (CIPR)*, IEST Shibpur, West Bengal, India, 19-20 January 2019. *Springer Advances in Intelligent Systems and Computing (AISC)*.
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18. N. Chakraborty, S. Biswas, A. F. Mollah, S. Basu, R. Sarkar, "Multi-lingual Scene Text Detection by Local Histogram Analysis and Selection of Optimal Area for MSER", *Second International Conference on Computational Intelligence, Communications, and Business Analytics (CICBA - 2018)*, July 27-28, 2018, Kalyani, West Bengal, India.
19. A. Das, S. Ghosh, R. Sarkhel, S. Choudhuri, N. Das, and M. Nasipuri, "Combining multilevel contexts of superpixel using convolutional neural networks to perform natural scene labeling," in *Recent Developments in Machine Learning and Data Analytics*. Springer, 2019, pp. 297-306.

20. A. Pal, S. Jaiswal, S. Ghosh, N. Das, and M. Nasipuri, "Segfast: A faster squeezeNet based semantic image segmentation technique using depth-wise separable convolutions," in *11th Indian Conference on Computer Vision, Graphics and Image Processing (ICVGIP 2018)*. ACM, 2019.
21. N. Debnath, N. Das, S. Sarkar, and M. Nasipuri, "An Automated Approach Towards Digital Photo-Trichogram for Hair Fall Diagnosis BT - Social Transformation – Digital Way," 2018, vol 836. Springer, Singapore pp. 314–329.
22. S. Mitra, S. Dey, N. Das, S. Chakrabarty, M. Nasipuri, and M. K. Naskar, "Identification of Benign and Malignant Cells from Cytological Images Using Superpixel Based Segmentation Approach," in *52nd Annual Convention of CSI 2018: Social Transformation – Digital Way, 2018, vol 836. Springer, Singapore*, pp. 257–269.
23. B. Barai, D. Das, N. Das, S. Basu, and M. Nasipuri, "Closed-Set Text-Independent Automatic Speaker Recognition System Using VQ/GMM BT - Intelligent Engineering Informatics," 2018, vol 695. Springer, Singapore pp. 337–346.
24. S. Ghosh, A. Sheikh, Sk G. S. Hossain, S. M. Obaidullah, KC Santosh, N. Das and K. Roy, "Handwritten indic script identification – a multi-level approach", in *International Conference on Computational Intelligence, Communications, and Business Analytics (CICBA-2018)*, Kalyani Govt. Engg. College, India, proceedings by Springer (accepted)
25. S. Ghosh, H. Mukherjee, SkMdObaidullah, K. C. Santosh, N. Das and K. Roy, "A Survey on Extreme Learning Machine and Evolution of its Variants", in *International Conference Recent Trends in Image Processing and Pattern Recognition (RTIP2R-2018)*, Solapur University, Maharashtra, India, proceedings by Springer
26. M. Ghosh, Sk Md Obaidullah, K. C. Santosh, N. Das and K. Roy,, "Artistic multi-character script identification using iterative isotropic dilation algorithm", in *International Conference Recent Trends in Image Processing and Pattern Recognition (RTIP2R-2018)*, Solapur University, Maharashtra, India, proceedings by Springer
27. K. Roy, D. Bhattacharjee, M. Nasipuri, "A Transfer-learning Based Deep Learning Framework for Automated Classification of Pap Smear Cervical Images" *Basic & Clinical Pharmacology & Toxicology*, 204-205, 2019.
28. A Raychaudhuri, S Maity, A Chakrabarti, D Bhattacharjee, "Detection of Moving Objects in Video Using Block-Based Approach," *Advances in Intelligent Computing*, 151-167, 2019
29. A Bera, D Bhattacharjee, M Nasipuri, "Pose-Invariant Hand Geometry for Human Identification Using Feature Weighted k-NN Classifier," *Information Technology and Applied Mathematics*, 115-129, 2019.
30. P. Mukhopadhyay, H. S. Roy and N. Mukherjee, "E-healthcare delivery solution," *2019 11th International Conference on Communication Systems & Networks (COMSNETS)*, Bengaluru, India, January 2019, pp. 595-600. doi: 10.1109/COMSNETS.2019.8711429
31. A. Gupta, A. Nag and N. Mukherjee, "Approach for Uncertainty Reduction in Sensors of Remote Health," *2018 IEEE SENSORS*, New Delhi, October 2018, pp. 1-4. doi: 10.1109/ICSENS.2018.8589721
32. Atreya Bandyopadhyay and Nandini Mukherjee, "An Approach to Predict Desktop Uptime for Job Allocation in Ad-Hoc Cloud", *Proceedings of the 47th International Conference on Parallel Processing Companion*, 978-1-4503-6523-9, Eugene, Oregon, USA, pp. 1-7, 2018, 10.1145/3229710.3229743, ACM
33. K. Ray, S. Bose and N. Mukherjee, "A Load Balancing Approach to Resource Provisioning in Cloud Infrastructure with a Grouping Genetic Algorithm," *2018 International Conference on Current Trends towards Converging Technologies (ICCTCT)*, Coimbatore, 2018, pp. 1-6. doi: 10.1109/ICCTCT.2018.8550885

5. Collaborative Programmes:

SubhadipBasu

1. Honorary Research Scientist, Department of Electrical and Computer Engineering, University of Iowa
2. DAAD Visiting Scientist, Hannover Medical School, Germany

DebotoshBhattacharjee

1. One collaborative project entitled “Development of a computer-assisted diagnosis system for segmenting and detecting abnormalities and disease diagnosis,” in collaboration with Medical University of Vienna, Austria.

6. Major Achievements:

SubhadipBasu

1. Received DAAD Fellowship to visit Hannover Medical School, Germany during May-June, 2018
2. Received an honorary position as Research Scientist from Department of Electrical and Computer Engineering, University of Iowa, USA (2016-2019).
3. Received Research Award from UGC, Govt. of India for 2016-2018

DebotoshBhattacharjee

1. gLink fellowship to visit Northumbria University for one month

A. Post-Doctoral Fellowship:

NUCLEAR AND PARTICLE PHYSICS RESEARCH CENTRE

[Department of Physics]

Int. : 2457-2352

Coordinator : Prof. Argha Deb

E-mail : nppr.centre@jadavpuruniversity.in

1. **A. Courses offered** : **Nil**
B. Number of Faculty members : **4 (four)**
2. **A. Area of Research Activities** :
 - High energy hadronic and leptonic interactions
 - Relativistic and ultra-relativistic heavy ion interactions
 - Quark gluon plasma
 - Environmental radioactivity
 - Radon Physics
 - Hadron structure
 - Beyond Standard Model
 - Supersymmetry

2. B. Major Research Projects:(Project Title–Funding Agency–Project Cost)

(Ongoing)

- | | | |
|--|-----------------|----------------|
| 1. Study on QGP and Its Properties Using Correlation and Fluctuation Phenomena in Ultra- relativistic Heavy Ion Collisions | DST | Rs. 3.276 Lakh |
| 2. Assessment of Radiological Impact of Environmental Radon in Some Selected Regions of West Bengal | DST (RUSA 2.0) | Rs. 5 lakh |

4. A. Seminars, Conferences, Workshops, Symposiums, etc. (Organized or participated):

The following Seminar/Workshop/Conference/Symposium attended:

1. Attended International Conference on Nuclear, Particle and Accelerator Physics (ICNPAP-2018), 23-26 October, 2018, Ranchi, India.
2. 27th West Bengal State Science and Technology Congress, 2019. Science City Auditorium, Kolkata. February 28-March 01, 2019

B. Articles published in Journals

1. Chowdhury, S., Barman, C., Deb, A., Raha, S., Ghose, D.
“Study of variation of soil radon exhalation rate with meteorological parameters in Bakreswar–Tantloi geothermal region of West Bengal and Jharkhand, India”
(2019) *Journal of Radioanalytical and Nuclear Chemistry*, 319 (1), pp. 23-32.
DOI: 10.1007/s10967-018-6286-2
2. Ghosh, S.B., Mondal, M., Mondal, A., Ghosh, D., Deb, A.
“Chaotic Multiparticle Production in Ring and Jet Structured Events in Heavy Ion Interaction: A Study in Multidimensional Phase Space”
(2018) *Physics of Particles and Nuclei Letters*, 15 (5), pp. 499-505.
DOI: 10.1134/S1547477118050084
3. Mondal, M., Mondal, A., Mondal, J., Patra, K.K., Deb, A., Ghosh, D.
“Evidence of centrality dependent fractal behavior in high energy heavy ion interactions: Hint of two different sources”
(2018) *Chaos, Solitons and Fractals*, 113, pp. 230-237.
DOI: 10.1016/j.chaos.2018.06.006
4. Das, B., Deb, A., Chowdhury, S.
“Radiological impact of some common foods of Southern Part of West Bengal, India”
(2018) *Radiation Protection Dosimetry*, 179 (2), pp. 169-178.
DOI: 10.1093/rpd/ncx246
5. Bhoumik, G., Bhattacharyya, S., Deb, A., Ghosh, D.
“Evidence of forward-backward multiplicity correlation at SPS energy”
(2018) *International Journal of Modern Physics E*, 27 (4), art. no. 1850029, .
DOI: 10.1142/S0218301318500295
6. Deb, A., Gazi, M., Ghosh, J., Chowdhury, S., Barman, C.
“Monitoring of soil radon by SSNTD in Eastern India in search of possible earthquake precursor”
(2018) *Journal of Environmental Radioactivity*, 184-185, pp. 63-70.
DOI: 10.1016/j.jenvrad.2018.01.009

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7. Naskar, A.K., Gazi, M., Barman, C., Chowdhury, S., Mondal, M., Ghosh, D., Sinha, B., Deb, A. “Estimation of underground water radon danger in Bakreswar and Tantloi Geothermal Region, India” (2018) *Journal of Radioanalytical and Nuclear Chemistry*, 315 (2), pp. 273-283.
DOI: 10.1007/s10967-017-5668-1
8. S. B. Ghosh, M. Mondal, A. Mondal, D. Ghosh, and A. Deb, Chaotic Multiparticle Production in Ring and “Jet Structured Events in Heavy Ion Interaction: A Study in Multidimensional Phase Space”, *Phys. Part. Nucl. Lett.* 15 (2018) 499–505.

C. Papers Presented in Conference

- I. M. Mondal et al., “Rapidity and Transverse Momentum Dependent Forward-Backward Correlation in p-p Events at $\sqrt{s} = 0.9 \text{ TeV}, 2.76 \text{ TeV}$ and 7 TeV : A Study Using EPOS3 Model”, Presented in: “International Conference on Nuclear, Particle and Accelerator Physics (ICNPAP-2018), 23-26 October, 2018”, Ranchi, India,
- II. A. Mondal et al., “Evidence of Different Fractal Behavior in EPOS3 Simulated p-p Events at $\sqrt{s} = 0.9 \text{ TeV}$ and 7 TeV : A Study Using Visibility Graph Technique”, Presented in: “International Conference on Nuclear, Particle and Accelerator Physics (ICNPAP-2018)”, 23-26 October, 2018, Ranchi, India.
- III. Chowdhury S., Deb A., Nurujjaman Md., Barman C. “Application of radioactive gas radon as earthquake precursor in Eastern Himalayas”. “International Conference on Nuclear, Particle and Accelerator Physics (ICNPAP-2018)”. Central University of Jharkhand, Ranchi. 23-26 October, 2018.
- IV. Arindam Kumar Naskar, Javed Akhter, Saheli Chowdhury, Mitali Mondal, Argha Deb, “A study of seasonal variation of radon levels in tube well water of Susunia Hill region, West Bengal”, “International Conference on Nuclear, Particle and Accelerator Physics (ICNPAP-2018)”. Central University of Jharkhand, Ranchi. 23-26 October, 2018.
- V. Chowdhury S., Deb A., Barman C., Nurujjaman Md., Bora D., Ghose D. “Study of Anomalies in Soil Radon Time Series as Earthquake Precursor in Eastern Himalayas and Geothermal Region of Eastern India”. “27th West Bengal State Science and Technology Congress, 2019”. Science City Auditorium, Kolkata. February 28-March 01, 2019.

5. Collaborative Programmes

- I. Jadavpur – N.I.T. Sikkim Collaboration
- II. Jadavpur – Diphu Govt College Collaboration
- III. Jadavpur - Bose Institute Collaboration

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PLASMA STUDIES

[Department of Instrumentation Science]

Phone: 2414-6321

Int.: 2457- 2379/2378

Co-ordinator: Prof Anup Bandyopadhyay

E-mail: ps.centre@jadavpuruniversity.in

1. A. Course offered: Nil

B. Number of Faculty Members: No permanent Faculty Member.

Teachers, Researchers of participating
Departments, other Institutes, Colleges.
Participate in the activities of the Centre.

C. Participating Departments: Instrumentation Science, J.U.
Mathematics, J.U.
Physics, J.U.

D. Collaborating Institutes:

Collaborative Institute (International):

- i) Universita Degli Studi de Milano-Bicocca (Italy)
- ii) Centre Lasers Intenseset Application, University Bordeaux, France.
- iii) University of North Carolina, Charlette (USA).
- iv) Bejing Agricultural University(China)

Collaborative Institute (India):

- i) Tata Institute of Fundamental Research (Mumbai).
- ii) Saha Institute of Nuclear Physics (SINP), Kolkata, Plasma Division.
- iii) Institute for Plasma Research, Gandhinagar.
- iv) Indian Statistical Institute, Kolkata, Physics & Mathematics Unit.
- v) University of Calcutta, Department of Applied Mathematics
- vi)Viswa Bharati University, Santiniketan, Deptt. of Mathematics

2. A. Area of Research Activities (Jointly with Dept. of Instrumentation Science, Physics & Mathematics, JU)

- i) Basic Plasma Physics : Linear & Non-linear wave processes.
- ii) Laser Plasma interaction: Inertial confinement fusion (ICF) related collaborative theoretical & experimentalprogramme.
- iii) High Energy Density Plasma: Fluid Dynamics, Interfacial Fluid Instabilities applicable to ICF target and Astrophysics.
- iv) Dusty Plasma.
- v) Astrophysical Plasma.

2. B. Major ongoing Research project (Jointly with Dept. of Instrumentation Science & Mathematics, JU)

(Name of the Teacher–Title of the Project–Funding Agency)

Prof. M.Khan (PI), Prof. R.Bhar(Co-PI), Prof N.Chakrabarti(Co-PI), Prof Samiran Ghosh (Co-PI),
Dr. Sachindranath Das(Co-PI)–Time Dependent Nonlinear Structure in Plasmas in the Frame Work
of Lagrangian Fluid Description–CSIR,Govt.of India–Duration:2017- 20

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Prof. M.Khan (Co-PI), Prof. R.Bhar (PI), Prof. R. K. Roychaudhury (Co-PI), ACNCP & ISI(Ex), Kolkata Prof.Anup Bandyopadhyay–Structural Properties and Astrophysical Application of Quantum Plasma–SERB, Govt.of India–Duration: 2017-20

2. C. Seminar/Workshop/Conference/Symposium Organized:

(Name of the Teacher acted as co-ordinator /Convener–Sponsored by–Name of Workshop/ Training–Organized by–Duration)

Convener: Prof. R. Bhar, Prof. Anup Bandyopadhyay–Family members of Prof. Gupta, Centre for Plasma studies and ACNCP, Kolkata–M. R. Gupta Memorial 2nd.National Seminar–Centre for Plasma Studies, JU, Deptt. of Mathematics and ACNCP, Kolkata–August 3, 2018

3. A. Invited Lecture Delivered/Chairing a Session:(Name of the Teacher–Type of Seminar/Workshop/ Conference–Organizer/Place Duration–No of days/Week)

Prof. Anup Bandyopadhyay–Invited Lecture in National Seminar–Department of Applied Mathematics, CU–March 12-14, 2019

3. B. Seminar/Workshop/Symposium attended and presented papers:

(Name of the Teacher–Type of Seminar/Workshop/Conference–Organizer/Place Duration–No of days/Week)

Prof. R. Bhar–National Symposium on Instrumentation(NSI-41) Title of paper: CO adsorption-desorption kinetics of polyaniline-carbon nanotube based sensor–Instrument Society of India, JSS Sc. & Technology University, Mysuru–July 13 – 14, 2018–2 days

4. B. List of publications in referred Journals during 2017-18:

1. “Damped solitary waves on a superfluid vortex filament”, A. Mitra, Manoranjan Khan. Khan and R. Roychoudhury *Chaos, Solitons & Fractals*, 21, 222-225 (2018).
2. “The effects of free vortex decay in quasi-classical and ultra-quantum turbulence”, A. Mitra *J Low Temp Phys*, 194 (1-2), 88-98 (2018)
3. “Superfluid Boson-Fermion mixture: Structure formation and Collective periodic motion” A. Mitra *J Low Temp Phys*, 190 (1-2), 90-99 (2018).
4. “Nonlinear density collapse in one-dimensional cold atomic gas” Sayanee Jana, Samiran Ghosh, Nikhil Chakrabarti and Manoranjan Khan *Physica Scripta*, 94, 055210 (2019).
5. “ZnO polymer composite based visible blind UV photo detector”, S.Patra, A.Ray, A.Roy, P.Sadhukhan, P.Pujaru, U.K.Ghorai, R. Bhar, S.Das *Materials Research Bulletin*, 101, 240 – 245,(2018).
6. “Polyaniline-multiwalled carbon nanotube (PANI-MWCNT): Room temperature resistive carbon monoxide(CO) sensor”. A.Roy, A.Ray, P.Sadhukhan, K.Naskar, G.Lal, R.Bhar, C.Sinha, S.Das *Synthetic Metals* 245, 182 – 189 (2018)
7. “Photovoltaic properties of F : SnO₂/CdS/CuO/Ag heterojunction solar cell”, S.Dolai, R.Dey, S.Hussain, R.Bhar, A.K.Pal *Material Research Bulletin*, 109, 1-9, (2019)

QUALITY MANAGEMENT SYSTEM

[Department of Mechanical Engg.]

Int. : 2457-2488/2256/2582

Coordinator : Prof Sadhan Kumar Ghosh

E-mail : qms.centre@jadavpuruniversity.in

Major Research Project: (Departmental/Individual, Name of the Project/Funding agency).

International Research Projects ongoing - Prof Sadhan K Ghosh as PI

1. Royal Academy of Engineering, UK funded (2019-2021): Circular Economy adoption within small and medium sized enterprises in India and the UK. (40,000 GBP) .
2. Funded by Global Challenge Research Funding, UK (2019-2020): Social Wellbeing and Mental Health Challenges of Employees of Small and Medium Sized Enterprise (SMEs) in Emerging Economies (2019-2020) : (10,000 GBP) .
3. Shota Rustaveli National Science Foundation (SRNSF), Georgia, funded (2019-2022): Development of an Integrated Methodology for Determination of the Likelihood of Emerging Illegal Dumpsites in High Mountainous Rural Regions on the Example of Georgia, (GEL 180 000). Partner: Institute of Hydrometeorology at Georgian Technical University, Georgia.
4. IGES Centre Collaborating with UNEP on Environmental Technologies (CCET), Japan and International Society of Waste Management, Air and Water (ISWMAW), India funded (2018-20): Developing Indore Case Study, the cleanest city in India (USD 5000).
5. European Union funded: Horizon 2020 Research projects from European commission (July 2018 – June 2022) : PI from Jadavpur University, Project Entitled, “ India H2O bio-mimetic and phyto-techNologies DesIgned for low-cost purfic Action and recycling of water. 20 participating organizations from 7 countries- India, UK, Denmark, Singapore, Spain, Netherlands and Israel. (INR 130 million).
6. Asian Productivity Organization (APO), Japan and China Productivity Council, Taiwan (May 2016 – continued) : Research Project, “Green Productivity for the Base of the Pyramid for Sustainable Development in APO Member Countries”. Lead Partner : National Taipei University of Technology, Taiwan; Partners : India, Vietnam; Thailand Indonesia; Malaysia; USA; Funded by : APO, Japan & CPC, Taiwan (USD30,000).
7. UNCRD, Japan; ISWMAW, CRIC (Consortium of researchers in international collaboration), India supported Research Project: International Collaborative Research Project on, “Global Status of implementation of Circular Economy” (2018-2021), participated by experts from 34 countries. Prof Sadhan K Ghosh is the Project Leader. Participating countries : India, Austria, Australia, Bangladesh, Brazil , Canada, China, Egypt, Ecuador, Germany, Indonesia, Israel, Italy, Japan, Kenya, Lebanon, Lao DPR, Malaysia, Mauritius, New Zealand, Norway, Nigeria, Norway, Rep. of Korea, Rep. of South Africa, Russian Federation, Serbia, Samoan Islands, Soudi Arabia, Sri Lanka, Thailand, Japan, USA , UK and Vietnam etc.

National Research Projects (Funded) ongoing - Prof Sadhan K Ghosh as PI

8. ISI, Kolkata funded(2019-2021): Pro-Environmental attitude survey (PES), Psychology Research Unit of the Indian Statistical Institute, Kolkata (INR 12,60,000).

Invited lectures delivered / Session Chaired (2018-19)

Lectures delivered in foreign Countries and India by Prof. Sadhan K. Ghosh

1. China, Hefei University, Hefei, China : *Invited Speech* on “Waste Management in India and SBM” in International Conference on Technology and Waste Management in Hefei University, Hefei, China, during June 12-13, 2018.

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2. Kuala Lumpur : Delivered *Plenary Speech*, “Waste Management under legal Framework in India” at the ISWA World Congress 2018 at International Convention Centre at Kuala Lumpur, Malaysia during October 21-24, 2018.
3. Thailand, 3RINCs : Delivered speech at the 5th 3R International Scientific Conference on Material Cycles and Waste Management (3RINCs) held, 27 Feb - 1 Mar, 2019 at Pullman Bangkok King Power, Bangkok, Thailand.
4. Thailand, UNCRD : Delivered speech and acted as the rapporteur at the 9th Regional 3R Forum in Asia and the Pacific organised by Thailand Government, UNCRD and Govt of Japan during 4-6 March 2019; at Royal Orchid Sheraton Hotel & Towers, Bangkok, Thailand; Theme: 3R as a Way for Moving towards Sufficiency Economy – Implications for SDGs.
5. China, Tsinghua University: Delivered *Keynote Speech* on “Marine Littering and Micro Plastics” at the ICWMT14, International Conference on Waste Management and Technology, by Tsinghua University, Basel Convention Regional Centre for Asia and the Pacific, held at Beijing, China, from 21st to 24th, March 2019.
6. Nepal, ICIMOD: Delivered *Keynote Speech* at the ”1stSub Regional workshop on Preparation of Status Report and Sub-regional Roadmap for Implementing the Global Waste Management Goals towards addressing SDGs in South Asia” during 25-26 March 2019 at the International Center for Integrated Mountain Development, Kathmandu, Nepal.
7. USA : Delivered the *Opening Plenary Speech* in Annapolis, Maryland, Washington DC, on “Sustainable Waste Management in Ribboning & Retting of Jute: Alternative to Plastics”, in the 34th International Conference on Solid Waste Technology and Management, by Widener University, USA held during March 31- April 03, 2019.
8. India, JU: Delivered talk on “Global initiatives in resource conservation : Circular Economy and 3Rs supported by legislation” at the UGC-HRDC-JU (www.hrdcju.in) on “Modern Methods in Earth System Science” from 18 September to 11 October 2018 at Geology Department, Jadavpur University.
9. India at BIS : Delivered Inaugural address in the World Accreditation Day 2018 on 9th June 2018 organised by QCI, NABET and BIS at Peerless Inn, J. L. Nehru Road, Kolkata.
10. India at JU: Delivered the address in the World Environment Day Seminar 2018 (Beat the Plastic Pollution) on 5th June 2018 organised by CQMS, ISWMAW, FOSMI at Jadavpur University, Kolkata.
11. India at ISI : Delivered Invited speech at Indian Statistical Institute (ISI) on “Eco-friendly High Speed Jute Ribboning Process – Reducing water footprints and occupational health Hazard” in the Seminar on “Strategies in jute industry sectors” on 3rd June, 2018, ISI, Barranagar, Kolkata.
12. India at BNCCI: World Environment Day 2018 Invited Speech in WED Seminar held on 4th June 2018 at Conference Hall of Bengal National Chamber of Commerce and Industries (BNCCI) organised by BNCCI, Kolkata.
13. India at CPCB: World Environment Day 2018 Invited Speech at Central Pollution Control Board, at Kolkata office in WED Seminar held on 5th June 2018 at Conference Hall at Kasba, Kolkata.
14. India at Indore : Delivered speech and acted as the rapporteur at the 8th Regional 3R Forum in Asia and the Pacific being jointly organised by Union of ministry of housing and urban affairs and government of Madhya Pradesh, UNCRD and Govt of Japan held at Brilliant Convention Centre during April 9 to 12, 2018.
15. India at the Consulate General of the Federal Republic of Germany Kolkata : “Circular Economy” at the Science Lecture Series Session at Goethe Institut – Max Mueller Bhavan Park Mansions, on 24th August 2018.
16. India at IconSWM, ANU: Delivered the Keynote Speech at 8th IconSWM 2018 (International Conference on Solid Waste Management, held at Acharya Nagarjuna University, Guntur, during November 22-24, 2018

Session Chaired (2018-19)

(Description–Date–Venue)

Chaired the Technical Session in the 34th International Conference on Solid Waste Technology and Management, Philadelphia, Widener University, USA held in March, 2019– March 2019– Annapolis, Maryland, Washington DC USA

Chaired the 8th International Conference on Solid Waste Management, 8th IconSWM held during November 22-24, 2018.– November 22-24, 2018–Acharya Nagarjuna University, Guntur

Chaired Technical Session in the ICWMT14 China, Basel Convention Regional Centre for Asia and the Pacific, Beijing, March 2019– March 2019– Tsinghua University, China

Chaired the Mayor’s Session in the 8th Regional 3R Forum in Asia and the Pacific being jointly organized held during April 9 to 12, 2018– 10th April 2018–Brilliant Convention Centre, Indore

Chaired Technical Session at the ISWA Congress 2018 at during October 21-24, 2018. Kuala Lumpur.– March 21, 2016–Convention Centre, Kuala Lumpur, Malaysia

Chaired the inaugural and valedictory programme of the 8th IconSWM 2018 (International Conference on Solid Waste Management),–November 22-24, 2018–Acharya Nagarjuna University, Guntur,

Conference attended by Prof Sadhan K Ghosh

1. 34th International Conference on Solid Waste Technology and Management, Philadelphia, Widener University, USA held during March, 2019, at Annapolis, Maryland, Washington DC
2. 14th International Conference on Waste Management and Technology at Beijing, China during March 21-24, 2019 by Basel Convention Regional Centre for Asia and the Pacific, Tshinhua University, Beijing.
3. 8th International Conference on Solid Waste Management, 8th IconSWM 2018 at Acharya Nagarjuna University, Guntur, AP, India, by International Society of Waste Management, Air and Water (ISWMAW), CQMS, Jadavpur University, TERI, IIT Kgp., IISc Bangalore and KWSA, JSMCWM.
4. 8th 3R Forum on Asia Pacific organized by UNCRD and Govt of Thailand and Japan, during April 9 to 12, 2018 at Bangkok, Thailand.

Seminar/Conference/Symposium organized by Prof Sadhan K Ghosh

1. 8th International Conference on Solid Waste Management, 8th IconSWM 2018 at Acharya Nagarjuna University, Guntur, AP, India, by International Society of Waste Management, Air and Water (ISWMAW), CQMS, Jadavpur University, TERI, IIT Kgp., IISc Bangalore and KWSA, JSMCWM.
2. WED (World Environment Day) Celebration Workshop on 5th June 2018 : Beat the Plastics Pollution at Jadavpur University.
3. Indo - Taiwan Workshop on 11th August by CQMS, JU and Fu Jen Catholic University.

