

MNIT NEWSLETTER

Issue 14, March 2015



MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

MNITJ NEWS

the quarterly news magazine

Director's Message

The Institute in this quarter witnessed a wide range of activities, Academic courses on satellite communication and networking, MATLAB programming, preparing technical manuscripts and mobile communication system provided useful insights for faculty and students alike. Workshops and training programmes on areas such as cyber-security, kinematics, dynamic analysis, remote sensing and GIS softwares, critical thiking and spatial analysis techniques provided hands-on experience and helped in understanding these concepts better. It is noteworthy that all these events were attended by participants from all over India, besides the students and faculty of our own institute. Several renowned scholars also visited the campus and shared their wide knowledge in areas of their expertise which included cloud computing, energy conservation, green chemistry, futuristic material and other such interesting topics.

As a premier institute of technology, the onus of innovative research and technology is on us-we have to gear our students to meet the challenges of this fast-paced world and take our country forward. Our students, too, continue to bring laurels and actively participate in symposia and other activities, both within the institute and outside. We at MNIT are also deeply aware of our social responsibility and contribute our bit by organising awareness programmes on various issues that are significant for the conservation of our ecology as well as the human race.

Today, the country needs individuals who are as committed as they are qualified- committed to the common good and the betterment of the society which they are a part of. After all, it is a continously evolving individual who is most likely to create a constantly evolving society. For, is it not rightly said " The world is changed by your example, not by your opinion."

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 developmetn and eye for opportunities for growth in the international perspective.

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

❖ A two-day National Conference on *Sustainability Manufacturing* was organised by **Department of Management Studies** from January 2-3, 2015 in collaboration with Petroleum Conservation Research Association (PCRA) and RIICO. The Chief Guest for the seminar was Prof. Devi Singh, VC, JK Lakshmi Pat University and Guest of Honour was Prof. P. N. Rao, Northern Iowa University, USA.



The aim of this conference was to bring together leading academic researchers to exchange and share their experiences and research results about all aspects of sustainable manufacturing. It gave a platform for practitioners and educators to present and discuss the most recent innovations, trends and concerns, practical challenges encountered and solutions adopted in the field of sustainable manufacturing. Six keynote addresses were given by industry and academia experts raising the importance of sustainability in continuous development while balancing our economic, social and environmental needs and allowing prosperity for future generation. Around 30 papers were also presented by various researchers from all over India talking about sustainability in manufacturing.

❖ The **Department of Electronics and Communication Engineering** conducted a one-credit course on *Satellite Communication and Networking: Principles and Research Challenges* from January 6-15, 2015. Lectures were hosted in NKN virtual classroom, MNIT, Jaipur, and were delivered by Prof. Sastri Kota, SoHum Consultants, Adjunct Professor, University of Oulu, Finland.



❖ A Short-Term Course on *Mathematical Modeling, MATLAB Programming and their Applications in Engineering and Sciences* was organized by the **Department of Mathematics** from January 19-23, 2015. More than 100 participants from IIT Kharakpur, NIT Srinagar, NIT Surat, NIT Bhopal, NIT Suratkal Karnataka, Central university of Rajasthan, Kurushetra University, Rajasthan University and other prestigious Universities and Institutes from all over India came to Jaipur to attend this course. Some of the participants were from prestigious private Universities/Engineering Colleges of Jharkhand, Chennai, Gandhi Nagar (Gujarat) and other places. Participants from industry have also attended the course to enhance their knowledge of MATLAB. The Course Coordinators of the STC were Dr. Nilama Gupta and Dr. Santosh Chaudhary.



❖ A workshop on *Kinematic and dynamic analysis of mechanism using Altair Hyperworks* was organized by the **Department of Computer Sciences** from January 20 to 23, 2015 for Department of Mechanical Engineering.

❖ The **Department of Electronics and Communication Engineering** organized a half-day workshop entitled *Technical Manuscript Preparation with LaTeX* on January 28, 2015. There was good response to the workshop and was attended by 87 UG, PG and PhD students of MNIT, Jaipur. The event was coordinated by Dr. M. S. Ansari, Dr. S. J. Nanda, Dr. M. Ravi Kumar and Mr. Amit M. Joshi.

❖ A Training for ERDAS (Remote Sensing and GIS) Software was arranged by **Department of Architecture and Planning** from January 29 to 30, 2015. During this training the lecture was delivered by MR. Sunit Thapa, an Engineer from Intergraph SG&I India Pvt., Limited, New Delhi.



