quarterly news magazine

Issue 21: December 2016



Director's Message

I am happy to lead MNIT Jaipur in its journey towards excellence in academic achievements, research, innovations and creativity. In this quarter MNITJ bagged prestigious awards in the field of energy efficiency and conservation and was platinum rated Green Educational Campus of the country.

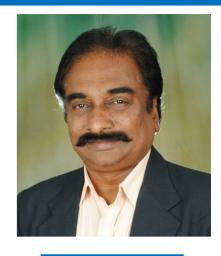
MNIT NEWSLETTER

The abuzz of training programmes, workshops, conferences, seminars and GIAN courses during the quarter included a wide ranging and diverse areas like architectural demonstration series, digital hardware designs, complexity and security of large software, mobile systems security, quantum communications, power devices and power quality improvements, nanomaterials, researches on combustions, detonics & shockwaves, internet security and challenges, smart grids, renewable integration energy storage and system operation, German language teaching, nature inspired optimization, metallurgical analysis by chemical methods.

MNIT attracted talented speakers in the form of guest lectures and invited talks being organized by various departments and centers on topics as hyperbolic geometry, solar technology, lazer texturing, computing & electronics, energy efficiency, motivational skills etc. Simultaneously the institute faculty and students left their mark on several national and global platforms through their lectures, talks, research presentations, training, entrepreneurial and innovative pursuits.

The students added flavour to their technical skills by organizing, attending, winning and participating in a number of co curricular and cultural activities through various societies and clubs of Creative Arts and Cultural Society. These encompassed Model UN, music, dance, drama, photography, fine arts, sports, cleanliness drive, TEDX and literary competitions. No knowledge is said to be complete if it lacks service towards nation, society and humanity. The observance and celebration of Hindi Pakhwara, Rastriya Ekta Saptah, Vigilance Awareness Week and Constitution Day in the institute certainly left imprints in the mind of one and all and inculcated a sense of duty, responsibility and service, as it is rightly said by great Albert Einstein, *Only a life lived in the service of others is worth living*.

Prof. Udaykumar R Yaragatti



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.



Director Prof. Udaykumar Yaragatti joined on October 13, 2016





MNIT has been awarded with 'Platinum' rated Green Educational Campus of the country at Green Building Congress-2016 held in Mumbai. Dr Sanjay Mathur, Head-Centre for Energy and Environment and Dr Tarush Chandra receiving the award.



Energy Club MNIT has been awarded by 'Council of Power Utilities' in '9th India Power Awards 2016' for 'Establishment of Clubs/Societies to promote Energy Efficiency and Conservation'. Dr. A.K. Solanki, Registrar MNIT receiving the award at New Delhi.





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

A workshop Lecture - Demonstration Series was organized for students by the Department of Architecture and Planning on September 03, 2016 showcasing various aspects of stone flooring. Field experts Mr Badri Kumawat and Mr Ravi Kumawat having more than twenty years of experience of using stone in buildings especially in stone cladding and flooring were invited. Students were demonstrated various stones available in the market along with a description of their respective properties and application in the construction industry, some of which were Red sand stone, Jaisalmer yellow, Makrana white marble, Italian marble, Jodhpur yellow stone, Black granite stone, Kesariya Marble from Udaipur, Kota stone etc.



Experts interacting with the students



Dr. Tarush Chandra explaining the stone cutting process to the students

Academy Training Programme on Digital Hardware Design & FPGAs under Electronics & ICT Academy, was conducted in MNIT, Jaipur from 3-16 September, 2016. The programme was coordinated by Dr. Amit M. Joshi and Dr. M. Ravi Kumar.

Global Initiative of Academic Networks (GIAN) in Higher Education aim at tapping the talent pool of scientists and entrepreneurs, internationally to



encourage their engagement with the institutes of Higher Education in India. In the series of GIAN courses, MNIT Jaipur organized a course Managing the Complexity, Security, and Safety of Large Software during 12-16 September, 2016. The course intended to provide in-depth subject coverage and laboratory setting hands-on experiments related to the complexity analysis and understanding security and safety of software components. Prof. Suraj C. Kothari. Richardson Professor, Electrical Computer Engineering Department, Iowa State University, USA was the Foreign Faculty Resource Person. Prof. Manoj Singh Gaur and Dr. Vijay Laxmi, Computer Science and Engineering Department were the Course Coordinators.



The course was formally started with Prof. Suraj Kothari's introductory lectures **Software Engineering – the Big Picture** and **When Programs Fail – a one semester course in two lectures**. This course provided a solid foundation on fundamentals of software that are applicable across all programming languages. The whole course was distributed in 6 modules consisting of 18 lectures and 6 lab sessions.

The Department of Electronics and Communication Engineering organized a one day National Workshop Quantum Communications on September 24, 2016. Dr. Subhashish Banerjee and Mr. Vishal Sharma of IIT Jodhpur delivered the expert lectures. Dr. Satyasai J. Nanda, Dr. Ghanshyam Singh and Prof. K. K. Sharma were the coordinators of the workshop.

A two day training cum workshop Metallurgical analysis by chemical methods was organized by Department of Metallurgical and Materials Engineering on 1-2 Oct. 2016. In this workshop training was given to participants on chemical analysis method for metals and alloys by chemists and metallurgists from the quality control lab of Indian Railway. This training cum workshop was organized by Dr. Rajendra Kumar Duchaniya.