Publications by Prof Sadhan K Ghosh during 2018-19

Published in Peer Reviewed Journal

1. Sadhan Kumar Ghosh, P. Agamuthu, (2018). “Circular economy: The way forward”, Editorial, *Waste Management & Research* 2018, Vol. 36(6) 481-482;DOI: 10.1177/0734242X18778444 journals.sagepub.com/home/wmr.
2. Ipsita Saha, Amit Kundu, Sadhan Kumar Ghosh “Organizational Perspective of Critical Success factor to establish ERP as a Sustainable Solution”, *The Journal of Army Institute of Management Kolkata*, Kindler Volume XVII January – June 2018, PP 150–156.
3. Baidya, R., Ghosh, S. K., & Parlikar, U. V. (2018). “Blast furnace flue dust co-processing in cement kiln– A pilot study”. *Waste Management & Research*, 0734242X18816791.
4. Baidya, R., & Ghosh, S. K. (2018). “Low carbon cement manufacturing in India by co-processing of alternative fuel and raw materials”. *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects*, 1-12.

5. Ghosh, A., Debnath, B., Ghosh, S. K., Das, B. and Sarkar, J. P., 2018. "Sustainability analysis of organic fraction of municipal solid waste conversion techniques for efficient resource recovery in India through case studies". *Journal of Material Cycles and Waste Management*, pp.1-17.
6. De, D., Chowdhury, s., Dey, P., & Ghosh, S., (2018), "Impact of Lean and Sustainability Oriented Innovation on Sustainability Performance of Small and Medium Sied Enterprises : A data Envelopment Framework", *International Journal of Production Economics*. . DOI: 10.1016/j.ijpe.2018.07.003
7. Debnath, B., Chowdhury, R., Ghosh, S. K. (December 2018). "Sustainability of metal recovery from e-waste". *Frontiers in Environmental Science and Engineering*, 12(6):2. (DOI: 10.1007/s11783-018-1044-9) [Topical Collection: Special Issue—Recycling Materials from WEEE] (Impact Factor: 1.961)

Published in Book Chapters:

8. Ipsita Saha, Amit Kundu, Sadhan Kumar Ghosh, "Exploring the rationale between ERP and EPR in Asian Countries using cloud based Approach" is selected for the book chapter publication being published by Springer with book title: *Sustainable Waste Management : Policies and Case Studies*, Volume 1., pp: 15-25, ISBN: 978-981-13-7070-7, DOI: https://doi.org/10.1007/978-981-13-7071-7_2
9. Ipsita Saha, Amit Kundu, Sadhan Kumar Ghosh "A Study to Establish an Energy-Efficient Sustainable Business Model in Virtual ERP" is selected for the book chapter published by Springer with book title: *Waste Management and Resource Efficiency*, Book Subtitle:, *Waste Management and Resource Efficiency*, Springer.pp: 1167-1174. DOI: 10.1007/978-981-10-7290-1_96. Link: https://link.springer.com/chapter/10.1007%2F978-981-10-7290-1_96
10. De, D., Dey, P., & Ghosh, S., and Pappu, R., (2019), "Impact of Waste Management Practices of Indian Small and Medium Sized Manufacturing Enterprises on their Financial Performance". *Sustainable Waste Management: Policies and Case Studies*, 53-65, DOI: 10.1007/978-981-13-7071-7_5.
11. Ipsita Saha, Amit Kundu, Sadhan Kumar Ghosh "Organizational Perspective of Critical Success factor to establish ERP as a Sustainable Solution" published in UGC approved journal *Kindler VolXVII* Jan-Jun17 published by Army Management Institute.
12. Bhattacharyya, S., & Ghosh, S. K. (2019). "A Review on Various Thermochemical Technologies for Resource Recovery from Sewage Sludge". In *Waste Valorisation and Recycling* (pp. 1-17). Springer, Singapore.
13. Baidya, R., Bhattacharya, T., Kumar, G., & Ghosh, S. K. (2019). "Energy Analysis of Water Hyacinth–Cow Dung–Sawdust Mixture Briquettes—An Indian Perspective". In *Waste Management and Resource Efficiency* (pp. 719-725). Springer, Singapore.
14. Baidya, R., Debnath, B., & Ghosh, S. K. (2019). "Analysis of E-Waste Supply Chain Framework in India Using the Analytic Hierarchy Process". In *Waste Management and Resource Efficiency* (pp. 867-878). Springer, Singapore.
15. Roychoudhuri, R., Debnath, B., De, D., Albores, P., Banerjee, C., & Ghosh, S. K. (2019). "Estimation of E-waste Generation—A Lifecycle-Based Approach". In *Waste Management and Resource Efficiency* (pp. 825-832). Springer, Singapore.
16. Baidya, R., Debnath, B., & Ghosh, S. K. (2019). "Analysis of E-Waste Supply Chain Framework in India Using the Analytic Hierarchy Process". In *Waste Management and Resource Efficiency* (pp. 867-878). Springer, Singapore.
17. Debnath, B., Chowdhury, R., & Ghosh, S. K. (2019). "An analysis of e-waste recycling technologies from the chemical engineering perspective". In *Waste Management and Resource Efficiency* (pp. 879-888). Springer, Singapore.
18. Mukherjee, A., Debnath, B., & Ghosh, S. K. (2019). "Carbon Nanotubes as a Resourceful Product Derived from Waste Plastic—A Review". In *Waste Management and Resource Efficiency* (pp. 915-934). Springer, Singapore.

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19. Debnath, B., Ghosh, A., Prathima, B., Birawat, K. K., & Ghosh, S. K. (2019). "Status of Composting for OFMSW Treatment in Karnataka and West Bengal: Case Studies and Sustainability". In *Waste Valorisation and Recycling* (pp. 225-236). Springer, Singapore.
20. Debnath, B., Chowdhury, R., & Ghosh, S. K. (2019). "Urban Mining and the Metal Recovery from E-Waste (MREW) Supply Chain". In *Waste Valorisation and Recycling* (pp. 341-347). Springer, Singapore.
21. Debnath, B., & Ghosh, S. K. (2019). "Hydrogen Generation from Biorefinery Waste: Recent Advancements and Sustainability Perspectives". In *Waste Valorisation and Recycling* (pp. 557-572). Springer, Singapore.
22. Debnath, B., Ghosh, A., Kumar, M., Shariff, A., Kumar, B.M., and Ghosh, S.K., 2019. "Waste Management Challenges due to Tourism in Hilly Areas in India: A case study of Chamundi Hill, Mysore". In *Sustainable Waste Management: Policies and Case Studies*. Springer Book Chapter. 7th IconSWM—ISWMAW 2017, Volume 3.
23. Dutta, N., Ghosh, A., Debnath, B., Ghosh, S. K., (2019). "Climate Change in Hilly Regions of India: Issues and Challenges in Waste Management". In *Sustainable Waste Management: Policies and Case Studies*. Springer Book Chapter. 7th IconSWM—ISWMAW 2017, Volume 3.
24. Debnath, B., Ghosh, A., Prathima, B., Birawat, K.K. and Ghosh, S. K., 2019. "Status of Composting for OFMSW Treatment in Karnataka and West Bengal: Case Studies and Sustainability". In *Waste Valorisation and Recycling* (pp. 225-236). Springer, Singapore. 7th IconSWM—ISWMAW 2017, Volume 2.

Published in Conference Proceedings

25. Sadhan Kumar Ghosh, (2018), "Sustainable Waste Management in Ribboning & Retting of Jute : Alternative to Plastics", *Proceedings of the ICWMT 14*, Tsinghua University, China (Best Paper Award) March, 2019.
26. Baidya, R., Ghosh, S. K., & Parlikar, U. V. (2018). "Co-processing of Trade Rejects in Cement Plant - A Critical Analysis", *International Conference on Sustainable Waste Management – 2018*, Guntur, 22nd -25th, November, 2018.
27. Baidya, R., Saha, I., Bhattacharya, T., Ghosh, S. K., (2018), Sustainable Waste Transportation in Kolkata Using DBMS and Image Sensing, *International Conference on Sustainable Waste Management – 2018*, Guntur, 22nd -25th, November, 2018.
28. Ipsita Saha, Amit Kundu, Sadhan Kumar Ghosh "Organizational Perspective of Critical Success Factor to Establish ERP as A Sustainable Solution" *National Conference on "Contemporary Management Practices" (NCCMP 2018)* at Army Management Institute on 21st April, 2018
29. Ipsita Saha, Amit Kundu, Sadhan Kumar Ghosh "A Business Model for Enterprise Resource Planning (ERP) by Establishing a Sustainable Supply Chain Management" published in *8th International Conference on Solid Waste Management* at Achharyya Nagarjuna University, Vijaywada from 22nd -24th November, 2018, pp. 160 - 165
30. Rahul Baidya, Ipsita Saha, Tapobrata Bhattacharya, Sadhan Kumar Ghosh "Sustainable Waste Transportation in Kolkata Using DBMS and Image Sensing" published in *8th International Conference on Solid Waste Management at Achharyya Nagarjuna University, Vijaywada* from 22nd -24th November, 2018, pp. 306 – 311
31. Ipsita Saha, Amit Kundu, Sadhan Kumar Ghosh "Development of Sustainable Business Model for Financial Sector for Successful Implementation of ERP", *The 2nd International Conference on Management of Ergonomic Design, Industrial Safety and Healthcare Systems (MESH 2018) & International Conference for Managing the Asian Century 2018 (ICMAC 2018)* from March 13 to 15, 2019.
32. Debnath., B., Chowdhury., R. & Ghosh, S. K. (2018). "Towards Circular Economy in E-waste recycling via Metal Recovery from E-waste (MREW) facilities". In proceedings: *ISWA 2018 World Congress*. pp. 310 – 314, Kuala Lumpur, Malaysia, 22-24 October, 2018. ISBN 978-967-16527-0-1.

33. Debnath., B., Chowdhury., R. & Ghosh, S.K. (2018). “Recycling of Polymers from WEEE: Issues, Challenges and Opportunities”. In proceedings: 8th International Conference on Sustainable Waste Management (8th IconSWM), Vol 2: pp. 386 – 393, Guntur, AP, India, 22-24 November, 2018. (Publication in Springer Book Chapter Awaited)
34. Birawat. K.K., Ravikumar. K.P., Debnath. B. & Ghosh, S.K. (2018). “Integrated Solid Waste Management in India - Implications from the Case study of Hunsur Municipality, Karnataka”. In proceedings: 8th International Conference on Sustainable Waste Management (8th IconSWM), Vol 1: pp. 642 – 646, Guntur, AP, India, 22-24 November, 2018. (Publication in Springer Book Chapter Awaited)
35. Birawat. K.K., Gowda. S.L., Debnath. B. & Ghosh, S.K. (2018). “Willingness of students and academicians to participate in E-waste Management Programmes - A case study of Bangalore”. In proceedings: 8th International Conference on Sustainable Waste Management (8th IconSWM), Vol 2: pp. 584 – 589, Guntur, AP, India, 22-24 November, 2018. (Publication in Springer Book Chapter Awaited)
36. Debnath., B., Chowdhury., R. & Ghosh, S.K. (2018). “A Circular Economy based Framework for Urban Mining of E-waste”. In proceedings: 8th International Conference on Sustainable Waste Management (8th IconSWM), Vol 2: pp. 1057 – 1161, Guntur, AP, India, 22-24 November, 2018. (Publication in Springer Book Chapter Awaited)
37. Debnath., B., Alghazo., J.M., Latif., G, Das., A., & Ghosh, S.K. (2018). “Security Threats in the Supply Chain of Waste Mobile Phone Recycling”. In proceedings: 8th International Conference on Sustainable Waste Management (8th IconSWM), Vol 2: pp. 1162 – 1167, Guntur, AP, India, 22-24 November, 2018. (Publication in Springer Book Chapter Awaited).
38. Ghosh, A., Ghosh, S.K., Sarkar, J.P. and Das, B., 2018. “An Integrated Approach for Management of Waste Biomass and Resource Recovery for Developing Nations Through Strategic Framework”. In *ISWA World Congress 2018*, Kuala Lumpur, Malaysia: Book of proceedings. Chapter: 8: Sustainable Consumption And Waste Management In Developing Countries. Publisher: Waste Management Association Malaysia (WMAM); ISBN 978-967-16527-0-1.
39. Ghosh, A., Debnath, B. and Ghosh, S.K., 2018. “Biomedical Waste Management in West Bengal: Current Practices, Issues and challenges”. In Conference proceeding: *Sustainable Waste Management: 8th IconSWM—ISWMAW 2018*.
40. Ghosh, A., Debnath, B., Dutta, N., Gupta, A. and Ghosh, SK., 2018. “Plastic Waste Management Rule 2016 Implementation in India: Current status, Issues and challenges”. In Conference proceeding: *Sustainable Waste Management: 8th IconSWM—ISWMAW 2018*.
41. Ghosh, A., Debnath, B., Ghosh, S.K., Das, B. and Sarkar, J.P., 2018. “Sustainability analysis of organic fraction of municipal solid waste conversion techniques for efficient resource recovery in India through case studies”. *Journal of Material Cycles and Waste Management*, 20(4), pp.1969-1985.
42. Debnath, B., Ghosh, A., Prathima, B., Birawat, K.K. and Ghosh, S.K., 2019. “Status of Composting for OFMSW Treatment in Karnataka and West Bengal: Case Studies and Sustainability”. In *Waste Valorisation and Recycling* (pp. 225-236). Springer, Singapore.
43. Anaya Ghosh and Sadhan Kumar Ghosh. “Smart City Development: A step towards Solid Waste Management and Sustainable Development”. *ICSW USA CONFERENCE*, Anapolis. MARCH 2019.
44. Aich A , Ghosh S K, (2018), “Framework for Auditing of Municipal Solid Waste Management System in India”, Conference proceeding: *Sustainable Waste Management: 8th IconSWM—ISWMAW 2018*.

Manuscript submitted under review in Journal:

45. Debashree De, Chrisovalantis Malesios, Prasanta Kumar Dey, Pavel Albores and Sadhan Kumar Ghosh, “Impact of Sustainability practices on Competitive Capability of Indian manufacturing Small and Medium Enterprises (SMEs)”, submitted to the *IJPE special issue*.

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46. Ghosh, A., Ghosh, S. K., Sarkar, J.P. and Das, B. “An Integrated Approach for Management of Waste Biomass and Resource Recovery for Developing Nations using Decision Making Support System/AHP/ANN for a sustainable framework”, submitted to *WM&R*.

Books as Editor : Edited volume /Int. Journal as Chief Editor / Editor / Associate Editor by Prof Sadhan K Ghosh

1. Chief Editor : *Proceedings of 8th IconSWM 2018 Two Volumes*, in November 2018
2. Associate Editor, *Special issue of International Journal of Materials Cycle and Waste Management*, Member Technical Committee of 4th 3RINCs, April 2018.
3. “Waste Management and Resource Efficiency”, published in January 2019, Springer Publication.
4. *Sustainable waste management: Policies & Case Studies* : published in January 2019, Springer Publication.
5. *Waste Water Recycling and Management*: Published in June 2018, ISBN 978-981-13-2619-6, Springer Publication.
6. *Energy Recovery Processes from Wastes*, Theme based book, ISBN 978-981-329-228-4, Springer Nature, © 2020
7. *Waste Valorisation and Recycling Technology* : Published in June 2018, Springer Publication. Volume 2, ISBN 978-981-13-2784-1, © 2019
8. *Urban Mining and Sustainable Waste Management*, Theme based book by Springer Nature, under publication, ISBN 978-981-15-0532-4, © 2020
9. *Bio-resource Utilization and Bioprocess*, ISBN 978-981-15-1607-8, book by Springer Nature, ,
10. Editor of the Book, *Waste Management and Resource Efficiency*, Proceedings of 6thIconSWM 2016, Sept 2018; Springer Publication,ISBN 978-981-10-7290-1;
11. Editor of the book volume : *Sustainable waste management: Policies & Case Studies* : Proceedings of 7th IconSWM 2017, published in Dec 2018, Springer Publication.
12. Associate Editor for WM&R (SAGE) June 2018 edition: *International Journal of Materials Cycle and Waste Management*, Member Technical Committee of 4th 3RINCs.

Outstanding Achievement of Prof Sadhan Kumar Ghosh in 2018-19:

1. Recognition as International Expert on SWM : Invited to act as the expert in Preparation of Status Report and Sub-regional Roadmap for Implementing the Global Waste Management Goals towards addressing SDGs in South Asian eight countries invited by the SACEP (South Asian Countries Environmental Programme), Sri Lanka and IGES Centre Collaborating with UNEP on Environmental Technologies (CCET), Japan in 2019-2020.
2. International Sports and Nature familiarization activity (First of its kind in Jadavpur University): As the head of delegation of the Cycling Team participated in the Summer Cycling Programme in Taiwan invited by the Chinese Taipei University Sports Federation (CTUSF) and Fu Jen Catholic University with two officers, Dr. Rajat Ray, Dean of Students and Dr. Aparup Konar, DoP and ten students across Jadavpur university during September 02-07, 2019.
3. Selected as the Chairman, 9th International Conference on Sustainable Waste Management, 9th IconSWM 2019 to be held at KIIT DU, Bhubaneswar, Odisha India to be held during November 27-30, 2019.
4. Publication of A Significant book on CE: The first book on global perspective on circular economy including cases by experts from 20 countries edited by Prof. Sadhan K Ghosh released on 27th November 2019 at Bhubaneswar at the inaugural programme of 9th IconSWM 2019 .

SIR C.V.RAMAN CENTRE FOR PHYSICS AND MUSIC

[Department of Physics]

Int. : 2457-2352

Coordinator : Prof Argha Deb

E-mail : cvrcpm.centre@jadavpuruniversity.in

1. A. Courses offered: Nil

B. Number of Faculty members: 4 (Four)

2. A. Area of Research Activities:

- Effect of music and noise on autonomous nervous system
- A neuro-physical study on Music cognition and the brain
- Study of the melodic, rhythmic and emotional characteristics of music
- Studies of stochastic, chaotic and fractal behavior of speech and music signals
- Study on the phonetic quality and articulation patterns in Indian music visa-a-vis speech
- Study on the alankars in Indian classical music, namely, Taan, Meend, etc.
- Study on the Musical scales, consonance and dissonance, shrutis and the intervals used in the Indian classical music performance
- Study on Nasality in speech and music, the acoustic and perceptual cues of nasality, the degree of nasality and effect of nasality
- Study on the improvisation in different forms of Indian music
- Study on the Rhythm, tempo and styles in Indian music
- Analysis of different nuances of Indian music for finding out the features for estimating the physical correlates of musical terminologies
- Feature extraction and study on the Timbre and prosodic characteristics of vocal and instrumental music.
- Modeling of emotion based on Hilbert space.
- Music, meditation and consciousness.

B. Major Research Projects :

Department of Science and Technology, Govt. of West Bengal sanctioned a R & D project “Neuro-cognitive physics approach to study music induced emotion using bio-sensors”.

Principal Investigator: Prof. Dipak Ghosh, Emeritus Professor, Sir C.V. Raman Centre for Physics and Music, Jadavpur University

Co-Principal Investigator: Prof. Kumardeb Banerjee, Professor, Department of Instrumentation and Electronics Engineering, Jadavpur University

Project Duration: 2 years

3. A. Invited lectures delivered/ session chaired:

- Invited lectures were delivered by Prof. Dipak Ghosh, Emeritus Professor of the Centre in and around Kolkata on Emotions in music and its processing in the brain.

B. Seminar/Workshop/Conference/Symposium attended:

1. Shankha Sanyal, Archi Banerjee, Souparno Roy, Madhuparna Gangopadhyay, research scholars of the Centre presented 4 papers in the *Western Asian Pacific Acoustic Conference, National Physical Laboratory (NPL), New Delhi November 11-15, 2018*

4. A. Books/Monographs etc. Published:1

A book entitled *Musicality of Human Brain through Fractal Analytics* authored by Dipak Ghosh, Ranjan Sengupta, Shankha Sanyal and Archi Banerjee was published by *Springer Nature Singapore Pte Ltd.* 2018; ISBN: 978-981-10-6511-8; <https://doi.org/10.1007/978-981-10-6511-8>

B. Papers Published during the period:

a) Journals:

1. “Soil radon fluctuation and local climate parameters - A multifractal cross correlation study” Alpa Kar, Shankha Sanyal, Dipak Ghosh *International Research Journal of Earth Sciences* 6 (12) (2018); 1-11
2. “Music of Brain and Music on Brain: A Novel EEG Sonification Approach” Shankha Sanyal, Sayan Nag, Archi Banerjee, Ranjan Sengupta, Dipak Ghosh *Cognitive Neurodynamics* (2019), Springer Nature
3. “Multifractal detrended cross correlation analysis of Land-surface temperature anomalies and Soil radon concentration” Alpa Kar, Sucharita Chatterjee, and Dipak Ghosh. *Physica A: Statistical Mechanics and its Applications* 521 (2019): 236-247.

b) Conference:

1. Shankha Sanyal, Archi Banerjee, Sayan Nag, Ranjan Sengupta and Dipak Ghosh “Acoustic and Neural Signature of Evolution of Tagore Songs for Over a Century” Proc. of Western Asian Pacific Acoustic Conference, New Delhi November 11-15, 2018; ISSN-0973-3302
2. Archi Banerjee, Shankha Sanyal, Ranjan Sengupta and Dipak Ghosh “Analysing the Style of an Artist in Indian Classical Music Scenario: A study with Silence or Pause” *Proc. of Western Asian Pacific Acoustic Conference, New Delhi November 11-15, 2018; ISSN-0973-3302*
3. Chirayata Bhattacharyya, Sourya Sengupta, Sayan Nag, Shankha Sanyal, Archi Banerjee, Ranjan Sengupta and Dipak Ghosh “From Speech to Recital – A Case of Phase Transition? A Non Linear Study” *Proc. of Western Asian Pacific Acoustic Conference, New Delhi November 11-15, 2018; ISSN-0973-3302*
4. Uddalok Sarkar, Soumyadeep Pal, Sayan Nag, Tamal Deep Maity, Shankha Sanyal, Archi Banerjee, Ranjan Sengupta and Dipak Ghosh “Speaker Recognition in Bengali Language from Speech Acoustic Features” *Proc. of Western Asian Pacific Acoustic Conference, New Delhi November 11-15, 2018; ISSN-0973-3302*
5. Souparno Roy, Archi Banerjee, Ranjan Sengupta and Dipak Ghosh “Analyzing music with Bose-Einstein distribution: A case study with Indian classical music” *Proc. of Western Asian Pacific Acoustic Conference, New Delhi November 11-15, 2018; ISSN-0973-3302*
6. Aditi Mondal, Madhuparna Gangopadhyay*, Anirban Patranabis, Kaushik Banerjee, Ranjan Sengupta, Dipak Ghosh “Study of the time theory of ragas by analysing sitar signals” *Proc. of Western Asian Pacific Acoustic Conference, New Delhi November 11-15, 2018; ISSN-0973-3302*
7. Anuradha Roy, Dipak Ghosh “Emotion change from audio mode to audiovisual mode - A study with Indian Classical Dance” *Proc. of Western Asian Pacific Acoustic Conference, New Delhi November 11-15, 2018; ISSN-0973-3302*

6. Major Achievements :

- Prof. Dipak Ghosh, Emeritus Professor of the Centre, was awarded the prestigious Tagore Research Scholarship by Ministry of Culture, Govt. of India
- Shankha Sanyal and Archi Banerjee, Research Scholars of the Center, were awarded Ph. D (Science) degree on October, 2018 and December, 2018 respectively.
- Shankha Sanyal, Research Scholar of the Center, received the prestigious ASA (Acoustical Society of America) International Students Grant and Student Membership for performing Graduate Studies in Acoustics.

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SRI AUROBINDO STUDIES

[Department of Philosophy]

Int. : 2457-2358/2638

Coordinator : Prof Aparajita Mukhapadhyay

E-mail : sas.centre@jadavpuruniversity.in

Centre for Sri Aurobindo Studies, Department of Philosophy was established on 2005 as a UGC Centre under the scheme of Epoch Making Social Thinkers of India. From 2005 to XII Plan period Centre has received the financial support from UGC for continuing its academic endeavor. This Centre is entirely an academic unit as its aim is to understand the unique philosophical ideas of Sri Aurobindo. Sri Aurobindo is commonly known as a renowned freedom fighter whose contribution to make India free from the British Imperialism cannot be overlooked. But the aim of the Centre is to highlight him also as a philosopher who interpreted *Upanisada* from a new angle. His spiritualistic interpretation opens a new avenue to understand the meaning of life. His way of seeing the world has a huge relevance in modern period as it helps to rescue Indian culture from all kinds of backslides. His explanation of Indian philosophical truth has a different dimension as he experienced the truth, lived in the truth. His analytic, argumentative, humanistic approach encourages us to focus on his view which emphasizes also on the divinity of life. From the beginning of the Centre our goal is to spread the philosophy of Sri Aurobindo among the scholars and interested persons through seminars, lectures, workshops. In this regard Centre has published several books penned by various famous national and international scholars.

Every year to celebrate the birth ceremony of Sri Aurobindo, Centre organizes the Annual Sri Aurobindo Memorial lecture. The Thirty Fifth Annual Sri Aurobindo Memorial lecture was held on 30th August, 2018. Dr. Amiya Kumar Samanta, the former IPS officer who also taught in The West Bengal National University of Juridical Sciences, Kolkata delivered lecture on 'Sri Aurobindo's Strategy of Anticolonial Struggle and His Idea of Nationalism'. In that lecture the speaker focused on Sri Aurobindo's political life and on India's the then socio-political scenario.

We are proud to intimate that almost from the very beginning, the Centre is successfully conducting the weekly Study Group. Research scholars, faculty members from different colleges and universities are the members of this group. Here we encourage reading the texts of Sri Aurobindo through discussion and interaction with each other. Professor Soumitra Basu, Department of Philosophy, Jadavpur University is regularly conducting the academic activities of the Study Group.

STUDIES IN LATIN AMERICAN LITERATURES AND CULTURES

[Department of Comparative Literature]

Int. : 2457-2223

Coordinator : Dr. Kavita Punjabi

E-mail :hod.comp.lit@jadavpuruniversity.in

1. A. Courses Offered :
1. B. Number of Academic Committee Members : 10
2. A. Area of Research Activities :
 - i. Borders in S.Asia and The Americas.
 - ii. Megacities
 - iii. Reception of Latin American Literatures in Bangla

- 2. B. Major Research Project : (Departmental/Individual, Name of the Project/Funding Agency) –**
- i. Borders in S.Asia and The Americas – in collaboration with Cornell University since 2010, and Presidency University too since 2019, including publication of volumes of collaborative research and a joint bi-annual video-conferencing course. Project of the CSLALC, non-funded.
 - ii. “Megacities”- Ongoing Collaborative Exchange with 17, Institute of Critical Studies, Mexico City, Mexico & several Schools/Centres/Departments of J.U. Project of the CSLALC, non-funded.
- 3. A. Invited Lectures Delivered/Sessions Chaired: (Name of the Teacher, Type of Participants, Name of the Seminar/Conference etc. Place, Duration)**
- i. Kavita Panjabi - Delivered a Special Lecture entitled “Stories/Histories of Calcutta: Baffling Paradoxes Indefatigable Citizenry” at the International Forum on Megacities, organized by 17, Institute of Critical Studies and The National School of History and Anthropology (ENAH) in Mexico City, September 10th-12th, 2018.
 - ii. Dr. Sucheta Bhattacharya – Chaired a session at the seminar - ‘Nation, Identity and Creative Expression : A Dialogue with Voices Unexplored’, organized by the Centre for Studies in Latin American Literatures and Cultures (CSLALC), Jadavpur University – held on 01/03/2019
 - iii. Dr. Parthasarathi Bhaumik - Chaired a session at the seminar - ‘Nation, Identity and Creative Expression : A Dialogue with Voices Unexplored’, organized by the Centre for Studies in Latin American Literatures and Cultures (CSLALC), Jadavpur University – held on 01/03/2019
- 3. C. Seminar/Workshop/Conference/Symposium Organized: (Name of the Teacher, Name of the Paper Presented, if any, Name of the Seminar, Place, Duration)**
- Seminar organized - ‘Nation, Identity and Creative Expression : A Dialogue with Voices Unexplored’, Co-ordinator: Kavita Panjabi, organized by the Centre for Studies in Latin American Literatures and Cultures (CSLALC), Jadavpur University – held on 01/03/2019
- 5. Collaborative Programmes of the CSLALC:**
- i. With 17, Institute of Critical Studies, Mexico City, Mexico & several Schools/Centres/Departments of J.U. - Ongoing Collaborative Exchange on “Megacities” leading to an International Seminar in February 2020.
 - ii. With Professor Debra Castillo, Stephen H. Weiss Presidential Fellow, Emerson Hinchliff Professor of Hispanic Studies, and Professor of Comparative Literature at Cornell University - Co-editing a volume of essays entitled *Centering Borders in Latin American and South Asian Contexts*, forthcoming with Routledge, as part of the ongoing comparative, collaborative research on Borders in S.Asia and The Americas.
 - iii. With Rosalie Purvis, Theatre Director and Scholar at Cornell University - collaborative exchange and workshops at JU on *Text and Performance*, as part of the ongoing comparative, collaborative research on Borders in S.Asia and The Americas.
 - iv. With Dr. Debaroti Chakraborty of the Performance Studies Dept. Presidency University, Kolkata - Co-editing a volume of essays entitled *Centering Borders in Latin American and South Asian Contexts: Aesthetics and Politics of Cultural Production* and workshops at JU on *Text and Performance* as part of the ongoing comparative, collaborative research on Borders in S.Asia and The Americas.
- 6. Major Achievements:**
- Invited by 17, Institute of Critical Studies, Mexico City, Mexico – for Collaborative Exchange on “Megacities” leading to the 3rd International Megacities Forum at J.U. in February 2020.

