

Newsletter from IIT Patna

Impulse

January 2016 / Vol. VIII / No. 1

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From the Director's Desk



Dear Friends,

It is a matter of great pride that IIT Patna has successfully completed its eight years and has recently started operating full fledged from its permanent campus at Bihta. Equipped with the state of the art technology, our sprawling campus of 500 acre is a delight to not only the residents of IITP but also to our national and international visitors from industry and academia. It is a perfect amalgamation of nature and nurture. Currently, we have three academic complexes, a tutorial building, an administrative block, Students Hostel, Faculty and Staff quarters, Market complex, Hospital and School. Sports facilities like a fully equipped Gymnasium, Cricket field, Football field, Tennis Court, Badminton Court, Volley Ball court, along with space for indoor games such as Table Tennis, Carrom etc. are

also on their way to getting fully constructed and functional. There are 6 engineering and 2 science disciplines, Mathematics, and Humanities and Social Sciences departments that impart the best quality education and do cutting edge research.

Our students, staff and faculty work in synergy. IIT Patna fully participates in the contemporary Government initiatives on entrepreneurial and incubation activities. Disciplinary and inter-disciplinary cutting edge research is our focus and our faculty and research scholars publish in top journals and conferences. We are aware of the emerging challenges and constantly update ourselves in all our processes and structures.

According to Henry Ford, "Coming together is a beginning; keeping together is progress; working together is success". The future holds colossal promise for the Institute. We look forward to being recognized as one of the premier institutes worldwide. In the recently published NIRF ranking by MHRD IIT Patna emerged as the top 10th engineering institute of India.

I congratulate the editorial team for their committed efforts in the conceptualization and publication of Impulse and wish IIT Patna sustained progress and grand success.

Keep doing well!!

Prof. Pushpak Bhattacharyya

Editorial

With this issue of the newsletter, IMPULSE, we are looking forward to 2016, a year that will certainly have its own challenges, but hopefully mostly the good kind. A newsletter is reflection of not only the vision and mission of an institute but also highlights the events, activities and academic prowess and achievements. At IITP, any strategic plan is broadly inclusive, collaborative and iterative with a vision to shape up the trajectory of the institute. On behalf of the editorial team, I thank our honourable Director, Prof. Pushpak Bhattacharyya, faculty members, staff and students for their support in bringing out this newsletter. I wish you continue to support us as we strive to continuously improve in all that we do.

I sincerely hope that this edition makes for an interesting read.

Dr. Priyanka Tripathi
School of Humanities and Social Sciences



New Appointments



Dr. Abyayananda Maiti
Assistant Professor, CSE



Dr. Suman Kumar Maji
Assistant Professor, CSE



Dr. Saurabh Kumar Pandey
Assistant Professor, EE



Dr. Anirban Bhattacharya
Assistant Professor, ME



Dr. Chiranjit Sarkar
Assistant Professor, ME



Dr. Om Prakash
Assistant Professor, CEE



Dr. Vaibhav Singhal
Assistant Professor, Civil



Dr. Amarnath Hegde
Assistant Professor, Civil



Dr. Koushik Roy
Assistant Professor, Civil



Dr. Trishikhi Raychoudhury
Assistant Professor, Civil



Dr. Nitin Dutt Chaturvedi
Assistant Professor, CBE



Dr. Sandip Khan
Assistant Professor, CBE



Prof. Debatosh Datta
Adjunct Professor, Civil



Dr. Tammineni Rajagopala Rao
Assistant Professor, Chemistry



Dr. Amit Kumar Verma
Assistant Professor, Mathematics



Dr. Jayakumar Balakrishnan
Assistant Professor, Physics



Dr. Richa Chaudhary
Assistant Professor, HSS



Sweta Sinha
Assistant Professor, HSS



Mr. Ravi Shankar
Pharmacist

Visits Abroad

Dr. Ashok Singh Sairam, Associate Professor, Department of Computer Science and Engineering visited San Diego, California, USA in the month of December 2015 to present a paper titled "Using CAPTCHA selectively to mitigate App-DDoS Attacks" at the IEEE conference GLOBECOM 2015.

Dr. Samrat Mondal, Assistant Professor, Department of Computer Science and Engineering presented a paper on "Few notes towards making honeyword system more secure and usable" in SIN 2015: Sochi, Russian Federation, 8th-10th September 2015.

Dr. S. K. Samanta, Assistant Professor, Department of Chemical and Biochemical Engineering visited Salt Lake City, USA to attend and present paper in AIChE Annual Meeting 2015 (International Conference) during 8-11 November 2015.

Dr. Dinesh Kumar Kotnes, Assistant Professor, Department of Materials Science and Engineering visited Tokyo, Japan during December 2015 for technical discussion / presentation related to the ongoing research project sponsored by DENKA, Japan.

Dr. Preetam Kumar, Associate Professor, Department of Electrical Engineering visited Singapore for presenting technical paper titled "Performance Evaluation of MC-CDMA over Hybrid Satellite/Underwater Acoustic Channel" in IEEE conference ICICS 2015, Dec. 2 - 4, 2015

Dr. Neeladri Das, Associate Professor, Department of Chemistry attended 6th EuCheMS (The European Association for Chemical and Molecular Sciences) conference on Nitrogen Ligands held in Beaune, France, Sep. 13-17, 2015

Dr. Akhilendra Singh, Assistant Professor, Department of Mechanical Engineering attended ICMAE 2015 to present a paper titled "Composite Patch Repair of Structural Members by Coupled FE-EFG Approach", Singapore, Dec. 12-14, 2015

Visitors to IIT Patna

Sr. No.	Name of the Speaker and Affiliation	Title of Talk	Date
1.	Dr. Debatosh Datta, Former Professor of the Department of Biomedical Engineering, IIT Bombay	Controlled Angiogenesis: An Alternate Mode of Therapy in Ischemic & Lifestyle Diseases	03.07.2015
2.	Padma Vibhushan Prof. M. M. Sharma, Former Director, UDCT Bombay (Now ICT Mumbai)	Innovations in Chemical Industry	05.08.2015
3.	Dr. Ranjit Kumar Sinha from The Scripps Research Institute, La Jolla, CA, USA	Hemostatic Factor- A Mechanistic Cellular Effect and an Effort to Engineer a Bio-therapeutics	14.11.2015
4.	Dr. Dhruv Kumar from Department of Otolaryngology, The University of Kansas Medical Center, USA	Metabolic Symbiosis between Tumor-associated Fibroblasts and Head and Neck Squamous Cell Carcinoma	16.11.2015
5.	Dr. Amit Shyam, Materials Science and Technology Division, Oak Ridge National Laboratory (ORNL), Oak Ridge, TN	Case Study in Public-private Partnership at a US National Laboratory: The Thermomechanical Behavior of Porous Microcracked Ceramics	23.11.2015
6.	Prof. Amit Agrawal, Department of Mechanical Engineering, IIT Bombay	Gas Flow in Complex Microchannels	27.11.2015
7.	Prof. Ramjee Prasad, Professor, Aalborg University	Human Bond Communications Beyond 2050	09.12.2015
8.	Dr. Sushant Kumar from Okinawa Institute of Science and Technology, Okinawa, Japan	Elucidation of Localized Hydrogen Sorption Mechanism in MG Nanofilms Catalyzed by Size-selected PD Nanoparticles	29.12.2015
9.	Dr. Hem Chandra Jha from Perelman School of Medicine at the University of Pennsylvania, Philadelphia, Pennsylvania, USA	Role of Gammaherpes Viruses in Cancer Progression	30.12.2015

Invited Talks

Prakash Om, "Golden Ratio for the students of 11th and 12th classes", Regional Level Science Congress, JNV Bikram, Nov. 23, 2015

Behera Ranjan Kumar, "Smart Grid Technology and Solar/Wind Power Converters", TEQIP Sponsored Faculty Development Program on "Smart Grid Technology" Govind Ballabh Pant Engineering College, Pauri-Garhwal, Uttara Khand, India, Oct. 28-29, 2015

Nishchal N K, "Techniques of optical information security", M. Phil. Program, Department of Physics, B. R. A. Bihar University, Muzaffarpur, Sept. 20, 2015

Nishchal N K, "Optical asymmetric cryptosystem and cryptanalysis", Int'l. Confer. on Opto-Electronics and Applied Optics, (IEEE IEM OPRONIX 2015), University of British Columbia, Vancouver, Canada, Oct. 16-17, 2015

Raj Aditya, "Engaging Young Minds", National Capacity Building Programme on Essential Teaching Skills for University Teachers, Educational Technology Cell, G.B. Pant University of Agriculture and Technology, Pantnagar, Uttarakhand, July 13-19, 2015

Raj Papia, "Health Impacts of Solid Waste Management in Patna", "Global Warming and Threat to Human Existence," Human Rights Association of Bihar, Patna, Dec. 10, 2015

Kolekar Maheshkumar H, "Video Object Detection and Tracking", "Human Activity recognition" and "various techniques of Intelligent Video Surveillance Systems", as Guest of Honor, Workshop on Video Analytics under Indo-US 21st century Knowledge Initiative Programme, NIT Trichirappalli, Nov. 27, 2015

Kumar Preetam, "Rate Independent Multi carrier Variable Rate Scheme over Frequency Selective Channel", IEEE WWITAE, Hyderabad, Dec. 13 - 16, 2015

Saha Sriparna, "Shortest Path Algorithm and Complexity Analysis", NIT Patna, Dec.19-20, 2015

Raj Rishi, "Nanotechnology for Energy Efficient Thermal Management", TEQIP-II Sponsored Faculty Development Programme, College of Engineering, Adoor, Kerela, Dec.17, 2015

Misra Rajiv, "Data Structures and Algorithms", NIT Patna, Dec.19-20, 2015

Singhal Vaibhav, "Are We Safe From Earthquakes?," Regional Level Science Congress, JNV Bikram, Nov. 24, 2015



Dr Mahesh Kolekar delivering the keynote speech.