Participants of ERDAS (RS and GIS) Software Training organised on 29th and 30th January 2015

The participants of the training were made of the tools used for analyzing Remote Sensing data and preparing the geospatial layers in GIS environment. For this purpose the resource person gave power point presentation and demonstrated the functionality of different tools of ERDAS Imagine and Geomedia tools. The whole presentation focused on two modules of the software. (1) ERDAS Imagine functionality for analyzing Remote Sensing data and Photogrammetric data and (2) Geomedia Pro for preparing GIS Maps. Along with the tools of the software, the participants were also made aware about the application of the software in the field of Urban Planning by Dr. Smriti Ashok, a Guest faculty from the Department of Architecture & Planning.

The training was attended by forty participants of different background. The participants included five Ph.D. scholars from the Department of Civil Engineering, 30 students from the Department of Architecture & Planning, Five faculty members from the Department of Architecture & Planning and Civil Engineering of the Institute.

❖ **Department of Centre for Energy and Environment** organized a workshop on *Selection of Heat Recovery Wheel and Energy efficiency calculations* on February 6, 2015. Mr. Aeron (National Sales Manager, DRI) described industrial practices of selection of such products through theory and practice.

❖ A two-day Training Program on *Environment Clearance on Infrastructure Project* was organized by **Centre for Energy & Environment** in association with IL&FS Academy, Mumbai from February 13-14, 2015. About 25 participants from industry, consultancy

organizations, financial institutions, and government sector participated in the event. Prof. Prasad Modak, IIT Bombay, and Dr. Sanjay Mathur, MNIT Jaipur were the main resource persons in this event.



❖ The **Department of Electronics and Communication Engineering** conducted a one credit course on *'Challenges in Advance Mobile Communication Systems* from February 16-28, 2015. Dr. Satyasai Jagannath Nanda was the Course Coordinator. The expert lectures were delivered by Dr. Vinod Kumar, Alcatel Lucent Bell Lab, France.



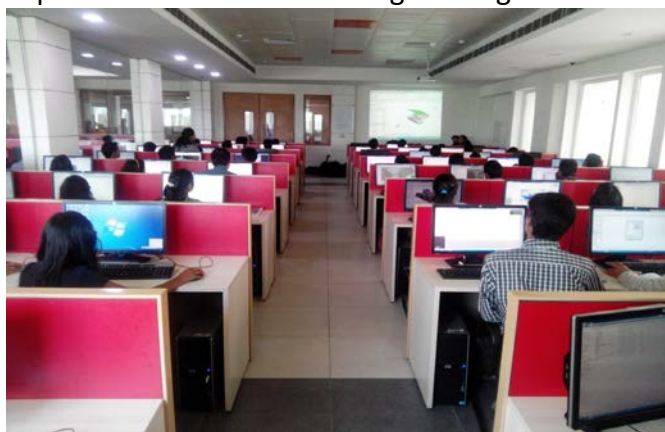
❖ **Department of Management Studies** organized a workshop on *MicroAnalysis of Financial Statements* on February 26, 2015. Mr. S.Chandrasekar, Managing Director, EmpoVer HR

Solutions Pvt. Ltd, Bangalore, was the main resource person in this event.



The workshop, attended by about 60 students, provided hands-on training to the participants regarding analysis of balance sheets, and application of knowledge derived from such multiple micro-analyses of financial statements. The workshop also included discussions on employability skills in the related sector and how to enhance them.

❖ A workshop on Autodesk Inventor was conducted from February 23-26, 2015 for Department of Mechanical Engineering.



❖ **Department of Management Studies** organised a workshop on *Critical Thinking for Managers: What, Why and How?* on February 27, 2015. Mr. Vivek Gupta, Faculty, IT & Systems Group, IIM Lucknow was the main resource person in this event.

❖ A Short-term training Programme on *Spatial Analysis Techniques & Creation of GIS database for the Watershed Applications* for the Engineers of Watershed Dev. & Soil Conservation Department, Govt of Rajasthan from March 7-11, 2015 organized by **Department of Civil Engineering**.



The workshop focused mainly on aspects of critical thinking that can be applied to work and study. The underlying concepts and hands-on exercises included in the workshop helped participants to understand the concepts used in critical thinking and use this understanding to develop clearer thinking, interpret and produce arguments more effectively and be more observant of what they see and hear.

Projects / Civil Works / Research Grants Received

❖ NVIDIA Corporation has designated MNIT as CUDA Teaching Center with Prof. M. C. Govil (Prof & Head), and Dr. Emmanuel Pilli (Assistant Professor) as Principal Investigators. They have awarded five NVIDIA GPU Cards – One Tesla K40, Two Quadro 6000 and Two GTX680 cards. The grant also includes 5 Text Books and Teaching material to support courses on parallel computing. The selection as a CUDA Teaching Center based on MNITs demonstrated commitment to advancing the state of parallel education using CUDA C/C++. Department of CSE is setting up a cluster of NVIDIA GPU Cards for CUDA and Open CL Programming.

