

# MNIT NEWSLETTER

Issue 7, June 2013

MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR



# MINITY NEWS

## Director's Message

In the quarter March-May 2013, workshops and conferences were organized on diverse topics such as pattern recognition techniques, computational techniques in engineering; brainstorming sessions were held on the new Science, Technology and Innovation Policy, and stimulating lectures by distinguished speakers on interesting aspects such as zeolite chemistry and energy conservation provided much food for thought. Experts from prestigious institutes such as the IIT's, NIT's, Central University of Rajasthan, IGNOU ,Delhi, BITS Pilani and others gave knowledgeable insights into various areas of engineering research and development. Exchange of ideas leads to creative thinking and facilitates innovation as varying perspectives are thrust on our consciousness. As a premier institute of engineering education and research, MNIT Jaipur stands for excellence and commitment. I expect these academic interactions have greatly benefited both faculty and students of the Institute and will eventually prove to be educative experiences.

JAI HIND

Prof. I. K. Bhat



## *Vision*

*To create a center for imparting technical education of international standards and conducting research at the cutting edge of technology to meet the current and future challenges of technological development.*

## *Mission*

*To create technical manpower for meeting the current and future demands of industry; To reorganize education and research in close interaction with industry with emphasis on the development of leadership qualities in the young men and women entering the portals of the Institute with sensitivity to social development and eye for opportunities for growth in the international perspective.*



# Workshops/Conferences/ Short-Term Courses/Training Programmes Conducted

❖ A Short-Term Training Program on '**Operation and Control of Modern Power Systems**' was organized by the **Department of Electrical Engineering** from March 7-11, 2013 which was attended by 69 participants, including 37 students. The course was partially self-sponsored and partially funded by TEQIP. The Convener of the course was Prof. K. R. Niazi and Course Coordinators were Dr. Nikhil Gupta & Dr. Anil Swarnkar. The speakers included Prof. B. Das (IIT, Roorkee), Prof. Ibraheem (JMI, New Delhi), Prof. S. L. Surana (Former Prof. MBM Engg. College, Jodhpur), Dr. S. K. Calla (Former CMD, RRVUNL), Er. B. N. Saini (Director, RVPNL), Dr. Nilanjan Senroy (IIT, Delhi), Dr. Saikat Chakrawarti (IIT, Kanpur), Dr. Jayashree Vajpai (MBM Engg. College, Jodhpur) and faculty members of the Department. The lectures covered different aspects related to security, power

quality, monitoring and control of modern power systems.

❖ A Short-Term Course on **Computational Techniques in Engineering and Sciences** was organized by the Department of Metallurgical and Materials Engineering from April 1-5, 2013. Overall 57 participants attended the course including faculty members and research scholars from NIT Allahabad, NIT Kurushetra, Central University Rajasthan and various Govt. Colleges, private universities and colleges all



*Inaugural ceremony of Short Term Course on Computational Techniques in Engineering and Sciences*

over India. The event was inaugurated by Dr. Amita Gill, Director, DST, Govt. of Rajasthan. The coordinators of this short term course were Mr R.K. Duchaniya and Dr. Santosh Chaudhary.

❖ MNIT, in collaboration with Dept. of Science & Technology, Govt. of India, organized a **Brainstorming Conference on 'Science, Technology and Innovation Policy 2013-Implementation'** on April 30, 2013. The Conference was about the measures, mechanism and instruments to realize the policy aspiration and to come up with specific suggestions for schemes, missions, programmes, and implementation of the Policy. In his inaugural address, Prof. I.K. Bhat, Director MNIT Jaipur, highlighted the issues of sustainable production and called for integrated approach



*Prof. I.K. Bhat, Director MNIT addressing the conference*



*Mr. Neeraj Sharma, Advisor, DST GOI, addressing the conference*



*Participants of Short Term Training Programme on 'Operation and Control of Modern Power Systems'*

from industry to academia for national development. Mr. Neeraj Sharma, Scientist and Advisor, DST, Govt. of India elaborated the background, need and pillars of the STI-Policy 2013, on this occasion.

❖ A one-week intensive programme on **Pattern Recognition Techniques** was organized at MNIT Jaipur under the Technical Education Quality Improvement Programme of MHRD, Govt. of India, from May 13-17, 2013. The inaugural function was presided over by Prof I K. Bhat, Director MNIT, Prof Shantanu Choudhary, IIT Delhi as Chief Guest and Prof V. Singh, Professor Emeritus as the Guest of Honour.