CSLALC Digital Library:

Holdings of the Digital Library augmented and catalogued under the following categories,

- 1) E-Books
- 2) Articles: on Borders Readings, Gendered Border Violence, Latin America Gender, Latin America Diaspora catalogue, Manovich Media:, Video Conferencing Course Study Material
- 3) Film holdings: more than 170 Latin American film holdings from the following countries: Cuba, Argentina, Brazil, Chile, Peru, Ecuador, Mexico, and Latino films from the US.

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STUDY OF RELIGION AND SOCIETY

[Department of Sociology]

Int. : 2457-2555

Coordinator: Prof. Ruby Sain

Joint Coordinators: Dr. Piyali Sur & Dr. Manojit Mandal

Academic Advisor :

Prof. Ruby Sain (Retd.)

1. A. Courses Offered:

ONE YEAR PG DIPLOMA COURSE IN SOCIETY, RELIGION AND SOCIAL WORK (Evening) at Centre for the Study of Religion and Society.

2. A. Area of the Research Activities.:

Sociology of Religion.

Religion & Health / Aging/ Gender/ Media/ Ecology Etc.

2. B Major Research Project

Ongoing Project on “Can religion have a role in mitigating socio-economic impacts of natural disasters? Acceptability of the Law of Karma for promoting Disaster Risk Reduction Policies”.

C. SEMINAR/WORKSHOP/CONFERENCE/SYMPOSIUM ORGANIZED

1. International seminar on “Religious Tolerance in the Contemporary World”

2. Workshop on “ Religion and Natural Disasters in the context of Law of Karma”.

5. Collaborative Programmes

International Conference on RELIGION, SOCIETY AND ENVIRONMENT 7-9 January, 2020

Organized by Department of Sociology, School of Social Sciences Adamas University, Barasat, West Bengal in collaboration with Center for the Study of Religion and Society, Jadavpur University, Kolkata

TRANSLATION OF INDIAN LITERATURES (CENTIL)

[Department of Comparative Literature]

Int. : 2457-2223

Coordinator: Dr. Sayantan Dasgupta

E-mail : til.centre@jadavpuruniversity.in

1. A. Courses Offered : Certificate Course on “Translation as a Skill”

1. B. Number of Faculty Members : 2, Dr Sayantan Dasgupta, Shradhanjali Tamang

2. A. Area of Research Activities : Translation

2. B. Major Research Project : Project Anuvad (UGC UPE 2: CR & SS)

3. A. Invited Lectures Delivered/Sessions Chaired: (Name of the Teacher, Type of Participants, Name of the Seminar/Conference etc. Place, Duration)

1. Sayantan Dasgupta, “Cross-cultural Connections” in the XIV CLAI Biennial International Conference on “Studying South Asian Narratives through Pluralist and Dialogic Frames”, organized by the Comparative Literature Association of India at Maulana Azad National Urdu University, Hyderabad, March 11-14, 2019.

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2. Sayantan Dasgupta, Chaired a session in the XIV CLAI Biennial International Conference on “Studying South Asian Narratives through Pluralist and Dialogic Frames”, organized by the Comparative Literature Association of India at Maulana Azad National Urdu University, Hyderabad, March 11-14, 2019.
 3. Sayantan Dasgupta, Invited Speaker at National Seminar on “Translation and Pedagogy”, Department of English, Jamia Millia Islamia, New Delhi, March 1, 2019.
 4. Sayantan Dasgupta, “Kolkata: A City of Translators”, talk at round table discussion on *City of Translators*, Sahitya Akademi and TOLEDO, Kolkata, November 9, 2018.
- 3. C. Seminar/Workshop/Conference/Symposium Organized:**
1. Two-day international workshop on the theme ‘Academic Social Responsibility’ on July 26 and July 27, 2018 in collaboration with University of East Anglia.
 2. One-day Symposium on ‘Literary Translation: Problems, Poetics and Politics’ organized by CENTIL as part of project Anuvad, UGC-UPE 2: CR&SS, Jadavpur University in collaboration with Sahitya Akademi, September 24, 2018.
 3. One-day Translation Symposium on ‘Cities of Translators: Berlin-Kolkata’ under Project Anuvad, UGC-UPE 2: CR&SS, Jadavpur University in collaboration with TOLEDO, November 12, 2018.
 4. One-day Translation Workshop on ‘Writings from the Sunderbans I’, organized by CENTIL as part of project Anuvad, UGC-UPE 2: CR&SS, Jadavpur University, December 20, 2018.
 5. One-day Translation Workshop on ‘Writings from the Sunderbans II’, organized by CENTIL as part of project Anuvad, UGC-UPE 2: CR&SS, Jadavpur University, January 3, 2019.
 6. One-day Translation Workshop on ‘Writings from the Sunderbans III’, organized by CENTIL as part of project Anuvad, UGC-UPE 2: CR&SS, Jadavpur University, February 1, 2019
- 4. B. Articles Published in Journals:**
1. “Indigenous History and the Tamba Tradition in Darjeeling and Sikkim Himalayas,” *Route to Oral Culture*, by Shradhanjali Tamang ed by Anvita Abbi, (New Delhi: Sahitya Akademi, 2018), 117-123.
 2. “Bharatiyo Ingreji Sahityo: Sahityer Itihas naki, Itihaser Sahityo” by Sayantan Dasgupta, *Parikatha, Sahityo o Songoskriti Bishoyok Potrika*, May 2018.
 3. “Darjeeling Pahar o Nepali Lokokotha” by Shradhanjali Tamang, *Parikatha, Sahityo o Songoskriti Bishoyok Potrika*, May 2018.
 4. “Rethinking Indian Literature, Reinventing Comparative Literature” by Sayantan Dasgupta in *Indian Literature 306*, New Delhi: Sahitya Akademi, July-August 2018, pp. 220-223.
 5. “Engaging with the Oral: Translating Lepcha and Tamang Traditions” by Sayantan Dasgupta and Shradhanjali Tamang in Anvita Abbi ed., *Route to Oral Literature*. New Delhi: Sahitya Akademi, 2018, pp. 91-102.
- 5. Collaborative Programmes:**
1. The centre collaborated with the University of East Anglia to organize a workshop on ‘Academic Social Responsibility’ on July 26 and July 27, 2018.
 2. The centre collaborated with Sahitya Akademi to organize a one-day symposium on ‘Literary Translation: Problems, Poetics and Politics’ on September 24, 2018.
 3. The centre collaborated with the University of Toledo, to organize a translation symposium titled ‘Cities of Translators: Berlin-Kolkata’ on November 12, 2018.
- 6. Major Achievements:**
- Sayantan Dasgupta became member of the Advisory Board (English) of Central Sahitya Akademi, New Delhi.
- Sayantan Dasgupta was appointed Joint Director, School of Media, Communication and Culture, Jadavpur University.

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WELDING TECHNOLOGY

[Department of Metallurgical & Material Engg.]

Int. : 2457-2171

Coordinator: Dr. A.K. Pramanick

E-mail : wtc.centre@jadavpuruniversity.in

Year of establishment: 2002

Department to which the centre is attached: Metallurgical & Material Engineering

Coordinator: Dr. A.K.Pramanick

Teaching Post: Nil

Administrative staff: Nil

Technical staff: 1(one)

Annual Budget: Rs. 12,000.00 (University Budgetary grant; excludes project funds and earnings)

Major Objectives: To strengthen the understanding & cooperating in promoting the development of Welding Technology.

Major activities

To conduct training programme for fresher and experience personnel engaged in welding.

To conduct long term and short term academic courses on welding technology

To undertake industry oriented research projects

To offer consultancy services for assessment and solution of industrial problem

Faculty Profile

There is no sanctioned post. The coordinator's profile is given below;

Name: Dr. A. K. Pramanick

Last degree: PhD

Designation: Professor

Research Interest/Specialization : Physical Metallurgy, Composites and Joining of Materials

Contact details: akshay99.ju@gmail.com

A. Paper Published

Program Organized/ Attended:

1. National Symposium on Sustainable development of the Iron and Steel Industry and Implementation of Industry 4.0.15th to 16th March, 2019 (Metallix 19).
2. International Seminar on Prospects and Challenges in Metallurgical and Allied Industries with Special Emphasis on Quality, Safety and Environment, 22nd February, 2019, Kolkata, India

Publications:

1. Soumyajit Roy, Akshay Kumar Pramanick, Prasanta Kumar Datta, "Comparative Study of Dimensional Variation and Surface Characteristics of thin Walled Investment Casting of Different Geometrical Shape for Different gating System in Hot Clay Mold", *International Organization of Scientific Research*, Vol. 9, Issue-3, March, 2019, pp-17-23.
2. "Characteristics of Dimensional Variation and Shrinkage Analysis of Wax- Based Thin-Walled Investment Casting in Hot Clay Mold for Batch Production", Soumyajit Roy, A. K. Pramanick, P. K. Datta, *International Journal of Computational Engineering Research (IJCER)*, Volume, 09, Issue, 3, March 2019, 43-52.
3. T. Sarkar, A. K Pramanick, S. K. Sahoo, T. K. Pal, A. K Pramanick, "Influence of Austempering Temperature and Time on the Microstructure and Mechanical Properties of Ductile Iron Weldment Using Developed Coated Electrode", *Journal of Material Engineering and Performance*, April, 2019, 28(4), 2071–2085, DOI: 10.1007/s11665-019-03989-1

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4. Tapan Sarkar, Ajit Kumar Pramanick, Tapan Kumar Pal, Akshay Kumar Pramanick, “Development of New Low Nickel Coated Electrode for Welding of Ductile Iron and Its Response to Austempering” *International Journal of Mineral Metallurgy and Materials*, September, 2018, 25 (9), 1090-1103, doi.org/10.1007/s1261
 5. Tapan Sarkar, Tapan Kumar Pal, Akshay Kumar Pramanick, “Variation of nano Ce content in austempered ductile iron (ADI) weld metal and its effects on microstructure”, *Trans Indian Inst Met*, October, 2018, 71(10), 2375-2385, doi.org/10.1007/s12666-018-1368-y
 6. Sourav Debnath, Akshay Kumar Pramanick, “ In vitro Evaluation for Bioactivity properties of crystalline Silica–aluminium Metal Matrix Composite in Simulated body fluid,” *Emerging Trends in Science and Technology*, ISBN 978-81-8487-642-0, pp 30.1-30.5, August, 2018.
1. Ph. D completed: 1
 2. Ph. D Ongoing: 4

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ADULT, CONTINUING EDUCATION AND EXTENSION

Phone : +91-33-2414-6236
Fax : +91-33-2412-7583
Int. : 2457-2290
H.O.D. : Dr. Parthasarathi Chakraborty
E-mail : hodadultcontinuing@jadavpuruniversity.in

1. (A) **Courses Offered:** Details of the Courses offered during the period from 1 April 2018 to 31 March 2019 may be found in the Annexure 'A' attached herewith.

1. (B) **Number of Faculty Members:** Three (3)

2. (A) **Area of Research Activities:** Adult Education, Continuing Education, Communication, Engineering

3. (B) **Seminar/Workshop/Conference/Symposium attended:**

Santwan Chattopadhyay presented paper:

1. 'Municipal Public Relations', organized by Department of Mass Communication & Videography, Rabindra Bharati University, 18 August 2018.
2. Media for Inclusive Development, organized by Department of Mass Communication & Videography, Rabindra Bharati University, 28 February, 2019.
3. 'Communication Channels for Development: A Case Study' organized by DACEE JU, 1 March 2019.
4. 'University – Community Partnership: University beyond its Boundary' organized by Researchfora, in Osaka, Japan, 27-28 March 2019.
5. 'Emergence of End-to-End Encryption and Perception among Social Media Users in Kolkata', organized by Researchfora, in Osaka, Japan, 27-28 March 2019

P S Chakraborty presented paper:

1. 'Communication Channels for Development: A Case Study' organized by DACEE JU, 1 March 2019.
2. 'University–Community Partnership: University beyond its Boundary' organized by Researchfora, in Osaka, Japan, 27-28 March 2019.
3. 'Emergence of End-to-End Encryption and Perception among Social Media Users in Kolkata', organized by Researchfora, in Osaka, Japan, 27-28 March 2019

4. (B) **Articles published in Journals:**

1. Santwan Chattopadhyay, "Futuristic Introspection of Public Relations", *Global Media Journal* (Indian Edition), ISSN 2249-5835, Vol 9, No.1, June 2018.
2. Santwan Chattopadhyay, "Municipal Public Relations: Ethical Framework", *IISRR –International Journal of Research*, ISSN 2394-885X, pp 27-31, July 2018.
3. Santwan Chattopadhyay & D. Roy, "Kashmir in Bollywood Lenses: Changing Perspectives from Roja to Haider", in the book Edited by Mugdha Sengupta, published by Kalyani Foundation, ISBN : 978-81-938439-1-8, pp 77- 87, October 2018

5. **Collaborative Programmes:** Courses organised in collaboration with different organisations have been shown in Annexure 'A'.

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Annexure : 'A'
COURSES OFFERED

POST-GRADUATE LEVEL COURSES:

Title of the Course: M.A. in Journalism & Mass Communication

Duration: 2 Year

Course Fee: Rs.40,000/-

Eligibility: Graduate with 50 % in Hons./Major subject

GRADUATE LEVEL COURSES:

Title of the Course: B.Ed. in Special Education (Multiple Disabilities) (With Indian Institute of Cerebral Palsy)

Duration: 2 Year

Course Fee: Rs.80,000/- +Rs.360/-

Eligibility: Graduate in any discipline

POST-GRADUATE DIPLOMA LEVEL COURSES:

Title of the Course: Post Graduate Diploma in Mass Communication

Duration: 1 Year

Course Fee: Rs.20,000/-

Eligibility: Graduate in any discipline

CERTIFICATE LEVEL COURSES:

1.

Title of the Course: Technician Training Course in Air-Conditioning and Refrigeration (In collaboration with St. Thomas Technical Training Centre)

Duration: 1 year

Course Fee: Rs.500/- per month

Eligibility: Passed Class VIII standard

2.

Title of the Course: Database Management for persons with disabilities (In collaboration with IICP)

Duration: 8 weeks

Course Fee: Rs 1200/-

Eligibility: Madhyamik or equivalent, Persons with Physical and multiple disabilities, hearing impairment and persons without disabilities from economically weaker sections who have working knowledge in English

3.

Title of the Course: Desktop Publishing for persons with disabilities (In collaboration with IICP)

Duration: 24 weeks

Course Fee: Rs 2600/-

Eligibility: Madhyamik or equivalent, Persons with Physical and multiple disabilities, hearing impairment and persons without disabilities from economically weaker sections who have working knowledge in English

4.

Title of the Course: One year Academic programme in Automobile Engineering

Duration: 1 year

Course Fee: Rs.12000/

Eligibility: 2 years diploma offered by the dept.

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5.

Title of the Course: One year Academic programme in Electrical Engineering

Duration: 1 year

Course Fee: Rs.12000/

Eligibility: 2 years diploma offered by the dept.

6.

Title of the Course: Caregivers for persons with disabilities (In collaboration with IICP)

Duration: 8 Weeks

Course Fee: Rs.1000/

Eligibility: Class VIII passed

7.

Title of the Course: Basic Management of Cerebral Palsy for Medical Professionals (In collaboration with IICP)

Duration: 4 Weeks

Course Fee: Rs. 5000/-

Eligibility: Qualified Medical Professionals (MBBS, BHMA, Therapists with B.SC. degree and Rehabilitation Professionals)

8.

Title of the Course: Manuscriptology & Paleography

Duration: 24 Weeks

Course Fee: Rs. 5500/-

Eligibility: Graduate with working knowledge of Sanskrit

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GLOBAL CHANGE PROGRAMME

Telefax : 2414-6382
Int. : 2457 - 2389
Coordinator. : Dr. Anupam Debsarkar
E-mail : jadavpur.gcp@gmail.com
<http://www.juglobalchangeprogram.org>

The Global Change Programme at Jadavpur University (GCP-JU) marks the beginning of a multidisciplinary and comprehensive approach in India at the University level to address the issues of global change and related issues like climate change. GCP-JU comprising theoretical, empirical and action research projects as well as outreach activities seeks to have a direct impact on policy implementation and global change related negotiations at the local, national and international levels. Specifically, GCP-JU has been providing research inputs to The Intergovernmental Panel on Climate Change (IPCC), Millennium Assessment Report (2005), Stern Review Report (2006), and Global Energy Assessment of IIASA (International Institute for Applied Systems Analysis) at the international level. The research centre has also worked with Ministry of Environment and Forest towards preparation of NATCOM (National Communication) for United Nations Framework Convention on Climate Change (UNFCCC) and helps in capacity building within India and many developing countries. At the state level, GCP - JU is involved in the preparation of comprehensive report to ascertain the climate change impact, vulnerability and mitigation potential within the state of West Bengal.

GCP-JU provides an ideal platform to researchers, working professionals, governmental and non- governmental organizations to research, network and collaborate on various local, national and international global change issues. GCP-JU collaborates with various governmental and non- governmental organizations to organize state level, national and international seminars, meetings and workshops which stimulate intellectual dialogue and facilitate policy making.

Primary Aim is capacity building through

- Targeted research
- Short training programmes
- Outreach activities
- Information dissemination

Internship at GCP-JU:

Graduate/undergraduate students from Jadavpur University and various parts of India as well as from other countries worked as interns and worked with researchers associated with various ongoing projects.

Visiting Fellows:

Individual researchers, doctoral fellows, faculty members of various academic institutions as well as working professionals have the opportunity to conduct a part of their research or project in collaboration with GCP-JU. The visiting scholars/working professionals can avail GCP-JU resources to facilitate their work and share their understanding of global change issues with the researchers at GCP-JU through workshops, seminars and group discussions. Dr. Souran Chatterjee from Central European University, Budapest, Hungary has worked as a visiting fellow during November-December, 2018.

Post Doctoral Research:

Through various project activities Post-Doctoral fellowship is helping advanced fellows to pursue research on frontier areas.

Activities during April 2018 to March 2019:

1. An interactive workshop on “Energy system in transition” at Hotel Hyatt Regency, Kolkata on 2nd May 2018. Organized with the Bengal Chamber of Commerce and Industry (BCCI) and University of Stavanger, Norway under UTFORSK Program

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2. Short term course on “Air & Water Pollution” under Green Skill Development Programme, MoEF&CC, Govt. of India from 20th Nov, 2018 to 14th Jan, 2019, jointly organised with Centre for Disaster Preparedness and Management
3. Seminar on “Future Ready Cities-An Experience Sharing with Norway”, under INCP and UTFORSK Program, held on December 17, 2018

Lecture Sessions/Meetings Organized at/by GCP:

1. 2018, June 20, Seminar on “Daylight Integration Using daylight Pipe” delivered by Ms. Purnima Mandal, SRF, Electrical Engineering Department, Jadavpur University
2. 2018, July 24, Seminar on “Sociological dimensions of climate change: Sundarbans region of India and Bangladesh” delivered by Ms. Raka Sen, Graduate Student in the Sociology Program, University of Pennsylvania
3. 2018, August 10, Seminar on “Building Energy and Occupant Comfort-Emerging Research Possibilities” delivered by Dr. Biswajit Thakur, Assistant Professor, Meghnad Saha Institute of Technology, Kolkata, India
4. 2018, November 29, Seminar on “Measuring the productivity impacts of energy efficiency in Hungary and Germany”, Central European University (Budapest), Department of Environmental Science & Policy
5. 2019, January 2, Seminar on “Systematic Review: A Tool for Evidence Synthesis” delivered by Ms. Shreya Some, SRF, Department of Economics, Jadavpur University

Research Projects (Completed/Ongoing):

1. UTFORSK funded project “Sustainable Energy and Environment Solutions: Technology and Policy” - Ongoing
2. University Grants Commission (UGC) funded research project “Road Map for Decarbonization of Indian Energy System: Exploring Innovative Solutions” under Indo-Norwegian Cooperation Programme (INCP)-Completed
3. University Grants Commission (UGC) funded research project under University of Potential Excellence - II (UPE - II) on “National Adaptation Strategy formulation for reduction of climate induced risk to labour productivity”-Completed
4. Ministry of Environment, Forests and Climate Change (UNFCCC) funded project “Assessment of economic cost of impact of heat Stress on labour productivity and adaptation in selected building and transport sector”-Completed

Publications: (April 2018 to March 2019)

In Peer Reviewed Journals:

1. Abhisek Roy, Case M. van Genuchten, Indranil Mookherjee, Anupam Debsarkar and Amit Dutta (2019). “Concrete stabilization of arsenic-bearing iron sludge generated from an electrochemical arsenic remediation plant”, *Journal of Environmental Management* 2019, 233: 141-150.
2. Sudipta Ghosh (Nath), Anupam Debsarkar and Amit Dutta (2019). “Technology alternatives for decontamination of arsenic-rich groundwater—A critical review”. *Environmental Technology & Innovation* 2019, 13:277-303.
3. Satiprasad Sahoo, Anirban Dhar, Anupam Debsarkar and Amlanjyoti Kar (2019). “Future Scenarios of Environmental Vulnerability Mapping Using Grey Analytic Hierarchy Process”. *Natural Resources Research* 2019, 1-23.
4. Hayward, B., and J. Roy (2019). “Sustainable Living: Bridging the North-South Divide in Lifestyles and Consumption Debates”, *Annu. Rev. Environ. Resour.* 2019, <https://doi.org/10.1146/annurev-environ-101718>.
5. Safari, A., Das, N., Langhelle, O., Roy, J., & Assadi, M (2019). “Natural gas: A transition fuel for sustainable energy system transformation?”. *Energy Science and Engineering* 2019, 1-20, 07 June 2019, (<https://doi.org/10.1002/ese3.380>)

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6. Dasgupta Shyamasree, Chakraborty D, Joyashree Roy (2019). "Selected Issues on Economics of Greenhouse Gas Emission Mitigation". *Reference Module in Materials Science and Material Engineering*. (<https://doi.org/10.1016/B978-0-12-803581-8.11056-2>)
7. Some, S., Roy, J., & Ghose, A. (2019). "Non-CO₂ emission from cropland based agricultural activities in India/ : A decomposition analysis and policy link". *Journal of Cleaner Production*, 225:637–646. <https://doi.org/10.1016/j.jclepro.2019.04.017>
8. Ray, A. and De, S. (2019): "A small-scale distributed polygeneration with local renewable resources for a remote place of India: techno-economic optimisation", *International Journal of Ambient Energy (Taylor and Francis)*, (in press)
9. S. Biswas, A. Debsarkar, G. Bhandari (2018). "Rainwater Harvesting (RWH)- A path not profusely explored to solve the crisis of water scarcity". *Indian Ground Water* 2018, 11:24-47.
10. P. Sen, A. Debsarkar, D. Pal (2018). "Hexavalent Chromium Tolerance of Bacterial Strains Isolated from Tannery Effluent Contaminated Soil". *International Journal of Innovative Research & Studies* 2018, 8 (4).
11. Satiprasad Sahoo, Anirban Dhar, Anupam Debsarkar and Amlanjyoti Kar (2018). "Impact of water demand on hydrological regime under climate and LULC change scenarios". *Environmental Earth Sciences* 2018, 77: 341-359
12. Satiprasad Sahoo, Indrani Sil, Anirban Dhar, Anupam Debsarkar, Pulakesh Das and Amlanjyoti Kar (2018). "Future Scenarios of Land-Use Suitability Modeling for Agricultural Sustainability in a River Basin". *Journal of Cleaner Production* 2018, 205: 313-328.
13. Debrupa Chakraborty and Joyashree Roy (2018). "Implementing Environmental Management Accounting (EMA): Case Study of a Paperboard & Paper Production Unit in India". *IJBIT/V11/02/228/RP*.
14. Felix Creutzig, Joyashree Roy, William F. Lamb, Inês M.L. Azevedo, Wändi Bruine de Bruin, Holger Dalkmann, Oreane Y. Edelenbosch, Frank W. Geels, Arnulf Grübler, Cameron Hepburn, Edgar (Hertwich, Radhika Khosla, Linus Mattauch, Jan C. Minx, Anjali Ramakrishnan, Narasimha D. Rao, Julia Steinberger, Massimo Tavoni, Diana Ürge-Vorsatz, Elke U. Weber (2018). "Towards demand-side solutions for mitigating climate change". *Nature Climate Change* 2018, 8: 268-271.
15. Jana, K. and De, S. (2018): "Polygeneration for power, utility heat, desalination and refrigeration: Comparative performance evaluation for different biomass inputs", *Materials Today: Proceedings (Elsevier)* 5(11), 22908-22915
16. Ray, A. and De, S. (2018): "Techno-economic optimization of a small scale distributed polygeneration with local renewable resources for a remote place of India", *International Journal of Ambient Energy (Taylor and Francis)*, (in press).
17. Mondal, S., Alam, S., De, S. (2018): "Performance of low grade waste heat driven Organic flash cycle with ejector". *Energy (Elsevier)* 163, 849-862.
18. Ray A, De, S, Assadi M. (2018): "Cost Optimization of a Polygeneration Using Renewable Resources". *Springer Proceedings in Energy* (Accepted).
19. Ray, A. and De, S. (2018): "Polygeneration Using Renewable Resources: Cost Optimization Using Linear Programming", *Process Integration and Optimization for Sustainability (Springer)*, (<https://doi.org/10.1007/s41660-018-0053-2>)
20. Ray, A., Jana, K., Assadi, M., De, S. (2018): "Distributed polygeneration using local resources for an Indian village: multi-objective optimization using metaheuristic algorithm". *Clean Technologies and Environmental Policy (Springer)* (doi:10.1007/s10098-018-1562-y), 20(6), 1323-1341.
21. P Mandal, D Dey , B Roy (2019). "Indoor lighting optimization: a comparative study between grid search optimization and particle swarm optimization". *Journal of Optics*. 2019. DOI: 10.1007/s12596-019-00549-7.