Department of Electrical Engineering conducted a Short Term Course Application of Custom Power Devices for Power Quality Improvement from 6-8 October, 2016 under the aegis of National Mission on Power Electronics Technology (NaMPET-II) Phase II an initiative of Ministry of Electronics and Information technology (MeitY) and Centre of Development of Advanced Computing (CDAC) Trivandrum. Around 78 participants from across the country attended this STC. Various speakers from IISC, IITS, NITs and other reputed Universities delivered expert sessions in the field of Power electronics and power quality. Prof. R. A. Gupta was the Convener and Dr. Nitin Gupta was the Course Coordinator.



A seminar for Researches on Combustions, Detonics and Shockwaves was organized by MNIT Jaipur and CDSW panel of DRDO on October 8, 2016. The seminar was mainly for a preliminary assessment of the research proposals on the theme area submitted by academicians from different Engineering Colleges of Rajasthan, participants and representatives of IIT Jodhpur, IIIT Kota, BITS Pilani, LNMIIT Jaipur, AMITY University, Jaipur. Prof. A.B.Gupta, Director (Acting), MNITJ welcomed the delegates from DRDO and participants from different academic institutions in Rajasthan. Prof. Gupta thanked DRDO for giving responsibility to MNITJ for organizing the seminar. Prof. A. K. Bhargava Department of Metallurgical and Materials Engineering, elaborated the purpose of the seminar in the context of defense research

activity in the country. Prof. A. Bhardwaj (MNITJ) and Prof. S. K. Verma (BITS Pillani) presented the achievements of the respective institutes in research and consultancy. Dr. Maniit Singh. Outstanding Scientist and Director, Terminal Ballistic Research Laboratory, Chandigarh was the Chief Guest. He presented the activities of TBRL in the theme area and welcomed the collaboration with MNITJ in different research areas through Armament Research Board (ARMREB). Fifteen presentations of the project proposals were made by the faculties from which MNIT had proposed 7, BITS Pilani 3, LNMIIT Jaipur 3, AMITY University Jaipur and IIIT Kota 1 each. Prof. S.K .Biswas Department of Metallurgical and Materials **Engineering** convened the seminar.



Prof. A.B. Gupta greeting Dr. Manjit Singh



Experts of DRDO Scientists and the participants

Department of Electronics and Communication Engineering organized a three day National Workshop Nature Inspired Optimization from 21-23 October, 2016. Prof. Kusum Deep, Department of Mathematics, IIT Roorkee, Dr. B. K. Panigrahi,



Department of Electrical Engg, IIT Delhi and Dr. Rajesh Kumar, Department of Electrical Engg., MNIT delivered the expert lectures in the program. The inauguration of the event was held in presence of Prof. V. Sinha, Prof. A. B. Gupta, Prof. K. K. Sharma, Head ECE and coordinator of workshop Dr. Satyasai Nanda. Thirty researchers from various prestigious institutes across the country participated in the workshop.

In the series of GIAN courses, MNIT Jaipur organized a GIAN course Internet: Security and Privacy Challenges from 24-28 October, 2016. The course discussed various Internet threats to mobile devices and security aspects of mobile cloud computing. The course focused on security and privacy issues in Online Social Networking especially on fake profile detection, techniques to violate and protect privacy in the ONS, as well as anonymization and de-anonymization approaches. Prof Mauro Conti, University of Padua, founder and leader of the SPRITZ Security and Privacy Research Group and EU Marie Curie Fellow at Department of Mathematics, University of Padua were the resource persons. The course was coordinated by Dr. Vijay Laxmi, and Dr. Meenakshi Tripathi, **Computer Science and Engineering Department.**



The course was started by Prof. Mauro Conti with introduction to SPRITZ, his research group of young researchers at University of Padua, SPRITZ. This course provided a solid foundation on the fundamentals of security with an introduction about the use of Cryptographic functionality such as Symmetric and Asymmetric encryption, its relevance to security and privacy domain. The whole course was distributed in 5 modules which had 15 lectures and 5 lab sessions.

A self financed short term course Nanomaterials and its applications was organized by Department of Metallurgical and Materials Engineering from 7-11 November, 2016. Eighty five research scholars and faculty members from different parts of the country participated. The resource persons were from different research organization and MNIT Jaipur. The short term course was coordinated by

Prof. Ashok Sharma, Prof. Upender Pandel and Dr. Rajendra Kumar Duchaniya.



Group photograph of Short term course on Nanomaterials and its applications

Department of Electrical Engineering organized a Short-Term course DC Smart Grids: Renewable Integration, Energy Storage and System Operation from November 10-14, 2016. Sh. A. K Jain, MD, REIL was the Chief Guest, Dr Vikas Gupta HOD, the Presiding Guest and Dr. Mukhtiar Singh DTU, Delhi the Guest of Honour for the inaugural function. Sh. A. K. Jain highlighted the increasing role of renewables in the power supply systems, and the innovations required to handle the same. Dr. Mukhtiar Singh DTU, Delhi, delivered keynote lecture on importance of DC grids. The resource persons for the course were Dr. Chris Dent, Edinburgh University UK, Sh. Avinash Aithal, Cardiff University UK, Prof. Sukumar Mishra, IITD, Prof. N. K. Padhy, IIT Roorkee, Prof. A. K. Pradhan, IIT-KGP, Dr. Sandeep Anand, IIT Kanpur, Dr. Parul Mathuria, IIT Kanpur and MNIT Jaipur faculty. The course coordinators were Dr. Rohit Bhakar, Dr. H. P.Tiwari, Dr. Prerna Jain, Dr Vijay Kumar. K, Dr. Satyanarayana Neeli and Dr. Arun Kumar Verma.



