Vol. 12 No. 5 October 2012 - February 2013



# VectorTech **Magnitude & Direction**





















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All information issued under authority of Chancellor

ITM University Sector-23-A. Gurgaon, Haryana - 122017 India Phone : 91 124 236 5811 - 12 -13, 4195200 Fax : 91 124 236 7488 e-mail : itm@itmindia.edu http://www.itmindia.edu

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Founder Members (Left to Right) Mr NK Dewan, Mr Avdhesh Mishra, Mr V Daulet Singh, Mr Vijay Makhija, Mr Shiv Saran Mehra

#### Vision:

To build an unaided, self-financed university, committed to delivering education of internationally recognized standards, a university that would go on to serve as an intellectual resource base in India and the subcontinent.

#### Mission:

To provide rigorous, high-quality and relevant education in India, designed to meet national needs and international standards, so that the student community would have an alternative to seeking such education in a foreign country, at a significantly lower cost.

To develop well-rounded and professional graduates with a breadth of knowledge and the capability for analytical thinking, who are committed to excellence in their personal and professional endeavours, and who have the vision, courage and dedication to operate successfully in a dynamic market- and technology-driven global environment.

To establish close ties with the corporate community and academicians of national and international repute. This will act as a rich resource of advice and information and help in keeping the curriculum relevant to the needs of business. To facilitate lifelong learning.

#### Core Values:

Integrity - To be honest, fair, impartial and unbiased in our dealings both within and on behalf of ITM University.

Excellence – To perform all duties to foster a culture of excellence and high quality in all we do.

Dedication – Dedicate ourselves to learning and teaching, and to attain knowledge, professional competence, focus on excellence, and contribute to research, innovation and entrepreneurship.

Accountability – We firmly believe that education in the form of scholarship, research, teaching, service and developing others is a public trust. We will live up to this trust through safeguarding our resources and being good stewards of the human, intellectual, physical and fiscal resources given to our care.

Respect – We recognize the inherent dignity and rights of every person, and we will do our utmost to fulfil our resulting responsibility to treat each person with fairness, compassion and decency.

#### **Quality Policy:**

To impart learning of the highest standards in the disciplines we have chosen, through a blend of theory, practice and performance. We endeavour to seek excellence in our academic activities and in all the services we provide to improve the quality of life of our students and the community we serve.



### Editorial

Whith the noteworthy success of our publications during the year 2012-13, particularly with the Annual Report 2011-2012 winning international recognition, this issue of VectorTech brings with it an all-new and refreshing change in design and content, leading to improved readability while making a compelling impact. In the issue, we are carrying for you ITMU's academic achievements, national and international awards and recognitions, festivals, society and club activities, besides other cheering news and articles.

If you believe, as we do, that in a span of not more than ten to twelve years from now, ITM University will emerge as one of the most sought after destinations of higher education and research in India, then we recommend you follow the success story we will carry for you in our forthcoming VectorTech issues, beginning with an opening article, 'Innovative University', in this issue.

We are sure that this VectorTech will be read with excitement and interest by all, and particularly by our stakeholders, students, and alumni in India and abroad. We would be happy to carry your write-ups in our next VectorTech, due for release in September 2013. Please do share your thoughts, experiences, knowledge and achievements, and make VectorTech an effective communication bridge between ITMU and its united community.

Warm regards

Editorial Team : Col (Retd) J R Sharma Deeksha T Madan Dr Payal Khurana



Please forward your feedback to us at the following E-mail ids : jrsharma@itmindia.edu deekshathakurmadan@itmindia.edu payalkuhrana@itmindia.edu

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Professor Prem Vrat Vice-Chancellor and Professor of Eminence ITM University

### Message from the Vice Chancellor

am delighted at the rise in the quality of our publications in the University, which are now receiving international awards for the superior quality in content and presentation. Publications are very important means of communication to our stakeholders. I commend the work and dedication of our public relations team, which has made us proud by winning a commendation for its Annual Report of 2012 from the Association of Commonwealth Universities. I am sure this issue of VectorTech will be equally well-received.

I do take this opportunity to bring to the focus ITM University's vision and philosophy, which is reflected in its logo with the keywords - **independent**, **innovative and inspiring**. In keeping with this, ITM University is committed to academic excellence and putting in place all the academic enablers that will provide value to our students, encouraging them to contribute to society. The university has excellent academic infrastructure, talented faculty and staff, quality focused decision-making systems in place, and value-orientation in the teaching-learning process.

We are consistently working to realign the university's activities with its mission, instituting internal controls, improving, and in some cases totally revamping, our teaching–learning processes, thus creating competencies and values for the students and stakeholders, and providing a robust foundation for our growth. As a result, our industry–academia co-operation, national and international collaborations, our programmes, course structures, pedagogy, value-added skill courses, industry projects, research and development, all stand on a sound footing — indeed a remarkable measure of our sustained consolidation process.

The members of our faculty also have excellent credentials and distinguished achievements in research. We are building an international network of partner institutions to support our development in the area of research. The network is creating exciting opportunities for our staff and students to live, work, study and research across the globe. This will help to ensure the ongoing relevance of our academic programmes and the continued excellence of our teaching, learning and research.

In recognition of its excellent track record, ITM University has been consistently ranked, year after year, amongst the top private engineering colleges and universities of the country by independent national survey agencies, such as the Outlook Survey 2012, which ranked ITM University as No. 1 in Haryana and the No. 1 Private University in the NCR (National Capital Region). We have also recently been awarded the Excellence in Engineering award in a conclave by HT Campus comprising of private universities and institutions in the NCR. I urge upon the School of Management and School of Law to also strive for similar accolades and make us proud.





# Feedback

# Impression of the Distinguished Visitors

I am happy to see the way ITM University has grown over a decade and half into one of the leading universities in India. It enjoys a well-deserved, special place amongst the premier education institutions for its quality engineering, management and law education.

Shri Jagannath Pahadia His Excellency The Governor of Haryana & Visitor of ITM University

This is a world class institution in the making, led by Prof. Prem Vrat, with the support of the Chancellor and other founders. The vision will come to reality!

Mr. Vishnu R. Dusad CEO & Managing Director, Nucleus Software Exports Ltd, Noida

Excellent progress made by ITMU

Mr. Ravindra Ojha Managing Director, GKN Driveline,

The institution is on the right path to becoming an institute of excellence.

Mr. Indu Bhaskar Scientist F & HOD, DSIR, Team Leader (TPDU Program), DSIR, New Delhi

Wonderful to see ITMU growing in stature day by day!

Dr. Devi Singh Director, Indian Institute of Management, Lucknow

A stimulating environment at ITM University – good to be a part of the academia.

Prof. (Dr.) K.L Chopra Former Director, Indian Institute of Technology - Kharagpur



TM University was conferred with the award **Excellence in Engineering** in private Universities and institutions in the national capital region Delhi during the Conclave organized by Hindustan Times on 22 February 2013. This was highest nomination award in the Engineering excellence category.

In recognition of its excellent track record, ITMU has been consistently ranked amongst the top engineering colleges and universities of the country, year after year, by independent national surveying agencies:

- Outlook MDRA Survey 2012
- CSR GHRDC Survey 2012
- Outlook MDRA Survey 2011
- GFK Mode Study 2010
- Mint Survey 2009
- EFY Survey 2009

# Recognitions

TMU is recognized by various government and regulatory bodies for teaching and awarding of degrees. The University has been established through an Act of the Haryana Legislature, and approved by the University Grants Commission (UGC). It is also recognized by the Bar Council of India (BCI).

### International Linkages and Partnerships

 $T_{global}$  o give our students and faculty global exposure to knowledge and research, ITM University has entered into academic alliances with several well-established international universities and establishments. <section-header>

ersity Ranked Violate University in NCR



# Second Meeting of the Academic Advisory Council : New Ideas to Improve Academic Life at ITMU proposed



Seated (Lto R): 1. Mr Ajai Chowdhry, Founder HCL & Chairman, HCL Infosystems Ltd, New Delhi 2. Dr Krishan Kumar, Executive Advisor, Maruti Centre for Excellence, Gurgaon 3. Prof. Prem Vrat, Vice-Chancellor & Prof. of Eminence, ITM University 4. Mr NK Dewan, Chancellor, ITM University 5. Prof. (Dr) KL Chopra, Former Director, IIT, Kharagpur 6. Dr Krishan Lal, Former Director, NPL, New Delhi 7. Dr PS Rana, Former Chairman, HUDCO, New Delhi 8. Mr Mangu Singh, Managing Director, Delhi Metro Rail Corporation Ltd, New Delhi

Standing 2nd Row (L toR): 1. Prof. MS Sodha, Former VC, Barkatulla University 2. Brig. (Retd) SK Sharma, Registrar, ITM University 3. Prof. Karmeshu, Professor & Dean, School of Computer & Systems Sciences, JNU, New Delhi 4. Dr Devi Singh, Director, Indian Institute of Management, Lucknow 5. Mr Suresh Rajpal, Chairman & CEO, Visnova Solutions Pvt. Ltd, Noida 6. Prof. Kehar Singh, Former Dean & Emeritus Fellow, IIT, Delhi 7. Mr Bunty Peerbhoy, Managing Director, Maa Group Holdings Pvt Ltd, Bangalore 8. Prof. BC Nakra, Principal Advisor to Governing Body, ITM University 9. Mr Indu Bhaskar, Scientist F & HoD, DSIR, New Delhi 10. Mr Shiv Saran Mehra, Founder & Member, Governing Body, ITM University 11. Prof. SG Deshmukh, Director, ABV, IIITM, Gwalior 12. Mr Vishur R Dusad, CEO & MD, Nucleus Software Exports Ltd, Noida 13. Mr Ravindra Ojha, MD, GKN Driveline, Faridabad 14. Mr V Daulet Singh, Founder & Member, Governing Body, ITM University 15. Mr Avdhesh Mishra, Founder & Member, Governing Body, ITM University 15. Mr Avdhesh Mishra, Founder & Member, Governing Body, ITM University 11. Prof. SG Deshmukh, Director, Row, ITM University 15. Mr Avdhesh Mishra, Founder & Member, Governing Body, ITM University 15. Mr Avdhesh Mishra, Founder & Member, Governing Body, ITM University 15. Mr Avdhesh Mishra, Founder & Member, Governing Body, ITM University 15. Mr Avdhesh Mishra, Founder & Member, Governing Body, ITM University 15. Mr Avdhesh Mishra, Founder & Member, Governing Body, ITM University 15. Mr Avdhesh Mishra, Founder & Member, Governing Body, ITM University 15. Mr Avdhesh Mishra, Founder & Member, Governing Body, ITM University 15. Mr Avdhesh Mishra, Founder & Member, Governing Body, ITM University 15. Mr Avdhesh Mishra, Founder & Member, Governing Body, ITM University 15. Mr Avdhesh Mishra, Founder & Member, Governing Body, ITM University 15. Mr Avdhesh Mishra, Founder & Member, Governing Body, ITM University 15. Mr Avdhesh Mishra, Founder & Member, Governing Body, ITM University 15. Mr Avdhesh Mishra, Founder & Mem

On 23 February 2013, members of the ITMU Academic Advisory Council, some of India's brightest minds, met at the University campus to further the goal of making ITMU a frontrunner in delivering world-class education. To this end, members deliberated on preparing a road-map for further improving the quality of academic life at the University.

In his opening remarks, the Vice-Chancellor, Professor Prem Vrat said, 'One could not hope for a better start for an eminent conference such as this. Just last evening, the award for Excellence in Engineering Education was conferred on ITM University at a ceremony of the Hindustan Times Conclave on Excellence in Education. In his welcome address, Mr NK Dewan,



Dr Mangu Singh, MD, Delhi Metro interacting with students

Chancellor of ITM University said, 'Quality needs to be built around three pillars, research, innovation and quality faculty. If we focus on quality, the quantity will follow.' He apprised the thought leadership of various initiatives taken by the University in the past one year in research and academic innovations.

Members of the Council interacted with students and faculty during lunch, sharing their thoughts, and inspiring them to be leaders of change.



Dr A K Vij HOD School of Management

#### An Interview with DR A K VIJ

#### Profile of Dr A K VIJ

Dr AK Vij is currently Professor and Head in the School of Management with specialization in the areas of Human Resource Management and Operations Management. He combines academic achievements with rich and diversified corporate experience. He graduated in Mechanical Engineering with specialization in Industrial Engineering from Delhi College of Engineering, followed by an MBA from the Faculty of Management Studies, University of Delhi, and PhD from IIT Delhi. He has also been a Visiting Fellow, Sloan School of Management, Massachusetts Institute of Technology, in the areas of System Dynamics and Business Policy, Energy Modelling and Executive Information Systems.

His industrial experience, spanning over 37 years, covers a wide range of areas in Industrial Engineering, Human Resource Management and Information Technology. In his last corporate assignment as Head (HR-Training and Development) at Engineers India Limited (EIL), a premier engineering consultancy and EPC organization in the hydrocarbons sector in India, he was responsible for many HR initiatives in the company, including HR strategy for the company's diversification and growth plans, MDPs, including leadership development programmes, competency mapping for key roles in the company, KRA-based Performance Management System, talent acquisition and retention, among others.

He also introduced employee engagement studies for periodic feedback from the employees on personnel policies, special change management programmes relating to the implementation of the Knowledge Management system, and e-learning programmes for management trainees.

His research publications cover many areas, like energy metaling, HR, operations management and supply chain management, including a paper, Energy Demand and Future Options, which received the best paper award at the ONGC Conference on Petroleum — Past, Present and Future, at Vigyan Bhavan, New Delhi, 1988.

He has also been awarded for excellence in Creativity and Innovation for the year 2002-03 under the National Petroleum Management Programme of the Ministry of Petroleum and Natural Gas, Government of India.

# Prospects of management education in India

Management education in India has been passing through a crucial phase these days. From the nineties, there was a boom in the Indian MBA market. While there were just 250odd B-schools and university MBA departments in the 1990s, there are more than 3500 management institutes in the country today, with more than 3,50,000 approved MBA seats. On the other hand, there has been a decline in the number of candidates appearing for the CAT and GMAT examinations - the number for CAT reducing from 3,00,000 applicants in 2008 to 2,06,000 applicants in 2011, and the number for GMAT declining from 30,600 applicants in 2008 to 25,400 in 2011 (Source: MBA Universe.com Merit Trac Employability Report, 2012). Hence, all the management institutes in the country, barring the 25 top B-Schools, are facing a crisis situation termed a 'shake-out and consolidation phase' by Mr. Amit Agnihotri, Chairman, MBA Universe.com. The employability of the management graduates is a crucial issue, since the placements and the salary packages will depend on the relevance of management education for the industry.

The School of Management, ITM University, has taken cognisance of this critical issue and made employability the main plank of their policy towards management programmes. We consider the quality and employability issue of management graduates relates to the quality of input, the quality of teaching-learning processes, including the curriculum design and pedagogy, competent and motivated faculty, quality infrastructure, including IT support, and last but not least, industry interaction. The School of Management has consciously raised the eligibility standards this year for admissions to the MBA, BBA and newly launched BCom (Hons) programmes. Hence, in spite of the general crisis of admissions to management programmes in the country, admissions to the School of Management, ITM University, this vear have been superior in terms of intake quality as well as numbers. Further, the School of Management takes pride in its curriculum design and teaching methods.

We have taken advantage of the flexibility available to the School of Management as part of ITM University, Gurgaon, and revised our curriculum with the participation of industry experts and academicians. We follow a systems-based approach to management education and impart holistic learning, with an emphasis on industry needs of realistic handson management education, aimed at operational efficiency, process focus, quality deliverables and effective use of IT for business efficiency. In our view, management education has to shed its elitist image and build on its relevance and contribution to industry and the corporate world. Hence, we have built in the choice of electives for our students, not only from the School of Management, but also from the School of Engineering and Technology and the School of Law, as managers in real life need technical, managerial and legal competency sets. We also believe that genuine growth and

development in India can take place through the entrepreneurial spirit and emotional commitment of young professionals. Hence, Entrepreneurship Development and E-Cell activities find a special place in our curriculum. Next, management and business success has to be supported by the highest standards of values and professional ethics of leaders. Hence, human values and professional ethics are an integral and mandatory part of our curriculum. We are also sensitive to environmental issues and the responsibility of would-be managers towards the society to provide pollution-free, cleaner technologies and sustainable development. Environmental issues and corporate social responsibility is also a compulsory part of our management curriculum.

Further, today's business world has moved out of the narrow territorial boundaries of nations. We have MoUs and alliances with world-class institutions to provide a global perspective to our management students. We are corporate members of the All India Management Association (AIMA), and the American Society for Quality (ASQ) has its local chapter at ITM University. Our faculty selection is based on the highest benchmarks of educational qualifications, academic and research achievements, as well as corporate experience. Presently, all the faculty members at School of Management either have PhD qualifications or are working towards acquiring them. We have faculty with rich corporate experience, and where required, we invite industry experts as visiting faculty to teach our students. We provide summer internship programmes to all our students, and associate faculty members to guide and support them during this period. We have started a PhD (Management) programme, where the research scholars are guided not only by internal supervisors but by subject experts from outside, the best in their profession. We have engaged academicians of international repute as honorary distinguished adjunct faculty members, who provide guidance and support in our faculty development programmes, in the curriculum design as members of the Board of Studies, and in guiding our research scholars as subject experts. In short, the students pursuing management programmes at the School of Management have bright prospects in terms of professionalism, employability, placements, entrepreneurial spirit and as responsible citizens of the country.

# Education beyond classrooms, guest lectures and seminars

Management education is holistic and classroom teaching, at best, provides theoretical knowledge to the students. We provide opportunities to the students to learn through activities: in the classroom through case studies, group discussions, management games, stock market simulation, quiz competitions and on-line business awareness programmes. We invite experts from academia and industry for guest lectures and seminars. We have provided facilities for extracurricular activities like sports, technical festivals, and social and cultural events organised by the

students themselves, so that they learn to conduct the programmes and events on their own with minimum guidance from faculty, and only where required.

# Your experience at ITMU and promise of ITMU to management students

The School of Management, ITM University, is the best place for learning for management students. In my view, no institute can teach management to the students. However, we can provide a nurturing and conducive environment to the students so that learning can take place. The focus of our management programmes is employability, beyond the narrow vision of placements and packages. Our programme structure, faculty, infrastructure support, interaction with industry experts, collaboration with international universities and professional institutions, and thrust on extra- and co-curricular activities provides an excellent platform for the students to learn, innovate and practise. We believe that placement and salaries are not a constraint for employable professionals.

# Leaders are born; however, they are even made in management schools

In my opinion, leadership qualities are latent in all individuals. However, these can be nurtured and honed in the management schools by providing forums where the students participate, form teams, and lead the activity. Such activities provide a sense of achievement to the students and bring their leadership abilities to the fore. As said earlier, the School of Management encourages such student forums and activities.

#### In your opinion, what dynamics are involved in team-building that can lead to better understanding and increased team effectiveness?

Teams are built on trust and commitment to the goals. Personal differences between the team members dissolve when they are committed to the mission and goals. Further, active participation by all the team members, communication, role clarity, encouragement and support from the leader and timely team rewards help in building effective teams. The School of Management has demonstrated strong teamwork in the admission process, and they are committed to the mission of building a high level of employability amongst the students, besides their own development through research, FDPs, MDPs, workshops and conferences. We are also working on a mentoring model where the faculty will take the responsibility of their mentees from the day of joining till their placements and beyond. In my view, these efforts will strengthen team spirit and help in developing the School of Management into a strong professional group of ITM University.

The Editorial Team, Vector Tech, is very thankful to Professor AK Vij for providing comprehensive answers to all the questions.

# **Recent Achievements**

Some of the achievements have been spelt out above, but to summarize, the following are some of the measurable recent achievements of the University:

- On 22 February 2013 at New Delhi, HT Campus declared ITM University the winner in the Excellence in Engineering category in the National Capital Region.
- ITM University figured amongst the niche group of IITs and IIMs and was rated at par with the IITs in logistics research in India in a white paper by top German technical universities. Professor Prem Vrat, Vice-Chancellor of ITM University, was listed as one of the top 20 leading academicians and researchers in

Research at the University

It is a stark reality that the educational institutions of the future will be known and distinguished by their research pursuits and outcomes. ITM University is therefore focused on building this single most important capability, and has taken a number of initiatives in this direction. The all-important need for research has also, indeed, trickled down to students and faculty alike.

We are happy to report the following research initiatives taken by the University:

• Research groups consisting of faculty members and students, based on research area competencies, have been

India in the field of Logistics and Supply Chain Management.

- The innovative practice of increased practical and industryspecific hands-on experience of our students has enhanced the • placement of students from the existing 95% to 98% of all eligible students.
- The Accreditation Service for International Colleges (ASIC), UK, conferred a Premier category status on ITM University, as it secured Commendable grades in seven out of eight measurable
   areas of a university's functioning.
- ITM University won the first prize in the Social Outreach category in the annual

competition for 2012 held amongst the 477 global universities of the Association of Commonwealth Universities (ACU).

- As a mark of recognition of ITMU as a centre of research in India, the University was registered by the Department of Scientific and Industrial Research (DSIR) for availing Customs and Central Excise exemptions, a privilege rarely given to a private university.
- We continue to be ranked as No. 1 University in Haryana and the No. 1 Private University in the NCR, as per current rankings of the Outlook – MDRA survey 2012, and the CSR – GHRDC survey 2012.



Dr SK Kaushik being briefed by Dr V Gayathri

formed, cutting across domains of departments and schools to encourage interdisciplinary research. These research groups are working on topics like materials science, thin films, nanophotonics, biofertilizers, water and waste management, geotechnical engineering, data mining, computer networking,

#### RECENT ACHIEVEMENTS



software engineering, soft computing, signal processing, communication engineering, control and power systems, embedded systems, VLSI design, photovoltaics, mechatronics and robotics. The groups have since formulated research plans, keeping the longterm research objectives, and are working towards further refining them.

- During the year, three sponsored research projects were completed, and six more sponsored projects are in progress from the previous year. In addition to these, three new projects were sanctioned by funding agencies during the year 2012. The total funding received in 2012 was Rs 25.82 lakhs. There is a need to enhance our fund base.
- Notable research achievements in these sponsored projects are synthesis of multiferroic rareearth magnanites and chalcogenide thin films, hydrocarbon production using

algae, study of speech impairment in children, dynamic analysis of robotic systems, water salinity and fluoride hazard mapping of vulnerable areas, and preparation of composites using fly ash.

- Three consultancy projects were also taken up and completed in 2012, and this is likely to give a fillip to bidding for more such projects with immediate benefit to industry.
- Thirty University fellowships for doctoral students and five research associate positions for fresh PhDs were instituted to encourage research.
- Sixty-six doctoral students are now registered with the University, and are carrying out their dissertation research work here.
- Seven continuing education programmes were conducted at the University in 2012 for the benefit of industry and outside organizations.
- A programme to offer modular

courses to industry personnel to enhance their skills in specific areas and accumulate academic credits to enable them to earn a certificate, diploma, or MTech degree has been worked out, with flexibility in course content and time and place of delivery of the modular courses.

- Regular sponsoring of faculty for conferences and seminars in India (approximately 40) was undertaken for faculty members in all the departments during the year ITMU faculty presented papers and attended international and national conferences. As a result, 66 papers have been published in conference proceedings, and 70 papers have been presented in conferences during the year. In addition, 60 research papers have been published in refereed journals and six books have been published by faculty members in 2012.
- An annual award for the best researcher and two annual awards for the best emerging researchers were introduced. These were given to budding researchers to inspire them and motivate others.



### Innovative University

By : JR Sharma

Sr. Manager Administration

We are an exclusive University with a difference in our desire for, and sustained focus to innovation - our crucial distinguishing feature. Over the years, the University has inspired its students, faculty and staff to think beyond the obvious and produce new knowledge, new solutions to current challenges. At ITM University, the best idea always wins. Some of the significant initiatives recently taken are explained in the succeeding paragraphs.

