



Prajwalam

Biannual Newsletter

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The Second Convocation of IIT Ropar



The Second Convocation of IIT Ropar was held on November 30, 2013. The Convocation was declared open by Prof. V. S. Ramamurthy, Chairman, Board of Governors of the Institute.

This was followed by a report of the Institute by Prof. M.K. Surappa, Director. Prof. Surappa started with an introduction of the Chief Guest for the Convocation, Dr. Anil Kakodkar, who is currently DAE Homi Bhabha Chair Professor at Bhabha Atomic Research Centre (BARC) and is a very distinguished nuclear scientist of India. Prof. Surappa proceeded to introduce Prof. V. S. Ramamurthy, Chairman of IIT Ropar's Board of Governors who is currently also the Director, National Institute of Advanced Studies in Bangalore and Chairman, Board of Governors, National Institute of Technology Hamirpur apart from being a prominent nuclear scientist.

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Indo-US Workshop

Indian Institute of Technology Ropar hosted a two day joint Indo-US workshop titled 'Recent Advances in Micro/Nanoscale Heat Transfer and Applications in Clean Energy Technologies' from December 21-22, 2013. The importance of micro/nanoscale heat transfer in improving the energy conversion efficiency in clean energy applications (solar thermal and PV) as well as other applications such as lighting, better cooling of data centres, as well as miniature electronic components was the main focus of this workshop.

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ICTS Conference on Knot Theory



pepartment of Mathematics of IIT Ropar in collaboration with IISER Mohali and IISER Pune, organized ICTS program "Advanced School and Discussion Meeting On Knot Theory and its Applications" during December 10 - 20, 2013 at IISER Mohali. A total of 67 participants including 25 speakers from abroad participated this program.

Speakers were from the USA, Japan, France, Greece, Serbia, Russia, UAE and India. The advanced school was mainly for graduate students and young researchers who are either working or wanting to work in knot theory and related areas. The topics included: Combinatorial Knot theory, Knot Quandles, Knot homologies, Surface knots, Knot theory and 3-manifolds, Knot invariants.

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Proposed Administrative Block in The New Campus



Independence Day

On the occasion of the Independence Day, the Director unfurled the flag. This was followed by the singing of the National Anthem. As is customary on days of national importance, a Sadbhavana Daud was organized. Faculty, staff and students participated in this race for harmony.



The Director flags off the Sadbhavana Daud (Race for Harmony)



The Director unfurls the National Flag



Hindi Pakhwada

IT Ropar organized Hindi Pakhwada from September 13-27, 2013. The aim was to encourage and promote the knowledge and skills in the use of the official language in accordance with the policy of the Government of India. During the Hindi Pakhwada, ten competitions that tested the Hindi oratory, literary acumen of the IIT Ropar fraternity were held. The Director emphasized the need to give Hindi the respect it deserves in the fast changing globalized world.

IIT Ropar leads in Research Impact

IT Ropar is the frontrunner in terms of research impact among the eight new IITs. According to an article in the Indian Express, a recent journal citation assessment commissioned by the new IITs through a reputed agency had IIT Ropar scoring highest in the hindex. According to the latest data, IIT Ropar leads the new IITs pack with an average citation per paper (ACPP) of 2.55 and h-index of 9.

MoU with UNDL Foundation

IT Ropar signed a memorendum of understanding (MoU) with the UNDL Foundation, Switzerland to collaborate in the area of language technology research with a focus on the Universal Networking Language (UNL). A project concerning the development of UNL grammar of two Indian languages is already in the process under the investigation of Dr. Somdev Kar, Department of Humanities and Social Sciences.

RuTAG Meeting

The third meeting of RuTAG with the NGOs and government organizations was held on August 12, 2013 at IIT Ropar. Technological gaps in agricultural practices were identified, and an attempt was made to find scientific solutions that would enable farmers to get more out of agriculture. Organizations such as National Bank for Agriculture and Rural Development, Kheti Virasat Mission, Ambuja Cement Foundation, Mahila Jagriti Swayamsevi Sanstha, Kheti Virasat NGO, and Krishi Vigyan Kendra, Punjab Agriculture University actively supported the activities of RuTAG centre.



Talk by Prof. P. Balaram

Prof. P. Balaram, Director, IISc, Bangalore delivered an Institute Lecture on 'Thinking aloud on Higher Educational Institutions' on September 27, 2013. The



lecture drew an enthusiastic response from the large audience present, as many of the points he touched were in keeping with their own experiences in educational institutions. Prof. Balaram talked about the need to excel in both the fields of teaching and research. He also shared his experiences in academia.

Talk by Prof. Jainendra Jain

Prof. Jainendra K. Jain delivered an Institute lecture on August 31, 2013 on Exotic Particles in Silicon MOSFETs. He is a condensed matter theorist and best known for work leading to the discovery of exotic particles



called "composite fermions", which he had postulated to explain the fractional quantum Hall effect and to develop a unified theory of the fractional and the integral quantum Hall effect. An alumnus of IIT Kanpur and Stony Brooke University, Prof. Jain was a co-recipient of the Oliver E. Buckley Prize in 2002, awarded by the American Physical Society, the highest award in the United States in the field of condensed-matter physics.

Award and Recognition

- Dr. C. C. Reddy (Asst. Professor, Dept. of EE) was invited as a member of international advisory committee for conference IEEE ISEIM 2014, Japan.
- **Dr. Himanshu Tyagi** (Asst. Professor, SMMEE) was awarded Travel Fellowship by Centre for International Co-operation in Science (CICS), for attending the ASME 2013 4th Micro/Nanoscale Heat & Mass Transfer International Conference, Hong Kong, China, December 11-14, 2013.
- Mr. Vikash Siwach (PhD Scholar, Dept. of Mathematics) has been selected as a grantee of the NANUM 2014 Travel Grants (within the range of \$1,300~\$2,700) to attend SEOUL ICM 2014.
- Ms. Deepika, (PhD Scholar, Dept. of Physics) has received best paper award in International E-Workshop on Computational Condensed Matter Physics and Materials Science 2013 held at IIITM Gwalior, with co-authors Dr. T. J. Dhilip Kumar and Dr. Rakesh Kumar.
- Mr. S. Rohit Sai and Mr. Rohan Ravi (B. Tech Students of Dept. of EE) received Best Presentation award at IEEE/IIAE ICISIP-2013 held at KIT, Kitakyushu, Japan.
- **Ms. Yayati Gupta** (PhD Scholar, Dept. of CSE) attended a workshop organized by Hong Kong University & Imperial College Summer School held during July 16-19, 2013 (Funded by Imperial College and IIT Ropar).
- Mr. Pankaj Dwivedi (PhD Scholar, Dept. of HSS) participated in Hornby Regional School on 'Lower Resource Classrooms' in collaboration with British Council at Kathmandu, Nepal during November 26-30, 2013.
- Mr. Pankaj Dwivedi (PhD Scholar, Dept. of HSS) was invited and participated (with travel grant up to €1000) in 'INNET Summer School on Technological Approaches to the Documentation of Lesser-Used Languages' held during September 1-14, 2013 in Gniezno, Poland (Funded by European Commission).

