

Vol. 19 No.12



# QUALITY BENCHMARKS



Ranked Top Private University in Haryana and Delhi/NCR and No. 82 amongst universities all India, under NIRF by MHRD, Govt of India



Awarded No.1 Rank in All India Emerging Universities, Higher Education Review - April 2015



Established under Haryana Private University (Third amendment) Act No. 25 of 2009, ordinance No. 2 of 2015 dated 22nd July 2015, Legislative Department, Haryana Government



Recognised by the University Grants Commission, Govt. of India, under Section 2(f) of the UGC Act 1956, and empowered to grant degrees under Section 22 of the Act.

ज्ञान-विद्याय विद्युत्सरोधे



School of Law, NCU Ranked No. 5 amongst Top Law Schools of Eminence, All India and No.2 in North India by GHRDC Law Schools Survey 2016



Ranked No. 8 All India, for Research Productivity among Category 'A' Private Universities in CII-ICI Report 2015



Recognised by the Bar Council of India, Govt. of India

Bar Council of India



Accredited Undergraduate Engineering Programmes



Member of Association of Indian Universities



Recognised as the BEST@govcampus



Accredited by Accreditation Services for International Colleges (ASIC), United Kingdom, in the category of 'Premier' Universities

ACCREDITED 2012 - 2016



Member of International Students Exchange Programme



Member of the Association of Commonwealth Universities



Institutional Member of American Society for Quality (India)

March - August 2016

All information upto 30 August 2016 issued under authority of Chancellor

The NorthCap University

Sector-23-A, Gurugram, Haryana – 122017, India

Phone: 91 124 236 5811 - 12 -13, 4195200

Fax: 91 124 236 7488

e-mail: [ncu@ncuindia.edu](mailto:ncu@ncuindia.edu)

<http://www.ncuindia.edu>

## DISCLAIMER

*While every effort has been made to ensure that the information contained in this publication is accurate at the time of publication (November 2016), all matter that it covers may be subject to change without notice. The information is meant for illustrative purposes only and cannot be quoted as authority, to which the rules, regulations and notifications concerned shall be referred. The University does not intend, by the publication of this magazine, to create any contractual or other legal relation with the students, their advisors or any other stakeholders. The University reserves the exclusive right to change or withdraw, without notice, any statement in this magazine. The NorthCap University, Gurgaon has no other branch in India or overseas.*

# Founder Members



N K Dewan



Kavita Mishra



Shiv Saran Mehra



V Daulet Singh



Neera Makhija



Avdhesh Mishra



Z Daulet Singh

## Vision:

To be known globally for learning innovations, academic excellence and socially relevant research outcomes; strive to become the preferred destination for students, faculty, employers and collaborators & pride of alumni and the community.

## Mission:

- Focus on quality of learning and innovation in all programmes with rigour and relevance.
- Develop competent professionals - innovative, analytical and independent; committed to excel in all their endeavours.
- Develop linkages globally with government, industry, academia and alumni for knowledge generation, dissemination and application.
- Encourage multi-disciplinarity in programmes and projects to explore new frontiers of knowledge.
- Continuously improve physical, academic and information infrastructure in pursuit of academic excellence.
- Create a nurturing environment for lifelong learning.
- Focus on entrepreneurship and socially relevant projects.

## Core Values:

- Integrity in all endeavours.
- Humility, compassion and concern for all.
- Passion for quality and excellence.
- Quest for innovation.
- Leadership and Team Spirit.
- Autonomy with Accountability.
- Perseverance.

## 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

You know, when it comes to finding out what's happening around The NorthCap University, there's nothing quite like your trusted friend, VectorTech. We are ready with 2016's last exciting and interesting edition of VectorTech, the biannual magazine which brings the news of the University.

NCU is not just about classroom lectures and examinations but also seminars, workshops, industrial visits, tours, co-curricular, sports, club activities, social outreach programmes etc. Participation in such activities helps young people to become confident, independent, facilitates in their holistic development and prepares them for lucrative careers and become leaders of tomorrow.

Exposure to talks by the best national and global minds, are an awakener. They motivate and inspire the youth to be innovative and to soar to greater heights.

I am thankful to the staff and students for their continued contributions and cooperation in sharing the information for the magazine. It is a request to all the readers to pen down their ideas and to send articles, technical or non-technical for subsequent issues. A warm note of thanks goes to Brig. SK Sharma (Retd) and Col Bikram Mohanty (Retd) for their valuable support and guidance at every step. Thanks are due to Mr Akhilesh Kumar for his wide ranging photographs and to Mr Lalit Narayan Lal for the layout and graphics of the magazine.

