Prajwalam

IIT Ropar

Biannual Newsletter

Vol -2 Issue -2 (July, 2013)

First Convocation of IIT Ropar

The first convocation of the Indian Institute of Technology Ropar was held on February 2, 2013 at the transit campus of the Institute. Dr. Krishnaswamy Kasturirangan, Member, Planning Commission, Govt. of India was the Chief Guest on the occasion. The convocation was a much awaited event as the 2008 batch was the first batch graduating from the Institute.

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New Chairman BoG

Prof. V S Ramamurthy has been appointed as the new Chairman of the Board of Governors of IIT Ropar. Prof. Ramamurthy is currently the Director of the National Institute of Advanced Studies (NIAS), Bangalore and Member, National Security Advisory Board. He was the Chairman of the IAEA Standing Advisory Group on Nuclear Applications for nearly a decade. A renowned nuclear scientist, he is recipient of many awards and honours including the highest civilian award of the country, the Padma Bhushan (2005). IIT Ropar expresses its sincere gratitude to Dr. T Ramasami, Secretary, DST, for his support and guidance that he provided as the first Chairman of BoG, IIT Ropar.

IIT Ropar – Aston University Collaboration on EnergyHarvest

A new renewable energy technology that has the potential to eradicate the problem of open field burning in India was unveiled at two events held on 2 July and 3 July 2013 at the Indian Institute of Technology Ropar and the British Council in New Delhi respectively. The technology–a Pyroformer™ container - developed by scientists at the European Bioenergy Research Institute (EBRI) at Aston University in the UK is the result of a prestigious international research collaboration between Aston University and IIT Ropar.

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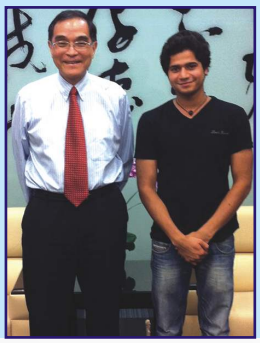
Internships Abroad



Thirteen students of the 2010 batch went abroad for internship in prestigious universities such as Aston University (UK), USC Viterbi School of Engineering (USA), University of Paderborn (Germany), and the National Tsing Hua University (Taiwan). Such experiences are likely to boost their career prospects to a great extent.

Contents

INSTITUTE NEWS

Bio-Medical Engineering Programme

IIT Ropar is planning to establish a Centre for Excellence in Bio-Medical Engineering in collaboration with Post Graduate Institute of Medical Education and Research (PGIMER), Chandigarh. IIT Ropar desired to leverage its strengths in Science, Engineering and Technology including advances in ICT to health care including medicine and surgery. Our faculty members with expertise in biomechanics, signal processing, control engineering and bio-sensors, are working with Orthopaedic surgeons, Anaesthesiologists, Cardiologists and Paediatricians of PGIMER respectively. The Institute has already started offering biology and bio-medical engineering related courses to BTech students with the aim of building a world class undergraduate and graduate Bio-Engineering programme at IIT Ropar.

PGI Chandigarh and IIT Ropar developed a closed looped anesthesia device

Prof G D Puri and his team from the Post Graduate Institute of Medical Education Research (PGIMER), have developed a system that provided automated anesthesia delivery based on the feedback of its effect on patient. This internationally patented software is developed in India for the first time. Once the technology is transferred, IIT Ropar will work to develop this into wireless device.

Republic Day

The 64th Republic day witnessed a spirit of zest and enthusiasm in the IIT Ropar fraternity. The Director of the Institute, Prof M.K. Surappa unfurled the National Flag and delivered a speech exhorting members of the IIT Ropar family to make the country proud of them. Students, faculty and staff members were present on the occasion. The students performed cultural programmes to commemorate the Republic Day.

Sadbhavana Daud : Flag off by the Director

Mr Ram Kumar, member of staff, was felicitated on his performance in the 48th Inter IIT Students Sports Meet that was held at IIT Roorkee from 17 Dec to 24 December 2012. The Republic Day was also marked by "Sadbhavana Daud"- a race celebrating the spirit of harmony.

Training Programme on Stores & Purchase

A training programme to acquaint the staff with stores and purchase procedures was held on June 20, 2013. The following day, the faculty members got an opportunity to learn more about the purchase procedure by interacting with Mrs Uma Chandran, Deputy Registrar, IISc, Bangalore. The administrative staff was made familiar with the procedures as well.

Portal for IIT News

IIT Ropar has taken an initiative to bring all IIT related news (Old and new IITs) at one place through the newly developed "IITs News Portal". It is an openly accessible portal where anyone can find IIT related news published in leading newspapers, periodicals besides online resources.

One can access the portal at http://www.iitrpr.ac.in/iitnews.

IIT Ropar – Aston University Collaboration on EnergyHarvest

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Every year farmers throughout India burn millions of tonnes of crop residue. This burning process has a negative impact on the environment and economy as this straw is wasted and has serious implications on health and society due to the smoke and fumes produced.

This project titled EnergyHarvest which is active in the Punjab takes agricultural waste left over from the harvests such as rice and wheat straw and EBRI's Pyroformer™ technology heats them in controlled conditions. The process generates oil, gas and biochar. Each one of these products is useful and means that harvest waste now has a value as it is put to use rather than simply being burnt. The oil produced can be mixed with diesel and used in engines to drive water pumps found on all agricultural land in the region; the gas can be used for power generation whilst the biochar can be used as a fertilizer to increase crop growth.

Funding from the Oglesby Charitable Trust has enabled Aston University to work closely with IIT Ropar to make this innovative technology available as a pilot phase in three villages of the Ropar District: Khuaspura, Hussainpur, Ladal.

The Pyroformer™ is housed in a container unit that can be transported between rural locations by tractor and is operated by the villagers themselves.

Professor M K Surappa, Director of IIT Ropar, expressed his delight at IIT Ropar's collaboration with the European Bioenergy Research Institute at Aston University on this prestigious research project. He also mentioned IIT Ropar's extension of laboratory facilities and technical support to enable essential testing and research to be conducted. The Director pointed out that IIT Ropar has built strong ties with villages participating in these trials. Professor Dame Julia King, Vice-Chancellor of Aston University mentioned the importance of projects like EnergyHarvest that bring together UK and Indian Universities to solve real life problems. Professor Robert Berry, Executive Dean, School of Engineering & Applied Science at Aston University referred to the research outcomes with significant, positive impact for the environment and for the rural community, particularly in the Punjab, that are the result of partnership between Aston University and IIT Ropar.

This technology has the potential to stimulate growth and provide a cost-effective, reliable and sustainable form of decentralised power generation to address the local needs of heat and energy.