Master Plan of IIT Ropar New Campus

The Board of Governors, IIT Ropar has approved the master plan of the new buildings that is to be set up on nearly 500 acres. The master plan is supposed to accommodate approx. 10,000 students. The Academic Block will be built for up to 2,500 students in the first phase. Three boys' hostels and one girl's hostel will be constructed besides appropriate number of faculty and staff residences. The first phase of construction is likely to begin soon.





The Second Convocation of IIT Ropar

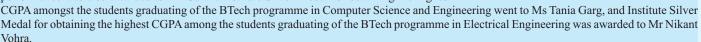
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The Director, in particular, mentioned the one respect in which the second convocation was unique: the Institute was awarding its first PhD degree along with awarding degrees to the second graduating batch of BTech. This acknowledgement was followed by a detailed report of the progress the Institute has made since it started functioning in the transit campus four years ago.

After the Director's presentation of the Institute report, Chairman, BoG, addressed the gathering. He offered his best wishes to the students receiving their degrees, and proceeded to identify the challenges faced by newly established IITs. Faculty shortage due to market forces, and the loss of the traditional aura associated with the teaching profession, and inadequate infrastructure were cited as some of the reasons for the lack of motivation among the best of students of today to take up higher education and research leading to a teaching career. One of the solutions mentioned was the possibility of putting in place a national structured faculty intern programme. After identifying promising young graduates, they can be nurtured through their MTech, PhD and a stint of Post-Doctoral programme lasting over almost a decade with an assured opportunity for a teaching career in Institutions of higher learning. Prof Ramamurthy expressed his faith in IIT Ropar's ability to offer a unique environment for training in problem solving considering its multidisciplinary strengths. He, then, introduced to the gathering the Chief Guest of the Convocation, Dr Anil Kakodkar, and invited him to deliver the Convocation Address.

The Chief Guest, Dr Anil Kakodkar, started his address by thanking Prof Surappa and authorities of IIT Ropar for inviting him to the Convocation. He talked about the role that IITs play in our society and the nation's need for them. He complimented IIT Ropar for its efforts to enhance the number of high quality engineering graduates. Dr Kakodkar congratulated the graduating students and pointed out that the country's development process needs them and that this phase the country is going throw holds plenty of opportunities for them. He emphasized the need for high quality research in our engineering and technological institutions. Dr Kakodkar also talked about the need to bridge the considerable gap between our academia and our industry, and discussed the many possibilities of technology being brought to bear on societal issues. Dr Kakodkar concluded by wishing the students well in their further pursuits.

The Chief Guest's speech was followed by the award of degrees by the Chairman of the Senate. After the award of degrees, medals were presented by the Chief Guest and the Chairman, Board of Governors to the meritorious students. The President of India Gold Medal for obtaining the highest CGPA amongst the graduating students of BTech in the year 2012-13 was awarded to Mr Rahul Gulati of Mechanical Engineering. The Director Gold Medal for the best all round performance was also awarded to Mr Gulati. Institute Silver Medal for obtaining the highest



The Chairman, Board of Governors, Prof V.S. Ramamurthy declared the Convocation closed.







Placement News

The placement season (2013-14) of the third graduating batch (B. Tech-2010) at IIT Ropar began with interviews in December of 2013. However, pre-placement talks and other pre-selection processes had already commenced in November, 2013. The companies that had confirmed their participation in the 2013-14 campus placements so far include: EPIC Systems, WorldQuant, eBay/PayPal, Amazon India, Arista Networks, Microsoft India, Edifecs, Indian Navy, DRDO, Nagarro Software, Trident, Lucid India Software, Cognizant Technology Solutions, Cisco, Samsung India Electronics, Timetooth Technologies and Oceaneering.

The number of students who have been placed so far in Computer Science and Engineering, Electrical Engineering and Mechanical Engineering is 35, 11 and 2, respectively. Further placements are expected to resume from February 2014 onwards, after the GATE exam, when companies that hire based on GATE score, notably PSUs, start arriving for on-campus tests and interviews.

Of the above-mentioned organizations, Arista Networks, Amazon India and Microsoft India visited IIT Ropar to deliver pre-placement talks, conduct screening/written tests for 2011-batch students and select summer interns. This was in addition to their taking part in the placement process. Arista Networks made internship offers to 5 B.Tech students of 2011-batch. Amazon India made internship offers to 7 students and Microsoft took 1 intern. One student managed an internship in Germany via the DAAD program. A team from Aston University, U.K., is expected to arrive shortly for the internship selection process.





Single Crystal X-ray Diffractometer Facility

T he aim of the facility is to provide single crystal X-ray diffraction analysis for determining crystal structures of molecular and supramolecular structures of various samples and also, to train our students on chemical crystallography. The facility is equipped with a state-of-the-art Bruker D8 venture diffractometer system. It consists of four-axis KAPPA goniometer module with an air cooled PHOTON 100 CMOS detector, INCOATEC microfocus X-ray source (Mo K α), radiation safety enclosure and a video Camera. For variable temperature data collection, an Oxford Cryosystem, COBRAPLUS which can produce nitrogen gas from air and cools it to provide liquid nitrogen required for variable temperature data collection is installed. The entire system is automated and controlled by a computer.

Sponsored R&D Projects

- 1. Arvind, K. Gupta (PI): "Mathematical Modeling of two-channel exclusion process relevant to real world: Analysis and simulation" approved under the SERC fast track scheme for young scientist in Mathematical Science, DST, Govt. of India.
- 2. C. C. Reddy (PI): "Experimental Investigations on Breakdown Phenomenon in Power Cables", DST, Govt. of India, Rs. 55 Lakhs.
- 3. D. Mandal (PI): "New Archetype of Ionic Liquids and their Applications in Electrolytes and other Systems", BRNS, 2014-2017, Rs. 23.55 Lakhs.
- 4. Ekta Singla (PI): "Modular Strategy for development of customized industrial robotic arms", DST-SERB Fast Track Scheme for young Scientists, October, 2013, Rs. 24,78,000 (3 years).
- 5. Kamal K. Chaudhary (PI): "Neurocognition of Ergative Languages", DST, Govt. of India (Cognitive science research Initiative project, 3 Years, Rs. 40.6 Lakhs.
- Ramjee Repaka (PI) "Assessment of Thermally Induced Damage of Healthy Cell Volume During Radiofrequency Ablation of Breast Malignant Tissues" DST, Govt. of India, Rs. 24 Lakhs (Approx.).