I hope you will like this issue. I request all the readers of VectorTech to mail to me on any aspect of the issue and help to make it an interactive tool, or write in to the Editorial Cell.

Happy Reading!

Rekha Mathur  
Editorial Cell  
Email: [rekhamathur@ncuindia.edu](mailto:rekhamathur@ncuindia.edu)

# Table of Contents



Factfile	01
Message from the Governor	02
Message from the Pro Vice-Chancellor	04
Feedback	05
Recent Achievements	06
Interviews	08
Outreach Activities of Prof. Prem Vrat	11
Outreach Activities of Brig. SK Sharma	14
<b>News and Events</b>	
NCU Students Shine in Startup Competition	15
Technovation 2016	16
Special Lecture by Prof. Kehar Singh	17
Special Lecture on Air Pollution	18
MoA with University of Regina	19
Best BTech Project Awards	20
Students Orientation 2016	21
Workshop on Authentic Leadership	22
Quality Improvement Initiatives	23
<b>News from the Schools</b>	
<b>School of Engineering &amp; Technology</b>	
Department of EECE	24
Department of CSE & IT	29
Department of Mechanical Engineering	34
Department of Civil and Environmental Engineering	37
Department of Applied Sciences	42
<b>School of Management</b>	47
<b>School of Law</b>	50
<b>School of Professional Attachment</b>	54
<b>News from the Centre for Languages Learning</b>	57
<b>News from the Library</b>	59
<b>Student Activities</b>	60
<b>Sports</b>	64

# Table of Contents



## Miscellaneous

International Women's Day	65
Annual Alumni Meet 2016	66
Enactus NCU	67
Eye Checkup Camp	68
Staff Development Programme	69
Fire Fighting Training	70

## Books & Papers Published / Presented

Books/Book Chapters Published	71
Department of EECE	71
Department of CSE & IT	74
Department of Mechanical Engineering	76
Department of Civil & Environmental Engineering	78
Department of Applied Sciences	79
Centre for Languages Learning	80

## School of Management

81

## School of Law

82

## Articles

Role of Higher Education in the Transformation of India	83
E-commerce vs E-business	83
Microwave Heating	84
Intelligent Transportation System	85
The Murder	86
Sketches	86

## In the News

87

## Dean's List Students

88

# Factfile

<b>Nature of University</b>	:	Multidisciplinary, Co-educational University offering Undergraduate, Postgraduate and Doctoral Programmes in Engineering, Management, Law, Applied Sciences and Humanities
<b>Established</b>	:	1996 as affiliated college; 2010 as University
<b>By</b>	:	Educate India Society, as a Private Self Financed University
<b>Located</b>	:	In the industrial heartland of Gurgaon (Located 7 km from Indira Gandhi International Airport, New Delhi)
<b>Campus Address</b>	:	Sector 23-A, Gurugram, Haryana, India, Tel.: +91-124-2365811-13 Email: <a href="mailto:ncu@ncuindia.edu">ncu@ncuindia.edu</a> , Website: <a href="http://www.ncuindia.edu">www.ncuindia.edu</a>
<b>Visitor</b>	:	Prof. Kaptan Singh Solanki, Governor of Haryana
<b>Chancellor</b>	:	V Dault Singh
<b>Pro-Chancellor</b>	:	Prof. Prem Vrat, PhD, FNAE, FNASc, FWAPS, FISTE, FIIE
<b>Pro Vice-Chancellor</b>	:	Brig. SK Sharma (Retd.), FIE, FHA, FITP
<b>Registrar</b>	:	Col. Bikram Mohanty (Retd)
<b>Student Population</b>	:	Undergraduate 3152 Postgraduate 221 PhD 136
<b>Student Gender Profile</b>	:	Female 30%, Male 70%
<b>Faculty</b>	:	200
<b>Scholarships</b>	:	Merit - cum - Means Scholarships available, covering 100%, 50%, 25% of tuition fee, Merit Scholarships, Teaching Assistantship etc. Dean's List of Students, Best Project awards



## Message from the Governor



**Hon'ble  
Prof. Kaptan Singh Solanki**  
Governor of Haryana



हरियाणा राजभवन,  
चण्डीगढ़।

**HARYANA RAJ BHAVAN,  
CHANDIGARH.**

### Message

I am extremely happy to note that ITM University\*, Gurgaon has emerged as one of the leading universities in North India. It is good to see that ITM University has been providing high quality education in Engineering, Management and Law. I am impressed by the way; this University has grown from strength to strength since its inception to become a unique multidisciplinary University of higher learning in North India. I am happy to see an absolute ragging-free environment in the University and its excellent intake and placement records. The ratio of female employees and students in different streams is praiseworthy. With relevant and innovative courses, excellent infrastructure and qualified faculty, ITM University shows its commitment to academic development in India in general and Haryana in particular.