❖ Dr. Sandeep Chaudhary (PI) and Dr. Mukesh Jain (Co-PI), Assistant Professors in the **Department of Chemistry** have been sanctioned a Joint research Project (International Project entitled *Exploring Antimalarial Peroxides from Bench-side to Bed-side: Synthesis, Chemistry, Antimalarial Assessment and SAR Studies of novel functionalized 1,2,4-Trioxanes and 1,2,4,5-Tetraoxanes against Multi-Drug Resistant Malaria* by the DST, New Delhi and Slovenian Research Agency (ARRS), Ministry of Education, Science and Sport of the Republic of Slovenia. The duration of Project is three years and the total sanctioned amount including overhead charges is approximately Rs. 35,36,000.00/-.

Distinguished Visitors/Expert Lectures in the Departments

❖ An invited lecture on “Market-Oriented Cloud Computing and Big Data Applications” was delivered by Prof. Raj Kumar Buyya, Director, Cloud Computing and Distributed Systems (CLOUDS) Lab, University of Melbourne, Australia on December 19, 2014 in the **Department of Computer Science**. This was followed by interaction with faculty members and students. The event was chaired by Prof. M. C. Govil and coordinated by Dr. Emmanuel Pilli.



Prof. Buyya is one of the highly cited authors in Computer Science worldwide (h-index=86 and 36200+ citations). He also received the “2009 IEEE Medal for Excellence in Scalable Computing” for pioneering the economic paradigm for utility-oriented distributed computing platforms such as Grids and Clouds. He is the founding Editor-in-Chief (EiC) of IEEE Transactions on Cloud Computing (TCC) and the founding CEO of Manjrasoft Pty Ltd.

❖ Dr. Anand Sastry of QoSys USA visited the **Department of Electronics and Communication Engineering** from January 9-11, 2015 for exploring possibilities of collaboration; his company is involved in design & manufacturing of Internet of Things (IoT) appliance;

❖ **Department of Centre for Energy and Environment** organised an invited talk by Dr. Anurag Ateet Gupta, Former Executive Director, IOCL, on “Reduction techniques for Green House Gases emission” on January 13, 2015. Dr. Gupta spoke on various dimensions of carbon capture and storage and India’s positioning in climate change negotiations.

❖ **Department of Centre for Energy and Environment** organised an invited talk by Dr.

Essam Khalil, Professor in Mechanical Engineering, Cairo University, Egypt, on “Energy Performance of Buildings” on January 15, 2015. Dr. Khalil explained international developments in this area including policy framing for built environment under ISO.

❖ Mr. Ajit Singh, Vice President of Vihan Network Ltd. India, Gurgaon, visited **Department of ECE** with two other company executives on January 17, 2015; this is a critical sector communication company owned by Mr. Rajeev Malhotra, (Chairman BoG, NIT Jalandhar); the company offered long term collaboration with the department.

❖ The **Department of Chemistry** organized an invited lecture as part of “Departmental Seminar Series” by one of the well-known chemists Prof. (Dr.) Kishor R. Desai, Director, Department of Chemistry, UkaTarsadia University & Ex-Prof. and Head, South Gujarat University, Gujarat on January 30, 2015 on the topic “**Green Chemistry**”. Prof. Desai talked about the different ways of doing greener chemical reactions which, especially, focused on greener ways to preserve our environment and living beings. Altogether 70 people from the institute including faculty members, Ph.D research scholars, M.Sc students and a few members of other departments attended this informative lecture on Green Chemistry. **Prof. Desai** is a renowned chemist and has published more than **350** research papers of international/national repute. He has **40** years of teaching experience and his research interests include Green Chemistry, Synthetic Organic Chemistry, Synthetic Dyes, Medicinal Chemistry and Heterocyclic Chemistry. He has guided 74 Ph.D students and 41 M.Phil students and published six books.



Prof. K. R. Desai receiving memento from Head of the Chemistry Department Prof. K. D. Gupta. Also seen on the left, the Programme Coordinator (Dr. Sandeep Chaudhary)

Ajay K Bansal (Supervisor: Prof. R A Gupta & Dr. Rajesh Kumar)

Visit/Expert Lectures delivered by Institute Faculty

❖ Dr. Vinod Kumar, Assistant Professor of Department of Metallurgical and Materials Engineering, delivered a Keynote Talk in the national conference on "**Innovation in Futuristic Materials and Manufacturing Techniques**" at Manipal University, Jaipur, on December 26, 2014. The title of the keynote talk was "**Development of Superlight Structural Metallic Materials**".



