

# MNIT NEWSLETTER

Issue 13, December 2014



MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

# MNITJ NEWS

the quarterly news magazine

## Director's Message

Beginnings are always looked forward to as they are full of promise and hope. And as another year approaches, there is anticipation of new challenges and of seeking and implementing fresh approaches. Malaviya National Institute of Technology Jaipur witnessed a wide range of activities throughout the year 2014, which ended with the usual and now familiar buzz of seminars, talks and cultural events. Academic interactions included conferences and workshops on application of nanotechnology, soft materials and frontier materials, mechatronics and structural dynamics that brought together brilliant minds from reputed institutes and organizations in India and abroad and proved to be as stimulating as they were enriching. The Institute hosted numerous dignitaries from all over the world who not only shared their own unique experiences with the students and faculty but also appreciated the initiatives the Institute has taken as it forges ahead towards development and excellence.

MNIT Jaipur also participated in the nationwide efforts of Clean India or 'Swachh Bharat' and in the celebration of birth anniversaries of such statesmen as Sardar Vallabhbhai Patel as National Unity Day, and of Maulana Abul Kalam Azad as National Education Day. The enthusiastic participation of the faculty, staff and students in these events brought to the fore the relevance of the principles these great stalwarts believed in and put their faith in so as to lead India towards prosperity and growth.

As we stand at the threshold of the new year, let us not look back with regret but with a sense of accomplishment. And, as well, let us usher in the new year with renewed vigour and set ourselves more ambitious targets and higher goals.

Happy New Year and 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

❖ Society of Automotive Engineers (SAE) India organized the SAE Student Convention 2014 and Malaviya National Institute of Technology, Jaipur got the privilege of organizing this event on September, 13, 2014.

The Society of Automotive Engineers is an international association which was founded in U.S.A with a vision to share the knowledge and innovation in various fields of Mechanical Engineering. Its student chapter was started with an aim to bridge the gap between the academia and industry and to provide the students with something that they do not receive in their textbooks, i.e., various technologies that are evolving and various types of new ideas which could be implemented to improve human life.



Participation was seen from many different colleges of North India, JECRC, MANIPAL University, GEC



Ajmer, BITS Sikar. The event was graced with the

presence of some distinguished persons from the industry as well as from the academia such as Sh. B.L. Soni, IPS, ADGP & Director, RPA(Rajasthan), Mr. Anup Kacker, ED SAE NIS, Mr. Sandeep Raina, GM, MSIL & SAE NIS Vice Chairman, Mr. S.S.V. Ram Kumar, GM (IOCL), Dr. Reji Methai, Chief Research Manager (IOCL), and Mr. Pritpal Singh, Manager MSIL. Prof. S. L. Soni, was the Convener of the event.

❖ A two-day workshop on *Application of Steels and Thermal Spray Coatings in Hydro Power Projects* was organised by the **Department of Metallurgical and Materials Engineering** in association with Central Power Research Institute, Bangalore from September 19-20, 2014. The speakers were from BHEL, CPRI and industry. The Coordinators were Prof. Ashok Sharma, Prof. Upender Pandel and Prof. C.P.Sharma and Co-Coordinator was Dr. R.K.Duchaniya. This workshop was funded by TEQIP-II.

❖ A self-financed Short Term Course was organised by the **Materials Research Centre** on *“Applications of Nanotechnology in current scenario”* from September 22-26, 2014 for faculty members, scientists, research scholars and industrialists. Total participants were 87 from different organisations. The Coordinators were Dr. Ragini Gupta, Dr. Madhu Agarwal and Dr. Rajendra Kumar Duchaniya.