Awards and Recognition

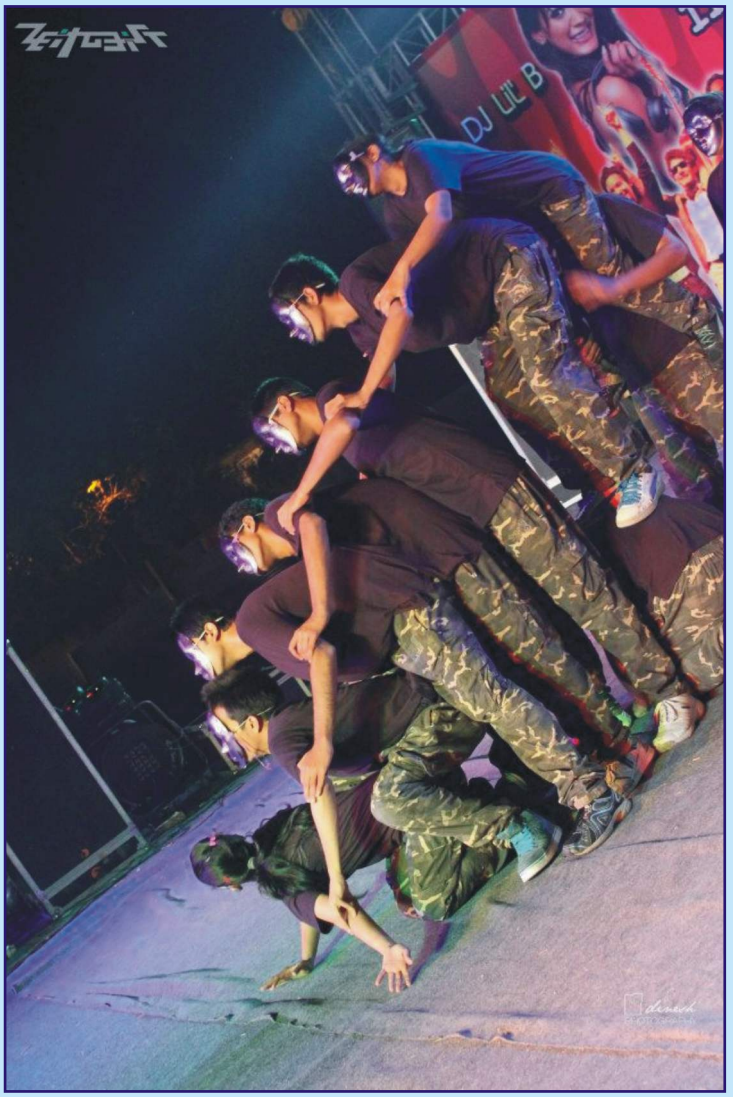
- **Prof. M. K. Surappa,** Director, IIT Ropar has been awarded "AMULYA 2012" award by the Karnataka State Innovation Council, Govt. of Karnataka.
- **Dr. Tharamani C. N.,** Assistant Professor, Department of Chemistry has been awarded Ramanujan fellowship by Department of Science and Technology, India.
- **Mr. Rajkumar Kore,** PhD Scholar in the department of Chemistry, received DST International Travel Grant to present his research work in the 2nd International Symposium on Green Chemistry (ISGC-2) Renewable carbon and Eco-Efficient Processes, held during May 21–24, 2013 at La Rochelle, France.
- **Mr. Arka Bhowmik** and Dr. Ramjee Repaka (SMMEE, IIT Ropar) received the best technical session paper award in 2nd International Conference on Biomedical Engineering and Assistive Technologies 2012 at NIT Jalandhar, Punjab.
- **Miss. Chinar Rana,** PhD Scholar in Mathematics department bagged the best poster award in Mackie international conference 2013 held at IIT Madras.

Baisakhi

IIT Ropar celebrated Baisakhi, one of the main festivals of Punjab, with a feeling of devotion. Dr. Harpreet Singh who is a faculty member of the Institute was the major driving force behind the programme. The programme began with a "Sukhmani Sahib Path" that was held at the college auditorium. This was followed by Kirtan and Ardaas. A slide show of the verses of the Guru Granth Sahib translated in English and Hindi was also projected on the screen along with the recital of the verses for the benefit of Non-Punjabi speakers. People streamed in the auditorium throughout the day to offer their prayers to Guru Granth Sahib. Towards the end of the day a langar was organized by the students, staff and faculty members of the institute.

Zeitgeist-2013

Zeitgeist 2013, IIT Ropar's third annual cultural festival, was successfully organised from 14-16 March 2013. The opening night on the 14th of March saw performances from various NGOs. The performances included a satire on the Indian politics and a performance by specially gifted children. The night was brought alive by the breath-taking GHATKA performance.



Holi

Great excitement was seen in the IIT Ropar fraternity on the occasion of Holi. Bright colours of gulal and abeer filled the air and people took turns in pouring colour water over one another. Children and students took special delight in spraying colours on others with their pichkaris.. Songs, dance and mouthwatering Holi delicacies were the other highlights of the day.

Lohri

Amidst the freezing cold weather, with the temperature wobbling between 0-5 degrees Celsius and the dense fog outside, everything seems stagnant in the northern part of India. However, below the apparently frozen surface, a palpable wave of activity is going on. The long-awaited bonfire festival that celebrates the harvesting of the Rabi (winter) crops was celebrated by the students and faculty and staff members by enjoying the traditional folk songs and dances.

The plethora of singing talent in the country found its voice in competitions like SAAZ and SUR. Similarly, the dance fanatics had to prove their mettle against one another in competitions like SMACK THAT and TARANG. The erudite students found the stage of EUREKA to their liking. There were also events such as TORQUE to cater to the taste of rock music fans. There was something for those who want to change the social consciousness as various street plays were organised as well. The theatre artists got to enthral on the stage of YATHARTH. Various other events such as SPIN A YARN, ENGLISH DEBATE, and GRAFFITTI PAINTING et al took the centre stage at various moments.

But there is something unique to Zeitgeist which is not to be found in any other such carnival across India. TITAN- THE STRONG MAN attracted a lot of attention. It tested the bodybuilders to the hilt as they were asked to do extremely strenuous things that pushed the limits of imagination.

This year's Zeitgeist was also the one to organise the Mr and Ms Zeitgeist event for the first time in Zeitgeist's history. The participants for the final night were selected using online voting that ran for weeks and months. The event culminated with performances from the participants and various other personality tests.

All in all it was a great success and the efforts of all the shareholders bore fruit. The event ended with a promise to come back better and stronger next year.

First Convocation of IIT Ropar

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After the arrival of the Academic Procession on stage, the Chairman, Board of Governors, Dr. T. Ramasami declared the convocation open. This was followed by the report of the Institute by the Director. The Director threw light on the genesis of IIT Ropar, and proceeded to mention the Institute's several achievements in a short span of time. He talked about the facilities available at the Transit Campus, and gave an overview of the new campus that is expected to be ready in about two years' time. The Director updated the audience about the faculty and staff recruitment scenario, and commended Prajwalam, the biannual newsletter, for keeping contact with the academicians in India and abroad.