Research Publications

Department of Chemistry

- 1. Bhardwaj, V. K., Saluja, P., Hundal, G., Hundal, M. S., Singh, N. and Jang, D. O. "Benzthiazole-based multifunctional chemosensor: fluorescent recognition of Fe(III) and chromogenic recognition of HSO4-"Tetrahedron 69 (2013): 1606-1610.
- Bhardwaj, V. K., Kaur, N., Ningh, N. and Kaur, K. "Fluorescent primary sensor for zinc and resultant complex as secondary sensor towards phosphorylated biomolecules: INHIBIT logic gate" Inorganica Chimica Acta 399 (2013): 1-5.
- 3. Bhardwaj, V. K., Sharma, H., Kaur, N. and Singh, N. "Fluorescent organic nanoparticles (FONs) of rhodamine-appended dipodal derivative: highly sensitive fluorescent sensor for the detection of Hg2+ in aqueous media" New Journal of Chem. 37 (2013): 4192-4198.
- 4. Rana, S. B., Bhardwaj, V. K., Singh, S. A., Singh, N., Kaur, N. "Synthesis and optical characterization of ZnO nanoparticles capped with 2-aminothiols" Journal of Materials Science: Materials in Electronics 24 (2013): 20-26.
- 5. Sharma, H., Bhardwaj, V. K., Kaur, N., Singh, N. and Jang, D.O "A benzimidazole-based Co3+ complex for electrochemical and spectroscopic recognition of I- and in semi-aqueous media" Tetrahedron Letters 54 (2013): 5967-5970.
- Kaur, S., Bharadwaj, V. K., Kaur, A., Singh, N. and Kaur, N. "Differential recognition of anions with ZnO based urea-coupled sensors" Materials Letters 107 (2013): 154-157
- Nagaraja, C. M. and Kaur, M. "Template-free Synthesis of CdS Microspheres Composed of Nanocrystals with a new Sulfur Source" Materials Letters 111 (2013): 230-233
- Singh, A., Raj, T., Aree, T., Singh, N. "Fluorescent Organic Nanoparticles of Biginelli-Based Molecules: Recognition of Hg2+ and Cl-in an Aqueous Medium" Inorg. Chem. 52 (2013): 13830-13832.
- 9. Sharma, H., Singh, A., Kaur, N. and Singh, N. "ZnO-Based Imine-Linked Coupled Biocompatible Chemosensor for Nanomolar Detection of Co2+" ACS Sustainable Chem. Eng. 1 (2013): 1600-1608.
- 10. Fegade, U., Sharma, H., Tayade, K., Attarde, S., Singh, N. and Kuwar, A. "An amide based dipodal Zn2+ complex: nano-molar detection of HSO4- in a semi-aqueous system" Org. Biomol. Chem. 11 (2013): 6824-6828.
- 11. Raj, T., Singh, N. and Ishar, M.P.S. "Unusual transformation of substituted-3-formylchromones to pyrimidineanalogues: Synthesis and antimicrobial activities of 5-(o-hydroxyaroyl) pyrimidines" Bioorganic & Medicinal Chemistry Letters 23 (2013): 6093-6096.
- 12. Sharma, S., Hundal, S. M., Singh, N. and Hundal, G. "Nanomolar fluorogenic recognition of Cu(II) in aqueous medium-A highly selective "on-off" probe based on mesitylene derivative" Sensors and Actuators B: Chemical 188 (2013): 590-596.
- 13. Saluja, P., Kaur, N., Kang, J., Singh, N. and Jang, D. O. "Benzimidazole-based chromogenic chemosensor for the recognition of oxalic acid via counterion displacement assay in semi-aqueous medium" Tetrahedron 69 (2013): 9001-9006.
- 14. Kim, M. J., Sharma, H., Singh, N. and Jang, D.O. "L-cysteine recognition triggered by Zn2+ complexation with ligand" Inorg. Chem. Commun., 36 (2013): 96-99.
- 15. Gao, J., Chen, P., Singh, Y., Zhang, X., Szekely, Z., Stein, S. and Sinko, P.J. "Novel monodisperse PEGtide dendrons: design, fabrication, and evaluation of mannose receptor-mediated macrophage targeting" Bioconjugate Chemistry 24 (2013): 1332-1344.
- Kore, R., Srivastava, R. and Satpati, B. "Highly efficient nanocrystalline zircon-silicatecatalysts for the aminolysis, alcoholysis, and hydroaminationreactions" ACS Catalysis 12(2013): 2891-2904.
- Anu Prathap, M.U., Srivastava, R. and Satpatib, B. "Simultaneous detection of guanine, adenine, thymine, and cytosine at polyaniline/MnO2 modified electrode" Electrochimica Acta 114 (2013): 285-295.
- Anu Prathap, M.U., Srivastava, R. and Satpatib, B. "Simultaneous detection of guanine, adenine, thymine, and cytosine at polyaniline/MnO2 modified electrode" Electrochimica Acta 114 (2013): 285-295.
- Anu Prathap, M.U., Anuraj, V., Satpati, B. and Srivastava, R. "Facile preparation of Ni(OH)2–MnO2 hybrid material and its application in the electrocatalytic oxidation of hydrazine" Journal of Hazardous Materials 262 (2013): 766-774.



- Kaur, B., Tumma, M. and Srivastava, R. "Transition-Metal-Exchanged Nanocrystalline ZSM-5 and Metal-oxide-Incorporated SBA-15 Catalyzed Reduction of Nitroaromatics Industrial and Engineering" Chemistry Research 52(2013): 11479-11487.
- 21. Jayanthi, N., Srivastava, R., Carlos, A.H., Gómez, J.M. T., Pandiyan, T., Camacho-Arroyo, I. and González-Arenas, A. "Synthesis, structural and spectral properties of Au complexes: Luminescence properties and theirnon-covalent DNA binding studies" Applied Organometallic Chemistry (2013) DOI 10.1002/aoc.3035.
- 22. Anu Prathap, M.U., Aguilar, Carlos, A. H., Pandiyan, T. and Srivastava, R. "Synthesis of imidazole based NHC-Au(I) complexes and their application in non-enzymatic glucose sensing" Journal of Applied Electrochemistry 43 (2013): 939-951.
- 23. Tharamani, C. N., Schaefer, D., Schuhmann, W. and Dimcheva, N. "Electrochemically deposited Pd-Ptand Pd-Au co-deposits on graphite electrodes for electrocatalytic H2O2 reduction" Anal. Chem. 85 (2013):7897–7903.

Department of Computer Science

1. Gaur, D. R, Mudgal, A. and Singh, R. R. "Routing vehicles to minimize fuel consumption" Operations Research Letters 41.6 (2013):576-580.

Department of Electrical Engineering

1. Reddy, C. C., Tiwana, A. P.S., Gupta, A. and Chahal, J.S. "Role of interfacial surface area on the physical phenomena of nanocomposites" Journal of Micro & Nano Letters IET, 8.11 (2013): 841,844.

Department of Mathematics

- 1. Gupta, A. K. and Dhiman, I. "Coupling of two asymmetric exclusion processes with open boundaries" Physica A: Statistical Mechanics and its Applications 392.24 (2013): 6314-6329.
- 2. Gupta, A. K. and Redhu, P. "Analyses of driver's anticipation effect in sensing relative flux in a new lattice model for two-lane traffic system" Physica A. 392.22 (2013): 5622-5632.
- 3. Gupta, A. K. and Redhu, P. "Analysis of a modified two-lane lattice model by considering the density difference effect" Communications in Nonlinear Science and Numerical Simulation 19.5 (2013): 1600–1610.
- 4. Gupta, A. K. and Redhu, P. "Analyses of the driver's anticipation effect in a new lattice hydrodynamic traffic flow model with passing" Nonlinear Dynamics (2013) DOI 10.1007/s11071-013-1183-2.
- 5. Pramanik, S. and Mishra, M. "Linear Stability Analysis of Korteweg Stresses Effect on Miscible Viscous Fingering in Porous Media" Physics of Fluids 25.074104 (2013).
- 6. Panda, S. and Martha, S. C. "Interaction of water waves with small undulation on a porous bed in a two-layer ice-covered fluid" Journal of Marine Science and Application, Springer 12.4 (2013): 381-392.