Dr Mahesh Kolekar lighting lamp along-with Hon Director, NIT Trichy and organizers of workshop

Sponsored Projects

Name of PI	Department	Title	Sponsor
Dr. K.C Ray	EE	Special Manpower Development Programme for Chips to System Design.	DEITY
Dr. Raju Halder	CSE	Information Leakage Analysis of Database Query Languages	SERB(DST)
Dr. Amit Kumar	CHE	Functionalization of the Carbohydrates : Designing New Strategies for the Synthesis of Natural and Modified Sugars via Metal Catalysis	SERB(DST)
Dr. T. Rajagopala Rao	CHE	Quantum Dynamical Studies on Bimolecular Reactions of Practical and Fundamental Interest	DST-INSPIRE
Dr. Anirban Chowdhury	MSE	Synthesis & Characterisation of Faceted Nanocrystalline Powders of Ceria-zirconia and Related Systems.	SERB(DST)
Dr. Karali Patra	ME	Modeling and Analysis of High Speed Hybrid Micro Machining	DST
Dr. Somanath Tripathy	CSE	Development of Solution to Defend against Collaborative Attacks in Peer-to-Peer Networks.	DEITY
Dr. Amit Kumar	CHE	Imidated : A New Class of N-H Directing Group for C(sp ²) - H Activation and Tools for Synthesis of Highly Functionalized Heterocycles	CSIR
Dr. S. Sivasubramani	EE	Testing of Rating of Motors and other Loads	M/s Indian Safety Glass Industries, Patna
Dr. Subrata Hait	Civil	Performance Evaluation of Saidpur STP, Patna - Phase II	IITM
Dr. Manabendra Pathak (PI), Dr. Mohd. Kaleem Khan (Co-PI)	ME	A Self Adaptive Electronic Cooling System by Enhanced Pool Boiling	DST, SERB, Govt. of India
Prof. Pushpak Bhattacharya, Dr. Asif Ekbal and Dr. Sriparna Saha	CSE	Centre of Excellence for Natural Language Processing	Elsevier
Prof. Pushpak Bhattacharya, Dr. Asif Ekbal and Dr. Sriparna Saha	CSE	Shusrut: ezDI Research Lab on Health Informatics	ezDI
Dr. Raghavan K Easwaran	PHY	Electromagnetically Induced Transparency and Slow Light in a two Dimensional Magneto Optical Trap (2d MOT)	SERB
Dr. Venkata Ramanaiah Dantham	PHY	Real-time Detection and Sizing of Single Protein Molecule Using a Nanoplasmonic-whispering Gallery Mode Hybrid Microresonator	SERB (DST)

Workshop and Short Term Courses

Winter School, Department of Physics

The Department of Physics organized a three weeks fully residential school on Modern Optics & Its Applications during Nov. 30 to Dec. 18, 2015. The school was fully sponsored by Science & Engineering Research Board (SERB), Department of Science & Technology (DST), Government of India. The school was attended by 40 participants from various Institutions/Universities across the country.



Inaugural function

[Left to right: Dr. N. K. Nishchal, Prof. M. P. Kothiyal, Prof. P. Bhattacharyya, Prof. P. K. Panigrahi, Dr. U. Roy]



Winter school participants with Prof. Kehar Singh, Dr. N. K. Nishchal, and Dr. M. Kar on 18th Dec. 2015



Valedictory function

[Left to right: Dr. A. K. Mukherjee, Prof. Kehar Singh, Prof. P. Bhattacharyya, Prof. R. S. Sirohi, and Dr. N. K. Nishchal]

The Fifth National Conference on Computer Vision, Pattern Recognition, Image Processing and Graphics (NCVPRIPG) - 2015

The Fifth National Conference on Computer Vision, Pattern Recognition, Image Processing and Graphics (NCVPRIPG) was held at IIT Patna, Bihta campus, Bihar from 16 to 19 December, 2015. It was the first ever event at our newly IIT Patna, Bihta Campus. NCVPRIPG was organized by Dr. Rajib Kumar Jha, Assistant Professor, Electrical Engineering, IIT Patna in association with the Indian Unit for Pattern Recognition and Artificial Intelligence (IUPRAI). NCVPRIPG aims to bring together researchers and practitioners from the allied areas of computer vision, graphics, image processing and pattern recognition, in order to promote community wide discussions of ideas that will influence and foster continued research in the field. The eminent scientists and researchers who attended this highly reputed conference was Prof. B. N. Chatterji (as a chief guest), Prof. P. K. Biswas, GENERAL CHAIR (IIT Kharagpur), Prof. Bhabotosh Chanda, ISI Kolkata, (IUPRAI President) and many more. High quality tutorial sessions were guided by Prof. C. V. Jawahar, IIIT Hyderabad, Prof. Subhashis Banerjee, IIT Delhi and Prof. Venu Madhav Govindu, IISC Bangalore. Everyday, the conference was started with high quality Plenary speakers presented by Professor Vijay Natarajan IISC Bangalore, Professor Subhasis Chaudhuri, IIT Mumbai and Professor Venu Govindaraju from University of Buffalo.



Inauguration of the NCVPRIPG - 2015



Ongoing session - NCVPRIPG - 2015

Publications

Department of Computer Science and Engineering

Boyar J, Larsen K S and **Maiti A**, The Frequent Items Problem in Online Streaming under Various Performance Measures, Int. Journal of Foundations of Computer Science (IJFCS), 26 (4), 413-439, 2015

Sairam Ashok Singh, Roy Sangita and Sahay Rishikesh, Coloring Networks for Attacker Identification and Response, Security and Communication Networks, John Wiley and Sons 8 (5), 751-768, 2015

Guet D, Burns L T, **Maji S**, Boulanger J, Hersen P, Wente S R, Salamero J and Dargemont C, Combining Spinach-tagged RNA and gene

localization to image gene expression in live yeast, Nature Communications, 6:8882, DOI: 10.1038/ncomms9882, 2015

Maji S K, Yahia H and Fusco T, A Multi fractal based Wavefront Phase Estimation Technique for Ground-Based Astronomical Imaging, IEEE Transactions in Geoscience & Remote Sensing, PP (99), 1-11, 2015

Alok A, **Saha S** and **Ekbal A**, Multi-Objective Semi-Supervised Clustering For Automatic Pixel Classification From Remote Sensing Imagery, Soft Computing, DOI 10.1007/s00500-015-1701-x, 2015

Ekbal A and **Saha S**, Joint Model for Feature Selection and Parameter Optimization Coupled with Classifier Ensemble in Chemical Mention Recognition, Knowledge-Based Systems, Vol. 85, 37–51, Sep. 2015

Acharya S, **Saha S**, and Thadisina Y, Multiobjective Simulated Annealing based Clustering of Tissue Samples for Cancer Diagnosis, IEEE Journal of Biomedical and Health Informatics (JBHI) DOI: 10.1109/JBHI.2015.2404971, 2015

Alok A, **Saha S** and **Ekbal A**, A New Semi-Supervised Clustering

Technique Using Multi-Objective Optimization, Applied Intelligence, Vol. 43 (3), 633-661, Oct. 2015

Acharya S, **Saha S** and Bandyopadhyay S, Use of Line Based Symmetry for Developing Cluster Validity Indices, Soft Computing, DOI 10.1007/s00500-015-1848-5, 2015

Saha S, Kuldeep K, Alok A and Acharya S, Multi-Objective Semi-Supervised Clustering Of Tissue Samples For Cancer Diagnosis, Soft Computing, DOI 10.1007/s00500-015-1783-5, 2015

Saha S, Alok A and **Ekbal A**, Use of Semi-Supervised Clustering and Feature Selection Techniques for Identification of Co-expressed Genes, IEEE Journal of Biomedical and Health Informatics, 2015

Das Debasis, **Misra Rajiv** and Raj Anurag, Approximating Geographic Routing Using Coverage Tree Heuristics for Wireless Network, Wireless Networks Vol. 21(4), 1109-1118, 2015

Das Debasis and **Misra Rajiv**, Caching Algorithm for Fast Handoff Using Ap Graph with Multiple Vehicles for VANETs, Int. Journal of Communication Networks and Distributed Systems, Vol. 14 (3), 219-236, 2015

Department of Electrical Engineering

Shukla Deepika, **Jha Rajib Kumar** and Ojha Aparajita, Unsteady camera zoom stabilization using slope estimation over interest warping vectors, Pattern Recognition Letters, ELSEVIER, Vol. 68, 197-204, 2015

Chouhan Rajlaxmi, Biswas P K and **Jha Rajib Kumar**, Enhancement of low-contrast images by internal noise-induced Fourier coefficient rooting, Journal of Signal, Image and Video Processing, SPRINGER, Vol. 9 (1), 255-263, 2015

Shukla Deepika and **Jha Rajib Kumar**, A robust video stabilization technique using integral frame projection warping, Journal of Signal, Image and Video Processing, SPRINGER, Vol. 9 (6), 1287-1297, 2015

Verma Vivek Singh and **Jha Rajib Kumar**, Improved water marking technique based on significant difference of lifting wavelet coefficients, Journal of Signal, Image and Video Processing, SPRINGER, Vol. 9 (6), 1443-1450, 2015

Verma Vivek Singh, **Jha Rajib Kumar** and Ojha Aparajita, Digital watermark extraction using support vector machine with principal component analysis based feature reduction, Journal of Visual Communication and Image Representation, ELSEVIER, Vol. 31, 75–85, 2015

Verma Vivek Singh, **Jha Rajib Kumar** and Ojha Aparajita, Significant region based robust watermarking scheme in lifting wavelet transform domain, Expert Systems with Applications, Vol. 42 (21), 8184–8197, 2015

Singh Abhinoy Kumar and **Bhaumik Shovan**, Higher degree cubature quadrature Kalman filter, International Journal of Control, Automation and Systems (IJCAS), Springer, Vol. 13 (5), 1097-1105, 2015

Sharma Neelam, **Kolekar Maheshkumar H** and Chandra Sushil, Role of the cognitive screening tool in early Dementia diagnosis, International Journal of Advances in Science, Engineering and Technology, Vol. 3 (4), 101-104, 2015

Pattanayak Prabina and **Kumar Preetam**, A computationally efficient genetic algorithm for MIMO broadcast scheduling, Elsevier Applied Soft Computing, Vol. 37, 545-553, 2015

Kumar Nagendra and **Singh Yatendra Kr**, Compact tri to dual passband switchable bandpass filter using stub-loaded split-ring resonator with improved bandwidth, IET Electronics Letters, , Vol. 51, 1510-1517, Sep. 2015

Department of Mechanical Engineering

Bhattacharyya R, **Sarangi S** and Samantaray A K, Effect of stress-softening on the ballooning motion of hyperelastic strings, International Journal of Engineering Science, Vol. 96, 19-33, 2015