He also referred to the teaching and research infrastructure. Some of the facilities that were mentioned were state of the art laboratories and NKN class rooms. The fact that our infrastructure is being used not just for IIT Ropar's purposes, but also being extended to several other academic institutions was also highlighted. Some of the other points that were covered in the Director's address were the excellent facilities for academic pursuits and extra-curricular activities, the new initiatives of IIT Ropar which include bio-medical engineering programme in collaboration with PGIMER, Chandigarh, IIT Ropar-Aston University Bio-Energy Research initiative, Centre for Rural Technology Action Group (RuTAG), Prototype Development Innovation Fund (PDIF) and Incubation Centre in ICT. The Director also apprised the gathering of the research and development activities at IIT Ropar, the achievements of IIT Ropar such as the laurels won by the students for the Institute, the excellent placement scenario and the several awards won by our Library, and our effective presence as a member of ENACTUS (Entrepreneur Action and Us), a worldwide non-profit organization that promotes societal responsibilities in the young minds of IIT graduates. The Director concluded his speech by congratulating the graduating class of 2012, and by acknowledging the help received from several quarters to make IIT Ropar a success story. The Director's speech was followed by the address of the Chairman, Board of Governors, IIT Ropar. Dr Ramasami pointed out that the new IITs are more in keeping with the spirit of the modern times than the old IITs established more than fifty years ago. He went on to introduce the Chief Guest, Dr Kasturirangan. The Chief Guest addressed the convocation, and congratulated the graduating students. The Chairman of the Senate awarded the degrees to the graduating students. The Chief Guest and the Chairman, Board of Governors gave away medals to the meritorious students. Ms Divya Mahajan of Electrical Engineering received the President Gold Medal for obtaining the highest CGPA amongst the graduating students of the Bachelor of Technology in the year 2011-12, and Mr Shashank Sharma of Computer Science and Engineering received the Director Gold Medal for the best all round performance amongst the graduating students of the Bachelor of Technology in the year 2011-12. The Institute Silver Medals went to Mr Bhargav Mangipudi and Mr Raghav Paul. After the presentation of medals, the Chairman, Board of Governors declared the Convocation closed. The convocation concluded with the singing of the National Anthem.

NCC Camp

NCC annual training camp was organized by 3 Punjab (I) COP at Kharar, Punjab from 27th December 2012 to 3th January 2013. In this camp the cadets learned about the command and control of the armed forces and way of their living. Cadets understood the importance of discipline and time management. Students also had to go through various physical exercises and drill practices. Students had interactive sessions with many army officers. They also had the hand on training of shooting. A cultural program was organized at the end of the camp where our students performed a play.

Design Exhibition

The School of Mechanical, Materials and Energy Engineering (SMMEE) at IIT, Ropar organized a Design exhibition and 'Poster presentations of B. Tech. Final Year Projects' on April 25th, 2013. Dean (A&R), IIT Ropar, Prof. P.K. Raina inaugurated the design fair and poster presentations. Prof. Raina, enlightened the students about the challenges that exists for the nation in terms of innovative product design and mentioned that India needs many inventions and he encouraged the students to develop products which are valuable for the masses.

The projects were result of two courses and final year B.Tech. projects: (i) Products designed by the first year students of all branches in GEL 101: Product design and realization –I course, more than 30 projects, guided by Dr. Prabir Sarkar (ii) Products designed by the second year mechanical students in MEP205: Product design and realization – II course, about 10 projects, Dr. Anshu D. Jayal, Dr. Anupam Agrawal, Dr. Ekta Singla, Dr. Harpreet Singh and Dr. Prabir Sarkar (iii) BTP projects completed by the final year B Tech (Mechanical) students, about 15 projects, coordinated by Dr. Ekta Singla and guided by SMMEE faculty members.

Some of the exciting projects that were displayed are: Mini Bio Gas Plant, Universal Testing Machine, Minimum Quantity Lubrication System, Solar refrigerator, Remote Heart Rate Measuring Device, Remote Mobile Switch, Mobile Operated Door Lock, Vending machine, Vegetable Peeler, Floor Cleaner, Cloth dryer, Versatile mop, and De-weeding Device. Dr. Sarkar informed that patents would be filed for many of these innovative products.

SPONSORED R&D PROJECTS

1. Anupam Agarwal (PI): "Development and analysis of deformation machining: A new hybrid process", DST-SERB Fast track scheme for young scientist, June 2013 – 16, Rs.21.82 Lakhs,
2. Apurva Mudgal (PI): "Algorithms in Computational Geometry", SERB Fast track scheme for young scientist;
3. C. M. Nagaraja (PI) and Dr. T. J. Dhilip Kumar (Co-PI): "Development of porous Metal-organic frameworks for H2 storage", BRNS, BARC, Mumbai, 2013-2016, Rs.28.00 Lakhs.
4. Harpreet Singh: "Engineering Driven Sustainable Supply Networks - A UK/India Collaborative Study" got under the UK & India Partnership in Advanced Manufacturing Research, in which team from IIT Ropar, IIM Lucknow and University of Cambridge are participating, Rs.1.13 Crore.
5. Himanshu Tyagi (PI): "Investigation into direct absorption of solar energy using nanofluids", DST, 2013-2016, Rs.26.00 lakhs.
6. P. K. Raina (PI, India) and Rita Bernaberi (PI, Italy): "Simulation, NTME Calculation and half life measurement for Double Beta Decay of Sn nuclei", DST, GOI and Italian Ministry of Foreign Affairs (MAE), 2012-15.
7. P. K. Raina (PI): "Computation Nuclear Transition Matrix Elements calculation for neutrinoless double beta decay within Deformed Hartree-Fock Model", CSIR, 2012-15, Rs.20.00 Lakhs.
8. Rajendra Srivastava (PI): "Synthesis and applications of crystalline mesoporous materials prepared using hierarchical structure directing agents", DST, New Delhi, Rs.33.50 Lakhs.

RESEARCH PUBLICATIONS

Books/Journal Papers

M. K. Surappa

1. Surappa, M. K. and Anilchandra, A. R. "Microstructure and Tensile properties of consolidated magnesium chips." Materials Science and Engineering A 560 (2013): 759-766.
2. Surappa, M. K. "India's ranking in material science research." Current Science 105.2 (2013): 147.

A. K. Gupta

1. Gupta, A. K. "A section approach to a traffic flow model on networks." International Journal of Modern Physics C 24.1350018 (2013).
2. Gupta, A. K., Redhu, P. "Jamming transition of a two-dimensional traffic dynamics with consideration of optimal current difference." Physics Letter A, available at DOI: 10.1016/j.physleta.2013.06.009.

Anupam Agarwal

1. Grewal, H.S., Agrawal, A. and Singh, H. " Design and development of high-velocity slurry erosion test rig using CFD." Journal of Materials Engineering and Performance 22.1 (2013): 152-161.

2. Grewal, H.S., Singh, H., Agrawal, A. and Arora, H.S. "Friction stir processing of mild steel to enhance its surface hardness." Advanced Materials Research 620 (2013): 117-121.
3. Grewal, H.S., Arora, H.S., Singh, H. and Agrawal, A. "Surface modification of hydroturbine steel using friction stir processing." Applied Surface Science 268 (2013): 547-555.
4. Grewal, H.S., Singh, H. and Agrawal, A. "Microstructural and mechanical characterization of thermal sprayed nickel-alumina composite coatings." Surface and Coatings Technology 216 (2013): 78-92.
5. Grewal, H.S., Singh, H. and Agrawal, A. "Understanding Liquid Impingement erosion behaviour of nickel-alumina based thermal spray coatings." Wear 301.1-2 (2013): 424-433.