MNIT Jaipur organized a GIAN course Mobile Systems Security from 21-25 November, 2016. The course intended to provide an introduction to mobile systems security by introducing various system security aspects as well as specific case studies such as Android OS platform security, hardware security mechanisms like TrustZone and

Trusted Platform Module. Prof. N. Asokan, Professor of Computer Science at Aalto University and the University of Helsinki, Finland and Dr Andrew Paverd, Postdoctoral researcher in secure systems at Aalto University, Finland were the resource persons.

Prof. Manoj Singh Gaur, Head and Professor, (Computer Science and Engineering and GIAN Coordinator) and Dr. Vijay Laxmi, Computer Science and Engineering Department, coordinated the course.



The course was inaugurated on November 21, 2016 by welcoming Prof. N. Asokan and Dr. Andrew Paverd. The GIAN coordinator MNIT, Prof. Manoj Singh Gaur gave a brief summary about the program and introduced the resource persons to the participants. Prof. N. Asokan started the course by introducing the objectives of the course module and basic concepts of Mobile system security. He covered the basics of access control and examples of access control models. This course focused on exposing participants to the Fundamentals of mobile systems security and enhancing the ability of participants to recognize and appreciate design challenges in this area by discussing specific example systems in software and hardware mobile platform security. The whole course was distributed in 6 lecture modules and 3 exercise sessions spread over five days.

The Department of Humanities and Social Sciences, in collaboration with the Indo-German Society Jaipur and Max Mueller Bhavan, New Delhi, organized a one-day workshop for teachers of German language on November 22, 2016. The workshop was attended by about 40 participants and was addressed by experts from Germany and Dr. Pawan Surana, among others.



The SPIE (an international society advancing an interdisciplinary approach to the science and application of light) MNIT chapter was inaugurated by Prof Udaykumar R Yaragatti, Director MNIT on November 24, 2016. The function was marked by the Inaugural Lecture delivered by Prof. Uros Janez Stanic, Jozef Stefan Institute, Ljubljana, Slovenia Strategy for massive absorption of the ICT solutions to the health care sector. The programme was coordinated by Dr. Vijay Janyani, faculty advisor of the SPIE student chapter.

A Master training program on ECBC was organised by Center for Energy and Environment in collaboration with UNDP-GEF-BEE and IIIT Hyderabad on 25-26 November, 2016.

A ISHRAE certified training course was organised by Center for Energy and Environment MNIT and ISHARE during Nov 28-02 Dec, 2016.



SPIE – The International Society for Optics and Photonics group photo at NKN MNITJ



Distinguished Visitors / Expert Lectures in the Departments / Institute

An expert lecture Necessity and Future of Green Buildings in India by Dr. P.C. Jain, Chairman, Indian Green Building Congress, was conducted by Center for Energy and Environment on September 1, 2016.



The OSA student chapter of MNIT Jaipur is one of the most active student chapters in India and was established in the

year of 2013. The OSA Ambassador, Dr. Antigone Marino from Physical Science Department of Federico II, University of Naples (ITALY) visited MNIT Jaipur on September 1-2, 2016 and delivered a series of lectures for members (students and faculty) of OSA Student Chapter. She covered one professional talk Everything you always wanted to know about research, but were afraid to ask and one technical talk The never-ending story of Liquid Crystals, from display technology to telecom application. Dr. Antigone and MNIT faculty discussed the possibilities of collaborative research between MNIT Jaipur and the Institute of Applied Sciences and Intelligent Systems (ISASI) of the Italian National Research Council (CNR).

Department of
Mathematics organized
two sessions of invited
talk Introduction to
Hyperbolic Geometry on
October 07, 2016. This
event was coordinated by



Dr. Rashmi Jain and Dr. Ritu Agarwal. The lectures were delivered by Dr. Kishnendu Gongopadhyay, The Indian Institutes of Science Education & Research (IISER) Mohali, Punjab.

He delivered the postulates of geometry and fifth postulate, in particular, which leads to the hyperbolic



geometry. He discussed two most famous models in hyperbolic geometry, called the Poincare Upper-

half space and the Poincare Disk models of the hyperbolic space. The students and faculty members of MNIT Jaipur participated in the event. This was a great learning experience to know about another form of geometry of importance. The students came to know about unsolved problems and research opportunities available in this field.

An expert lecture Public transportation, traffic management and technology by Prof. S. Peeta, Purdue University, USA was organised by Center for Energy and Environment on 18 Oct, 2016.

Prof. Frank Spate, Ostbayerische Technische Hochschule Amberg-Weiden, Germany visited **Center for Energy and Environment MNIT** on November 5-6, 2016 and delivered an expert session on **Energy efficient building technology and solar technology**.