Nirala C K and **Saha Probir**, Evaluation of μ EDM-Drilling and μ EDM-dressing Performances Based on Online Monitoring of Discharge Gap Conditions, International Journal of Advanced Manufacturing Technology, DOI:10.1007/s00170-015-7934-0, 2015

Pathak Himanshu, **Singh Akhilendra**, Singh I V and Brahmkankar M, Three-Dimensional Stochastic Quasi-Static Fatigue Crack Growth Simulations Using Coupled FE-EFG Approach, Computers and Structures, Vol. 160, 1-19, 2015

Pathak Himanshu, **Singh Akhilendra**, Singh I V and Yadav S K, Fatigue crack growth simulations of 3-D linear elastic cracks under thermal load by XFEM, Frontiers of Structural and Civil Engineering, Vol. 9, 359-382, 2015

Department of Civil and Environmental Engineering

Hussaini Syed K K, Indraratna B and Vinod Jayan S, Application of Optical-Fiber Bragg Grating Sensors in Monitoring the Rail Track Deformations, *Geotechnical Testing Journal*, ASTM, Vol. 38 (4), 387-396 (doi: 10.1520/GTJ20140123. ISSN 0149-6115), 2015

Rai D C, **Singhal V**, Raj S B and Sagar S L, Performance of Residential Buildings During the M 7.8 Gorkha (Nepal) Earthquake of 25 April 2015, *Current Science*, Vol. 109 (11), 2126-2135, 2015

Department of Chemical and Biochemical Engineering

Samanta S K and Verma P, Microwave Assisted Heating of Human Blood at 2450 MHz Frequency Using Various Composite Supports, *Electrical, Electronics, Signals, Communication and Optimization (EESCO)*, International Conference Proceedings, IEEE Xplore, 1-5 (doi: 10.1109/EESCO.2015.7253996), 2015

Department of Material Science and Engineering

Sribalaji M, Arunkumar P, Babu K Suresh, **Keshri Anup Kumar**, Crystallization mechanism and corrosion property of electroless nickel phosphorus coating during intermediate temperature oxidation, *Applied Surface Science*, Vol. 355, 112-120, 2015

Department of Chemistry

Ahmed Sayeed Ashique, Chatterjee Aninda, Maity Banibrata and **Seth Debabrata**, Thermodynamic Behaviour of Binary Mixtures of 1-Butyl-1-methylpyrrolidinium Iodide and Alcohols, *J. Chem. Eng. Data*, Vol. 60, 2301, 2015

Ahmed Sayeed Ashique, Chatterjee Aninda, Maity Banibrata and **Seth Debabrata**, Supramolecular Interaction of a Cancer Cell Photosensitizer in the Nanocavity of Cucurbit[7]uril: A Spectroscopic and Calorimetric Study, *Int. J. Pharm.*, Vol. 103, 1-2, 2015

Mondal S and **Das N**, Triptycene based 1,2,3-Triazole linked Network Polymers (TNPs): Small Gas Storage and Selective CO₂ Capture, *J. Mater. Chem. A: Materials for Energy and Sustainability*, Vol. 3 (46), 23577-23586, 2015

Bhowmick S, Chakraborty S, Das A, Nallapeta S and **Das N**, Pyrazine Motif Containing Hexagonal Macrocycles: Synthesis, Characterization and Host-Guest Chemistry with Nitro Aromatics, *Inorg. Chem.*, Vol. 54 (18), 8994-9001, 2015

Mondal S and **Das N**, Synthesis of Triptycene Based Non-Conjugated Polytriazole: Temperature Dependent Regioselectivity and Host-Guest Interaction with Nitroaromatics, *Polymer*, Vol. 75, 109-118, 2015

Chakraborty Mithun, **Ahmed Aziz** and Lal R. A., Synthesis, Characterization, and Structural Assessment of Ni(II) Complexes Derived from Bis (2-hydroxy-1-naphthaldehyde) succinoyldihydrazone, *International Journal of Inorganic Chemistry*, Vol. 2015, Article ID 121895, 2015

Department of Mathematics

Dutta Bapi and **Guha Debashree**, Partitioned Bonferroni mean based on linguistic 2-tuple for dealing with multi-attribute group decision making, *Applied Soft Computing*, Elsevier, Vol. 37, 166-79, 2015

Singh Sukhdev and **Tripathi Yogesh Mani**, Reliability sampling plans for a lognormal distribution under progressive first-failure censoring with cost constraint, *Statistical Papers*, Vol. 56 (3), 773-817, 2015

Saini R K, Sangal Atul and **Prakash Om**, A Modified Method For Unbalanced Transportation Problems in Fuzzy Environment by Zero Suffix Method Via Robust Ranking Technique, *Global Journal of Pure and Applied Mathematics*, Scopis, Vol. 11 (2), 997-1011, 2015

Prakash Om, Sharma D and Maheshwari P, Certain generalized q-operators, *Demonstr., Math.*, Vol. 48 (3), 404-412, 2015

Choi Junesang, Shekhawat Nidhi, Rathie Arjun K and **Prakash Om**, On a new class of series identities, *Honam Math. J.*, Vol. 37 (3), 339-352, 2015

Das Satyajit and **Guha Debashree**, Power harmonic aggregation operator with trapezoidal intuitionistic fuzzy numbers for solving MAGDM problems, *Iranian Journal of Fuzzy Systems*, Vol. 12 (6), 41-74, 2015

Das Satyajit, Dutta Bapi, **Guha Debashree**, Weight computation of criteria in a decision making problem by knowledge measure with intuitionistic fuzzy set and interval valued intuitionistic fuzzy set, *Soft Computing*, DOI 10.1007/s00500-015-1813-3, 2015

Das Satyajit, **Guha Debashree**, A centroid-based ranking method of trapezoidal intuitionistic fuzzy numbers and its application to MCDM problems, *Fuzzy Information and Engineering*, 8(1), 41-74, 2015

Singh Sukhdev and **Tripathi Yogesh Mani**, Bayesian estimation and prediction for a hybrid censored lognormal distribution, *IEEE Transactions on Reliability*, 10.1109/TR.2015.2494370, 2015

Department of Physics

Kumar D and **Nishchal N K**, Three-dimensional object recognition using joint fractional Fourier transform correlators with the help of digital Fresnel holography, *Optik*, Vol. 126, 2690-2695, 2015

Mehra I and **Nishchal N K**, Double image encryption using gyrator wavelet transform, *Proc. SPIE 9654*, 96542D, 2015

Kumar D and **Nishchal N K**, Water marking of phase-only Fresnel hologram using symmetrical 3D modified Gerchberg-Saxton algorithm, *Asian Journal of Physics*, Vol. 24, 1425-1429, 2015

Sanchela Anup V, Tomy C V and **Thakur Ajay D**, Effect of Sb deficiency on the thermoelectric properties of Zn₄Sb₃, *Sol. St. Commun*, Vol. 218, 49, 2015

Yadav A K, Sharma H, **Thakur A D** and Tomy C V, Growth and angular dependent resistivity of Nb₂Pd_{0.73}S_{5.7} in superconducting single crystal fibers, *Mater. Chem. and Phys.*, Vol. 164, 46, 2015

Yadav Anil K, Sanchela Anup V, **Thakur Ajay D** and Tomy C V, Effect of nominal substitution of transition metals for excess Fe in Fe_{1+x}Se superconductor, *Sol. St. Comm.*, Vol. 202, 8, 2015

Ghosh S, Sharma R, **Roy Utpal** and Panigrahi P K, Mesoscopic Quantum Superposition of the Generalized Cat state: A Diffraction Limit, *Phys. Rev. A*, 92, 053819, 2015

Kavala A K and **Mukherjee A K**, Sub-Threshold-Like Charge Transport In Organic Field Effect Transistor: A Study On Effective Channel Thickness, *Modern Physics Letters B*, Vol. 29 (28), 1550172, 2015

Kumar Pawan, Shankhwar Nisha, Srinivasan A and **Kar Manoranjan**, Oxygen Octahedra Distortion induced Structural and Magnetic Phase Transitions in Bi_{1-x}CaxFe_{1-x}MnxO₃ Ceramics, *J. Appl. Phys.*, Vol. 117, 194103, 2015

Kumar Pawan, Panda Chandrakanta and **Kar Manoranjan**, Effect of Rhombohedral to Orthorhombic Transition on Magnetic and Dielectric Properties of La and Ti co-substituted BiFeO₃, *Smart Material and Structures*, Vol. 24, 045028, 2015

Kumar Pawan and **Kar Manoranjan**, Effect of Structural Phase Transition on Magnetic and Optical Properties of co-substituted Bismuth Ferrite, *Materials Science in Semiconductor Processing*, Vol. 31, 262, 2015

Kumari Swati, Kumar Vikash, Kumar Pawan, **Kar Manoranjan** and Kumar Lawrence, Structural and Magnetic Properties of Nanocrystalline Yttrium Substituted Cobalt Ferrite Synthesized by the Citrate Precursor Technique, *Advance Powder Technology*, Vol. 26, 213, 2015

Kumar Vikash, Kumari Swati, Kumar Pawan, **Kar Manoranjan** and Kumar Lawrence, Structural Analysis by Rietveld Method and its Correlation with Optical Properties of Nanocrystalline Zinc Oxide, *Advanced Materials Letters*, Vol. 6, 139, 2015

Kour Paramjit, Kumar Pawan, Sinha S K and **Kar Manoranjan**, Study of Dielectric and Impedance spectroscopy of La Substituted Nanocrystalline Pb(Zr_{0.52}Ti_{0.48})O₃ Ceramics, *Journal of Materials Science: Materials in Electronics*, Vol. 26, 1304, 2015

Department of Humanities and Social Sciences

Raj Papia and **Raj Aditya**, An Analysis of Waste Production in Patna, *International Sociological Association E Symposium*, Vol. 5 (2), 1-13, 2015

Tripathi Priyanka and Dey Deepannita, Baidh/Abaidh: Relationships in Buddhadeva Bose's It Rained All Night and Dibyendu Palit's Illicit, *The Commonwealth Review*, Vol. XXIV (1), 138-151, 2015



Conference Presentations

Department of Computer Science and Engineering

Joshi Aditya, Sharma Vinita and **Bhattacharyya Pushpak**, Harnessing Context Incongruity for Sarcasm Detection, ACL 2015, Beijing, China, July 26-31, 2015