C. M. Nagaraja

1. Nagaraja, C. M. "Homochiral Metal-Organic Frameworks (MOFs) for Asymmetric Catalysis: Modern Aspects of Functional Materials." International Journal of Science Research, Tumkur University (2013):17-28.

Ekta Singla

1. Shukla, A., Singla, E., Wahi, P. and Dasgupta, B. "A Direct Variational Method for Planning Monotonically Optimal Paths for Redundant Manipulators in Constrained Workspaces." Robotics and Autonomous Systems 61.2 (2013): 209–220.

Harpreet Singh

1. Grewal, H.S., Agrawal, A. and Singh, H. "Identifying erosion mechanism: A novel approach." Tribology Letters 51.1 (2013): 1-7.
2. Arora, H.S., Singh, H. and Dhindaw, B. K. "Wear behaviour of a Mg alloy subjected to friction stir processing" Wear 303.1-2 (2013): 65-77.
3. Kchaou, M., Sellami, A., Elleuch, R. and Singh, H. "Friction characteristics of a brake friction material under different braking conditions." Materials and Design 52 (2013): 533-540.
4. Grewal, H. S., Agrawal, A. and Singh, H. "Slurry erosion performance of Ni-Al2O3 based composite coatings." Tribology International 66 (2013): 296-306.
5. Grewal, H.S., Singh, H. and Agrawal, A. "Understanding Liquid Impingement erosion behaviour of nickel-alumina based thermal spray coatings." Wear 301.1-2 (2013): 424-433.
6. Kumar, M., Singh, H. and Singh, N. "Synthesis and deposition of Ni-20Cr powder using cold spraying." Surface Engineering 29.6 (2013): 419-426.
7. Grewal, H. S., Agrawal, A. and Singh, H. "Design and development of high-velocity slurry erosion test rig using CFD." Journal of Materials Engineering and Performance 22.1 (2013): 152-161.

Himamshu Tyagi

1. Phelan, P., Otanicar, T., Taylor, R. and Tyagi, H. "Trends and Opportunities in Direct-Absorption Solar Thermal Collectors." ASME Journal of Thermal Science and Engineering Applications 5.2 (2013): 021003.
2. Soni, S., Tyagi, H., Taylor, R. A. and Kumar, A. " Role of Optical Coefficients and Healthy issue Sparing Characteristics in Gold Nanorod Assisted Thermal Therapy." International Journal of Hyperthermia 29.1 (2013): 87-97.
3. Taylor, R., Coulombe, S., Otanicar, T., Phelan, P., Gunawan, A., Lv, W., Rosengarten, G., Prasher, R., and Tyagi, H. " Small Particles, Big Impacts: A Review of the Diverse Applications of Nanofluids." Journal of Applied Physics 113.1 (2013): 011301.

Madeti Prabhakar

1. Vikash, S. and Prabhakar, M. "A Sharp Upper Bound for Region Unknotting Number of Torus Knots." Journal of Knot Theory and Its Ramifications 22.5 (2013).

Manoranjan Mishra

1. Mishra, M., Rana, C., De W. A. and Martin, M. "Influence of a strong sample solvent on analyte dispersion in chromatographic columns." Journal of Chromatgraphy A 1297(2013): 46-55.

Narinder Singh

1. Kaur, A., Sharma, H., Kaur, S., Singh, N. and Kaur, N. "A counterion displacement assay with a biginelli product: A ratiometric sensor for Hg2+and the resultant complex as a sensor for Cl-." RSC Advances 3.17 (2013): 6160-6166.
2. Sharma, H., Guadalupe, H.J., Narayanan, J., Höpfl, H., Pandiyan, T. and Singh, N. "Pyridyl-and Benzimidazole-Based Ruthenium (III) Complex for Selective Chloride Recognition through Fluorescence Spectroscopy." Anal. Methods (2013), DOI: 10.1039/C3AY40434J.
3. Kaur, K., Bhardwaj, V. K., Kaur, N. and Singh, N. "Fluorescent primary sensor for zinc and resultant complex as secondary sensor towards phosphorylated biomolecules: INHIBIT logic gate." Inorganica Chimica Acta 399.1-5 (2013).
4. Aguilar, C., Narayanan, J., Manoharan, M., Singh, N. and Thangarasu P. "A Much-Needed Mechanism and Reaction Rate for the Oxidation of Phenols with ClO2: A Joint Experimental and Computational Study, Australian Journal of Chemistry (2013).
5. Kumar, M., Singh, N. and Singh, H. "Extraction and transport behaviour of tripodal receptor: Selective recovery of Ni2+ and processing into nickel nanoparticles." Transactions of the Institutions of Mining and Metallurgy, Section C: Mineral Processing and Extractive Metallurgy 122.1 (2013): 36-41.
6. Kumar. M., Singh. H. and Singh. N. "Synthesis and Deposition of Ni-20Cr Alloy Powder on SA 516 Steel by Cold Spraying." Surface Engineering (2013), DOI: 10.1179/1743294413Y.0000000133.

P. K. Raina

1. Raina, P. K., Rath, P. K., Chandra, R., Chaturvedi, K., Lohani, P., Hirsch, J. G. "Uncertainties in nuclear transition matrix elements for β+β+ and eβ+ modes of neutrinoless double-β decay within projected Hartree-Fock-Bogoliubov model." Physical Review C87.014301 (2013).
2. Raina, P. K., Rath, P. K., Ghorui, S. K., Singh, A. K., Naik, Z., Patra, S. K. and Praharaj, C. R. "Rotational bands and electromagnetic transitions of some Neodymium nuclei in-projected Hartree-Fock model." International Journal of Modern Physics E 21.1250070 (2012).

Rajendra Srivastava

1. Srivastava, R. and Prathap, M.U. A. "Electrochemical reduction of Lindane (γ-HCH) at NiCo2O4 modified electrode." Electrochimica Acta (2013).
2. Srivastava, R., Satpati, B. and Prathap, M.U. A. "Facile preparation of polyaniline/MnO2 nanofibers and its electrochemical application in the simultaneous determination of catechol, hydroquinone, and resorcinol." Sensors and Actuators: B. Chemical (2013).
3. Srivastava, R., Satpati, B., Prathap, M.U.A, Kaur B. and Thangarasu, P. "Simultaneous and sensitive determination of ascorbic acid, dopamine, uric acid, and tryptophan with silver nanoparticles-decorated reduced graphene oxide modified electrode." Colloids and Surfaces B: Biointerfaces (2013).
4. Srivastava, R. and Prathap, M.U. A. "Synthesis of NiCo2O4 and its application in the electrocatalytic oxidation of methanol." Nano Energy (2013), DOI: http://dx.doi.org/10.1016/j.nanoen.2013.04.003.
5. Srivastava, R. and Kaur, B. "Simultaneous determination of ascorbic acid, dopamine, uric acid, and tryptophan by nanocrystalline ZSM-5 modified electrodes." Journal of Nanoscience and Nanotechnology (2013).
6. Srivastava, R. and Kore, R. "A simple, eco-friendly, and recyclable bi-functional acidic ionic liquid catalysts for Beckmann rearrangement." Journal of Molecular Catalysis A: Chemical. 376 (2013): 90-97.
7. Srivastava, R. and Tumma, M. "Transition metal nanoparticles supported on mesoporous polyaniline catalyzed reduction of nitroaromatics." Catalysis Communications 37 (2013): 64–68.
8. Srivastava, R., Sridharkrishna, R. and Kore, R. Synthesis of hierarchical Beta using piperidine based multi-ammonium surfactants." RSC Advances 3 (2013): 1317-1322.