Department of Humanities and Social Sciences

- 1. Bardhan, S. and Mukherjee, V. "Willful Default in Developing Country Banking System: A Theoretical Exercise" Journal of Economic Development, The Economic Research Institute of Chung-Ang University, Korea, 38.4, (2013): 101-121.
- 2. Bardhan, S. "Profit Efficiency of Indian Commercial Banks during the Post-Liberalisation Period: A Stochastic Frontier Approach" Margin, The Journal of Applied Economic Research, Sage Publications, New Delhi 7. 4(2013): 391–415.
- 3. Kar, S. "Complex onsets in regional varieties of Bangla" Language Sciences 40 (2013): 212-220.
- 4. Khushu-Lahiri, R. "Review of John Kinsella, Post-colonial: A Récit" Transnational Literature 6.1 (2013).
- 5. Khushu-Lahiri, R. "Review of the Magic of Bollywood: At Home and Abroad" Asiatic 7.2 (2013).
- Ringo, R. "Intersections: The Simultaneity of Gender and Racial Exploitation in Margaret Laurence's This Side Jordan." Atlantic Critical Review. 12.2 (2013): 62-79
- 7. Ringo, R. "It's in Character and Nuance and Mood': Truth in Michael Ondaatje's Anil's Ghost." Indian Journal of World Literature and Culture. 9 &10 (2013): 103-110

School of Mechanical, Materials & Energy Engineering

- 1. Grewal, H. S., Singh, H., and Agrawal, A., "Slurry Erosion Performance of Ni-Alumina Thermal Spray Coatings: Effect of Impingement angle" Journal of Thermal Spray Technology (2013): 1-13.
- 2. Grewal, H. S., Agrawal, A. and Singh, H. "Slurry Erosion Mechanism of Hydroturbine Steel: Effect of Operating Parameters" Tribology Letters 52.2 (2013): 287-
- 3. Grewal, H. S., Agrawal, A. and Singh, H. "Slurry erosion performance of Ni-Al2O3 based composite coatings", Tribology International 66 (2013): 296-306.
- 4. Grewal, H. S., Agrawal, A., and Singh, H. "Identifying Erosion Mechanism: A Novel Approach", Tribology Letters 51.1 (2013): 1-7.
- Grewal, H. S., Singh, H. and Agrawal, A. "Microstructural and Mechanical Characterization of Nickel-Alumina Thermal Sprayed Coatings", Surface and Coating Technology 216, (2013): 78–92.
- Bhowmik, A., Singla, R. K., Roy, P. K., Prasad, D. K., Das, R. and Repaka, R. "Predicting geometry of rectangular and hyperbolic fin profiles with temperature-dependent thermal properties using decomposition and evolutionary methods" Energy Conversion & Management 74 (2013): 535-547.
- 7. Tiwari, A.K. and Prasad, J. "Investigating the Role of Shear Strain in Bone Adaptation" Indian Journal of Biomechanics, 4.1 (2013): 26-34.
- 8. Sarkar, P. and Chakrabarti, A. "A support for protocol analysis for design Research" Design Issues, MIT Press 29.4 (2013): 70-81.
- 9. Joung, C. B., Carrell, J., Sarkar, P. and Feng, S. C. "Categorization of indicators for sustainable manufacturing" Ecological Indicators 24 (2013): 148-157.
- 10. Gulati, R., Reddy, A., Khullar, V., Bhalla, V., Tyagi, H., Zhao, Y., Law, E., and Taylor, R. A. "Enhancing the efficiency of absorption refrigeration cycle by seeding nanoparticles directly in the working fluid" International Journal of Environmental Studies 70.5 (2013): 808-823.

Library

1. Kaur, H. "Digital Preservation: Problems and Prospects" Rayat Bahra Journal of Education, Winter 1.2 (2013).

Conference Proceedings/Papers Presented

Department of Chemistry

- 1. Kaur, R. and Kumar, T. J. D. "Hydrogen interaction with titanium functionalized calixarenes" A computational study at Current Trends in Theoretical Chemistry-2013, organized by BARC, Mumbai held during September 26-28, 2013.
- 2. Samolia, M. and Kumar, T. J. D. "A computational study of hydrogen storage in titanium functionalized Mg-BN-framework" at Current trends in Theoretical Chemistry 2013 held at BARC, Mumbai, India held during September 26-28, 2013.

Department of Electrical Engineering:

- 1. Gupta, A., Reddy, C. C. "Sparse de-convolution of space charge signal in PEA method" Signal Processing, Computing and Control (ISPCC) 2013, IEEE International Conference 26-28th Sept. (2013): 1,4.
- 2. Tiwana, A.S., Reddy, C. C. "Design and development of microcontroller driven, portable, low-cost HVDC source" Signal Processing, Computing and Control (ISPCC) 2013, IEEE International Conference, September 26-28, 2013.
- 3. Tiwana, A. S., Reddy, C. C. "Some Investigations on Temperature Dependent Breakdown of Electric Cables under no Load" IEEE Catcon, December 6-7, 2013.
- Sodhi, R, "Evaluating PMU Site Performance using Multi Attribute Utility Theory" IEEE Conference on Innovative Smart Grid Technologies, November 10-13, 2013.



Department of Humanities and Social Sciences:

- Bardhan, S. "Causality Relationships between Cost Efficiency and Non-performing Assets Of Banks: A Dynamic Panel Data Approac" In Three day National Conference on Economic Reforms, Growth and Social Welfare organized by Department of Economics, School of Global Studies, Central University of Kerala, India during December 16-18, 2013.
- 2. Behera, S. R. "Horizontal and Vertical Technology Spillover of Foreign Direct Investment: An Evaluation across Indian Manufacturing Industries" Structural Change, Dynamics and Economic Growth, Livorno, Italy, Conference organized by University of Pisa during September 12-14, 2013.
- 3. Behera, S. R. "Saving-Investment Dynamics and Capital Mobility in the Newly Industrialized Countries" 50th Annual Conference of the Indian Econometric Society, IGIDR, Mumbai during December 22-24, 2013.
- 4. Kumar, N., and Choudhary, K. K. "A corpus-based analysis of animacy in Hindi" Paper presented at the 35th Annual & 1st International Conference of Linguistic Society of India, CIIL Mysore, November 27-29, 2013.
- 5. Dwivedi, P., Chand, G. and Kar, S. "Technological approaches to linguistic documentation and meta-Documentation" Presented at the 34th Annual International Conference of Linguistic Society of Nepal, Kathmandu, Nepal during November 26-27, 2013.
- 6. Chand, G., Kar, S., Dwivedi, P. and Kumar, N. "Endangering a language: A study of language contact and language loss" Presented in the conference Seminar on Endangered and Lesser Known languages held at University of Lucknow during October 23-24, 2013.
- 7. Khushu-Lahiri, R. "Literature in Exile: A Study of Kashmiri Diasporic Writers" presented at the Sixth Global Conference Diasporas: Exploring Critical Issues, held in Oxford University, UK during July 6-8, 2013.
- 8. Khushu-Lahiri, R. "Bakhtin and the Bani of Saint Ravidas in Guru Granth Sahib" presented at the International conference on Bakhtin in India: Exploring the Dialogic potential in self, culture and history held in Gandhinagar, Gujarat during August 19-21, 2013.
- 9. Ringo, R. "The Significance of Metaphor in Satyajit Ray's Shatranj ke Khilari. Paper presented at the 2013 Metaphor Festival organized by Stockholm University, Stockholm, Sweden during August 29-31, 2013.