Department of Electrical Engineering hosted the joint meeting of EPSRC-DST funded research project High Energy and Power Density Solutions to Large Energy Deficits on 12-13 November, 2016. The project meeting was attended by faculty and researchers from University of Bath, UK, Cardiff University, UK, Durham University, UK, Edinburgh University, UK, and IITs from Delhi, Roorkee, Kharagpur and Kanpur. The participants held wide ranging discussions on the energy challenges arising due to large penetration of uncertain wind and solar energy sources, and how high-efficiency DC grid technologies are likely to change the future of energy supply systems. The participants deliberated on key innovations at various partner institutions, and the impact of these innovations on industrial product development. The meeting was coordinated by project PI from MNIT Jaipur, Dr. Rohit Bhakar.

The Department of Electrical Engineering organised an invited talk Solar PV Converters by Dr.

Sandeep Anand, Electrical Engineering Department, IIT Kanpur, on 22 November, 2016. He identified the technology evolution challenges in developing DC-DC and DC-AC Solar PV converters.



Further, he outlined the innovations in converter technology, that is helping stable Power Systems operation, with reduced energy conversion losses. Dr. Rohit Bhakar coordinated the event.

Prof. Kevin Z. Truman, Vice Provost & Dean, School of Computing and Engineering, University of Missouri – Kansas City (UMKC) with his team visited the **Department of Computer Science and Engineering** on November 23, 2016. They presented an overview of UMKC, The School of Computing and Engineering and their research mission. They interacted with the faculty of the Department and discussed various research problems, research opportunities for the students etc.

Prof. J. Ramkumar from IIT Kanpur delivered an expert lecture Laser Texturing in Mechanical Engineering Department on November, 25 2016. The visiting professor also interacted with the research scholars of the Advanced Manufacturing & Mechatronics lab and visited other central facilities of the Institute. The programme was coordinated by Dr. Harlal Singh Mali.

An invited talk Photonics: Basics and Advances in Material Technology was delivered by Prof Y.K. Vijay, President, Vivekananda Global University, Jaipur on November 30, 2016 under the banner of SPIE-MNIT Student Chapter.





AU India & SAARC 2016 Summit was held in Mumbai on September 1,

2016 with around 3000 professionals, educators and students. Dr. Harlal Singh Mali (Mechanical Engineering Department) was invited to share the role of technological tools in student project in product development and manufacturing space.

Dr. Vivekanand V (Centre for Energy and Environment) delivered a lecture on Sustainable organic waste management at Indo-Norwegian Joint Workshop on Bio-economy: The Research Council of Norway and DST-Govt. of India, Oslo-Norway during 6-7 September, 2016.



Dr Vivekanand at Indo-Norwegian Joint Workshop on Bioeconomy, Oslo-Norway

Dr. Deepak Verma (Department of Management Studies) conducted two workshops - Multivariate Techniques and Conjoint Analysis at TEQIP sponsored Faculty Development Programme on Multi – Criteria Decision Making Methods and Analysis conducted by Department of Mechanical Engineering, Deenbandhu Chhotu Ram University of Science and Technology, Murthal during September 09-13, 2016.

Dr. Pilli Emmanuel
Shubhakar (Department
of Computer Science and
Engineering), was invited
to speak on Email
Investigation and Cloud
Computing for
Investigation at the



course Investigation of Cyber Crime Cases conducted by the Rajasthan Police Academy Jaipur. The participants were police officers from across the state and other parts of North India.

Dr. Vivekanand V (Centre for Energy and Environment) delivered a talk Biological waste treatment on September 26,2016 at a TEQIP II short term course Frontiers of Applied Chemistry held at Government Women Engineering College, Ajmer, Rajasthan.

Dr. Chitrakant Sahu (ECE Department) delivered an expert lecture on the topic Low power Nanoelectronics in the TEQIP-STTP VLSID-SoC & Micro-nano Technology at National Institute of Technology Raipur during September 26-30, 2016.

Dr. Vivekanand V (Centre for Energy and Environment) delivered a talk Organic waste management practices and opportunities on September 30, 2016 at a Short Term Training Program on Waste to Wealth: Fundamentals & Hand on Experience, SVNIT Surat, Gujrat.

Dr. Ritu Agarwal (Department of Mathematics) delivered a series of invited lectures during the workshop on LaTeX held at IIS University, Jaipur during October 13-15, 2016. Her talks included introduction to the software LaTeX, typesetting professional document using it, graphics software GeoGebra and graphics in TeX file and other related topics.



Workshop at IIS University

Dr. Harlal Singh Mali (Mechanical Engineering Department) was invited to deliver a Keynote Speech at Jaipur Institute of Technology in the International Conference on Innovation in Industrial Engineering, IIE-2016. He delivered the lectures on Computer Aided Product Design & Manufacturing (Design, Prototype & Part Program) on Single Platform on October 15, 2016.

Dr. Sandeep Chaudhary (Department of Chemistry) delivered a plenary lecture entitled **Artemisinin Derived Stable Ozonides: Synthesis, Chemistry, X-ray studies, in vitro and in vivo Antitubercular activities, SAR and molecular docking studies** at International Conference on **Current Trends in Chemical Sciences** held at Department of Organic Chemistry, Perm State University, Perm, Russia on October 19 – 21, 2016.



Dr. Sandeep Chaudhary with Prof. Vladimir V.Malanin, Honourable President & Prof. Igor Ju. Makarikhin, Honourable Rector of the Perm State University

Dr. G.D. Agrawal (Mechanical Engineering Department) visited College of Technology and

Engineering, Udaipur and delivered lectures An overview of Research carried out on DASC using Nanofluids at MNIT Jaipur and Research carried out on EATHE at MNIT Jaipur on October 19, 2016.