Joshi Aditya, Mishra Abhijit, Balamurali A R, **Bhattacharyya Pushpak** and Carman Mark James, A Computational Approach to Automatic Prediction of Drunk Texting, ACL 2015, Beijing, China, July 26-31, 2015

Joshi Aditya, Sharma Vinita and **Bhattacharyya Pushpak**, Harnessing Context Incongruity for Sarcasm Detection, ACL 2015, Beijing, China, July 26-31, 2015

Joshi Aditya, Mishra Abhijit, Balamurali A R, **Bhattacharyya Pushpak** and Carman Mark James, A Computational Approach to Automatic Prediction of Drunk Texting, ACL 2015, Beijing, China, July 26-31, 2015

Joshi Aditya, Kunchukuttan Anoop, **Bhattacharyya Pushpak** and Carman Mark J, SarcasmBot: An open-source sarcasm-generation module for chatbots, WISDOM at KDD 2015, Sydney, Australia, Aug. 9-10, 2015

Ross Joe Cheri and **Bhattacharyya Pushpak**, Conference Resolution to Support IE from Indian Classical Music Forums, RANLP 2015, Hissar, Bulgaria, Sep. 5-11, 2015

Sharma Raksha, Agarwal Astha, Gupta Mohit and **Bhattacharyya Pushpak**, Adjective Intensity and Sentiment Analysis, EMNLP 2015, Lisbon, Portugal, Sep. 17-21, 2015

Jayanth, Jayaprakash S and **Bhattacharyya Pushpak**, Monotone Submodularity in Opinion Summaries, EMNLP 2015, Lisbon, Portugal, Sep. 17-21, 2015

Khattri Anupam, Joshi Aditya, **Bhattacharyya Pushpak** and Carman Mark J, Your sentiment precedes you: Using an author's historical tweets to predict sarcasm, WASSA at EMNLP 2015, Lisbon, Portugal, Sep.17-21, 2015

Sharma Raksha, Agarwal Astha, Gupta Mohit and **Bhattacharyya Pushpak**, Adjective Intensity and Sentiment Analysis, EMNLP 2015, Lisbon, China, Sep. 17-21, 2015

Jayanth, S Jayaprakash and **Bhattacharyya Pushpak**, Adjective Intensity and Sentiment Analysis, EMNLP 2015, Lisbon, China, Sept 17-21, 2015

Kunchukuttan Anoop and **Bhattacharyya Pushpak**, Addressing Class Imbalance in Grammatical Error Detection with Evaluation Metric Optimization, ICON 2015, Trivandrum, Kerala, India, Dec. 11-14, 2015

Pawar Sachin, Ramrakhiani Nitin, Palshikar Girish, **Bhattacharyya Pushpak** and Hingmire Swapnil, Noun Phrase Chunking for Marathi using Distant Supervision, ICON 2015, Trivandrum, Kerala, India, Dec. 11-14, 2015

More Rohit, Kunchukuttan Anoop, Dabre Raj and **Bhattacharyya Pushpak**, Augmenting Pivot based SMT with word segmentation, ICON 2015, Trivandrum, Kerala, India, Dec. 11-14, 2015

Kanojia Diptesh, Joshi Aditya, **Bhattacharyya Pushpak** and Carman Mark J, Using multilingual topic models for improved alignment in English-Hindi MT, ICON 2015, Trivandrum, Kerala, India, Dec. 11-14, 2015

Bhingardive Sudha, Singh Dharendra and **Bhattacharyya Pushpak**, Using Word Embeddings for Bilingual Unsupervised WSD, ICON 2015, Trivandrum, Kerala, India, Dec. 11-14, 2015

Rakshit Geetanjali, Ghosh Anupam, **Bhattacharyya Pushpak** and Haffari Gholamreza, Automated Analysis of Bangla Poetry for Classification and Poet Identification, ICON 2015, Trivandrum, Kerala, India, Dec. 11-14, 2015

Patil Deepak, Chavan Harshad and **Bhattacharyya Pushpak**, Triangulation of Reordering Tables: An Advancement Over Phrase Table Triangulation in Pivot-Based SMT, ICON 2015, Trivandrum, Kerala, India, Dec. 11-14, 2015

Singh Dharendra, Bhingardive Sudha, Patel Kevin and **Bhattacharyya Pushpak**, Multi word Expressions detection for Hindi Language using Word Embeddings and WordNet-based Features, ICON 2015, Trivandrum, Kerala, India, Dec. 11-14, 2015

Shah Ritesh, Boitet Christian and **Bhattacharyya Pushpak**, Post-editing a chapter of a specialized textbook into 7 languages: importance of terminological proximity with English for productivity, ICON 2015, Trivandrum, Kerala, India, Dec. 11-14, 2015

Gupta Naman, Joshi Aditya and **Bhattacharyya Pushpak**, A temporal expression recognition system for medical documents by taking help of news domain corpora, ICON 2015, Trivandrum, Kerala, India, Dec. 11-14, 2015

S Sreelekha, Dungarwal Piyush, **Bhattacharyya Pushpak** and D Malathi, Solving Data Sparsity by Morphology Injection in Factored SMT, ICON 2015, Trivandrum, Kerala, India, Dec. 11-14, 2015

Kanojia Diptesh, Gupta Naman, Mishra Abhijit, Dhuliawala Shehzaad and **Bhattacharyya Pushpak**, TransChat: Cross-Lingual Instant Messaging for Indian Languages, ICON 2015, Trivandrum, Kerala, India, Dec. 11-14, 2015

Sharma Raksha and **Bhattacharyya Pushpak**, Domain Sentiment Matters: A Two Stage Sentiment Analyzer, ICON 2015, Trivandrum, Kerala, India, Dec. 11-14, 2015

Mehta Pratik, Kunchukuttan Anoop and **Bhattacharyya Pushpak**, Investigating the potential of post ordering SMT output to improve translation quality, ICON 2015, Trivandrum, Kerala, India, Dec. 11-14, 2015

Nagvenkar Apurva, Pawar Jyoti and **Bhattacharyya Pushpak**, Let Sense Bags Do Talking: Cross Lingual Word Semantic Similarity for English and Hindi, ICON 2015, Trivandrum, Kerala, India, Dec. 11-14, 2015

Dhuliawala Shehzaad, Atreya Arjun, Yadav Ravi and **Bhattacharyya Pushpak**, Judge a Book by its Cover: Conservative Focused Crawling under Resource Constraint, ICON 2015, Trivandrum, Kerala, India, Dec. 11-14, 2015

Redkar Hanumant, Singh Sandhya, Joshi Nilesh, Ghosh Anupam and **Bhattacharyya Pushpak**, IndoWordNet Dictionary: An Online Multilingual Dictionary using IndoWordNet, ICON 2015, Trivandrum, Kerala, India, Dec. 11-14, 2015

Roy Sangita, **Sairam Ashok Singh**, Network Attack Detection and Mitigation, PhD symposium of IEEE 9th International Conference on Self-Adaptive and Self-Organizing System (SASO-2015), MIT, Cambridge, MA, USA, Sep. 21-25, 2015

Jana Angshuman, **Halder Raju**, Chaki Nabendu and Cortesi Agostino, Policy-based Slicing of Hibernate Query Language, Proc. of the 14th International Conference on Computer Information Systems and Industrial Management Applications (CISIM), Warsaw, Poland, Springer LNCS 9339, 267-281, Sep. 24-26, 2015

Imran Md. Alam and **Halder Raju**, Data-centric Refinement of Information Flow Analysis of Database Applications, Proc. of the 3rd International Symposium on Security in Computing and Communications (SSCC), Kochi, India, Springer CCIS 536, 506-518, Aug. 10-13, 2015

Khosley Dileep and **Halder Raju**, Data Cleaning: An Abstraction-based Approach, Proc. of the 4th International Conference on Advances in Computing, Communications and Informatics (ICACCI), Kochi, India, IEEE Press, 713-719, Aug. 10-13, 2015

Das Ranjita, **Saha S**, Microarray Gene Expression Data classification Using Modified Differential Evolution Based Algorithm, IEEE INDICON-2015, Jamia Millia Islamia, New Delhi, India, Dec. 17-20, 2015

Das Ranjita, **Saha S**, Gene expression classification using a fuzzy point symmetry based PSO clustering technique, 2nd Int. Conf. on Soft Computing & Machine Intelligence, Hong Kong, Nov. 23-24, 2015

Pratap Ajay and **Misra Rajiv**, Resource sharing in D2D Communication Underlying Cellular LTE-A Networks, 4th Int. Conf. on Advances in Computing, Communication & Informatics, Kochi, Kerala, Aug. 10-13, 2015

Yadav Ram Narayan and **Misra Rajiv**, Periodic Channel-Hopping Sequence for Rendezvous in Cognitive Radio Networks, 4th Int. Conf. on Advances in Computing, Communication & Informatics, Kochi, Kerala, Aug. 10-13, 2015

Department of Electrical Engineering

Radhakrishnan Rahul, Singh Abhinoy Kumar, **Bhaumik Shovan** and Tomar Nutan Kumar, Quadrature filters for underwater passive bearings-only target tracking, Sensor Signal Processing for Defence, Edinburgh, United Kingdom, Sep. 9-10, 2015

Singh Abhinoy Kumar and **Bhaumik Shovan**, Improved high-degree cubature Kalman filter, Sensor Signal Processing for Defence, Edinburgh, United Kingdom, Sep. 9-10, 2015

Behera R K and Ojo O, Modeling and Control of DAB Converter for Solar Micro-grid Application, in Proceedings of IEEE PESA 2015, Hong Kong Polytech. University, Hong Kong, 1-6, Dec. 15-17, 2015

Kumar Abhay, Hasan M A, Akhtar Md. Junaid, **Parida S K** and **Behera R K**, Design Optimization of Linear Induction Motor, in Proceedings of IEEE PESA 2015, Hong Kong Polytech. University, Hong Kong, 1-6, Dec 15-17, 2015

Akhtar Md. J., **Behera R. K.** and **Parida S K**, Propulsion System Design of Electric Vehicle, in proceedings of IEEE PESA-2015, Hong Kong Polytech. University, Hong Kong, Dec. 15-17, 2015

Jha Chandan and **Kolekar Mahesh kumar H**, Performance Analysis of ECG Data Compression using Wavelet Based Hybrid Transform Method, Int. Conf on Microwave, Optical and Communication Engineering (ICMOCE), IIT Bhubaneswar, Dec. 18-20, 2015