#### 'Catch Them Young'

Apart from the mandatory UG projects, nearly a dozen social projects by students, under a special National Institute of Design (NID), Ahmedabad, scheme (supported by the Ministry of Micro, Small and Medium Enterprises (MSME)) are underway, such as, an 'Intelligent Aid' for the blind; an economical pug cutting machine and detachable rainproof accessories for scooters and motorcycles.

#### Making Students Industry-ready

After the first five semesters of rigour in learning the fundamentals of the domain subjects, students are provided ten weeks of intensive





exposure to specific industries. including various bridge and valueadded industry-run courses. Schemes with NIIT, Ericsson and solid innovative student-to-student selfmodelling by Electronic Data help scheme devised by the Systems through bridge courses to make students industry-ready, are well underway. This is paying dividends by ever larger off-takes in our placements, which are over 95% of eligible students.

#### **ITMU Scholars**

A student with a minimum CGPA of 9 on a 10-point scale, and a GATE score of a minimum of 90% is declared an ITM Scholar and given a one-time cash prize of Rs 10,000, an incentive to working hard. Despite being a private, unaided university, ITMU disburses about Rs 1.25 crores per year in scholarships.

#### Peer Tutors

Meritorious, talented and capable students are recognized and paid for

their efforts to assist weaker students in their studies. They act as persuasive facilitators. This is an University.

#### Dean's List of Students

To promote excellence in academics and to recognize performers, a Dean's list is published each semester. Those students who achieve a CGPA of 9.5 and above feature in this list. This special recognition is endorsed in their degrees, and, as part of the student participation in university affairs, they are also in the think-tank of the University..

#### E-learning process

The use of the Learning Management System (LMS), social media, Virtual Labs, simulation studies and other niche teaching software drive our teaching-learning process. The LMS is on our website www.itmindia.edu and students access this with their own login ID and password.

Teacher & Researcher Awards: An annual award for the best

An annual award for the best researcher, and two annual awards



Ms Jaya Ahuja receiving the Best Teacher Award from Prof Prem Vrat

for the best emerging researchers are given each year. The latter are given to budding researchers to inspire them and motivate others.

Emphasis on Practical Aspects:To shift the emphasis from teaching to a focus on learning, this initiative in academic terms means that the Lecture–Tutorial–Practical (L-T-P) of 3–0–0 has been modified to 2–0–2. This enhanced practical paradigm takes varied imaginative forms, to include role play, design and simulation studies, etc.

# Scalability of Innovative Initiatives

The outcomes of innovative academic initiatives are measurable only over a considerable span of time. However, their positive effects do begin to get reflected in the patterns of change. At ITM University, a number of diverse and innovative initiatives taken in the recent past have begun to generate or become drivers of dynamic academic growth. All such initiatives are scalable, and after the initial phase of limited application, have been applied across the University with a multiplier effect. Some of these are:

#### **UG Projects**

The freedom given to young UG students to innovate in labs, with guidance provided to them when required, and workshops for pursuing social projects beyond the classroom have earned our students seven research projects in a short span of six months. These have been entirely funded by the MSME through NI D Ahmedabad. This endeavour is expected to result in creating a young students' community in the University engaged in research. Rarely do UG students get such funded project support from Government agencies, and these seven projects are a harbinger of more to come in the years ahead.

#### Interdisciplinary Research

Twenty one multidisciplinary research groups consisting of faculty members and students from different departments are currently engaged in finalizing interdisciplinary research projects of high relevance. This new and innovative initiative to actively involve faculty and students together in diverse areas of research has a potential of high scalability in its efforts towards research excellence in the University. Some of the current areas of our research are speech and signal processing, millimetre wave research, VLSI design and photovoltaics, embedded systems, mechatronics and robotics.

#### **Rewarding Scholarship**

Initiatives such as the Deans' List and ITM Scholars, as described above, are resulting in increased academic engagement by bright students with a desire to excel in academics so as to be a part of these select groups. As a result, more than 80 students scored over 9.5 CGPA in the last two semesters. Similarly, in an activity organized for the first time, 490 students of ITMU appeared for the GATE test. This is to benchmark our teaching practice against a national scale, yet another example of scalability of innovative steps taken at the University.

#### Industry focus

Initiatives such as hands-on industry training, value-added courses and industry tie-ups have significantly improved the placement record of



Students after their Campus placements with Deloitte Consulting Pvt. Ltd.

Innovative University

students in the University. Companies such as TCS, Ericsson and NIIT, which impart hands-on training to our students to be industry-ready, hire a large number of students from the campus. This initiative too has the inherent advantage and potential to scale up the number of students receiving such training and the resultant absorption in these companies.

#### Ability to Overcome Challenges

# Private University : A Limitation or Advantage?

Being a private university limits the source of funding, as government and the public sector do not fund it in any way. However, the limitation is also an opportunity as internal systems can be adopted with a complete absence of bureaucracy, with very speedy decision making and a high regard for value for money for all stakeholders – all of which are prerequisites to a good organization.

#### Physical size

The ten-acre site of the University in a very urbanized setting of Gurgaon imposes limitations to growth. This has been overcome by using the locational advantage to have a strong industry-academia linkage; a select, high calibre faculty, who chose the university because of the proximity to their residences; and the use of Virtual Labs to have access to the IITs e-resources. The proximity to IIT Delhi has been turned to our distinct advantage, in that a large number of senior faculty members at IITD have moved to ITM University on superannuation, bringing along

with them decades of a high-quality academic experience.

#### Impact Potential

Each of the innovations mentioned above have had a substantive impact, making the achievements listed possible. However, the impact potential of various steps taken by the University need to be reiterated.

- An impact has been felt on the quality of intake as the University reduced the admission to undergraduate
  Engineering programmes from 650 in 2011–2012 to 550 in 2012–2013. We now have high quality of students as compared to previous years.
- In 2012, the University adopted the ranking method of 25% weightage to 10+2 marks for Engineering, with the balance of 75% to AIEEE marks. This even preceded the IITs. This year, the ratio has been further improved to 60% for JEE Main 2013 and 40% for 10+2 marks – with a sure potential for attracting even better intake.
- An increasing number of leading

international universities are visiting ITM University for collaborations and tie-ups for students' academic mobility and research. Universities from America, Australia, France and Ireland visited ITM University this year. Some of the important collaborations are:

- Institute of Technology Blanchardstown (ITB) – Ireland.
- Michigan Technological University-UK.
- University of Warwick, UK.
- University of Chester, UK.
- "(n+i)" Engineering Network, French.
- Association of Commonwealth Universities (ACU)–UK.

#### Conclusion

In short, the University is on a growth path with the single-minded aim of quality enhancement in all facets of higher education. Innovations are geared to this aim, and growth in numbers is an incidental outcome of the impact of all-round improvement. The growth story of the University is soaring.



Campus life is full of joy : Students posing for a picture

# Alumni Relations - A Fresh Beginning at ITMU, Gurgaon

Two hundred and seventy students come together to renew ties with their Alma Mater



The Governing Body of ITM University decided to boost engagement with the alumni of ITMU. An Alumni Relations Office (ARO) has been set up, under the overall responsibility of a Deputy Dean (Alumni Affairs) who will be assisted by two colleagues, Ms Deepika Deswal and Mr Deepak Satyarthi, who are alumni as well.

In its objectives, the ARO will be planning activities and events for alumni. The aim is to build a strong alumni community and foster opportunities for alumni development.

Its first task was to consolidate the available data on the alumni and establish contact with them. In the past six to seven months, over 550 alumni have been located all over the country and abroad and contacted. The ARO is in the process of using social media (mainly LinkedIn and Facebook) to reach out to the remaining members of the alumni community. The microsite of alumni on the ITMU website is being restructured and improved upon to

Happy faces at Alumni Meet, ITM University

make it more interactive. Alumni can register through the microsite and can reach the ARO by writing to alumni@itmindia.edu.

The first major event planned and organized was the Annual Alumni Meet on 29 Dec 2012 at the ITMU campus. Going by the participation and enthusiasm of the alumni, the event was a success. More than 250 alumni from various parts of the country and a few from overseas participated in the Meet. One of the most encouraging aspects of the event was the attendance by a significant number of alumni from the 1996 batch, some even with their families. On arrival, the Alumni interacted with the faculty and staff. sharing memories of the past and their professional lives at present. A cultural show was put up by the students in their honour. On the occasion, the Vice-Chancellor, ITMU, addressed the gathering and highlighted the initiatives the University was taking to strengthen alumni affairs. He appealed to the alumni to uphold the values their

alma mater promotes, and to continually strive to improve upon the ITMU brand with persistent efforts and success. The alumni present were felicitated by their respective Heads of Department. Some of the alumni chose to share with the gathering thoughts and cherished memories and nostalgic moments of their ITMU days.

Among other things, the ARO plans to keep alumni posted on all major developments at the University through bulletins and newsletters. It will also serve as a single point of contact for all their requests, facilitating contact with the unit or department concerned. Alumni engagement would include their involvement in guest lectures, internships, placements and projects, among other things. Some alumni have already shown interest in actively participating and contributing to such initiatives.

We at ITMU look forward to a very fruitful connection with our alumni.

# Outreach Activities of Professor Prem Vrat Vice-Chancellor and Professor of Eminence, ITM University, Gurgaon

- □ As a member of the ATF (Ad hoc Task Force) appointed by the Cabinet Secretariat, Government of India, to assess the functioning of central and state government ministries, the Vice-Chancellor, Professor Prem Vrat, attended a meeting of the ATF for the H a r y a n a G o v e r n m e n t Performance Appraisal on 4 and 5 October 2012 in Chandigarh.
- Professor Prem Vrat was invited to deliver a keynote address at the 23rd Chapter Convention of the Quality Circle Forum of India – Delhi Chapter, on 6 October 2012 at Om Shanti Retreat Centre, Manesar, Gurgaon.
- As a member of the INAE (Indian N a t i o n a 1 A c a d e m y o f Engineering), Professor Prem Vrat attended the first meeting of the INAE Forum on Technology Foresight and Management for addressing National Challenges on 9 October 2012 at INAE Headquarters.
- Professor Prem Vrat delivered a keynote inaugural address at a national workshop on Value Education in the 21st Century and Human Rights, organized by the Department of Political Science and Nehru Studies Centre, University of Rajasthan, Jaipur, in collaboration with the University Grants Commission, New Delhi, on 27 October 2012 at Jaipur.

- □ As a member of the ATF, Professor Prem Vrat also attended a meeting to review RFDs from Himachal Pradesh on 31 October 2012 at the Indian Institute of Foreign Trade (IIFT), New Delhi.
- □ As a member of ATF (Ad hoc Task Force) appointed by the C a b i n e t S e c r e t a r i a t, Government of India, Professor Prem Vrat attended a meeting to review RFDs from Himachal Pradesh on 1 November 2012 at the Indian Institute of Foreign Trade (IIFT), New Delhi.
- As a member of INAE, Professor Prem Vrat attended the second meeting of the INAE Forum on Technology Foresight and Management for addressing National Challenges on 9 November 2012 at INAE (Indian N ational Academy of Engineering) Headquarters.
- Professor Prem Vrat participated in a meeting on the 2nd Global Management Guru Award,

organized by BIMTECH and MBAUniverse.com on 9 November 2012 at Vasant Kunj, New Delhi.

- Professor Prem Vrat attended a discussion with Professor Ned Mohan, University of Minnesota, USA, at the IEEE workshop on Revitalizing Power Engineering Education on 23 November 2012 at the Department of Electrical Engineering, IIT Delhi.
- Professor Prem Vrat attended as an invitee a dinner reception hosted by H.E. Mr Feilim McLaughlin, Ambassador of Ireland, in honour of Ireland's Minister for Education and Skills, Mr Ciaran Cannon T.D., at his residence at New Delhi on Monday, 26 November 2012.
- Professor Prem Vrat attended a luncheon meeting with senior executives from ASQ Inc., USA, Mr Paul Borawski, CEO, and Mr Jim Rooney, current Chairperson of ASQ's Board of





Directors, along with an exclusive gathering of about 15 persons, comprising senior advisors, including executives from academia and the corporate world, on 1 December 2012 at New Delhi.

- Professor Prem Vrat attended The Second National Summit on Academia–Corporate Interface for Upskilling Leaders of Tomorrow on 12 December 2012 at PHD House, New Delhi.
- □ A White Paper by a few top technical universities in Germany in their analysis of logistics research in India, listed Professor Prem Vrat as one of the top 20 leading academics and researchers in India in the field of Logistics and Supply Chain Management. The paper has also identified ITM University, Gurgaon, as being amongst the various institutions where logistics-related research is being conducted.
- Professor Prem Vrat was invited as the chief guest to inaugurate the XVI International

Conference of Society of Operations Management (SOM) held at IIT Delhi on 22 December 2012. The conference was jointly organized by IIT Delhi, IIM Lucknow, and Grand Valley State University, USA. Sir Mike Gregory, Head of the Manufacturing Institute, Cambridge University, UK, delivered the keynote address at the inaugural session.

- Professor Prem Vrat was felicitated in the inaugural session with the Lifetime Achievement Award in Operations Management by the Department of Management, IIT Delhi, host of the conference.
- Professor Prem Vrat chaired the second meeting of the Project Review Committee (PRC) for the TDDP project entitled, Development of small-size pistons for two-stroke engines by high pressure die casting process, by Abilities India Pistons and Rings Ltd (AIPRL), Delhi, on 22 December 2012.

Professor Prem Vrat attended a

meeting as a member of the Academic Committee of Surajmal Memorial Education Society on 30 December 2012 at Maharaja Surajmal Institute, New Delhi.

- Professor Prem Vrat delivered a lecture based on a white paper on Materials Management Practices, at JK Group of Organizations, and later on a concept paper on Managing costs in a challenging environment, on 9 and 10 January 2013. The two-day conference was attended by more than 50 top or senior level managers from six JK Group companies across the country. The conference was highly appreciated by the participants.
- □ As a member of the ATF (Ad hoc Task Force) appointed by C a b i n e t S e c r e t a r i a t, Government of India, Professor Prem Vrat attended a meeting to review Results Framework Document from Jammu and Kashmir on 3 and 4 January 2013 at the Indian Institute of Foreign Trade (IIFT), New Delhi.
- □ As a member of the INAE, Professor Prem Vrat attended the third meeting of the INAE Forum on Technology Foresight and Management for addressing National Challenges, on 11 January 2013 at INAE Headquarters.
- Professor Prem Vrat attended a seminar and interview on faculty recruitment at IIM, Rohtak, as

an external expert on 1 February 2013.

- □ He also attended a workshop for developing content design, pedagogy and broad curriculum for CPPP (Certificate Programme in Public Procurement) organized by the World Bank from 7 to 8 February 2013 at Hindustan Times House, New Delhi.
- □ The VC attended the 2nd International Conference on Human Values in Higher Education from 16 to 18 February 2013 at IIIT Hyderabad, and also delivered a presentation on human values, which was very well appreciated by the participants. Professor Prem Vrat attended a seminar and interview on faculty recruitment at IIM, Rohtak, as an external expert on 1 February 2013.

Papers published:

- Prem Vrat (2012), 'Wealth and Quality of Life: A View Point\*', Haryana Recorder, September 2012, p 27.
  - Sushmita A Narayana, Rupesh Kumar Pati, Prem Vrat, 'Research on Management Issues in the Pharmaceutical Industry: A Literature Review', International Journal of Pharmaceutical and Healthcare Marketing, Emerald Group Publishing Limited, Vol.6 Issue: 4, pp 351–375.
- Prem Vrat (2013), 'Modelling Behaviour Induced Costs in Transport Systems and Environmental Degradation: A Conceptual Framework', published in RITES Journal, Volume 15, Issue 1, January, 2013, pp12.1-12.16.

#### **Received Best Paper Award**

Professor Prem Vrat's paper entitled 'Inventory Model and Human Body Food Supply Chain: Some Managerial Insights', published in IIIE – Industrial Engineering Journal – Vol.II, Issue No. 27, September 2011, pp 08-16, received the best paper award for the year 2011-2012.



Professor Prem Vrat inaugurated the Annual Function of CCA School, Gurgaon, as a chief guest on 10 February 2013.



# Schools

### School Of Engineering and Technology

#### Department of **EECE**

Papers Published/Presented

- Anjali Garg (2012), 'Keil software based designing of multi-storeyed car parking system', published in International Journal of Emerging Technologies and Applications in Engineering Technology and Sciences, IJ-ETA-ETS, ISSN: 0974-3588 | Vol. 5: Issue 2, pp 34-37.
- Sharda Vashisth, Munna Khan, Ritu Vijay, Ashok K. Salhan (2012), 'On line acquisition and wireless transmission of carotid pulse waveforms to analyse posture related changes', published in International Journal of Biomedical Engineering and Technology (Inderscience), ISSN No. 1752-6418, Vol.10, No.3, 2012, pp 255–265.
- Ritika Kajal, Deepshikha Saini, Kusum Grewal (2012), 'Virtual Private Network', published in International Journal of Advanced Research in Computer Science and Software Engineering, Volume: 2 (10), October 2012, pp 428–432.
- Pankaj Rakheja, Medhavi Gupta (2012), 'Performance analysis of ANESAT Protocol for FTP, FTP generic, VBR and C B R over Satellite Communication', published in International Journal of Advanced Research in

Electrical, Electronics and Instrumentation Engineering, Vol.I, No. 5, November 2012, pp 443-447.

- Ramandeep Singh, Ankur Bhardwaj, Yogesh Chauhan, Rachit Jain (2012), 'PWM Strategies in 32-Bit Microcontroller for Interior White LED Down Panel', published in International Journal of Computer Applications (IJCA), Vol. 58, No. 22, December 2012, pp 25-32.
- Ramandeep Singh, Sulab Kumar, Shilpa Mehta, Rajat Saxena (2012), 'Simulation Based Design of Robotic Arm and Omni Directional Drive Mechanism of Dexto Eka', published in International Journal of Computer Science Engineering and Information Technology Research (IJCSEITR), Vol. 2, No. 4, November 2012, pp 93-103.
- Rajeev Kamal (2012), 'Electronic Design and Automation Industry in An Open Source Survival Issues', published in Global Research Analysis, Vol.1, No.5, November 2012, pp 49-51.
- Neeraj Kumar Shukla, Madhurima Kumar, Anshul Arora, Ritu Arora, P Bhatnagar, S Birla (2012), 'An Analysis of Power and Stability in 6T, NC,

Asymmetric, PP, and P3SRAM Bit-Cells Topologies in 45nm CMOS Technology', published in International Journal of Computer Applications, Vol. 59, No. 3, December 2012, pp 18-21.

- Sulabh Kumra, Tanmay Rao (2012), 'A Novel Design for a P a l m - P r i n t s E n a b l e d Biometric System', published in IOSR Journal of Computer Engineering, Vol.7, No. 3, December 2012, pp 01-08.
- Sulabh Kumra, Rajat Saxena, Shilpa Mehta (2012), 'Navigation System for Omnidirectional Automatic Guided Vehicle with Mecanum Wheel', published in IOSR Journal of Electrical and Electronics Engineering (IOSRJEEE), Vol. 2, No. 3, October 2012, pp 35-39.
- Manish Chaudhary, Mandeep Singh Narula (2013), 'High Speed Modified Booth's Multiplier for Signed and Unsigned Numbers', published in International Journal of Science and Engineering Investigations (IJSEI), Vol 2, Issue 12, January 2013, pp 106-113.
- ❑ Vandana Khanna (2012), 'PSPICE and MATLAB Models for Study of Solar Cells', presented at the TAPSUN conference

organized by CSIR-National Physical Laboratory at New Delhi, held on 4-5 December 2012.

- Renu Bhardwaj (2012), 'Reduced Rule Base Fuzzy Controller For Performance Enhancement of Inline PI Controller', presented at IEEE International Conference on Power and Energy (PECON), organized by the Research Management Institute, University Teknologi MARA, Malaysia, held on 2-5 December 2012.
  - Renu Bhardwaj (2012), 'Hybrid PI Speed Controllers for Permanent Magnet Brushless DC Motor', presented at the IEEE 5th India International Conference on Power Electronics (IICPE), organized by the Delhi Technological University, Delhi, held on 6-8 December 2012.
- Sulabh Kumra, Rajat Saxena, Shilpa Mehta (2012), 'Design and Development of 6-DOF Robotic Arm Controlled by Man Machine Interface', presented at IEEE International Conference on Computational Intelligence and Computing Research, organized by Tamil Nadu College of Engineering at Coimbatore, held on 18-20 December 2012.
- Hemani Kaushal (2013) 'Experimental Study on Aperture Averaging in Free Space Optical Communication Link', presented at the National C o n f e r e n c e o n Communication, NCC 2013, at the Indian Institute of Technology Delhi, held on 17

VectorTech Oct 2012 - Feb 2013

February 2013.

Hemani Kaushal (2013), 'Free S p a c e O p t i c a l Communication', presented at the International Conference on Telecommunication and Network, TEL-NET 2013, at Amity University, held on 28 February 2013.

#### **Other Professional Activities**

- ☐ JP Shivhare attended a conference organized by the Indian Society of Remote Sensing (ISRS), ISRO, Department of Space, Department of Science and Technology, with participation by international agencies.
- Nitin Malik attended a conference on Grid Integration of Renewable and Sustainable Energy Sources organized by IEEE Deenbandhu Chhotu Ram University of Sciences and Technology, Murthal, Sonepat, Haryana, 19-22 December 2012.

- Hemani Kaushal attended a workshop organized by National Instruments at IIT Delhi on 22 August 2012, on Introduction to LABVIEW software and hardware and its use in research, specific to wireless communication, structural health monitoring. Implementing LABVIEW with FPGA kits without the knowledge of verilog of VHDL was an essential part of the learning.
- ❑ JP Shivhare attended a National workshop: the IEEE SSCS Delhi Chapter -Advanced Analog and RF workshop at ST

Microelectronics at Greater Noida on 30 October 2012. He also attended another international conference organized by the Indian Science Congress Association (ISCA) on completion of 100 years, at the India International Centre, Lodhi Road, New Delhi, 26-27 November 2012.

- ❑ Vandana Khanna, Dipti Girdhar and Charu Rana attended the short-term course on Applications of Solar Energy and Photovoltaics, organized by the Centre for Energy Studies at Indian Institute of Technology, Delhi, 12-18 December 2012, under the sponsorship of the Quality Improvement Programme, AICTE.
- Renu Bhardwaj attended a two-day IEEE workshop on Advanced Analog and RF, 30-31 October 2012.
- Sidharth Bhatia completed an online course in Machine Learning by Mr Andrew NG of Stanford University, USA.
- Mandeep Singh and Sheila Mahapatra attended AICTErecognized short-term course on Computer-Aided Power SystemAnalysis, 19-23 November 2012, conducted by NITTTR, Chandigarh.
- Naresh Kumari attended a one-day workshop on Manuscript Preparation using LaTeX, conducted by Professor V Ravichandran, Delhi University, and organised at ITMU, 21 January 2013.

Naresh Kumari, Ms Shiela Mahapatra and Mr Mandeep Singh attended a two-day workshop on Computational Intelligence and its applications in Microgrid at the Department of Electrical Engineering, IIT Delhi, 26-27 December 2012.

#### Citation

Neeraj Kr Shukla, work cited in IEEE transaction, Andrea Calimera, Alberto Macii, Enrico Macii, and Massimo Poncino, Design Techniques and Architectures for Low-Leakage RAMs, IEEE Transactions on Circuits and Systems-I: Regular Papers, Vol. 59, No.9, September 2012, pp 1992-2007.

#### Department of CSE & IT

#### Papers Published/Presented

- Swati Aggarwal, AQ Ansari, Ranjit Biswas, (2012), 'Neutrosophic classifier: An extension of fuzzy classifier', published in Applied Soft Computing – Journal – Elsevier. Online manuscript (unedited version) available at http://dx.doi.org/10.1016/j.aso c.2012.08.002
- Roopal Mamtora, Shilpi Gupta (1st Year MTech student) (2012), 'Intrusion Detection System using Wireshark', published in International Journal of Advanced Research in Computer Science and Software Engineering (www.ijarcsse.com), Volume 2, Issue 11, held on November 2012, ISSN: 2277 128X.