I am confident that the University will continue to deliver quality education to serve as an intellectual resource base in India and the world, I wish ITM University, Gurgaon all the best in its endeavours to achieve academic goals and excellence.

**(Prof. Kaptan Singh Solanki)**

\*Now THE NORTHCAP UNIVERSITY



निजी सचिव / राज्यपाल  
Private Secretary to Governor



हरियाणा राज भवन,  
चण्डीगढ़ - 160 019

HARYANA RAJ BHAVAN,  
CHANDIGARH - 160 019

No. HRB-PSG-2016  
June 1, 2016

4372

Dear Brig. S.K. Sharma Ji,

I am desired by Hon'ble Governor of Haryana to acknowledge with thanks the receipt of your letter of 25<sup>th</sup> May, 2016 and convey his congratulations to you and staff of your University for listed as the top private University in the State of Haryana in the recent ranking list announced under the National Institutional Ranking Framework (NIRF) by the Ministry of Human Resource Development, Govt. of India and wish you further success in the years to come

With best wishes and regards,

Yours sincerely,

(Bakhvinder Singh)

Brig. S.K. Sharma (Retd.)  
Pro Vice Chancellor,  
The NorthCap University (NCU),  
Sector - 23A,  
Gurugram - 122 017  
Haryana.

## Message from the Pro Vice-Chancellor



**Brig. SK Sharma (Retd)**  
Pro Vice-Chancellor and  
Senior Professor

*We are immensely proud that The NorthCap University has been accredited by the National Assessment and Accreditation Council (NAAC) for a period of five years i.e. 2016-2021. Accreditation Services for International Colleges (ASIC), UK has reaccredited the University with distinction for the next four years. The accolades by various organizations, our consistent top rankings in different surveys, a good placement record of students in reputed organizations – all give us the impetus to further improve ourselves.*

*The University offers a dynamic learning environment with programmes that prepare you for a myriad of opportunities that are on the anvil. It is always incorporating the finest pedagogies, education processes and methodologies to ignite your curiosity and infuse real knowledge in your young minds. We want to nurture your curiosity that goes beyond the formal curriculum, and develop in you a love for learning that stays with you always.*

*The University believes in the motto of 'Students First' and emphasizes on your all-round development. We provide the best facilities in academics and extracurricular activities and provide you with opportunities to develop skills and values that you will need for life. Student-led clubs, social, cultural and sports activities enliven the campus with the talent and the camaraderie of individual and collective achievements and prepare you to be mentally and physically fit, so necessary in high demanding job profiles. We nurture you to be good human beings and excel in different realms of life and prove your calibre. We want to give you a broad range of experiences and help you to make the most of your years at the University where you interact with one another and form strong friendships for life.*

*I extend my best wishes to all staff and students of The NorthCap University and wish them the best of luck in all their future endeavours.*



# Feedback

## *Impression of Distinguished Visitors*

*The University is an excellent university producing students of technology, management and law. The atmosphere of the university is very pious and holy suiting to the culture of our nation. It is truly a centre of learning as we aspire. I wish all the success to the University.*

**Prof. Kaptan Singh Solanki**  
The Governor of Haryana &  
Visitor, The NorthCap University

*I have been delighted to come here and was pleasantly surprised at the standard of education being imparted and the discipline. I wish you all the best.*

**Justice RS Sodhi**  
Justice Delhi High Court

*Great experience to be a part of joyous occasion of convocation. I am impressed with the achievements of the University. Wish great things in future also.*

**Prof. D P Agrawal**  
Chairman, UPSC

*I am delighted to visit NCU; it has given hope and confidence about progress India is making- a country free from ignorance and poverty, a country that would be achieving a social and political order.*

**Sri Balmiki Prasad Singh**  
IAS (Retd.)  
Former Governor of Sikkim &  
Union Home Secretary,  
Govt of India

*It was great to be here in this great institution. NCU has a very bright future.*