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22. P K Maiti, B Roy (2019). "Evaluation of a daylight-responsive, iterative, closed-loop light control scheme". *Lighting Research & Technology*, 2019. DOI: 10.1177/1477153519853318.
23. P Mandal, D Dey , B Roy (2019). "Optimization of luminaire layout to achieve a visually comfortable and energy-efficient indoor general lighting scheme by particle swarm optimization". *LEUKOS: The Journal of the Illuminating Engineering Society of North America*, 2019. DOI: 10.1080/15502724.2018.1533853.
24. Suchandra Bardhan (2019). "Socio-Ecological Urban Systems: Planning For Resilience". *Journal of Indian Institute of Architects*, 2019. 84(1): 31-36. ISSN 0019-4913
25. Parama Mitra and Suchandra Bardhan (2019). "A Theoretical Perspective of Designing for Safe Urban Public Place: Learnings from the Social and Urban Theorists". *International Journal of Advanced Research in Engineering and Technology*, 2018. 10(2): 381-388. ISSN print: 0976-6480/ ISSN Online: 0976-6499
26. Suchandra Bardhan (2019). "Tree composition mapping and environmental role of small natural areas in dense urban setting: Case study of Jadavpur University campus in India". *The Indian Forester Journal*, 2018. 145 (3) : 227-233. ISSN: 0019-4816 (Print), 2321-094X (Online)
27. B Gupta Bakshi, B Roy (2018). "Wattage-independent dynamic conductance model of compact fluorescent lamps: Validation and application in high-frequency operation". *Lighting Research & Technology*, 2018. 50(7):1107-1123. DOI: 10.1177/1477153517717081.
28. Krishna Ghosh, Suchandra, Bardhan, Souvanic Roy (2018). "An Assessment of Floristic Diversity in Urban forestry". *The Indian Forester Journal*, 2018. 144 (4) : 354-362. ISSN: 0019-4816 (Print), 2321-094X (Online)
29. Parama Mitra and Suchandra Bardhan (2018). "Personalization and its Relation to the Perception of Safety: A Case in Residential Apartments". *Journal of Civil Engineering and Environmental Technology*, 2018. 5 (4) : 186-191. Print ISSN (2349-8404) Online ISSN: (2349-879X)
30. Suchandra Bardhan (2018). "Studies on flood vulnerability assessment of Kolkata under a changing climate: A Quantitative Inferential Approach". *SPANDREL*. Issue 13, Spring 2017: 03-13.
31. Souporni Paul and Suchandra Bardhan (2018). "Reinstating Nature in a City with the help of Biodiversity Indicators: A Framework for a Resilient Kolkata". *Urban India*, 2018. 38 (II): 115-135. ISSN no. 0970-9045.

Conference Papers (April 2018 to March 2019):

1. Sudipta Ghosh (Nath), Abhisek Roy, Anupam Debsarkar & Amit Dutta (2019) "Integrated Arsenic Remediation from Contaminated Groundwater: Field Trials in Dhapdhapi, South 24 Parganas" National workshop on "Arsenic Contamination And Sustainable Technological Solutions In India (ACASTSI-2019)", organized by NSHM, Faculty of Business and Management Studies, in collaboration with "Save the Environment (STE)", NSHM Knowledge Campus, Durgapur, 26 -27 February, 2019.
2. Sudipta Ghosh (Nath), Anupam Debsarkar & Amit Dutta (2019) "Electrochemical Arsenic Remediation- An Alternative to get Arsenic Safe Water", National Seminar on "Groundwater Arsenic Contamination Problem in Ganga-Meghna-Brahmaputra (GMB) Plain: It's Health Effects, Socio-Economic Implications and Mitigation Strategies", jointly organized by Department of Economics, Vijaygarh Jyotish Ray College and School of Environmental Studies, Jadavpur University, 1.25th March, 2019 at Vijaygarh Jyotish Ray College, Kolkata.
3. Satabdi Biswas, Anupam Debsarkar and Gupinath Bhandari (2019) "Socio-economic Appraisal of Arsenic Pollution and Rain Water Harvesting (RWH): A case study of Amdanga Block, North 24 Parganas, West Bengal, India", National Seminar on "Groundwater Arsenic Contamination Problem in Ganga-Meghna-Brahmaputra (GMB) Plain: "It's Health Effects, Socio-Economic Implications and Mitigation Strategies", jointly organized by Department of Economics, Vijaygarh Jyotish Ray College and School of Environmental Studies, Jadavpur University, 1.25th March, 2019 at Vijaygarh Jyotish Ray College, Kolkata.

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4. S Das, S Sahana, B Roy (2019). “Experimental Assessment of WLED Lamp Performance for Area Lighting Application under Mesopic Photometry System”. International Conference on “Electrical, Electronics, Computer Science & Civil Engineering”, 2019 (ICEECC-2019), Kolkata, April 26-27.
5. Suchandra Bardhan (2018). “Mitigation of Indirect GHG Emission through Wastewater Treatment in Wetlands, Case study- East Kolkata Wetlands, India”. Proceeding of the “4th Annual International Conference on Urban Planning and Property Development”. Singapore, October 2018

Authored/Edited Books (April 2018 to March 2019):

1. De S., Bandyopadhyay S, Assadi M, Mukherjee D.A, (2018): *Sustainable Energy Technology and Policies- A Transformational Journey* (Vol 1); book doi: 10.1007/978-981-10-7188-1 (Springer)
2. De S., Bandyopadhyay S, Assadi M, Mukherjee D.A, (2018): *Sustainable Energy Technology and Policies- A Transformational Journey* (Vol 2); book doi: 10.1007/978-981-10-8343-8 (Springer)
3. Gautam A, De S, Dhar A, Gupta JG, Pandey A, (2018): *Sustainable Energy and Transportation Technologies and Policy*; book doi: 10.1007/978-981-10-8343-8 (Springer)

Articles in Edited Volumes/Book Chapters (April 2018 to March 2019):

1. Mookherjee, I., Roy, A., Dutta, A., Debsarkar, A., and Aitch, P,(2019). “Sustainable Management of Arsenic-bearing Sludge”. In *Waste Management and Resource Efficiency*, Springer Publication
2. Shikha Jain, Suchandra Bardhan and Vanicka Arora (2019). “Interpreting Jeanneret’s Vision for Gandhi Bhawan” in the book *Gandhi Bhawan: Documenting and Conserving Modern Heritage of India*, 2019, ISBN: 978-93-85360-53-4: 60-79.
3. Souran Chatterjee (2019). “Co-benefits- the unrealised aspect of climate change policies”. *Cross cutting research in social sciences*. Edited by Sabuj Kumar Chaudhuri and Purbalika Bhattacharya Maitra.: 62-77
4. Indraneel Roy Choudhuri and Suchandra Bardhan (2018). “Embodied Water of Construction and Its Significance in Sustainable Development: Case Study of A Single Family Residential House in Pune, India”. In *Annual Technical Volume of Architectural Engg. Division Board*, 2018, ISBN: 978-81-936149-2-1:45-49
5. Roy J., Dasgupta S., Ghosh D., Das N., Chakravarty D., Chakraborty D. & De S. (2018), “Governing National Actions for Global Climate Stabilisation : Examples from India”, Chapter 8 In: Barua Anamika, Narain Vishal, VijSumit (eds) *Climate Governance and Adaptation: Case Studies from South Asia*. CRC Press-Taylor and Francis Group

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JADAVPUR UNIVERSITY PRESS

(Publications)

Int. : 2457-2951
Director : Professor Abhijit Gupta
E-mail : pressju@gmail.com

BOOKS PUBLISHED IN THE CURRENT YEAR

1. Hariprabha Takeda, *The Journey of a Bengali Woman to Japan and other essays*, trans. Somdatta Mandal, ISBN 978-93-83660-47-6. Rs 350.
2. Subrata Sinha, *Adhunikatar Kabyatattva o Sudhindranath Dutta*. ISBN 978-93-83660-42-1. Rs 400.
3. Amartya Sen, *Calcutta After Independence: A Personal Memoir*. ISBN 978-93-83660-53-7. Rs 30.
4. *Indian Drama in English: the Beginnings*, ed. Ananda Lal. ISBN 978-93-83660-52-0. Rs 450.
5. *Desiring India: Representations through British and French Eyes 1584-1857*, ed. Nirajan Goswami. ISBN 978-93-83660-50-6.
6. *XI Structural Engineering Convention 2018 (SEC 18) Abstracts*. ISBN 978-93-83660-46-9. Unpriced.

FORTHCOMING TITLES IN 2020

7. Ursula le Guin, *Irasindhur ek Jadukar*, trans. Sudeshna Datta Chaudhuri.
8. Girindrasekhar Basu, *Laal-kaalo*, trans. Sukanta Chaudhuri, illustrated by Kaustav Chakraborty
9. Graham Shaw, *Subaltern Squibs and Sentimental Rhymes: the Raj Reflected in Light Verse*
10. Kanishka Sarkar, ed. *Bangali Narir Odhikar, Unnayan o Kshamatayan*
11. Various hands, *Tagore Graphic Anthology*
12. D. N. Bandyopdhyay, *Evolving India: Phanerozoic Eon; A Book on Stratigraphy*
13. Hansda Showvendra Shekhar, *The Adivasi will Not Dance*, trans. Damayanti Dasgupta, Rita Ray, Abdul Kafi, Epsita Halder, Sujit Kumar Mondal

GRANTS and PROJECTS

1. The director and joint-director of JUP received a grant under the RUSA 2.0 scheme to carry out research on 'Academic Publishing in India: Issues and Challenges'.
2. JUP received a grant of 1000 Euros from the Poland Translation Programme for the translation and publication of a volume 100 poems in Bengali translation, by the Nobel Prize winning Polish poet Czeslaw Milosz. The translation is to be done by Kamil Siedczynski.
3. JUP received a grant of 300 Euros from the Publishing Support Programme of the Camões Instituto da Cooperação e da Lingua Portugal, Government of Portugal, for the translation and publication of a volume of poems in Bengali translation by the Portuguese author Fernando Pessoa. The translation is to be done by Dr. Rita Ray.
4. JUP received a grant of 310 Euros from DGLAB-LIVRO for the above publication.
5. JUP has been contracted by Utrecht University, the Netherlands, to publish an open-access online edition titled 'Urban Utopias', funded by Utrecht University
6. JUP has been contracted by Exeter University, UK, to produce a graphic work titled 'Famine Tales from India and Britain' as part of a project of the same name, funded by the Arts and Humanities Research Council, UK

COLLABORATIONS AND EVENTS

1. Designed and produced an exhibition titled 'Ishwarchandra Vidyasagar as Printer and Publisher' for Asiatic Society, Kolkata, launched on 26 September 2019.

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2. Designed catalogue titled *Ishwarchandra Vidyasagar as Printer and Publisher: An Exhibition Presented by the Asiatic Society, Kolkata*.
3. The director attended a two-day workshop organized by the French Institute, New Delhi, on 17-18 September 2019, on the French publishing market.
4. Participated in the Kolkata Book Fair 2019, provided a space to retail JUP and NCE Bengal books. JUP employees staffed the stall for the entire period of the book fair, representing Jadavpur University in one of the largest book fairs in the world today.
5. Set up and staffed a stall of JUP books for the University Convocation, 24 December 2018.
6. Launch of *Elite Conflict in a Plural Society*, at the Kolkata Book Fair on 8th February 2019, through a panel discussion featuring Profs. Sekhar Bandyopadhyay, Sudeshna Banerjee, Bhaskar Chakraborty, and Parimal Ghosh.

RIGHTS ACQUISITION

Over the last two years, JUP has acquired translation rights to some of most well-known world writers for translation into Bengali, and English. Some of these works have already been published while others are in production. The authors/works whose rights have been acquired in the year under review are as follows:

1. Bengali translation by Kazuhiro Watanabe, of Takeshi Nakajima, *Nakamura no Bose*, from Tuttle-Mori and Hakusuisha Publishing
2. Haruki Murakami, *The Elephant Vanishes*, from Curtis Brown
3. Haruki Murakami, *Men Without Women*, from Curtis Brown
4. Haruki Murakami, *Kafka on the Shore*, from Curtis Brown [renewal]

BACKLIST

14. J. H Broomfield, *Elite Conflict in a Plural Society*. Fiftieth Anniversary Edition. With a new introduction by Sekhar Bandyopadhyay. ISBN 978-93-83660-45-2. Rs 650.
15. Humphry House, *I Spy with My Little Eye*. Eds. Sajni Mukherji and Sujaan Mukherjee. ISBN 978-93-83660-44-5. Rs 200.
16. Sukanta Chaudhuri, *Chandalika: Prakritir Abhisar*. ISBN 978-93-83660-43-8, Rs 50.
17. H. Dutta, *Lieut. Suresh Biswas: His Life and Adventures*. ISBN 978-93-83660-33-9, Rs 300.
18. INCOM 2018: Proceedings of the First International Conference on Mechanical Engineering. Eds. Achintya Mukhopadhyay, Prasanta Sahoo and Swanendu Sen. ISBN 978-93-83660-38-4. Print and CD. *Not for sale*.
19. Samir Saha, *Samaj, bijnan o Haldane*. ISBN 978-93-83660-34-6, Rs 100.
20. Rui Zink, *Shesher sedin*. Translated by Rita Ray from the Portuguese and published with financial assistance from the Camoes-Instituto da Cooperacao e da Lingua, I.P. ISBN 978-93-83660-37-7, Rs 300.
21. *E-Learning and Higher Education in India and Italy: Research Study and Analysis*. Eds. Supriya Chaudhuri, Sritama Chaudhuri and Andrea Reggiani. ISBN 978-93-83660-36-0. *Not for sale*.
22. Dante Alighieri, *Norok (L'Inferno)*. Translated from the Italian into Bengali by Alpana Ghosh under the general editorship of Sukanta Chaudhuri, and third in the Italio-Bangla Anubad series.
23. Haruki Murakami, *Samudratate Kafka II (wm°•n0«0Õ0«0 Umibe no Kafuka)*. Second volume, translated from the Japanese into Bengali by Abhijit Mukherjee.
24. Rui Zink, *Ek dojon Rui Zink*, collection of short stories. Translated from the Portuguese into Bengali by Rita Ray.
25. Haruki Murakami, *Samudratate Kafka I (wm°•n0«0Õ0«0 Umibe no Kafuka)*. Translated from the Japanese into Bengali by Abhijit Mukherjee. ISBN: 978-93-83660-25-4. Bengali. 382 pages. 2016. Rs 300.

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26. Sayantan Dasgupta and Kabita Lama, eds., *Call of the Hills: A Coursebook of Indian Nepali Literature in Translation*. ISBN 978-93-83660-06-3. English. 250 pages. 2016. Rs 250.
27. Sangeeta Dutta and Subhoranjan Dasgupta, eds., *Tagore: The World as His Nest*. ISBN: 978-93-83660-14-8. English. 222 pages. 2016. Rs. 650.
28. *Journal of the Moving Image* 13. ISSN: 2230-9160. English. Academic journal of the Department of Film Studies, Jadavpur University.
29. *Tamang Selo: A Coursebook of Indian Nepali Literature in Translation*. ISBN: 978-93-83660-05-6 Nepali/English. 201 pp. 2015. Rs 200. -
30. Pulin Behari Das, *Astracharchaa: Pulin Behari das Rachanasamgraha*; eds. Deeptanil Ray and Nikhilesh Bhattacharya. ISBN: 978-93-83660-13-1. 516 pages. Rs 700. 2015.
31. Mohit Ray, *Five Thousand Mirrors: The Water Bodies of Kolkata*. ISBN: 978-81-926767-7-7. 324 pages. Rs 495. 2015.
32. P.B. Shelley, *Kaaler joyjatra*. trans. Malini Bhattacharya. A translation of P. B. Shelley's *The Triumph of Life*. ISBN: 978-93-83660-04-9. 95 pages. Rs 150. 2015.
33. Madhumita Chattopadhyay and Tirthanath Bandyopadhyay, eds., *Ethics: An Anthology*. ISBN: 978-81926767-9-1. 260 pages. Rs 450. 2015.
34. Amiya Bandhyopadhyay, *Khanasmriti*. ISBN: 978-81-927525-8-7. 170 pages. Rs 150. 2014.
35. Tushar Kanti Sarkar, Shefali Maitra and Indrani Sanyal, eds., *Wittgenstein: jagat, bhasa o chintan*. ISBN 978-81-86954-96-6. Rs 350. 2013.
36. Madhabendranath Mitra, Amita Chatterjee and Prayas Sarkar, eds., *Manodarshan: sarirbad o tar bikalpa*. ISBN 978-81-86954-98-0. Rs 300. 2013.
37. Amita Chatterjee, ed., *Bharatiya dharmaniti*. ISBN 978-81-86954-99-7. Rs 350. 2013.
38. Robert Antoine and Hrishikesh Basu, trans., *Aeneid*. ISBN 978-81-86954-93-5. Rs 400. 2013.
39. Amlan Das Gupta, eds. and trans., *Henry Sargent's Aeneid of 1810*. ISBN 978-81-86954-92-8. Rs 200. 2013.
40. Ashutosh Roy, *Amar cheen probash*. With an introduction by Prof. Amit Bhattacharya. ISBN 978-81-86954-97-3. Rs 100. 2013.
41. Sukanya Dasgupta, ed. *Aspects of Modernity: American Women's Poetry*. ISBN 978-81-927525-9-4. Rs 550. 2014.
42. *Essays on Half-tone Photography* by Upendrakishore Raychowdhury. ISBN 978-81-927525-5-6. Rs 300. 2014.
43. Bidhusekhar Shastri Bhattacharya, *Rabidrasanglapkanika o onannyo rochona*. ISBN 81-86954-66-X. 210 pp. Rs 170. 2011.
44. Niccolo Machiavelli, *Rajpurush*, trans. Doyeeta Majumder, with an introduction by Swapan Chakravorty. A translation of Niccolo Machiavelli's *Il principe*, translated from the original Italian. ISBN 978-81-86854-76-7. 156 pp. Rs 270. 2012.
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47. Madhuja Mukherjee, ed., *Aural Films Oral Cultures: Essays on Cinema from the Early Sound Era*. ISBN 978-81-86854-81-2. 216 pp. Rs 450. 2012 [Distributed by Orient Blackswan]
48. Gangadhar Kar Nyayacharya, *Tarkabhasha*, Vol. I; 398 pp.; ISBN 978-93-80336-67-1; Rs 450. 2012 [Distributed by Mahabodhi Society]

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49. Sumitra Mukherjee and Sujata Roychoudhury, *Aspects of Interpersonal Communication* (Self-Empowerment Series, general editor: Soumitra Basu). ISBN 978-81-86954-82-9. 133 pp. Rs 100. 2012.
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51. Sumitra Mukherjee and Sujata Roychoudhury, *Kathopakathan o taar nanan aangik* (Nijer bikasher jonyo' granthamala, gneral editor: Soumitra Basu). ISBN 978-81-86954-84-3. Rs 100. 2013.
52. Subhrangshu Aditya, Sahana Nag and Susmita Chatterjee, *Managing Anger-Provoking Situations* (Self-Empowerment Series, general editor: Soumitra Basu). ISBN 978-81-86954-85-0. Rs 100. 2013.

STAFF

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NATIONAL SERVICE SCHEME (N.S.S.)

Phone : +91-33-2414-6151

Fax : (033-2414-6151)

Int. : 2457-2502

Co-ordinator : Dr. Anupam Debsarkar

The motto of the National Service Scheme is 'NOT ME BUT YOU'. It is in the line of this motto, the NSS unit of J.U., under the coordinatorship of the Dr. Anupam Debsarkar does various activities of the body emphasizing on community and student welfare and to develop a sustainable sensitivity in the student-volunteers towards their fellow beings, particularly the underprivileged and the challenged. The activities are categorized into two parts - Regular activities and Special Camps. The NSS activities of Jadavpur University on & from 1st April, 2018 to 31st March, 2019 are mentioned below: -

a) Major Achievements (2018-2019)

i. International Youth Exchange programme, China

NSS student volunteer from Jadavpur University viz. Mr. Subhankar Halder (Department of Sanskrit, P.G-II) participated in the International Youth Exchange programme at Republic of China, during 3rd to 10th July, 2018, organized by Ministry of Youth Affairs and Sports, Govt. of India.

ii. National Integration Camp, Maharaja Sayajirao University of Baroda, Baroda.

NSS Student volunteers from Jadavpur University viz, Mr. Ranajit Jana (Department of Education, U.G.-II), Miss Ractima Baidya (Sanskrit, U.G.-II), Miss Monalisha Basuri (Department of Education, P.G.-I), Miss Payel Barman (Department of Sociology, P.G.-II) participated in the National Integration Camp at Sayajirao University of Baroda, Varoda, during the period 8th to 14th October, 2018.

iii) National Integration Camp, SOA University, Bhubaneswar

NSS Student volunteer from Jadavpur University viz, Miss Priya Addya (Department of Sociology, P.G.-II) participated in the National Integration Camp at SOA University, Bhubaneswar, during the period 29th October to 4th November, 2018.

iv) Pre-Republic Day Camp, University of Science & Technology, Meghalaya

NSS student volunteers from Jadavpur University viz. Mr. Uday Karmakar (Department of Sanskrit, P.G-II), Miss. Rita Mondal (Department of Education, P.G.-I), Miss. Radharani Adak (Department of Education, P.G.-I), Mr. Koushik Palui (Department of Education, P.G.-I), Miss Monalisha Basuri (Department of Education, P.G.-I) were selected for Pre Republic day Parade Camp at University of Science & Technology, Meghalaya from 14th to 13th November, 2018.

v) National Integration Camp, University of Rajasthan, Rajasthan

NSS student volunteer from Jadavpur University viz. Mr. Surjodeb Basu (Department of Language & Linguistics) participated National Integration Camp at University of Rajasthan, Rajasthan from 5th December, 2018 to 11th January, 2019.

vi) Republic Day Camp, Rajpath, Delhi

NSS student volunteer from Jadavpur University viz. Miss Monalisha Basuri (Department of Education, P.G.-I) was selected for Republic Day Parade Camp at Rajpath, Delhi from 31st December, 2018 to 1st February, 2019.

vii) Republic Day Camp, Red Road, Kolkata

NSS student volunteer from Jadavpur University viz. Mr. Koushik Palui (Department of Education, P.G.-I) was selected for Republic day Parade Camp at Red Road, Kolkata from 10th to 27th January, 2019.

viii) National Integration Camp & 15th Pravasi Bharatiya Diwas, Varanasi, UP

NSS student volunteers from Jadavpur University viz. Mr. Ujan Natik (Department of International Relations, UG-III), Miss Suthirtha Majumder (Department of History, U.G.-III) participated National Integration Camp & 15th Pravasi Bharatiya Diwas at Varanasi, Uttar Pradesh from 18th to 24th January, 2019.

ix) The initiative taken by NSS, JU in Pulse polio immunization programme benefited more than 300 children and "Health check-up camp with awareness generation" benefited approximate 3400 people mainly coming from low-income groups.

x) In this year the Science Talent Search Programme was conducted by NSS Jadavpur University, in which more than 900 School students participated.

xi) More than 1050 Clothes were distributed among the needy people in collaboration with the NGO's and Clubs.

xii) Twenty NSS student volunteers from Jadavpur University participated State Integration Programme at Rabindra Bharati University, Jorasako Campus, Kolkata on 6th March, 2019.

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xiii) More than 800 units of blood were donated and more than 1800 saplings were planted at various places of Kolkata and adjacent areas.

b) Special Camps (2018-2019)

1. Celebration programme on International day of yoga & personality development programme at Department of Physical Education, Jadavpur University & Salimpur Netaji Basti, Dhakuria dated 20th to 26th June, 2018. No. of participants – 50 (Male: 25 Female: 25), Total beneficiaries- 210 (Male 107, Female: 103).
2. Village development Camp at Arapanch, Sonarpur, South 24 Parganas, dated 2nd to 8th August, 2018. No. of participants – 50 (Male: 30 Female: 20). Total beneficiaries- 60.
3. Awareness programme on health & education with health checkup camp at Banerjee Para Adarsha Samity, Sarsuna, Behala, Kolkata-700061, dated 15th to 21st August, 2018. No. of participants - 50 (Male: 30 Female: 20), Total beneficiaries- 230 (Male: 130 Female: 100). Total blood donor's- 30 (Male: 20 Female: 10).
4. Awareness programme on health with health checkup & cleaning and beautification programme under Swachha Bharat Abhiyan at Orphan home, Thakurpukur, P.O-Joka, Kolkata, dated 15th to 21st August, 2018. No. of participants - 50 (Male: 26 Female: 24), Total beneficiaries- 235 (Male: 120 Female: 115).
5. Celebration of National Sports Day & Cleaning programme under Swachha Bharat Abhiyan at Jadavpur University Main Campus, dated 10th to 16th September, 2018. No. of participants – 50 (Male: 38 Female: 12).
6. Training and survey programme on Annual Status on Education Reports, 2018 at Mrinmoyee Madhusudan Memorial Hall, Jadavpur University and 15 Villages of South 24 Parganas, dated 12th to 18th September, 2018. No. of participants- 50 (Male: 25 Female: 25). Total beneficiaries- 500 (Male: 289 Female: 211).
7. Science awareness programme & talent search programme at Satin Sen Park, Sarsuna, Kolkata, dated 20th to 26th October, 2018. No. of participants - 50 (Male: 28 Female: 22). Total beneficiaries- 527 (Male 320 Female: 207).
8. Colony development programme with science awareness programme at Barisha Udayan Pally, Barisha, Ward No-125, Kolkata, dated 20th to 26th October, 2018. No. of participants- 50 (Male: 30 Female: 20), Total beneficiaries- 302 (Male: 185 Female: 117).
9. Village development programme with health awareness and cleaning and beautification programme under Swachha Bharat Abhiyan at Charalkhali, P.O.-Chandanpur, P.S.- Hingalgang, North 24 Parganas, dated 7th to 13th November, 2018. No. of participants – 50 (Male: 27 Female: 23), Total beneficiaries- 230 (Male:120 Female: 110).
10. Awareness programme on health & education with health check-up at Oxford Mission, Diamond Harbour Road, Barisha, Kolkata, dated 20th to 26th November, 2018. No. of participants – 50 (Male: 30 Female: 20), Total beneficiaries- 80 (Male: 80).
11. Awareness programme on health & education and health checkup at Parnasree Club, Parnasree, Ward no.- 131, Kolkata, dated 24th to 30th November, 2018. No. of participants- 50 (Male: 25 Female: 25) Total beneficiaries- 333 (Male: 182 Female: 151).
12. Colony development including project identification with cleaning and beautification programme under Swachha Bharat Abhiyan at Jadavpur University Main Campus, Kolkata and Selimpur Netaji Basti, Dhakuria, Kolkata, dated 28th December, 2018 to 3rd January, 2019. No. of participants - 50 (Male: 27 Female: 23), Total beneficiaries-254 (Male: 151 Female: 103).
13. Awareness on Health with health check-up and blanket distribution programme at Santi Niwas, Old age home, Diamond Harbor Road, Barisha, Kolkata, dated 6th to 12th January, 2019. No. of participants – 50 (Male: 29 Female: 21), Total beneficiaries- 80 (Male: 45 Female: 35).
14. Colony development including project identification and health checkup camp at Vivekananda Sporting Club, P-412 Upen Banerjee Road, KMC, Kolkata-700060, dated 12th to 18th January, 2019. No. of participants- 50 (Male: 27 Female: 23), Total beneficiaries- 264 (Male: 184 Female: 80).