9. Srivastava, R. and Prathap, M.U.A. "Tailoring properties of polyaniline for simultaneous determination of a quaternary mixture of ascorbic acid, dopamine, uric acid, and tryptophan." Sensors & Actuators: B. Chemical 177 (2013): 239-250.
10. Srivastava, R., Pandiyan, T. and Prathap, M.U.A. "Cu nanoparticles supported mesoporous polyaniline and its applications towards non-enzymatic sensing of glucose and electrocatalytic oxidation of methanol." Journal of polymer research 20 (2013): 86.
11. Srivastava, R., Ravindran, A. and Kore, R. "One-pot synthesis of 3-substituted indole derivatives using moisture stable, reusable task specific ionic liquid catalysts." Indian Journal of Chemistry: Section B 52B (2013): 129-135.

Rajyashree Khushu-Lahiri

1. Khushu-Lahiri, R. and Chakravarty, U. "A Pragmatic Study of Intercultural Communication in Kiran Desai". Pertanika Journal of Social Sciences and Humanities 21.1 (2013): 351-360.
2. Khushu-Lahiri, R. "Review of Chitra Sankaran, ed. History, Narrative and Testimony in Amitav Ghosh's Fiction." Asiatic 7.1 (2013): 194-195.
3. Khushu-Lahiri, R. and Chakravarty, U. "The Relevance of Shakespeare: A Study of Subalternity in The Tempest." Deccan International Journal of Advanced Research Studies 1.1 (2013): 1-12.

Ramjee Repaka

1. Bhowmik, A., Singh, R., Repaka, R. and Mishra S.C. "Conventional and newly developed bioheat transport models in vascularized tissues - A review." Journal of Therm. Biology 38 (2013): 107-125.

Shubhrangshu Dasgupta

1. Bensky, G., Nair, S. V., Ruda, H. E., Dasgupta, S., Kurizki, G., Brumer, P. "Highly efficient biexciton preparation for quantum-dot entangled photon generation." Journal of Physics B: At. Mol. Opt. Phys 46 (2013): 055503.

S. C. Martha

1. Panda, S. and Martha, S. C. "Water wave scattering by small undulation of the Porous bottom in a two-layer fluid." Mathematics and Computing: Current Research and Developments, Narosa Publishing House Pvt. Ltd., New Delhi, India (2013): 87-96.
2. Panda, S. and Martha, S. C. and Chakrabarti, A. "Boundary value problems involving flow of multi-layered fluid over undulating bottom in a channel." American Journal of Mathematics and Sciences 2 (2013): 227-234.

Somdev Kar

1. Kar, S. "Slot-specific glide formation in Bangla." International Journal of Dravidian Linguistics 42.1 (2013): 67-83.

Tharamani C. N.

1. Ramu, V. G. and Nagaiah, T. C. "Nitrogen containing carbon materials and their applications in electrocatalysis", in "New research on carbon materials", Nova Science Publishers, NY, (2013): 113-144.
2. Sun, Z., Dong, N., Wang, K., König, D., Nagaiah, T. C., Sánchez, M. D., Ludwig, A., Cheng, X., Schuhmann, W., Wang, J. and Muhler, M. "Ag-stablized few-layer grapheme dispersions in low boiling point solvent for versatile nonlinear optical applications." Carbon 62 (2013): 182-192.
3. Sun, Z., Dong, N., Xie, K., Xia, W., König, D., Nagaiah, T. C., Sánchez, M. D., Ebbinghaus, P., Erbe, A., Zhang, X, Ludwig, A., Schuhmann, W., Wang, J. and Muhler, M. "Nanostructured few-layer grapheme with superior optical properties fabricated by steam etching process." Journal of Physical Chemistry C 117 (2013): 11811-11817.

T. J. Dhilip Kumar

1. Samolia, M. and Kumar, T. J. D. "A first-principles study of hydrogen interaction and saturation on ScAl3." Journal of Alloys Compound 552.457 (2013).

T. S. Handa

1. Handa, T. S. and Singh, J. "Information technology based organizational knowledge management." IASLIC Bulletin 57.3 (2012): 184-191.

CONFERENCE PROCEEDINGS

Anupam Agarwal

1. Grewal, H.S., Singh, H. and Agrawal, A. "Understanding liquid impingement erosion behaviour of nickel-alumina based thermal spray coatings." 19th International Conference on Wear of Materials (WOM 2013) held at Portland, USA, April 14-18, 2013.

Balwinder Sodhi

1. Agrawal, A., Sodhi, B. and Tadinada, P. "A Multi-dimensional measure for intrusion–the intrusiveness quality attribute." In Proceedings of the 9th international ACM Sigsoft Conference on Quality of Software Architectures, (QoSA 2013), Vancouver, Canada, June 17-21, 2013.

Ekta Singla

1. Singla, A. and Singla, E. "Input shaped open-loop control for vibration suppression of lightweight flexible manipulators." International Conference on Emerging Technologies: Micro to Nano, BITS Pilani, Februry 2013.

Manoranjan Mishra

1. Rana, C., Wit, A. De, Martin, M. and Mishra, M. "Coupling of viscous fingering and adsorption in chromatographic column." Mathematics in Chemical Kinetics and Engineering (MaCKie 2013), Chennai, India, February 4-6, 2013.
2. Pramanik, S. and Mishra, M. "Viscous fingering of a miscible slice with Korteweg stresses: A linear stability theory." Mathematics in Chemical Kinetics and Engineering (MaCKie 2013), Chennai, India, February 4-6, 2013.
3. Rana, C. and Mishra, M. "Spatio-¬temporal behaviour of Viscous fingering on the adsorbed analyte." Mathematics in Chemical Kinetics and Engineering (MaCKie 2013) IIT Madras, Chennai, February 4-6, 2013.