Prof. Shantanu Chaudhary IIT Delhi, Dr. Chandra Shekhar, Director CEERI Pilani, Dr. Atenandu Mondal, IC Design Lab CEERI Pilani, were invited to deliver expert lectures, on topics like pattern classification and machine learning, speech synthesis and pattern in motion.

There were more than 60 participants (faculty and research scholars) from various technical Institutes from all over India. The programme was coordinated by Dr. Neeta Nain, Dr. Mushtaq Ahmed and Dr. Ritu Sharma.

❖ As part of Golden

Jubilee Celebrations, an **International Conference on Management and Business Innovation** was jointly organized by Department of Management Studies, MNIT Jaipur, Government Engineering College, Ajmer and Government Women's Engineering College, Ajmer. The conference was inaugurated at Senate Hall, Design Centre, MNIT on May 18, 2013 & Mrs. Meenakshi Jwala, Director, IIQM was the Chief Guest. Keynote addresses on Innovation were delivered by Mr. S.S. Kushwaha, GM, John Deere India Pvt. Ltd, Pune, Prof. Harsh Dwivedi, Director, RA Poddar Institute of Management, Jaipur and Dr. Balvir Talwar, Director Corporate Planning, BHEL, New Delhi. 63 papers were received from IIT's, BITS and other reputed universities and institutes from all over the country out of which 35 papers were selected and invited for presentation. **The selected best 9 papers out of the 35 papers will be published in a special issue of "International Journal of Intercultural Information Management" (IJIM), an Interscience journal.**

❖ A five-day **Computer Awareness Program** for the non-teaching staff of MNIT was organized from May 13-17, 2013, (4.00 pm to 6.00 pm) at the Department of Computer Engineering. The program was organized and conducted by Dr. Mushtaq Ahmed and Dr. Neeta Nain.

The aim of the Program was to develop an understanding of Computer system and applications used for office

automation and dealt with Basics of Computer, OS and applications; MS Excell, MS Word, Open Office tools; Internet communication, Emailing, and cyber law and ethics; Computer based record keeping, data analysis; Data protection, encryption, backup/ restore; Basic trouble-shooting. The course was open to the all the MNIT non-teaching staff.

❖ A one-day Training Program on **Energy Conservation Building Code** was organized on May 25, 2013 by the Centre for Energy and Environment, at the Centre for Excellence in Design, MNIT. The program was organized in partnership with ISHRAE and with support from RRECL.



*Training to participants on Energy Conservation Building Code*

❖ A **National Convention of Production Engineers** was jointly organized by Department of Mechanical Engineering, MNITJ and Institution of Engineers.

The Inaugural session (on May 4, 2013) was presided over by Er. Vijay Joshi, Chairman, PRDB; Prof. I.K Bhat, Director, MNIT, Jaipur was the Chief Guest and Er. R.P Gupta, past President was Guest of Honour. Dr. G.S Dangayach, was the

### प्रिंसिपल कॉम्पोनेंट्स एनालिसिस के बारे में बताया



सिटी रियॉर्डर एम्पनआइटी में चल रहे पैटर्न रिकग्निशन टेक्निक प्रोग्राम के दूसरे दिन मंगलवार को प्रिंसिपल कॉम्पोनेंट्स एनालिसिस के बारे में बताया गया। डॉ.नीता नैन और डॉ.मुस्ताक अहमद ने प्रैक्टिकल व थ्योरेटिकल सेशन लिए। डाटा एनालिसिस, मशीन लर्निंग के बारे में भी जानकारी दी गई। कार्यक्रम में देश के 60 से ज्यादा डेलीगेट्स हिस्सा ले रहे हैं।



*Inaugural function of National Convention of Production Engineers*

Organizing Secretary, During the inaugural function, the following eminent engineers were felicitated for their eminence & contribution to production engineering:

- Prof. R.S Parmar, Ex-Professor, IIT Delhi
- Er. M.L Khandelwal, M.D, Continental Petroleum Limited
- Er. Jugal Kishore Baid, Director, Poly Medicure Limited
- Er. S.K Rathi, former G.M, BHEL, Bhopal

Three young engineers were also awarded with a certificate and a Cheque of Rs.10000/-each for their contribution to the profession of production engineering. These were

- Dr. R. Aravindhan, scientist, Leather Process Technology Division, CSIR- Central Leather Research Institute, Chennai
- Dr. Dr. S. Vinodh, Assistant Professor, Department of Production Engineering National Institute of Technology Tiruchirapalli, Tamilnadu
- Dr. Anupam Krishna, Assistant Professor, Manipal University, Jaipur.