Niharika Garg (2013), 'Issues and the Proposed Solutions with the Automatic Monitoring of School Buses Using RFID', published in International Journal of Computer Science and Engineering (IJCSE), Vol 2-No.1, pp 69-74, ISSN: 2278-9979.

- Niharika Garg (2013), 'Are Smart Phones Really Smart in Supply Chain and Logistics?', published in International Journal of Business and General Management (IJBGM), Vol 2-No.1, pp 1-6, ISSN: 2319-2275.
  - Sandeep Singh and Aarti (2012), 'Neurocomputational Model for information storage and retrieval of objects', presented at ICRTITCS – 2012, organized by Thakur College of Science and Commerce, Mumbai, held on 17-18 November 2012.

#### **Other Professional Activities**

- □ Sandeep Singh with eleven final-year IT students and two third-year CSE students attended a one-day Windows Azure workshop at Microsoft Gurgaon Campus on 11 November 2012.
- Ms Niharika Garg attended the International US-India workshop on Best Practices for Women in Science, sponsored by the Department of Science and Technology, US Embassy, Indo-US Science and Technology Forum, on 10 December 2012 at Gulmohar Hall, India Habitat Centre, New Delhi.

Mr Anil Kumar Mishra and Mr Bablu Pandey, with 21 students (M-Tech, CSE & SE), participated in a two-day International workshop on science for shaping the future of India, organized by the Indian Science Congress Association. in association with the Department of Science and Technology, 26-27 November 2012, at India International Centre, New Delhi. Dr Farooq Abdullah and Mr Tariq Anwar inaugurated the workshop. Dr Ratan Kumar Datta, Director, CSI, and other distinguished speakers conducted the sessions.

# Department of Mechanical Engineering

Papers Published/Presented

- Ashwini Sharma, Dixit Garg and Ashish Agarwal (2012), 'Quality Management in Supply Chains: The Literature Review', published in International Journal of Quality Research, ISSN No. 1800-6450, Vol. 6, No.3, 2012, pp 193–206.
- Dinesh Kumar and Surya Prakash (2012), 'Investigation and analysis for the wrinkling behaviour of deep drawn die sheet metal component using fast form', presented at the National Conference TAME 2012, organized by the YMCA University of Science and Technology, Faridabad, held on 19-20 October, published in the proceedings, Trends and Advances in Mechanical Engineering 2012, October 2012, p 32.

and Ashish Agarwal (2012) 'Supply chain quality management case study on supplier of an Indian automotive Original Equipment Manufacturer', presented at the International Conference on Best Practices in Supply Chain Management. organized by the Institute of Technical Education and Research (ITER), Siksha 'O' Anusandhan University, Bhubaneshwar, 22-23 November, published in the proceedings, held on November 2012, pp 247-254.

Ashwini Sharma, Dixit Garg,

- BC Nakra and KK Chaudhry. (2012), The solution manual of the existing popular textbook,
   ' I n s t r u m e n t a t i o n , Measurements and Analysis', published by M/s Tata McGraw Hill, Third Edition 2009.
- Abhishek Pratap Singh, KK Chaudhry and Pramod Bhatia (2013), 'Computational Modeling and Simulation of Vehicular Pollutants Dispersion in Street Canyons', presented at the National Conference on Emerging Trends in Science, Technology and Management – Vision 2020, organized by the Gurgaon Institute of Technology and Management, held on 18-19 January 2013.
- Swati Bhardwaj and Pramod Bhatia (2013), 'Comparative study on hydrocarbon and hydrogen flames', presented at the National Conference on Emerging Trends in Science, Technology and Management –

Vision 2020, organized by the Gurgaon Institute of Technology and Management, held on 18-19 January 2013.

#### **Other Professional Activities**

- Prof KK Chaudhry participated in the 6th National Conference on Wind Engineering, held at Central Road Research Institute, New Delhi, 14-15 December 2012. He chaired the session on General Issues in Wind Engineering.
- Professor JK Gera attended an Indo-French conference on Shaping the Future: Energy Security in India, 11-12 October 2012, at Claridges Hotel, New Delhi.
- Mr Om Ji Shukla, Mr Surya Prakash and Mr Lalit Upadhayay attended the ASQ Delhi Chapter convention on Quality Circles, organized by ASQ Delhi at Om Shanti Retreat, Gurgaon, on 6 October 2012.
- Ms Shiv Manjaree Gopaliya and Professor S K Saha of IIT Delhi have successfully guided Siddharth Jaitley (student, ECE Department, ITMU) on a project titled PID Control of DC Motor using NI-LabView. Also, a lab manual has been developed, consisting of experiments which can be performed by other students based on this project.
- Ms Swati Bhardwaj, Mr Vinkel Arora, Mr Ashwini Sharma and Mr Prahlad Singh attended a workshop on LATEX at ITMU on 21 January 2013.

Ms Shiv Manjaree, Mrs Gayatri and Ms Niharika Garg, along with other research scholars, attended the US-India Workshop on Best Practices for Women in Science, on 10 December 2012 at Gulmohar Hall, Habitat World, India Habitat Centre, Lodhi Road, New Delhi.

#### Department of Civil Engineering

Papers Published/Presented

- Ram Karan Singh et al (2012), 'Groundwater modeling with processing MODFLOW for windows (PMWIN)', for the water balance study and suitable recharge site: Case of Gurgaon District, Haryana, India, published in International Journal of Application or Innovation in Engineering and Management (IJAIEM), Vol.1, Issue 1, September 2012, pp 72-84.
- Ram Karan (2012), 'A Technical Report on the Workshop on Global Challenges, Climate Change, Water, Environment and Society', published in Indo-US Science and Technology Forum (IUSSTF), Connect, Volume 4(2), September 2012, pp 16-17.
  - Prachi Sohoni, Nipun Verma, Isha Verma (2013), 'Application of Green Technology in Infrastructure', published in International Journal of Scientific Research (IJSR), Vol. 2, No. @, February 2013, pp 150-152.

- Ram Karan Singh and PS Pawar (2012), 'Comparison of Reference Evapotranspiration Estimations across Five diverse locations in India', published in International Journal of Application or Innovation in Engineering and Management, Vol.1, Issue 4, December 2012, pp18-27.
- □ T Chaudhary and AK Misra (2013), 'Minimizing changing climate impact on buildings using easily and economically feasible earth to air heat exchanger technique Mitigation and Adaptation Strategies for Global Change (Springer)', p u b l i s h e d i n : D O I : 10.1007/s11027-013-9453-3.
- Ram Karan Singh (2012), 'Impact of Climate Change on Water Resources : A Review on Global Perspective', published in New Dimensions of Disaster Management in India: Perspectives, Approaches and Strategies, Editors: A Mishra and AK Singh, Vol-II, January 2013, Serials Publications, New Delhi, India, pp 556-569.
- Ram Karan Singh (2013), 'Impact of Urbanization on Groundwater of Gurgaon District, Haryana, India', published in New Dimensions of Disaster Management in India: Perspectives, Approaches and Strategies, Editors: A Mishra and AK Singh, Vol-II, January 2013, Serials Publications, New Delhi, India, pp 586-608.
- Ram Karan Singh (2013), 'Water Disastrous Management Nexus Climate Change Scientific Findings and Sectoral

Solutions', published in New Dimensions of Disaster Management in India: Perspectives, Approaches and Strategies, Editors: A Mishra and AK Singh, Vol-I, January 2013, Serials Publications, New Delhi, India pp 126-143.

Ram Karan Singh (2012) 'Climate Change Nexus Water Availability in Himalayan Rivers' presented at an International Workshop on Understanding-Water-Energy-GHG nexus for future water and food security', jointly organized by WTC, New Delhi, and University of Melbourne, Australia, held on 27-28 September 2012.

- Vaishali Sahu and V Gayathri (2012) 'Unconfined Compressive Strength of Fly Ash Modified with Lime Sludge (FALS) a Composite Material', presented at Indian Geotechnical Conference, Advances in Geotechnical Engineering, under the theme, Advances in Environmental Geotechnics, organized by the Indian Geotechnical Society at IIT Delhi, held on 13-15 December 2012.
- Vaishali Sahu and V Gayathri (2013), 'Sustainable approach towards sludge management derived from water treatment plant: A review of beneficial uses, presented at the national conference on Geotechnical Geomerontal Aspect of Waste and their utilization in infrastructure project', held on 15-16 February 2013, presented at Gurunanak Dev Engineering College, Ludhiana.

#### **Other Professional Activities**

■ Ms Isha Verma attended a fiveday short-term course under the QIP (Quality Improvement Programme) on Advanced Steel Design at the Department of Civil Engineering, IIT Delhi, 8-12 October 2012. The main objective of this course was to create awareness and share knowledge on the design provisions as per current codes, leading to wider use in the future.

#### Guest Lecture by Prof Kehar Singh

Professor Kehar Singh, Honorary Distinguished Research Professor, delivered a lecture on Optoelectronic Techniques for Data Security at the Indo-US Joint Workshop on National Security: Applications of Laser Spectroscopy. The workshop was held at the Banaras Hindu University (BHU), Varanasi, from 18 to 20 January 2013.

#### Visit of Professor Kehar Singh to IRDE

Professor Kehar Singh, our Honorary Distinguished Research Professor, was invited by the Instruments Research and Development Establishment (IRDE, DRDO) to interact with their scientists /engineers on 17 and 18 December 2012. On this occasion he also delivered a lecture on Holography: Historical Development and Some Applications.

#### Department of Applied Sciences & Humanities

Papers Published/Presented

- Phool Singh, Deepa Sinha and NS Tomer (2012), 'Oblique Stagnation-Point Darcy Flow
   towards a Stretching Sheet', published in Journal of Applied Fluid Mechanics, ISSN No. 1735-3645, Vol. 5, No. 3, 2012, pp 29–37.
- R Tamrakar, V Dubey, N Kumar Swamy(2012), 'Thermoluminescence studies of UV-irradiated Y2O3:Eu3+ doped phosphor', published in Research on Chemical Intermediates, Vol.38, No.9, 2012: pp 1–5.

- J Kaur, V Dubey, N S Suryanarayan, N Kumar S w a m y (2012), 'Thermoluminescence study of ZnS:Cu nanoparticles', published in Research on Chemical Intermediates, Vol.38, No.10, 2012, pp 1−6.
- Manish Gupta, N Kumar Swamy, Inder Pal Singh, Dinesh Bisht (2012), 'Comparative Studies of Mobile Generations and their Future', published in International Journal of Advances in Science and Technology, Vol.5, No.2, December 2012, pp 60-67.
- Inder Pal Singh, Manish Gupta, N Kumar Swamy (2012), 'The miniaturized bulb shape microstrip Low-pass filter using parallel coupled strip lines', published in International Journal of

Electronics, Communication and Instrumentation Engineering Research and Development (IJECIERD), ISSN 2249-684X, Vol. 2, Issue 4, December 2012, pp 89-95.

- N Kumar Swamy (2012), presented a poster titled, Magnetic and Thermodynamic Properties of A-site disorder M a n g a n i t e N d 0 . 3 Sm0.2Sr0.5MnO3, at the National Conference in Functional Material-2012, organised by GVM Girls College, Sonepat, 24-25 September 2012.
- Meena Shivrana, Dipti Vaya and BK Das (2012), 'Synthesis of Copper Nanoparticles', presented at the National Conference, Emerging Trends in Pharmaceutical Sciences, organized by Manav Bharati University, Solan, held on 29-30 September 2012.
- Payal Khurana (2012), 'Women Empowerment: A Reality or A Façade?', presented at the International Conference on G e n d e r R e l a t i o n s i n Developing Societies: A 21st Century Perspective, organised by Maharaja Agrasen College, University of Delhi, held on 30-31 October 2012.
- N Kumar Swamy, Manish Gupta, BK Das (2012), 'Structural and Thermodynamic Properties of Y0.5Dy0.5MnO3', presented at the International Conference on Ceramics (ICC-12)', organized by Government Engineering College, Bikaner, held on 12-13 December 2012.

- Ambika Sharma, Preeti Yadav, Kumari Anshu (2012), 'Electrical and Photoelectrical properties of GE20 TE80xBIx(x=0,1.5,2.5,5.0) thin films', presented at the International Conference on Ceramics, Bikaner, (ICC-12), organized by Govt. Engineering College, Bikaner, held on 12-13 December 2012.
- Ambika Sharma, Kumari Anshu (2012), 'Effect of BI addition on Electrical and Photoelectrical properties of GE-TE alloys', presented at Processing and Fabrication of Advanced Material (PFAM 21), organized by IIT Guwahatti, held on 10-13 December 2012.
- ❑ Vikas Poply, Phool Singh and KK Chaudhry (2012), 'Analysis of Laminar Boundary Layer Flow along a Stretching Cylinder in the presence of Thermal Radiations', presented at the International Conference on History and Development of Mathematical Sciences, at MD University, Rohtak, held on 21-24 November 2012.
- Gaurav Gupta (2012), 'An Iterative Marching with Correctness Criterion algorithm for Shape from Shading under Oblique Light Source', presented at the 2nd International Conference on Soft Computing for Problem Solving, organized by JK Lakshmipat University, Jaipur, held on 28-30 December 2012 (conference proceedings will be published by Springer).
- RB Bajpai (2012), 'The Emergence of Green

Chemistry', presentd at the 49th Annual Convention of Chemists, organized by Indian Chemical Society, Bhopal, held on 12-15 December 2012.

- Rashmi Tyagi and Avdesh B h a r d a w a j (2013), 'Cyanobacterial Biofertilizer Production', presented at the National Conference on Emerging Trends in Science, Technology & Management – Vision 2020, organized by GITM at Gurgaon, held on 18-19 January 2013.
- Shilpa Jain and Dinesh Bisht (2013), 'Practical Aspects of Genetic Algorithm: A review', presented at the National Conference on Contemporary developments in Mathematical Sciences and Computing, organized by Galgotia University at Noida, held on 2-3 February 2013.
- NK Swamy (2013), 'Structural and Thermodynamic Properties of Y0.3Dy0.2Sr0.5MnO3', presented at the International Conference on Recent Advances in Material Science (RAM-2013), organized by Government Engineering College, Bikaner, held on 1-2 February 2013. (The paper has been accepted for publishing in the proceedings of the AIP Conference Series.)

#### **Other Professional Activities**

RB Bajpai, Puja Malik and Dipti Vaya attended a National workshop on Basics and Applications of Spectroscopic Techniques, organized by the Department Of Chemistry, KMC (DU), with the Indian Society of Analytical Scientists, Delhi Chapter, 5-6 October 2012. The workshop was followed by a visit to the R&D centre of Indian Oil Corporation Ltd, Faridabad. This centre has state-of-the-art analytical facilities and worldclass pilot plants related to refining, processes, catalysts, lignocellulose to ethanol, and many more.

- N Kumar Swamy attended a conference on Lasers & Applications, at Laser India 2012, held at Expo Centre, Greater Noida, organized by Hannover Milano Fairs India Pvt. Ltd on Laser Technology, 21-24 November 2012.
- Mr Pawan Singh Raghav, Sports Teacher, has been awarded a PhD degree in October 2012. His research topic was Physiological and Somatotype profile of Senior National Men Football Players. He did his PhD from Nagpur University.

#### School of Management

Papers Published/Presented

Shashi Gupta, DR Aggarwal, (2012), 'Empirical analysis of CAPM and APT models in FMCG Companies listed in BSE Stock Exchange', published International Journal of Multidiscipline Research, Vol. 2, Issue 12, December 2012, ISSN 22315780, pp 197-217. Charu Shri and Ankita Popli, (2013), 'Discerning the Level of Awareness and Ethical Acceptance of Neuromarketing in Indian Context', presented at the Tenth AIMS International Conference on Management at IIM Bangalore, held on 6-9 January 2013, published in conference proceedings. ISBN: 987-81-924713-1-0, pp 2306-2319.

- Poonam Malik, Harsh Purohit, Himanshu Choudhary and SC Malik (2013), 'SHE Policies: A Comparative Analysis of Haryana Textile Units', published in International Journal of Human Resource Development and Management, Volume 3, Number 1, pp 15-31.
- SK Mangla, and T K Nayak (2012), 'Regional Disparities in Industrial Development in Haryana', published in International Journal of Economic Research, Vol. 9, pp 461-475. ISSN: 0972-9380.
- □ Charu Shri (2012), 'Guiding Emotions and Stress Management through Emotional Intelligence', presented at International HR Conference organized by ITM Business School, Navi Mumbai, held on 3 November 2012.
- Charu Shri and Ankita Popli (2012), 'Neuromarketing: Boon or Bane', presented at International HR conference organized by ITM Business School, Navi Mumbai, held on 3 November 2012.
  - Sanjay Kumar Mangla (2012),

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'Significance of Information Communication Technology in Economic Development of India', presented at the National Conference organized by Institute of Management Studies, Ghaziabad, held on 24 November 2012.

- DR Agarwal (2012), 'A critical analysis of economic reforms and FDI in India', presented in an international conference, Best of Breed Practices in Changing Global Business Environment at Dr Gaur Hari Singhania Institute of Management and Research, Kanpur, held on 16-17 December 2012. He also chaired a technical session, Evolution of growing sophistication of financial markets. Participants from various countries, including England, America, Bangladesh and UAE were present.
- Shashi Gupta and Divya Goyal (students of MBA) (2013), 'Weekend Effect on Indian Stock Market — An empirical analysis', presented at the International Conference on Innovative Ways of Managing Business in the Post-Globalized Era, held at Bharti Vidhya Peeth Institute of Management and Research, New Delhi held on 2-3 February 2013.
- □ Jaya Ahuja (2013), 'Whistleblowing and Corporate Social Responsibility: Cases in India', presented at an international conference on Business, Social R e s p o n s i b i l i t y a n d Transformation: Indian and

International Perspective, organized by Jamia Hamdard University, in collaboration with FICCI, held on 9 February 2013.

❑ Shitika Kulshrestha and Sunita Tanwar (2013), 'Educational values for social entrepreneurs: A model for budding Entrepreneurs', presented at the 8th International Conference on Transforming the Global Economy through Strategic I n n o v a t i o n a n d Entrepreneurship, organized by JIMS Kalkaji at the PHD Chamber Auditorium, held on 15 February 2013.

#### School of Law

Papers Published/Presented

- Praveen K Lochab (2012), 'NRIs' Property Disputes and Law: A need to regulate their property rights,' presented at the seminar, Marriage and Property Issues of NRIs: Challenges and Remedies, jointly organized by ICSR and Rajiv Gandhi National University of Law, Patiala, on 1 October 2012.
- P Lakshmi (2012), in absentia, 'Contractualizing NRI Marriages,' presented at the seminar, Marriage and Property Issues of NRI's: Challenges and Remedies, jointly organized by Rajiv Gandhi National University of Law, Patiala, and ICSR on 1 October 2012.
- □ S Shanthakumar (2012), 'Need to Re-engineer the Genetic Engineering Laws in India', presented at the National

Seminar on Science, Technology and Law Reform, at Banaras Hindu University, Varanasi, held on 3-4 November 2012.

- □ S Shanthakumar (2012), 'How Legitimate is Governance by Judges?', presented at the National Seminar on Judicial Activism and Judicial Restraint, organized by IP University, held on 16-17 November 2012.
- P Lakshmi (2012), 'Inter-Religious Marriages and Conflict of Laws', Modern Educational Research in India (MERI), ISSN-0974-0554, Vol.17, Issue 2, June 2012.
- P Lakshmi (2012), 'Personal Laws and the Rights of Women, Christ Law Journal', ISSN 2278-4322, Vol. 1, Issue 1, July – December 2012.
- P Lakshmi (2012), 'Surrogacy: The Nine Month Rental Agreement', presented at the National Seminar on Science, Technology and Law Reform, organized by Banaras Hindu University, Varanasi, held on 3-4 November 2012.
- Rahul Nikam (2012), 'Risk Management to the Space Venture Companies: Legal Issues and Challenges, and, Aviation Technology: Role of ICAO', presented at the National S e m i n a r o n S c i e n c e, Technology and Law Reform, organized by Banaras Hindu University, Varanasi, held on 3-4 November 2012. He received the Best Speaker Award from Justice Vishnu Sahai, Chief Justice, Allahabad High Court.

# Collaborations

• ollaborating and sharing knowledge and resources with other universities and academic communities throughout the world is an important mission of ITM University. The University is also committed to providing ITMU students and faculty a unique lifechanging experience with global exposure that will help them grow professionally and prepare them for their careers. It has, therefore, forged path-breaking alliances with premier universities and institutions abroad, and has collaborated significantly for student and faculty mobility in academic and research pursuits.

A brief on our international linkages and collaborations is presented in the succeeding paragraphs.



The University has a n effective MoU in place with ITB Ireland

and is collaborating significantly in the mobility of students and faculty. The first student exchange started in the month of September 2011 for a semester-abroad programme, and the feedback received from the students on the institution and the exposure is indeed very positive. Various collaborative schemes for UG and PG students have been rolled out for this year and have been uploaded on the website. In a positive recent development, both institutions signed an ongoing MoU for a further



ITM students Ms Neha Thethi and Mr Manoj Kumar at ITB Ireland

three years, at a ceremony organized concurred on establishing a joint Ireland in India.



The visit of Dr Ram Karan Singh, Head of the Department of Civil a n d Environment

Engineering, to Michigan University in 2011 marked the beginning of relations with Michigan Technology University. This was followed by an initiative by both the universities to collaborate in organizing an international workshop funded by the Indo-US Science and Technology Forum to further the exchange of research development knowledge in the most talked-about and critical area of climate change and its impact on water resources globally. The international conference held at ITM University in March 2012 was a great

in the presence of Mr. Ciaran Cannon research centre for research on water TD, Ireland's Minister for Education resources, both at ITM University and Skills, and the Ambassador of and Michigan University. Michigan University proposed that there be academic mobility of our UG- and PG-level students, and provided a draft proposal to ITMU, which after due consideration, was approved and submitted to them. The relations between the two universities are expected to bring substantial value to our students and faculty and build research capabilities at the University.



A visit by Professor Neil Storey, Director, International Recruitment.

School of Engineering, University of Warwick, UK, to ITM University on 31 January 2011 was the watershed moment for co-operation between the two universities. This was followed success. Both the universities further by yet another enabling visit by Collaborations

Professor Storey on 2 February 2012. Taking the deliberations forward, an agreement was signed on 1 September 2012 valid for a period of three years. The collaboration focuses on the academic mobility of students, joint guidance for PhD students, and research cooperation between the two universities. ITM University showed interest in research in the area of Fluid Dynamics, Sustainable Energy Engineering Design, Structures and Materials and Systems, Measurements and Modelling. The collaboration on student and faculty mobility for study abroad and research projects will commence from 1 September 2013. A number of schemes have been jointly worked out for one to two years' study abroad. The mapping of courses and criteria for eligibility have been finalized. Fees and other expenses have been specified and uploaded on the website for the students to exercise their choices.

University of Chester University of Chester was

signed on 10 January 2012, following the visit of Professor Phillip Harris, Executive Dean (Faculty of Business Enterprise and LifeLong Learning). The Chester Business School has earned a good reputation, and has over 1500 students, with campuses at Chester and Warrington. It provides both undergraduate- and postgraduatelevel courses. It is a University which squarely meets our requirement for students' academic mobility and research co-operation. Going further, the School of Management at ITMU has worked out schemes of a semester or year abroad in UG and PG studies which have been deliberated upon with the University of Chester. The course structures of both the universities have been mapped and areas of students' mobility identified. The schemes have been put into the domain knowledge of the students and response is being sought.