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15. Awareness programme on environment and health with health check- up at Little Club, Jaigirghat Road, Ward No.- 125, Kolkata - 700063, dated 26th January to 1st February, 2019. No. of participants - 50 (Male: 24 Female: 26), Total beneficiaries- 284 (Male: 184 Female: 100).
16. Awareness programme on drugs and health at Jadavpur University Main Campus, dated 28th February to 6th March, 2019. No. of participants – 50 (Male: 28 Female: 22). Total beneficiaries- 156 (Male: 100 Female: 56).
17. Village development programme at Lahiripur, Jamespur, Gosaba, South 24 Parganas, dated 20th to 26th March, 2019. No. of participants – 50 (Male: 26 Female: 24), Total beneficiaries- 175 (Male: 100 Female: 75).
18. Colony development and health awareness programme at Barisha Yubak Sangha, Silpara, Ward No. 125, Kolkata-700008, dated 23rd to 29th March, 2019. No. of participants – 50 (Male: 20 Female: 30). Total beneficiaries- 220 (Male: 100 Female: 120).

c) **Regular Activities (2018-2019)**

1. Report relies of ASER, 2018 and Certificate distribution programme at Mrinmoyee Madhusudan Memorial Hall, Jadavpur University Main Campus, dated 13th April, 2018. No. of participants – 58 (Male: 33 Female: 25).
2. Stephen Hawking: A challenge and physical disability and unknowing mystery of universe at Dr. K.P. Basu Memorial Hall, Jadavpur University Main Campus, dated 24th April, 2018. No. of participants- 179 (Male: 136 Female: 43).
3. Blood donation camp at Sarsuna Satin Sen Park, Sarsuna, Kolkata, dated 3rd June, 2018. No. of participants – 50 (Male: 25 Female: 25), Total blood donor's- 240.
4. Celebration of Life-2018, World Blood Donor's Day programme at Gandhi Bhavan, Jadavpur University Main Campus, Kolkata-700032, dated 17th June, 2018. No. of participants- 520 (Male: 300 Female: 220).
5. Awareness programme on health with health & eye checkup and free medicines and spectacles distribution programme at Brace Bridge Pally Unnayan Samity Bhavan, Brace Bridge Railway Station Road, Taratala, Kolkata-700008, dated 24th June, 2018. No. of participants- 25 (Male: 10 Female: 15), Total beneficiaries- 148 (Male: 85 Female: 63).
6. Celebration of 125th Birth Anniversary of S. N. Bose through exhibition and speeches on life and works of S.N. Bose at Mrinmoyee Madhusudan Memorial Hall, Placement cell, Jadavpur University, dated 18th July, 2018. No. of participants – 105 (Male: 54 Female: 51).
7. Observation of Banamahotsab Week at Sarsuna Thakurpukur Bazar, Thakurpukur, Kolkata, dated 21st July, 2018, No. of participants: 26 (Male: 13 Female: 13), Total beneficiaries- 350 (Male: 205 Female: 145).
8. Personality development programme at Dr. Triguna Sen Auditorium, Jadavpur University, dated 29th July, 2018. No. of participants- 50 (Male: 35 Female: 15).
9. Pulse polio immunization programme at Selimpur Netaji Basti, Dhakuria, Kolkata, dated 5th August, 2018. No. of participants- 20 (Male: 10 Female: 10), Total beneficiaries- 45 (Male: 21 Female: 24).
10. Value education workshop at New Seminar Room, Department of Civil Engg., Jadavpur University Main Campus, dated 7th August, 2018. No. of participants – 110 (Male: 60 Female: 50).
11. International Youth Day celebration programme at Gandhi Bhavan, Jadavpur University, dated 12th August, 2018. No. of participants- 500 (Male: 280 Female: 220).
12. Celebration of Independence day at Jadavpur University Main Campus, Kolkata, dated 15th August, 2018. No. of participants – 149 (Male: 81 Female: 68).
13. Celebration of Independence Day at Dakshinayan Community Hall, Pratapaditya Roy Road, Rasbihari Avenue, Kolkata, dated 15th August, 2018. No. of participants – 149 (Male: 81 Female: 68). Total beneficiaries -145.

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14. Celebration of International Youth Day at Gandhi Bhavan, Jadavpur University, Kolkata, dated 23rd August, 2018. No. of participants- 450 (Male: 250 Female: 200).
15. Blood donation camp with voluntary organ donation programme at Department of Physical Education, Jadavpur University, dated 29th August, 2018. No. of participants- 30 (Male: 20 Female: 10). Total blood donors-106 (Male: 80 Female: 26).
16. Awareness programme E-Waste at Dr. K.P. Basu Memorial Hall, Jadavpur University, dated 30th August, 2018. No. of participants- 130 (Male: 80 Female: 50).
17. District level Youth Parliament at Mrinmoyee Madhusudan Memorial Hall, Jadavpur University, dated 11th & 12th September, 2018. No. of participants- 90 (Male: 50 Female: 40).
18. Pulse polio immunization programme at Selimpur Netaji Basti, Dhakuria, Kolkata, dated 23rd September, 2018. No. of participants- 10 (Male: 5 Female: 5). Total beneficiaries- 55 (Male: 40 Female: 15).
19. Awareness programme on women's health at Children's Welfare Association High School for Girls 1, Rakhai Mukherjee Road, P.O.-Sarsuna, Kolkata-700061, dated 25th September, 2018. No. of participants- 10 (Male: 5 Female: 5). Total beneficiaries- 150 (Female: 150).
20. Certificate distribution programme of 'Project Sukanya' at Nazrul Mancha, Rabindra Sarabar, Kolkata, dated 25th September, 2018. No. of participants – 10 (Female: 10), Total beneficiaries- 150 (Female: 150).
21. Interactive session and Gynecological workshop at Children's welfare association High School for Girls' (H.S), dated 25th September, 2018. No. of participants – 10 (Male: 5 Female: 5) Total beneficiaries-150 (Female: 150).
22. State Level Programme on "Mobilizing for Social Change" at Gandhi Bhavan, Jadavpur University, dated 10th October, 2018. No. of participants – 40 (Male: 20 Female: 20) Total beneficiaries-500 (Male: 254 Female: 246).
23. Debate competition on Gandhian philosophy to commemorate of 150 birth anniversary of Mahatma Gandhi at Raj Bhavan, Kolkata, dated 2nd October, 2018. No. of participants- 10 (Male: 08 Female: 02).
24. Lecture on Leprosy desensitization at Vivekananda hall, Subarnajayanti Bhavan, Jadavpur University Main Campus, dated 20th November, 2018. No. of participants – 105 (Male: 67 Female: 38).
25. Cloths distribution programme at Southern Avenue Park, Dr. Meghnath Saha Sarani, Kolkata, dated 14th October, 2018. No. of participants – 10 (Male: 5 Female: 5), Total beneficiaries- 500.
26. State Level Pre Republic Day Parade Camp at Bidhannagar College, Bidhannagar, Kolkata, dated 4th and 5th October, 2018. No. of participants – 10 (Male: 5 Female: 5).
27. Lecture programme on "Dawn on science in Kolkata during early twenty century" at Mrinmoyee Madhusudan Memorial Hall, Bidhan Chandra Bidharthi Bhavan, Jadavpur University, dated 26th November, 2018. No. of participants- 77 (Male: 66 Female: 11).
28. Awareness programme on environment and health at Barisha High School, Barisha, Kolkata, dated 9th December, 2018. No. of participants – 10 (Male: 6 Female: 4) Total beneficiaries- 155 (Male: 85 Female: 70).
29. State Pre Republic Day Parade Camp at Bidhan Chandra Sishu Udyan, Ultodanga,, dated 27th December, 2018. No. of participants – 13 (Male: 7 Female: 5).
30. Celebration of National youth day at Dr. K.P. Basu Memorial Hall, Jadavpur, Kolkata, dated 18th January, 2019. No. of participants – 251 (Male: 151 Female: 100).
31. Observed Mother Language Day at Saheb Bagan, Talpukur, Ward No-126, Kolkata-700061, dated 21st February, 2019. No. of participants – 150 (Male: 110 Female: 40).
32. State Integration programme at Rabindra Bharati University, Jorasanko Thakur Bari, dated 6th March, 2019. No. of participants- 20 (Male: 10 Female: 10).
33. Seminar programme on Air Quality at Dr. K. P. Basu Memorial Hall, Jadavpur University, dated 9th March, 2019. No. of participants-180 (Male: 95, Female: 85).

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34. Pulse polio immunization programme at Selimpur Netaji Basti, Dhakuria, Kolkata, dated 10th March, 2019. No. of participants – 25 (Male: 15 Female: 10), Total beneficiaries-55 (Male: 40 Female: 15).
35. Workshop on Communication at Jadavpur University Salt Lake Campus, dated 25th March, 2019. No. of participants- 98 (Male: 74 Female:24).
36. Workshop on e-nose & e-tongue at Jadavpur University Salt Lake Campus, dated 27th March, 2019. No. of participants- 85 (Male: 64 Female: 21).
37. Educational kits distribution programme at Baruipur Prathamik Vidyalaya, Begampur Colony Baruipur, South 24 Parganas, dated 30th March, 2019. No. of participants- 20 (Male:15 Female: 5), Total beneficiaries-60 (Male: 35 Female: 25).

REGIONAL CENTRE
NATIONAL AFFORESTATION & ECO-DEVELOPMENT BOARD
(Ministry of Environment, Forests & Climate Change, Govt. of India)

Phone : 2414-6979/6886
Int. : 2457 -2324
Coordinator : Professor Asis Mazumdar

1. **A. Courses offered:** Not Applicable
- B. Number of Faculty members/Scientists :** 01 (Coordinator) + 01 (Sr. Scientist) + 01 (Scientist) + 01 (Research Assistant)
2. **A. Area of Research Activities:** (Broad Areas)
 1. Afforestation & Eco-development
 2. Joint Forest Management
 3. Forest Development Agency
 4. Green India Mission
 5. Small & Micro Forest Enterprise
 6. Soil & Moisture Conservation
 7. Indigenous Technologies
 8. Capacity Building & Forest Conservation
 9. Wasteland Development & Biodiversity Conservation
 10. Soil Water Plant Relationship
 11. Impact of Forested Watershed on Stream Flow and Water Quality
 12. Watershed Management
 13. Natural Resources Management
 14. Clean Development Mechanism
 15. Carbon Sequestration
 16. REDD+

B. Major Research Project:

Coordinator: Prof. (Dr.) Asis Mazumdar

Name of the Project: 1. Study on Impact of Forest Patta Grant on Forests in Jharkhand

2. Impact of Water Harvesting Structures created under CAMPA in Jharkhand

Funding Agency: Department of Forests, Environment & Climate Change, Government of Jharkhand

C. Seminar/Workshop/Conference/Symposium organized: (Name of the Workshop/Training Programme–Duration–Place) One Week refresher training course for the Indian Forest Service Officers on “Emerging Trends in Water Conservation and Rain Water Harvesting”, December 03-07, 2018
Kolkata

4. B. Articles published in Journals:(Name of the Author–Name of the Article–Name of the Journal–Volume and Page no.–Date of publication)

International

Sabarni Biswas, Paramita Chatterjee, Soumyajit Biswas, Asis Mazumdar and Asok Kumar Biswas–
“Salt induced inhibition in photosynthetic parameters and polyamine accumulation in two legume cultivars and its amelioration by pre-treatment of seeds with NaCl”–*Legume Research*–DOI:10.18805/LR-4106–2019

6. Major Achievements:

- The Regional Centre over the years has played significant role in Human Resources Development Activities by organizing over 189 workshops, 234 Training Programmes for thousands of participants of the State Forest Departments (West Bengal, Jharkhand, Bihar, Sikkim and Andaman & Nicobar Islands) as well as for the grass root level Community / Organizations.
- Conducted more than 140 important Research Studies and 25 Success Stories/Case Studies covering a wide spectrum of pertinent issues on Natural Resources Management in Eastern Region.
- Carried out the field monitoring and evaluation work for over 367 Centrally Sponsored Projects (AOFFP, IAEDP, NTFP, IPVM, Sample Check etc.) in last 10 years throughout the Country.
- Prepared 4 Status Reports on Natural resources of three different states and also several Wasteland Maps.
- Developed cost-effective Agro-forestry model for Red Lateritic Wastelands and Biological Reclamation for abandoned Collieries model.
- Formulation of Joint Forest Management Strategies and Norms for the Union Territory of Andaman & Nicobar Islands under the sponsorship of Andaman & Nicobar Administration.
- The Centre has evaluated 64 projects of National Afforestation Programme (NAP) implemented through Forest Development Agencies (FDAs) in Arunachal Pradesh, Assam, Bihar, Orissa, Mizoram, Manipur, Sikkim, Uttar Pradesh and West Bengal.
- Organized seven “Refresher Course for Indian Forest Service (IFS) Officers” in association with the School of Water Resources Engineering, Jadavpur University, which is unique among the Regional Centres of NAEB.
- Developed the “Strategic Plan and Financial Framework for Large-Scale Development Programme of Sundarban Biosphere Reserve” funded by Sundarban Biosphere Reserve (under UNDP project).
- Established the first Small and Micro Forest Enterprise (SMFE) in India under Dhalbhum FDA, East Singhbhum, Jharkhand and replicated the same in Seraikela Forest Division in Jharkhand and Purulia Forest Division in West Bengal.
- Registered as one of the 25 Business Incubators by Ministry of Small and Micro Enterprises (MSME) to promote innovative ideas and young entrepreneurs and currently 5 such ideas are being implemented.

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- Prepared the “State Report on National Programme on Promoting Medicinal Plants Conservation and Traditional Knowledge for Enhancing Health and Livelihood Security for West Bengal (UNDP-CCF-II Project No. 13047)” funded by Research Circle, Directorate of Forests, Govt. of West Bengal.
- Implemented project on “Strategic Knowledge Management, Advisory Support and Capacity Building for Wood Based SMEs to Enhance Market Potential through Sustainable Business Practices” funded by WWF-India, New Delhi as part of European Commission - SWITCH ASIA project on Sustainable and Responsible Trade Promoted to Wood Processing SMEs through Forest and Trade Networks in China, India and Vietnam.
- Prepared 2 reports on “Meta Evaluation of Different Evaluation Programmes on NAP Implemented through FDAs in India” based on evaluation reports of all Indian states.
- Conducted a consultative study on “Landscape Survey and developing Micro-plan for enhancement of Forest Quality and improvement of Ecosystem Services in the Identified Districts of Odisha” in partnership with Indian Institute of Forest Management (IIFM) funded by Department of Forests, Government of Odisha under Green India Mission.
- Conducted “Evaluation of Central Sponsored Schemes implemented by Sundarban Biosphere Reserve” funded by Sundarban Biosphere Reserve, Directorate of Forests, Govt. of West Bengal.
- Completed mid-term evaluation of activities implemented (2009-10 to 2014-15) in the state of Sikkim by ‘State CAMPA’, Sikkim, Forests, Environment & Wildlife Management Department, Govt. of Sikkim in 2016
- Completed “Examination of Microplans and Compilation of APOs in the state of West Bengal” funded by West Bengal Forest and Biodiversity Conservation Project, Directorate of Forests, Government of West Bengal.
- “Technical assistance for evaluation of NAP implemented through WBSFDA in West Bengal” funded by WBSFDA, Directorate of Forests, Government of West Bengal
- Technical Assistance for “DPR preparation for Forestry Interventions for Clean Ganga in the state of West Bengal” funded by WBSFDA, Directorate of Forests, Government of West Bengal
- Conducted a consultative study on “Landscape Survey and Capacity Building for preparation of microplan in selected landscape of West Bengal for Preparation of Perspective Plan under Green India Mission in West Bengal” funded by Directorate of Forests, Govt. of West Bengal
- Implementation of Medicinal Plants Conservation Area (MPCA) in Kankrajhore, West Midnapore, West Bengal by Silviculture (South) Division, Directorate of Forests, Govt. of West Bengal
- Prepared Local Volume Table for Roadside Trees of Selected Species in West Bengal by West Bengal Forest Development Cooperation, Directorate of Forests, Govt. of West Bengal.

**REGIONAL-CUM-FACILITATION CENTRE (RCFC)
(EASTERN REGION)**

NATIONAL MEDICINAL PLANTS BOARD (NMPB)

(Ministry of AYUSH, Government of India)

Phone : 2414-6979/6886

Int. : 2457-2324

Nodal Coordinator : Professor Asis Mazumdar

E.mail : rfcfnmpb@jadavpuruniversity.in

1. A. Courses offered: Not Applicable

1. B. Number of Faculty Members/Scientists : 01 (Nodal Coordinator) + 01 (Regional Director) + 01 (Deputy Director) + 03 (Consultant) + 02 (Technical Assistants)

2. A. Area of Research Activities: (Broad Areas)

Regional-cum-Facilitation Centre (RCFC), National Medicinal Plants Board (NMPB), Jadavpur University has been established as one of the seven such Centres in different regions (East, West, North-I, North-II, South, Central and North East) of the country under the Ministry of AYUSH, Government of India during 2017-18. This RCFC, NMPB for Eastern Region will act as a one stop center for the growers, cultivators, researchers, traders and other stakeholders of medicinal plants. The centre caters to the states of Bihar, Jharkhand, Odisha, West Bengal & Sikkim and would function in close co-ordination with State Medicinal Plants Board (SMPBs), the State implementing agency of the medicinal plants component of the AYUSH Mission. The RCFC, NMPB is to provide a service window for growers of medicinal plants for supporting conservation, development, marketing, cultivation and provide handholding support to stakeholders in terms of technology dissemination and also for establishing primary processing facilities etc. besides undertaking identified research relevant to the area concerned as and when assigned.

The major functions of the RCFC, NMPB are:

- To act as multifaceted facilitating arm of NMPB
- Development of Quality Planting Materials (QPM)
- Development of Agrotechnology of medicinal plants
- Setting up of primary processing, grading, marketing facilities
- To develop managerial and technical skill among the stakeholders
- Facilitation of sale of medicinal plants and produces
- To provide inputs on conservation, sustainable cultivation, technology upgradation, training & research
- Domestication of wild species in demand
- To function as a platform for bringing together the different stakeholders
- To organize periodical meetings, workshops, consultation of stakeholders
- To review the projects sanctioned by NMPB to various organizations
- To collect and maintain database of all concerned Sectors of the Medicinal Plants in the states and Integration of database of various States of the region concerned.
- To develop a strategy for Information, Education and Communication (IEC) and its implementation.
- To document and disseminate success stories of activities supported by NMPB.

2. B. Major Research Project:

Coordinator: Prof. Asis Mazumdar

Name of the Project: Development of Hi-Tech Nursery for Development of Skilled Manpower for Medicinal Plants Propagation

Funding Agency: JU-RUSA 2.0.

3. A. Invited lecturers delivered/Sessions chaired: (Name of the teacher/Scientist–Type of participation–Name of the Seminar/ Conference etc–Place–Duration

Prof. Asis Mazumdar–Resource Person–National Seminar on “Current Research in Medicinal Plants–Global Trends and Indian Scenario”–Dr. B. C. Roy College of Pharmacy and Allied Health Sciences, Bidhan Nagar, Durgapur–March 28-29, 2019

Prof. Asis Mazumdar–Resource Person–“Rural Connect Conclave” on Export opportunities of Medicinal Plants in West Bengal organized by Bengal Chamber of Commerce & Industry in association with WBSMPB–Biswa Bangla Convention Centre, Kolkata–3rd & 4th December, 2018

3. B. Seminar/Workshop/Conference/Symposium attended:(Name of the teacher/Scientist–Name of the paper presented (if any)–Name of the Seminar–Place–Duration)

Prof. Asis Mazumdar–Stakeholders’ Meeting of the Medicinal Plants Sector–Goa –9th April, 2018

Prof. Asis Mazumdar–One day Launch Workshop of the RCFC, Central Region, SFRI, Jabalpur–Jabalpur, Madhya Pradesh–18th May, 2018

Prof. Asis Mazumdar & Dr. Sanjay Bala–One day Workshop on use of e-CHARAK and Voluntary Certification of Medicinal Plants Produce as a platform for promotion forward-backward linkage in MAP sector–Chandigarh–28th June 2018

Prof. Asis Mazumdar–Second Review Meeting of Regional-cum-Facilitation Centre–New Delhi 28th June, 2018

Dr. Sanjay Bala–Stakeholders Meet-cum-workshop of RCFC-Northern Region II–Jammu & Kashmir–25th September, 2018

Prof. Asis Mazumdar–National Conference on Giloe (*Tinospora cordifolia*)–New Delhi–15th November, 2018

Dr. Sanjay Bala–National Expo & Workshop on Medicinal Plants with Buyers-Farmers Meet–Guwahati–11th January, 2019

3. C. Seminar/Workshop/Conference/Symposium organized: (Name of the Workshop/Training Programme–Duration–Place)

1. Stakeholders’ Meet on Medicinal Plants –May 10, 2018–Jadavpur University, Kolkata
2. Stakeholders’ Workshop on Medicinal Plants in Odisha–July 31, 2019–Bhubaneswar, Odisha
3. Training Programme on Good Agriculture Practices for Cultivation of Medicinal Plants in Odisha–1st August 2018–Bhubaneswar, Odisha
4. Training Programme on Medicinal Plants in Bihar–14th September 2018–Patna, Bihar
5. Training Programme for Promotion of Medicinal Plants in Jharkhand–31st January 2019–Ranchi, Jharkhand
6. Exposure Visit to Chhattisgarh for the progressive farmers of Odisha and West Bengal –24th to 29th March 2019–Bilaspur and surrounding districts of Chhattisgarh
7. Exposure Visit to Chhattisgarh for the progressive farmers of Bihar and Jharkhand–27th March to 1st April 2019–Bilaspur and surrounding districts of Chhattisgarh

3. D. Orientation courses/Refresher courses attended: (Name of the teacher/Scientist–Title of the Course–Place–Duration)

Dr. Sanjay Bala & Dr. Soumyajit Biswas–Training of Trainers on “Development of training module and facilitation guide for Good Agricultural Practices and Good Collection Practices for Medicinal plants” –ICAR-DMAPR, Anand, Gujarat–12 to 16 November 2018

4. B. Articles published in Journals: (Name of the Author–Name of the Article–Name of the Journal–Volume and Page no.–Date of publication)

International

Palin Sil, Prabal Das, Soumyajit Biswas Asis Mazumdar & Asok K. Biswas–Modulation of photosynthetic parameters, sugar metabolism, polyamine and ion contents by silicon amendments in wheat, (*Triticum aestivum* L.) seedlings exposed to arsenic–Environmental Science and Pollution Research (Springer-Verlag GmbH Germany part of Springer Nature 2019)–26(13), pp.13630-13648–March, 2019

6. Major Achievements:

- RCFC-ER has organized one workshop in Kolkata and another workshop in Bhubaneswar for the promotion of medicinal plants by bringing all stakeholders in one platform.
- RCFC-ER has organized one training programme in Bhubaneswar & one programme in Ranchi for the promotion of cultivation of medicinal plants and one programme in Patna for value addition and marketing of medicinal plants by promoting Farmers Producer Companies (FPOs).
- RCFC-ER provided training 218 nos. of medicinal plants cultivators in the state of Bihar, Jharkhand, Odisha & West Bengal.
- The RCFC-ER has organized Two Exposure Visits to Chhattisgarh State for the progressive farmers of Bihar, Jharkhand, Odisha & West Bengal.
- One lakh Quality Planting Materials (QPM) were raised in multiple locations by engaging various organizations in the state of Bihar, Odisha and West Bengal.
- A modern nursery established inside University campus for raising QPM of Medicinal Plants (approx. 10,000 – 15,000 nos.)
- RCFC-ER assisted in 3 nos. of research identified concerned with the region viz., Assessment of Active Principle of Medicinal Plants (viz. *Withania somnifera*, *Bacopa monnieri*, *Aloe vera* & *Ocimum spp.*) for Recommendation of Cultivation as Quality Plant Materials; Identification of High Yielding Stevia Cultivars Suitable for Gangetic Alluvial Regions of West Bengal and Research study to explore the ethnomedicinal use of *Uraria lagopoides* (Shiv-jata) along with validation of one major use.
- RCFC-ER participated in 23rd Sundarban Kristi Mela, Basanti, South 24 Pgs, W.B. during 20th -29th December 2018 and State level Arogya Fair during 1st to 3rd March 2019 at Triangular Park, Kolkata.
- RCFC-ER published Activities and Achievement booklet up to May 2019 for RCFC-ER, NMPB, JU
- RCFC-ER documented 2 success stories (“*Medicinal Plants Promotion by NEPO FPO Group*” & “*Inspiring Journey of Mr. S.K. Das to a Medicinal Plants Entrepreneur*”) and converted to 4 regional languages for publicity.
- The 1st and 2nd fortnight Market Price data of top 100 Medicinal and Aromatic Plants from 25 Major Markets of India (Kolkata, Siliguri and Berhampur Market) is being collected for “e-CHARAK”- e-Channel for Herbs, Aromatic, Raw material and Knowledge, a platform to enable information exchange between various stakeholders involved in the medicinal plants sector which has been jointly developed by the National Medicinal Plants Board (NMPB), Ministry of AYUSH, Government of India and Centre for Development of Advanced

RURAL & CRYOGENIC TECHNOLOGIES

[Funded by Department of Higher Education, Science & Technology and Bio-technology]

(Govt. of West Bengal)

Phone : 2414-6747/6735/6965

Int. : 2457-2585

Director : Prof.(Dr.) Swapan Chandra.Sarkar

E.mail : rct.centre@jadavpuruniversity.in

1. Number of Associated Faculty Member: 06

2. Centre for Rural & Cryogenic Technologies (Former Advanced Centre of Cryogenic Research – Calcutta) has the distinction of being born on 2nd November 1979 (the time when the Institute of Cryogenics, University of Southampton, UK was also born) as a R & D Institute of Cryogenics with initial GRANT from Commerce and Industries Dept. Govt. of W.B. to promote cryogenics research and education/training in all fields of science and technology with Prof Akhyananda Bose (the founder president of Indian Cryogenics Council) as its Founder Director. It is a grant in aid autonomous organization under Department of Science & Technology, Government of West Bengal since April 1996 and it also receives grant from Dept. of Higher Education (Social Education Branch) on scheme basis. The Centre is an affiliated unit of Jadavpur University and academically recognized for offering Ph.D. under Faculty for Interdisciplinary studies, Law & Management (FISLM).

3. Area of Research

Promoting research in the field of cryogenic and allied science for its potential development in education & training towards spread of knowledge in the multi-dimensional fields for the improvement of human society. The work aimed at solving the difficulties of society, planning of education and training to create trained manpower in cryogenic science & technology, cryopreservation including Rural technology and other relevant areas by utilizing knowledge of this front line discipline.

A. Research Activities Under

- i) Cryogenics in production, maintenance, measurement, control and its utilization for scientific investigation.
- ii) Investigation of phenomena, techniques and concepts of fertilizer, steel, petrochemicals, material science, gas purification, environmental science, agricultural chemistry, food science, biology, chemicals & pharmaceutical science.
- iii) Defense, atomic energy and space science.

B. Academic and Research activities in Cryogenic/Rural & Allied Technology during financial year 2018-19 at Centre for Rural & Cryogenic Technologies

The institute is known for promoting Cryogenic science application towards the benefit of the Human society.

Different research programme conducted in the Institute during current year (2018-19) are summarized below

- i). **Ongoing External Funding Project:** (ICMR- Project- Govt. of India)
Project title “Improvement of Human Semen Quality Utilizing Two Novel Innovations Sperm Vertical Velocity and Motility – Promoting Proteins”
Project Investigator (PI): Dr. G.C.Majumder, Emeritus Scientist, CRCT,
Research Associate for the Project- Dr. Prasanta Ghosh
Technical and other Research support extended by Mr. T. Chanda (CRCT)

Research works has done under the project

FMSF (Forward Motility Stimulating Factor) was found to increase human sperm motility in a dose dependent manner and maximum increase of sperm forward motility was observed at 1.5 μ M concentration. At this dose approximately 50% increment in motility was observed but above that concentration a slight decline in motility was noticed but monovalent antibody against FMSF was able to block this effect. Therefore 1.5 μ M concentration of FMSF was found optimum for human sperm motility enhancement. FMSF was also found to be effective in enhancement of as the nozoospermic sperm motility approximately 40% (without bicarbonate medium) and 55% (with bicarbonate medium).

Translational potential: Successful completion of project is expected to establish the motility promoting efficacy of FMSF and MIP (Motility Initiating Protein) for sub-fertile or infertile human spermatozoa. Thus, this investigation has the translational potential not only for human infertility clinics but also for animal breeding centres.

ii). **Ph.D. Programme of the Centre:**

a) **Ph.D. (Engineering) awarded by JU from CRCT**

Sri Debajyoti Roy Chowdhury completed his Ph.D. work under Dr. S.C. Sarkar and submitted his thesis under the Faculty of Interdisciplinary studies, Law & Management on 15 April, 2018. His viva voce examination was completed in November, 2018 and he was awarded his Ph.D. (Engineering) degree at the convocation of the Jadavpur University December 2018. Dr. D. Roy Chowdhury is still associated with CRCT for Academic/Research work on adhoc basis.

b) **New Registration Ph.D. (Science) at JU,** Ms Shrabani Ghosh has registered for Ph.D. (Sc.) Programmes in March, 2018 under Dr S.C Sarkar in the year 2018. Ph.D. (Science)Scholarship Rs. 8000.00/ month will be receiving from Jadavpur University under The scheme of Swami Vivekananda Merit Cum Means Scholarship and CRCT need not pay her fellowship.

iii). **INVITED TALK**

a) International workshop on sustainable Agri-food cold supply chain in India– Optimizing cold supply chain through the use of Cryogenics- organized by Science & Technology Facility Council (STFC). University of Sheffield, UK and University of Hull UK (17th June to 19th June 2018)- at New-Delhi.