After these felicitations & awards Er. Ashish Gupta, Hony. Secretary, RSC, IEI presented vote of thanks. The convention included 12 key note addresses & 53 papers in six technical sessions.

A core committee comprising of Er. R C Bairathi as Convener, and Dr. G. S. D a n g a y a c h , Dr.AwadeshBhardwaj and Dr Amit Singh was also formulated at Rajasthan State Center to enhance activities of production engineering as a follow- up activity of this

convention.

❖ Department of Management Studies supported by UK-India Education and Research Initiative (UKIERI), British Council organized a workshop on May 30, 2013. The main objective of the workshop was to understand the present scenario and future direction for technology management education in India. Dr. Neeraj Sharma, Scientist G, DST, New Delhi was the Chief Guest for the workshop. Various eminent speakers like Prof. P.C. Basak, IGNOU, New Delhi; Prof. V.P. Wani, Principal, MET Institute of Engineering, Nashik, Maharashtra; Mr. Ajay Gupta, MD, Kamtech Associates; Prof. Jindal, MPTU, Udaipur; Prof. Rakesh Premi; Campus Director of Leeds Metropolitan University, UK's Indian campus 'Leeds Met India, Bhopal, Prof. Rohit Joshi, IIM Shillong, Prof. K.C. Chandrasekhar, Kerala University and Mr. Prashant Pundrik, Managing Partner, Athena Consulting shared their thoughts.

## Distinguished Visitors/Expert Lectures in the Departments

❖ **Centre for Energy and Environment** in association with Mechanical Department organized an invited talk by **Mr. Tom Watson**, ASHRAE President on March 4, 2013 on **Current research needs in HVAC**.



*Mr. Tom Watson delivering the talk*

❖ The Department of Metallurgical and Materials Engineering organized an invited lecture by Prof. B. S. Murty of Indian Institute of Technology Madras on April 5, 2013. This event was coordinated by Prof. P. R. Soni.

❖ As part of Golden Jubilee Celebrations, Department of Management Studies organized two invited lectures on April 8, 2013. The topics of the lecture were: Role of effective Communication for Knowledge Transfer and How to make excellent presentations? The speaker was Dr. Sangeeta Sharma, Associate Professor, BITS-Pilani, Pilani Campus.

❖ As part of the Golden Jubilee celebration of MNIT Jaipur, the Department of Chemistry organized an invited lecture on May 10, 2013 by Dr. Rajendra Srivastava, Assistant Professor, Department of Chemistry, Indian Institute of Technology R o p a r o n

**“Hierarchical/Nanocrystalline zeolite: A new concept in zeolite Chemistry”**. Altogether 60 people including faculty members, research scholars, M.Sc students and persons from other departments attended this informative lecture on Zeolite Chemistry. The lecture on **Nanocrystalline Zeolites** benefitted all the attendees but especially those postgraduate students who have shown keen interest in research and development as a career.

## Visit/Expert Lectures Delivered by Institute Faculty

❖ Dr. Jyotirmay Mathur presented an invited talk on **'Building Integrated Solar Energy Systems: Towards Net Zero Energy**

**Buildings'** at the Conference on Solar Rajasthan - Tapping the Untapped organized by ASSOCHAM on March 15, 2013.

❖ **Mr. Lalit Joshi**, Sr. Project Engineer at CEE, presented an invited talk on '**Building Integrated Solar Energy Technologies & Future Possibilities**' at the Conference on 'Renewable Energy in Rajasthan –Unleashing the Potential', on April 25, 2013.

❖ **Prof. U. Pandel**, Prof. C. P. Sharma, Prof. A. K. Bhargava, Prof. M. K. Banerjee, Dr. V. K. Sharma, and Dr. Vinod Kumar visited **National Engineering Industries Ltd. Jaipur** (popularly known as NBC) to explore the opportunity for collaborative research work

## Awards / Recognition Received / Faculty Achievements

❖ **Dr. Anil Swarnkar**, Assistant Professor, Department of Electrical Engineering, received POSOCO Power System Award (PPSA-2013) for Ph. D. category. The award is given by Power System Operation Corporation (POSOCO) - a subsidiary of Power Grid Corporation of India Ltd, in partnership with the Foundation for Innovation & Technology Transfer (FITT), IIT Delhi for innovative research in area of power systems. The

award includes a cash prize of Rs. 75000/- along with a certificate.