Kolekar Mahesh kumar H and Dash Deba Prasad, A nonlinear feature based epileptic seizure detection using least square support vector machine classifier, IEEE Region 10 Conference (TENCON), Macau, 1-6, Nov. 1-4, 2015

Pattanayak Prabina and **Kumar Preetam**, Limited Feedback Scheduling For MIMO-OFDM Broadcast Network, IEEE WPMC, Hyderabad, Dec. 13-16, 2015

Trivedi Vinay Kumar, Sagar Vidya and **Kumar Preetam**, An Efficient Deterministic Scheme for Blind CFO Estimation in SC-FDMA, IEEE WPMC, Hyderabad, Dec. 13-16, 2015

Pattanayak Prabina, Pandey Diwakar and **Kumar Preetam**, Error Rate Performance for Multiuser scheduling in MIMO downlink system with imperfect CSI, IEEE WWITAE, Hyderabad, India, Dec. 13-16, 2015

Agarwal Akash, Mukati Vijay and **Kumar Preetam**, Rate Independent Multicarrier Variable Rate Scheme over Frequency Selective Channel, IEEE WWITAE, Hyderabad, Dec. 13-16, 2015

Gupta Jitendra and **Adhya Aneek**, A Cost-efficient Protection Scheme for Service Recovery Against Single Shared-risk Link Group Failure in Long-reach Passive Optical Network, Proc. ANTS (IEEE International Conference on Advanced Networks and Telecommunication Systems), 1-6, Kolkata, Dec.15-18, 2015

Trivedi Vinay, Agarwal Akash and **Kumar Preetam**, Performance Evaluation of MC-CDMA over Hybrid Satellite/Underwater Acoustic Channel, IEEE ICICS, NTU, Singapore, Dec. 2-4, 2015

Kumar Nagendra and **Singh Yatendra Kr**, Switchable Ultra Compact Wide stopband Bandstop Filter to Wideband Bandpass Filter, Asia Pacific Microwave Conference, Nanjing, China, Dec. 6-9, 2015

Department of Mechanical Engineering

Ahmed S and **Saha P**, Downscaling the Process of Friction Stir Welding: An Analysis of Temperature Distributions, 23rd National Heat and Mass Transfer Conference & 1st International ISHMT-ASTFE Heat and Mass Transfer Conference, LPSC(ISRO), Trivandrum, Kerala, India, Dec. 17-20, 2015

Pathak Himanshu, **Singh Akhilendra** and Singh Indra Vir, Composite Patch Repair of Structural Members by Coupled EF-EFG Approach, ICMAE, Singapore, Dec. 12-14, 2015

Prajapati Y K, **Pathak M** and **Khan M K**, Investigation of Flow Boiling Heat Transfer in Segmented finned Micro channels, 23rd National and 1st International ISHMT-ASTFE Heat and Mass Transfer Conference (IHMT2015), ISRO Trivundram, India, Dec. 17-20, 2015

Hassan M A, **Pathak M.** and **Khan M K**, Thermal instabilities in convection of viscoplastic fluids, 23rd National and 1st International ISHMT-ASTFE Heat and Mass Transfer Conference (IHMT2015), ISRO Trivundram, India, Dec. 17-20, 2015

Kumar N, Raza Md. Qaisar and **Raj R**, Comparison of Bubble Behavior and Heat Transfer during Pool Boiling with Aqueous Surfactant Solution on Upward and Downward Facing Heater, CHEMCON 2015, 68th Annual Session of Indian Institute of Chemical Engineers, Guwahati, Dec. 27-30, 2015

Ghosh D P, Mohanty D, Saha S K and **Raj R**, Fabrication of Nanostructured Microchannels for Enhancement of Single and Multiphase Heat Transfer, 23rd National Heat and 1st International ISHMT-ASTFE Heat and Mass Transfer Conference, Thiruvananthapuram, India, Dec. 17-20, 2015

Raza Md. Qaisar and **Raj R**, Pool Boiling Critical Heat Flux Enhancement for Reduced Gravity Application, 23rd National Heat and 1st International ISHMT-ASTFE Heat and Mass Transfer Conference, Thiruvananthapuram, India, Dec. 17-20, 2015

Chattopadhyay A, **Thakur A,** and **Raj R**, Spline Based Modeling of Static and Sliding Droplets with Contact Angle Hysteresis, 42nd National Conference on Fluid Mechanics and Fluid Power, National Institute of Technology, Surathkal, India, Dec. 14-16, 2015

Department of Civil and Environmental Engineering

Anshupriya and Hait S, Bioleaching of selected metals from waste printed circuit board by *Acidiphilium acidophilum*, CHEMCON, Indian Chemical Engineering Congress, IIT Guwahati, Guwahati, Assam, Dec. 27-30, 2015

Department of Materials Science and Engineering

Singh Kushal, Kumar Rishu and **Chowdhury Anirban**, Structural and Catalytic Properties of $\text{Ce}_{0.8}\text{La}_{0.2}\text{O}_{2-x}$, ICMFA 2015, IIT BHU, Varanasi, UP, India, Oct. 27-29, 2015

Kumar Rishu, Singh Kushal and **Chowdhury Anirban**, Densification of Phase Pure $\text{La}_2\text{Zr}_2\text{O}_7$ Nano-Powders by Spark Plasma Sintering, ICMFA 2015, IIT BHU, Varanasi, UP, India, Oct. 27-29, 2015

Singh Kushal, Kumar Rishu and **Chowdhury Anirban**, Lanthanum doped Ceria Nanoparticles: a Promising Material for Energy Applications, Int. Conf. on Advances in Energy Research (ICAER-2015), IIT Bombay, India, Dec.15-20, 2015

Department of Mathematics

Tripathi Yogesh Mani, Kumar Somesh and Petropoulos C, Minimax estimation for the lower bounded scale parameter of an exponential distribution, International Indian Statistical Association Conference on Celebrating Statistical Innovation and Impact in a World of Big & Small Data'co-organized by Department of Statistics, Savitribai Phule Pune University, Pune, India, Dec. 20-24, 2015

Prakash Om, Strongly prime ideals and its extension in nearrings, 24th International conference on Nearrings, Nearfields and Related topics, Manipal Institute of Technology, Manipal, July 5-12, 2015

Singh Sushma and **Prakash Om**, A-3-Armendariz rings, 24th International conference on Nearrings, Nearfields and Related topics at Department of Mathematics, Manipal Institute of Technology, Manipal, July 5-12, 2015

Singh Sushma and **Prakash Om**, A note on reversibility over prime radicals, International Conference on Recent Trends in Mathematics, Department of Mathematics, University of Allahabad, July 10-12, 2015

Shekhawat Nidhi, Rathie A K and **Prakash Om**, On a quadratic transformation due to Kummer and its generalizations, International Conference on Condensed Matter and Applied Physics, Department of Physics, Govt. Eng. College, Bikaner, Oct. 30-31, 2015

Shekhawat Nidhi, **Prakash Om** and Rathie Arjun K, On generalizations of two Ramanujan's Summations, International Conference on Condensed Matter & Applied Physics, Department of Physics, Govt. Eng. College, Bikaner, Oct. 30-31, 2015

Kumar Manish and **Majhi Sudhan**, Blind Synchronization of OFDM System and CRLB Derivation of CFO over Fading Channels, International Conference on Information, Communications and Signal Processing, Singapore, Dec. 2-4, 2015

Department of Chemistry

Ahmed Aziz and Lal Ram A, Synthesis, characterization and spectral studies of copper (II) complexes derived from disalicylaldehyde malonoyl-, succinoyl- and adipoyldihydrazone: An Experimental and DFT Approach, 2nd Int. Conf. MRAEHEI-2015, Goa, Oct. 26-28, 2015

Department of Physics

Kumar D and **Nishchal N K**, Three-dimensional object recognition using phase-only computer-generated Fresnel hologram, Int'l. Confer. on Opto-Electronics and Applied Optics, (IEEE IEM OPTRONIX 2015), University of British Columbia, Vancouver, Canada, Oct. 16-17, 2015

Mehra I and **Nishchal N K**, Optical asymmetric cryptosystem and wavelet based image fusion, Int'l. Symp. on 3D Imaging, Metrology, Data Security (3DIM-DS 2015), Shenzhen, China, Sep. 26-29, 2015

Kumar D and **Nishchal N K**, Digital holographic microscopy for detection of microorganisms, Siegmund International School on Lasers, Amberg, Germany, Aug. 02-07, 2015

Das Gour Mohan, Parit Mithilesh Kumar, Laha Ranjit and Dantham Venkata Ramanaiah, Enhancement of Raman Scattering Signal of a Few Molecules Using Photonic Nanojet Mediated SERS Technique, Int. Conf. on Condensed Matter & Applied Physics, Bikaner, Rajasthan, Oct. 30-31, 2015

Das Gour Mohan and **Dantham Venkata Ramanaiah**, Photonic Nanojet Mediated Surface Enhanced Raman Scattering (SERS) Technique, DST-SERB School, IIT Patna, Nov. 30 – Dec. 18, 2015

Arya Akash and **Dantham Venkata Ramanaiah**, Efficient Nanostructures for Studying Single Protein Molecules in Real Time, DST-SERC School on Modern Optics and its Applications, IIT Patna, Nov. 30 – Dec. 18, 2015

Kumar R and **Kar M**, Magnetic studies of nanocrystalline cobalt ferrite by Employing the Arrot plot, Int. Conf. on Condense matter and Applied physics, Bikaner, Oct. 30-31, 2015

Kumar R, Goswami A M and **Kar M**, Increase of Dielectric Constant in PVDF by Incorporating $\text{La}_{1.8}\text{Sr}_{0.2}\text{NiO}_4$ into its Matrix, Int. Conf. on Condense matter and Applied physics, Bikaner, Oct. 30-31, 2015

Kumar R, Pandey R and **Kar M**, Study of strain mediated magnetism on non-magnetic Sr substituted cobalt ferrite by employing the Arrott plot, ICMAGMA, Vellore University, Dec. 2-4, 2015

Supriya S, Kumar S and **Kar M**, Grain Size Effect on Activation Energy in Spinel CoFe_2O_4 Ceramic, DAE-SSPS 2015, Amity University, Noida, Uttar Pradesh, Dec. 21-25, 2015