Dr. Ritu Agarwal delivered a series of invited expert lectures on **Integral Calculus** to the engineering students of Government Engineering College, Bikaner on November 12, 2016.



Government Engineering College, Bikaner

Dr. Vivekanand V (Centre for Energy and Environment) delivered an expert lecture Green pretreatment: Biobleaching of mixed wood pulp on November 16 - 18, 2016 at the National Conference on Fungal Biotechnology and 43rd annual meeting of Mycological Society of India, BISR, Jaipur.

Dr. Satish Kumar (Department of Management Studies) was invited as resource person on Methods of Data Collection and Publishing in Quality Journals in ICSSR Workshop on Research Methodology organized by Department of Management Studies, Jai Narain Vyas University, Jodhpur on November 19, 2016.



Dr. Satish Kumar conducting session at Jai Narain Vyas University, Jodhpur

Dr. Satish Kumar (Department of Management Studies) delivered a three hour session on Literature Review and Understanding Research Literature & Identifying Research Gaps in a 7 Day Workshop on Research Methodology organized by The Centre for Research, Innovation and Training (CRIT), The IIS University, Jaipur on November 24, 2016.



Faculty Achievements

Dr. N.C. Upadhyay (Department of Metallurgical and Materials Engineering) received II Prize and Certificate in Mono Acting and received III Prize and Certificate in Hindi



Kavyapath in **Hindi Pakhwada** held during September 14-23, 2016 at MNITJ.

Dr. Pilli Emmanuel Shubhakar (CSE Department) was elevated to the status of Senior Member of the professional body of Institute of Electrical and Electronics Engineers (IEEE).

Dr. Abbas Raja Naziruddin (Department of Chemistry) have obtained the DST-SERB Early Career Research Award for the pursuing the project entitled Organometallic-Photosensitizers Bearing Hybrid N-Heterocyclic Carbene Ligands.

 $\mathbf{D}_{\mathsf{r}.}$ Sandeep Chaudhary (Department Chemistry) was invited as Guest of Honour in the official celebration of the 100 years (1916-2016) of Perm State University, Perm Russia on October 12, 2016. In his inaugural speech, Dr. Chaudhary highlighted the healthy and long standing bilateral scientific cooperation between Perm State University and MNIT Jaipur. The speech was also further focussed on improving research possibilities, building strong bonds and further strengthening bilateral scientific cooperation between MNIT J and Perm State University, Russia.



Jaroslav Prikhodko, Bharti Rajesh Kumar Shyamlal, Prof. Irina V. Mashevskaya, Dr. Sandeep Chaudhary, Prof. Igor Ju. Makarikhin and Prof. Vladimir V. Malanin

Dr. N.C.Upadhyay (Department of Metalllurgical and Materials Engineering) received Second Prize and Certificate in Debate competition and Third Prize and Certificate in Poem competition held during Vigilance Awareness week from October 31 to November 5, 2016 at MNITJ.

Dr. Satish Kumar (Department of Management Studies) has been awarded with prestigious Best Faculty in Finance Area award at 24th Business School Affaire & Dewang Mehta National Education Awards function held on November 25, 2016 at Taj Lands End, Mumbai. Dr. Satish Kumar has been given this award on the basis of his contribution to academic, publication and media outreach in finance area by a jury of experts.



Dr. Satish Kumar receiving Best Faculty in Financial
Management Award



Research....related activities

Prof. S. P. Chaurasia (Department of Chemical Engineering) visited Indian Institute of Chemical Engineers on September 9, 2016 and take a tour of the research facilities related to Membrane Technology and discussed for possible research collaboration with Dr. S. Sridhar.

Dr. Sandeep Chaudhary (**Department of Chemistry**) and his Ph.D student Mr. Bharti Rajesh Kumar Shyamlal visited Department of Organic Chemistry, **Perm State University, Perm, Russian Federation** as part of a DST-RFBR Indo-Russian Joint Research Project from October 10–22, 2016.



Dr. Sandeep Chaudhary giving brief introduction about his joint research work during Russia visit.

Presentations

Oral presentations entitled Recalcitrance of lignocellulosic biomass and its pretreatment by Yadav M & Vivekanand V; Biomethane production potential from hotel food waste in Jaipur city by Gandhi P & Vivekanand V; Bioenergy potential in the form of agricultural residue of Rajasthan by Kumar S & Vivekanand V were given at the 4th Rajasthan Science Congress (Govt. of Rajasthan), Jaipur during October 15-17, 2016.

Yadav M & Vivekanand V (Centre for Energy and Environment) made a Poster presentation Biological pretreatment of lignocellulosic biomass for enhanced biogas production at the National Conference on Fungal Biotechnology and 43rd annual meeting of Mycological Society of India, BISR, Jaipur during November 16-18, 2016,



Projects

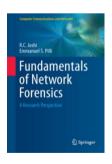
A research project Designing Sugar-Fused Glycosidase Inhibitors Using Glycal Template sponsored by DST New Delhi under INSPIRE Faculty scheme for Young Researchers has been approved to Dr. Sudhir Kashyap (Department of Chemistry) and is in progress.