I T M University signed an MoU with the Chartered

Institute of Arbitrators (India) branch of CIArb, UK, a non-profit organization which focuses exclusively on creating awareness on arbitration as an effective means to settle disputes, and runs programmes and courses on arbitration in India. ITM University law students would benefit a great deal from this tie-up. While doing their BBA-LLB (Hons) course, they would be in a position to add to their professional graph in one of the most sought-after futuristic areas, the field of arbitration.

n+i

A delegation of F r e n c h engineering institutes visited

ITM University on 6 December 2012 and on 15 March 2013 and signed an MoU with ITMU on long-term academic and research cooperation, and also on student exchange programmes, specifically at the postgraduation level. The n+i engineering network, which is a consortium of over 70 French Grandes Ecoles (elite engineering institutes), is the largest network in France. There was a complete understanding between the French delegation and ITMU to go further with the MoU for the mutual benefit of both the universities.



The Vice-Chancellor with Prof. JP Trotignon, Executive Director of the Réseau <n+i>

#### COLLABORATIONS



ITMU is now a Direct Member of ISEP, under which the

University can send its students for a semester or year abroad to over 54 ISEP universities in 30 countries at affordable costs to the students. The host universities would transfer credits after students complete all requirements. Students who have cleared their first two semesters at ITM University are entitled to apply.



The American Society of Quality (ASQ) India and ITMU established a students' chapter to provide a certificate

programme for students, and a Management Development Programme (MDP) for executives, to certify trainers and develop PG Diploma programmes in Total Quality Management (TQM).



ASIC UK, a respected i n t e r n a t i o n a l accreditation body for academic institutions worldwide, has conferred on ITM

University, Gurgaon, the status of Premier University. The University was awarded a grade of Commendable in as many as seven out of eight measurable areas of a university's operations.



Prof. Prem Vrat with delegates from international universities

The Association of Commonwealth Universities I T M University is a member of the

Association of Commonwealth Universities, actively participating in all its affairs. The ACU recently held a competition in the UK for its 477 member universities. ITM University won the prize in the Social Outreach category, and also received an Honourable Mention for its Annual Report.



WESTERN AUSTRALIA

A delegation led by Professor Hema Sharda, the Director, South Asia

Relations, University of Western Australia, visited ITM University on 24 December 2012 and 18 January 2013 to forge academic ties between the two universities. The University of Western Australia is ranked among the top 100 universities of the world, and has high academic and research credentials. Two Nobel Laureates are on its rolls. It is a fullfledged University with international students from 80 countries. The delegation presented an opportunity to our students in engineering and management to enrol for their PG and PhD programmes, and admissions with scholarships were assured for deserving faculty of ITMU, for their PhD programmes. ITM University will further intensify its interaction, exploring the possibility of a longterm MoU with the UWA.



### Talent Rises to a New Level at the Club Week Fiesta



Action-packed street play - students send social message loud and clear

CLUB Week Fiesta is one of the most eagerly awaited student festivals of ITM University, and provides an excellent platform to showcase students' talents. The twoday event was held at the campus on 7 and 8 February 2013.

The Fiesta was packed with two days of fun, frolic and entertainment. The students took a break from their academics to have fun with friends, organizing various activities and competitions and converting the cafeteria lawns and cricket ground of the campus into an entertainment zone. Stalls selling pocket-friendly street food like chaat, momos and noodles were thronged by the students.

The level of performance of members of the various clubs of the University could even rival some of the better-known professionals in the field. Abhimanch, the theatre and drama club of the University, performed a street play, a knucklerapping outcry on the compelling theme of crime committed against women and the need for men to change their mindsets. Through fierce action and drama, the artistes conveyed a message that was loud and clear. It called upon the government to enact deterrent laws, and for the judiciary to act with speed. The play sensitized the spectators about the need to protect the dignity and honour of women, and cautioned people in power not to air their retrograde opinions or impose all kinds of restrictions on women's liberty and freedom. It called upon the youth to keep the struggle alive till the desired transformation takes place in society.

There was an enthusiastic participation from the hobby and

professional clubs of the University. Samwad organized a recital of famous speeches of great men and women; Encore, the music club of the University, fired up the campus with music, with guitarists giving some enthralling performances; Students' Senate (coordinated by Ms Deeksha T Madan and Professor DR Aggarwal) organized a Declamation Contest, with the topic of discussion being Woman: an epitome of worship or merely an object?; Corpova organized a quiz called Inquisitive, in which all the schools participated, with the School of Law bagging the first prize; Lumiere, the photography club, exhibited some striking collections of photographs by students on varied themes; the art club, Reframers, organized a poster and graffiti competition, attracting a large number of students. The artwork produced had the potential to secure entry in any national competition. The Mathemactive Club designed many board games such as snakes and ladders, giving a new twist to the old game to test the analytical quotient of students.

Club Week Fiesta provided students an outlet for their talents, and on their part, the students displayed some amazing abilities and innovative skills.



Registrar, Brig. (Retd) S K Sharma, being briefed by the Dy Dean Students, Ms Shrutimita Mehta

# MOMENTUM 2012: A big hit at ITM University A three-day festival of dance and music for the students



Onstage performances by students

MOMENTUM 2012, a threeday annual cultural fiesta, was held at ITM University from 10 to 12 October 2012. Over 40 offstage and 10 onstage events enthralled the audience.

Momentum serves as a perfect platform for the students to explore and give expression to their talent, at the same time inculcating a spirit of healthy competition among students from various colleges and universities. Over 14 colleges and universities in the National Capital Region participated in the festival.

The festival started with the inauguration ceremony, celebrating the culture and tradition of India. The first day of the three-day extravaganza saw the participants keenly competing to secure the top position in various events offstage, such as Football Frenzy, facepainting, tug-of-war, paint-ball and street play. On the second and third day, a host of competitive events were staged, including Mr and Ms Momentum, Street Dance, Rock Show, Step-Up & Groove, and many more. Adding to the glamour quotient of the festival was the fashion show, the highlight of the day. The audience was captivated by the spectacular performances of the participants. Raunaq Chhawri and Annu Danvi were crowned Mr and Ms ITM University respectively.

The liveliest part of the festival was the energetic performance by the popular hip-hop artist, Honey Singh. The spectators were on their feet during the entire 90 minutes of euphoric dancing and singing.

The festival ended with the prize distribution ceremony, rewarding the students for their skills, talent, organizing abilities and leadership. After that, the dance floor was left open for DJ Night, where students danced to the beats of popular numbers. Momentum 2012 was a enjoyable experience for the students, who participated with exuberance and enthusiasm.



Yo Yo Honey Singh enthrals the audience

# US Universities woo ITM University students with study-abroad options



Hon'ble Vice-Chancellor with representatives from various universities

Us universities seek ITM University as their preferred destination for quality students. Last year, 27 top US universities visited to present their programmes for postgraduate degrees.

On 8 October 2012, Oklahoma City University, San Jose State University, California, and the University of South Florida visited ITMU, offering admissions to students in the postgraduate programmes in their universities.

The interaction with students was initiated by the United States–India Educational Foundation (USIEF), which promotes mutual understanding between India and the US through the educational exchange of outstanding scholars, professionals and students. Since its inception in India in 1950, USIEF has awarded approximately 17,000 Fulbright, Fulbright-Nehru, and other prestigious grants and scholarships in almost all academic disciplines.

The representatives of each university explained their criteria for admissions, academic and physical infrastructure, research opportunities, popular programmes in engineering and management, as also their fee structure and scholarships.

Dr Vijaya Rao, coordinator USIEF, pitched in wherever the information needed further clarification. Students, on their part, asked for a number of details regarding the educational criteria, scholarships, admission documents, fees and job opportunities. The representatives of the universities explained to the students the opportunities they would have of earning stipends and scholarships while doing their degrees, with university-oriented research and other academic work. All representatives expected high merit students who, while applying, were expected to write their true statement of purpose and compliance of ethics and anti-plagiarism norms. Speaking on the occasion, Professor Prem Vrat, Vice-Chancellor, invited the visiting delegates to collaborate with ITMU in the field of research and student-exchange programmes.



### Director, School of Law, invited to Belgium for participation in an international workshop

rofessor S Shanthakumar was invited to participate in the Core Professional Training in Feinstein International Center, Tufts Humanitarian Law and Policy, Thematic Workshop on Monitoring and Enforcing International Humanitarian Law at Brussels, Belgium, from 17 to 21 September 2012, organized by the International Association of Professionals in Humanitarian Assistance and Protection, in cooperation with the Professor S Shanthakumar's Programme on Humanitarian Policy and Conflict Research at Harvard International Committee of the Red University, and with the support of Cross, South Asian Delegation. the Belgian Ministry of Defence.

The programme was attended by professors from Harvard University, University, University of Ruhr Bochum, Germany, University of Geneva, and a host of other organisations.

ITMU is the only university from Asia to be represented in this programme.

participation was sponsored by the

During the visit, Professor Shanthakumar had an opportunity to visit the International Court of Justice at The Hague, Netherlands.

This participation, and resulting contacts, are expected to pave the way for increased sponsorship of projects and establishment of a centre for research at ITMU.



### Brainstorming session at the University held to forward our recommendations to the Justice Verma Committee

he gruesome gang-rape leading L to the death of a young woman in Delhi, and triggering spontaneous widespread protests on the streets of India, has shaken the conscience of society, calling for solutions to protect the honour and dignity of women in India. In the aftermath of this incident, the government of India constituted a committee on 23 December 2012, under the chairmanship of Justice (Retd) JS Verma, to review the existing laws and related executive shortcomings. Responding to the call of the committee seeking views, ITM University Law School organized a brainstorming session at its campus to arrive at concrete recommendations



Brainstorming session in progress

which were subsequently sent for consideration to the committee, thus contributing usefully to the process of change. The session was chaired by former Justice RS Sodhi, and attended by distinguished lawyers from the Delhi High Court and Supreme Court, eminent persons

from civil society, academicians and students. Some of the recommendations made by the University have found place in the final report submitted to the government of India by the Justice Verma Committee.

# Samwad's Intra-Model United Nations (MUN) 2013



A Platform of Learning - MUN Delegates conducting a Session

S amwad, the literary club, organized Intra MUN 2013 on 2 and 3 February 2013. Dr Divyabha and Dr Divya Agarwal facilitated the students, who organized the event under the guidance of Ms Shrutimita Mehta (Dy Dean Students). The event was coordinated by students Manind Arora (Secretary General), Drishti Goel and Geetika Guleria (Deputy Secretary General), Hitesh Gulabani (Head, Delegate Affairs) and Arshia Arora (Head, International Press).

MUN is an academic simulation of the UN that aims to educate participants about current events, topics in international relations, and diplomacy. The agenda of the council was Censorship of the Media and Press, with Special Focus on Conflict and Non-conflict Areas.

Since the Council consisted mainly of beginners, the Chairs kept reverting to informal sessions to help the delegates understand every aspect of an MUN. Many important aspects such as the military, terrorism, government intelligence agencies, hacking, etc., were bought up before the Council.

# India International Friendship Society confers Shiksha Rattan Puraskar on Doctor Ram Karan Singh

Dr Singh was also recently awarded the title of Best Researcher by the University at the annual Teachers' Day event. He is leading national and international collaborations to explore new areas of research in the field of civil and environmental engineering, particularly in water resources. He was earlier awarded the Bharat Jyoti Award and a certificate of excellence in August 2012.



Award being received by Dr Ram Karan Singh, HoD, Civil Engineering, from former Governor of Tamil Nadu and Assam, Dr Bhishma Narain Singh

#### After all, Health is Wealth

health camp was organized from 26 to 27 November 2012 at the campus. Columbia Asia Hospital, a health partner of the University, established a complimentary medical camp for two days and conducted free health check-ups and other tests by its leading consultants, particularly specialists in ENT, Eyes, Dentistry and Nutrition. The two medical officers of the University also joined the visiting doctors.

received consultation and advice.

Over 1200 students and staff Student residents of the University hostels and those staying in PG accommodation away from their homes were the main beneficiaries.

#### All for a Social Cause - Blood Donation and Eye-Care Camp

t ITMU, students are encouraged to imbibe the principles of community service and be generous and large hearted and bound by concerns beyond themselves. Organizing a blood donation camp is just one step in this direction. Keeping the tradition alive, Yukti, the social service cell of ITMU, in association with the Rotary Blood Bank, organized a blood donation and eye-care camp on 27 February 2013 on the canteen lawns. The camp was inaugurated by Professor Prem Vrat. Six hundred and five students and staff members of ITMU turned up to donate blood. Of these, 450 students were successful, while the rest did not meet the fitness criteria, as evaluated by the medical team.

The donors were given refreshments, a memento and a certificate each as a mark of appreciation for their service to humanity. A confidential blood test

A huge response - students of ITMU donating blood

report and a donor's card shall soon be provided to each donor by the Rotary Blood Bank - the country's largest and most modern blood bank with state-of-the-art technologies and services.

An eye-care camp was also organized alongside, where students were

provided with free eye-care advice by a team of qualified doctors. They were also given free eye check-up coupons.

The event was a major success, with a large number of students, faculty and staff turning up for the cause.



# Haryana Governor distributes scholarships to merit-and-means students

News and Events

In an appropriately solemn atmosphere, His Excellency, Governor of Haryana, Shri Jagannath Pahadia, chief guest at the scholarship distribution ceremony on 16 November 2012 at the University campus, distributed scholarships to 202 students in the category of merit-cum-means amounting Rs 1.34 crores.

Speaking at the occasion, the governor lauded the academic milestones achieved by ITM University in becoming one of the premier universities in India. He appreciated the service ITMU renders by awarding scholarships to meritorious students and those from weaker sections of society, despite being a self-financed and unaided university. 'The University should further endeavour to achieve global benchmarks in higher education, and use emerging technology and pursue research to benefit the people, industry and the country at large', he added, while urging students to become good, responsible citizens of this country, besides being professionals.

Yukti, a student-led NGO at the University, which is engaged in the empowerment of differently-abled and underprivileged children, organized an interaction of underprivileged children with the guests – an initiative greatly admired by the visitors.



His Excellency, Governor of Haryana, Shri Jagannath Pahadia, with Members of the Governing Body and Vice-Chancellor of the University



His Excellency, Governor of Haryana, Shri Jagannath Pahadia, distributing scholarships

Earlier, the University staff and students welcomed the governor on his arrival. The campus was spruced up for the occasion with colours and flowers, and the University choir built up patriotic fervour while singing the national anthem and Vande Mataram.



# Q21 Dialogue on Future of Quality Held By Top Leadership of American Society for Quality





how the meaning and usage of quality has transformed over the years.

The distinctive feature of this workshop was the involvement of the students' leadership team of ASQ (I)-ITMU chapter in efficiently organizing the workshop with great success.

With the aim of creating fresh perspectives on the future of quality as it evolves in the twentyfirst century, a visiting top executive of ASQ, Mr Jim Rooney, the Chairperson of the Board of Directors, ASQ Inc. USA, held the Q21 Futuring workshop on 27 November 2012.

The participating faculty and students came up with a number of

ideas to make radical changes in how quality can be transformed in the twenty-first century. 'It was indeed a great pleasure to listen to the thoughts and emerging perspectives on quality as envisioned by the young generation', said Mr Jim Rooney.

The Vice-Chancellor, himself a strong believer in quality, delivered a powerful keynote address, showing

#### Society of Programming Languages Day

An Exclusive Technical Event with a Touch of Entertainment



On 30 January 2013, the Society of Programming Languages, a society known for its exclusivity, organized SPL Day. The event was an amalgamation of knowledge and entertainment, and also the first of its kind to take place in the University. The event commenced with the inaugural ceremony presided over by Vice-Chancellor, Professor Prem Vrat, along with the patrons of the society, Dr Latika Singh, Professor Prabha Sharma, Gaurav Gupta, and Md Ezaz Ahmed.

# Visit by French delegation to ITMU

A delegation of French engineering institutes visited ITMU on 6 December 2012. The visit was organised by the 'n+i' engineering network, which is a consortium of over 70 French Grandes Ecoles (elite engineering institutes). It has been the biggest network in France, with the official support of the French Ministry of European and Foreign Affairs for fifteen years.

The representatives of ITMU and the visiting delegation discussed several opportunities of mutual benefit, like student-exchange programmes, faculty-exchange programmes, possibilities of double degrees, and many more. It emerged



Visiting French delegation

during the discussions, after the presentations by Director, 'n+i', and the Vice-Chancellor, that student mobility provided an opportunity to supplement knowledge, learn a new language, discover upcoming technologies, and obtain high-quality training. Both institutes expressed their resolve to collaborate in the future.

# A Top Delegation from Vietnam Visits ITM University



Vice-Chancellor with visiting delegation from Vietnam

A high-powered, seven-member delegation led by His Excellency Dr Phung Huu Phu, the Vice-President of the Central Theoretical Council of the Government of Vietnam, visited ITM

University on 24 December 2012 and held discussions on various issues relating to the industrialization and intellectual development of our country. The Vietnamese delegation deliberated with the Vice-Chancellor and his team regarding issues pertaining to technology as relevant to economic development, social management and training of human resources.

Professor Prem Vrat, during his discussions, brought out the role of technological management in the development of India, and touched upon how Vietnam and India could benefit from each other's experience.



# Exemption of Customs/Central Excise Duty on Any Equipment for Research Activities

In a major development benefitting Scientific and Industrial Research dated 23 July 1996, and Central research, and as a mark of (DSIR) for purposes of availing Excise duty exemption in terms of recognition of ITMU as a centre of Customs or Central Excise duty research in India, the University has exemption in terms of Government – Central Excise, dated 1 March been registered by the Department of Notification No. 51/96 – Customs, 1997, as amended from time to time.

# International Award to Dr Manu Vora, our **Distinguished Adjunct Faculty Member**

For his commitment to social 2013 American Society for Quality's ITMU congratulates Dr Manu K responsibility in founding Spancer Hetcher I and the second se responsibility in founding, funding and leading the Blind Foundation for India to serve over 15 million blind people in India, Dr Manu K Vora, our new adjunct faculty member, has received the Convention Center in USA.

Spencer Hutchens, Jr. Medal for Vora for the international award, and Social Responsibility. He will receive takes pride in his achievement. the Medal on 5 May 2013 at the World Conference on Quality and Improvement, at the Indianapolis

Government Notification No. 10/97

# ITMU won the first prize for its beautiful garden in the Flower Festival organized by HUDA



The members of the Governing Body and Registrar with the personnel who helped win 12 trophies

or the continuous 12th time ITM University won the first prize for it beautiful gardens in the Flower Festival organized by HUDA. This is a unique achievement by the Mali staff of ITM University who toiled day and night to keep the standard of the campus and its green cover prize - winning.

# Visit by a Delegation from the University of Western Austrilia

Professor Hema Sharda, Director, South Asia Relations, University of Western Australia (UWA), ranked 83rd globally by the Times Higher Education World Survey -2012, along with her colleague, visited ITMU on 18 January 2013. She addressed the students and faculty on opportunities for students in MTech and PhD in UWA. Professor Sharda also offered to further academic ties with ITMU in various academic and research areas.



Prof Hema Sharda kept students captivated during her briefing

### **Republic Day Celebrations**

Republic Day was celebrated at ITM University, Gurgaon, with the customary zeal and enthusiasm. Members of the staff came with their children, carrying small national flags and wearing colourful clothes. The air was filled with patriotic songs played for the occasion.

The celebrations began with the unfurling of the tricolour by the Vice-Chancellor, followed by the national anthem and a march past by the security guards of the University. The Vice-Chancellor took the salute and the audience cheered the impressive march past.

Speaking on the occasion, the Vice-Chancellor explained the striking features of our constitution. He explained how our constitution, which vests power with the people, is one of the best in the world. He called upon everyone to do their duty, rather



Hon'ble VC addressing the audience on Republic Day

than merely think of their rights. The country was going through some testing times, leading to the degradation and denigration of the value systems in society. It was up to us to shape the destiny of our nation and remove the ills from society, to take up a progressive path to generate employment and bring prosperity for all. Focusing on the University, he said that the country had great expectations from those in higher education, and called upon members of ITMU to dedicate themselves to the building of high standards in education, thus contributing towards the nation-building effort.

The celebrations ended with high tea for all.

# TEDx 2013



20 January 2013 was a remarkable day in the calendar of ITM University, as renowned personalities of India shared a common platform at the TEDx 2013 to give voice to their ideas, making a great impact on the viewers. Nearly a hundred students from the University and outside attended the event. The conference was distinct in the way speakers like Suroshree Dutta and Raghav Mandwa used humour to successfully deliver strong messages. Mrs Sanjukta Basu spoke of serious issues confronting society that required immediate attention. Speakers came from across India. We also saw Ankur Lal. a distinguished alumnus of IIT Delhi, sharing what he wished he had learned during his stay at IIT, while Vipin Sharma, a versatile theatre personality, gave theatre tips to the students of our society, Abhimanch. Talks by young talent from the University, Akshar Pathak, a graphic designer, Tanvi Girotra, and Suchita Mehta, a young entrepreneur, were inspiring to our young achievers.

#### Visit of Professor Mario T Tabucanon, Professor Emeritus, AIT Bangkok

**P**rofessor Tabucanon, a professor of Industrial Engineering and Management at AIT Bangkok, and Visiting Professor, United Nations University, Institute of Advanced Studies, Yokohama, Japan, visited ITMU on 29 January 2013.

He gave a short talk to 4th Semester MBA students on Multiple Criteria Decision Making. Accompanied by our Vice-Chancellor, he later took a tour of the University.



Prof. Mario Tabucanon delivering the session

# Budding engineers & managers visit ITMU — get the first feel of the University campus

Over 200 students from CD International School, Gurgaon, visited ITMU campus on 19 December 2012. They were conducted around the campus, in particular the labs and workshops, by Dr Himani Kaushal and Ms Jaya Ahuja. The students appeared visibly impressed with both the University campus and its academic infrastructure.



#### At the 150th birth anniversary of Swami Vivekananda



Vivekananda, widely regarded as a patriotic sage and scholar, has left an everlasting imprint on the revival of Hinduism in India. As the chief disciple of Sri Ramakrishna, and the founder of the Ramakrishna Math and the Ramakrishna Mission, he disseminated Hindu philosophy in the United States, England and Europe. Vivekananda is increasingly relevant in the present times of increased degradation and denigration of values and ethics in society. His 150th birth anniversary should inspire us to re-dedicate ourselves to lead a life of high moral values and spiritualism.

# School of Engineering & Technology Department of Electrical, Electronics and Communication Engineering (EECE)

- A five-day special skill development programme was organized at ITM University for MTech First-Year ECE students from 24−28 September 2012. The programme covered the basics of LINUX, Shell and Perl language. The session was delivered by an expert from FOSTERing Linux, Gurgaon.
- □ Five-day workshops on Just a little bit of C and Linux for ECE 3rd semester students, spanning over four weeks, was conducted by faculty coordinator Ms Vandana Khanna, in association with Technology Uncorked Ltd, in September 2012. Students learned a new operating system Linux and basics of C programming with practical experience of programming with hardware, which will be beneficial for applications in industry.
- A two-day workshop on Learning to Work with Design Productivity Tools was conducted for the ECE 1 st semester students, coordinated by Ms Vandana Khanna. They worked on Excel, PowerPoint and Word, with brainteaser sessions and practical exercises.
- ☐ Students of 1st, 3rd and 5th semesters appeared for an online GATE examination from 24–27

September 2012. General Knowledge, Aptitude, Technical were introduced from this semester in the EECE department. This was initiated by faculty coordinators Ms Charu Rana and Ms Pooja Sabherwal.

- A workshop on Virtual Lab was organized by the Department of EECE at ITMU on 19 October. Sessions were delivered by Virtual Lab coordinators from IIT Delhi. The laboratories covered were Physical Science, Basic Electronics and Virtual Electric Circuits.
- A lecture on Verification Methodology in VLSI Design was arranged for MTech (VLSI Design) first-semester students on 20 October 2012. The lecture was delivered by Ms Sangeeta Soni, Senior Member, Technical Staff, Mentor Graphics.
- A special technical session on Shell Scripting and Industrial Applications was organized for MTech first-semester VLSI Design students on 20 October. The session was conducted by Mr Pulkit Bhatnagar, Design Engineer, ST Microelectronics.
- □ EECE students, accompanied by faculty members, visited the Jhajjar power plant, a 1,320 MW (2 x 660 MW) coal-based power

project located at village Khanpur, District Jhajjar, Haryana, on 20 October 2012. It is one of India's first few plants that use supercritical technology generating a voltage of 22 KV.