Department of Mathematics:

- Dhiman, I. and Gupta, A. K. "Two-channel partially asymmetric exclusion process model with open boundaries" International Conference on MathematicalModeling and Numerical Simulation (2013), Department of Applied Mathematics, School for Physical Sciences, Babasaheb Bhimrao Ambedkar University, Lucknow, India.
- Redhu, P. and Gupta, A. K. "Analyses of individual anticipation driving behavior in a modified two-lane lattice hydrodynamic model with density difference" International Conference on Mathematical Modeling and Numerical Simulation (2013), Department of Applied Mathematics, School for Physical Sciences, Babasaheb Bhimrao Ambedkar University, Lucknow, India.
- 3. Dhiman, I. and Gupta, A. K. "Effect of a static bottlelneck in a continuum traffic flow model" 2nd International conference on engineering and computational Mathematics (ECM 2013), Hong Kong Polytechnic University, December 16-18, 2013.
- Panda, S. and Martha, S. C. "Oblique wave diffraction by varying porous bottom in the presence of surface tension" AIP Conference Proceedings, Published by American Institute of Physics 1536 (2013): 595-596.
- 5. Panda, S., Martha, S. C. and Chakrabarti, A. "An integral equation approach to the fully nonlinear fluid flow problem in an infinite channel over arbitrary bottom topography" NonlinearMechanics: Proceedings of the Sixth International Conference, August 12-15, Shanghai, China edited by Zhewei Zhou, Published by DEStech Publications, Inc., USA, (2013): 90-94.
- Pramanik, S. and Mishra, M. "Miscible viscous fingering of pushed versus pulled interface" Proceedings in COMSOL Conference, Bangalore, India during October 17-18, 2013.
- Rana C., De W.A., Martin, M. and Mishra, M. "Strong sample solvent and viscous fingering effects on the dynamics of adsorbed solutes" 66th Annual Meeting of APS Division of Fluid Dynamics (DFD13), Pittsburgh, Pennsylvania USA during November 24-26, 2013.
- 8. Mishra, M., Pramanik, S. "Effect of transient interfacial tension on miscible viscous fingering" 66th Annual Meeting of APS Division of Fluid Dynamics (DFD13), Pittsburgh, Pennsylvania, USA during November 24-26, 2013.
- 9. Pramanik, S. "Effect of Péclet number on miscible viscous fingering: linear stability theory" 58th meeting of Indian Society of Theoretical and Applied Mechanics (ISTAM 2013), Kolkata, India during December 18-21, 2013.

School of Mechanical, Materials & Energy Engineering:

- Grewal, H. S., Agrawal, A., and Singh, H. "Slurry erosion of thermal spray coating: Effect of sand Concentration", Malaysian International Tribology conference (MITC-2013), Kota Kinabalu, Sabah, Malaysia during November 18-20, 2013.
- 2. Singla, R.K., Das R., Bhowmik, A. and Repaka, R. "Inverse heat transfer analysis of porous extended surface using simplex search method" ASME-2013: Gas Turbine India Conference, CSIR, National Aerospace Laboratories (NAL), Bangalore, India.
- 3. Bhowmik, A., Repaka, R., Mulaveesala, R. and Mishra, S.C. "Thermal Characterization of Varying Subcutaneous Fat Thickness Using Thermal Wave Imaging Technique" 22nd National and 11th ISHMT-ASME Heat and Mass Transfer Conference, IIT Kharagpur, India during December 28-31, 2013.
- 4. Repaka, R. and Satyamurty, V. V. "Effect of Viscous Dissipation on Wall Heat Transfer and Energy Gain by the Fluid: Parallel Plate Channel Subjected to Unequal Wall Temperatures" 22nd National and 11th ISHMT-ASME Heat and Mass Transfer Conference, IIT Kharagpur, India during December 28-31, 2013.
- 5. Bhowmik, A., Repaka, R., Mishra, S. C. and Mitra, K. "Thermal Assessment of Ablation Limit of Subsurface Tumor During Focused Ultrasound and Laser Heating" 22nd National and 11th ISHMT-ASME Heat and Mass Transfer Conference, IIT Kharagpur, India during December 28-31, 2013.
- 6. Bhowmik, A., Repaka, R., Mishra, S. C. "Thermal Imaging and Screening of Subsurface Cancer during Thermal Recovery after Cold Stress" The 10th International Conference on Flow Dynamics (ICFD 2013), Sendai, Japan during November 25-27, 2013.
- Bhowmik, A., Repaka, R., Mishra, S. C. and Mulaveesala, R. "Detection of Subsurface Skin Lesion Using Frequency Modulated Thermal Wave Imaging: A Numerical Study, ASME 2013" International Mechanical Engineering Congress and Exposition, San Diego, CA, USA during November 15-21, 2013.
- 8. Repaka, R. and Satyamurty, V. V. "Effect of Viscous Dissipation on Forced Convection Heat Transfer in Parallel Plate Channels with Asymmetric Boundary Conditions, ASME 2013" International Mechanical Engineering Congress and Exposition, San Diego, CA, USA during November 15-21, 2013.
- 9. Singla E. and Dasgupta B. "Maneuvering Redundant Manipulators in Cluttered Environments." IEEE 6th Robotics and Mechatronics Conference (RobMech) held at South Africa, October 30-31, 2013.
- 10. Singla E., Singl S. and Gupta S. "Novel Modular Strategy for the Fabrication of Robotic Manipulators Based Upon Task-Based Designs." 1st International & 16th National Conference on Machines and Mechanisms (iNaCoMM 2013) held at IIT Roorkee, India, Dec. 18 20, 2013.
- 11. Vijayaraghavan, K., Tyagi, H., Randhawa, S., and Singh, M. "Wind Solar Hybrid Power System Modelling and Analysis" ASME 2013 7th International Conference on Energy Sustainability and 11th Fuel Cell Science, Engineering and Technology Conference, Minneapolis, Minnesota, USA during July 14-19, 2013
- 12. Mittal, T., Saroha, S., Bhalla, V., Khullar, V., Tyagi, H., Taylor, R. A., and Otanicar, T. P. "Numerical Study of Solar Photovoltaic/Thermal (PV/T) Hybrid Collector Using Nanofluids" ASME 2013 4th Micro/Nanoscale Heat & Mass Transfer International Conference, Hong Kong, China during December 11-14, 2013.

Library

1. Bhattacharya, A. "Relationship with Library Users: A user satisfaction approach". (Proceedings of) Libraries in the Digital Era, Seminar organized by Chandigarh Librarian's Association and Dev Samaj College, October 11, (2013): 31-34.