❖ A Short-Term Training Programme (STTP) on Altair Manufacturing Solutions (Hyperform & Hyperxtrude) was organized by the **Department of Mechanical Engineering** from September 28 to October 1, 2014. The programme was designed and coordinated by Dr. Harlal Singh Mali, mainly for the students of M Tech (Production Engineering). Along with M Tech



(Production Engineering) students, a total of fifty- five participants including PhD Scholars, M.Tech (Design Engineering) and B.Tech (Mech. Engg.) benefitted from the programme. The objective of this STTP was not only to introduce the capabilities of the these high end tools of modeling & simulating in manufacturing process but also to have reasonable hands on practice, so that students can use them in their projects. The resource person for this programme Mr. Pavan Kallurkar, Senior Application Enginner, Altair Engg. covered Hyperworks platform and Hyperform in person whereas HyperXtrude was covered through a webinar by Mr. Yogesh of Altair Engg. from Pune.

❖ **Department of Physics** organized an International Conference on *Soft Materials (ICSM 2014)* from October 06-10, 2014. Prof. I. K. Bhat opened the meeting by welcoming all participants and in a short presentation he also introduced the ongoing research in the Institute. To enable participants to embrace innovative ideas and work going in soft materials, a wide



range of experts, specialists, researchers and educators chaired and spoke in plenary, invited talk sessions and oral/ poster sessions where they discussed and presented the latest information and findings for quality technology enhanced learning in soft materials. The conference was a great success with 32 speakers and

157 participants from different countries like Germany, France, UK, Singapore, Japan, Netherland, Turkey, Spain, Italy, Australia and India. 15 best presentation awards were selected and presented by International Advisory Committee. Conveners of conference, Dr. Kamlendra Awasthi & Dr. Sujin B Babu promised to continue this meet every two years.

❖ A two-day National Workshop on *Emerging Materials Technology* was organised by the **Department of Metallurgical and Materials Engineering** from October 9-10 ,2014. Eminent speakers included Dr.



Daniel Fabijanic from Deakin University, Australia, Prof. S.K.Nath, Head, Department of Metallurgical and Materials Engineering, IIT Roorkee, Er. R.K.Gajria, Industriast and Prof. Nikhil Gupta from Department of Mechanical & Aerospace Engineering, New Yark University, New Yark. The Chairman of the workshop was Prof. A.K.Bhargava and Coordinators were Dr. R.K.Duchaniya, Dr.Vinod Kumar and Mr. Krishna Kumar.This workshop was funded by TEQIP-II.

❖ A Students' Symposium on *Advance Materials and Processing* was organised by the **Department of Metallurgical and Materials Engineering** on October 10, 2014. In this symposium students presented their research work going on in different department of



MNIT Jaipur. The Chief Guest was Dr. Daniel Fabijanac from Deakin University, Australia who highlighted possible areas of collaborative research. The Coordinators were Dr. R.K.Duchaniya, Dr.Vinod Kumar and Mr. Krishna Kumar.

❖ A one-day international symposium on "Frontier Materials" was organised by the **Materials Research Centre** on October 12, 2014. Eminent speakers were Dr. Kuei-Hsein Chen, Dy. Director, Institute of Atomic & Molecular Sciences, Academia Sinica, National Taiwan University, Taipei, Taiwan, Dr. Li-Chyong, Director, Centre for the Condensed Matter Sciences, National Taiwan University, Taipei, Taiwan, Dr. Omkar Nath Mohanty, Director Technology & Academic Initiative, RSB Metaltech, RSB Group and Dr. Manbendra Mukherjee from Surface Physics Division, Centre for Nanomaterials and surface physics, Saha Institute of Nuclear Physics, Kolkata. Prof. M.K.Banerjee and Prof. S.K.Sharma from MNIT Jaipur were also speakers in this workshop. There was a poster presentation session also organised in this symposium. The Coordinators of the symposium were Dr. Kanupriya Sachdev, and Dr. R.K.Duchaniya, This Symposium was funded by TEQIP-II.

❖ A Short-Term Training Programme was conducted from October 27-31, 2014 by the **Mechanical Engineering Department** on "Research Methodology



and Design of Experiments'. Total number of participants were thirty-six and eight experts delivered lectures in various realms of research. The program coordinators were Dr. M.L. Mittal and Dr. Gunjan Soni.