Students and faculty at the power plant, Jhajjar

- Mr JP Shivhare, along with students of the EECE department, attended a two-day IEEE – Congress session organized by IEEE – Delhi Section at Netaji Subhas Institute of Technology (NSIT), Dwarka, Delhi, on 20 and 21 October 2012.
- Mr JP Shivhare attended a national workshop on 9 October 2012, at Hotel Radisson, Noida, on Challenges in Electronic Systems' Design and Technologies, sponsored by the Department of Information and Technology, Government of India, and organized by the Electronics Industries

Association of India (ELCINA), CEAMA, MAIT, GICA & ISA.

- Mr JP Shivhare attended an I E E E – I n t e r n a t i o n a l Symposium on IEEE Standards on Science & Technology, sponsored by IEEE HQ, USA, at Delhi Technological University (DTU) on 4 October 2012.
- ☐ IEEE has recently selected ITMU to open an IEEE Women in Engineering student branch group at ITM campus.
- A two-day workshop on Virtual Lab and Matlab was organized for third-semester EEE and ECE students on 25 and 26 October 2012. A Virtual Lab demonstration was given to students, who performed experiments and resolved their queries related to Virtual Labs.
- A three-day workshop on PCB design was organized for third-semester EEE and ECE students from 29 to 31 October 2012. Demonstrations were given by faculty members on PCB design. The workshop proved very helpful to students for a hands-on experience on PCB designing.
- □ The TCS online mock test was organized by Mr Pankaj Rakheja and Mr Mandeep Singh Narula of the EECE department on 20 October 2012 for final-year BTech and MTech students. Over 350 students appeared in the test.

☐ Mr Kashish Jhamb chaired the session at the National Conference on IT Innovations and Sustainability: Current Trends and Ethical Issues. It was jointly organized by the School of Management Studies and School of Computer Applications from 19 to 20 October 2012 at Ansal University.

- ☐ The Peer-Tutor Programme has been launched at the Department of EECE. Currently, three peer-tutors (Himanshu Singhal, Aryan Kaushik and Neha Jain), all with a CGPA 9 or above, are engaged in tutoring their colleagues (peer-tutees). Around 35 peer-tutees have registered themselves in this programme and have appreciated this initiative.
- ❑ The Department of EECE has taken the initiative of preparing third- and final-year students for GATE-2013. The classes for prime subjects from a GATE point of view are scheduled on each working Friday. The faculty of the EECE department are taking these classes in their areas of specialization. The aim of these classes is to discuss the difficulties students may have on GATE-level problems.
- Ms Vandana Khanna organized a two-day workshop on Value-Added Modular Course (EEV101), Basic Computer

Skills for first-semester ECE/EEE students, and Learning to Work with Design Productivity Tools, in September and October 2012.

A one-day industrial visit to 66KV grid substation, Gurgaon, for ECE third-semester students was organized on 18 September 2012. This visit, facilitated by Professor AN Jha, Mr Gian Chandra, Ms Naresh Kumari and Mr Bipin Sharma, gave the students a feel of a real-world power distribution set-up.



Students and faculty at the power plant, Jhajjar

→ Ms Vandana Khanna organized workshops on Design Initiation and Industry Alignment Programme: Building C++ Applications, for ECE fifthsemester and EEE fifth-semester students in October and November 2012, in association with Technology Uncorked Ltd (TU).



A workshop on Design Initiation & Industry Alignment in progress

- Mr Ramandeep Singh organised a workshop on Embedded System Design on 21 November 2012. Sessions were delivered by industry experts from Trident Techlabs Pvt. Ltd.
- Mr JP Shivhare organized an IEEE event on 21 November 2012: TECHWORDS (a crossword event for technocrats), attended by 60 groups.
- Ms Kusum Grewal, EECE department, took the initiative and launched a Psychology society named Santulan. The first event of the society was organized on 29 October 2012, aimed at gathering information about the psychology of our students, their ideas about life in general, and the types of stress they are facing.
- Ms Charu Rana and Ms Pooja Sabherwal organized an online first GATE mock test for EI final-year students on 1 November 2012.

- Mr JP Shivhare organized an industrial visit-cumeducational tour to Sahasra Electronics Pvt. Ltd, Noida, for fifth-semester ECE and EI, and third-semester ECE and EI students on 22 November 2012.
- Naresh Kumari (Senior Assistant Professor) and Siddhartha Jaitly, Neharika Kapil, Urvashi Luthra, Deepak Sukhija (students of EECE department) have been selected to be a part of the Leadership Team of the American Society for Quality (ASQ). They are m a k i n g s i g n i f i c a n t contributions in various events and programmes conducted under the ASQ banner.
- □ Eighty students of the EECE Final Year 2009-2013 batch were selected for the ERICSSON Empower University Programme on 19 December 2012.



Prof. Swaran Ahuja with the Ericsson team

Vandana Khanna initiated a campus placement drive for 2012 graduating students with Technology Uncorked in November 2012.

- Charu Rana and Pooja Sabherwal (Assistant Professors) conducted an online GATE mock test for final-year ECE students on 19 December 2012
- Neeraj Kr Shukla attended the Nodal Coordinators' meet at IIT Delhi, and subsequently organised a visit by Professor Ranjan Bose (initiator of project Virtual Labs, India) and Mr Kanwarjit Singh, IFS, to ITMU for future possibilities in research and the role of ITMU in the Virtual Labs project at IIT Delhi.
- A one-day training session on Synopsis TCAD Device Simulator was organized by Ms Vandana Khanna (EECE Dept) on 18 January 2013. Faculty members from the VLSI domain and MTech VLSI students attended the training.
- Mr JP Shivhare organized a quizplus-aptitude test under SEE on 17 January 2013.
- Mr Neeraj Shukla organized an expert lecture on Front-End and Back-End Library Views in VLSI Design Technology by Mr Pulkit Bhatnagar, ST Microelectronics, Gr. Noida, on 19 January 2013. He also organized a special technical session on FPGA: The VGA Port Interfacing and Image Creation using HDL, by Ms Deepika Ahlawat, a student of MTech 2nd Semester, on 19

January 2013. He also organized an online test for certification on Python held on 21 January 2012 by IIT Bombay for MTech VLSI Design second-semester students.

- Dr Hemani Kaushal and Ms Amanpreet Kaur organized a guest lecture on Latest Trends in Optical Networks by Mr Rajneesh Kumar, senior Network System Engineer, Ciena India Pvt. Ltd, on 31 January for BTech eighth-semester ECE and MTech second-semester ECE students.
- A five-day value-added programme for sixth-semester EECE students was conducted in February 2013 by the EECE department in association with Technology Uncorked LLP (TU) on Design Initiation and Industry Alignment Program: Initiation into the World of MCUs, tinkering with microcontrollers. The session provided know-how required for integrating industrial grade MCUs in real applications and gadgets. The session focused on



*Prof Swaran Ahuja (HoD, EECE) giving away certificates of appreciation to students* 

various building blocks of application software for interaction with various input/output devices like LCD, LED panels, serial communication devices, etc.

- Mr JP Shivhare organized the SEE (Society of Electronic Engineering) event, Present Yourself, on 4 February 2013. The event was attended by 39 students. He also organized two IEEE events, Instant GK, and Membership Drive, during the Fiesta Club week on 7 February.
  - A workshop and certification programme on Python skills for BTech ECE final-year students was successfully conducted on 30 January 2013. Thirteen students appeared and were declared successful in the test conducted by IIT Bombay.
  - An expert lecture on Timing Issues in Sequential Circuits was conducted by Mr Narender K u m a r f r o m S T Microelectronics, and a special technical session on Perl Scripting and its uses and applications in the VLSI industry was conducted for MTech second-semester VLSI students on 2 February.
- A one-day workshop on Virtual Labs was organized on 27 February 2013 for BTech First-Year students of all branches. Virtual Lab coordinators from IIT Delhi delivered a very useful demo session.

Dr Hemani Kaushal attended a

workshop on Next Generation Networks, conducted by Mr S N Gupta, Chief, Corporate Affairs, Sterlite Technologies Limited, New Delhi, at Amity University on 28 February.

Pankaj Rakheja and Mandeep Singh Narula conducted a mock test on Protivity for the finalyear batch on 18 February..



# Department of CSE & IT

Dr Latika Singh with Mr Aman Jatain, Ms Geetika and Mr Sandeep Singh conducted a workshop on Software Development Techniques in an open source environment for the CSE/IT faculty to provide them extensive hands-on practice of Linux Tools and LaTeX.



Students during the workshop on software development techniques in an open source environment

- Ms Roopal Mamtora organized a seminar on Current Trends in IT security, delivered by Mr Gautham Sharma, Director Business Development, Institute of Intellectual Property, Gurgaon, (established business alliances for EC-Council partnership throughout India and Middle East markets) for the Second-Year CSE/IT students.
- ☐ Ms Apoorvi Sood and Ms Anu Yadav organized a Preplacement Mock Interview Programme, which was conducted by the industrial representatives for the Third-Year CSE students to improve their employability and acquaint them with the actual industry scenario.



Students during the mock interviews

- Mr Gaurav Aggarwal and Ms Manju organized a value-added training programme on Windows Azure cloud application development by EduConnect – gold certified partner of Microsoft, for the Third-Year CSE/IT students.
- SPL (Society of Programming Languages) facilitated a Mock Aptitude Pre-Placement Exam for seventh-semester CSE students, Autonomous batch.
- A thirteen-day training programme on Dot Net was conducted by coordinators, Ms Jyotsna Singh, Ms Suman Bhatia, Ms Supriya Raheja and Mr Gaurav Aggarwal, with technical support from Mr Vijay Budakoti and Mr Sachin Tyagi, in association with Tai InfoTech. The main objective of this training was to prepare students to be industry-ready.
- Mr Sandeep Singh attended a seven-day short-term course on Open Source Technologies at NITTTR, from 15 to 19 October 2012 at Chandigarh.
- Mr Ezaz Ahmed with Ms Preeti Bansal, SE MTech student, 2012, presented a poster, An

Empirical Study of Data Mining Tool on Search Engine Dataset, at the International Symposium on Standards in Engineering and Technology, sponsored by IEEE at DTU, Delhi, held from 4 to 6 October 2012.

- Mr Ezaz Ahmed, Ms Divya Sharma and Ms Shilpa Mahajan conducted a workshop on A n d r o i d A p plic a t i o n Development by Boot Camps India, in association with C-Tides, IIT Chennai, for ITMU students on 6 and 7 October 2012.
- Yukti, an ITMU students' initiative, provided an opportunity to underprivileged children from Sanshil Foundation, an NGO, to exhibit their talent through Momentum 2012.
  - A National Workshop on WEKA (an open-source data mining tool) was conducted by the coordinators, Ms Shalini Bhaskar and Ms Meghna Sharma, with the help of the organizing committee, consisting of Ms Roopal Mamtora, Ms Rita Chikara, Ms



National workshop on WEKA in progress

SEMINARS, WORKSHOPS AND CONFERENCES

Geetika Munjal, Ms Anuradha Dhull, Mr NN Das and Mr Ezaz Ahmed.

- Dr RK Agrawal from JNU was the keynote speaker, and Ms Rita Chikara, Ms Geetika Munjal and Ms Anuradha Dhull were our inhouse speakers. A total of 61 participants attended the workshop, out of which 21 were from ITMU and 40 from IIT, NIT, DTU, IP, AMITY, MDU, etc.
- Ms Usha Batra organized a twoMs Usha Batra organized a two-day workshop on Java and SOA to provide a strong foundation of the syntax and semantics of Java programming language, and hands-on practice on design and deployment of web services. She was the orator of the session.
- Ms Rita Chhikara visited DRDO office at DRDO Bhawan to initiate research projects for MTech students with DRDO labs in areas of artificial intelligence, image processing, and analysis and networking.
- Dr Latika Singh and Mr SandeepDr Latika Singh and Mr Sandeep Singh visited Indian Agricultural Statistics Research Institute (IASRI), New Delhi, and met Dr AR Rao, Senior Scientist, for exploring research and training collaboration.
- Mr Anil Kumar Mishra visited the National Informatics Centre (NIC), Department of Electronics and Information

Technology, CGO complex, New Delhi, and met Mr Mahesh Chandra, Deputy Director General, NIC, to facilitate students' visits to their campus and to arrange guest lectures from NIC experts in the area of E-governance, GIS and Data Mining.

- Ms Roopal Mamtora, along with Tushar Trehan (11CSU158), a Third-year CSE student, organized a seminar, Differentiating Yourself in the Job Market and Getting Admission in Top Global Universities, on 30 October 2012, for Third-Year CSE students.
- Ms Swati Aggarwal, along with Ms Swati Aggarwal, along with Mr Ishwar, coordinated a fourday workshop for First-Year MTech students from 19 to 22 November 2012. This workshop was aimed at updating the students with possible research domains, relevant software tools and expertise available in the department to enable them to select domains of interest from the available options for their MTech project or thesis work.
  - Ms Sujata and Ms Jagdeep Kaur conducted a workshop on Unified Modelling Language, on 19 November 2012 for BTech-CSE and IT final-year students to provide them hands-on practice on UML tools that would also help them in their major projects.
  - A project-making competition,

- PROJECT-O-TECH, was conducted for the First- and Second-Year students from 19 to 22 November 2012, and coordinated by Ms Prachi and Ms Roopal Mamtora respectively. This competition was to instil a sense of competition among the students, and motivate them to come up with their own programming skills.
- A Windows App Development Competition was conducted from 19 to 22 November 2012 by the CSE and IT departments, under the co-ordination of Ms Shilpa Mahajan, as part of evaluating the mini projects submitted by fifth-semester students. The competition was aimed at evaluating students on what they learnt from the recently conducted workshop by Microsoft. The competition proved to be a big motivational factor for students, who got a chance to show their programming skills and talent in one of the most talked-about technologies of recent times.



Project Development Competition – 1st, 3rd and 5th Semester

- Seminars, Workshops and Conferences
- Mr Md Ezaz Ahmed, along with Ms Jagdeep Kaur, Ms Manju and Mr Sandeep Singh, conducted a three-day Valueadded Course on LINUX for IT and CSE (4th semester) on 14, 15 and 16 January 2013.
- Ms Niharika Garg organised a seminar on Linux for Second-Year CSE&IT students on 16 and 23 January 2013, delivered by Mr Sumit Vohra from DUCAT.
- A one-day workshop on Manuscript Preparation using LaTeX on 21 January 2013 was coordinated by Mr Anil Kumar Mishra and Ms Divya Sharma. Dr V Ravichandran, Professor Delhi University, was the invited speaker. There were 44 participants from various institutes, such as Maharaja Surajmal Institute of Technology, Gautam Buddha University, Gurgaon, Institute of Technology and Management, and Manav Rachna International University, to name a few, along with in-house faculty members.
- The **REFRAMERS** creativity club has been formed and coordinated by Ms Shilpa Mahajan and Ms Divya Sharma. This club aims to enhance the creativity and personality of the students by conducting various technical and non-technical events like graffiti and postermaking using Photoshop. These events will be conducted during **FIESTA 2013**.

Mr Satish Sharma and Mr 

Anirban Kar from industry have Industry Visit joined as visiting faculty, and are taking Software Verification Validation and Testing, and Advanced Database Management Systems courses for MTech second-semester students.

- Ms Niharika Garg and Ms Meghna Sharma organised a hands-on demonstration lecture on RFID scanners and sensors on 24 January 2013, delivered by a team from Rajkamal Bar-Scan Systems Private Limited.
- Ms Shalini Bhaskar has been promoted to Associate Professor.
- Ms Neha Sahu, Ms Neeti Kashyap, Ms Hitesh Yadav and Ms Richa Chhabra joined the Department as Assistant Professors.
- Mr Anil Kumar Mishra attended a conference, Transforming Indians to Transform India (TITI), on 30 January at Chinmaya Mission, New Delhi.
- Ms Jagdeep Kaur attended a one-week short-term training course on Open Source Technologies, from 18 to 22 February at National Institute of Technical Teachers' Training and Research (NITTTR), Chandigarh.



Dr Latika Singh, Mr Aman Jatin, Ms Divya Sharma and Mr Anil Kumar Mishra, along with 21 students of Third Year CSE/IT visited the Integrated Network Operation Command (INOC) Centre, Space Data Centre, Space GIS Division of the National Informatics Centre, New Delhi, under the coordination of Mr Anil Kumar Mishra. They attended the demonstration sessions on GIS, CAD, VAHAN Sarthi, Remote Sensing and Topological Mapping.

#### **Guest Lecture**

A guest lecture was organized by Mr Anil Kumar Mishra on career options for students in the semiconductor industry delivered by Mr Amit Kumar Gupta, Global Programme Manager, Freescale Semiconductors.

#### New Lab Setup

☐ Ms Niharika Garg and Ms Meghna Sharma have set up a hand-held devices applications and data analysis research lab with the objective of data analysis and knowledge management, deploying and developing mobile and RFID applications and implementing barcode scanning applications.

# Department of Mechanical Engineering

- ❑ An introductory seminar of the Indian Society of Heating, R efrigerating and Air Conditioning Engineers (ISHRAE) was organized by Mr Joydeep Chakraborty for the Mechanical Engineering finalyear students on 30 August 2012. Delegates from ISHRAE, Delhi, visited our campus and provided information regarding the activities of their organization and the benefits to the students.
- Mr Amit Dhamija, faculty member, and Mr Ravinder Kumar and Mr Mukesh Kumar, lab technicians of the Department of Mechanical and Automobile Engineering, organized an industrial visit for final-year Automobile Engineering students on 25 October 2012 to Apra Auto, Gurgaon, which has recently opened a new high-tech workshop near Palam Vihar, Gurgaon.
- ☐ Mr Jeremy Harrington (SolidWorks Corporation, USA) and Mr PM Ravikumar (SolidWorks Corporation, South Asia) visited ITM University on 18 September 2012 and had an interaction with the Vice-Chancellor and the coordinators Mr Ashwini Sharma, Mr Vinkel Arora and Mr Prahlad Singh. On meeting the students of the value-added course on SolidWorks being run by the Department of Mechanical Engineering, Mr Harrington agreed to publish the case study of ITM University, regarding the course and availability of talent

pool for the design-specific needs on SolidWorks, to give this programme worldwide publicity.



Mr Jeremy Harington with the Vice Chancellor ITM University

- Mr Amit Dhamija arranged four meetings with senior industry professionals for the promotion of modular programmes of ITMU on 17 and 18 October 2012. The industries visited were VOITH Hydro Private Limited, Noida; Motherson Sumi Limited, Noida; DLF, Gurgaon; and RICO Industries, Gurgaon.
  - The meetings were attended by Professor RK Bhogra (Deputy Dean, RDIL), Professor Fergus R e a of ITB, Ireland (International Project Consultant, Modular Programme), Mr Gaurav Aggarwal (IT department) and Mr Amit Dhamija.
  - Mr Ashwini Sharma, Mr Vinkel Arora and Mr Prahlad Singh organized a visit by Mr Vinay Mittal (Design Head) and Mr Anand (HR) from Escorts Ltd, Faridabad, to ITMU on 19 October 2012, as part of the industry–institute interaction.

They had a productive interaction with Professor Prem Vrat and Ms Bhumika Sharma (TPO) regarding the availability of talent pool at the University for industrial training, industrial projects, and recruitment of students.

- A guest lecture on Advancement in Engine Management to meet future Emission Norms was organised, and delivered by Dr DS Khatri (Director, Technology Innovation Centre, JDA Pvt. Ltd) to the final-year students of Automobile Engineering on 18 October 2012. Dr Khatri has vast experience in the area of emerging technologies in automotive industries.
- Mr Ashwini Sharma gave atalk on Value Addition and its benefits for engineering students, at the SolidWorks Innovation Day, organized by Ideas Design Solutions Pvt. Ltd at Radisson Blu, Gurgaon, on 11 September 2012.
- Professor Raj Singh (The Donald D Glower Chair in Engineering, Department of Mechanical and Aerospace Engineering, and Director, NSF I/UCRC Smart Vehicle Concepts Center, The Ohio State University, USA) visited ITMU on 10 December 2012. He conducted a seminar on Vehicle Brake Vibration: Formulation of Industrially Relevant Academic Research Problems. He also visited the

Mechanical and Automobile . Engineering laboratories, and shared with faculty and students some valuable points from his rich experience.

- A guest lecture on Alternative Fuels for the Automobile Sector was organized, and delivered by Dr D S Khatri (Director, Technology Innovation Centre JDA Pvt. Ltd) to the final-year students of Automobile Engineering on 21 November 2012. Dr Khatri has vast experience in the area of emerging technologies in automotive industries.
- □ Thirteen mechanical engineering students have enrolled for membership of the Solar Energy Society of India (SESI), and thirty students have enrolled for membership of the Indian Society of Heating, Refrigerating and Air-Conditioning Engineers (ISHRAE) Society this year.
- The MSME-funded final-year project of Mr Prakhar Pandey (Mechanical, 4th year), Design of New Toilet Flush System, under the guidance of Mr Ashwini Sharma, has been displayed at the 12th CII NID Design Summit on 13 and 14 December 2012 at Hotel Le Meridien, New Delhi.
- The following BTech and MTech schemes have been approved, after due process, incorporating industryacademia experts:
- BTech in Mechanical Engineering (4 Years, with an option of specialization)

- MTech in Mechanical 🖵 Engineering (2 Years, with an option of specialization)
- BTech MTech Dual Degrees (5 Years, with an option of specialization).
- Mr Ashwini Sharma and Mr Ashwini Sharma and Mr Vinkel Arora attended a meeting at the Delhi centre of the National Institute of Design at India Habitat Centre, Delhi, on 9 January 2013, and invited Mr Sudhir Kumar to visit ITMU to provide project opportunities to ITMU students.
- Dr Gayatri Singh (NID), Dr Bindoo Rajan (NID) and Mr Rakesh Atre (GM, Business Excellence, Munjal Showa Ltd) visited the ITMU campus on 11 January 2013 to see the progress of students' design projects funded by MSME. It was decided to add more industrial projects funded by MSME.
- Professor BC Nakra, Dr RK Bhogra and Dr Pramod Bhatia visited BHEL on 4 January 2013. Several aspects regarding consultancy projects and modular programmes were discussed with Mr OP Bhutani, Director (Engg. Res & Dev) BHEL.
- Mr Lalit Upadhayay and Mr Om Ji Shukla have become members of the Indian Institute of Industrial Engineers (IIE) in January 2013.
- Mr Devender Pathak and Mr Vivek Narang joined as Assistant Professors in January 2013.

- Professor KK Chaudhry was invited to give a keynote address at the National Conference on Emerging Trends in Science, Technology & Management -Vision 2020, at the Gurgaon Institute of Technology and Management on 18 January 2013.
- A short-term consultancy of Rs 1.5 lakhs, undertaken by Professor KK Chaudhry and Professor B C Nakra on Technical Advice on the Study of Noise Reduction due to Impulsive Loading, by M/sLogwell Forge Ltd, Udyog Vihar, Gurgaon, and has since been successfully completed.
- Professor BC Nakra and Professor KK Chaudhry attended a seminar on Application of Vibration Test System in Automotive Industry by M/s Josts Engineering Company Ltd, in collaboration with M/s Bruel Kjaer Sound and Vibration Measurement A/s (B & K), who are the leading manufacturers of sound and vibration measurement systems, held on 22 February 2013, at Hotel Jaypee Siddharth, New Delhi.
- Mr Ashwini Sharma, Mr Om Ji Shukla, Mr Lalit Upadhayay and Ms Amrita Jhawar attended a hand-holding workshop on How to improve the Success Rate in Research, held at ITMU on 1 and 2 February 2013. Professor Ravi Shankar, Department of Management Studies, IIT Delhi, shared some valuable 'Guru Mantras' about how to write a good research paper.