**Prof. (Dr) Ranbir Singh**  
President, Association of Indian  
Universities and  
Vice-Chancellor,  
National Law University, Delhi

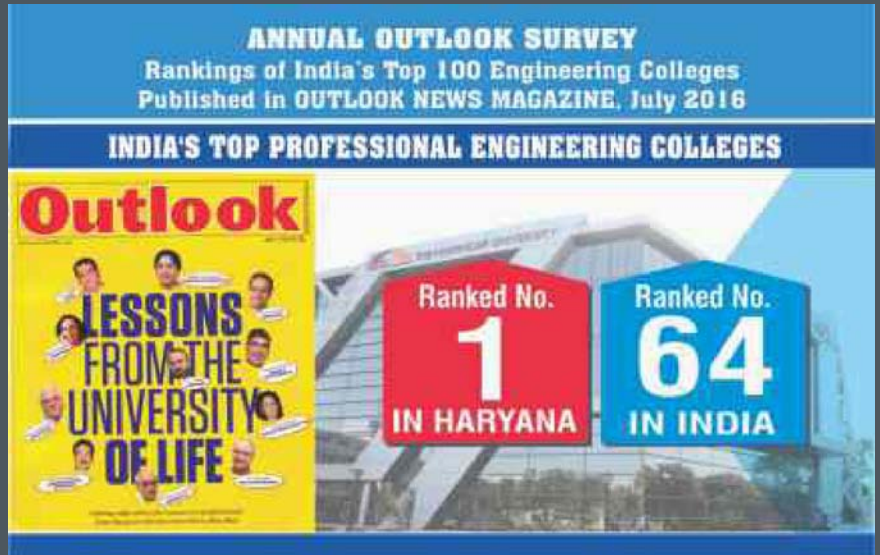
## Recent Achievements

The NorthCap University once again Ranked No.1 Top Emerging University in India

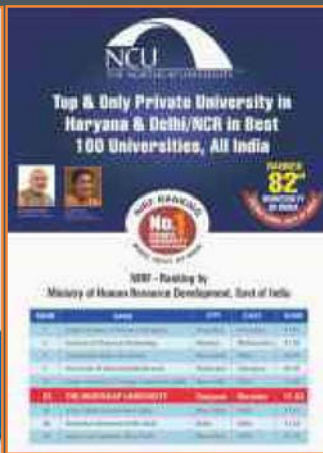


The NorthCap University has been ranked No.1 among Top Emerging Universities in India, in a survey by Higher Education Review, Bangalore in May 2016. The University has reached this pole position successively for two years in a row. It has been also been placed among Top 10 Universities for Academic Excellence, all India.

University Rankings



- ❑ Ranked No. 8 in AAA category All India, for Outstanding Private Multidisciplinary Universities in the survey conducted by Careers360.
- ❑ Ranked No. 12 amongst Top Private Technical Universities All India by The Week Best Universities Survey 2016.
- ❑ Ranked No. 32 amongst Top Private Engineering Institutes by Times Engineering Survey 2016.
- ❑ Ranked No. 64 among all Engineering Colleges in India, including IITs and NITs in Outlook Top Professional Engineering Colleges 2016.
- ❑ Ranked No. 1 Engineering College in Haryana and No. 3 amongst Top Engineering Colleges of Eminence all over India in CSR-GHRDC Rankings 2016.
- ❑ NCU was ranked No 1 Private University in Haryana by Dialogue India in their May-June 2016 issue.



## NCU School of Law ranks Second in North India



NCU School of Law participated for the first time in National Law Schools Survey 2016 conducted by Global Human Resource Development Centre, New Delhi and has been awarded '2nd Rank in the Northern Region' and '5th Rank amongst Top Law Schools of Eminence All India'. It is a matter of pride for the NCU Law School to stand tall among others.

## NCU Emeritus Faculty listed in India Book of Records



Dr DR Agarwal, Professor Emeritus created a national record of being the longest serving faculty with continuous unbroken service in the higher education sector. The India Book of Records felicitated Dr Agarwal with the feat of "Longest Tenure in Academics". Dr Agarwal has been teaching in higher education sector since July 1961, without any break. He is the first and only Indian to achieve this feat. Dr Agarwal, as many would know, has authored a number of books on Quantitative Methods and Business Mathematics to his credit.