A research project Diversity oriented synthesis (DOS) approach to sugar-based therapeutic sponsored by DST-SERB New Delhi has been awarded to Dr. Sudhir Kashyap (Department of Chemistry) under Start-up Research Grant for Young Scientists in Chemical Science.



Publications

Dr. Pilli Emmanuel Shubhakar co authored a book with Prof. R. C. Joshi (former Professor, IIT Roorkee) titled Fundamentals of Network Forensics – A Research Perspective. The book was published by Springer Verlag London in its Series on Computer Communication and Networks.



This is the first book to provide a thorough discussion on attribution in network forensics. It presents an exhaustive literature survey on theoretical models and implemented frameworks. It introduces a wide range of both proprietary and open source tools for network forensic analysis. It also examines a range of advanced topics including forensics of botnet, smart phone, and cloud.

An article entitled Formation of NH,NR N-Heterocyclic Carbene Complexes through Mercuration of Mono-N-substituted Benzimidazoles authored by Abbas Raja Naziruddin, published in Eur. J. Inorg. Chem., October, 2016, pp 4829–4834.

Research paper entitled Regioselective vicinal functionalization of unactivated alkenes with sulfonium iodate(I) reagents under metal-free condition authored by Dodla S. Rao, Thurpu R. Reddy, K. Babachary, Sudhir Kashyap, published in Org. Biomol. Chem., 14, 2016, pp7529-7543: IF = 3.559.

Research paper entitled Vibrational, Structural and Thermal studies of Debris of 30%CaO-70%B₂O₃ authored by Shrikant, A. K. Nayak, U. Pandel, R. K. Duchaniya, published in Journal of Materials Science & Surface Engineering Vol. 04 / 444-447 / 2016.

Research paper entitled Evidence on Rationality and Behavioural Biases in Investment Decision Making authored by Goyal, N. and Satish Kumar, forthcoming publication in Qualitative Research in Financial Markets, Vol 8,No 4, 2016, pp. TBA: Emerald Group Publishing Limited, UK (ABDC and ERA listed Journal).

Research paper entitled Working capital management practices in India: survey evidence authored by Baker, K., Satish Kumar, Colombage, S. and Partap Singh, H., accepted for publication in Managerial Finance, 2017: Emerald Group Publishing Limited, UK (ABDC –'B', Scopus, ABS and ERA listed Journal).

Research paper entitled Working Capital Management and Firm Profitability: A Meta-Analysis authored by Partap Singh, H., Satish Kumar and Colombage, S., forthcoming publication in Qualitative Research in Financial Markets, 2017: Emerald Group Publishing Limited, UK (ABDC –'C', Scopus and ERA listed Journal).

Research paper entitled A Study on Factors Driving the Financing Decisions of Small and Medium Enterprises in India authored by Rao,P., Satish Kumar, and Madhavan, V., forthcoming publication in IIMB-Management Review, 2017: Science direct publication (Scopus Indexed and ABDC-"B" Listed Journal).



Student related activities

The talented Samantha Gash, first female & the youngest person to complete the Planet's 4 Desert Racing



and a Grand slam in one calendar year, and Jhonty Rhodes-a former South African Test Series player and ODI Cricketer, graced the institute for an interactive session with the students on September 02, 2016. The guest panel included Dr. Vinod Garg, President of the Rotaract Club and Sh. Mahendra Bhatia, MNIT alumnus and Vice-President of the club and Sh. Mukesh Mishra, the founder of the Jaipur Marathon.



The Rajbhasha Samiti organised Hindi Pakhwada from September 14-23, 2016 which was celebrated in the Institute in the form of various activities and competitions in

Rajbhasha Hindi. The event concluded with a panel discussion and address by the Chief Guest Sh. Om Thanvi, chief editor JANSATTA. The Hindi Pakhwada was coordinated by Sh. Ashok Agarwal Convenor, Rajbhasha Samiti MNITJ.

On the occasion of Engineer's Day on September 15, 2016, the inauguration of the renovated hydraulic lab of Civil Engineering Department (which is one of





the oldest labs **MNIT** in Jaipur) was done by Prof. A.B. Gupta (Director In charge) and Prof. Rohit Goyal (Dean

P&D) in the presence of faculty members and students of the Civil Department.



Students performing experiments

A Health Awareness
Program for
Underprivileged
Women was
organised by Indian
Institute of



Information Technology, Kota on September 17, 2016 with the support of Jaipur-based NGO Sakhi Bal Niketan aur Amar Seva Samiti. Seventy-five women including twenty girls from Jhalana Kunda Kachchi Basti attended the program. Dr Anamika Papriwal, psychologist and counsellor from Rungta Hospital and Dr Ranu Patni, gynaecologist and cancer specialist from Bhagwan Mahavir Cancer Hospital interacted with the women to increase their awareness of diseases that women are prone to, and good health including hygiene. The program was coordinated by Dr Meenakshi Tripathi and Dr Preeti Bhatt.

The Photography club of CACS organized Campus Walk on the September 17, 2016 during which the students clicked photographs inside the campus according to the



decided photography categories.

Fine Arts Society of CACS organized **Kraftastic** a craft competition on September 19, 2016. The craft work prepared by the students became a major part of decoration of GHUME ENO GARBO.

Invited lectures by Dr. Sudhir Bolusani, Alumnus of 1968 batch (Director, NIET Alwar) was organized by Team ALCOM on September 22, 2016. Dr. Sudhir delivered



two lectures **Iron Making & Material Science**, a technical one and **Road to Success: A professional's Approach** an open one.