#### Expert Lecture

☐ The Department of Mechanical Engineering organized an expert lecture by Mr Rakesh Atre, AVP, Business Excellence, Munjal Showa Ltd, on Lean Manufacturing and Lean Machines, which was delivered on 31 January 2013.



Organizers and participants at the Lean Manufacturing and Lean Machines session

# Research and consultancy outreach

M/S Logwell Forge Ltd, Gurgaon, has requested ITMU for a consultancy on Technical Advice on the Study of Noise, with a budget amounting to Rs 1.5 lakhs. The project coordinator, Professor KK Chaudhary from the Department of Mechanical Engineering, shall render suitable advice to the industry concerned within the time frame.

#### Industry Interactions

- Mr Ashwini Sharma was granted permission to carry out a case study by Munjal-Showa Ltd and Sona Okegawa Ltd, Gurgaon, on Quality Management in the Supply Chain.
- Dr Pramod Bhatia, Mr Prahlad Singh and Mr Ashwini Sharma visited Sona Okegava Ltd, Gurgaon, for an industryinstitute interaction on 13 February 2013. As an outcome of the visit, the company agreed to sign an MoU with ITM University, the process for which is underway.

#### New Joinee

The following persons have recently joined the Department of Mechanical Engineering:

> Professor JP Subhrahmanyam joined as Senior Professor, Dr DS Khatri as Adjunct Professor, and Ms Anita Yadav as Technical Staff.



#### Department of Civil and Environmental Engineering

☐ The Department of Civil Engineering undertook the cube testing of concrete used in ITM University's new construction site under the supervision of Ms Isha Verma. Forty cubes were tested from [?] August to 25th September 2012. Students were also involved in the testing of material. A three-day educational-cumindustrial visit to Bhakra Dam for final-year students was organized from 17 to 19 October 2012. Bhakra Dam is one of the highest multipurpose gravity dams, constructed despite several seismic and geological challenges. It is India's second tallest dam at



Academic field visit of final-year Civil Engineering students to Bhakra Dam

225.55 m (740 ft), next to the 261m Tehri Dam. This visit gave the students an opportunity to learn about different challenges in the construction of large dams. Facilitators were Dr Anil Kumar Misra, Ms Isha Verma and Mr Nipun Verma.

A one-day Industrial visit to an A one-day Industrial visit to an RMC (Ready-mix concrete) plant for Second-Year Civil Engineering students was organized on 30 October 2012. The trip included a visit to an NHAI (National Highways Authority of India) construction site and an RMC plant. At the construction site, three towers at different stages of construction were shown to the students. The site engineer briefed them about the construction plans for the nine-, ten- and 11-storeyed buildings. Students were shown how reinforcement, concreting in beams, slabs and columns are done. They also saw retaining walls, waterproofing, grouting, etc., under execution. The second site of the trip was the RMC plant, equipped with a



NHAI construction site and the RMC plant

capacity of 30 m3 production of concrete and concrete pumps with a capacity to deliver material at 45 m3/hour vertically up to a height of 65m.

A total of 40 Second-Year Civil Engineering students actively participated in this visit. It gave the students an opportunity to learn how to cope with different challenges at a construction site. Faculty member Ms Niragi Dave, along with one member of the technical staff, Mr Sanjay Sharma, organised the trip.

- A one-day industrial visit to the 66-million-gallon-perday (MGD) water treatment plant, Chandhu Budhera, Gurgaon, for Third-Year students was organized on 25 October 2012. The plant is built on 274 acres of land, with three raw-water storage tanks 306x306x5m in size, with a capacity of 103 MG each. Six clariflocculators with a diameter of 54.20m, depth of 3m, and a capacity of 11 MGD each have been constructed. There are twelve filtration plants 6x6m in size, capable of removing organic matter of 22 MGD capacity. A clear-water tank of 55x55x3m to store the treated water has been constructed, and the water is supplied to Gurgaon.
- Thirty-eight Third-Year students participated in this visit, and had the opportunity to learn about the various processes involved in water

treatment. Faculty members who coordinated the industrial visit were Dr Ram Karan Singh and Ms Vaishali Sahu.



Educational field visit: Chandu Budhera Water Treatment Plant site – 3rd-Year Civil Engineering students

- Initiated by Dr V Gayathri, Associate Professor, Department of Civil Engineering, ITMU, Gurgaon, a meeting was held with Dr K Ramamurthy, Director, Projects, Ireo, Gurgaon, on 11 October 2012 at the Ireo project office in Sector 58, Gurgaon. Professor Krishnamoorthi and Dr Gayathri took part in the interaction between the Department of Civil Engineering and Ireo to provide practical training and project work for students, guest lectures, short training programmes, postgraduate programmes and consultancy projects for mutual benefit.
  - Dr S K Kaushik, Fellow, INAE, and former Professor and Head,

Department of Civil Engineering, IIT, Roorkee, delivered lectures under the INAE-Distinguished Professorship Scheme on 20 and 21 November 2012.

- Dr V Gayathri delivered a guest lecture at the National Power Training Institute (NPTI), Faridabad, during the induction programme of the National Hydro-Power Corporation (NHPC) trainee engineers, on the topic, Concrete Technology, on 17 December 2012.
- Dr RK Singh attended a special event of the Delhi Sustainable Development Summit, 2013, on Building Climate Resilient Cities: Responding to the Emerging Water Crisis on 30 January 2013, at Taj Palace Hotel, New Delhi, jointly organized by TERI and Monash University, Australia.
- □ Dr Surendra Kumar Kaushik, Fellow, INAE, and former Professor and Head, Department of Civil Engineering, IIT, Roorkee, delivered lectures under the INAE Distinguished Professorship Scheme from 14 to 16 January 2013, coordinated by Ms Isha Verma. Dr Kaushik also interacted with faculty and students of Civil Engineering, sharing research experience and mentoring research work.
- ☐ Ms Vaishali Sahu has been selected as a reviewer for the

Journal of Civil Engineering and Architecture, David Publishing Company, for one year.

- Dr V Gayathri delivered a guest lecture on the topic, Concrete Technology, on 31 January 2013 at National Power Training Institute (NPTI), Faridabad, to trainee engineers of the National Hydro Power Corporation (NHPC) as part of their induction programme.
- ☐ The Department is launching an MTech Programme in the area of five specializations, with thesis options in Structures, Geotechnical, Water Resources, Environmental Engineering, from the July 2013 session onwards, approved by the Academic Council meeting held in January 2013.
- Dr V Gayathri attended the twoday National Conference on Geotechnical and Geoenvironmental Aspect of Waste and its Utilization in Infrastructure Projects, organized by the Department of Civil Engineering, Guru Nanak Dev Engineering College, Ludhiana, Punjab, on 15 and 16 February 2013. She delivered a talk at the plenary session on the topic, Appropriate Use of Waste Materials in Infrastructure Projects, and also chaired a technical session on Reinforced Soil and its

Applications in Infrastructure Development.

#### Research project awarded

🗋 A final-year Civil Engineering student, Nikita Gupta, has been awarded the project, Design and Testing of Geo-synthetic materials along with artificial set of lithologies suitable for water filters, RO systems, building recharge structures and soil aquifer treatment systems, by the Ministry of Small and Medium Enterprises, Government of India. The project (No. SDP-12-87, dated 6 February 2013) is for 6 months, with funds of Rs.1.5 lakhs, and with Dr AK Mishra as Project Supervisor.



# Department of Applied Sciences & Humanities

🗋 Mr Paritosh Tyagi (Former 🗋 Professor Kehar Singh, Chairman-Central Pollution Control Board) has been associated with ITM University under the AICTE-INAE scheme of Distinguished Professorship for a period of one year since 1 June 2012 to promote technical education, research, industry-institute interaction, enrichment of curriculum content and other activities. The **Department of Applied Sciences** (Coordinator - Dr Rashmi Tyagi) organized a lecture by Mr Tyagi on Environmental Issues for Engineers, on 24 September 2012 at ITM University for BTech students and faculty members. In his address, he introduced the audience to the various kinds of environmental impacts and emphasised the importance of environmental management through engineering activities. He explained the importance of various natural resources. sources of fresh water. abstraction of water for consumption, conjunctive use of surface and ground water.

Professor Kehar Singh, Honorary Distinguished Research Professor, delivered the keynote address on History of Early Holography: Myths, Mysteries, Missed Opportunities and More, at a conference on Applied Optics held on 22 September 2012 at the MS University, Baroda.

Honorary Distinguished Research Professor, was invited by the Indian Institute of Space Science and Technology and the University of Kerala, Thiruvananthapuram, to interact with their students and faculty from 15 to 17 October 2012. Professor Singh also delivered guest lectures on Recent Advances in Optics and Photonics: some Glimpses.

During the academic session 2008-09, the Department of AS&H set up a Wall Journal. It displays different themes from different areas of science and technology. Ms Poornima Gaur, the Faculty Coordinator, guides the students to showcase their creativity and knowledge through this medium. Information is displayed with the help of different articles and pictures, and the theme displayed



Students displaying their creativity and talent through the Wall Journal

this time was animal cloning, which is the latest advancement in biotechnology and the medical sector. The process of animal cloning has become a commercial venture to help in improving the quality of herds, and in forming of artificial organs and tissues, and also in producing different medicines. The journal was widely appreciated.

- Dr Dipti Vaya submitted a project proposal entitled Water Remediation: Photocatalytic Degradation of Dye using Nanophotocatalyst, on 3 October 2012, under the Haryana government scheme.
- Dr Puja Malik and Dr Lakshmi Chaudhary submitted a project proposal titled Kinetics and Mechanism of Oxidation of some Polyhydric Alcohols (Sorbitol, Mannitol and Dulcitol) and Sugars (Ribose and Arabinose) by Potassium Bromate and Chloramines-T Catalysed by Os(VIII) and Rh(III) in Acidic Medium – A comparative study, in October 2012 to the Department of Science and Technology, under the Women Scientists' Scheme.
- Dr Puja Malik and Dr RB Bajpai, along with their students from Civil Engineering and ECE third semester, visited the 10th International Oil and Gas Conference and Exhibition,

#### SEMINARS, WORKSHOPS AND CONFERENCES

PETROTECH-2012, Hydrocarbon and Beyond, organized under the aegis of the Ministry of Petroleum and Natural Gas, by IOC Ltd at Vigyan Bhawan from 14 to17 October 2012.

- A two-day seminar, XIX National Symposium on Ultrasonics (NSU-XIX 30-31 October 2012) was jointly organized by CSIR-National Physical Laboratory (NPL), New Delhi, and Ultrasonic Society of India, New Delhi, on 30 and 31 October 2012. Dr Hukum Singh was invited to deliver a talk, and presented a research paper, Thermal properties of semi conducting materials by Photoacoustic technique.
- □ CYBORG the robotics workshop was organized by Dr Gaurav Gupta (ASH), Dr Sangeet Srivastava (ASH), Ms Sharda Vashisth (ECE) and Ms Nidhi Sharma (ECE) under the Society for Innovations and Development (SID) of ITMU, in collaboration with Kyrion Technologies on 20 and 21 October 2012 at ITMU. The main objective of the workshop was to introduce students to the latest technologies and ways for innovation. About 20 participants from ITMU and other colleges and universities participated in the workshop. The workshop was designed to introduce the fundamentals and working principles of robotics.

The structure of the module was designed to highlight and explain the features of an automatic robotic system using the software and the hardware details of embedded systems. An 8 bit ATmega (28 pin) microcontroller and peripheral accessories were employed for demonstrations.



Students engaged in the models

- Visit to Paper Recycling Unit A huge quantity of wastepaper is generated in schools, colleges, companies, offices, etc., which can be recycled in useful form. This recycling process will not only help to solve the problem of wastepaper dumping, but also help in the conservation of forests. A few Third-Year BTech ME students visited the Wastepaper Recycling Unit, Ghitorni, New Delhi, with Dr Rashmi Tyagi, Associate Professor, Department of Applied Sciences and Humanities, on 22 October 2012. They observed the machinery and various steps involved in the paper recycling technology.
- Visit to Sewage Treatment Plant: Third-Year BTech Mechanical Engineering students visited the sewage treatment plant in Vasant

Kunj, New Delhi, on 19 November 2012 with Dr Rashmi Tyagi, Associate Professor. They learnt the technique of processing raw sewage before its disposal into natural waterbodies.



A visit to the sewage treatment plant, Vasant Kunj

#### Visit to Orientation of Enactus

☐ MATHEMACTIVE, a society of active learning, has started a workshop series on Mathematical and Scientific Software Tools for research and scientific computing. As a first move in this direction, a workshop on Modelling with Mathematica, in collaboration with Wolfram Research Inc. USA (developer of MATHEMATICA Software), was organised on 26 November 2012 in Language Lab #301. Dr Gaurav Gupta, Dr Divya Agarwal and Dr Sangeet Srivastava were instrumental in setting up the workshop series.

Faculty members and students

Seminars, Workshops and Conferences

from both the University and outside participated in the workshop. During the first session, the speakers, Dr Aravind Hanasoge and Mrs Sonali De Souza from Wolfram, introduced the participants to the software and its utility. In the second session, training on the software was given by the experts from Wolfram. It was a very useful workshop for the participants, in particular for those pursuing research.

Derofessor Punit Boolchand, a well-known and distinguished Research Professor of ECE and Physics in Cincinnati University, USA, delivered a lecture on Innovation and Discovery in Condensed Matter, on 18 December 2012 at ITMU. This lecture was organized by Dr Ambika Sharma, under the guidance of Professor Prabha Sharma and Professor Kalika Srivastava, and was attended by ITMU faculty members and research scholars. In his talk, Professor Boolchand introduced the audience to the technological



Prof. Punit Boolchand making an impact

applications of chalcogenide glasses and their thin films. Faculty members and research scholars, especially those working in materials science, later had a fruitful discussion with Professor Boolchand on various technological aspects of materials science.

#### □ ENACTUS stands for:

Entrepreneurial – having a perspective to see an opportunity

Action – the willingness to do something and the commitment to see it

US – a group of people who see themselves connected in some important way

The ENACTUS orientation was organised on 01 December 12 at KPMG, DLF Cyber City, Gurgaon.

Ms Shruti Saxena, HR manager of KPMG, explained the structure and working of ENACTUS at this motivational seminar. A team of six students, along with faculty member incharge, Dr Dinesh Bisht, participated in the orientation programme.

Professor Prabha Sharma was invited to deliver a talk titled Local Search Does Work, in an international conference on Applied Optimisation and Game Theoretic Models, organized by Indian Statistical Institute, Delhi, from 9 to 11 January 2013.

- Professor Prabha Sharma recorded video lectures for NPTEL on Probability Theory and Applications, at IIT Kanpur from 4 to 6 January 2013.
- Dr Paritosh Tyagi addressed BTech students and faculty members on Environmental Concerns for Engineers, on 22 January 2013.
- Dr Indra Verma, Professor (Retd) from IIT Delhi, gave talks to BTech students from 15 to 18 January 2013, covering diverse topics from the history and evolution of chemistry to the latest developments in nanotechnology, energy, and environmental management. The students were inspired by the extent and depth of the talks and their correlation with everyday life. Dr Verma encouraged the students to apply the theoretical concepts of green chemistry to their respective engineering branches to become 'green engineers'. The discussion session was lively, with students pledging to help protect the environment, conserve energy and contribute to sustainable development.
- Dr Sunanda Vashisth attended a short-term course on Laser Science and Technology, organized by the Department of Applied Sciences, National Institute of Technical Teachers'

Training and Research, at Chandigarh, held from 11 to 15 February 2013.

- Professor Prabha Sharma chaired two technical sessions on Advanced Algorithms, presented at the 3rd IEEE International Advanced Computing Conference, on 22 and 23 February 2013, at AKGEC, Ghaziabad, India.
- Dr Dinesh Bisht chaired two technical sessions on Advances in Communication and Networks, and Teaching and Learning Systems, presented at the 3rd IEEE International A dvanced Computing Conference, on 22 and 23 February 2013, at AKGEC, Ghaziabad, India.

Faculty/Research Scholars who have joined the Department:

Professor RK Bhogra, a new joinee, besides teaching Energy and Environment Management courses and interdisciplinary MTech programmes, shall also act as Deputy Dean, RDIL, to interact with private and public industries and government agencies for joint sponsored projects, consultancy work, and CEP programmes with involvement of university faculty.

> Apart from this, Professor Bhogra will also be Member Secretary of the Coordination Committee for Modular

Programmes for working professionals from industry. During the past 40 years, he has had vast experience of research and development and teaching, with extensive networking with academia, national and international research institutions, and various government agencies and industries, before joining ITMU.

- Professor IK Varma has joined as Honorary Distinguished Professor in Chemistry. She is a renowned professor in the field of Polymer Chemistry. She has five US and two Indian patents to her credit. She has guided 54 PhD and 65 MTech students. She was appointed as Reliance Chair Professor from 2000-2005. Professor Varma has more than 250 papers in scientific journals. She retired from IIT Delhi in 2005.
- Dr Biswajit Saha has joined as Assistant Professor in Chemistry. He did his MSc in Organic Chemistry from Gauhati University and MTech in Chemistry from IIT Delhi. He pursued his PhD in Chemistry from the Central Drug Research Institute, Lucknow. He has three years postdoctoral experience as an Alexander von Humboldt fellow in Germany, and the University of Arizona, USA, and more than two years industrial experience in the field of Organic and Medicinal

Chemistry. Dr Saha has published 13 papers in international journals.

Dr Shibesh Kumar, who has a PhD from BHU, has joined as a member of the Mathematics faculty.

#### Lectures delivered by Professor MS Sodha

Professor MS Sodha delivered lectures on Free Electron Theory to BTech Computer Science First-Year students from 4 to 7 February 2013.



# School of Management

- □ The School of Management (SOM) organized a session on Creativity and Innovation on 5 October 2012 for MBA students. Professor KL Chopra, Padmashri, and Honorary Distinguished Research Professor at ITMU, chaired the session. He emphasized that creativity and innovation is of utmost importance, and students should cultivate an innovative mindset from the very beginning.
- □ The Synergy is a Management forum that was established by the SOM with the aim of stimulating logical thinking in students and generating interest in the application of management concepts in the real world, has attracted membership not only from management, but also from engineering students. Apart from conducting virtual stock market classes every Thursday, a talk on insurance by a resource person from Birla Sun Life Insurance was organized on 18 October 2012.
- □ A guest lecture for BBA and MBA students on Being a World



A Representative from Ebsco Host

Class Leader in the Global Context was organized on 9 October 2012. Professor Deepak Sukh from Luminent Inc., USA, with extensive global experience in renowned multinational companies, delivered the talk.

- □ A training programme was organized by EBSCO Host (Online database for management and allied areas) for the faculty members and research scholars of ITMU, in coordination with the library committee, on 5 October 2012.
- □ Two students from the School of Management were nominated for Management Knowledge Chair and Administrative Chair in the ASQ forum. At present, there are 14 management students registered for ASQ.
- □ An FDP (Faculty Development Programme) in Research



Prof DPS Verma addressing the audience

Communication Skills was organized on 20 October 2012. Professor DPS Verma (Former Head, Delhi School of Economics) delivered the session, focusing on the principles and structure of report writing, especially a doctoral thesis.

□ The School of Management organised the first online quiz on current affairs, conducted by XED Intellect, Pune, for finalyear MBA students.



Online quiz in progress

- Mr Sanjay Kumar Mangla was designated as a special judge for the Case Study and Business Plan competition at an intercollege management and cultural event, Magnifest-12, held at Hindustan Institute of Management and Computer Studies, Mathura, on 5 and 6 October 2012.
- Ms Shailja Dutt, Managing Director (Stellar Search), delivered a guest lecture on How to start a recruitment firm for MBA students, on 19 November 2012.



Ms Shailja Dutt, MD Stellar Search, during the guest lecture

□ A team of 28 students of the MBA first semester, led by Mr Sanjay Kumar Mangla and Ms Jaya Ahuja, visited Parle-G, Bahadurgarh plant, on 27 October 2012. They were briefed about the manufacturing process of Parle-G biscuits and wafers, and had productive discussions with the HR department regarding their management strategies.



MBA students at Parle-G Bahadurgarh plant

- Earth Infrastructure Ltd selected 16 students of the MBA first semester for summer internship, with a stipend of Rs 10,000 per month.
- □ An informative seminar conducted by Synergy, a

Management Forum, on 29 November 2012, was attended by students from the School of Management and School of Engineering and Technology. The speakers from brokerage firm Sharekhan shared information relating to the equity and derivatives market. A real market demo was presented to students with the help of trading software Trade Tiger from Sharekhan.

The School of Management organized a handholding workshop on writing a research publication for research scholars and faculty members of the School of Management and School of Engineering. The workshop was conducted by Professor Ravishankar, IIT Delhi, Department of Management Studies, on 1 and 2 February 2013. Over thirty participants from ITM University attended and benefitted from the workshop.



Prof. Ravishankar addressing research scholars and faculty members

 A five-day Special Skill Development Programme (SSDP) on Project Management was organized for MTech (VLSI Design) students from 25 February to 1 March 2013.

- Dr Himanshu Choudhary represented ITM University at the Women Managers' Club of the Gurgaon Management Association, and participated in the panel discussion on Views and Challenges of the Union Budget – 2013, on 21 February at City Club, Gurgaon.
- An E-Brary training programme for faculty members, research scholars and students of the School of Management was organized in coordination with the library committee on 22 February 2013.



Mr Vinod Shihani from ProQuest conducting a training session on E-Brary

- Management Club Corpova organized the Inquisitive 2013-business quiz as an event under the flagship of Club Fiesta on 7 February 2013. Fifteen teams, comprising forty-five students from all the departments of the University, participated enthusiastically in the event. Team SOL was the winner of the event.
- ❑ An identify-the-logo quiz named Business Quotient, under the aegis of Synergy, a management forum, was organized by the School of Management on 25

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January 2013. The aim of the quiz was to provide a learning experience and insight into current business affairs. Faculty members and students of the School of Management participated in this event and were very appreciative of it.

Dr Ranjit Sinha, Honorary Distinguished Research Professor, School of Management, conducted an interactive workshop on leadership, change management and developing a business

he School of Management, ITMU, conducted a senior level inter-company materials management conference, Managing Costs in a Challenging Environment, for the JK Group on 9 and 10 January 2013 at PHD House, New Delhi. The JK Group had offered this as a consultancy assignment to Professor Prem Vrat and Dr AK Vij, School of Management, ITMU. A detailed questionnaire for the JK Group companies was drafted, and a white paper on the current materials management practices in the JK Group companies was prepared, followed by the theme paper, Managing Costs in a Challenging Environment, by Professor Prem Vrat. The conference was inaugurated by



Dr Ranjit Sinha addressing the audience

model, for research scholars, faculty members and students of the University from 13 to 15 February 2013. He also conducted a special interactive

session with the research scholars to address various issues faced by them.

Professor DR Agarwal was invited by the Government (PG) College, Gurgaon, for giving an extension lecture to their students on 26 February. He interacted with the students on topics of poverty and inflation in India.



Professor Prem Vrat being greeted by Smt. Vinita Singhania, Director, JK Organisation.

Smt. Vinita Singhania, and was Suzuki, Jindal Steel, IRILMM, attended by more than 50 senior-level Bekaert, Bains and Company, and managers from the corporate team, KPMG. The conference went very and functional heads of materials well and received an excellent management from six companies response from the participants. under the JK Group. Besides Professor Prem Vrat, there were nine eminent speakers from Maruti

- ✤ Dr Sunita Tanwar attended a refresher course on Cooperative Policy and Development, for the faculty of Indian Universities, from 26 to 29 December 2012, organised by NCUI, Government of India, New Delhi. She also attended a oneday authors' workshop on How to write papers and get them published in academic journals, organised by JNU, in association with Emerald Group Publishing Ltd, on 10 January 2013.
- ✤ Dr Shilpa Sindhu, Ms Jiveta Chaudhary and Ms Sunaina Sangwan attended a faculty development programme (FDP) on Advanced Data Analysis Techniques on 11 and 12 January 2013 at University School of Management Studies, GGS IP University.
- ♦ Dr Charu Shri judged and evaluated the applicants of an international business challenge

#### School of Law

#### Departmental Activities

Professor S Shanthakumar I Mr Subhradipta Sarkar, along attended a meeting with the District and Sessions Judge, Gurgaon, at the District Court, Gurgaon, on 4 October 2012, to discuss the possibility of establishing a Legal Literacy Club at ITMU. He held another meeting on 29 October 2012 to discuss the possibility of celebrating the National Legal Services Authority Day.