## University gets First prize in Garden Competition for 15th time in a row



The University bagged the 1st prize in the Educational Institution category during the HUDA flower festival held on 5-6 March 2016. Our band of gardeners headed by Mr Suresh deserves all praise for the grand and colourful look which they have given to the garden. They diligently worked continuously and took care of the plantations in the University garden. They have made all the efforts to meliorate the garden by planting seasonal flowering plants and protecting them from odd weather and conditions.

It is a matter of great pride that our garden has stood first, continuously for the last fifteen years.

## In conversation with the Pro Vice-Chancellor, Brig. SK Sharma (Retd)



**Brig. SK Sharma (Retd)**  
Pro Vice-Chancellor  
The NorthCap University,  
Gurugram

**T**he NorthCap University's Pro Vice-Chancellor, Officiating Vice-Chancellor & Professor, Department of Civil Engineering, Brig. SK Sharma, shares his views regarding the present and the future of the University with Ms Rekha Mathur, Sr Editor, NCU.

### **Sir, what are the key issues before NCU?**

Quality is the single mantra to excellence and is therefore, the key issue on which The NorthCap University focuses all its endeavours towards having quality students with the best faculty. The key therefore, is to have a quality intake of both students and faculty.

Secondly, employers being the ultimate stakeholders of our services and their feedback is of utmost importance to us. Their inputs help us evaluate and gauge our course content, our strengths and weaknesses and take necessary action to empower our students for a lifetime of personal and professional fulfillment.

The key, therefore, is to continuously strive towards improving ourselves in every sphere and all our decisions are therefore merit based. In pursuit of academic excellence the University upgrades its physical, academic, information infrastructure and support facilities. In short, the focal point of the mission of the University is to provide quality of learning and innovation in all our programmes, consider new areas of

learning and do this with all rigour and relevance.

### **How do you cope with so many important positions you are holding at present?**

Most of the issues one faces are correlated. Therefore in my official capacity, I have the added advantage of getting a 360° view of the interrelated issues and seeing it from different perspectives. This guides me towards a holistic approach to address them.

### **How do you plan to encourage multidisciplinary teamwork at the University?**

Some of the steps to multidisciplinary teamwork have already been initiated. As problems are multifaceted their solutions need to be holistic, having engineering, management and legal aspects to their solutions. To begin with, we have proposed that some of the major projects of BTech 4th Year students should have multidisciplinary teams working on them.

Similarly, to encourage for multidisciplinary sponsored projects we have invited proposals from the faculties of different departments. Prof. A Sen Gupta, Mentor RDIL, is currently finalizing projects involving various groups from the Departments of CSE & IT, EECE, Mechanical Engineering and APS.

Lastly, there is higher flexibility in the course structure in a ratio of 60:40 for Core and Elective. 20% credit for Open Electives give a boost to interdisciplinary courses. A student can choose courses according to his/her interest which leads to multiple interdisciplinary courses in say, the four year BTech programme.

### **How do you propose to enhance benefits of collaboration with foreign universities?**

We have collaborations for BTech student exchange programme with ITB Ireland. Many students have benefited through the scholarships offered by our University and ITB Ireland. For the first time for

MTech students of NCU we have collaborated with the University of Regina, Canada. Under this agreement MTech students from the Departments of ECE and CSE can study at the University of Regina in the second year, after successfully completing their first two semesters at NCU. The students get the advantage of earning a Canadian MEngg degree in the same period, i.e. a total of two years, thus reducing the expenses of a foreign degree.

NCU has collaborated with the Michigan Technological University, USA regarding 3+1+1 programme in Computer Science. Under this agreement, undergraduate students of Computer Science at NCU can go to study at Michigan Technological University in the 4th Year, after successfully completing three years at NCU. Successful completion of this programme by NCU students will lead to a Bachelor's degree in Computer Science and Engineering, conferred by NCU, and a Master's of Science degree conferred by Michigan Technological University, if the master's degree requirements are satisfied.

### **Where do you wish to see NCU after five years?**

The field of higher education is dynamic, ever evolving so we have to keep reinventing ourselves to remain relevant and contemporary. We have to gauge future requirements today and be prepared to face the challenges. Some of the issues for the next five years in this regard are:

- Introduce more inter-disciplinary courses which are at the boundaries of intersecting disciplines.
- Our Engineering Post Graduate courses require to be substantially restructured and improved.
- To have an edge over others we have to impart to our students smart skills such as Machine Learning, Robotics, Business Analytics, Big Data Analytics, Gaming Skills, Critical Analysis skills and more.