P. K. Raina

1. Chaturvedi, K., Chandra, R., Rath, P. K. Raina, P. K. "Study of neutrinoless positron Double beta decay including induced currents in the nuclear structure calculation within PHFB model." Proceedings of DAE-BRNS Symposium on Nuclear Physics 57, pp.194-195, 2012.
2. Raina, P. K., Ghorui, S. K., Patra, S. K., Praharaj, C. R. , Rath, P. K. " Low-lying deformed rotational bands in N = 50 Ge nucleus." Proceedings of DAE-BRNS Symposium on Nuclear Physics 57, pp.362-363, 2012.
3. Das,S., Nag,S., Raina, P. K., Rath, P. K. "Large scale shell model calculation for 120- 130Sn." Proceedings of DAE-BRNS Symposium on Nuclear Physics 57, pp. 356-357, 2012.

T. J. Dhilip Kumar

1. Dhilip Kumar, T. J., "Non-adiabatic dynamics in H+ + CO system." International Conference on Electronic Structure and Dynamics of Molecules and Clusters, (ESDMC-2013), IACS, Kolkata, India, February 19-20, 2013.
2. Samolia , M. and Dhilip Kumar, T. J., "A first-principles study of hydrogen interaction and saturation on MAl3 clusters [M=Sc, Ti, Zr]." 3rd Indo-German conference: Modeling chemical and biological reactivity, NIPER, Mohali, India, February 26-March 1st, 2013.

Tarvinder Singh Handa

1. Handa, T. S. "Library service through the cloud: a new paradigm." Proceedings of 2nd International Conference on Academic Libraries, organized by Guru Gobind Singh Indraprastha University, New Delhi, India, February 12-15, pp. 224-227, 2013.

ENGAGEMENTS OF THE DIRECTOR, IIT ROPAR

1. Participated in the 2nd MSME Summit on "Innovation – An Imperative for Competitiveness & Sustainable Development" as a Panelist on March 14, 2013 held at New Delhi.
2. Chief Guest for the 1st Convocation of Rayat Bahra Group of Institutes, Education City, Hoshiarpur, Punjab held on March 22, 2013.
3. Chief Guest for the Inaugural Ceremony of the International Workshop on "Exploring Science of Transportation System (TS-2013)" at NIT Hamirpur held on April 11, 2013.
4. Chief Guest for the Opening Ceremony of "Advanced Faculty Training in VLSI Design and Embedded Systems" at C-DAC Mohali held on June 17, 2013.

SESSION CHAIRED/INVITED LECTURES/PAPERS PRESENTED

Anshu Dhar Jayal

1. Chaired two sessions and delivered a talk on "Sustainable Manufacturing: Recent Trends and Future Developments" at the International Conference on Global Technology Initiatives, Rizvi College of Engineering, Mumbai, March 29-30, 2013.

Anupam Agarwal

1. Chaired a session of "Electrical Contacts" and presented a paper on "Understanding liquid impingement erosion behaviour of nickel-alumina based thermal spray coatings" in 19th International Conference on Wear of Materials (WOM 2013) held at Portland, USA, April 14-18, 2013.

Debaprasad Mandal

1. Presented a paper (poster) titled "Highly nonpolar fluorinated environment towards catalyst recovery, and ion sensing" at the 15th CRSI National Symposium in Chemistry during February 1-3, 2013 at Banaras Hindu University (BHU), Varanasi.

Ekta Singla

1. Delivered a talk on "MultiObjective Evolutionary Algorithms: Concepts and Applications", Jan 21-25, 2013, UIET Punjab University, Chandigarh, TEQIP-II sponsored national short term training programme (STTP) on "Advanced Optimization Techniques and their Applications in Engineering Research".
2. Expert Talk on Fundamental of Robotics, March 5, 2013, Chandigarh University, Garuan.
3. Delivered a talk on "Performance measures for Robotic Arms", March 21-23, 2013, TEQIP sponsored short term training program on Advanced Robotics: Design, Planning and Control, Thapar University, Punjab, India.
4. Delivered a talk on "Optimal Design of Robotic Manipulators", March 25-29, 2013, TEQIP Sponsored Short term program on design and development of robots with practical approach, Dr. Ambedkar Institute of Technology, Bangalore.
5. Delivered a talk on "Optimization through Matlab", June 4-7, 2013, TEQIP Sponsored Short term Program on MATLAB for Chemical Engineers, Thapar University, Patiala.

Harpreet Singh

1. Chaired a session on "Cold Sprayed Powders" at the Conference International Thermal Spray Conference and Exposition (ITSC-2013) at Busan, South Korea during May 13-15, 2013.
2. Delivered an expert talk on "High Temperature Corrosion Behavior of Plasma Sprayed Coatings on Some Superalloys" at Korean Institute of Science and Technology (KIST) Seoul, South Korea on May 16, 2013.

Himanshu Tyagi

1. Delivered an expert lecture on "Utilizing Nanoparticles for Harnessing Solar Thermal Energy" at NIT Hamirpur as part of the National Workshop on Power Generation from Renewable Energy Sources sponsored by Ministry of New & Renewable Energy, India, March 24, 2013.
2. Delivered the invited lecture on "Applicability of Nanoparticle Suspensions in High Flux Solar Collectors" at MANIT Bhopal as part of the Short Term Training Programme on Solar Energy and its Applications, June 25, 2013.
3. Delivered (as Guest of Honour) the inaugural lecture on "Technology Advances in Sustainable Energy Applications" during the 'Short Term Training Programme on Solar Energy and its Applications' (STTP-SEA) at MANIT Bhopal, India, June 24, 2013.

Kamal Kumar Choudhary

1. Delivered an invited talk on Bridging the Gap between theoretical and experimental Linguistics. Language faculty: Design and interfaces, workshop organised by the department of HSS, IIT Delhi during February 11-12 , 2013.

Madeti Prabhakar

1. Delivered an invited lectures on "Unknotting Procedure for Torus Knots" in the International Conference, "KOOK Seminar", Osaka City University, Japan during February 14-16, 2013.
2. Delivered a talk on "An Emerging Area of Topology", National Seminar on Recent trends in Mathematical Sciences sponsored by UGC, SMVD University, Katra, India, on March 22, 2013.

Manoranjan Mishra

1. Delieved a talk on Modeling of miscible viscous fingering instability, "Colloquium in Mathematics in the Thrust Areas of Algebra, Number Theory and Applied Mathematics" during February 22-23, 2013, Punjab University, Chandigarh, India.
2. Delievered a talk on Modeling of Viscous fingering instability between two miscible fluids, "National Seminar on Recent trends in Mathematical Sciences" March 22, 2013, Shri Mata Vaishno Devi University, Katra, Jammu and Kashmir. India.
3. Delivered a talk on Mathematical Modeling for Chemical Engineering based Problems, DST center of National Program on Differential Equations(NPDE) –PG Level Workshop on "PDE and Applications" at IIT Madras during May 20 – June 8, 2013.

Nitin Auluck

1. Delivered a talk on "Restricted Duplication based MILP Formulation" in the workshop of Parallel Computing Workshop using High Performance Computing, Department of Physics, Punjab University on March 22, 2013.