Supriya S, Kumar S and **Kar M**, Impedance Spectroscopy Studies in Cobalt Ferrite-Reduced Graphene Oxide Nanocomposite, ICC 2015, Bikaner, Rajasthan, Oct. 30-31, 2015

Kumar S, Supriya S and **Kar M**, Dielectric Investigations on Li and Cr Substituted Nickel Oxide, 4th ICANN, IIT Guwahati, Dec. 8-11, 2015

Kumar S, Supriya S, Kumar P and **Kar M**, Dielectric Investigations on co-substituted Bismuth Ferrite ($\text{Bi}_{1-x}\text{La}_x\text{Fe}_{1-x}\text{Mn}_x\text{O}_3$) ICC, Bikaner, Rajasthan, Oct. 30-31, 2015

Pradhan L K, Pandey R, Kumar R, Kumar P and **Kar M**, Structural and electrical properties of CFO and PZT multi ferroic nanocomposite, 4th ICANN, IIT Guwahati, Dec. 8-11, 2015

Department of Humanities and Social Sciences

Singh Anupama and **Raj Papia**, Sustainable Recycling Model for Municipal Solid Waste in Patna, 5th International Conference on Advances in Energy Research, IIT Bombay, Dec. 15-17, 2015

Kumar Chandan, FDI in Agribusiness: Comparison between India & China, International Conference on Trade and Exchange Rate Policies In The Context Of WTO And Preferential Trading Agreements (PTAS): Challenges Before Emerging Economies, Institute of Public Enterprise, Hyderabad, Sep. 28-29, 2015

Kumar Gaurav and **Bharti Nalin**, India-Japan CEPA: What RCA Reveals for Services Trade?, 28th Annual Conference of the Japanese Association for South Asian Studies(JASAS), University of Tokyo (Komaba Campus), Tokyo(Japan), Sep. 26-27, 2015

Ghazal Sadeqa, English as a Medium of Instruction: Challenges for Low-Cost Private School Teachers, 11th International Language and Development Conference on Multilingualism and Development, New Delhi, India, Nov. 18-20, 2015

Tripathi Priyanka, Translating Desire: Exploring Love and Life in Blue: The Tranquebar Book of Erotic Stories from Sri Lanka, ISCS 2015, Osmania University Hyderabad, Nov. 26-28, 2015

Reyaz Aiman and **Tripathi Priyanka**, Accepting with Grace: Realism, Redemption and Reconciliation in J M Coetzee's Disgrace, ISCS 2015, Osmania University Hyderabad, Nov. 26-28, 2015

Students' Visit and Participation

Kumar Gaurav, Research Scholar, Department of Humanities & Social Sciences visited the University of Tokyo, Komaba Campus, Tokyo (Japan) to present a paper, entitled, "India-Japan CEPA: What RCA Reveals for Services Trade?" in the 28th Annual Conference of the Japanese Association for South Asian Studies (JASAS) during Sept. 26-27, 2015

Mayank Garg, 3rd Year, UG Student attended Harvard Project for Asian and International Relations Conference at Manila, Philippines under Energy and Sustainability Panel. The Conference was organized Harvard University and was held from August 20-24, 2015

Nagendra Kumar, Research Scholar, Department of Electrical Engineering visited Nanjing, China to present a paper titled "Switchable Ultra Compact Widestopband Bandstop Filter to Wideband Bandpass Filter" in Asia Pacific Microwave Conference, Dec. 6-9, 2015

Awards/Fellowship and Honours

Dr. Pushpak Bhattacharyya, Director, elected as Fellow, Indian National Academy of Engineering, 2015

Dr. Debashree Guha, Assistant Professor, Department of Mathematics received a two month SAIA-NSP scholarship in the framework of the National Scholarship Programme of the Slovak Republic during the summer semester of the academic year 2015-16

Dr. Rajib Kumar Jha, Assistant Professor, Department of Electrical Engineering received National Award for supervising Best M. Tech. Thesis (First Prize) in Electrical and Electronics engineering, year - 2015 by Indian Society for Technical Education, Gov. of India

Dr. Rajib Kumar Jha, Assistant Professor, Department of Electrical Engineering received Premium Award-2015 for Best Research Paper Published during the last two years in IET Image Processing, IEE

Dr. Sudhan Majhi, Assistant Professor, Department of Mathematics received start-up grant for Young Scientist for Project Title: Blind Symbol Timing Offset (STO) and Carrier Frequency Offset (CFO) Estimation and Implementation over OFDM, and MIMO-SC-FDMA testbed by DST, December 2015

Dr. Ranjan Kumar Behera, Assistant Professor, Department of Electrical Engineering has been Selected of his biographical profile for inclusion in the new "Who's Who in the World" (30th Edition)", Nov. 2015

Dr. N. K. Nishchal, Associate Professor, Department of Physics was designated as Senior Member, SPIE – The International Society for Optics & Photonics, July 2015

Dr. N. K. Nishchal, Associate Professor, Department of Physics was designated as School Director, SERB, DST (GoI) sponsored School on Modern Optics & Its Applications, Nov. 30 - Dec. 18, 2015

Dr. Sriparna Saha, Assistant Professor, Department of Computer Science and Engineering received Best Paper Award in IEEE INDICON 2015

Dr. Sriparna Saha, Assistant Professor, Department of Computer Science and Engineering elevated to IEEE Senior member category, Nov. 2015

Dr. Sriparna Saha, Assistant Professor, Department of Computer Science and Engineering granted the Junior Humboldt Research Fellowship, 2015

Mr. Aziz Ahmed, JTS, Department of Chemistry received best research paper award in 2nd International Conference MRAEHEI-2015, Goa, Oct. 26-28, 2015

Dr. Neeladri Das, Associate Professor, Department of Chemistry has been awarded the "Chemical Science" Poster Prize at 6th EuCheMS (The European Association for Chemical and Molecular Sciences) conference on Nitrogen Ligands by the Royal Society of Chemistry (RCS), Beaune, France, UK, Sep. 13-17, 2015

Mr. Gaurav Kumar, Research Scholar, Department of Humanities and Social Sciences, awarded with the UNCTAD certified Non-Tariff Measures Data Collector certificate from Trade Information Section, Trade Analysis Branch, United Nations Conference on Trade and Development, UNCTAD Virtual Institute, July 1-19, 2015



Kumar Gaurav, Research Scholar, School of Humanities and Social Sciences, IIT Patna with Michal Fabinger, Assistant Professor, Faculty of Economics, The University of Tokyo, during Sept. 26-27, 2015, Tokyo, Japan.

Ms. Pracheta Sahoo, Student, 2nd Year, M. Tech., was awarded DAAD IIT Master Sandwich Fellowship 2015-2016, Leibniz Universität Hannover University for duration Sep. 2015- March 2016

Dr. Preetam Kumar, Associate Professor, Department of Electrical Engineering has been selected as Senior Member in IEEE, 2015

Dr. Preetam Kumar, Associate Professor, Department of Electrical Engineering has organized special session on "Spectrum Management and Networking for Multi-link Satellite and Terrestrial Communication Systems" in Global Wireless Summit 2015, Hyderabad, Dec. 13-16, 2015

Dr. Vaibhav Singhal, Assistant Professor, Department of Civil and Environmental Engineering received "Innovative Students Projects Awards 2015", Indian National Academy of Engineering (INAE) for his doctoral research work, Dec. 2015

Dr. Venkata Ramanaih Dantham, Assistant Professor, Department of Physics received Best Poster Award in Int. Conf. on Condensed Matter & Applied Physics, Bikaner, Rajasthan Oct. 30-31, 2015

Dr. Venkata Ramanaih Dantham, Assistant Professor, Department of Physics received Best Poster Award in DST-SERB School, IIT Patna, Nov. 30 – Dec. 18, 2015

Ms. Sharmistha Chatterjee, M. Tech., Nano Science & Tech. received proficiency prize for best thesis submission, Convocation, IIT Patna, Aug. 06, 2015

Training and Placement

Training and Placement Cell (TPC) of the Institute is actively engaged in developing relationship between IIT Patna and various Industrial organizations and employers of technical and scientific manpower. The Cell has organised Placement activities for the final year B. Tech, M.Tech & Ph.D students.

The Placement is in process for the session 2015-16, and till now the Cell has been successful in getting 128 offers from 32 Companies for B.Tech & M.Tech students. Few of the names are Google(1) by PPO, Coal India(12), BPCL(7), Arista Networks(4), CISCO Systems(1), Tata Motors(8), Amazon(5), TCS(17), Samsung(6), Texas Instruments(1), Bank of America(4), EZDI(8), Mahindra and Mahindra(3), Wipro(8), L&T ECC(3), etc and few companies are in pipeline. The highest package was offered by Google Rs.1.8 Crore during PPO (Pre Placement Offer) and Rs. 27 Lakhs per annum by Amazon during Campus Placement. TPC has various facilities to assist companies for training and placement such as Training and Placement brochure, high speed internet, video conferencing facility, seminar room and auditorium.

The summer internship for a period of 8 weeks is compulsory component of all the branches of B.Tech curricula for per-final year students. The cell is engaged in arranging Summer Internship for 182 pre final year B.Tech students, to various private companies, public sector undertakings, Institutes and R&D organizations in India & abroad.

Events held at IIT Patna

Convocation 2015

The Third Convocation of Indian Institute of Technology Patna was held on 06th August, 2015 in its permanent campus at Bihta. The Chief Guest for this grand occasion was the Vice President of Boeing International and President of Boeing India, Dr. Pratyush Kumar. The students of third & fourth batch were enthusiastic enough come to receive their degree.