- We must offer more opportunities for the learning of the Liberal Arts as a separate area of study or as a Minor area for other programmes.
- We have to supplement the teaching learning process for encouraging Entrepreneurship in a big way.
- Learning rather than teaching be the guiding principle for tomorrow in a 24x7 e-learning environment.
- We have to offer an immersive learning environment that simulates realistic scenarios.

***One Army work culture you would like to introduce in the civilian way of functioning?***

The value system of the Army which is synonymous with sincerity, discipline, integrity, teamwork, being self-driven, ethical and moral values are as crucial in functioning of any organization and must

be encouraged. So are they in the field of education.

***Please tell us about your hobbies.***

I am fond of reading and I like to read on a multitude of subjects. On weekends, I choose to play golf. I am passionate about travelling, particularly exploring less frequented places with my family.

## In talk with Prof. Sanjay Goyal



**Prof. Sanjay Goyal**  
PhD, MDI, Gurgaon  
MBA, Auburn University, USA  
BTech, REC, Kurukshetra  
Professor & Dean,  
School of Management

**P**rof. Sanjay Goyal, Professor & Dean, School of Management, NCU, has over 25 years of international work experience in developed and emerging markets and over ten years of experience as Adjunct and Visiting faculty with leading business schools in India and the UAE. He has worked with premier institutes like IMT Group, IIFT New Delhi, MDI, Gurgaon, ISB, XLRI. His vast industry experience includes Ericsson-India, America, Australia and New Zealand; Tennyson Technologies, Australia etc.

Prof. Goyal shares his views on the changing scenario of businesses and how the School of Management is gearing up not just to prepare students to be a part of

the future but for getting ready to shape the future, in a talk with Ms Rekha Mathur, Sr Editor, NCU. He opined that with the advent of globalization 2.0, technology, digitization, Internet of Things (IoT) etc. there is knowledge/information explosion. The content of businesses has changed from customer experience to customer lifestyle. Environment sustainability is crucial in every business and thus the world needs new economic models.

"At NCU's School of Management it is our commitment to disseminate knowledge relevant to the future. For providing a holistic professional experience to students our chief focus will now be on content, pedagogy and industry exposure. As we work with our students, we aim to prepare them for the challenges of the workplace and equip them with the ability to think for themselves. Assimilation of knowledge and self-learning are important so that students can continue acquiring useful knowledge and using it effectively for planning and organizing people, processes and systems in the organizations they will go on to manage."

"We are reviewing the content, pedagogy and industry relevance of courses offered at SOM. Our approach is outcome based. We are striving to promote more industry specific learning by increasing

the activities that bring us closer to the industry such as more interaction with industry stalwarts and academia-industry collaboration. NCU's Centre of Creativity, Innovation and Entrepreneurship is on my radar and we will soon be able to make it a platform for entrepreneurship at the University."

Prof. Goyal is of the view that The NorthCap University has a distinct advantage as it is located in the industrial hub of Gurugram and has three Schools viz., the Schools of Engineering & Technology, Management and Law functioning from one campus creating opportunities for synergetic learning. He is of the opinion that if the Schools work more closely, the students would be able to get an in-house wholesome experience in a highly techno-pervasive environment.

## Interaction with Prof. SG Deshmukh



**Prof. SG Deshmukh**  
Director, ABV IITM,  
Gwalior

On the sidelines of the Fifth Academic Advisory Board Meeting held on 20 February 2016, Prof. SG Deshmukh, Director, ABV IITM Gwalior, shared his insights on higher education. In an exclusive interaction with Ms Rekha Mathur, Sr Editor, Prof Deshmukh mentioned that the present 10+2+3 structure of education in India is good but there should be special emphasis on skills-based learning that will better equip students to meet India's rapidly changing scenario and growth expectations. To further strengthen 'learner centred education', higher priority should be given to choice based curricula and there should be increased use of ICT in education. Digital learning technologies are a vital component for expansion and

quality, as blended learning and MOOCs have a large potential. Prof. Deshmukh observed that currently there is limited collaboration with the industry but must be strengthened to bridge the supply-demand gap. Sensitization sessions to professionals are important in a 'learner centred education'.

Sharing his views on the skills necessary to make a start-up successful, Prof. Deshmukh emphasized that perseverance and risk taking aptitude are important skills that an entrepreneur must possess. One should be passionate about the project that is being started up and a strong team back up is necessary for a venture to be successful.