❖ **Dr. N.C.Upadhyay**, Associate Prof., Department of Materials and Metallurgical Engineering, was selected for the Indira Gandhi Shiromani Award for Excellence by India-International Friendship Society, New Delhi.

## Students' Achievements

❖ Shivani Kanongo and Kailash Chand Sharma, students of Master of Technology in Power Systems from Electrical Engineering Department won POSOCO Power System Award (PPSA) - 2013. They were both conferred with PPSA and a cash price of 35,000/- each. They completed their masters under the supervision of Mrs. Purna Jain, Assistant Professor and Dr. Rohit Bhakar,



*Winner of POSOCO Award*

Assistant Professor.

## Projects/Civil Works/Research Grant Received

Three Research projects have been sponsored to

**Department of Chemical Engineering** by various sponsoring agencies of Rajasthan:

(i) Research project on "**Membrane Integrated Modified Nalgonda Defluoridation Technique for drinking water**" sponsored by CCDU, Rajasthan, sanctioned **Rs. 15,90,000/-** for two & half year project. **Dr. Madhu Agarwal** is the Principal Investigator and Dr. A.B. Gupta, Dr. S.P. Chaurasia, Dr. Suja George are Co-PI.

(ii) Research project on "**Defluoridation of drinking water using combination of magnesium and calcium amended activated alumina**" sponsored by DST, Rajasthan, sanctioned for **Rs. 11,50,000/-**. **Dr. Suja George** is the Principal Investigator and Dr. A.B. Gupta, Dr. Urmila Brighu Co-PI.

(iii) Research project on "**Studies on Mist Reactor**" sponsored by DST, Rajasthan, sanctioned **Rs. 9,30,000/-**. **Dr. Manish Vashishtha** is the Principal Investigator.

## Other Activities

❖ A Road Show was



*Director's address to the participants*



*Students visiting the laboratories of Institute during Road show*

organized on April 5, 2013 in the institute. Three groups of about 50 students in each group from different schools of class X, XI, and XII visited the various laboratories, workshops of Mech., Engg. Deptt, Central Library, Hostels, Design Centre of the institute. Prof. I.K.Bhat, Director MNIT, Prof. S. L. Soni, Chairman Golden Jubilee, Prof. Rakesh Jain, Dr.G.D.Agrawal, Co-ordinator of the programme along with many faculty members of the department addressed and

interacted with the students and guided them. Prof. I. K. Bhat motivated the students with a new idea of "SMART GOAL" for a better and successful career.

❖ As part of the activity "Interaction with Sr. secondary school students to popularise the Metallurgical and Materials Engineering education" during the Golden Jubilee Celebration Year, the Seventh meeting was held with the students (Hindi medium) of Indian Public School, Barkat Nagar, Jaipur on April 29, 2013.

❖ The world celebrated 'Earth Hour' on Saturday, March 23rd, 2013, by switching off lights between 8:30 PM to 9:30 PM. We have been celebrating the Earth Hour in MNIT Jaipur for quite a few years. This year also, following events were held by Centre of Energy and Environment:

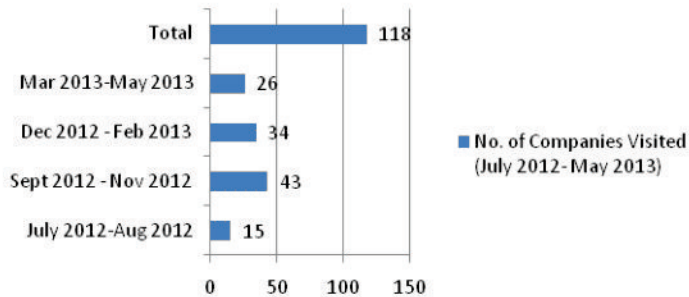
1. An awareness march was organised by UG students of MNIT Jaipur and children of staff in the campus to appeal to people to participate in earth hour.
2. A short cultural programme was organised near the solar light in the Children's Park on the campus during the earth hour. It was attended by numerous students, staff and faculty members and their families