SPIC MACAY society organized an orientation lecture on September 23, 2016. Prajjwal, SPIC MACAY Jaipur, coordinator took the session based on the screening of Charlie Chaplin.

Technical Society CACS conducted intra-college online coding competition **Code Friday #1** first of its kind in MNIT Jaipur on September 23, 2016. It was a 3 hour event consisting of 4 problems on basic programming and algorithms.

A Dandiya night
Ghume Eno Garbo
was organized by
Creative arts and
Cultural Society to
marks the
celebration of
Navratri on



September 24, 2016. The evening commenced with the lighting of lamp and a traditional puja by the Chief Guest Mrs. Poonam Gupta, Mrs. Nanny Tripathi (Associate Dean, CACS/AA) and Ms. Kalpana Pandit (Coordinator, CACS). The celebration was attended by around 1500 students.

VIGYAN Study Circle (Under CACS) organised Yuva Prerna Pratiyogita on September 24, 2016.



The Dramatics Society of CACS organized MAD ADS on September 27, 2016 which showcased



craziness, innovation and spontaneity and enthralled the audience with some amazing advertisements. The faculty coordinators Dr. Nivedita Kaul and Dr. Reeta Singh graced the event with their judgment.

Technical Society, organized an event **GESELL-BOTS** for the bright minds of MNIT to showcase their innovative technical ideas in field of Robotics on September 29, 2016. Inspection of Bots was done by Dr. Meenakshi Tripathi and Dr. Prerna Jain, Faculty Advisors of the Technical Society.

NSS organized a seminar on drug awareness which was conducted by Narcotics



Control Bureau, Ajmer, Department of Internal Security, MHA, Government of India. The guest speakers were Mr. Harish Kumar, Superintendent, NCB, Ajmer, Mr. Girdhari Lal, Intelligence Officer, NCB, Ajmer & Mr. Harish Bhutani, President, Nav Viklap Sansthan (NGO) who made the students aware of the types of drugs, their abuses and prevention methods. The students pledged not to fall prey to peer pressure and also to help those who are addicted and to assure a drugfree college campus.

A cleanliness drive was organized by National Service Scheme - MNIT, Jaipur on October 10, 2016, under the aegis of Swachh Bharat Abhiyan in the campus during the morning hours 8:00- 10:00 am. The event saw participation of more than 100 B Tech and M Tech students registered in the NSS wing of MNIT Jaipur.

M.Tech students of Center for Energy and Environment proceeded on a field visit to Tehri Hydro Power Complex (2400 MW) Tehri, Uttrakhand on October 13, 2016.

A Ruby Meet of MNIT Jaipur Alumni of 1971-76 Batch along with their spouses was held on October 17, 2016. Mr. Lalit Shingal and Mr. Surendra Murlidhar Choubey Gold Medalists in Mechanical & Metallurgy Branches (1976) led the Alumni in offering floral tribute to Pt. M. M. Malaviya by garlanding the statue.



About 61 alumni of 1971-76 were felicitated in presence of the Director MNITJ Prof. Udaykumar Yaragatti, Dean Alumni Affairs Prof. Dilip Sharma. The event concluded by presenting a painting of Dronacharya-Eklavya as a mark of respect to all the faculty members of their era by Alumni Mr. Lalit Shingal and Mr. S. M. Choubey the Chief Guests of the function. The Meet marked the inauguration of **Neki Ka Dariya** and **Aushadhi Vatika**. About 400 plants were planted in Aushadhi Vatika.

The Technical society conducted a Photoshop workshop on October 19, 2016. The students were taught various aspects and tools of Adobe Photoshop PS5. The second phase consisted of an online assignment submission and on - spot Photoshop Designing event to evaluate the designing skills.

MNIT hosted TED^x talk on October 21, 2016. The event featured four distinguished speakers: Cartoonist Mr. Vikas Singh (Dainik Bhaskar's Associate Vice President of



brand marketing), Roads safety Ambassador and Social Worker Mr. Chetan Pardeshi , Debater and News Panelist Ms. Megha Rathore and Entrepreneur Innovator Mr. Rituraj Singh. The theme of the event was **Singing a Different Tune** in which the speakers showcased how daily things should be approached with a fresh and unique perspective. Two official TED talk videos of Sir Ken Robinson and Keith Barry were also shown.

Literary society organized MNIT INTRA Model UN'16 during October 22-23, 2016. An extensive debate was held during two days of conference with delegates discussing the violation of human rights on the basis of religious beliefs with special emphasis on Islamophobia. The diplomats of nations and observer nation Palestine highlighted the solutions and the causes of violation of basic civic, human and political rights of religious minorities.

Another event
Sculpt on the
theme Medieval
Era was
organized by
the Fine Arts



Society on October 24 - 25, 2016 whereby the students were supposed to make a sculpture out of paper mache and aluminum wire.

To commemorate the contribution of Sardar Vallabhai Patel, the Iron Man of India, who gave the concept of Ek Bharat or United India, the Creative Arts and Cultural Society



organized a week -long (October 31 to November 6,

2016) programme of events in the form of **Rashtriya Ekta Saptah**, which included Pictorial Exhibition and Display of Books, competitions including T-shirt design, Short Clip, Drama, Debate and Slogan writing, Run for Unity and Felicitation of Freedom Fighters. The program was inaugurated by the Director on October, 31- the birth anniversary of Sardar Patel.