Session Chaired/Invited Lectures

Department of Chemistry

C. N. Tharamani

- 1. Invited talk titled "Scanning electrochemical method for the local visualization of electrocatalytic activity of oxygen reduction reaction" at NSEST 2013, Electrochemical Society of India, Indian Institute of Science, Bangalore during August 23-24, 2013.
- 2. Invited talk titled "Electrochemistry and chemical kinetics" at VIBE, Rayat International School, Rupnagar, Punjab on 4th of October 4, 2013.
- 3. Invited talk titled "Design of Active Catalysts for Tomorrow's Energy Claim" on the occasion of Golden Jubilee celebration of Indian Chemical Society, at 50th Annual Convention of Chemists, Department of Chemistry, Panjab University, Chandigarh during December 4-7, 2013.
- 4. Invited talk titled "Science & Research" at Sree Siddaganga College of Arts, Science and Commerce for Women, Tumkur, INSPIRE Internship Science Camp, organised by DST, Govt. of India during December 24-29, 2013.

Narinder Singh

- 1. Invited Talk titled "Chemosensor Development: Fluorescent Organic Nanoparticles and Organic-Inorganic Hybrid Nanoparticles" at International Conference on Interdisciplinary Areas with Chemical Sciences (ICIACS 2013) on October 31, 2013 (INST Mohali & PU Chandigarh).
- 2. Invited Talk titled "Strategies in Supramolecular Chemistry" at Mata Gujri College on October 11, 2013.
- 3. Invited Talk titled "Recent Advancements in Nanosciences and Technology" at Chandigarh University on September 19, 2013.
- 4. Invited Talk titled "Applications of Nanomaterials in Engineering Applications" at GGS College of Modern Technology on November 8, 2013.
- 5. Invited talk titled "Aggregate-Induced Fluorescence Emission" at UNAM, Mexico, on December 2, 2013.

R. Srivastava

1. Invited talk titled "Mesoporous zeolites, a new concept in nanoporous material: Fundamental approach to insert mesoporosity is zeolite microcrystal and its application in industrial research" Organized by Institute of Nanoscience and Nanotechnology, Mohali on November 8, 2013.

Yashveer Singh

- 1. Invited talk titled "Design, development, and evaluation of PEG-based biomaterials for targeted drug delivery" 50th Annual Convention of Chemists, Indian Chemical Society, Department of Chemistry, Panjab University, Chandigarh on December 6, 2013.
- 2. Invited talk titled "Emerging trends in biomedical nanotechnology" on Nanotechnology at Department of Applied Sciences and Humanities, RIMT Institute of Engineering and Technology, Mandi Gobindgarh on August 20, 2013.

Department of Electrical Engineering

C. C. Reddy

- 1. Invited talk titled "Experimental Investigations on breakdown phenomena in power cables" at Indian Institute of Technology Madras on November 22, 2013.
- 2. Invited talk titled "Investigations on nano composite materials for electrical insulation" at Central Electricity Authority, New Delhi, on December 7, 2013.

Department of Humanities and Social Sciences

Kamal Kumar Chaoudhary

- 1. Invited talk titled "Ambiguity resolution: Computational and Psycholinguistic perspectives" Workshop on Language, Cognition and Computation in the International Conference on Mining Intelligence and Knowledge Exploration, VHNSN College, Virudhunagar, Tamil Nadu on December 18-20, 2013.
- Invited talk titled "The electrophysiology of language comprehension: some contemporary issues" at International Symposium on Advances in Language-Cognition Research, Centre for Neural and Cognitive Sciences, University of Hyderabad on October 30, 2013.

Somdev Kar

1. Invited talk titled "Role of Linguistics in Natural Language Processing" at the TEQIP-II National Workshop on Natural Language Processing, organized by the Department of Computer Science and Engineering, Thapar University, Patiala, India on December 7, 2013.

Department of Mathematics

Manoranjan Mishra

1. Pramanik, S. and Mishra, M. "Self-similar linear stability analysis of miscible viscous fingering instability" International Conference on Mathematical Modeling and Numerical Simulation, Lucknow, India during July 1-3, 2013.

S.C. Martha

1. Invited talk titled "Research Methodology and Innovation" in the Institute Seminar Series at National Institute of Technology Rourkela on December 17, 2013.

School of Mechanical, Materials & Energy Engineering

Ekta Singla

- Chaired a session on Mechatronics at the 1st International & 16th National Conference on Machines and Mechanisms (iNaCoMM 2013), IIT Roorkee, India, December 19, 2013.
- 2. Invited talk titled "Evolutionary Robotics" at Chandigarh University, Mohali, Punjab on October 10, 2013.
- 3. Invited talk titled "Robotic Arms: Concept, Design and Performance Measures" at TEQIP sponsored short term course on Recent Trends in Materials, Manufacturing and Safety, GZS CET, Bathinda, Punjab, India on December 5, 2013.

Himanshu Tyagi

- 1. Chaired a technical session and delivered the plenary lecture on "Clean and Renewable Energy Resources" at the International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering at Punjab Technical University, Jalandhar in October 2013.
- 2. Invited talk titled "Opportunities in Solar Thermal Collectors" at Chandigarh University, India in October 2013.
- 3. Invited talk titled "Applications of Nanoparticles in Harnessing Solar Thermal Energy" during the International Conference on Interdisciplinary Areas with Chemical Sciences (ICIACS 2013) at Panjab University, Chandigarh, India in October 2013.

Department of Physics

Asoka Biswas

 Invited talk titled "Inseparability Inequalities for Multi-Spin Systems based on Bipartition" at the Quantum -Nano Winter School (QANSAS 2013), Agra during November 28 December 1, 2013.

Library

Dinesh K. S.

1. Invited talk on "Best practices in Electronic Resources Management" at the International Conference on "Challenges of Electronic Environment in Academic Libraries" organized in commemoration of Golden Jubilee Celebrations of A. C. Joshi Library, Punjab University, Chandigarh during October 29-30, 2013.

Invited Participation in Workshops/Poster Presentations

 Wang, L., Schlesewsky. M., Choudhary, K. K. and Bornkessel-Schlesewsky, I. "Actor-Undergoer Asymmetry in Learning Case Marking Strategies" Poster presented at the 5th Annual Neurobiology of Language Conference, San Diego, California, November 6-8, 2013.



- Kar, S. Invited and attended XIII UNL School (workshop) organised by the UNDL Foundation (Switzerland) at the National Academy of Sciences, Yerevan, Armenia during October 7-11, 2013.
- 3. Kaur, H. presented a poster titled "Marketing of Information Products and Services" in NACLIN 2013, 16th National Convention on Knowledge, Library and Information Networking Emerging Technologies and Innovations in Library Practices at jointly organized by DELNET and Malaviya National Institute of Technology, Jaipur during December 10-12, 2013.
- 4. Hota, T. K. and Mishra, M. "Miscible viscous fingering instability in a microfluidic Hele-Shaw cell: a non-normal linear stability analysis, Recent advances in micro/nanoscale heat transfer and applications in clean energy technologies" IIT Ropar, India, December 21-22, 2013.
- 5. Rana, C. and Mishra, M. "Influence of viscous fingering and solute adsorption in microfluidic column" Recent advances in micro/nanoscale heat transfer and applications in clean energy technologies, IIT Ropar, India, December 21-22, 2013.
- 6. Sodhi, R, IEEE Innovative Smart Grid Technologies, Bangalore. November 10-13, 2013.