Students Achievements / Activities

❖ Prestigious enhanced fellowships for PhD candidates under Visvesvariya PhD scheme of DeitY, Ministry of Comm. & IT received for focus areas of Electronics System Design & Manufacturing & IT for nine fellowships to MNIT (ECE/EE/CSE); the first ever admissions into the stream initiated in December 2014.

❖ Scholars of the Department of Electrical Engineering have received five POSCO awards for year 2014.

M.Tech. Category

Pankaj Kumar (Supervisor: Dr. Nikhil Gupta)

Kritika Saxena (Supervisor: Dr. Prerna Jain & Dr. Rohit Bhakar)

Gaurav Bhansali (Supervisor: Dr. Rajesh Kumar)

Ph.D. Category

Parul Mathuria (Supervisor: Dr. Rohit Bhakar)

❖ A workshop on "Cyber Security" by GtechLearn on January 11, 2015 was organised by Dr. Sanjay Rajpal, Coordinator, **Computer Centre** for ECE, CSE, MBA students. This workshop was attended about 200 students. Most of the students want to learn Cyber Security in depth. Seminar@CAMPUS is a full Service of Ethical Hacking that is ideal for all student groups aspiring Ethical Hacking, Penetration Testing streams. Seminar@CAMPUS is determined to upgrade the quality and professionalism in the field of Ethical Hacking and Penetration Testing across the nation. Seminar@CAMPUS has gone beyond conventional methodology to encourage students achieve their career goals. The philosophy of Seminar@CAMPUS is simple but effective. Seminar@CAMPUS was set up with an objective to provide its students with an excellent service experience with respect to their needs.

❖ Vibhor Goyal and Aman Agarwal presented a paper titled "Information Integration for Movies Data Using Graph Database" in IEEE International Conference on *Signal Processing, Informatics, Communication and Energy Systems (IEEE SPICES)*, organized by National Institute of Technology, Calicut from February 19-21, 2015.

This work was the result of summer internship as part of IBM's Global Remote Mentoring Programming. This is a unique program designed to provide a mechanism for students to learn real life technical problem solving, project delivery concepts and communication skills. Students worked with Faculty Mentor Dr. Emmanuel Pilli, Assistant Professor in consultation with designated IBM Mentor Dr. Sameep Mehta, Senior Researcher and Manager, IBM Research Lab, New Delhi on their project. The resources of the Institute were used to support their work.



❖ A team comprising students, namely Karsh Tharyani, Maharishi Kant Mishra and Ansh Kathpalia, from the CAD-CAE Society of the Mechanical Engineering Department and the

Research & Robotics Group "ZINE" participated in the Mind Rover, an event organized by TATA MOTORS. The MNIT team qualified amongst the top 5 nationalists for the finale held at Automotive Research Association of India (ARAI), Pune on February 27, 2015, and ultimately won the Nationals by bagging the first prize. Apart from winning a chance for each team member to appear for the Pre-Placement interview for TATA Motors, the team also won a prize money of Rs. 1,00,000.



Other Activities

❖ The Center for Disaster Mitigation and Management in association with Vivekananda Society Jaipur Chapter organised a special lecture on November 20, 2014 - **Glimpses of Shri Vivekananda and his teaching: A monk of the highest order in the Indian society**. The function was presided over by Shri S N Bhargava, former Chief Justice of Sikkim and the main Speaker was Professor T K Datta, IIT Delhi.

❖ On the occasion of World AIDS Day, the Department of Chemistry, MNIT, Jaipur (Rajasthan) in association with Anand Bhawan Foundation (*a Non-Government Organization*) organized "AIDS Awareness Programme" as part of Community Development Programme on December 1, 2014. MNIT team lead by Dr. Sandeep Chaudhary (*Programme Coordinator*) and Dr. Jyoti Joshi (*Programme Co-coordinator*) in association with Dr. Manas Mathur and Mr. Rishabh Ronin Shrivastava & their team from Anand Bhawan Foundation, (NGO) played a key role in organizing this event successfully.



❖ DMS, MNIT Jaipur organized on January 22, 2015 the 4th session of **Reconnect - Alumni interaction session** with Ms. Ritika Sharma, Gold Medalist of MBA Batch 2013 and currently Business Analyst at Karani Group, Dubai (UAE).