B-Plan competition at the Audacia, hosted by the Great Lakes Institute of Management (GLIM), Chennai, and the National Entrepreneurship Network (NEN), from 3 to 10 January 2013. She evaluated the B-Plan of teams from IIT Roorkee, MDI, Atmiya Institute of Pharmacy (incubatee of IIT Madras), Vellore Institute of Technology, etc.

\*\* On 3 December 2012, CMIE (Centre for Monitoring Indian Economy), the leading source of intelligent information for business and professionals, organized an FDP for the faculty and research scholars of SoM on the business database. Prowess. The programme was aimed at providing the management faculty and research scholars with the core practical skills they would require on a daily basis for research and teaching purposes.

This will enable them to put theory into practice.

- \*\* The School of Management has commenced online tests with the students as a weekend exercise on Fridays. The aim of this is to equip the students with a full series of online tests and prepare them for future endeavours. It also necessitates being attentive in class, as every week a test is conducted on the basis of the course covered during the week.
- Professor DR Agarwal was invited by the Principal, Govt. PG College, Gurgaon, as chief guest for the valedictory function of the seven-day NSS camp, organized in three groups on 27 January 2013. Professor Agarwal addressed groups of women NSS volunteers about their role in the contribution of GDP.

- with four students, attended a meeting with the Chief Judicial Magistrate and Secretary, District Legal Services Authority, Gurgaon, on 5 October 2012, to discuss the strategy for organizing legal literacy camps at various schools of Gurgaon.
- D Professor S Shanthakumar attended a meeting with the

District and Sessions Judge, Gurgaon, at the District Courts on 29 October 2012, to join the deliberations regarding the National Legal Services Authority Day.



□ The Bar Council of India celebrated its Golden Jubilee on 16 and 17 February 2013 at the Vigyan Bhawan, New Delhi. The conference was presided over by Dr Manmohan Singh, Prime Minister of India, and Justice Altamas Kabir, Chief Justice of the Supreme Court of India. At the request of the Bar Council of India, the students of ITMU School of Law participated in this historic event. Their efforts and support were recognized by the BCI. ITMU Law students had the unique opportunity to listen to and interact with the judges of the Supreme Court of India, as well as the top lawyers of the country. Professor S Shanthakumar was invited to speak on the need for training and certification of law teachers, and ITMU faculty members Mrs Archana Sarma, Mrs P Lakshmi, Mr Praveen Kumar, Dr Rahul Nikam and Dr Sunod M Jacob were invited to participate in the proceedings of the seminar.



Prof S Shanthakumar, Director, School of Law, ITM University, speaking at the Bar Council of India Golden Jubilee celebrations at Vigyan Bhavanz

#### **Court Visits**

□ As part of the industry interaction process, a formal visit to the Family Courts of the District Court of Gurgaon was organized for the First-Year BBA-LLB students of ITM University School of Law. The students were taken to the courts on 21 and 22 February 2013, where they witnessed hearings and got an opportunity to interact with the judges of the Family Courts. The visit was organized by Mrs P Lakshmi, the faculty-in-charge of Family Law, with the support and assistance of the CJM of the District Court of Gurgaon and the Gurgaon District Bar Association. The students were



ITMU Law students with the Chairman, Appellate Tribunal for Electricity

accompanied by faculty members Mrs PLakshmi and Mr S Sarkar.

□ The Third-Year BBA-LLB students of ITMU School of Law were taken on a court visit to the Appellate Tribunal for Electricity (APTEL), the apex body vested with the authority to hear disputes relating to power. Through this visit, the students got the rare privilege of witnessing high-profile cases. The visit yielded a rare platform for the students to closely interact with eminent judges and lawyers of the Supreme Court and High Court who personally guided the students through the court process. The visit to the apex tribunal was organized by Professor S Shanthakumar, Director, School of Law, with the cooperation of the Appellate Tribunal for Electricity.

#### **Guest Lectures**

- Mr CS Mawri, Assistant Registrar, National Human Rights Commission (NHRC), delivered a talk, Role and function of NHRC in protection and prevention of Human Rights, on 21 November 2012.
- Professor Siddiqui, Former Dean, Faculty of Law, Jamia Millia Islamia University, delivered a speech, Juvenile Justice: Law as an instrument of social change, on 8 November 2012.
- Dr Vijay Kumar Singh, Deputy Director (Law), Competition Commission of India, delivered a guest lecture, Competition Laws for the students and faculty of the School of Law, ITMU, on 27 September 2012.
- Mr Nikhil Chandra, CEO of Rainmaker, delivered a special lecture on Social Contract to Legal Contract, at the Law School on 18 October 2012. Mr Nikhil Chandra is an alumnus of the NLSIU, Bangalore, and worked

with AZB & Partners, Mumbai, for five years after graduation.



Mr Nikhil Chandra, delivering the lecture

- □ An FDP was organized by Rainmaker for the faculty of SOL on Using Technology for Teaching Law, on 12 December 2012. Rainmaker is one of the country's leading legal recruitment companies. However, of late, it has expanded its focus to cover a broad range of services for the legal domain. These services include education, training, information and managing examinations and evaluations.
  - On 13 December, Thomson Reuters, the world's leading source of intelligent information for businesses and professionals, organized an FDP for the faculty of SOL on their newly developed Legal Advancement Programme. The programme aimed at providing law teachers with the core practical skills they will need on a daily basis in their professional career. It will enable them to put theory of law into

practice by using real-life legal situations, combined with innovative web-based training techniques.

□ Internship at the SOL is given very high priority, and the faculty of SOL actively assists the students in this arduous process. The internship programme started for all students in the SOL on 20 December 2012, and will continue for six weeks till 30 January 2012. As per the internship programme, the Third-Year students have been placed with lawyers of the Supreme Court of India and the High Courts. The list of lawyers includes legal luminaries like Mr Shanti Bhushan, Mr PP Rao, and Mr PH Parekh. For the internship of the Second-Year students, the Internship Committee approached the offices of the Directorate of Public Prosecution of Delhi and Haryana. Overall, 35 students have been placed with public prosecutors under the Delhi office, while 18 others have been placed with the Haryana office. The SOL takes pride in the news that for the first time in the history of Haryana, the Government of Haryana has granted permission for internship of law students through an official communication from the Additional Chief Secretary, Government of Haryana, after a strong urging of our case with the state government. The rest of the students have opted out of Delhi-NCR in favour of their respective home states. The

Seminars, Workshops and Conferences

committee has also played its role in this internship. It was successful in placing one student with the Office of the Public Prosecutor for CBI. Bhubaneswar. All First-Year students are interning with 19 reputed governmental and nongovernmental human rights organizations, including the Punjab State Human Rights Commission, Chhattisgarh State Human Rights Commission, Transparency International, PILSARC, Vishakha, RLEK, Udayan Care, across the nation in cities like New Delhi, Bangalore, Chennai, Mumbai, Chandigarh, Jaipur, Dehradun, Patna, etc. The choice of the organization was primarily based on consultation with the students. The faculty members responsible for the successful implementation of the programme are Ms P Lakshmi for the Third-Year students; Mr Subhradipta Sarkar and Mr Praveen for the Second-Year students; Dr Sunod Jacob and Ms Archana Sarma for the First-Year students.

#### Visit to District Courts

Dr Sunod Jacob prepared 10 students of ITMU Law School to conceive and act in skits on juvenile justice and rights against domestic violence at Suncity School, Gurgaon, on 31 October 2012, and DAV School, Gurgaon, from 1 to 9 November 2012. The programmes were organized by DLSA (District Legal Services Authority), Gurgaon.

#### Internship Orientation Programme

Professor S Shanthakumar, Director, SOL, attended an international seminar on IPR (Intellectual Propertity Rights) organized by the Washington University School of Law at ISIL, New Delhi, on 14 December 2012.

Professor S Shanthakumar and Ms P Lakshmi, Assistant Professor, attended an international seminar on IPR organized by the Japanese Patent Office at ISIL, New Delhi, on 22 December 2012.



Professor S Shanthakumar, Director, School of Law, addressing the students on the Internship Orientation Programme



Hon'ble Justice Mr Karpaga Vinayagam addressing Law students

Honorable Justice Karpaga Vinayagam, Chairman, Appellate Tribunal for Electricity, formerly Chief Justice of the High Court of Jharkhand, and a Gandhian, delivered an inspirational lecture to ITMU School of Law students on 23 February 2013 on how to build successful careers as legal practitioners without compromising on ethical values and principles. The lecture was designed in the form of an interactive session, w h e r e b y s t u d e n t s ' apprehensions over adherence to moral principles as lawyers

Mr Vinod K Jacob, IFS, Director, Ministry of External Affairs, delivered a special lecture to Second- and Third-Year BBA-LLB students of ITMU School of Law on the reform of the UN Security Council, on 25 February 2013. Having worked extensively with the United Nations, Mr Jacob provided an insider's perspective of the legal and geopolitical aspects of reforming the Security Council membership. Ms Tennilly Duffy, former advocate, Supreme Court of Australia, currently working for Rainmaker, conducted a training session on Legal Writing and Professional Communication Skills on 18 February 2013. The training session, attended by all the students of ITMU School of Law, served as an occasion for them to acquire an insight into the nuances of legal research in today's digital age.



Ms. Tennilly Duffy addressing Law students

Mr Vasant Singhal, Assistant Vice-President, Professional Skills, Thomson Reuters, delivered a special lecture on Legal Advancement Skills, on 18 February 2013. Mr Singhal provided a detailed analysis of various tools that may be utilized for advancing professional legal skills to bridge the gap between legal theory and practice.

> The Bar Council of India entrusted the onerous task of conducting the 4th All India Bar Examination to ITMU Law School. With the guidance of Col Bikram Mohanty and the able assistance of the staff of the Examination Department of ITM University, the Law School successfully conducted the examination.

- Dr Saligram Bhatt was appointed as Adjunct Professor at the School of Law, ITM University. His experience spans a period of more than four decades. A pilot with considerable flying experience and a Commercial Pilot's Licence, he was a post-doctoral Fulbright Research Scholar in Air Law, Space Law and Environment Law at the School of Law, Southern Methodist University, Dallas, Texas, USA, 1969-1970. He has a PhD in International Law from Jawaharlal Nehru University, with specialization in Air Law and Space Law, done under the guidance of Dr Nagendra Singh, Judge (President) of the International Court of Justice. Dr Bhatt has more than forty years of extensive experience in civil aviation administration, legal and policy matters, drafting or amending of primary aviation legislation and detailed civil aviation regulations, among other things, for the Director General, Civil Aviation (DGCA), Government of India, with ICAO and other aviationrelated organizations. He was the Director of Air Transport Regulations and Deputy Director General of Civil Aviation, Government of India (1984-1988), Chairman, National Facilitation of Passengers Committee in DGCA, and drafted air laws and policy briefs for the government of India.
- $\Box$  On 18 December 2012, the SOL, ITMU, hosted Shri Jai Prakash Dabral, the founder of the Himalayan Chipko Foundation, one of the leading environmental organizations in the country. Mr Dabral, himself an advocate of the Supreme Court, is also a recipient of **CNN-IBN** Real Heroes Award, for his immense contribution in protecting the Himalayan environment. He delivered a lecture to the students on Protecting Trees from State Exploitation: A Story of Tehri Dam Transmission Lines.
- Dr Sunod M Jacob was invited by the Faculty of Law, University of Madras, to deliver a special lecture on the Position of Joint Stock Piling in the Energy Charter Treaty, on 11 January 2013.
- Professor S Shanthakumar was invited by the Vice-Chancellor, NLU Delhi, to speak at the National Conference on Role of Legal Education in the changing Economic World, organized by NLU Delhi and Shastri Indo-Canadian Institute on 20 January 2013. Vice-Chancellors of NLUs and Deans of reputed law schools participated in the conference.

#### **Students Activities**

- ☐ The student activity Chair of the Delhi Chapter of ISHRAE (DCI), Mr Dheeraj Rastogi, and Co-Chair, Mr Sunil Yadav, conducted the ISHRAE presentation at ITM University, Gurgaon, on 30 August, 2012, attended by 120 students. Mr Joydeep Chakraborty facilitated the event. This news was published in the Delhi Chapter of ISHRAE magazine, Twitter, Vol IV, Edition Oct-2012.
  - A technical quiz was conducted at the University by ISHRAE Society. Four students of ITM University were selected for the zonal contest. Two students of ITMU have been selected to participate in the National Level Technical Quiz competition to be held in Mumbai in March 2013 .The entire process was guided by Mr Joydeep Chakraborty and Ms Shikha Kashyap.
- A team of 25 students participated at BAJA SAE INDIA national competition at Indore. Five final-year Mechanical Engineering students out of the participating students were recruited by the sponsoring companies. Mr Kartik Khurana (Team Captain) has been selected by the Anand Group, Pune, and Mr Sahil Bangia, Mr Lokesh Mittal, Mr Parik Dhamija and Mr Karan

Mahajan have been selected by iCAT, Manesar.

CSE & IT announces with immense pleasure and pride that our students have got an opportunity to develop a realtime mobile application for Ginos Restaurant of Ireland. This has been made possible because of the efforts of Professor Fergus, ITB Ireland.

- ☐ Three students, Mr Shubham Gupta (Third Year CSE), Mr Pushkar Mangla (Third Year CSE) and Mr Karan Kapoor (First Year CSE) have been selected for the MUN programme.
- □ The students of the School of Law participated in the Inter-College Technical Management Fest, AMIFEST, on 14 and 15 February 2013. The Fest was organized by Amity, Manesar. ITMU School of Law, represented by Akshay Mehta, Nirpi Jolly, Tanya Sharma, Aditi Khera, Nikhil Jain, Amitendra Arayan, Kriti Goyal, Puranjay Bhatt, and Nikita, was awarded the overall achievers' trophy of the Fest.
- Ms Kritika Mahajan, Third-Year
   BBA-LLB student, presented a paper titled Constitutional
   Perspective of the Right to
   Know, at the National Seminar
   on Right to Information,

organized by the Rajiv Gandhi National University of Law, Patiala, in collaboration with the State Information Commission, on 23 February 2013.

- Three students from the School of Law, Ayush Gupta and Abhijeet Gupta (Second Year) and Udit Pahuja (First Year) participated in a one-day training programme on human rights, organized by KIIT University, Bhubaneswar, in collaboration with the National Human Rights Commission (NHRC). The programme took place on 23 February 2013, and served as an excellent platform to deal with human rights issues in India, including child rights and rights of women. Our students got a thorough insight into the role and functioning of the NHRC in addressing issues of such nature. Through this programme, our students interacted with various speakers and guests, including senior officials from the NHRC, Ramon Magsaysay Awardees, and Senior Supreme Court advocates specializing in human rights.
- The International Exchange Programme (ISEP), a global leading network in study-abroad programmes, granted Direct Membership to ITM University on 30 August 2012. This will

enable students of ITM University to pursue a semester or year in some of the wellknown universities across the globe, and get study-abroad credits transferred to ITMU credits, on successful completion of their term. Detailed information will soon be uploaded on the university website.

Two of our students, Manoj Kumar (11CSP011) MTech (CSE) and Neha Thethi (11SEP011) MTech (SE) have been awarded fully funded scholarships by the Government of Ireland. These scholarships are for pursuing a one-year MSc in Computing (Information Security and Digital Forensics) at ITB Ireland. Each student scholarship is worth Rs 15.55 lakhs, which includes tuition fee, boarding, lodging and medical insurance.



Manoj Kumar MTech (CSE)



Neha Thethi MTech (SE)



ITM University Bags Second Prize in SUPRA SAEINDIA



The ACCELEROS

ACCELEROS won second position, with a prize of Rs 20,000 in the marketing presentation award at SUPRA SAEINDIA, a national competition held from 6 to 9 September 2012 at Buddha Circuit, and became the first team in North India to race the vehicle on an international track. The SUPRA SAEINDIA is a competition which presents undergraduate and postgraduate engineering students the challenge of designing, modelling and fabricating a Formula-type racing car.

This vehicle was designed and fabricated under the guidance of

- □ Final-year students of Civil Engineering celebrated Teachers' Day on 5 September 2012, where they presented flowers to their teachers as a token of love and respect.
- ☐ Thirteen students from the Second-Year BBA-LLB

TM University's THE faculty advisors Mr Ashwini Sharma and Mr Vinkel Arora by a team of 25 students, The Acceleros, with Jatin Goel (Captain), Kartik Khurana, Karan Mahajan, Dhruvay Jain, Sanchit Tandon, Gautam Chhabra, Sumit Chopra, Gauravsaini, Ankit Dhiman, Swati Mendiratta, Kanchan Vashisth, Himanshu Gugnani, Ishu Jain, Yuganshu Kakkar, Vikas Sharma, Lokesh Mittal, Prabhat Tiwari, Akshay Vashisth, Lakshay Gandhi, Abhiyank Govil, Nitin Rana, Karan Bharwaj, Prateek Dalal, Mohit Grewal and Siddhartha Jaitly from the Departments of Mechanical, Automobile and Electronics Engineering.

> programme participated in the sensitization workshop on the status of victim assistance programmes in India, organized by the OP Jindal Global Law School, Sonepat, on 21 September 2012.

- Students Activities
- Ms Sangeeta Soni, member, team-VLSI ITMU, former student of ITMU 2011 batch, has been placed at a salary package of Rs 9.25 lakhs per annum with Mentor Graphics.
- The National Institute of Design has approved a student project titled Intelligent Blind Aid, by Mr Himanshu Singhal of Final-Year EI for a reimbursable amount of Rs1.3 lakhs.
- ❑ ASME (American Society of Mechanical Engineers) student members of the Department of Mechanical Engineering attended a workshop conducted by the ASME Society at Indian Habitat Centre, New Delhi, on 12 and 13 October 2012.
- ☐ The Civil Engineering Society (SPACE) organized an event called KRUSIFY on 10 October 2012, under the guidance of Ms Niragi Dave and Ms Vaishali Sahu, where participants designed futuristic models which were tested against simulated natural disasters.
- ❑ Mannu Bansal, a student of BCom (Hons) won the second prize at a debate competition in a t w o - d a y intercollege management and cultural event, Magnifest-12, held at Hindustan Institute of Management and Computer Studies, Mathura, on 5 and 6 October 2012.
- Mr Pulkit Garg (ECE third semester) and Anchal Jain (IT fifth semester) started an entrepreneurial activity under the guidance of Ms Sagarika Goswami, faculty member, Department of Applied Sciences

And Humanities, and Mr Sanjay Mangala, faculty member, School of Management. This activity aims at saving students the money they spend on getting study material photocopied.

#### Moot Competitions

International Committee of the Red Cross (ICRC) and the Indian Society of International Law (ISIL), New Delhi, held on 22 and 23 September 2012, in New Delhi. This is considered to be a top-tier moot court competition, and this edition attracted 68 law



ITMU Law School Team at Henry Dunant Memorial Moot Court Competition

The ITMU Law School has continued to make its presence felt in prestigious moot court competitions. The students participated in three such competitions.

- A team comprising of Ms Natasha Sahani, Ms Navya Chopra and Ms Rupali Srivastava participated at the 8th Dr Vijender Jain All Delhi (NCR) Moot Court Competition organized by University School of Law and Legal Studies, GGSIP University, Delhi, held on 1 September 2012 at NOIDA.
- Mr Harshit Dushad, Mr Nikhil Jain and Ms Alisha Jain represented us at the 12th Henry Dunant Memorial Moot Court Competition organized by the

schools from across the country. Our team reached the quarterfinals, beating some of the National Law Schools.

- A team comprising of Mr Akshay Mehta, Ms Nripi Jolly and Mr Raghav Kumar participated in the 3rd All India Corporate Moot Court Competition organized by the National Law University, Delhi, and UKCA Law Chambers, on 22 and 23 September 2012 in New Delhi.
- □ The Auto Quiz was conducted by ASME on 18 September 2012. The multiple choice questions were geared to test the participants' technical and commercial knowledge of automobiles. Sixty-six students from various branches

#### STUDENTS ACTIVITIES

participated, and it wasThree students of the thirdsupervised by Ms Swatisemester of BBA-LLB (Hons)Bhardwaj (faculty coordinator),represented ITMU in the Mootand Abhay Nagpal and VikasCourt Competition conducted byAnand (student coordinators).Delhi University (Faculty of

- Mr Sulabh Kumar from the EECE department was awarded the InterScience Scholastic Award for his paper titled Singular Self-Balancing Robot, in the Best Presentation category, at the International Conference on Electronics, Electrical and Computer Engineering held at Delhi on 12 August 2012.
- Ms Shilpa Mehta and Mr Sulabh Kumar presented a paper titled Singular Self-Balancing Robot, at the International Conference on Electronics, Electrical and Computer Engineering held at Delhi on 12 August 2012.
- ☐ Mr Sulabh Kumar participated in the National Conference on Artificial Intelligence, Robotics and Embedded Systems, held at the Department of Computer Science and Systems Engineering, AU College of Engineering, Andhra University, Visakhapatnam, on 29 and 30 June 2012.
- ☐ Mr Sulabh Kumar was awarded the Inter-Science Scholastic Award for his paper, Design and Development of Dexto-Eka - a tele-operated Humanoid Robot, in the Best Presentation/Best Content category at the International Conference on Electronics and Electrical Engineering (ICEEE) held at Jaipur on 29 July 2012.

semester of BBA-LLB (Hons) represented ITMU in the Moot Court Competition conducted by Delhi University (Faculty of Law) on 20 October 2012. The team reached the finals of the competition, after successfully winning the preliminary, quarterfinals and semi-finals, leaving behind teams from premier universities like Delhi University, NLU Delhi, Jamia, Amity, Symbiosis, etc. At the finals, they lost to the IP University team, and received the Runners-up trophy, presented by Justice Deepak Mishra, Judge, Supreme Court of India. The team had the privilege of arguing the case before Justice Rajiv Sahai Endlaw and Justice Rajiv Shakdher, sitting judges of the Delhi High Court.

□ The team comprised Ms Jennifer, Mr Naveen and Ms Gabriella. The case was about surrogacy and legal questions arising out of it, on which there is currently no law in India.

- The team of Mr Nitesh Srivastava, Mr Apoorv Pandey and Mr KS Kathiravan participated in the Second FYLC-Ranka National Moot Court Competition, organized by the University of Rajasthan, Jaipur, from 30 September to 3 October 2012.
- A team comprising of Ms Garshima, Ms Gabriella Ruhil and Mr Mandeep Kalra participated in the prestigious 9th KK Luthra Memorial Moot Court Competition, which was held from 18 to 20 January 2013. Ninety-three teams from different countries, including the United States and the United Kingdom, participated in the competition. Sixty teams were selected, based on research, and ITMU Law School was one of the shortlisted teams. Our team put up an excellent show, reaching the top 16 before bowing out to the eventual finalists.

The ITMU Law School's consistent good performance in various prestigious moot court competitions continues.



Our students, flanked by Mr Siddharth Luthra, Additional Solicitor General of India, Hon'ble Justice Mrs Ranjana Prakash Desai, Judge, Supreme Court of India, and Professor JL Kaul, Delhi University. (Left to Right)

Mahajan and Ms Namita Malick represented the School of Law at the 1st National Moot Court Competition organized by IIMT, IP University, New Delhi, held on 18 and 19 January 2013 in New Delhi. The team was awarded the 3rd Best Team prize in the competition. Mr Raghav Kumar was adjudged the Best Researcher at the event.