❖ **Department of Mathematics**, in collaboration with **National Institute of Technical Training and Research, Chandigarh** organized a "Short-Term Course on Analysis and Applications" STCAA-2014 from November 10-14, 2014. The STCAA was arranged keeping in mind the need of analysis in different fields of mathematics and sciences. The Chief Guest on the occasion was Dr. Amita Gill, Director, Department of Science and Technology, Rajasthan.. Dr. Rashmi Jain and Dr. Ritu



Participants of Short-Term Course with faculty

Agarwal were the Coordinators STCAA.. The inauguration was followed by keynote lecture on "Crypt Analysis" by Prof. R.K.Sharma, IIT Delhi. Prof. A.P. Mehra from IIT, Delhi spoke on *Convex Functions and Optimization*. Prof. Mridula Garg, Retired Professor from University of Rajasthan gave her talk



on 'Analytic functions and analytic continuation'. Dr. Manjul Gupta from IIT Kanpur spoke on 'Positive operators on Cones'. Prof. K.C Jain from MNIT, Jaipur delivered a talk on Hypothesis Testing. Dr. Ritu Agarwal from MNIT Jaipur discussed 'Types of spaces and their properties', Dr. V. G. Gupta from University of Rajasthan discussed 'The concepts of Topology'. Prof. I.K.Rana from IIT Mumbai made students aware of the interesting 'Integration from Antiquity to Riemann and beyond', 'Geometry and analysis' and 'The concept of infinity and limits'. The valedictory function was graced by Prof. I.K.Rana, IIT Mumbai. More than 50 participants including teachers, research scholars and PG students from various cities and institutes participated in the event.

❖ A half-day Workshop on "Mechatronics in

Manufacturing”was organized by the **Department of Mechanical Engineering** on November 15, 2014. The programme was designed and coordinated by Dr. Harlal Singh Mali, mainly for the Final Year students of B Tech (Mechanical Engineering), currently studying Mechatronics Design Course. Along with B Tech students, a total of fifty five participants including PhD Scholars and M.Tech (Production Engineering) students benefitted from the workshop. The resource person for this programme



was Mr. Chandrashekar V Varekar of CSTT, Mumbai.

❖ The **Centre for Disaster Mitigation and Management** organised a special Short-Term



Workshop on *Structural Dynamics for Practising Engineers* from November 20-22, 2014. The emphasis was on applications of Earthquake Resistance Design and Aseismic devices. Main speakers were Prof. T K Datta, IIT Delhi, Prof. CVR Murty, Director IIT Jodhpur and Prof. Vasant Matsagar, IIT Delhi. The program was supported by TEQIP.

## Projects /Civil Works / Research Grant Received

❖ A project on Functionalization of Nano-channels in track etched membranes for gas separation/sensing has been sanctioned to Dr. Kamendra Awasthi, Department of Physics, MNIT Jaipur by IUAC-UGC New Delhi for three years.

## Distinguished Visitors / Expert Lectures in the Departments

❖ Invited lectures were organized during the convention of the Society of Automotive Engineers (SAE) India organized on September, 13, 2014; An invited lecture was given by Dr. Reji Mathai Chief Research Manager (IOCL), on “**Engine Oil Evaluation or HCNG - An Alternative Fuel**”. Mr. Pritpal Singh, Manager, MSIL delivered a talk on “**Basics of Automotive Seat Design**”.

❖ **Department of Management Studies**, organized a series of Student-Alumni interaction sessions and for the inaugural session on September 23,2014, invited the alumnus of MBA 2003-2005 Batch Mr. Rahul Madaan (Finance and Strategy Head - DSC Group Africa). Mr. Madaan conveyed the message of "ENTHUSIASM IS KEY TO SUCCESS" so students should be enthusiastic and should try to grab opportunities everywhere.



❖ On October 02, 2014, Dr V D Maheshwary Prof and Head Department of Medicine , Mahatma Gandhi National Medical College Jaipur delivered a talk on **Health and Hygiene Awareness** for faculty members of MNIT Jaipur.

❖ A lecture on **Hypnotism** was organised by METMASS ( **Metallurgical and Materials Students Society**) and **Creative Arts and Cultural Society** on October 9, 2014. The lecture was delivered by Er. R.K.Gajria, who is an industrialist and an alumnus of the Department of Metallurgical and Materials Engineering ,MNIT Jaipur.