In B.Tech 2010 batch, the President of India Gold medal was given to Sachin Basil John from the Department of Computer Science and Engineering while the Director's Gold medal went to Chaitanya Kansal from the Department of Computer Science and Engineering. Sachin Basil John of Computer Science and Engineering Department, Piyush Sharma of Electrical Engineering Department and Md. Hasan Dad Ansaari of Mechanical Engineering Department were the class toppers and received the Institute Silver Medal. Sachin Basil John of Computer Science and Engineering Department, Himal Kumar of Electrical Engineering Department and Srinivas Gunti of Mechanical Engineering Department were the winners of Institute Proficiency prizes for best B.Tech Project. In B.Tech 2011 batch, the president of India Gold medal was given to Prabhakaran S from the Department of Computer Science and Engineering while the Director's Gold medal went to Venkatesh Chaturvedi from the Department of Electrical Engineering. Prabhakaran S of Computer Science and

Engineering Department, Saptadeep Pal of Electrical Engineering Department and Aakash Tripathi of Mechanical Engineering Department were the class toppers and received the Institute Silver Medal. Manish Garg of Computer Science and Engineering Department, Saptadeep Pal of Electrical Engineering Department and Ashesh Kumar Chattopadhyay of Mechanical Engineering Department were the winners of Institute Proficiency prizes for best B.Tech Project. Shri Kedar Nath Das Memorial Award had been awarded to Manish Garg from the Department of Computer Science & Engineering for all-round performance among the students of Computer Science and Engineering Department. In M.Tech 2012 batch, the Chairman's Gold Medal was given to Govind from the specialization of Mathematics & Computing. Govind from the specialization of Mathematics & Computing, Anand Kumar Mishra from the specialization of Mechatronics and Anirban Chakraborty from the specialization of Nano Science & Technology were the class toppers and received the Institute Silver Medal. Druv Gupta from the specialization of Mathematics & Computing, Anand Kumar Mishra from the specialization of Mechatronics and Anirban Chakraborty from the specialization of Nano Science & Technology were the winners of M.Tech Project Proficiency prizes. In M.Tech 2013 batch, the Chairman's Gold Medal was given to Deepak Kumar Gupta from the specialization of Mathematics & Computing. Deepak Kumar Gupta from the specialization of Mathematics & Computing, Arun Singh from the specialization of Nano Science & Technology, Parmar Pratik Kumar Ashokbhai from the specialization of Mechatronics, Ambarish Madhukar Jadhav from the specialization of Computer Science & Engineering and Vijay Mukati from the specialization of Communication System Engineering were the class toppers and received the Institute Silver Medal. Uday Kumar from the specialization of Mathematics & Computing, Parmar Pratikumar Ashokbhai from the specialization of Mechatronics, Sharmistha Chatterjee from the specialization of Nano Science & Technology, Suraj Suman from the specialization of Communication System Engineering and Vikram Singh from the specialization of Computer Science and Engineering were the winners of M.Tech Project Proficiency prizes. The "Distinguished Academician Award" was given to Padma Vibhushan Dr. G. Madhavan Nair, Padma Vibhushan Prof. M.M.Sharma and Dr. Rajendra Prasad Singh, FNAE in this convocation.

Unnat Bharat Abhiyan Partners with SANMAT

The Unnat Bharat Abhiyan team of IIT Patna arranged a visit by SANMAT functionaries to Dilawarpur. Sanmat is a vision of young enthusiastic engineers passionate about building just and participative society. They work towards changing lives of under privileged communities in Bihar with a special focus on rural development and capacity building.



Team of SANMAT along with the villagers at Dilawarpur, Bihta, Photo courtesy: UBA Team.

The UBA Team along with the team members of the SANMAT visited Dilawarpur village with a motto to contribute towards their development on 5th November, 2015. They informed the villagers about various programmes that maybe beneficial for their development. They distributed the forms for the SC/ST scholarships on behalf of the Government of Bihar. Several forms were distributed among the matriculate students of the village. The students will get the monetary help during their education process. Under the same, the students will also get assistance in getting themselves admitted to the various colleges empanelled with the Government of Bihar. The SANMAT team also informed the villagers (mostly youngsters) about the 'Training for Skill Development' that is conducted by them. Later, the villagers were also seen receiving and filling up the distributed forms for scholarships with much delight. They were eager to know and receive more from SANMAT and for that matter, the UBA team of IIT Patna.

UBA Team Partners with ICICI for Youth Employment

Providing livelihoods to the rural youth is essential for the growth of the country. As a step in this direction, the UBA team at IIT, Patna tied up with 'ICICI Academy for Skills' to impart vocational training to the rural youth. On 14th December, 2015, the ICICI Academy for Skills (the CSR wing of ICICI Bank) visited the village Dilawarpur' under Bihta block (One of the adopted village by IIT, Patna, under UNNAT BHARAT ABHIYAN project) ICICI Academy for Skills offers short duration (12 weeks) vocational skill building programme on a pro-bono basis. The training are industry-relevant and focus on practical aspects to make the youth employable for the industry. In addition to vocational training, some life skills training like communication skills, financial literacy and how to adapt to an organized working environment is also being taught to students. The courses are conducted at both, residential and non-residential centers. The Academy selected 59 students (34 for non-residential and 25 for residential program) from the village 'Dilawarpur' for its different 3-month's vocational training programs like

Selling Skills

Electrical & Home Appliance Repair

Office Administration

Refrigeration & AC Repair

Retail Café Operations

Pumps & Motor Repair

The Academy has tied up with different industry houses for the effective training and placement of its students. In order to ensure that the courses are relevant to the industry, the content design, setting up of laboratories and training of trainers is undertaken by Knowledge Partners who are leaders in their respective industries. The Academy has partnered with Blue Star Ltd. (for refrigeration & AC repair), Café Coffee Day (for retail café operations), Crompton Greaves Ltd. (for pumps & motor repair), NIIT Ltd. (for web designing), Schneider Electric Pvt. Ltd. (for electrical & home appliance repair), Tally Solutions Pvt. Ltd. (for office administration) and Voltas Ltd. (central air conditioning). ICICI Academy for Skills has partnered with various organizations for the placement of its students. The course curriculum will be customized as per the requirements of the partner, so that upon completion of the course, the participants can be incorporated by the industry. These partnerships serve the dual purpose of making the youth employable and ensure their livelihood.



The UNNAT BHARAT ABHIYAN team at IIT Patna give its best wishes to the selected candidates

Debate Competition Sponsored by Powergrid India

An Inter-College Debate competition was held on the occasion of Vigilance Awareness Week on 30.10.2015. The debate was sponsored by Power Grid of India (Pvt.) Ltd. The topic for the debate was 'Preventive Vigilance Will Lead to Good Governance'. Seven teams participated in this competition from institutes like Patna Women's College, NIT Patna, St. Xavier's College, Patna. The debate was judged by Prof. Muniba Sami, Retd. Professor, Dept. of English, Patna University, Dr. Ajay Thakur, Asst. Prof, Dept. of Physics, IIT Patna and Mrs. Aparna Bhattacharyya, Director (Academic), Foundation Academy, IIT Patna. Teams from IIT Patna won the First and Second Prize while NIT Patna was the Runner Up.



Mrs. Aparna Bhattacharyya being felicitated by Dr. Smriti Singh



Ongoing session



Ongoing session

152nd Meeting of all IIT Directors

IIT Patna hosted the 152nd meeting of all IIT Directors in the permanent campus of the institute at Bihta on 6th September, 2015. The meeting discussed various aspects of IITs functioning, and has been chaired by Prof. Pushpak Bhattacharyya, Hon'ble Director, IIT Patna.

Inauguration of Elsevier Centre of Excellence for Natural Language Processing and Sushrut - eZDI Research Lab on Health Informatics

Elsevier, the renowned scientific literature publishing company has set up the Elsevier Centre of Excellence for Natural Language Processing at IIT Patna to conduct research and development in some of the novel areas of artificial intelligence, natural language processing and machine learning under the leadership of Prof. Pushpak Bhattacharyya, director, IIT Patna. The centre also involves other two faculty members, Dr. Asif Ekbal and Dr. Sriparna Saha, and several student-members including research scholars, research engineers, B.Tech & M.Tech students. It is situated at 5th floor of Block 3 academic building of IIT Patna. Another company, ezDI has set up the Sushrut-eZDI Research Lab on Health Informatics, which is dedicated towards developing products for health care and contributes to research having significant outcomes.

MoU between IIT Patna and CTIF, Aalborg University, Denmark, on 9.12.2015

Indian Institute of Technology (IIT)-Patna students and teachers will work on developing fifth generation (5G) cellular wireless communication technology, assisted by academicians and students from Aalborg University, Denmark. This technology ensures faster transfer of data and better connectivity than the one currently in use in India. Currently, India uses 3G mobile telephony while 4G has been introduced at some places. IIT-Patna and Center for TeleInfrastruktur (CTIF), Aalborg University, Denmark, inked a memorandum of understanding (MoU) in this connection on Wednesday. IIT-Patna director Pushpak Bhattacharyya and Center for TeleInfrastruktur (CTIF) founder director Ramjee Prasad inked the deal. Ramjee has his roots in Bihar. Center for TeleInfrastruktur (CTIF) was established in 2004. He is also founder chairman of the Global ICT Standardisation Forum for India (GISFI), established in 2000. After signing the MoU, Prasad gave a talk on "Human Bond Communications Beyond 2050", which touched on various issues in the field of wireless communication, specifically the development of 5G technology and beyond. He talked about his plan to set up a world-class company to develop the technology in Patna. The talk also encouraged students and faculty to innovate and propose new ideas in various engineering disciplines for society's benefit. Implementing 5G would require a paradigm shift to meet the demand that networks will face by 2020. IIT-Patna registrar Subhash Pandey said: "CTIF will set up a telecommunication centre where students and faculty from IIT-Patna and Aalborg University will work in tandem and research on 5G communications." A third year IIT-Patna student said on condition of anonymity: "Signing of MoU with the Denmark-based university will be of great advantage to IIT-Patna students who want to research in telecommunication. 5G is the need of the hour and will become more important by 2020 when 3G network gets congested." IIT-Patna will also carry out a student and faculty exchange programme. Students from IIT-Patna will visit Aalborg University and their students and faculty visit IIT-Patna. IIT-Patna is already in collaboration with University of Hartford USA, National University of Singapore, University of Houston, USA, Louisiana State University, USA, University of New South Wales, Australia and Universita Ca'Foscari di Venezia, Italy.



Delegates sign the MoU

Sports Activities

After shifting to the main campus in Bihta, we are trying to develop sports facilities for our students and staff. In this connection we have developed Cricket ground, Football ground, Athletics track, Volleyball court, Basketball court, Badminton court, Tennis court, Table tennis hall and Multi gym etc. We are trying level hard to meet the requirements of our students.