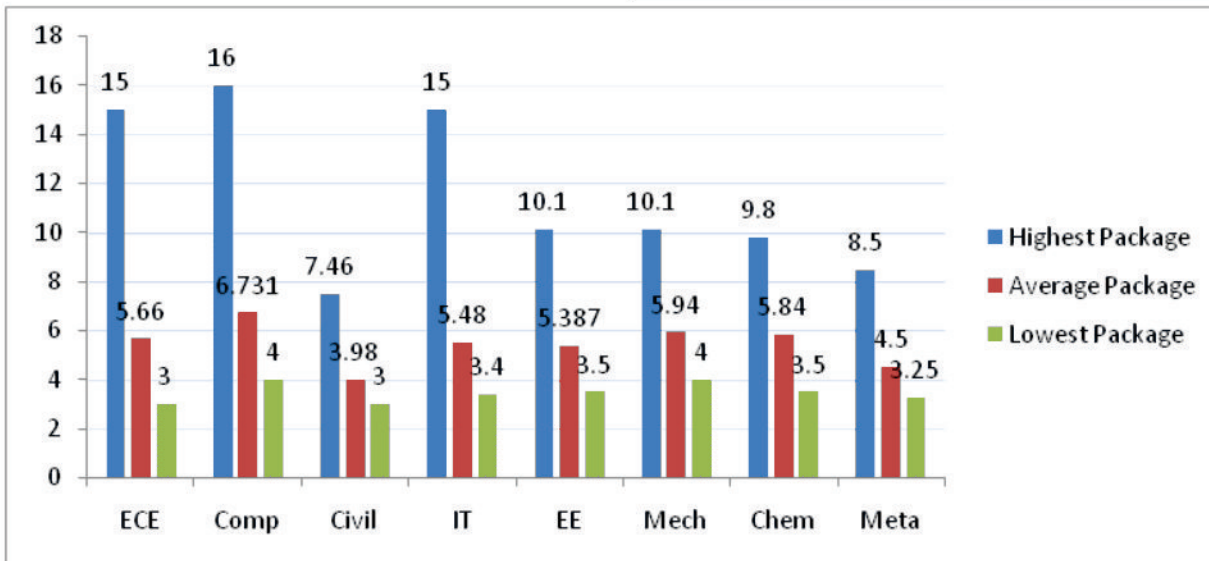
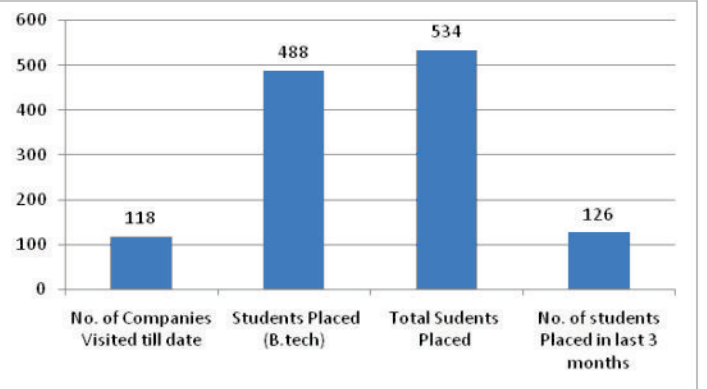
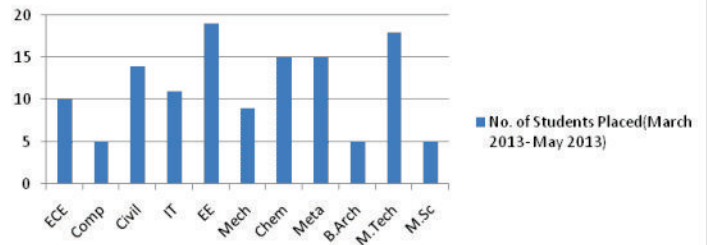
*Students visiting the laboratories of Institute during Road show*

# Placement & Industry Institute Interaction

**No. of Companies Visited (July 2012- May 2013)**



**No. of Students Placed(March 2013- May 2013)**



## Forthcoming Programmes

❖ *The Institute is going to celebrate its Eighth Convocation on July 10, 2013. Honorable President of India, Sri Pranab Mukherjee has given his kind consent to be the Chief Guest on the occasion.*

### Editorial Team -

Coordinator  
 Dr. (Mrs.) Nupur Tandon  
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 Dr. Madhu Agarwal  
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 Ms. Shveta Tripathi