❖ Four lectures of experts were organized for the CET661Ground Water Hydrology course of M.Tech. (WRE) students by the Course Coordinator Prof. Rohit Goyal. These lectures were taken by field engineers from Central Ground Water Board with many years of experience of field investigation, pumping test and analysis of field conditions etc.:  
Sh. P.K.Parchure, Regional Director, on *Ground Water Basics and Ground Water Hydraulics* on October 17,2014.

Dr. R.K.Kushwaha Scientist-C, on *Determination of Aquifer Parameters: Pumping Test Analysis* on October 18,2014.

Dr. D.V.Lazarus, Scientist-B, on *Surface Investigation of Ground Water using Electrical Resistivity (Geophysical) Method.* on October 18,2014.

Dr. Arijit Dey Scientist-D on *Planning, Design, Construction and Development of Water Wells* on October 20, 2014.

❖ On October 31, 2014, **Department of Management Studies** organised the second session of RECONNECT - Student Alumni Interaction with Guest Alumni Mr. Gagan Nigam,Manager (Corporate strategy) GMR Infrastructure Limited, Bangalore.

Mr. Nigam gave an informative lecture about corporate planning and strategy to the MBA students.

❖ On 10 November, 2014 **Department of**



**Management Studies** organized the third session of Reconnect - Student Alumni Interaction with Alumni of MBA 2004 batch, i.e. Mr. Manuj Vyas, Country Head Farsighted Corporation. Mr. Vyas conducted a very enlightening lecture on the importance of "Focus on Target".

❖ A talk was delivered and videos on "Cleanliness and Hygiene" were shown to students of Primary school of Chimanpura village near Kukas Jaipur on November 13, 2014.

❖ Mr. Charlie Curcija from Lawrence Berkeley National Laboratory and Dr. Mahveer Bhandari from Oak Ridge National Laboratory visited **Centre for Energy and Environment** from November 18-19, 2014.

❖ The **Centre 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 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.

## Faculty Achievements

❖ Dr. Harlal Singh Mali of **Mechanical Engineering Department** was invited to Autodesk University (AU) India & SAARC 2014 Annual Summit on September 12, 2014 at Mumbai. Department of Mechanical Engineering is closely associated with Autodesk® through various activities.

❖ Prof P R Soni of **Department of Metallurgical and Materials** attended 6th Asian Thermal Spray conference, Hyderabad held on Nov.24-26,2014 and delivered a talk on " Microstructure and dry sliding



wear behavior of atmospheric Plasma sprayed Nanostructure 2024 AL-15 wt.% SiCp Composite coatings”, based on Ph D research work of Dr Satish Tailor. Dr Satish Tailor is carrying out post doctoral research at National University of Science of Technology (NUST), Moscow,

❖ Dr. Prerna Jain, Assistant Professor, Electrical Engineering Department was awarded the Ph.D degree.



❖ Abhishek Goyal and Aman Natani of MBA II year were Runners Up in the Stock Stunner (virtual stock market based competition) at "Abhyudaya 2014" 8th National Inter College Annual Fest organized by Jaipuria Institute of Management, Jaipur on November 9, 2014. More than three hundred students from 34 colleges from all over India had participated at Abhyudaya 2014. MNIT Jaipur Students Won 1st & 3rd Rank in 3D Student Design Challenge 2014, Fourth Edition of the 3D Student Design Challenge-Powered by Autodesk®-The Future is Now-for its Manufacturing category which had the theme "PUBLICLY SHARED MOBILITY BIKE". Team GRAVIDA of MNIT Jaipur consisting of Devang Darode, Mandeep Singh Kapoor and Mitesh Rajput and team Wily E Trio consisting of Ayush Jhalani, Karsh Tharyani and Sumit Tomar won first and third ranks respectively for their innovative designs of their human powered publically shared bikes. The First three teams of each region will fight for nationals and the winners will represent India internationally in the most awaited event Autodesk Panorama in Las Vegas, USA.