## Outreach Activities of Professor Prem Vrat

Pro-Chancellor, Professor of Eminence and Chief Mentor, The NorthCap University



**Prof. Prem Vrat**  
*Pro-Chancellor and  
Professor of Eminence*

- Prof. Prem Vrat was invited as Chief Guest in a Street Play Competition on 'Women Empowerment and Gender Equality' at Mothers Pride School, Dwarka, organized by Brahma Kumaris, Gurgaon Centre, on 1 March 2016.
- As an Independent Director at Air India, Prof. Prem Vrat attended the 71st Board Meeting of the Air India on 4 March 2016, the 72nd Board Meeting of the Air India on 29 March 2016 and the Audit Committee and Board Meeting of Air India on 23 May 2016.
- Prof. Prem Vrat was invited as Chief Guest at Peace Palace, the Palam Vihar Centre of Brahma Kumaris on 7 March 2016 on Maha Shiv Ratri day. He participated in the flag hoisting ceremony during the event.
- Prof. Prem Vrat chaired the Meeting of Internal Screening Committee (Main) for Scientist 'F' for promotion of Scientist 'G' at Recruitment and Assessment Centre (RAC), Defence Research and Development Organisation (DRDO), Hyderabad on 9-10 March 2016 and at RAC, DRDO Timarpur, New Delhi on 12 March 2016. He also chaired the meeting of assessment committee for promotion of scientists to the next higher grade at Recruitment and Assessment Centre (RAC), Defence Research and Development Organisation (DRDO), Timarpur, New Delhi from 25-28 April 2016.
- Prof. Prem Vrat attended the 3rd World Summit on Accreditation (WOSA-2016) on the theme of 'Quality Assurance through Outcome Based Accreditation' organized by National Board of Accreditation (NBA) at The Leela Ambience Hotel, Gurgaon during 18-20 March 2016.
- Prof. Prem Vrat was invited as the Guest of Honour on the 12th anniversary celebration of Shri Shakuntla Singh Memorial Rita Kumar Foundation, organized by Excelsior American School, Gurgaon on 19 March 2016. In the function, Rao Inderjit Singh, Minister of State Independent Charge of the Ministry of Planning and Minister of State in Ministry of Defence was the Chief Guest and Lt Col Rajya Vardhan Singh Rathore (Retd.), Minister of State, Ministry of Information and Broadcasting was the Special Guest of Honour.
- Prof. Prem Vrat was invited to preside over a discussion-cum-seminar on the burning topic 'Freedom of Expression and our Responsibility', held on 20 March 2016 at CCA School, Gurgaon. The function was arranged under the auspices of a well-known literary organization 'Suruchi Sahitya Kala Parivar Samiti Gurgaon'. The learned speakers were Prof. Nirmala Jain of University of Delhi, Dr Sanjay Dubey, Director of Human Rights Commission, Government of India, New Delhi and Mr Sudhir Chaudhary, Editor of ZEE News, New Delhi. Prof. Vrat was also honoured by the organization for his outstanding services in the field of higher education, research and administration.
- Prof. Prem Vrat delivered lectures on 'Operations Planning and Control' at IIT Delhi on 27 March, 10, 17 and 24 April 2016; on 'Rationality, Decision Science and Management' at IIT Delhi on 29 July 2016; on 'Decision Theory' at IIT Delhi on 12 and 20 August 2016 as an Honorary Professor of IIT Delhi.
- Prof. Prem Vrat attended the 10th National Research Conference on 'Integrating Technology in Management Education' as a distinguished speaker at AIMA, New Delhi on 28 March 2016. During the conference Prof. Vrat also delivered the presentation on the title of 'New Learning Ethos & Impact of Internet and Social Media on Learning Culture in a Management School'.
- Prof. Prem Vrat attended the 60th Annual General Body Meeting of India International Centre at IIC, New Delhi on 3 March 2016.
- Prof. Prem Vrat attended the meeting of Management Evaluation & Accreditation Committee (MEAC) on 4 April 2016 at National Board of Accreditation (NBA), New Delhi.
- Prof. Prem Vrat attended the get-together celebration organized by Air India on the occasion of introduction of a new flight from Delhi to Vienna at Hotel Ashok, New Delhi on 4 April 2016.
- As an alumnus of IIT, Prof. Prem Vrat was invited to attend the live webcast of a lecture by His Holiness Dalai Lama on the theme 'Ethics and Happiness' on 9 April 2016 at IIT Delhi.