Seminars @ IIT Ropar

Department of Chemistry

- 1. Dr. Diptikanta Swain, Institute of Chemical Sciences of Rennes, University of Rennes, France: "Structure-conduction correlation in layered oxide electrode and sulfate electrolyte: Insight from diffraction and Raman spectroscopy" on August 29, 2013.
- 2. Dr. Ashutosh S. Singh, Academia Sinica, Taiwan: "N-Bridged Tripodal Receptor: Reliable Candidate for Recognition and Selective Sensing of Nitrate Anion, Self-Sorting phenomenon and High-Energy Materials Synthesis" on November 29, 2013.
- 3. Dr. Rajesh Sharma, Paul-Drude-Institut, Berlin, Germany: "Transport and lasing characteristics of terahertz quantum-cascade lasers" on October 28, 2013.

Department of Humanities and Social Sciences

1. Prof. Narayanan Srinivasan, Professor & Head, Centre of Behavioural and Cognitive Sciences, University of Allahabad: "Explanation and Experimentation in Cognitive Science" on October 3, 2013.

Department of Mathematics

- 1. Prof. Gurmeet Kaur Bakshi, Dept. of Mathematics, Punjab University, Chandigarh: "On Semi-simple Group Algebra" on July 1, 2013.
- 2. Dr. R. Parthasarathi, IISER, Pune: "Moduli of Vector Bundles" on October 7, 2013.
- 3. Dr. Sutanu Roy, Mathematisches Institut, Universität Göttingen, Göttingen, Germany: "From locally compact groups to C*-quantum groups: a multiplicative unitary approach" on October 9, 2013.
- 4. Prof. Rama Govindarajan, TIFR Centre for Interdisciplinary Sciences, Hyderabad: "Instabilities in Viscosity Stratified flows" on October 10, 2013.
- Dr. Kirti Chandra Sahu, Associate Professor, IIT Hyderabad: "Lattice Boltzmann simulation of pressure-driven displacement flow of immiscible liquids" on November 7, 2013.

Department of Physics

- Dr. Gautam V. Soni, Kavli Institute of Nanoscience, TU Delft, The Netherlands: "Nanopore Biophysics, From Gene Sequencing to Gene Silencing" on August 5, 2013.
- 2. Dr. Santanu Karan, Dept. of Chemical Engineering, Imperial College of Science Technology and Medicine, UK: "Superpermeable membranes with ultra-thin nanosheet selective layer" on August 7, 2013.
- 3. Dr. Rajendra S. Dhaka, Paul Scherrer Institut, Switzerland: "Electronic structure of Iron-based high-temperature superconductors probed by angle-resolved photo-emission spectroscopy" on August 8, 2013.
- 4. Dr. Praveen Kumar, Universidad Politonica de Madrid, Spain: "Heteroepitaxy of III-Nitrides: Role of surface modifications" on August 30, 2013.
- 5. Prof. Jainendra K. Jain, Evan Pugh and Erwin W. Mueller Professor of Physics, Department of Physics, Pennsylvania State University, USA: "Exotic Particles in Silicon MOSFETs: An intriguing road to quantum computation?" on August 31, 2013.
- 6. Dr. Navinder Singh, Reader, Theoretical Physics Division, Physical Research Laboratory, Ahmedabad: "A statistical mechanical model of the pseudogap state of high Tc cuprate superconductors" on September 13, 2013.
- 7. Dr. Sunil P. Singh, Department of Polymer Science and Engineering, University of Massachusetts Amherst, Amherst, Massachusetts, USA: "Structural and dynamical behavior of complex fluids under flow" on October 7, 2013.
- 8. Dr. Manjari Bagchi, TIFR, IISc Campus, Bangalore: "Binary Radio Pulsars: Prospects and Problems" on November 14, 2013.
- Dr. Pierluigi Belli, Director, Research INFN, Italy: "Investigations on Dark Matter by DAMA/LIBRA and results on some other rare processes" on December 16, 2013.
- 10. Prof. Gurinder Pal Singh, HGST, San Jose, California: "Progress in Magnetic Data Storage Technology and Future Challenges" on December 23, 2013.

School of Mechanical, Materials and Energy Engineering

- 1. Dr. V. Jayaram, Principal Research Scientist, Solid State and Structural Chemistry Unit, IISc Bangalore: "Materials under extreme thermodynamic conditions An experimental Investigation" on May 21, 2013.
- 2. Dr. Ratan K. Mishra, ETH Zurich: "Nanoscale Studies of Building Materials and Interfaces for Construction Applications" October 4, 2013.
- 3. Prof. Gary W. Rankin, Professor, Mechanical Automotive and Materials Engineering and Interim Director, Fluid Dynamics Research Institute, University of Windsor, Windsor, Canada: "Characteristics of a Micro-scale Ranque-Hilsch Vortex Tube" on October 8, 2013.
- 4. Dr. Om Prakash Singh, IIT Mandi: "Effect of Rayleigh numbers on the evolution of double-diffusive salt fingers" on December 4, 2013.
- 5. Prof. Arun M. Gokhale, Materials Science and Engineering, Georgia Institute of Technology, Atlanta, Georgia: "Computational Materials Engineering of Meso-Scale Microstructures" on December 16, 2013.

Biomedical Engineering

- 1. Dr. Aloke Kumar, Assistant Professor, Department of Mechanical Engineering, University of Alberta, Edmonton, AB, Canada: "Micro and nano-fluidics enabled frontiers for bioenergy and biomedical engineering" on October 8, 2013.
- 2. Dr. Sunil Kumar, Founder and Director, CoatingsMantra Science and Technology Consulting, Adelaide, Australia: "Nanoscale Surface Engineering for Biomedical Applications" on November 13, 2013.

Engagements of the Director, IIT Ropar

- 1. Delivered a talk at the 36th Annual Science Festival at the National College, Bangalore on July 20, 2013.
- 2. Delivered an invited lecture in the Material Science and Technology (MS&T) -2013 conference held in Montreal, Canada during October 27-31, 2013.
- 3. Delivered a lecture on "Micro and Nano Aluminium and Magnesium Matrix Composites" in the School of Materials Science and Engineering, Georgia Institute of Technology, Atlanta, USA on October 25, 2013.
- 4. Visited University of Colorado, Denver for seminar and collaborative research work.
- 5. Participated in the PAN IIT Global Conference 2013 held in Houston, Texas, USA during December 6–8, 2013.
- 6. Chief Guest in the Annual Convocation of Guru Nanak Dev Engineering College (GNDEC), Ludhiana held on November 15, 2013.
- 7. Chief Guest at the Teachers Day Celebrations at Chandigarh University held on September 5, 2013.

New Faculty Recruits (July to December 2013)



Dr. Ravi Mohan Prasad Assistant Professor SMMEE



Dr. PremaRajagopalan Visiting Faculty (under inter IIT Faculty Exchange Programme) Humanities & Social Sciences



Dr. Pankaj Kumar Thakur **Assistant Professor Electrical Engineering**



Dr. Kailash Chandra Jena Assistant Professor **Physics**



Dr. Narayanan C. Krishnan Visiting Faculty Computer Science & Engg.



Dr. Raiesh V. Nair Assistant Professor **Physics**



Dr. Rakesh Kumar Maurya **Assistant Professor** SMMEE



Dr. Srikant Sekhar Padhee Assistant Professor SMMEE



Dr. Prabhat Kumar Agnihotri **Assistant Professor** SMMEE



Dr. Pushpendra Pal Singh Assistant Professor Physics



Dr. Mukesh Kumar **Assistant Professor Physics**



Dr. Dhiraj Kumar Mahajan **Assistant Professor** SMMEE



Dr. Jung Hyun Jun (Peter) Visiting Faculty Computer Science & Engg.