## Students Activities / Achievements

❖ **Centre for Energy & Environment** organized a visit of M.Tech, RE students to Wind World India Ltd., Tinwari Jodhpur wind farm on October 28, 2014.

❖ **Centre for Energy & Environment** organized a visit of M.Tech, RE students to manufacturing facility of solar PV modules of Rajasthan Electronics & Instrument Limited (REIL) on November 04, 2014.

❖ A training session was organized by **Centre for Energy & Environment** by Mr. Sachin Bhandare on November 08, 2014. Meteodyn WT software is basically used for CFD Modeling of Wind Flow for All



Kind of Terrain to Evaluate Wind Resource Assessment.

## Other Activities

❖ An **Inter-College Essay Writing Competition** in English and Hindi was organized by the Creative Arts and Cultural Society on September 17, 2014 which witnessed participation from institutes such as JECRC, SKIT, Jaipur, JEC Kukas, COMPUCOM Institute of Engineering & Technology, Jaipur, Biyani Institute of Engineering & Technology and RITM Jaipur. The topic of the competition was '*Is the present Indian system of education producing educated or merely literate individuals?*' Dr. Nupur Tandon was the Faculty Coordinator of the event, in which about a hundred students participated.

❖ The Plasma Lab was inaugurated on October



Director inaugurating the Plasma Lab

10, 2014 by Prof. I.K. Bhat Director in the **Department of Metallurgical & Materials Engineering**. Dr. Daniel Fabijanic from Deakin University, Australia was also present on this occasion.

❖ The **Department of Chemistry**, in association with Anand Bhawan Foundation (a Non-Government Organization) organized a *Cancer*

*Awareness Programme* as part of Community Development Programme on **November 19, 2014**. MNIT team led by Dr. Sandeep Chaudhary (Programme Coordinator) and Dr. Jyoti Joshi (Programme Co-coordinator) with Dr. Manas Mathur and Mr. Rishabh Ronin Shrivastava & their team from Anand Bhawan Foundation, (NGO)



The Run for Unity



played a key role in organizing this event successfully.

❖ On October 31, 2014, the **Birth Anniversary of Sardar Vallabhbhai Patel** was celebrated at Malaviya National Institute of Technology Jaipur as **Rashtriya Ekta Diwas** or Quami Ekta Divas or National Unity Day. Several educational and interactive programs were organized for students by the Creative Arts and Cultural Society, MNIT. In the '**Run for Unity**' organized in the morning, students enthusiastically participated in a marathon, taking a circular route from the Institute to Jawahar Circle and return. Faculty, students and staff members of the Institute took the pledge for upholding the unity, integrity and security of the nation. The pledge was administered by Prof. Rohit



**Prof. Rohit Goyal administering the Pledge**

Goyal, Dean, Planning and Development. Volunteer students of the National Service Scheme, participated in the cleanliness drive of the campus and took an oath to maintain the safety and security



**Book Exhibition in Central Library**



**Photography Exhibition on Sardar Patel**

of our country.

❖ A Photography Exhibition focusing on the life of Sardar Vallabhbhai Patel was organized in the Department of Architecture in which around 150 photographs were displayed. Books on Sardar Vallabhbhai Patel's life and achievements were displayed for students in the Central Library of the Institute.

❖ A panel discussion on **National Unity, Safety and Security** was organized by Dr. Nupur Tandon as Coordinator.



**Dr. Nupur Tandon welcoming panellist Prof. Ramesh Arora**

Speakers in the discussion included Prof. Ramesh Arora (Visiting Prof. HRM RIPA), Dr Vibhuti Singh Shekhawat (Head, Deptt. of Humanities & Social Sciences, MNIT), Prof. Bhawani Singh and Prof. Shashi Sahai (University of Rajasthan). The panelists emphasized on the need to remain united to combat threats to the nation's security from outside.