Prof. S.C. Sarkar delivered a talk on the interaction meeting on Cold Chain development in Food Supply in India and Scoping of Cryogenics being invited jointly by STFC-UK and Sheffield University-UK.

Usually fresh perishable crop contains 65 to 95 percent water when harvested and get spoiled due to microbial spoilage, water loss, and higher respiration and sprouting under ambient conditions for long time. Presently more than 40 percent of agricultural produce being dumped in wastage bins due to lack of proper storage technique.

Outcome-Dr S C Sarkar is likely to be a project partner under University of Sheffield, Science and Technology Facilities Council(STFC), UK Govt. for their global project shortly.

b) **Resource Person in UGC refresher Course**

Dr. S.C.Sarkar delivered a talk on “Cryogenic and Cryogenic R & D efforts in India –An overview” as a resource person at UGC approved refresher course (RCPHYS 1819) on recent development in physics: Theory and experiment for in Service College/University Teachers held on 10th December 2018 at Physics Dept, JU.

c) Dr S.C.Sarkar visited Oxford University and Cryogenic Energy Storage Laboratory of Birmingham University UK and presented a paper at International Conference on Cryogenic and Material Engineering during September. 2018 (Local expenses provided by organizer and registration fees and Laboratory visit at Birmingham University provided by Indian Cryogenic Council)

4. Promotion of Academic Research:

a) Summer Internship Project Work:

A student from The University of Sheffield UK completed his summer internship on cryogenics in Biological Application at Centre For Rural & Cryogenic Technologies under Prof. S.C.Sarkar

b) Cryotreatment of Food materials:

Department of Food Technology & Bio-Chemical Engineering students studied under Cryo grinding of Plantains for retention of shelf life characteristics of the plantain powder at CRCT.

c) Dissertation Work:

M.Sc (Instrumentation Science) JU

Two students namely Sree Supratim Dutta & Ratnadeep Roy had completed Dissertation Work studies in Magnetotransport properties of perm alloy based materials and Design of digital thermometer at cryogenic temperature range under Dr.G.P. Mandal.

5. WORKSHOP ON CRYOGENICS

CRYO – 2019

The institute Organized a National Workshop on Liquefied Natural Gas (LNG) as a Cryogenic Fuel (March 29, 2019) under the banner CRYO – 2019

The workshop was attended by a galaxy of scientists /faculty members from reputed institutes and invited talk were delivered by Prof. Kanchan Chowdhury Cryogenic Engineering Centre, Indian Institute of Technology, Kharagpur, India, Prof. A K Eswara, Indian Maritime University, Kolkata, Prof.Tarun Kumar Naiya, Department of Petroleum Engineering IIT (ISM) Dhanbad, Prof Asit Kumar Saha Principal Haldia Institute of Technology Haldia, Mr Sisir Kumar Chakraborty Ex- Manager, Linde India Limited. Large cross section of students, Research Scholars, and young scientists also participated in deliberation.

The program was appreciated by all the participants & academicians and benefited a large cross section of the teaching, research and student communities in this interdisciplinary field of science and technology which have immense societal value.

6. Publication

- i) Debajyoti R. Chowdhury, Nathuram Chakraborty, and Swapan C. Sarkar, “Development and investigation of a regenerator for a Reverse Stirling cycle based Cryogenerator”, is accepted in *IOP Science Journal of Physics: Conference Series*. 2018 (Scopus indexing)
- ii) Debajyoti R. Chowdhury, Nathuram Chakraborty, and Swapan C.Sarkar, “Development of a cryogenic condenser and computation of its heat transfer efficiency based on liquefaction of nitrogen gas”, *Mechanics and Mechanical Engineering Journal* @Technical University of Lodz Poland will be published in Vol. 23, No. 1, 2019.
- iii) Debajyoti R. Chowdhury, Nathuram Chakraborty, and Swapan C. Sarkar, “Prospect of refrigeration recovery during liquefied natural gas regasification for Agri-food cold supply chain in India”, is accepted at *25th International Institute of Refrigeration- International Congress of Refrigeration proceedings*, paper Id: 1054, DOI -10.18462/iir.icr.2019.1054.
- iv) BK Chaudhuri, PK Chakraborty and BN Mondal, “Fermi integral and density of state function in a parabolic semiconductor doped with impurity forming a band tail”. *Pramana Journal*, vol. 90, Page 18-24, 2018(the paper deals with ultra-low temperature (Cryogenic)
- v) BK Chaudhuri, “Laser induced modifiable of optical band gap present in the III-V semiconductor from density state calculation”- *Pramana Journal* vol. 92, June 2019 (paper deals with Cryogenic)
- vi) Shrabani Ghosh, S.C.Sarkar and BK Chaudhuri, “A novel cost effective cross linking polymer grapheme oxide nano composite cryogelfilm and fibres mesh films for thermal Insulation Application” accepted at *27th National Symposium on Cryogenics and Superconductivity*, 2019, Indian Institute of Technology. Bombay, Mumbai abstract Id- 227.

7. Other academic activities

Academic Staff / Scientist of the centre acted as paper sector, Paper reviewer, expert member for various University / IITs.

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SYLFF PROGRAMME

[Jadavpur University –Ryoichi Sasakawa Young Leaders Fellowship Fund Program]

Int. : 2457-2389

Director : Professor Shibashis Chatterjee

In 2003-2004, Jadavpur University became the First Indian University among the 69 SYLFF (The Ryoichi Sasakawa Young Leaders Fellowship Fund) Institutions across 44 countries to earn SYLFF status and receive an endowment of one million US dollars (US\$1,000,000) from the Nippon Foundation. The JU-SYLFF program provides a unique opportunity for students in Social Sciences and Humanities as fellowships are awarded to postgraduate students whose studies focus on the broad theme: Tradition, Social Change and Sustainable Development and those which adopt a Holistic Approach, that is, any issue or problem relevant to contemporary Indian society. It provides unique research opportunity to the postgraduate students of the M. A. and M. Phil. and Ph. D. level and is one of the highest-valued scholarships in India.

JU-SYLFF Fellows: work in progress

1. Sudeshna Dutta
2. Sujaan Mukherjee

JU-SYLFF SRA Awardees:

1. Purbasha Auddy: Visited School of Oriental and African Studies (SOAS), University of London, UK.
2. Sudeshna Dutta: Visited University of Hawai’I, Manoa.
3. Sujaan Mukherjee: Visited the British Library, with support from Professor Mark Crinson at Birkbeck, University of London

Orientation courses organized:

The annual Sylff Pre-Application Orientation was held at Professor Anita Banerjee Memorial Hall on 10th September, 2018. The objective was to encourage and guide students to develop a research oriented mind. During the day, participants were introduced to the various facets of the Sylff programme: its goals, multidisciplinary approach, leadership initiatives, social action programs et al. The programme began with an introductory speech by the JU-Sylff Project Director, Professor Shibashis Chatterjee. This was followed by informative, inspiring talks by SYLFF expert Professor Amlan Das Gupta, Department of English, the Joint Registrar, Dr. Sanjay Gopal Sarkar and Professor Rajat Acharya from the Department of Economics. Prof. Chatterjee then showed a presentation and conducted an interactive Q&A session with the participants. Current fellows also shared their journey as part of the programme and talked about their respective areas of research to provide the students with basic ideas about the kind of interdisciplinary research that SYLFF engages in.

Lecture Series organized:

The JU- SYLFF Lecture Series was started in April 2016. The idea was to involve academic experts and graduate SYLFF fellows for the academic enrichment of the SYLFF community and university students in general. An overview of the lectures delivered:

- On 15th June, 2017, Dr. Sulagna Maitra, NOHA Lecturer and Academic Coordinator at University College, Dublin, delivered a lecture on “Humanitarian Action: Introduction to principles and contemporary challenges”.
- On 25th July, 2017, Dr. Nilanjan Das, Assistant Professor at New York University Shanghai delivered a lecture titled “Tolerance, Pluralism and Public Reason in Classical India”.
- On 15th January, 2018, Dr. Shuhita Bhattacharjee, Assistant Professor at the Department of English, Presidency University, Kolkata, delivered a lecture titled “Hijab, the Search for Freedom and the Meaning of Rebellion: the Case of Marjane Satrapi’s Persepolis”.

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- On 26th February, 2018, Professor T. David Ito, Professor at the Graduate School of Applied Religious Studies, Sophia University, Japan, delivered a lecture titled “The Concept and Sense of “Others” in Japan: Social and Scientific Implications”.
- On 12th June, 2018, Mr. Sagar Taranga Mandal, Assistant Professor, University of Kalyani, delivered a lecture titled “In and Out of the Spotlight: Notes on Revisiting the Refugee”.
- On 12th September, 2018, Mr. Vikrant Dadawala, Research Scholar, University of Pennsylvania, delivered a lecture titled “Of Lonely Poets and Foreign Soap: Hope and Disillusionment in the New Indian Cinema”
- On 4th October, 2018, Mr. Biswajeet Halder delivered a lecture titled “Ramayan Gaan: The Oral Narratives of South 24 Parganas”
- On 5th November, 2018, Mr. Sarbajit Mitra, PhD Scholar, SOAS, delivered a lecture titled “Bornibare Gulikhor, Basana Hoyeche Mor: The Case of Opium Consumption in 19th century Bengal”
- On 31st January, 2019, Dr. Debaroti Chakraborty, Assistant Professor, Department of Performing Arts, Presidency University, delivered a lecture titled “Border Narratives of Women in India and Latin America: Re-inventing Selves, Re-creating Spaces (1980s-2016)”
- On 25th February, 2019, an interactive seminar was held with Dr. David Ito which focused on the Right to Health as part of SDGs and MDGs and its practical incorporations at the domestic level.
- On 25th April, 2019, Mr. Abhijit Sadhukan, Assistant Professor, Kazi Nazrul University, delivered a lecture titled “Social Stratification and Mobility: Caste in Early India”
- On 11th July, 2019, Ms. Sritama Chatterjee, PhD Scholar, University of Pittsburgh, delivered a lecture titled “Quotidian Oceans, Bureaucratic Waters: Genres and Forms of Hydrocolonialism on the Bay of Bengal (1870-1920)”

The JU-SYLFF Association has also published the 12th issue of *Fellows*, the annual newsletter.

The JU-Sylff Association was the first to apply for and be awarded the Local Association Networking Support (LANS) grant from the Sylff Association in Tokyo. The grant consists of a maximum US\$5,000 to cover the long-distance transportation costs of participating fellows. It became a matter of great honour for JU-SYLFF to receive the LANS grant for a second time in 2019. On 14th and 15th March 2019 the association organized the LANS Meet in Kolkata, India, inviting JU-SYLFF fellows from Britain, Ireland, and other parts of India. Day 1 consisted of the annual visit to the Premananda Leprosy Mission Hospital as part of the Social Action Programme at JU-SYLFF. Day 2 at LANS 2019 was arranged around the academic and professional experiences of fellows around the theme of inclusivity. The discussions were divided into four panels on pedagogy, environment and sustainability, gender and sexuality, and historiography. The 12th edition of the annual newsletter of JU-SYLFF, *Fellows*, was also released.

Day 1: Sylff-JU fellows, both current and graduated, who had previously organized and visited the Premananda Leprosy Mission Hospital as part of JU-SYLFF, were able to revisit the hospital in a large group on 14th March, 2019. The team was accompanied by the head of staff, Mr. Mark Moloy Ambros, while they met and interacted with the patients and Dr. Helen Roberts, medical superintendent of the hospital. They engaged in fruitful discussions with individual patients who talked about the developments that had been introduced since their last visit. The Sylff-JU Association presented the residents with medical supplies, fruits and sweets, and the fellows decorated the walls of the inmates’ wards with colourful stickers. The fellows spent the day with the inmates and also organized lunch for them. Later in the day, a film was screened for the patients and staff there, which they thoroughly enjoyed. A sum of INR 3000 was donated for prosthetics with the vision to collect funds for the said purpose before every future visit. It was an enriching experience for the Fellows and mentors to be able to reach out beyond the realm of academics, integrating themselves into the community and giving back to it in small ways.

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Day 2: On 15th March, 2019 graduated and current fellows met to discuss and deliver presentations on the broad theme of inclusivity. They also discussed their own individual research and brainstorm over collective goals to address social, cultural, and environmental issues that concern us all in different ways. JU-SYLFF Fellows who are currently working in different institutions across the world made presentations and shared stories of their diverse and inspiring experiences, which served to encourage all the participants in pursuing their ambitions with renewed vigour. Apart from the fellows, many mentors of the JU-SYLFF Programme, including Professor Joyashree Roy, Professor Abhijit Gupta, Professor Amlan Dasgupta, Professor Samantak Das, Professor Paromita Chakravarti, Professor Sibashish Chatterjee, and Professor Kavita Panjabi, were present for the Meet. Members of the JU-SYLFF Steering Committee attending the Meet were Mr. Gour Krishna Pattanayak and Dr. Sanjay Gopal Sarkar, Finance Officer and Joint Registrar respectively of Jadavpur University. The Mentors and the Fellows were able to brainstorm and learn from Ms. Marie Suzuki about other SYLFF Plus Programs the JU-SYLFF Associations may apply for.

In the august company of the JU-SYLFF fraternity on Day 2 of JU-SYLFF LANS MEET 2018, the 12th issue of Fellows, the annual JU-Sylff newsletter, which addresses questions of academics' role within and outside the walls of academia and their responsibility toward society at large, was introduced by Ms. Suzuki.

Activities of JU-SYLFF Fellows :

1. Duke Ghosh

Books/Monographs/ Articles Published:

- Roy, J., Dasgupta, S., Ghosh, D., Das, N., Chakravarty, D., Chakraborty, D., De, S. (2018): "Governing National Actions for Global Climate Change Stabilization: Examples from India", in Barua, A., Narain, V. and Vij. S. (eds.) *Climate Change Governance and Adaptation: Case Studies from South Asia*, CRC Press, Boca Raton, pp: 137-159, <https://www.taylorfrancis.com/books/9781351680783>
- Roy, J., Chakravarty, D., Dasgupta, S, Chakraborty, D., Pal, S., Ghosh, D. (2018): "Where is the hope? Blending modern urban lifestyle with cultural practices in India", *Current Opinion on Environmental Sustainability*, 31, pp: 96-103, <https://www.sciencedirect.com/science/article/pii/S1877343517300696>
- Ghosh, D. & Roy, J. (2018): "National Mission on Bio-Diesel in India (2003): An Assessment Based on Strategic Niche Management" in S. De, S. Bandyopadhyay, M. Assadi and D. Mukhejee (eds.) *Sustainable Energy Technology and Policies: A Transformational Journey*, Springer Nature, Singapore, https://link.springer.com/chapter/10.1007/978-981-10-8393-8_10

Major Research Projects:

- UNDP funded Preparation of an Approach Paper for Climate Financing in Nepal (2018-Present)
- GIZ GmbH funded Mapping and Assessing Capacity Needs in Domain of Science, Policy and Practice (2018 – Present)
- UNDP funded Climate Change Vulnerability & Disaster Risk Reduction in Agriculture Sector in Nepal (2017-18)
- The World Bank funded Technical Assistance to Urban Local Bodies in Issuing Municipal Bonds and Commercial Borrowings (2017-18)
- MoUD funded Exploring potentials of Value Capture Finance as a source of financing for Urban Development Project (2017-18)

Teaching:

- Visiting faculty at the Institute of Cost and Management Accountants, Government of India
- Visiting Faculty at Indian Institute of Foreign Trade
- Visiting Faculty at Indian Institute of Social Welfare & Business Management
- Visiting Faculty at International Management Institute

2. Madhuchanda Ghosh

Study Tour Attended:

- Visited the United States of America under the invitation of the US State Department on a study tour for three weeks in February, 2018.

Books/Monographs/Articles Published:

- Article entitled: “India’s Strategic Convergence with Japan in the Changing Indo Pacific Geopolitical Landscape”, published in the *Asia Pacific Bulletin of East West Center Washington DC.*, August 16, 2017
- Book Chapter entitled : “India’s Economic Dynamism and India-Japan Relations” in Takenori Horimoto (ed.) *Introduction to Contemporary India-Japan Relations*, University of Tokyo Press, March 2017

3. Shyamasree Dasgupta

Seminar/Workshop/Conference/Symposium Attended:

- “Understanding the drivers of CO2 emissions in India: A decomposition analysis”, Paper accepted for poster presentation in the 2nd International Conference on Climate Change 2018, held in Colombo, Sri Lanka (15-16 Feb, 2018).
- “What Affects the Willingness to Pay for Arsenic Safe Drinking Water? A Case Study in Rural West Bengal”, paper presented in the Ninth Biennial Conference of Indian Society for Ecological Economics, held in Trissure, Kerala, India (8-10 November, 2017)
- “The pattern of inter-fuel substitution in energy intensive manufacturing industries in India during 2000-01 - 2011-12”- paper (with Prateek Gauba and Shivam Satija) presented in the 40th International Seminar of International Association for Energy Economics (IAEE), Singapore, June 19-22, 2017.
- Visiting Researcher in Energy Studies Institute, National University of Singapore, Singapore in December, 2016.
- Presented the paper “*Energy use Behaviour of Manufacturing Industries in India: An Analysis using KLEMS framework*” in the Seventh National Seminar on Annual Survey of Industries organized by Central Statistical organization, Industrial Statistics Wing, Ministry of Statistics and Programme Implementation, Government of India. Kolkata, India. (26th September 2016).
- Seminar on “Analyzing long-run trends of energy demand in the manufacturing industries in India” at Energy Research Institute, National University of Singapore, Singapore (8th August, 2016)

Articles/Papers/Works published in Journals:

- Dasgupta S., Sankhyayan P. (2018) “A narrative analysis of state-level renewable energy policies in India”. In: Gautam A., De S., Dhar A., Gupta J., Pandey A. (eds) *Sustainable Energy and Transportation. Energy, Environment, and Sustainability*. Springer, Singapore.
- Roy, J., Dasgupta, S. and Chakraborty, D (2017). “Deep decarbonisation in industries: what does it mean for India?” Wuppertal Institute’s brochure on the LCS-RNet conference 2016. Wuppertal Institute for Climate, Environment and Energy, Wuppertal, Germany.
- Dasgupta, S., Gauba, P., Satija, S. (2017) “The pattern of inter-fuel substitution in energy intensive manufacturing industries in India during 2000-01 - 2011-12” in the *Proceedings of 40th International Conference of International Association of Energy Economics*. Singapore. link: Online Proceeding.
- Dasgupta, S. and Roy, J. (2017) “Analysing energy intensity trends and decoupling of growth from energy use in Indian manufacturing industries during 1973-74 to 2011-12”, *Energy Efficiency*, 10 (4), 925–943 (Springer).
- Dasgupta, S., Satija, S. and Gauba, P. (2017). “Energy use Behaviour of Manufacturing Industries in India: An Analysis using KLEMS framework”. *Journal of Industrial Statistics*. 6(1), 72-88.2017.

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- Dasgupta, S. and Roy, J (2016). “Analysing energy intensity trends and decoupling of growth from energy use in Indian manufacturing industries during 1973-74 to 2011-12”, Article in Press. DOI 10.1007/s12053-016-9497-9. *Energy Efficiency*.

4. Rimple Mehta

Major Research Project:

- March 2016- present: Researcher for a Harvard University South Asia Institute project “The 1947 Partition of India: The Demographic and Humanitarian Consequences”
- March 2016- February 2017: Researcher for a School of Women’s Studies, Jadavpur University project titled “Love, Law and Labour: Child Marriage in West Bengal; focus of research being Cross-Border Child Marriages along the Indo-Bangladesh border.

Seminar/Workshop/Conference/Symposium Attended:

- Presented a paper titled “She Came to Stay: Bangladeshi Women in India Negotiate Cross-Border Child Marriages” at a Dissemination Meeting of the research project titled “Love, Law and Labour: Child Marriage in West Bengal” organised by the School of Women’s Studies Jadavpur University, on 23 February 2017.
- Presented a paper titled “Inside Prison Walls: Resistance, Subversions, Negotiations” at XV National Conference on Women’s Studies, titled “Women in a Changing World: Restructured Inequalities, Countercurrents, and Sites of Resistance” organised by Indian Association of Women’s Studies at University of Madras, Chennai, from 22-25 January, 2017
- Presented a paper titled “‘Illegal’ Bangladeshis in Akhand Bharat: Inscriptions of race and religion on citizenship” at International seminar titled “Shifting Significations of Borders in Contemporary South Asia and the Americas” organized by the Centre for Studies in Latin American Literatures and Cultures (CSLALC) & Centre of Advanced Study (CAS), Dept. of Comparative Literature, J.U, from 19-20 January, 2017.
- Presented a paper titled “‘Illegal’ Bangladeshis in Akhand Bharat: A Shameful Other?” at international workshop titled “Race, Criminal Justice and Migration” organized by Border Criminologies, Centre for Criminology, University of Oxford, at University of Oxford, UK from 19- 20 September 2016.
- Presented a paper titled “Time is on My Side: Negotiating Space and Time in Prison” at international workshop titled “Critical Prison Studies, Carceral Ethnography, and Human Rights: From Lived Experience to Global Action” organized by Debra Parkes (University of Manitoba), Gillian Balfour (Trent University), Joane Martel (Université Laval), Kelly Hannah-Moffat (University of Toronto in Mississauga), Dawn Moore (Carleton University) and Sarah Turnbull (University of Oxford) at International Institute for the Sociology of Law, Onati, Spain from 23-24 June 2016.

Books/Monographs Published:

- Mehta, R. Forthcoming. *Women, Mobility and Incarceration: Negotiating Social and Political Borders*. UK: Routledge.

Articles Published:

- Mehta R. (2016) ‘Borders: A View from ‘Nowhere’’, *Criminology and Criminal Justice*, 16(3), 286-300.

Major Achievements:

- 2017: Nominated for the International Visitor Leadership Programme (IVLP) by the US Department of State
- 2016: Received a travel grant for a seminar in Spain in June 2016 under the “UGC GDA- Travel, Seminar and Visiting Fellow Scheme (XII Plan)”

5. Nikhilesh Bhattacharya:

Seminar/Workshop/Conference/Symposium Attended:

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- Presented a paper, “Anglo-Indians: Lives Beyond Literature,” at an Anglo-Indian Studies Workshop, entitled “Nexus: Anglo-Indian Literature and Anglo- Indian life,” held at Jadavpur University, Kolkata, on 18-19 January 2017.

6. Aritra Chakraborty

Seminar/Workshop/Conference/Symposium Attended:

- Presentation given at the Annual Conference of Cambridge University Press, India, on new approaches to editing English Language Textbooks.

Articles Published in Journals:

- Book review: Shukla Sanyal, “Revolutionary Pamphlets, Propaganda and Political Culture in Colonial Bengal”. New Delhi: Cambridge University Press, 2014 in *Sanglap: Journal of Literary and Cultural Enquiry*, Vol 2 (2)

7. Deeptanil Ray

Articles Published in Journals:

- Deeptanil Ray and Abhijit Gupta, “The Newspaper and the Periodical Press in Colonial India: Explorations in Early Media History,” in *Journalism and the Periodical Press in Nineteenth-Century Britain*. Edited by Joanne Shattock. Cambridge, UK: Cambridge University Press, 2017, 245-262.
- “Review of Isabel Hofmeyr, *Gandhi’s Printing Press: Experiments in Slow Reading*,” *SHARP News* [quarterly organ of The Society for the History of Authorship, Reading and Publishing], vol. 25, no. 2 (2016), 20-21.
- “Comics porar pnaachti sahaj upaay,” *Deepan*, Special Issue on Bengali Comics, edited by N. Julfikar, vol. 20, no.1-2 (2016), 129-140.

Major Achievements:

- Guest Faculty, Department of English, Presidency University
- Received *Nidan* (Second Degree Black Belt) in Aikido, from the international aikido federation, Kokusai Aikido Kenshukai Kobayashi Hirokazu Ryu Ha (KAKKHRH), in December 2016.

8. Payoshni Mitra

Major research Project:

- Research Project on Sport, Sexual Harassment and Discrimination on the basis of gender identity, sexual orientation and intersexuality supported by Ministry of Youth Affairs and Sport, Government of India as the Project Director. The Project was hosted by School of Media, Communication and Culture, Jadavpur University.

Invited Lectures:

- Invited as speaker at the 10th Gender Summit, Tokyo Japan. Invited to talk on Dutee Chand case at bastions law schools including National University of Juridical Sciences, Kolkata.

Major Achievements:

- Directed a documentary on Sport and Sexual abuse: In the Name of Pride (2016)
- Was interviewed as the domain expert before and during the Rio Olympics by BBC Radio 5, Australian Broadcasting Corporation, The Times, London, Business Line, WYNC.org, New York on Issues related to the suspended Hyperandrogenism Regulations of the IAAF and IOC.

9. Anwesha Sengupta

Major achievements:

- Attended Persian language classes for two weeks in April 2016 at the International Centre for Persian Studies, University of Tehran, Tehran, Iran.

10. Nilanjan Das

Invited Lecture:

- “Externalism and the Value of Information”, Formal Epistemology Workshop, Seattle, May
- “Self-Locating Belief and Knowledge Defeat”, Latinx Philosophy Conference, Rutgers, April
- “Buddhists against Inferentialism about Self-Knowledge”, Central Division Meeting of American Philosophical Association, March

11. Shounak Set

Invited Lecture:

- Resource-person (11.03.17) for Special Lecture on “International Relations And Outer Space” at Loreto College, Kolkata

Major Research Project:

- Marie Sklodowska Curie Global India ETN ESR under the European Union’s Horizon 2020 underway (2017-2020)

Seminar/Workshop/Conference/Symposium Attended:

- Participant (and paper presenter), European International Studies Association Early Career Workshop on “Political Parties and Foreign Policy”, Institute of International Relations, Prague, September 11, 2018.
- European Consortium of Political Science Research 2018 Summer School in Methods and Techniques, 26 July – 10 August, Central European University at Budapest.
- Presented Paper, “Space Technology And Rural Development” at National Seminar organized by Dept. of Economics, SKBU in March 2017.
- Participated in 5 day Workshop on “History of Science and Technology” at Asiatic Society, Kolkata in February, 2017.
- Presented Paper, “Precedents, Probabilities And Prospects: Re-Imagining The India Australia Relations” at the 5th International Conference of Indian Association for Study of Australia in February 2017.
- Presented Paper, “Outer Space and Development: A Case Study Of The Indian Space Program”, at the National Seminar organized by Loreto College in December, 2016.

Articles Published in Journals:

- “Book Review, India’s Wars: A Military History 1947–1971”, *Arjun Subramaniam, International Journal of Military History and Historiography* 38 (2018), pp. 149-151
- “Book Review: U.R. Rao, Inside the ISRO: Narrating the Indian Space Odyssey”, *India Quarterly*, Vol 72, Issue 2, May 2016 (SAGE)

Major Achievements:

- Appointed as Vice-Chair, KDSA (KCL Doctoral Students Association) on 08/09/2018 for the Academic Year 2018-19
- Selected as a Young Leader for “UK-India Young Leaders Forum: 35 under 35” on 21/06/18
- Resource Person for Soft Skill Development Course at SKB University.
- Selected as Jt. Coordinator for NET/SET Free Coaching at SKBU

Collaborative Programmes:

- Organized and co-hosted Netsys Talk, “2019 Indian General Election: The social media strategies of the Bharatiya Janata Party and the Indian National Congress” by Dr. Sangeeta Mahapatra of German Institute of Global and Area Studies, at Department of Informatics, King’s College London on January 11, 2019.

Miscellaneous:

- Co-authored, India's Leap in Space: The Significance of the First Indian Anti-Satellite Test" in *The Diplomat* (March 29, 2019).