New Staff Recruits (July to December 2013)



Mr. Manvander Singh J.L.A., CSE



Mr. AshuKaushik



Mr. Amit Kumar J.T.S., SMMEE



Mr. Rupinder Singh Mundra Mr. Sukhwinder Singh



J.L.A., SMMEE



Ms. Samita Saini



Mr. Nagendra Singh



Mr. Shubham Gautam Mr. Harsimranjit Singh J.L.A, EE



J.T.S., Physics



Mr. Ashish Uniyal



J.L.A., SMMEE



Mr. Surender Kumar J.L.A., EE



Mr. Vinod Kumar J.L.A., EE



Mr. Nitin Kumar Mittal J.L.A., SMMEE



Mr. Neeraj Sharma J.L.A., Maths



Jr. Asst., Physics



Shiv Shankar Kumar J.L.A. Physics



Mr. Diwakar Sharma Mr. Daljeet Singh Saini Jr. Asst., Works & Estate Jr. Acct., Works & Estate



Ms. Pooja Pandey J.L.A. HSS



Ms. Amrit Kaur Jr. Asst., SMMEE



Mr. Kamal Jeet Singh J.T.S., EE



Ms. Neha Dandhare Jr. Asst., Diary & Dispatch



Dr. Girish Pramodrao Kathane ch J.H.T., Hindi Cell



Diwali

Diwali was celebrated with much fanfare at IIT Ropar. There were lights, lamps, sweets, fireworks, Rangoli, singing and dancing. In this festive mood, there was an element of competition as well. Every hostel competed to get the best Rangoli award, and there were several beautiful, exquisite Rangolis on display.





Post-Diwali Celebration

A cultural programme took place at IIT Ropar on November 9, 2013 where several faculty members and non-teaching staff along with their kids participated and enchanted audiences with their splendid performances. This programme was inaugurated by our honourable Director. This programme was followed by delicious dinner that too was enjoyed by all.



NCC-NSS

A Blood Donation Camp was organized on October 9, 2013 by the NSS/Blood Connect Unit of Indian Institute of Technology, as a part of the one day NSS Camp. Blood Donation Camp is carried out every year and is one of the most important social activities carried out by the NSS/Blood Connect unit of IIT Ropar. This time 93 units of blood were donated by the students, staff and the faculty members of IIT Ropar. Besides the blood donation camp NSS is active in the institute throughout the year.





Tree Plantation in the transit campus by Prof. Balaram, Director, IISc., Banglore

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Indo-US Workshop

Dr. HimanshuTyagi (Assistant Professor, SMMEE, IIT Ropar) along with Dr. Ankur Jain, (Assistant Professor at University of Texas at Arlington, USA) together co-organized the workshop which was supported by the Indo-US Science and Technology Forum (IUSSTF). Prof. M. K. Surappa, Director of IIT Ropar, inaugurated the workshop and emphasized the need for collaborative research activities between academicians from India and USA. He encouraged the participants to foster closer ties and explore the opportunities for undertaking large research projects jointly. Dr. Harpreet Singh, Coordinator of School of Mechanical Materials and Energy Engineering at IIT Ropar, highlighted the importance of inter-disciplinary research.

Six eminent researchers from USA and over ten researchers from India as well as three industry representatives participated in the workshop and presented lectures on topics ranging from micro/nanoscale heat transfer to solar thermal energy engineering.

Inter-IIT Sports

The 49th Inter IIT Sports Meet and 21st Inter IIT Staff Sports Meet were held at IIT Guwahati during December 16-23, and December 25-29, 2013, respectively. IIT Ropar participated in this Sports Meet with 94 students (84 boys and 10 girls) and 14 staff members (11 men and 3 ladies). The students of the IIT Ropar participated in Athletics, Badminton, Basketball, Cricket, Football, Table Tennis, Tennis, Volleyball and Weight Lifting in boys section and in Athletics and Volleyball in girls section. The staff of IIT Ropar participated in Athletics, Badminton and Table Tennis in men and ladies sections. Ms. Poonam Sharma won Silver medal in shot put event and Mr. Ram Kumar won the bronze medal in hammer throw. The Ladies badminton team reached the quarter final.





Design Fair

The School of Mechanical, Materials and Energy Engineering (SMMEE), IIT Ropar organized Design exhibition and industrial internship poster presentation on November 18, 2013. Students from all branches displayed their products designed in the Product design and realization I (guided by Dr. Prabir Sarkar). The final year students of mechanical engineering presented their posters describing their work during summer industrial internship (coordinated by Dr. Anupam Agrawal). Some of the projects that were displayed in the design exhibition are: Board cleaner, Tomato ketchup maker (Rutag), Mini lathe machine, Locking system, Bone alignment measuring system (PGI-IIT RPR), Pedometer, Food packaging system (RuTAG), Paneer maker (MSMEs), Protection of agriculture field from wild animals (RuTAG), Redesign of syringe crusher exterior (RuTAG), Strain remover, Plastic package joiner, Personal safety devices, and Garlic peeler. Prof. P. K. Raina,

Professor-in-charge (A&R) inaugurated the event and encouraged the students to develop more innovative products and make them saleable.



INDIAN INSTITUTE OF TECHNOLOGY ROPAR

Academic Calendar for Second Semester of AY 2013-14 (For UG & PhD)

1	Registration	Jan 06 (Mon)
2	Commencement of classes	Jan 07 (Tue)
3	Late registration	Jan 15 (Wed)
4	Last date for course Add/Drop	Jan 15 (Wed)
5	Last date for adding courses in lieu of courses dropped on Jan 15, 2014	Jan 16 (Thu)
6	Midterm evaluation project for UG	Feb 22 (Sat)
7	Last date for getting mid semester course evaluation form filled	Feb 24 (Mon)
8	Mid Semester Examination	Feb 26 (Wed) – Mar 1 (Sat)
9	Last date for return of marked answer scripts	Mar 07 (Fri)
10	Class Committee Meeting	Mar 10 (Mon)
11	Last date for Audit and Withdrawal	Mar 12 (Wed)
12	Last date for departments to float courses for next semester	Mar 24 (Mon)
13	Course registration for next semester	Apr 01 (Tue) – Apr 07 (Mon)
14	Meeting of Timetable In-charges for courses of next semester	Apr 10 (Fri)
15	Last date for Submission of project reports for UG students	Apr 14 (Mon)
16	Last date for getting course evaluation form filled	Apr 16 (Wed)
17	Project viva-voce for UG	Apr 19 (Sat)
18	Last day of classes	Apr 23 (Wed)
19	Major Examination	Apr 24 (Thu) – Apr 30 (Wed)
20	Viewing of answer scripts by the student	May 05 (Mon)
21	Last date for grades to reach to the Academics Section	May 06 (Tue)
22	Display of grades	May 07 (Wed)
23	Summer Vacation (for UG only)	May 07 (Wed) – Jul 20 (Sun)
24	Last date for progress report submission (for PhD only)	Jun 30 (Wed)

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