❖ The **Indo-German Society, Jaipur**, in collaboration with **MNIT Jaipur** celebrated its Golden Jubilee Year with the **German Education Fair** on the campus on November 7, 2014. The Fair was inaugurated by Dr. Alexander Hansen, Director, German Research Foundation, and Prof. I.K.Bhat, Director, MNIT Jaipur. Also present on the occasion were Mr. Heiko Sievers, Director, South Asia Max Mueller Bhavan, Delhi, Ms. Heike Mock, Director, German Academic Research Exchange Service and Prof. Pawan Surana, General Secretary, Indo-German Society, Jaipur Chapter. The dignitaries in their inaugural addresses highlighted the various aspects of Indo-German collaborations, particularly in the sphere of academics. The Inaugural ceremony ended with a Vote of Thanks by Dr. Nupur Tandon. The German Ambassador to India, His Excellency Mr. Michael Steiner also visited the exhibition and the campus later.

❖ On **November 11, 2014**, the **Birth Anniversary of Mualana Abul Kalam Azad** was



celebrated in the Institute as the **Seventh National Education Day**. Several educational and interactive programs were organized for students by the Creative Arts and Cultural Society, MNIT.

❖ In the 'Cycle Rally' organized in the morning, students enthusiastically participated in a marathon, taking a circular route from the Institute to Jawahar Circle and return.



❖ A Plantation Drive in MNIT Campus was successfully organized by Dr. Dinesh Kumar. There was an overwhelming response and participation from students as well in this drive.

❖ An **Essay Writing Competition** in English and Hindi for the students was organized on November 11, 2014 in which Prof. Sarojini Hoon, (Retd.), Department of English, University of Rajasthan (English Essay) and Prof. Sudesh Batra, (Retd.), Department of Hindi, University of Rajasthan (Hindi



**Participants of Essay Competition**

Essay) were invited to judge the event. The Faculty Convener was Dr. Nupur Tandon.



❖ A Slogan Writing Competition in Hindi and English was organized for the students of MNIT, with the theme: '**True education is education with values**' under the guidance of Dr Preeti Bhatt & Mrs Nanny Tripathi. Two experts were invited to judge the entries: Dr Mini Nanda, HoD, Department of English, University of Rajasthan, Jaipur, and Prof Sudesh Batra, retired faculty member from the Department of Hindi, University of Rajasthan, Jaipur



❖ A Wall-Painting Competition was organized on the theme "**Role of education in our life**". The Coordinator was Dr. Madhu Agarwal, Assistant Professor, Chemical Engineering.

❖ A Poster-Making Competition was also organized in the Architectural Studio II, MNIT Jaipur under the guidance of Architect Ms.Pooja Nigam. The theme for the poster was given as "**Education for All**".

❖ A Debate Competition was organized on this occasion under the guidance of Dr. R. K. Vyas which got an overwhelming response from students as



well as staff.

❖ A dream for a clean India was taken to a completely new level when 'Swachh Bharat Abhiyaan' turned into a competition. The competition ran for duration of about two weeks starting from October 28 to November 11, 2014. The Conveners of the event were Dr. R. K. Duchaniya and Dr. M. L. Meena.

The participants of all the above events were awarded and felicitated. The Convener of the felicitation ceremony and cultural evening was Dr. Jyoti Joshi.

### MNITJ Placement Highlights

Total Number of Companies visited on campus till 23 November 2014	75
Total Number of companies for Placement + Pre Placement Offer	71
Total Number of Companies for Internship	11
Total Number Of Offers till 23 November 2014	520
Companies which Offered PPO were: - Amazon, Wooqer, Salesforce, Schaeffler.	

Companies Offered more than 10 LPA	No. of Students Placed
Amazon	6
DE SHAW	2
Epic	0
Google	0
Job Tessio	0
Wooqer (PPO + Intern)	1
Freescale	1
Commvault	2
Salesforce	2
My-Smart-Price	2
Expedia	3
Drishti Software	3
Total	22



### Editorial Team -

Coordinator:-

Dr. (Mrs.) NupurTandon

Co-Coordinator:-

Dr. Dipti Sharma

Dr. Deepak Verma

Member :-

Sh. Deepak Atolia

Note : The information published has been received from the respective departments / sections / faculty.