Mr Raghav Kumar

#### International Summer Internship

☐ Mr Raghav Kumar, Ms Kritika

- International Summer Internship -Mr Abhishresth Deswal of finalyear ECE did his internship at Audi AG Ingolstadt, Germany. He was in the department, Production and Planning Electronics (I/PG-E1). His projects were on Audi A3 and Audi A8.
- Mr Anuj Mehta of final-year ECE did his internship with GBM, Dubai. GBM is the only sales and service representative of IBM in the Gulf. He worked with the Technology and Service group on IBM me System X and the Power servers.
- Ms Kritika Nagpal of final-year ECE did her internship at Harvard University from 13 June to 13 August. She attended two courses in the seven-weeks programme, Introduction to Scientific Computing and Introduction to Quantative Methods.
- Vidushi Batra and Rahul Dua of ECE, among many final-year students who appeared in CAT

Mr Abhishresth Deswal



Mr Anuj Mehta



Ms Kritika Nagpal

2013, scored 99.2 and 97.7 percentile respectively. Well done!

## Other Achievements

Two students from the School of Law, Ms Aashna Srivastava and Mr Mandeep Kalra, have been selected as academic interns by the International Association of Law Schools (IALS) and, in that capacity, will participate in the International Conference and General Assembly of IALS at Infosys, Mysore, with all expenses, including air travel, borne by IALS USA.

BTech final-year student of Civil Engineering, Mr Pradit Kulshrestha, stood third in the event, Acoustica, at the Delhi zonals of the Nokia Indiafest 2013. The results were announced on the TV on Channel V by Larishka Dsouza. With over 25,000 entries for participation, and more than 3000 just from the Delhi-NCR region, he was shortlisted as part of the top three, and invited to participate at the finale at Goa with a wild card entry.



## SPORTS

## **Basketball** Tournament



A Basketball Tournament was held from 17 to 20 September 2012. The ECE department boys' team won the hotly contested tournament, defeating the Mechanical team by a score of 24-26. The girls team from the CSE were the winners, defeating the Law department by a score of 12-9.

## **Volleyball** Tournament



The boys' and girls' Volleyball Tournaments were held from 6 to 9 September 2012. In a close contest, in the boys' category the Civil Engineering department won the match, defeating the Mechanical Engineering department by 3 to 1. In the girls' match between MTech and BTech, MTech won the match by 2 to 1.

## ITMU Premier Cricket League gets underway in grand style

It was a spectacle to watch on 16 October 2012, as departmental cricket teams appeared on the University cricket ground dressed in colourful sportswear, holding flags, marching smartly up to the dais and saluting the chief guest, Professor AN Jha, Director of the School of Engineering and Technology, amid cheers.





Prof Swaran Ahuja being introduced to Cricket teams

The most popular and stiffly being played to a league format. The contested tournament of the year is Mechanical Engineering team, the

favourite for the fourth time, was defeated by the CSE team in the semi-finals. First-time entrant, the MTech team, has already reserved its place in the semi-finals. The team is being led by Mr Chirag and Mr Ajay Pal, the two hard-hitting batsmen who have dominated the matches. Mr Rachit Yaday of Mechanical Engineering has emerged as an allrounder, claiming the maximum wickets, and has the only hat-trick of the tournament to his credit.

## Lawn Tennis Tournament

- ♦ A lawn tennis tournament was held from 19 to 22 November 2012. The School of Management boys' team won the hotly contested tournament, defeating the ECE department team by a score of 3-2. Himanshu Garg and Prashant of School of Management won the match, defeating Nishant Ahlawat and Akshay Ahuja of the ECE department.
- ✤ A team from ITMU Law School participated in various events at the Law Sports Fest organized by NLIU, Bhopal, between 19 and 24 October 2012. Mr Janmajay Yadav of the Second Year won the silver medal in swimming. A team comprising Akshay Mehta (Second Year) and Sobir Garg (First Year) won the silver medal in snooker.
- ♦ Anshul Chaudhury and Sugam Kumar Jha of the First Year BBA-LLB (Hons) course participated in the NLIU Bhopal National



Victorious basketball team



Parliamentary debate competition as adjudicators. There were a total of 32 teams from various parts of the country. The event took place from 9 to 11 November 2012.

✤ The MSME-funded Final-Year project of Mr Prakhar Pandey (Mechanical Fourth Year), Design of New Toilet Flush

Sports

System, under the guidance of Mr Ashwini Sharma, has been displayed at the 12th CII NID Design Summit on 13 and 14 December 2012 at Hotel Le Meridien, New Delhi.

✤ The ITMU students' football

## Athletics

The Athletics Meet was held from 25 to 28 February 2013 at the University campus, drawing a very large participation from the students. The field and track events conducted were shot put, javelin throw, discus throw, high jump and race events of various lengths, including relays. Mr Praveen Dhouchak (11ECU105) was selected as the Best Athlete of the tournament, while Ms Gabrilla Ruhil (11LLB025) was selected as the Best Athlete, female. team won the first prize in the inter-university football competition held at Jamia Millia Islamia from 15 to 23 January 2013 and lifted the trophy, beating Shaheed Bhagat Singh College, Delhi.

ITMU boys were the winners in yet another inter-university basketball competition, held at IILM on 11 December 2012, where they beat the IILM team.



#### Faculty and Staff Sports Event

A sports event for faculty and staff was conducted from 11 to 13 February 2013, generating a lot of enthusiasm and excitement amongst the teams. A cricket match between the seniors' and ladies' teams was most entertaining, and was eventually won by the ladies' team, led by Professor Prabha Sharma HoD, (AP&H) Department. The other intra-department cricket matches of the University, led by young faculty and staff, were keenly

contested. The KSB team moved up convincingly in the knock-out format and beat the administration department team in the finals. Mr Roshan Lal of the KSB team gave a stellar performance throughout, and was declared the Best Batsman of the Tournament, while Mr Anamuddin Khan of the same team was the Best Bowler of the Tournament, confusing the opponents by moving the ball in the air.



Roshan Lal (The Best Batsman)



Anamuddin Khan (The Best Bowler)



## Placements



ne of the outstanding features of ITM University is its excellent Campus Placement record with premier companies. ITM University makes sincere efforts to get suitable job placements for its students, for which it has a wellorganized placement cell functioning under a full-time dedicated Placement Officer, who acts as a central coordinator for all University placement activity, working in coordination with the various Departments. The Departments have their respective placement cells comprising faculty and students.

The University has achieved over 98% placements of its eligible students for the 2008 – 2012 batch, and the placements for the current batch are in progress, with the first company, TCS, alone taking 100 students. New companies added this year include Maruti Suzuki, Shell, Dell and Delloitte, to name a few.



## Training in Firefighting

Training in firefighting provided by the Fire Section in situ in various departments of the University is a regular feature. The Fire Section of the University organized a training session for the accounts section on 29 September 2012. A fire extinguisher was also installed in the accounts section.



Fire officer imparting fire training

## A Trip to Manali

The ITMU Recreation Club organized its third trip to Manali for the three Schools. Ninety-two students from the BTech Third Year, MBA First Year, BBA Third Year, BBA-LLB prefinal year, and LLM pre-final year went on this excursion. The trip was flagged off by the Registrar, Brigadier (Retd) SK Sharma on 20 February 2013, with Ms Jyotsna Singh, Mr Pawan Raghav, Mr Vijay Budakoti, Mr Dinesh Mishra and Mr Amrit (Security Guard) accompanying the students.

The group stayed at a Manali resort and visited the Solang valley. It was snowing in the valley, much to everyone's delight. With excursions, dancing and singing, the students had a thoroughly good time.

The group stayed at a Manali resort and visited the Solang valley. It was snowing in the valley, much to everyone's delight. With excursions, dancing and singing, the students had a thoroughly good time.



Value-Added Modular Programmes Conducted as Hands-on Workshops in EECE Department, in Association with Technology Uncorked LLP (TU)





he curriculum of the Department of EECE embeds value-added (VA) programmes which are in addition to the regular courses in every semester, focussed to enhance the technical domain knowledge of the students and make them ready for better placements. It was initiated by Ms Vandana Khanna (Assistant Professor), who has put rigorous efforts into starting industrial interaction. As a Faculty Coordinator, she ensures that the students benefit and are prepared to embark on their journey into the corporate world.

Technology Uncorked LLP (TU) was engaged last year, to train ECE and EEE students in various emerging and placement-centric domains. The following programmes have been conducted:

**Tinkering with Micro-controllers**: ECE/EIE sixth-semester students (February 2012). Concepts of C, C++, OOPS for software, VLSI & Embedded Engineers: ECE/EEE fourthsemester students (March-April 2012).

Learning to Work with Design Productivity Tools : ECE / EEE first-semester students (September and October 2012).

Just a little bit of C & Linux: ECE / EEE third-semester students (September and October 2012).

Building C++ Applications: (February 2013).

**Building C Applications:** ECE / EEE fourth-semester students (March 2013).

In all these sessions, students developed skills in various domains such as MS-Office, Linux, programming concepts in general, algorithm development, C and its variants, along with concepts of object oriented programming and C++, building Application programmes using C++. The Microcontroller sessions in the 6th semester exposed the students to various industrial grade MCUs and their real applications.

The curriculum of the Department of EECE embeds value-added (VA) programmes which are in addition to the regular courses in every semester, focussed to enhance the technical domain knowledge of the students and make them ready for better placements.

## Introduction to Internet access through ADSL Modem



*Mr Anil Nigam Assistant Professor, Department of EECE, School of Engineering and Technology* 

**B**rief details of Author: Lt. Col (Retd) A K Nigam is a telecom professional with more than 35 years of experience in diverse fields of telecommunication, administration, network management and teaching. He has received in-depth training in telecommunications, supplemented with field experience.

1. ADSL (Asymmetric Digital Subscriber line) is an acronym which all of us are very familiar with. Most internet service providers like Airtel, Reliance, and Tata Teleservices provide services by using ADSL modems. Those of us with internet connections at home are in all probability using ADSL modems. ADSL is the all-digital broadband replacement for dial-up modems which were very popular till a few years ago. Though it is named alldigital transmission, as a matter of fact all digital streams have to be converted to analog signals prior to transmission. You may recall that any rectangular pulse

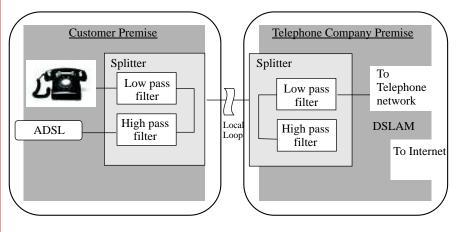
when analyzed by Fourier analysis will give infinite bandwidth and thus cannot be transmitted through any media having limited bandwidth.

2. About six to seven years ago, access to the internet was provided by the dial-up modem which used the telephone line coming to your home. The basic limitation faced while using the dial-up modem was very low speed and inability to use the phone once the computer was connected to the line. The low speed was because the dial-up modems used the voice band through the PSTN, the bandwidth of which is limited to 0.3-3.4 KHz. As per the Shannon theorem, the information rate of this channel was limited to I=B.log(1+S/N) which is quite low, even if higher orders of modulation are used, like multilevel QAM. The switching of the channel was done through the PSTN, and once a connection was set up, the switched circuit through the PSTN, which otherwise would have been used for voice conversation, was dedicated for and used to send data tones by the computer. Due to this, when the dial-up modem was used on your home telephone line, the phone was rendered useless and would show an engaged status. Also, it was billed as per the telephone line charges, which used to be very heavy, because once the connection was set up, the call was treated as a telephone

(voice) call and the plans of the telephone calls applicable were used to bill the customers based on time of connection and not the amount of actual data transfer. This was very inconvenient and costly, and led to dissatisfaction among the users, and a need was therefore felt to develop some better alternatives.

#### The Underlying Concept

3. As discussed the limitation of the speed was due to the fact that the path between the telephone exchanges was limited to .3 to 3.4 KHz. However, it was soon realized that the local line (often called local lead) from the exchange to the customer's premises was dedicated to the customer and had a very large capacity - of the order of 1.1 MHz – and was not being used to its capacity. This fact was used to separate the voice from the data traffic sent by the computer by dividing the bandwidth of the local lead from the customer's premises till the telephone exchange. At the telephone exchange, the two were separated by the use of filters. While the voice calls were made to enter the telephone exchange and were switched through PSTN, the Data traffic, which was already separated out, was switched through the internet service provider's network, independent of the PSTN. By doing so, the

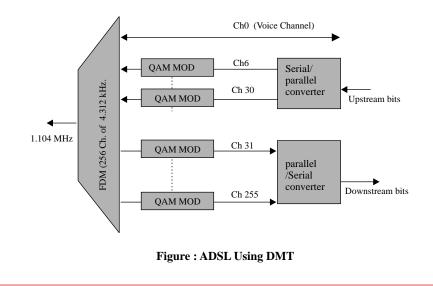


Articles

limitation of the bandwidth 5. available for the data traffic was removed, and also the data traffic and the voice traffic were made independent of each other. The overall concept is depicted in the figure given below.

#### ADSL Technology

- 4. ADSL is a special form of the DSL in which the total bandwidth a vailable for data is asymmetrically divided into two parts. As we are mostly interested in downloading from the internet rather than uploading on it, more bandwidth is allocated for downloading and less for uploading.
- ADSL systems use one of two modulation techniques. The first one is carrierless amplitude phase (CAP) and the second is discrete multitone (DMT) modulation. CAP is nothing but quadrature amplitude modulation (QAM) with the carrier suppressed and the symbol rate adjusted to suit the available bandwidth. The DMT modulation scheme divides the available spectrum into many frequency bands, each with a bandwidth of 4.3125 kHz each of which is referred to as tone. Typically available bandwidth of a local loop, which can be taken as about 1.104 MHz for a normal subscriber, is divided into 256



channels. Modulation used is QAM with 15 bits/baud. The figure below shows a typical arrangement:

6. Bandwidth and channel division for ADSL

Bandwidth and channels are divided as follows.

- Voice: Channel 0 is used for voice communication.
- Idle (guard band): Channel 1 to 5 are not used and are provided as guard bands between the voice and data channels to avoid any interference among them.
- Upstream data and control: ٠ Channels 6 to 30 (25 channels) are used for upstream data transfer and control. Out of 25 channels, one channel is dedicated for control and the other 24 channels are for data transfer. The 24 channels put together are capable of giving a bit rate which is calculated as follows (assuming 4 kHz usable band): Bandwidth of each channel - 4 kHz. Total bandwidth for 24 channels is thus 244 kHz =96 kHz. Using 15 bits per baud QAM modulation we get the data rate of 96000 15 bps =1.44 Mbps. This is the theoretical maximum achievable rate: however in practice we get much lower rates, which range from 64 Kbps to 1 Mbps.
- Downstream data and control: C h a n n e l s 3 1 t o 2 5 5 (225channels) are used for downstream data transfer and control. Leaving one channel for

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control, we have 224 channels for data capable of giving 225 4000

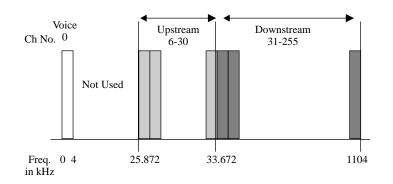


Figure : Bandwidth and channel division in ADSL

## Decision Support System Using Data Mining



Dr Sangeet Srivastava Asst. Professor, Applied Science & Humanities School of Engineering & Technology

The phenomenal advent of the computer-age technologies has enabled various activities to generate digitized data, and today the amount of data we usually deal with is enormous. At the same time, we need to extract more sophisticated and apt information from them. For example, electricity production needs to know the pattern in the usage in different sectors to assess the demand for each sector from day to night. In a more complex application, a marketing manager needs to know not only the simple listing of marketing contacts, but also detailed information about customers' past purchases as well as predictions of future purchases. As the complexity grows, the simpler ways of database management are inadequate to cater to the growing demand for detailed information using complex and huge datasets. Traditional database queries could simply provide as output a subset of the data relevant to the given query, whereas data-mining tools could be used to find hidden information in

the data or to 'detect' something new in data. However, the current state of the science of data mining is almost comparable to that of database query processing in the 1960s and 70s. Over the last decade, though, we have seen a proliferation of mining algorithms and applications, and in due time, we probably will see new data structures designed for databases being used for data-mining approaches.

Data mining has recently gained much attention from policymakers and industry, due to the existence of large datasets in different formats and the increasing need for data analysis. Furthermore, there is increasing interest in the mining of unstructured data such as text and web. As the business emphasis is changing from mere automation to smart automation or decision-based automation. limitations of database and datawarehouse queries such as OLTP (Online Transactional Processing) and OLAP (Online Analytical Processing) proved to be encouraging motivation to analyse existing data in much broader perspective in terms of extracting the most relevant analytical solutions from the data instead of merely receiving a customised data table at the end. As the difference between OLTP and OLAP is the number of records accessed per operation, the new paradigms of data mining brought about the needed changes according to the growing demand of a decision support system and to the exponential increase in the computational power and tools. While data-warehousing- (OLAP) based analytical tools enable only a user-defined scenario-based data analysis, where the user needs to know in advance about the data to pose the right questions in order to get the appropriate answers, datamining paradigms are based on the idea of analysing and inferring from complex data, or when analysis done by humans is not feasible.

The existing numerous statistical methods are more or less aligned on the same paradigms. However, the real-life applications do require inferences on-the-fly (real time) as well as the representation of these results in a more comprehensible manner. The data-mining methods use not only the simple visualizations but also other ways of formalisms such as decision trees and rules. One obvious difference between statistical methods and data-mining methods is that while the goal of the former is to test a hypothesis, that of the latter is to generate understandable hypotheses.

Decision support systems (DSS) are usually knowledge-based systems. Wikipedia defines DSS as 'an interactive software-based system intended to help decision makers compile useful information from a combination of raw data, documents, and personal knowledge, or business models to identify and solve problems and make decisions'. The decision-making process involves scenario development on how the pathways of a decision or action would be. It is difficult to visualize the linkages, existing patterns or the hidden information in the data

enabling better decision making. To automat a decision, it is imperative to define different pathways exhaustively and then select the most feasible pathways (optimized for certain goals). In brief, this whole process can be streamlined in a 5step process as:

- 1. Defining a business goal, the data-mining goals would be defined on it.
- 2. Cleaning and pre-processing of the data using descriptive datamining tools.
- 3. Developing appropriate datamining model based on the defined goals.
- 4. Inferring from the results aided with visualization to support human decision making.
- 5. Deploying these inferences for the decision support system.

The decision-making process is vital to enhance the optimal use of resources and profits. And if we use data-mining tools to support the decision-making process, it would be a great achievement. Judging from the recent developments and the interdisciplinary nature of data mining, one may easily envisage the intensive development in various domains, including bioinformatics, multimedia, textual and web data apart from its specific domain of industrial decision-making.

## Important Facts you Need to know about F.I.R.



Ms Archana Sarma Assistant Professor, School of Law, ITM University

#### A. Introduction

Trime is a common phenomenon ✓ in almost every society. There is hardly any civilization in the world which has not witnessed an upward trend in the crime graph. The task of prevention, control of crimes and collection of evidence in cases of crimes is assigned to the law enforcement agency, i.e., the police, which is an important segment of the criminal justice system. The police has a vital role in the criminal justice administration, which starts with the lodging of a complaint, or what is known as a First Information Report (FIR). An FIR is a written document prepared by the police on the basis of information received from the aggrieved party or any other person first in point of time relating to the commission of a crime. Even if a telephonic message discloses commission of a cognizable offence, it may constitute a First Information Report. It is the primary basis on which the information reaches the police, and only after the registration of the FIR can an investigation process be initiated by the police. An FIR cannot be registered for all crimes and there are circumstances in relation to which it may be registered. Again, it has come to be seen that very often common people are harassed by the police's refusal to register FIRs, which ultimately dilutes the entire process of the criminal justice delivery system.

In the light of all these issues, it is important to understand the laws relating to the filing of an FIR and other associated matters.

# B. Classification of offences and Registration of FIR

Even though an FIR is the primary basis for initiating the investigation process, an FIR cannot be registered for all offences. Based on the degree of seriousness, offences are classified into two categories: cognizable and non-cognizable offences. The literal meaning of the term 'cognizable' is, 'to take note of'. An offence is classified as cognizable if it is of a serious nature, such as murder, rape, robbery, etc. In the case of cognizable offences, the police can arrest an accused or suspect without a warrant, i.e., without an order from the court. Non-cognizable offences are less serious offences, such as defamation, intimidation, giving or fabricating false evidence, etc. In the case of such offences, the police can neither

investigate nor arrest the suspect for an offence without an order or warrant from the court. An FIR is filed only in cases of cognizable offences. Non-cognizable offences may also be reported to the police, but the police will not file an FIR for these offences. Instead, they will register the complaint in the Daily Diary Report. This classification of offences is provided in Schedule I of the Code of Criminal Procedure, 1973.

#### C. Persons eligible for lodging FIR

Any person who is aware of the commission of a cognizable offence can lodge an FIR. It is not necessary that only the victim of the offence should lodge an FIR. In addition to this, a police officer who comes to know about the commission of a cognizable offence can file an FIR himself or herself. The police may not investigate a complaint under the following circumstances:

I) the case is not serious in nature

II) the police is of the opinion that there is not enough ground to investigate

However, the police must record the reasons for not conducting an investigation, and this needs to be communicated to the person providing the information.

#### D. Procedure for filing an FIR

The procedure of filing an FIR is laid down in Section 154 of the Code of Criminal Procedure. When the information about the commission of a cognizable offence is given orally, the police must write it down. Alternatively, the information may be given to the police in writing. The officer-in-charge of the police station is under an obligation to read over the statement written in the FIR register to the person concerned, and the recorded information must be signed by the person giving the information. People who cannot read or write must put their left thumb impression on the document after being satisfied that it is a correct record. The officer-incharge has to make three copies of the FIR, which shall be given to the magistrate competent to try the case, the Superintendent of Police, and the person lodging the FIR, free of cost. The original is retained, for record, in the police station.

E. Contents of an FIR and other requirements

The FIR should contain the following:

- 1. The name and address of the informant
- 2. Date, time and location of the incident reported
- 3. True facts of the incident as they occurred
- 4. Names and descriptions of the persons involved in the incident.
- 5. Names of witnesses, if any.

The FIR should be registered immediately after the occurrence of an offence. In case of delay in the registering an FIR, the reasons for the delay must be explained.

#### F. Refusal to register FIR

It is an obligation on the part of the police to register an FIR for every cognizable offence. However, there are circumstances when the police may refuse to register an FIR on various grounds, such as, when the offence is not a cognizable offence, or to keep the crime rate low, or as happens many a time, when the parties bribe the police not to register an FIR. On facing a refusal to register an FIR, one may approach the Superintendent of Police of the concerned area ,who will either himself or through any other officer get the FIR registered. Apart from this, the Code of Criminal Procedure has also provided under Section 156(3) that an aggrieved person may file a petition before the magistrate asking for a direction to the police to lodge an FIR. However, the judiciary has reiterated on several occasions that if any information disclosing a cognizable offence is laid before an officer-in-charge of a police station satisfying the requirements of Section 154(1) of the Code, the said police officer has no other option except to register a case on the basis of such information. Besides, the Supreme Court of India, in a recent judgment held that a policeman turning away a person without registering his complaint could face

contempt of court charges, which could lead to him being put behind bars if he failed to justify nonregistration of the FIR.

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## Our Other Publications :



Annual Report 2011-12 which won **Honourable Mention** in ' PR, Marketing and Communications' award from Association of Commonwealth Universities for the year 2012





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Website : www.itmindia.edu Vector-Tech, Newsletter of itm University Vol. 12 No. 5 Printed by : www.abcpress.in (M) 9810121172

The Editorial Team thanks Brig (Retd) S K Sharma for overall support and encouragement

HUDA Sector-23A, Gurgaon-122 017, Haryana (INDIA) T : +91-124-2365811-12-13 • F : +91-124-2367488 • E : itm@itmindia.edu