❖ Under the aegis of the Literary Society of the Creative Arts and Cultural Society, MNIT, a Panel Discussion of four young authors: Jaspreet Kalra, Tanessa Puri, Simar Malhotra and Udyan Sharma, on the topic 'Creative Writing: Give Wings to your Imagination' was held on January 24, 2015. The four authors, who were also Panelists at the Jaipur Literary Festival 2015, shared their views and experience of creative writing and presented excerpts from their published works. Around 85 students of different streams attended the programme. Students from the audience asked the authors questions about the process of writing fiction and non-fiction. The Panel Discussion was moderated by Dr Preeti Bhatt and Mrs Nanny Tripathi.



❖ Prof. I. K. Bhat, Director MNIT, Jaipur inaugurated the new premises of Department of ECE initiated with Hawan and Puja on 11th February 2015 .

❖ Students of Mechanical Engineering Department and Centre for Energy & Environment

visited factory and R&D Centre of Desiccant Rotors India Ltd., Gurgaon on February 14, 2015. They saw the fabrication and testing facility of heat recovery wheels in this visit.

❖ A free-of-cost Computer Skill Development Programme was organized from February 23 -27, 2015 for the youths living in the villages adopted by MNIT under Unnat Bharat Abhiyan (UBA) of the Ministry of Human Resource Development for the upliftment of rural India. Total 22 participants participated in this programme.

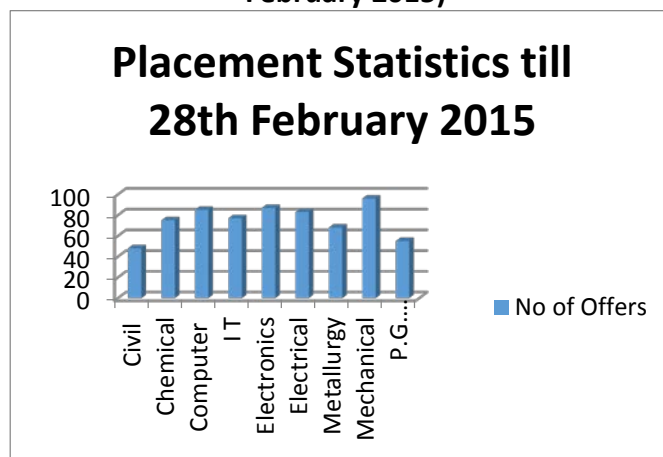
Prof. Dilip Sharma is Coordinator, UBA MNIT and Dr. Dinesh Kumar and Dr. M.L.Meena were Programme Coordinators to organize more such programme for the development of their villages. They also promised that they would play a vital role with the institute in the development of their villages. During the closing ceremony of the programme on February 27, 2015, Prof. I.K. Bhat took feedback from the participants, awarded certificates and encouraged them in contributing towards the development of the society.



❖ Second semester students of MBA visited Jaipur Rugs on February 26, 2015. Jaipur Rugs is the leading manufacturer of hand-knotted rugs from India and is known for its quality, variety of traditional, transitional and modern designs.



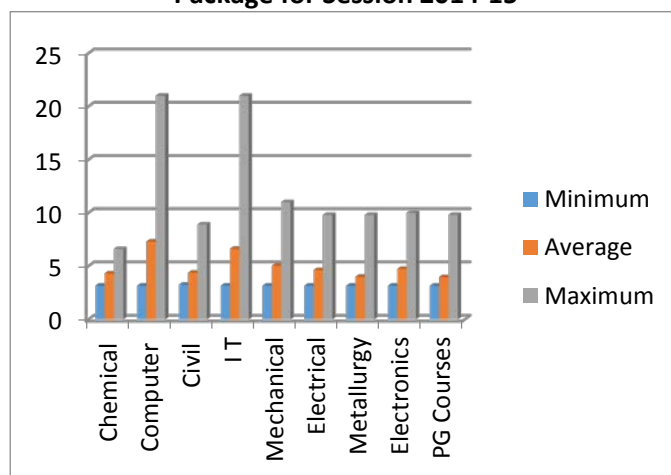
Placement Statistics for Session 2014-15 (Till February 2015)



Overall Minimum Maximum and Average Package for Session 2014-15

Title	Package in LPA
Minimum package	3.15
Maximum	21
Average	5.09

Branch Wise Minimum, Maximum and Average Package for Session 2014-15



Editorial Team-

Coordinator:-

Dr. (Mrs.) Nupur Tandon

Co-coordinators:-

Dr. Dipti Sharma

Dr. Deepak Verma

Member :

Sh. Deepak Atolia