P. K. Raina

1. Delivered an invited talk on "Inside the Nucleus: Some Fundamental Scientific Discoveries to probe Micro and Macro Cosmos" in the two day workshop on the Physics and Mathematics of Universe during March 14-16, 2013 at the Gurukula Kangri Vishwavidyalaya, Haridwar.

Rajendra Srivastava

1. Delivered a talk on "Hierarchical/Nanocrystalline zeolite: A new concept in zeolite chemistry" on the occasion of Golden Jubilee celebration of MNIT Jaipur, Organized by MNIT Jaipur on May 10, 2013.
2. Delivered a talk titled "Synthesis of nanocrystalline zeolite Beta using Ionic Liquids" at the 21st National Symposium on Catalysis, Organized by CSIR-IICT Hyderabad during February 11-13, 2013.

Rajyashree Khushu-Lahiri

1. Delivered an invited lecture in a workshop on on "Express Yourself" in IET, Bhaddal, March 19, 2013.

2. Presented a paper on "The Language of Power or the Power of Language" at an International Conference on Language and Power : perspective issues and impact, at JNU New Delhi, April 5-7, 2013.
3. Presented a paper on "Violence Against Women and ICTs" at the International conference on 'Empowering Women in Developing Countries through Information & Communication Technologies', Solan , HP, India, June 1-3, 2013.
4. Presented a paper on "The Journey and scope of Comparative Literature: India and Beyond" at the XIth CLAI Biennial International Conference, January 16-18, 2013.

S. C. Martha

1. Delivered a talk on "Role of Integral Equation in Nonlinear Flow problems" in the UGC sponsored National Seminar on Recent Trends in Mathematical Sciences held at School of Mathematics, Shri Mata Vaishno Devi University, Katra on March 22, 2013.

Somdev Kar

1. Delivered the inaugural lecture titled "Natural Language Processing: How IT and Linguistics Work Together" at Intra-University Technical Fest organized by the Department of Computer Science and Engineering, Thapar University, Patiala, India on February 4, 2013.

INVITED PARTICIPATION IN WORKSHOPS

Balwinder Sodhi

1. Participated in a workshop on Mobiles for Development: Emerging Opportunities and Challenges. Jointly organized by IIT Kanpur, Commonwealth of Learning and BITCOE. May 8-9, 2013, IIT Kanpur.

Dhilip Kumar, T. J.,

1. Participated as a resource person for a session on May 13, 2013 in AICTE sponsored faculty development programme titled "Nanotechnology for sustainability: Energy conversion and storage." KSR College of technology, Tiruchengode, India, May 6-18, 2013.

Somdev Kar

1. Participated in the workshop 'XI UNL School' organised by the UNDL Foundation, Switzerland at the University of Macau, Macau, China during March 11-15, 2013.

SEMINARS @ IIT ROPAR

Department of Chemistry:

1. Dr. Syed Masood Husain, Postdoctoral fellow at the University of Freiburg, Germany: "The role of quinone-hydroquinone tautomers in biosynthesis of natural products" on January 9, 2013.
2. Dr. Easwar Srinivasan, Assistant Professor, Department of Chemistry, Central University of Rajasthan: "Rational Design of Onium-tagged Prolines as Organocatalysts for the Asymmetric Aldol Reaction" on February 4, 2013.
3. Dr. Kalyan K. Sadhu, Postdoctoral fellow Institut de Science et d'Ingénierie Supramoléculaires Université de Strasbourg, France: " Development of fluorogenic bio-application based on supramolecular interactions" March 7, 2013.
4. Prof. Kamal K. Kapoor, Professor, Department of Chemistry, University of Jammu: "Copper–promoted carbon-heteroatom cross-coupling reaction with boronic acids: An emerging synthetic tool for organic chemist" on May 9, 2013.
5. Dr. Parthasarathi Das, Principal Scientist, Medicinal Chemistry Division, Indian Institute of Integrative Medicine, CSIR, Jammu: "Understanding the mechanism of the unprecedented reactions for the development of metal-free transfer hydrogenation process and the synthesis of naphthodioxoles" on May 9, 2013.

Department of Computer Science and Engineering:

1. Prof. N. Viswanadham, Dept. of Computer Science and Automation, IISc., Bangalore: "Innovation in Emerging Markets and Challenges of Network Governance" on March 4, 2013.
2. Prof. Shalabh Bhatnagar, Dept. of Computer Science and Automation, IISc Bangalore: "Simultaneous Perturbation Algorithms for Optimization via Simulation" on February 26, 2013.

Department of Humanities and Social Sciences:

1. Prof. Satish Iyengar, Professor and Chair, Statistics Department and Center for the Neural Basis of Cognition, University of Pittsburgh: "Regularized regression models for detecting neuronal interactions" on May 24, 2013.
2. Dr. Prema Rajgopalan, Associate Professor, Department of Humanities and Social Sciences, IIT Madras: "Strategies for the New Knowledge Economy: Towards a Deeper Understanding among Stakeholders" on March 21, 2013

Department of Physics:

1. Dr. Kartick Tarafder, Post Doc. Fellow, Materials Science Division, Lawrence Berkeley National Laboratory, California, USA: "Theoretical Investigation of metal-organic interfaces: An approach from first principles" on January 4, 2013.
2. Dr. Vidhu S. Tiwari, School of Electrical Engineering & Computer Science, University of Ottawa, Canada: "Hollow core photonic crystal fiber based surface enhanced Raman scattering (SERS) bio-sensors" on January 11, 2013.
3. Dr. Pintu Das, Senior Research Associate, Institute of Physics, J. W. Goethe University, Germany: "Magnetization dynamics in nano/micro-structures using micro-Hall magnetometry" on January 18, 2013.
4. Dr. Sudhir Kumar Sharma, Centre for Nano-Science and EngineeringIndian Institute of Science, Bangalore: "Implementation of NiTi Shape Memory Materials for Micro-device Applications" on February 21, 2013.
5. Dr. Swastik Mondal, University of Bayreuth, Germany: "Unraveling mysteries of boron-rich solids through electron-density analysis" on March 1, 2013.
6. Dr. Pushpendra Kumar, Assistant Professor, National Institute of Technology Delhi: "Mesoporous Silicon Formation and its use as Template for Organic and Inorganic Materials" on March 22, 2013.
7. Dr. Kanan Kumar Datta, Astronomy Dept., Stockholm University: "Shedding light on the universe's first sources of light through radio observations of neutral hydrogen" on April 05, 2013.
8. Dr. Kailash Chandra Jena, Laboratory for Fundamental Biophotonics, Institute of Bioengineering, Switzerland: "Nonlinear light scattering spectroscopy and its relevance for probing the biological molecules at hidden soft matter and planar interfaces" on April 5, 2013.
9. Dr. Dinesh Kumar Shukla, PETRA III, Deutsches Elektronen-Synchrotron (DESY), Germany: "Resonant and non-resonant x-ray scattering studies on the rare earth iron borate multiferroics and on the iron chalcogenides" on April 12, 2013.
10. Dr. Bhaskar Kaviraj, International Center for Materials Nanoarchitectonics (MANA), National Institute of Materials Science (NIMS), Japan: "Noise Correlations in three-terminal superconducting hybrid nanostructures" on May 29, 2013

School of Mechanical, Materials and Energy Engineering:

1. Prof. Rudra Pratap, Department of Mechanical Engineering, IISc Bangalore: "Initiation and Execution of Big Interdisciplinary Research Projects: The Role of Vision, Teamwork, and Infrastructure Development" on March 8, 2013.