Volleyball Match



Marathon



Basketball Match

“Adhyayan Utsav”

National Service Scheme (NSS) and Unnat Bharat Abhiyaan (UBA) Cell of IIT Patna conducted “Adhyayan Utsav”, a 6 days Camp in three government funded schools in the town of Bihta the Middle School, Dilawarpur the Middle School, Amhara and the High School, Amhara. The student camp was conducted from March 14, 2016 to March 19, 2016. A plethora of activities and competitions were organised for these not so privileged but immensely talented kids of these schools. The activities were so engrossing that they involved each and every soul be it the organisers or the participants. On the first day, essay writing competition was organised in school in Amhara for class 6th8th Middle School

(Dilawarpur) and for classes 6th to 9th in High School (Amhara). Students participated with enthusiasm to give their views. On the second day, complete the Story event was the main event conducted on Tuesday, In this event, organisers gave the children a situation, and the kids put their imaginations into work in writing a short story based on it. Their stories were reviewed by the volunteers later and the most creative one was given a prize. The children showed a lot of enthusiasm throughout the week. The event PicSay conducted on Wednesday. Themes like child labour, drug abuse were involved in the event. Later on, prizes were given to the 1st, 2nd and 3rd best write ups for each class. Apart from that Rangoli was also conducted for girls of class 9th. Day four consisted of events like Spell bee, puzzles and allocation contest were conducted on Thursday. Students enjoyed the puzzles sessions and loved Allocation contest. It helped in getting rid of their stage fear and helped in improving their confidence. General Knowledge Quiz was organised on the fifth day. The sixth day marked the end of Adhyayan Utsav. The day started with a "Nukkad Natak" by IIT Patna students spreading awareness among the school students on the topic "right to Education". Then followed cultural performances like Singing, Dancing and Stage Drama for which the school students were being trained for these 5 days. Also a very exciting Chammach Race was organised for little buds of class 15 for Middle School, Amhara. The kids participated in it and really enjoyed the race. Drawing and fill the colours competition was organised for children of classes 1 to 9. This event witnessed children letting loose their imaginations on paper. Adhyayan Utsav ended with prize distribution for the events organised over the six days. Prizes were sponsored by 2 faculty members and 4th year students and were presented by Mr. Koushik Ray, Program Officer NSS IIT Patna, Dr. Aditya Raj, UBA Coordinator IIT Patna and the Principal of Middle School, Amhara. "Adhyayan Utsav was very nice experience for NSS student volunteers who got this opportunity to interact with these children. The children also felt good and sense satisfaction could be seen on their faces. This gave the real pleasure making small efforts into a big success" said Akhil Jain, a 1st year B. Tech. student of IIT Patna.



Adhyayan Utsav, group photo



Dr. Aditya Raj, UBA Coordinator IIT Patna

Nebula '15

The fresher's party continued its legacy of success. This edition of the event proved to be the most successful Nebula in the history of IITP welcoming around 200 fresher's this year. The party began with a lamp lighting ceremony shortly followed by formal introductory speeches by the Chief Guest. Beginning with a plethora of events, first performance to be showcased was a classical dance and then a group song by first year and second year students. A group of first year students formed a fusion band and performed with table, an acoustic guitar and synthesizer in the background and marked the formation of a band of its kind in IITP. After this; IIT Patna witnessed the super awesome Mime performance in the institute aptly acted by the fresher's depicting the varied mind-set of a person in different situations. The excitement augmented to a joyful high when the fashion show embarked on. Beginning the charismatic show, the fresh batch put up an attractive fashion show in which gorgeous looking girls and smartly dressed boys walked the ramp for the coveted Mr and Miss Fresher's title. The contest, held in a number of rounds was keenly contested and judged the students on different parameters. Ms. Deepali and Mr. Ayush were adjudged as Ms Fresher & Mr Fresher respectively. As the mercury began to rise, the dance floor was left open for some unbridled energy and the night concluded with a DJ-Nite.



Independence Day '15

The function started with the flag hoisting ceremony by Honourable Director of IIT Patna, Prof. Pushpak Bhattacharyya. This was shortly followed up by an inspiring speech by the director. Lined up next were the jingoistic events organized by the students of IIT Patna. The intellectual minds presented a mélange of cultural activities, which created an atmosphere of national pride on the premises of the institute's campus on Thursday. House of Socio-Cultural Affairs, IIT Patna organized a street play which imparted a very inspiring social message. Other events encompassed the patriotic songs sung by the students. The entire atmosphere was filled with songs full of nationalism highlighting India's flight to progress in spite its diversity.



Janmashtami

The students of Indian Institute of Technology, Patna celebrated Janmashtami with a great vivaciousness and spiritual fervour. Bhakti Vedanta Club of IIT Patna put up a festive environment by organizing the birthday of Krishna with full vigor. However, the most exciting event of evening was yet to come. House of Socio Cultural Affairs, HoSCA, IIT Patna brought the mass of the institute for 'Handi Phod' event on the campus. Filled with fun, excitement and exhilaration, the thrill continued for over an hour. Finally, with the support and coordination of each other, first and second years jointly succeeded in making a human pyramid to break the handi



Gandhi Jayanti & Swachh Bharat Abhiyaan

On the auspicious occasion of Gandhi Jayanti; a campus cleanliness drive was organized in the morning where all the students of the campus along with the faculties actively took part in cleaning the campus under the flagship of NSS. A classical musical night was organised under House of Socio-Cultural Affairs. A multitude of melodious performances were the part of the event which made the night a memorable



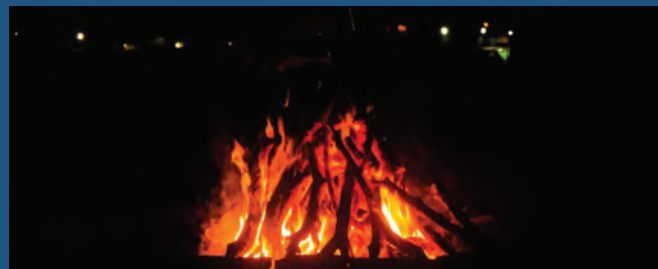
A classical recitation by Prof. Pushpak Bhattacharyya, Director, IIT Patna



Glimpses of Swachh Bharat Abhiyaan

Reverberance

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Forthcoming Events

- Women Grievance Redressal Committee (WGRC), IIT Patna is going to organize a workshop on Gender Sensitization & Awareness Program on Jan. 16, 2016
- A Three day workshop on Cross Lingual Information Access (CLIA) is to be organized from Jan. 23-25, 2016
- First International Symposium on 5G is scheduled on March 29- 31, 2016. Previously, the international 5G summit was held in Princeton (May 2015), Toronto and Santa Clara (Nov 2015).
- GIAN Courses:
Course Name - Advanced Wireless Networks: Joint Design of Technology and Business
Models Duration : 02-04-2016 to 10-04-2016
Course Name - Introduction to Natural Language Processing
Duration : 02-05-2016 to 08-05-2016
Course Name - Contemporary Youth Studies
Duration : 10-06-2016 to 20-06-2016

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Information for Impulse can be sent throughout the semester to the editorial team on impulse@iitp.ac.in

Academic Calendar for **Spring** Semester 2015-16

EVENT	DATE	DAY
Registration for all Existing UG & PG Students and Registration for all new PG Entrants (PhD Students)	Jan 04, 2016	Monday
First Day of Instruction for all Students	Jan 05, 2016	Tuesday
Last Date for Late Registration with Fine	Jan 11, 2016	Monday
Last Date for Course Adjustment for B.Tech. and M.Tech. Programmes	Jan 12, 2016	Tuesday
Communicating the List of Short Attendance Cases to Respective Faculty Advisors/Supervisors	Feb 15-18, 2016	Monday to Thursday
Mid Semester Examination (MSE)	Feb 22 – 27, 2016	Monday to Saturday
Last Date for Showing Mid-semester Answer Copies to Students	Mar 04, 2016	Friday
Mid-semester Review of UG Projects (without affecting the regular Classes)	Between March 07, 2016 and March 12, 2016	
Last date for Review of Mid-semester Performance of all Students by Department UG & PG Program Committee and Report of Academically Weak Students to their Faculty Advisors/Supervisors	Mar 10, 2016	Thursday
Last Date for Assigning Final-year-project to Pre-final year B.Tech. and M.Tech. Students	Mar 18, 2016	Friday
Last Date for Sending List of Courses to be Offered in Next Semester	Mar 23, 2016	Wednesday
Last Date for General Time Table Slot Allocation for Next Semester	April 14, 2016	Thursday
Course Evaluation Week/Course Pre-Registration Week/Submission of Applications for Changing the Branch for B.Tech. Second Semester Students/ Communicating the Final List of Short Attendance Cases to Academic Section through their Faculty Advisors or Supervisors	Between April 18, 2016 and April 21, 2016	
Display of List of Detained Students in End Semester Examination due to Short Attendance by the Academic Section	April 22, 2016	Friday
Last Day of Instructions	April 22, 2016	Friday
End Semester Examination (ESE)	April 25 – April 30, 2016	Monday to Saturday
Last Date for Submission of Grades	May 05, 2016	Thursday
Last Date for Department UG & PG Program Committee Meeting for Considering Results of all Students. Last Date for Submitting Hard Copies to the Institute UG & PG Program Coordinators	May 06, 2016	Friday
Last Date for Make-up-Examinations for Students Having "I" and "X" Grades and Submission of Letter Grades to the Institute UG & PG Program Coordinators	May 08, 2016	Sunday
IAPC Meeting	May 10, 2016	Tuesday
Declaration of Results	May 11, 2016	Wednesday
Submission of fee for Autumn Semester 2016-17	Between May 13, 2016 and the Day of Registration for Coming Autumn Semester 2016-17	
Registration for M.Tech. Students for Third Semester	May 12, 2016	Thursday
Last Date for Finalization of Branch Change	May 13, 2016	Friday
Summer Break Begins (Only for UG students)	May 02, 2016	Monday
Summer Vacation (Only for Teachers)*	May 11 – July 22, 2016	Wednesday to Friday
*Teachers Can Avail their Vacation Leave According to the Institute Rules.		
Industrial/Summer Training for B.Tech. Students of all Branches after Sixth Semester (8 Weeks Training During Summer Break)	Between May 02, 2016 and July 09, 2016	
Registration of Students for the Summer Quarter (SQ)	May 19, 2016	Thursday
SQ Classes Begin on	May 20, 2016	Friday
Mid-Term Examination for SQ	June 13 – 15, 2016	Monday to Wednesday
Conduct of Written Test/Interview by Departments for M.Tech. and PhD Admissions	May 16 - 27, 2016	Monday to Friday
Last Date for Registration of Students for Supplementary Courses	June 30, 2016	Thursday