12. Natasha Upadhyay

Major Achievements:

- Participant at the 61st session of the Commission for Status of Women at the UN in New York, March 13-24 through the Center for Women's Global Leadership, Rutgers University.

13. Soumya Bhowmick

Major Achievements:

- Graduated Erasmus Mundus Joint Master Degree – Economics of Globalisation and European Integration with Distinction on 27th October, 2017.

Major Research Project:

- SDG Index and Ease of Doing Business: A study of Indian States ; FDI in Indian States ; Energy Transitions in India and China - at Observer Research Foundation, Kolkata
- Joined as a Research Assistant at Observer Research Foundation, Kolkata from 1st December 2017. Associated with two projects at the moment - Urban Water Challenges in KMC Area; A Comparative Study on China and India's Energy Transition.
- Cultivation Of The Globalized World: *An Economic Analysis Of The 'Sense Of Globalization' In People*, May 2017, Antwerp, Belgium ; Advisor: Professor Giuseppe Attanasi, Faculty of Economics and Social Sciences, Lille University of Science and Technology, Lille, France.

Seminar/Workshop/Conference/Symposium Attended:

- International Seminar for Young Scholars on Economic Development Issues, Graduate School Chinese Academy of Social Sciences, Beijing (Representative from India) in August 18th - September 16th 2018.

14. Ritajyoti Bandopadhyay

Articles Published in Journals:

- R. Bandyopadhyay and R. Samaddar (2017): "Caste and the Frontiers of PostColonial Capital Accumulation", in I. Mitra, R. Samaddar and S. Sen (eds), *Accumulation in Post-Colonial Capitalism*, pp. 189-215, Springer, DOI 10.1007/978- 981-10-1037-8.
- R. Bandyopadhyay (2017): "Genealogies of Political Modernity", *A Review of Decolonisation and the Politics of Transition in South Asia* (ed), S. Bandyopadhyay, Orient BlackSwan, 2016, Book Review, XLI, 3.
- R. Bandyopadhyay (2017): "Obstruction: Counter-Pedestrianism and Trajectories of an Infrastructure Public", *Decision (Springer)*, 44 (2). DOI 10.1007/s40622-017- 0155-7

Collaborative Programmes:

- Associated with a collaborative project on the social history of 'big-data' in India, as a lead author involving the researchers at the Mahanirban Calcutta Research Group, the University of Western Sydney, and Tata Institute of Social Science (TISS) Mumbai.
- Associated with a collaborative project titled *Entangled Urbanization: Capabilities and Informal Labour, Dignity and Deprivation*, funded by the Rockefeller Foundation.

Major Achievements:

- One of the founder members of a major Indo-German academic consortium titled *M.S. Merian-R. Tagore International Centre of Advanced Studies in the Humanities and Social Sciences*, housed at the Institute of Economic Growth, New Delhi.
- Invited as an 'advisor' to a Ford Foundation funded Project at the TISSMumbai exploring the social life of small urban spaces.

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- Associated with a research network titled *The Social Life of Commercial Trust: Comparative historical perspectives from Asia, Africa and Europe, 1600-1950*,

15. Purbasha Auddy

Seminar/Workshop/Conference/Symposium Attended:

- Presentation on ‘বাংলা সাময়িক পত্রের সন্ধান (১৮১৮-১৮৬৭)’ or ‘In search of Bengali periodicals (1818-1867)’ at the researchers’ conference organized by the Department of Bengali, Jadavpur University, March 28-29, 2017
- Presentation on ‘বাংলা সাময়িক পত্রের সন্ধান (১৮১৮-১৮৬৭)’ ‘In search of Bengali periodicals (1818-1867)’ at the researchers’ conference organised by the Department of Bengali, Jadavpur University, March 28-29, 2017
- Presentation on ‘Bibliography, digital file management and workflow’ in the group discussion on ‘The Making of the Bichitra Project: Online Variorum of Rabindranath Tagore’ at the international workshop on “Shakespeare Archiving, Digital Archiving and Textual Computing,” organised by the Department of English, and School of Cultural Texts and Records, Jadavpur University, November 29, 2016
- Easy Access for Rare Books: A Proposition’ at ‘Re-booting Public Libraries for the 21st Century to Recreate the Future,’ national seminar organised by the Department of Library and Information Science, University of Calcutta in collaboration with the University Grants Commission and Raja Rammohun Roy Library Foundation, March 3-4, 2016

Presentations Made:

- ‘বাংলা সাময়িক পত্রের ব্যবসায়িক জীবন’ or ‘Commercial lives of early Bengali periodicals’ at the researchers’ conference organised by the Department of Bengali, Jadavpur University, November 29-30, 2018
- “The Titles, Epigraphs and Editorials of Early Bengali Newspapers and Magazines (1818-1867)” at the Society for the History of Authorship, Reading and Publishing (SHARP) 26th annual conference titled ‘From First to Last Texts, Creators, Readers, Agents,’ Western Sydney University, July 9-12, 2018
- Presentation on ‘বাংলা সংবাদপত্র প্রকাশনার প্রথম পঞ্চাশ বছর ১৮১৮-১৮৬৭: কয়েকটি বিশেষ ঘটনা’ at the one-day national seminar on ভারতীয় সংবাদ-পত্র: সেকাল ও একাল organized by the Vidyasagar Centre of Indological Studies, Rabindra Bharati University, February 23, 2018

Publications:

- Mining Verbal Data from Early Bengali Newspapers and Magazines,’ in *Global Debates in the Digital Humanities*, eds. Domenico Fiormonte, Sukanta Chaudhuri and Paola Ricaurte (Minneapolis: University of Minnesota Press, forthcoming in 2019)
- ‘প্রাচীন বাংলা পত্রিকার ইতিহাসের সন্ধান’ or ‘In search of old Bengali periodicals,’ proceedings of the researchers’ conference organised by the Department of Bengali, Jadavpur University, March 28-29, 2017. Volume edited by Sekhar Samaddar (Kolkata: Jadavpur University, 2017) (ISBN: 9789383660414)
- I try to keep my senses open,’ *Fellows*, Newsletter of the Jadavpur University SYLFF Association, Issue 12
- “Not only for Keeps: But also for Documentation and Access,” *Fellows*, Newsletter of the Jadavpur University SYLFF Association, Issue 11

Grants Received:

- Society for the History of Authorship, Reading and Publishing (SHARP) travel grant for attending their 26th annual conference titled ‘From First to Last Texts, Creators, Readers, Agents,’ Western Sydney University, July 9-12, 2018
- SYLFF Research Abroad grant of US \$ 5,000 for conducting research at the British Library, London and the School of Oriental and African Studies, University of London, May-August 2017

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- Sambrook Fund bursary of GBP 500 for attending the London Rare Book School course 'Introduction to Bibliography' at the Institute of English Studies, University of London, July 3-7, 2017

16. Sudeshna Dutta

Seminar/Workshop/Conference/Symposium Attended:

- Awarded the SYLFF Research Abroad (SRA) Programme, and pursued research on Adivasi and Mulvasi women's oral narrative, was pursuing research in University of Hawaii, Manoa, at the Department of Indigenous Politics Programme, focusing on Hawaiian indigenous movements over land rights, from September to December, 2017.
- Attended National Level Workshop on "Comparative Literature: Texts, Contexts, Concepts" organized by Centre of Advanced Studies (Phase-3), Comparative Literature Department, Jadavpur University from 22nd to 24th February, 2017.
- Attended a Gian course, "Oral history and the Art of Listening" from 9th to 16th November, 2016.
- Presented a paper in International XIXth Oral history Conference held in Bangalore from 27th June-1st July, 2016.

Major Achievement:

- Initiated an Indigenous Language Learning center in Kolkata.

17. Reep Pandi Lepcha

Invited Lectures

- Was invited as a delegate for a panel on Questions of Identity and Progress specifically dealing with North-East of India, at the Apeejay Kolkata Literary Festival.
- Invited as resource person to a one-day national seminar on Ethnicity and Development of Lepcha Primitive Tribe of Sikkim organized by Department of Anthropology, Sikkim University and Social Justice, Empowerment and Welfare Department, Government of Sikkim.

Seminar/Workshop/Conference/Symposium Attended:

- 'Landscapes to Mindscapes: Engaging with the Personal and Impersona in Lepcha Folk Beliefs' was presented at 6th International Folklore Conference organized by Institute of Lithuanian Literature and Folklore Department of Estonian and Comparative Folklore, University of Tartu at Vilnius, Lithuania.
- 'Dabbling with Kaleidoscopic Narratives: A Prerequisite for Comprehending the 'forgotten' History of Róngs/Lepchas' was presented at 4th International Conference on North-East India, Reframing India's North-East People, Power and Perspectives, organized by Sikkim University.
- Participated in a one-day workshop on 'Introduction to the Study of Linguistics and Training on Language Documentation', organized by the Centre of Advanced Study, Department of English, Jadavpur University.

18. Sujaan Mukherjee.

Seminar/Workshop/Conference/Symposium Attended:

- "Historical Pilgrimage: Brahma Travel and the Narrativization of Space", at the national seminar, "Modes, Motives, Motifs, and Conditions in Intra-Asian Travel", 20-21 March 2017, Department of English, University of Delhi.
- "Labourer's only library": Funeral Inscriptions in Calcutta Cemeteries" at the international conference, "Turning the Page: New Directions in South Asian Book History". held on 9-10 March 2017, University of Chicago Centre, New Delhi.
- "Deathly Excess in Titus Andronicus" at the international conference, "Shakespeare's Ashes", organized by the Shakespeare Society of India, Ashoka University, and British Council on 21, 22 October 2016.
- "Remembering Death: Questioning the Literary Urban Imagination" at the workshop, "Urban Futures and Urban Utopia in South-Asian Megacities: Narrative, Play, Planning" organized by Institute of Development Studies Kolkata & Utrecht University, Netherlands, on 25 July 2016.

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- “Second Cities, Secondary Utopias: Calcutta in the Early 20th Century”, (forthcoming) at ‘Urban Utopias: Memory, Rights, and Speculation,’ international workshop at Utrecht University, 21-22 February 2018.
- “‘Labourer’s only library’: Funeral Inscriptions in Calcutta Cemeteries”, at “Turning the Page: New Directions in South Asian Book History”, international conference at University of Chicago Centre at Delhi, 9-10 March 2017.
- “The Ageing Body in Wrestling and as Spectacle: The Cases of Sri Biswanath Dutta and Manohar Aich,” at “Ageing, Ageism, Cultures”, a national conference organized by the Centre of Advanced Study, Department of English, Jadavpur University, 21-22 September 2017.
- “Historical Pilgrimage: Brahmo Travel and the Narrativization of Space”, at “Modes, Motives, Motifs and Conditions in Intra-Asian Travel”, an international conference organized by the Department of English, University of Delhi, 20-21 March 2017.

Articles/ Reviews Published in Journals/ Magazines:

- “One Great Graveyard of Memories”: Remembering Death in Kolkata in *Presidency Historical Review* 2, 1 (August, 2016): 13-30. ISSN: 24575058.
- “Travels in Time: Kolkata through Postcards,” in *Coldnoon Cities: Mapping the Metropolis I* (August 2016). ISSN 22789642, E-ISSN 22789650.
- “Captain Haddock in Calcutta (or, the story that Herge did not write but history did)”, in *Scroll Magazine*, 28 January 2017;
- “The story of the elusive man who made these fascinating pastel postcards of Calcutta”, 2 March 2017; “What 19th-century Calcutta’s street cries revealed about its food and politics”, in *Scroll Magazine*, 13 May 2017.
- “Cities from Above in Literature: Moscow, Kolkata”, *Sanglap: Journal of Literary and Cultural Inquiry* 3, no. 2, (2017): 286-320. ISSN: 2349-8064.
- “The story of the elusive man who made these fascinating pastel postcards of Calcutta,” *Scroll*, 2 March 2017.
- “What 19th-century Calcutta’s street cries revealed about its food and politics,” *Scroll*, 13 May 2017.
- ‘দৈনন্দিনতার প্রতিরোধ ও মিশেলদিসার্তো’ “Michel de Certeau and Everyday Resistance” in *Chorus* May-June 2017.
- “Against the Certified Art of Drinking: Two Nineteenth Century Tracts on Alcoholism in Bengal,” published by British Library, *Early Indian Printed Books*.
- “How Britain’s love affair with ‘the world’s most beautiful tree blossomed in Calcutta,” *Scroll*, 16 June 2017.
- “Who was the photographer who took these dehumanising images of the Madras famine?” *Scroll*, 20 November 2017.

Talks Delivered:

- Talk on India Foundation for the Arts project, “Chance Directed” at “Searching Cultures: Stories from the Archives,” organized by India Foundation for the Arts and Tamaasha Theatre (Mumbai) on 27 May 2017.

Awards Won:

- Awarded Sylff Research Abroad grant by Sylff, Tokyo Foundation, for research at Birkbeck, University of London, and the British Library, London, from April to June 2018.

19. Abhijit Sadhukhan

Seminar/Workshop/Conference/Symposium Attended:

- Presented a paper on the “Incarnation Theory of Chaitanya Deva” in “XIII Biennial Conference of Comparative Literature Association of India”, in March 2017. This paper has been nominated for publication as a chapter in a Book. This is based on M.Phil Thesis.

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- Presented a paper on the “Concept of Body in Buddhist Philosophy”, in the ICPR Centre for Buddhist Studies, Jadavpur University, in October, 2016.

20. Sreerupa Sengupta

Invited Lectures:

- Delivered a lecture on “Gender Responsive Budgeting and Gender Mainstreaming in Community Development” as part of the *International Certificate Program on Community Participation and Rural Development* organised by NIRD, Hyderabad – 4 January 2017.
- Delivered a lecture on “Gender Mainstreaming” at Sardar Vallabhbhai National Police Academy on 22 August 2016
- Delivered lectures to senior executives from banks and public sector enterprise; government officials from various state departments (Assam, Uttarakhand, Maharashtra, Odisha, Uttar Pradesh, Bihar, Chhattisgarh, Andhra Pradesh, Jharkhand) and officials from Asia-Pacific and SAARC countries. Topics covered - Decent Work Agenda and Gender Mainstreaming Strategies at Workplace, Integrating Gender in Rehabilitation and Resettlement action plans, Engendering Monitoring and Evaluation, Gender Responsive Budgeting, SDG and Gender.

Seminar/Workshop/Conference/Symposium Attended:

- Attended a consultative workshop organised by the National Women Commission to identify issues/themes for research/workshops for 2017-2018 on 29 March 2017.

Seminar/Workshop/Conference/Symposium Organised:

- Conceptualized and coordinated a sensitization workshop in Chandigarh on 12-13 December 2016 as part of the project on “Facilitating Replication of PM Awarded Initiatives in the States and UTs (2015-2017)”, supported by DARPG.
- Coordinator of a regional workshop for north eastern states in the Assam Administrative Staff College, Guwahati on 4-5 August 2016 as part of the project on “Facilitating Replication of PM Awarded Initiatives in the States and UTs (2015-2017)”, supported by DARPG.

Articles Published in Journals:

- Dr. Sreerupa Sengupta and Dr. Balbir Singh, “Breaking the cycle of malnutrition in India: *SurgujaFulwari*, Chhattisgarh and *Aman Persera*, Meghalaya”; *ASCI Journal of Management* (forthcoming volume)
- Dr. Sreerupa Sengupta and Dr. Balbir Singh, “Right to consent: *Lado* Campaign, Madhya Pradesh”; *ASCI Journal of Management* (forthcoming volume)

Major Achievements:

- Course Director of Management Development Program for Women Executives, 16-20 January 2017.
- Course Director of General Management Program for Women Scientists (supported by Department of Science and Technology) 23 January – 3 February 2017.
- Course Coordinator of Gender Policies and Audit supported by Asian Development Bank (June 2016).
- Coordinated 2 programs on leadership skills for senior officials from Central Bank of India (November 2016 and January 2017)
- Member, recruitment committee for the selection of Social Development Experts for the project on Establishment and Operationalisation of SLTC and DLTCs for HUD Department, Odisha; supported by Government of Odisha, September 2016
- Advisor of Ms. Kankana Roy, researcher in Maulana Abdul Kalam Azad Institute of Asian Studies, Kolkata for the *Occasional Paper on India and Bangladesh- Plans and Policies for the Participation of Women in Technical and Vocational Training: A Comparative Study*. The *Occasional Paper* was published in April 2017.

21. Mayuri Banerjee

Seminar/Workshop/Conference/Symposium Attended:

- Presented a paper on India-Pakistan relations titled “India-Pakistan Relations: A narrative of Post-colonial identities” at a two day national conference jointly organized by Department of Political Science of Bombay University and JAIR in December 2016.
- Presented a paper on India-China relations titled “Territorial Anxiety in India-China Relations: Can BCIM come to rescue?” in a two day international conference organized by Kolkata Association of Asian Studies.

22. Sulagna Maitra

- Maitra S. (2018) “The Changing Nature of Conflict: The Need for a Conflict-Sensitive Approach”. In: Heintze HJ., Thielbörger P. (eds) International Humanitarian Action. Springer, Cham
- Gibbons, P., Mc Dermott, R., Maitra, S. and Herman, J. (2017), “Building on the Capacities of Crisis-affected Populations: from Victims to Actors”. *Dev Policy Rev.* Accepted Author Manuscript. doi:10.1111/dpr.12239

23. Sritama Chatterjee

Articles Published in Journals:

- “E-Learning and Higher Education in India and Italy: Research Study and Analysis”. Co-authored with Supriya Chaudhuri and Andrea Reggiani. Published by Jadavpur University Press, 2017. ISBN No.- 9789383660360
- “Refugee in My Own Country”: Exile, Hospitality and Ethics in the Writings of Kashmiri Pandits”. Published in *Lapis Lazuli: An International Literary Journal*. Volume 7 no. 2, Autumn 2017. ISSN No.- 2249-4529. UGC Approved: Serial number, 41623. Blind Peer-reviewed.

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UGC-HUMAN RESOURCE DEVELOPMENT CENTRE

Director : Prof. Rajat Acharyya
Phone : 033-2335-9349 (Extn. 6209 / 6115)
Tele-Fax : 033-2335-7069
Mobile : 086-979-7343
E-mail : ugchrdcju@outlook.com

In the academic session 2018-19, the UGC-HRDC, Jadavpur University, has conducted altogether 20 programmes including four (4) Orientation Programmes, five (5) subject-specific Refresher Courses, five (5) inter-disciplinary Refresher Courses, Winter School, four (4) Short Term Courses and the Principals' Meet. The details of these courses are given below, with time distribution of courses as indicated.

Programme	Conducted at	Time
A. Orientation Programme		
A1 69 OP	UGC-HRDC	July 09 – August 04, 2018
A2 70 OP	UGC HRDC	August 27 – September 26, 2018
A3 71 OP	UGC-HRDC	November 19 – December 18, 2018
A4 72 OP	UGC-HRDC	February 06 - March 06 th , 2019

B Refresher Courses

B Refreshers Courses

B 1 Subject Specific Refreshers Courses

B 1(i) Quantitative Techniques in Economics: Methods & Application in Micro-Econometrics–Economics–12th November-4th December, 2018

B1(ii) Social and Political Philosophy: Indian and Western–Philosophy–28th November-18th December, 2018

B1(iii) Indian Life & Culture Revealed in Ancient & Early Mediaeval Literature–Sanskrit–27th August-15th September, 2018

Recent Developments in Physics: Theory and Experiment–Physics–19th November-11th December, 2018

Recent Advancement in Food and Bioprocess Technology–Department of Food Technology & Bio-Chemical Engineering–2nd January-22nd January, 2019

B 2 Inter-disciplinary Refreshers Courses

B 2(i) Advances in Instrumentation and Automation: Role of ICT–Department of Instrumentation and Electronics Engineering–3rd December-22nd December, 2018

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B 2(ii) Modern Methods in Earth System Science–Department of Geological Science–18th September-11th October, 2018

B 2(iii) Disaster Management: Water and Environmental Sanitation–School of Water Resource Engineering–7th January-30th January, 2019

The U.N. and the Global Perspectives of Human Rights–Department of International Relation–1st November-26th November, 2018

C Refreshers Course on Teacher’s Educators

Happy Teachers can Change the World–Department of Education–19th February-25th February, 2019

D One-week Short Term Courses

D 1 Interpreting Gender at its Intersections–School of Woman Studies–27th November-3rd December, 2018

Stress Management & Counseling–UGC-HRDC–3rd January-9th January, 2019

Management and Use of E-resources in Academic Libraries–Department of Library & Information Science –23rd August-29th August, 2018

D 2 Workshop on MOOCs & E-Learning: Issues, Prospects, Problems–School of Cultural Texts & Records –15th January-21st January, 2019

E Winter School under Refresher Course

Emerging Trends in Mechanical Engineering with Inter-Disciplinary Application–Department of Mechanical Engineering

F Other Programmes

One-day Principals’ Meet–UGC-HRDC–6th October, 2018

However, HRDC, JU has always kept in mind the fundamental curriculum proposed by UGC and designed the lectures on the basis of that. Following chart clearly shows the distribution of arts subjects in orientation programmes for Science and Engg. and science subjects in ARTS and humanities Orientations.

N.B. According to the proposed guideline of UGC (item, 5.3 f) we have already initiated the active participation and inculcate the practice of self improvement and group learning among the teacher participants. Here the participants are emotionally, intellectually, and aesthetically engaged in solving problems, creating products, and making meaning—an assemblage in which each person learns autonomously and through the ways of learning of others.

Further we have already started procuring multimedia documents of several lectures from different eminent persons delivered during programmes organised by HRDC from the previous session.

C. Participants’ Feedback:

In general, the participants’ responses were very positive and satisfactory. Not only each participant submitted his/her written feedback in the prescribed format, on the concluding day of each Orientation Programme the participants also expressed their opinions and made suggestions of further improvements in an Interactive Session with the Director, Assistant Director and other Staff of the UGC-HRDC, JU. Summary of feedback on quality of teaching, academic programme, infrastructure facility is uploaded in the website of the UGC-HRD, JU, and is available at action taken report.xlsx.

D. Infrastructure Development

During the financial year 2017-18, the UGC-HRDC, JU, has undertaken several infrastructure development projects and has added to its facilities for the participants and other stakeholders.

a) A separate Website (www.hrdcju.in): On January 20, 2018, the UGC-HRDC, JU, has achieved a milestone by launching its own website, which has been the first of its kind among all the HRDCs in West Bengal. Till then, the information regarding programmes, applications, etc. were nested in the Jadavpur University website. Apart from providing all necessary information regarding different programmes organized by it

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along with time lines and application forms, the website contains a feedback link which can be used by the participants and other stakeholders for providing their valued suggestions. **Till date the number of viewer is approximately more than 75000.**

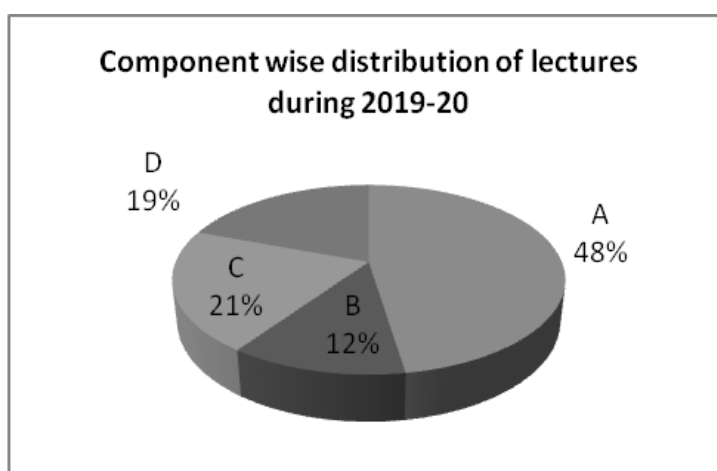
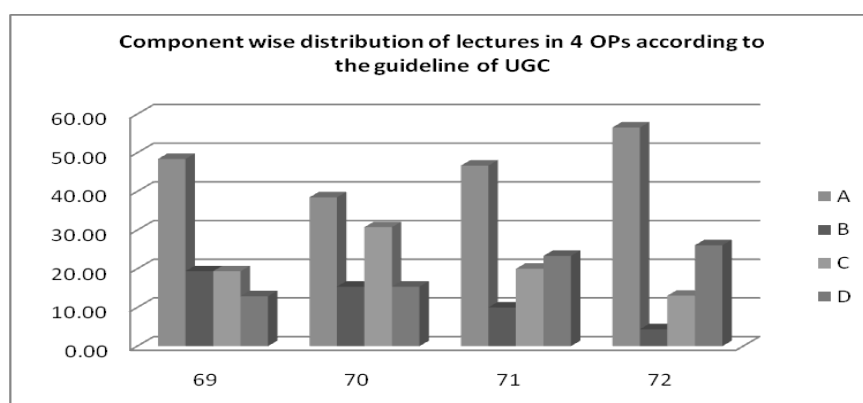
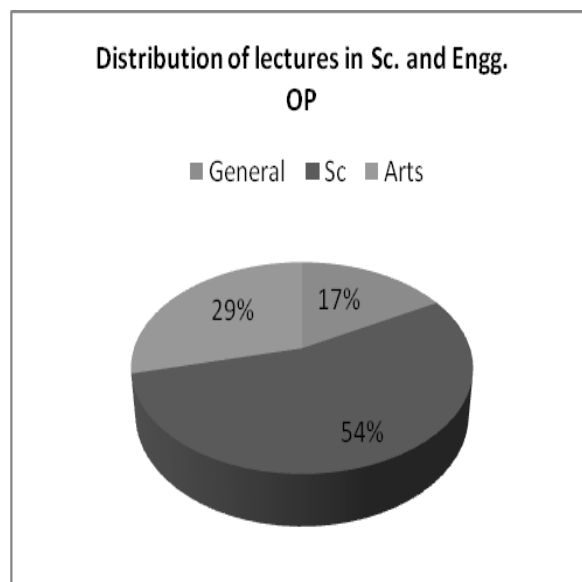
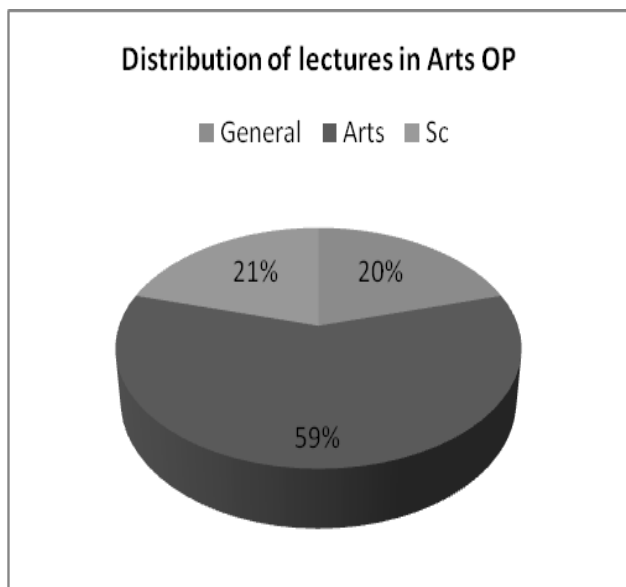
- b) Online Application Process:** In order to facilitate application by participants from remote areas, and to improve administrative efficiency in processing a large number of applications that the UGC-HRDC, JU, receives for each programme, an online application portal has been initiated, which would be ready for use before the programmes commence in the next academic session 2018-19.
- c) Big-screen remote control projector screen:** A state-of-the-art LCD projector along with big-screen projection facility has been installed in the Lecture Hall at the UGC-HRDC, JU.
- d) Renovation of the Meeting Room:** Renovation of the meeting room adjacent to the Lecture Hall at UGC-HRDC, JU, has been initiated with acoustic setting.