Vigilance Awareness
Week was observed in
MNIT Jaipur from October
31 to November 5, 2016 as
part of its efforts to





promote probity in public life and to achieve a corruption-free society. It began with the distribution of pamphlets and

displaying of banners both inside and outside the campus.

A live demonstration cum E-Pledge session was organized on November 2, 2016. Sh. Mohan Ram Choudhary demonstrated



How to take E-Pledge and use of Central Vigilance Commission website for redress of grievance against corruption to the faculty, staff and students of the Institute. Participants took the E- Pledge on the website and downloaded their certificates, acknowledging and appreciating their commitment to the cause of anti-corruption.



A debate competition on the topic Public awareness is the only means to eradicate corruption was organized on Novemb

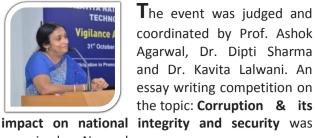


er 3, 2016. Twenty participants including faculty, staff members and students actively spoke for and against the topic.



organized on Novemb

3, 2016. er Participants including staff members and students actively wrote an essay in Hindi/English





language. The event was judged and coordinated Dr. Kavita Lalwani (Department of Physics) and Mr. Jai Narain (Estt & Administration).

A Panel Discussion Impact of Corruption Society was organized on November 4, 2016 at MNIT J. The speakers for the panel discussion were Sh. P



L Agarwal, Sh. B L Arya, Prof. Rajan Mahan, Sh. K Ram, Ms. Amrita Maurya Sh. Ranjeet Singh and Sh. R. Bhanawat. The event was anchored by Dr. Puneet Sharma and Dr. Ashok Agarwal. The programme was coordinated by Dr. Harlal Singh Mali, Dr. M L Meena and Sh. D M Sharma and Prof. R P Yadav.

Music and Dance Society organized a Musical talent hunt based competition Sargam: gaata rahe mera dil 2016. The event was organized under the



guidance of Dr. Sumanta Kumar Meher and Dr. U K Arun Kumar. This program was conducted in two stages viz. Audition Round and Grand Finale.

 \mathbf{A} team of 30 students including 19 from first semester



represented MNIT at Waves 16, festival of BITS Goa during November 4-6, 2016. The MNIT students performed an emotional play kuch hi dino ki baat hai, a heart touching story of residents of an old age home. The team made it to the top four. Our students also participated play in street competition.

SPIC MACAY society organized Mohan Veena Recital **Pandit** by Vishwa Mohan Bhatt (Grammy Award winner) on November 8, 2016.



Vishwa thrilled Pandit Mohan **Bhatt** and enlightened the audience by playing Raag Vishwaranjini followed by national song Vande Mataram and national anthem Jana Gana Mana on Veena.



A Flute Performance by Pandit Rajendra Prasanna, Indian Flautist Bansuri and Shehnai Artist of Hindustani Classical Music from Beneres Gharana was organized on November 10, 2016 by Spic

Macay. Dr. Preeti Bhatt, Sh. Nischal Jain and Dr. N C Upadhyaya lighted the lamp for starting the event.

The Institute observed Constitution Day on November 25, 2016. The commenced with a lecture Importance of



Fundamental Duties by Dr. Vibhuti Shekhawat (Department of Humanities & Social Sciences). Several other activities and competitions included debate competition on the Need of

Fundamental Duties. display of banners on **Fundamental** Duties, essay writing competition on the Importance



of Fundamental Duties in the Constitution in a Democracy and a guiz on Fundamental Duties and Constitution of India. Besides the Preamble of the Constitution was read aloud by the students, faculty and staff.

Preamble of the Constitution and Fundamental Duties being read aloud by students & faculty at **Department of Mathematics**

Center for Energy and Environment MNIT won INDIA's First Solar Hackathon 2016 Award organized by New Energy NEXUS at New Delhi.



Upcoming Events

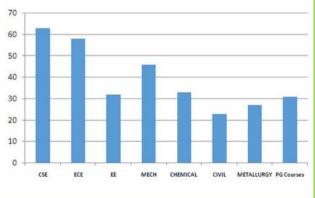
- GIAN Course: Multimodal and Advanced Biometrics Authentication from 2-11 January, 2017.
- Winter Research School from 9-14 January, 2017 by Department of Management Studies.
- National conference on Urban Environmental Management in Indian: Problems and Prospects from 20-21 January, 2017 by Department of Architecture and Planning.
- Short Term Training Programme (STTP) On Research Methodology from 20-24, March 2017.



Placement & Training / Packages

Training and Placement Statistics till 27-12-2016		
Total number of Companies visited	96	
Number of PPOs offered	12	
Number of Placements on Campus	304	
Total Number of Students Placed (Inc. PPO)	316	
Total number of Internships offered	52	

Branch wise - Placement	
CSE	63
ECE	58
EE	32
MECH	46
CHEMICAL	33
CIVIL	23
METALLURGY	27
PG Courses	31
Package offered (>10 Lpa)	40
Package offered (<10 Lpa)	276
Following Companies have offered package >10 Lpa	Amazo, DE Shaw, Arcesium, Deutsche Bank, Adobe



CONGRATULATIONS



Inter NIT meet Runners up team with the Director

Seasons Greetings Happy New Year



EDITORIAL



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