2. Prof. K. Chattopadhyay, Department of Materials Engineering, IISC Bangalore: "Doing research in India: pages from personal experience" on March 8, 2013.
3. Dr. Sriram Venkatesan, Post-Doctoral researcher, Center for NanoScience, Ludwig-Maximilians-Universität München, Germany: "Structure, Chemistry and Interface of Epitaxial Systems" on March 13, 2013.
4. Prof. S. K. Saha, Naren Gupta Chair Professor, Department of Mechanical Engineering, IIT Delhi: "RoCK-BEE: Robotics Competition Knowledge Based Education in Engineering" on March 22, 2013.
5. Dr. Philip A. Davies, Associate Professor, Sustainable Environment Research Group, School of Engineering and Applied Science, Aston University, UK: "DesaLink: Solar powered desalination of brackish groundwater giving high output and high recovery" on April 1, 2013.
6. Dr. Namrata Gundiah, Assistant Professor, Department of Mechanical Engineering, Indian Institute of Science, Bangalore: "Mechanics of Living Tissues: In Sickness and in Health" on April 5, 2013.
7. Dr. Supreet Singh Bahga, Stanford University, USA: "Propagation and Interaction of Ion Concentration Shock Waves in Microfluidics" on April 9 2013.
8. Dr. Raghupatruni Prasad, Postdoctoral Research Scientist, High Temperature Energy Materials Research Center, Korea Institute of Science & Technology: "Structure, magnetic and mechanical properties of rapidly solidified Ni-base magnetic shape memory alloys and Fe, Ni-Au alloy, barcode" on April 29, 2013.
9. Dr. V. Jayaram, Principal Research Scientist , Solid State and Structural Chemistry Unit, IISc Bangalore: "Materials under extreme thermodynamic conditions-an experimental" on May 21, 2013.

New Faculty Recruits (January to June 2013)

Sl.	Name	Designation	Department	Ph.D.	Joining
1	Dr. Partha Sharathi Dutta	Assistant Professor	Mathematics	IIT Kharagpur	February 2013
2	Dr. Smruti Ranjan Behera	Assistant Professor	Humanities & Social Sciences	University of Delhi	March 2013
3	Dr. Balwinder Sodhi	Assistant Professor	Computer Science & Engineering	IIT Kanpur	April 2013
4	Dr. S. R. Sudarshan	Assistant Professor	Computer Science & Engineering	IISc Bangalore	April 2013
5	Dr. Vishwajeet Mehandia	Assistant Professor	SMMEE	IISc Bangalore	April 2013
6	Dr. S. Varun Kumar	Assistant Professor	SMMEE	IISc Bangalore	May 2013


Partha Sharathi Dutta


Smruti Ranjan Behera


Balwinder Sodhi


S. R. Sudarshan


Vishwajeet Mehandia


S. Varun Kumar

IIT Ropar Placement Report 2013

The placements of the second batch (2009-13) at IIT Ropar have been completed and it was very successful. The organizations that participated in the final placement 2013 include companies such as Microsoft India, Ebay/Paypal, Cognizant Technology Solutions, Larsen & Toubro Limited, Nucleus Software, Samsung India Software Centre, Samsung Engineering Lab, Ericsson, Infosys, Flipkart, SCA Technologies, Navyug Infosolution, Oceaneering, Texas Instruments, Cisco among others. The response from industry has been overwhelming, with companies in the recruitment process making 97 offers to the students. The PSUs also contributed in a big way towards the recruitment of our students. ONGC hired as many as 16 students from our campus. Other PSUs that hired from our campus were Indian Oil Corporation Limited, DRDO and HPCL. Some of the new companies that took part in the placement process were TCS, L&T and Cognizant.

The average salary for all the three engineering branches is Rs. 11.13 Lakhs. The average salary for Computer Science and Engineering is Rs. 13.83 Lakhs, for Electrical Engineering it is Rs. 9.36 Lakhs and for Mechanical Engineering it is Rs. 9.13 Lakhs. The highest package offered abroad remained US$1,05,000 per annum by the US based company Epic Systems.

This year we had a great internship season as well. The students secured internships at Aston University (UK), and in Germany and USA through DAAD and S.N. Bose Scholars Programs, respectively. It was heartening to note that most of the internships were paid internships.

Central NMR Facility

The NMR centerrecently became operational in the transit campus of IIT Ropar. It provides state-of-the-art high-field NMR facilities to support research across a wide range of disciplines for some of the main applications in the IIT. These include internal and external (both industry and academic collaboration) users. The centre has a Faculty-in-charge and is run by a dedicated operator.

INDIAN INSTITUTE OF TECHNOLOGY ROPAR

Academic Calendar for First Semester of AY 2013-14

1	Reporting of new students (UG)	Jul 22 (Mon)
2	Orientation of new students (UG)	Jul 23 (Tue)
3	Registration for New Students (UG & PhD)	Jul 23 (Tue)
4	Registration validation for continuing students (UG & PhD)	Jul 24 (Wed)
5	Commencement of classes	Jul 25 (Thu)
6	Late registration and finalization of registration	Jul 31 (Wed)
7	Last date for course Add/Drop	Aug 02 (Fri)
8	Last date for adding courses in lieu of courses dropped on Aug 02, 2013 by UG & PhD Section)	Aug 06 (Tue)
9	Last date for getting mid semester course evaluation form filled	Sep 12 (Thu)
10	Midterm evaluation project for UG (No classes)	Sep 13 (Fri)
11	Mid Semester Examination	Sep 16 (Mon) – Sep 19 (Thu)
12	Last date for return of marked answer scripts	Sep 27 (Fri)
13	Last date for departments to float courses for next semester	Oct 04 (Fri)
14	Last date for Audit and Withdrawal	Oct 07 (Mon)
15	Mid Semester Break	Oct 14 (Mon) – Oct 18 (Fri)
16	Last date for getting course evaluation form filled	Oct 19 (Tue)
17	Course registration for next semester	Oct 30 (Wed) – Nov 01 (Fri)
18	Last date for Submission of project reports for UG students	Nov08 (Fri)
19	Last day of classes	Nov 20 (Wed)
20	Project viva-voce for UG (No classes)	Nov 21 (Thu)
21	Major Examination	Nov 22 (Fri) – Nov 28 (Thu)
22	Last date to show answerscripts to the student	Dec 03 (Tue)
23	Last date for grades to reach UG/PhD section	Dec 04 (Wed)
24	Display of grades by UG /PhD section	Dec 09 (Mon)
25	Winter Vacation	Dec 09 (Mon) – Jan 3 (Fri)
26	Last date for progress report submission for PhD	Dec 27 (Fri)

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