E. Distribution of Programmes during the session of 2018-19:

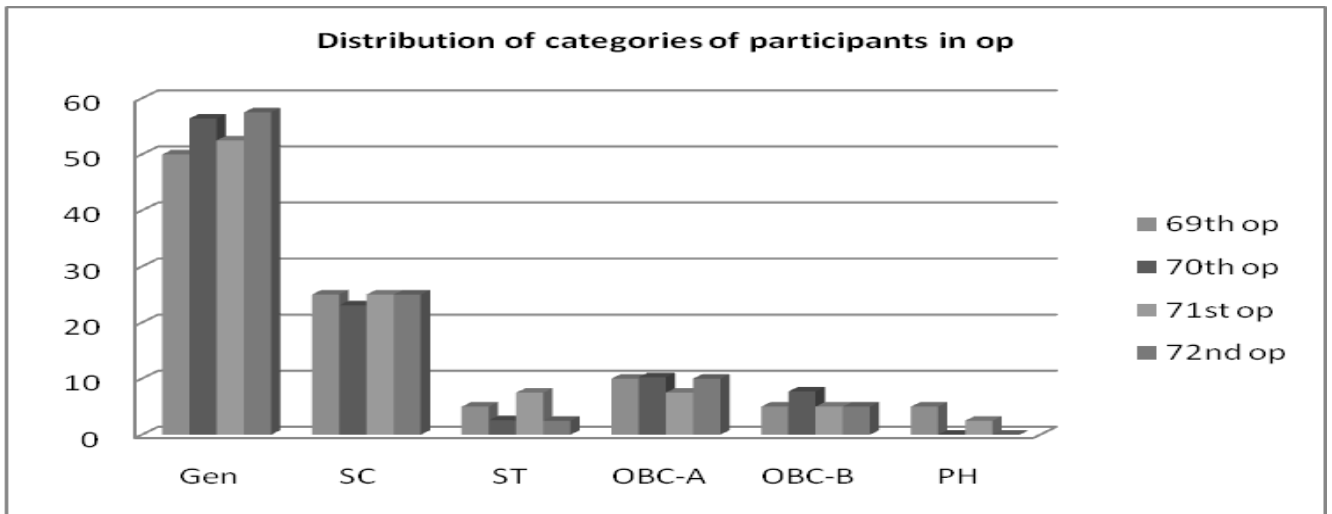
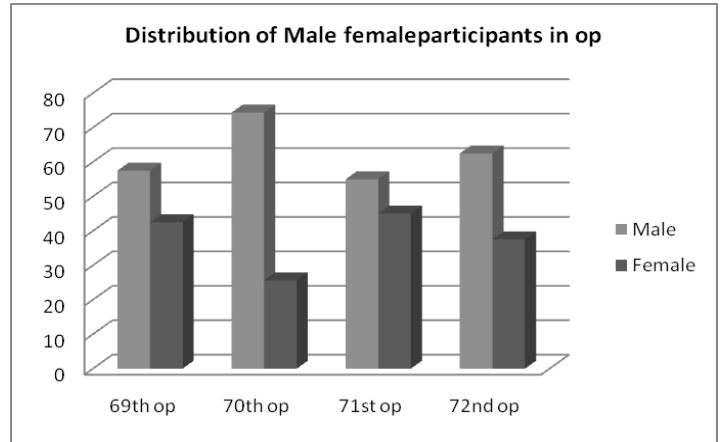
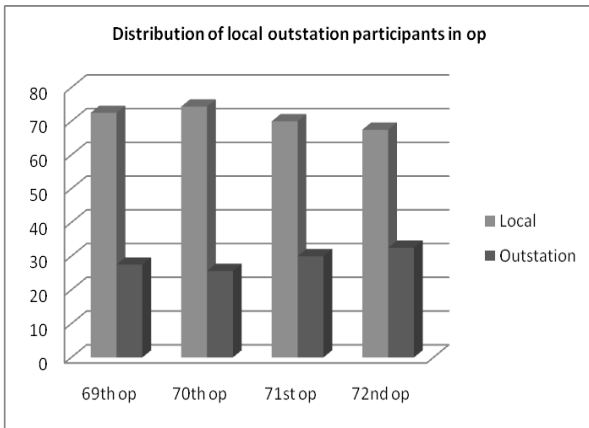
The major programmes have been conducted during November - December. The reason behind it is perhaps during this part of the year teachers faces a slag session in institutions and the authority usually releases them at that time.

F. Distribution of subjects in Orientation Programmes:

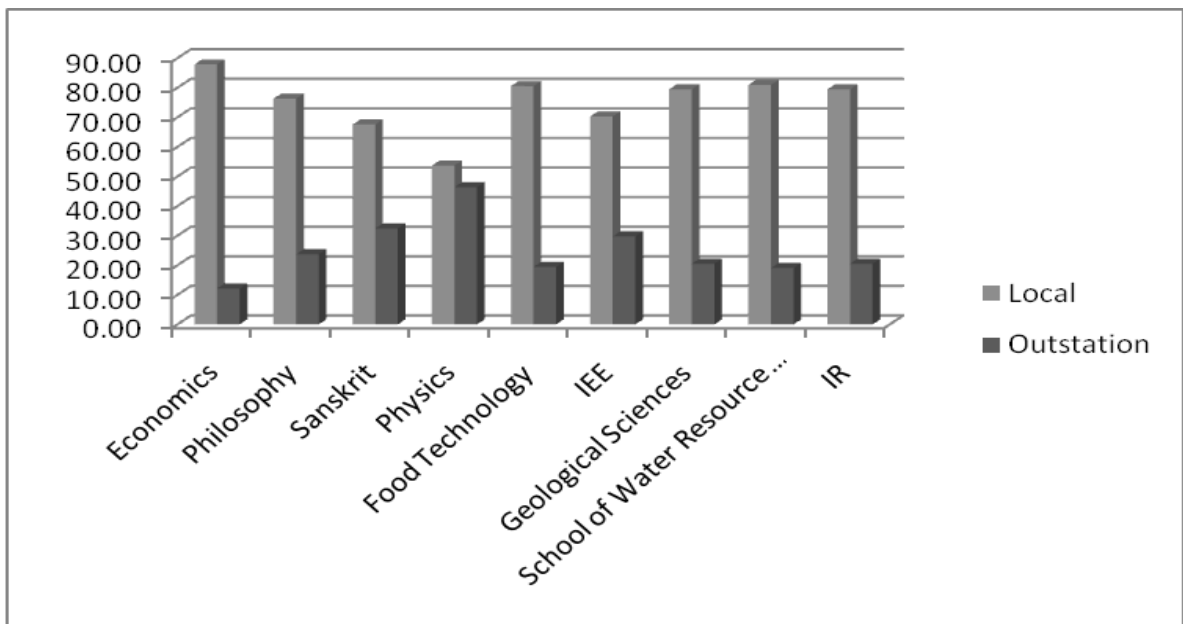
Composition of lectures in Orientation Programme

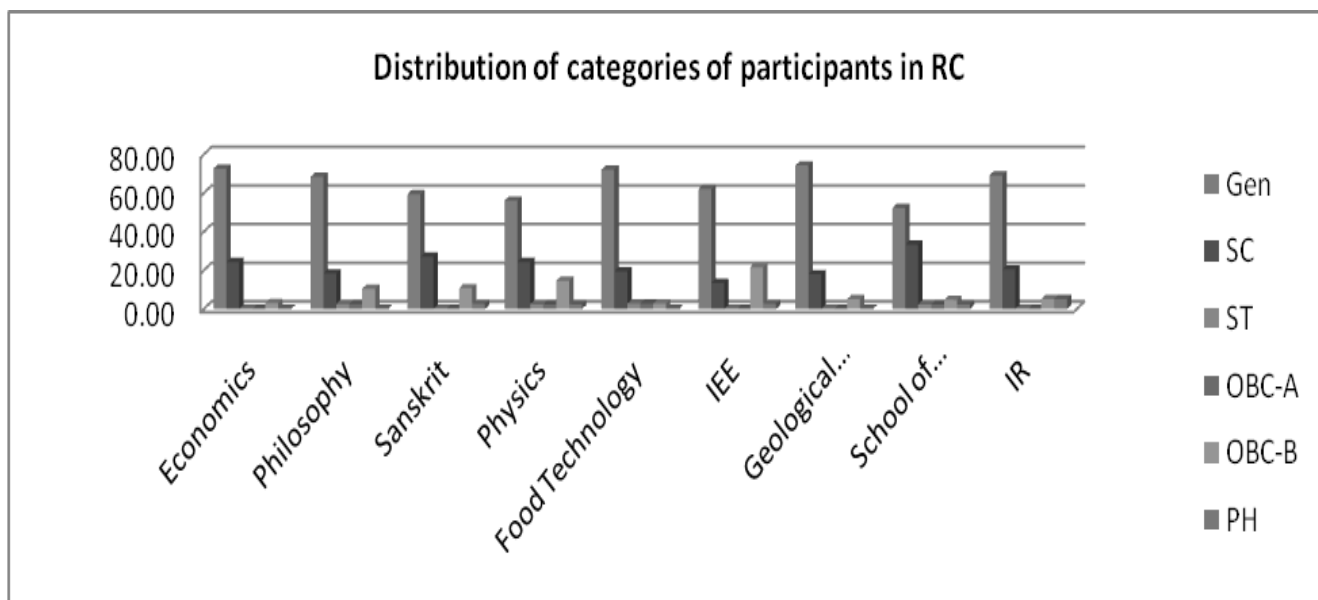
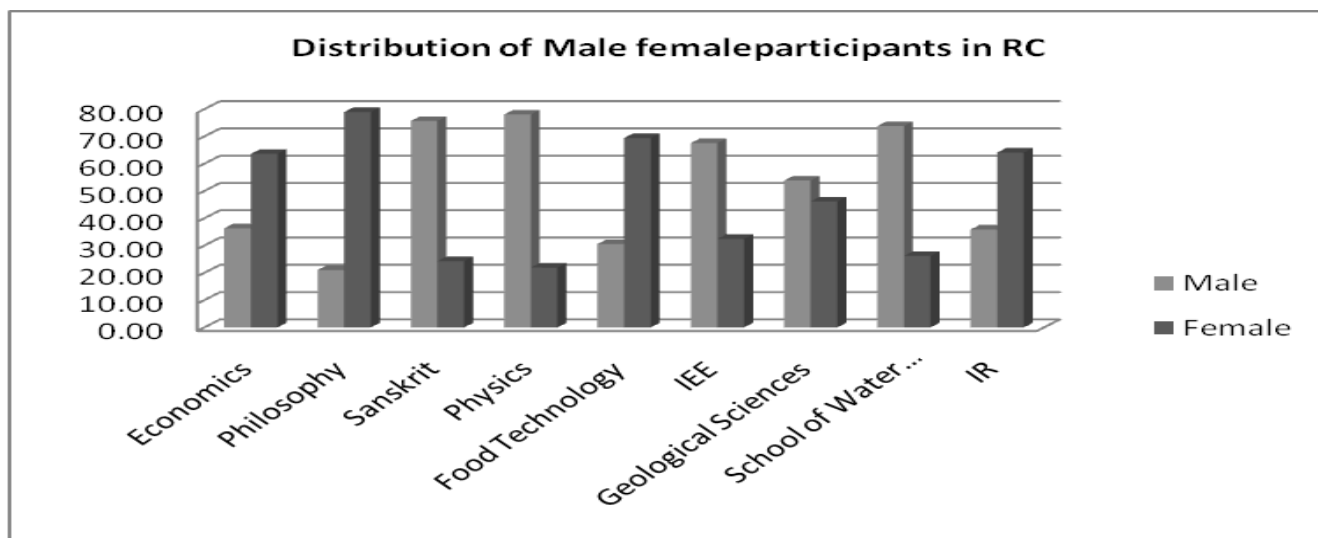


A. Composition of Participants in Orientation Programmes on the basis of application and selection

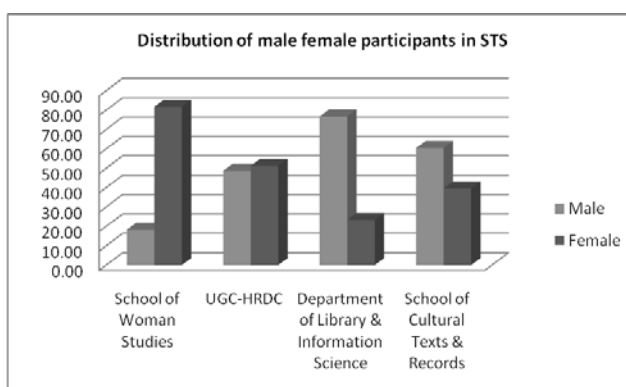
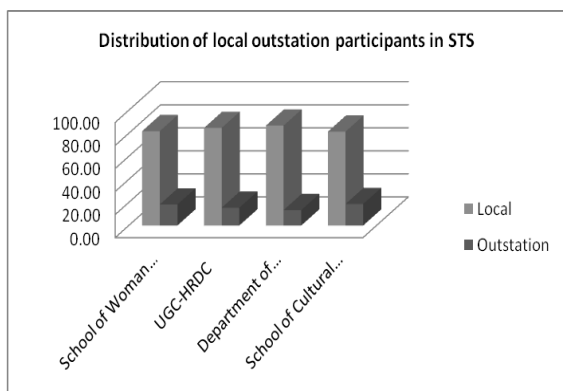


B. Composition of Participants in Orientation Programmes on the basis of application and selection

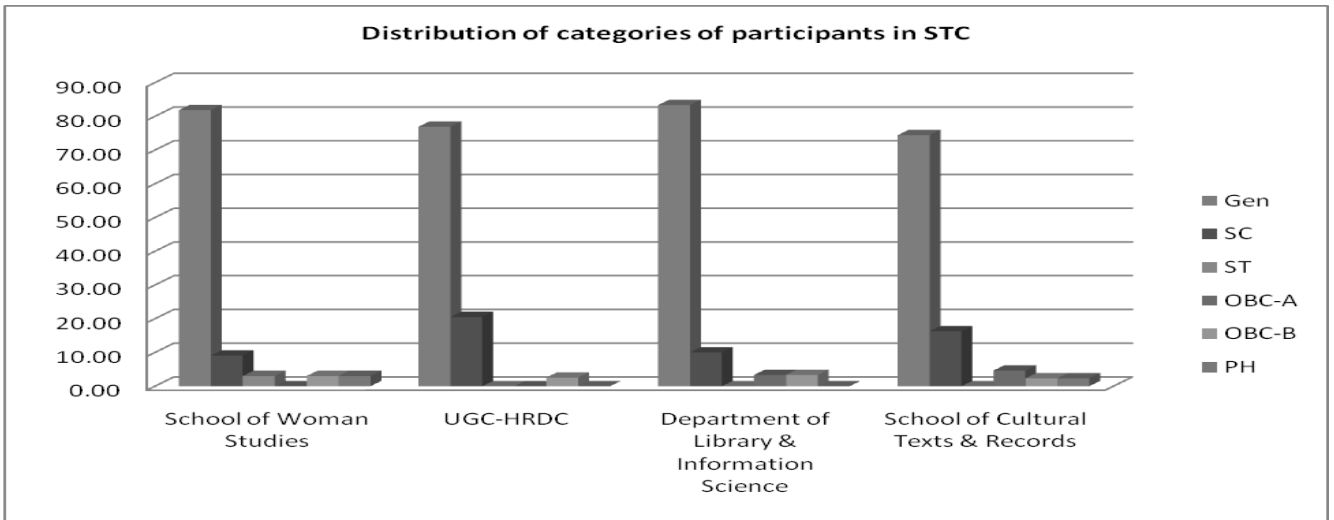




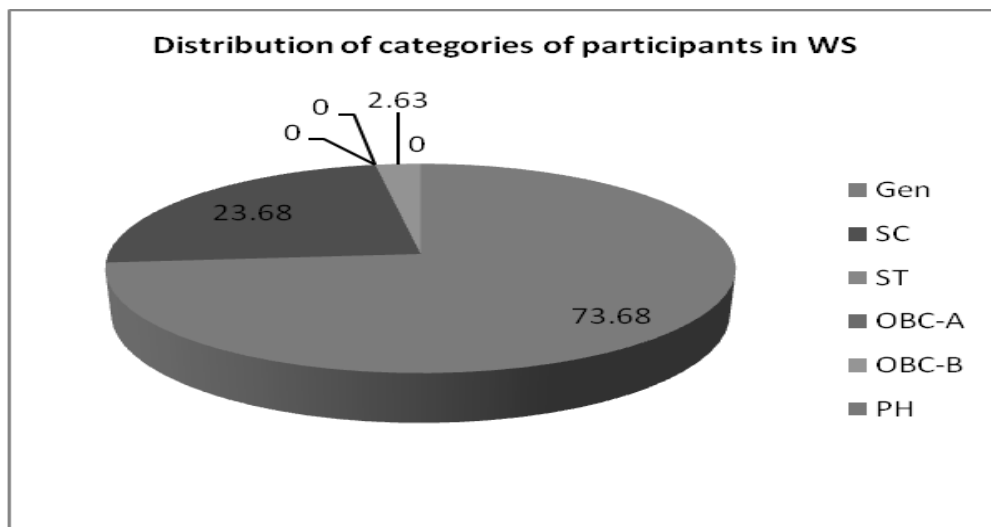
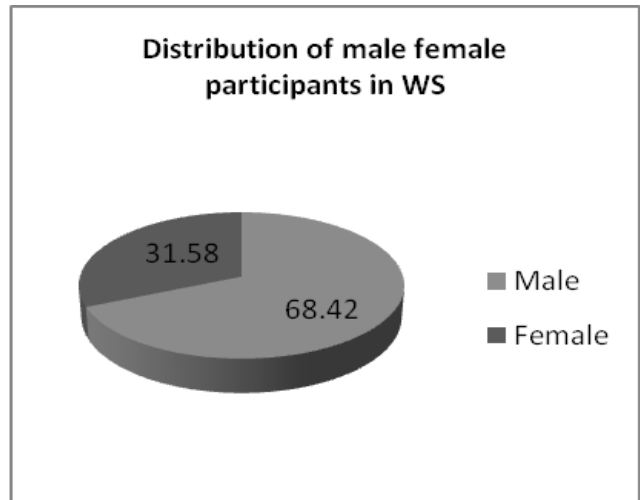
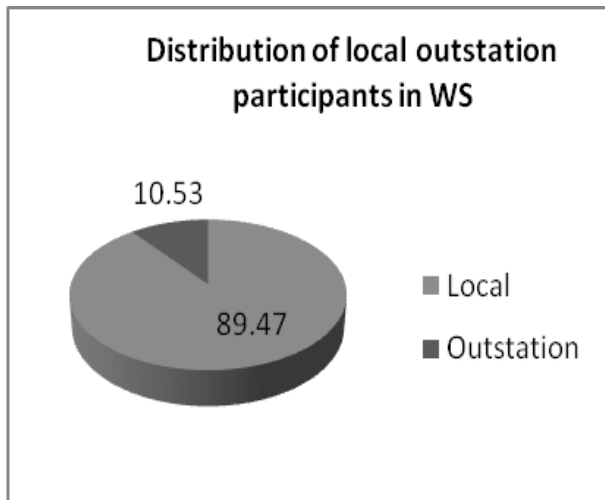
C. Composition of Participants in STC on the basis of application and selection



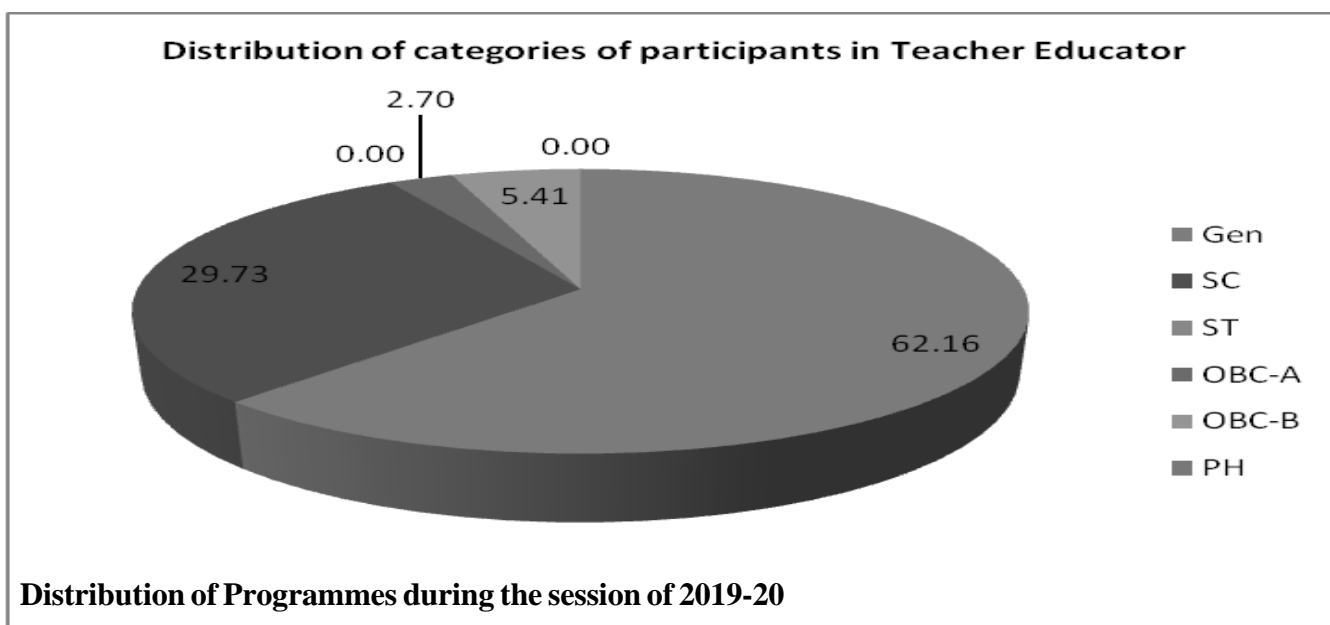
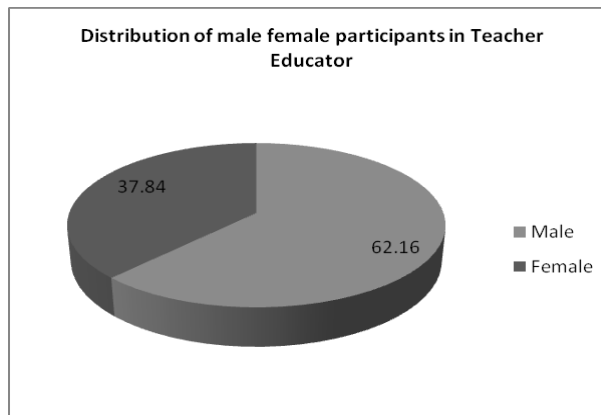
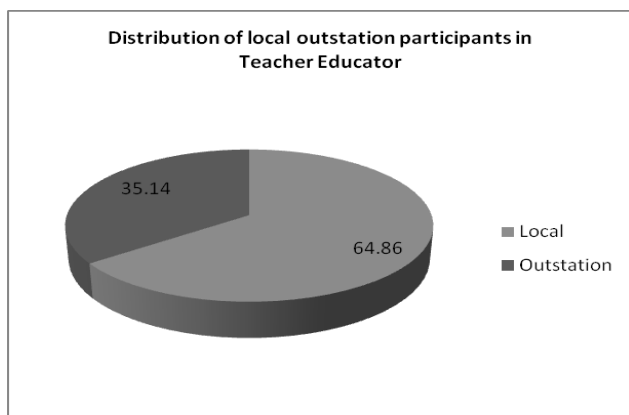
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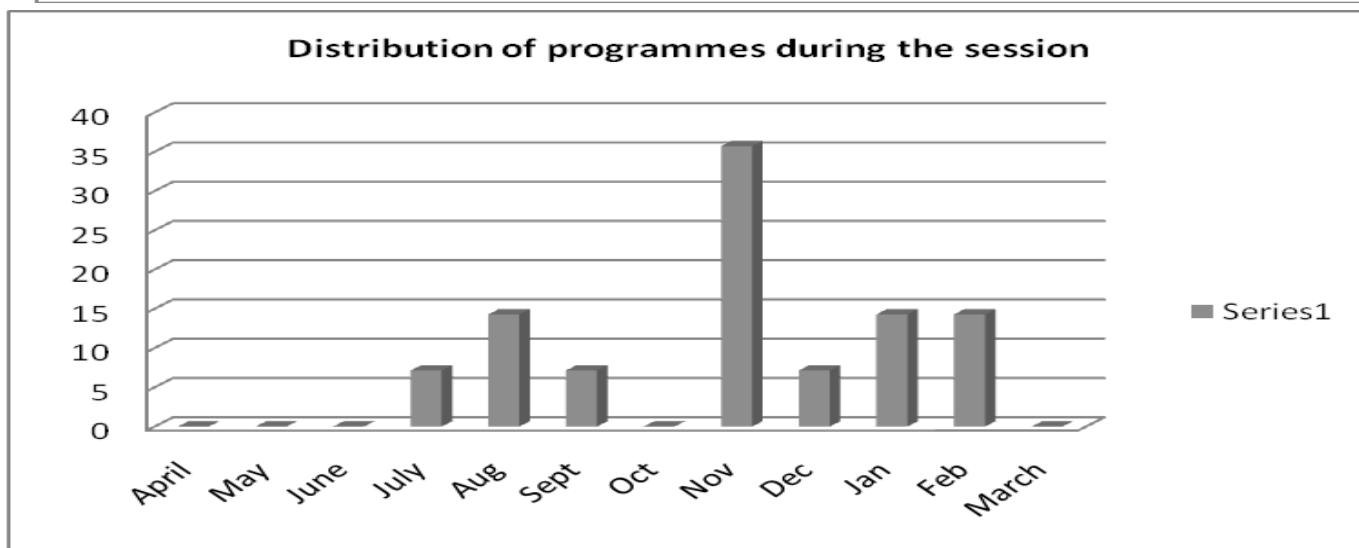
D. Composition of Participants in Winter School on the basis of application and selection



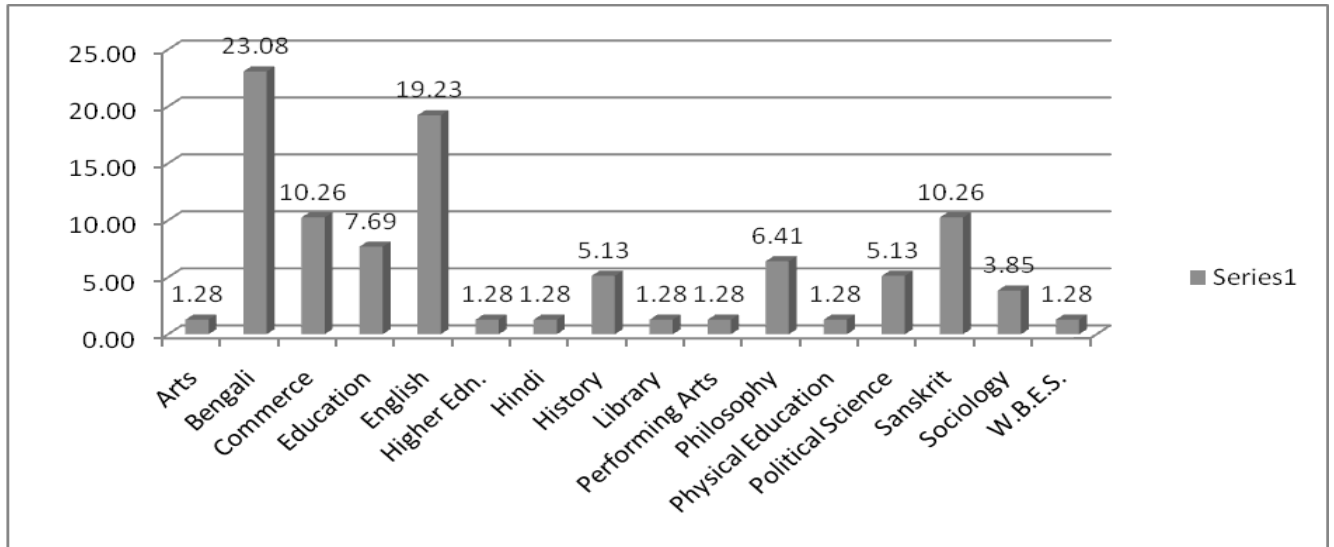
D. Composition of Participants in programme for Teacher Educator on the basis of application and selection



Distribution of Programmes during the session of 2019-20



a) Distribution of subjects in Arts and humanities OP



b) Distribution of subjects in Sciences and Engg. OP