- ❑ Prof. Prem Vrat attended the two-day Regional Conference on 'Leadership for Academic Excellence in Higher Education' organized by IIM Raipur on the initiative of Ministry of Human Resource Development, Government of India, held at Guwahati University, Guwahati, Assam on 21 April 2016. The conference was participated by Vice-Chancellors, Registrars and Deans of nine Central Universities of North East India, including Viswa Bharati University, Santiniketan. Prof. Prem Vrat delivered the keynote address on the theme 'Leadership Management Framework' and 'Creating and Developing a Shared Vision' during the conference. UGC Vice-Chairman, Advisor NAAC and Joint Secretary, Higher Education, Ministry of Human Resource Development (MHRD) were present during his lecture.
- ❑ Prof. Prem Vrat attended the 10th edition of the Mindmine Summit on the theme 'The Idea of India - Whose India' organized by Hero MotoCorp Ltd at Taj Hotel, New Delhi on 21-22 April 2016.
- ❑ Prof. Prem Vrat attended the Annual General Body Meeting of IIT Delhi Alumni Association at IIT Delhi on 30 April 2016.
- ❑ Prof. Prem Vrat chaired the Academic Committee Meeting of Surajmal Memorial Educational Society at Maharaja Surajmal Institute of Technology (MSIT), New Delhi on 8 May 2016.
- ❑ Prof. Prem Vrat was invited as an Expert for chairing the Faculty Selection Committee Meeting at BML Munjal University, New Delhi on 14 May 2016.
- ❑ As a member of the Advisory Group of Expert on Upgradation of Technology and Leveraging 'Make in India' in Indian Railways, Prof. Prem Vrat visited Rail Wheel Factory (RWF), Bengaluru along with Dr VK Saraswat, Member Niti Ayog and Chairman Advisory Group of Expert Committee and his team on 16 May 2016.
- ❑ Prof. Prem Vrat was invited to attend the dinner hosted by the President of University of Petroleum and Energy, at The Taj, New Delhi on 21 May 2016, on the occasion of 'Decade of graduating students'.
- ❑ Prof. Prem Vrat attended the Meeting on 'SRESTHA' Special Railway Establishment for Strategic Technology and Holistic Advancement) of Ministry of Railways at Niti Ayog, New Delhi on 1 June 2016.
- ❑ Prof. Prem Vrat attended the Selection Committee Meeting for Life Time Achievement Award in Engineering, Prof. Jai Krishna Award, Prof. SN Mitra Award and Outstanding Teachers Award held on 16 June 2016 at INAE Headquarter. The Meeting was chaired by the President INAE.
- ❑ Prof. Prem Vrat attended the General Body Meeting of Fellows of the Academy at Indian National Science Academy (INSA) on 17 June 2016.
- ❑ Prof. Prem Vrat visited 'Indian Railways Institute of Signal Engineering and Telecommunication (IRISET), Secunderabad on 28 June 2016 in the capacity of the 'Advisory Group of Experts' on Upgradation of Technology and Leveraging 'Make in India' in the Railways chaired by Dr VK Saraswat, Chairman, Advisory Group and Member, Niti Ayog (Government of India).
- ❑ Prof. Prem Vrat has been re-appointed as Member of Editorial Board of the 'International Journal of Value Chain Management' published by Inderscience.
- ❑ Prof. Prem Vrat was appointed a member of review committee to evaluate nominations received by IIT Kharagpur for 'Distinguished Alumnus Award-2016' under the category 'Academics'.
- ❑ Prof. Prem Vrat reviewed a research paper submitted for publication in the International Journal of Value Chain Management.
- ❑ Prof. Prem Vrat was invited as Guest of Honour and Speaker on 1 July 2016 for a 3-day National Workshop on OBE and NBA Accreditation at Lucknow, organized by Engineering Staff College of India, Hyderabad.
- ❑ Prof. Prem Vrat was invited as Chief Guest during the inaugural function of Global Initiative of Academic Networks (GIAN) Course on Production Planning for Manufacturing Excellence organized by Department of Mechanical Engineering at Delhi Technological University, Delhi on 4 July 2016.
- ❑ Prof. Prem Vrat was invited by BML Munjal University, Gurgaon on the occasion of Invocation and Orientation Ceremony on 5 July 2016. On this occasion Prof. Vrat delivered a lecture on Leadership and his life experiences to the new batch of MBA Students.
- ❑ Prof. Prem Vrat attended a conference on 'Empowering Administrator for Good Governance and Sustainable Progress' from 8-10 July 2016 at Brahma Kumaris Headquarters, Mount Abu. He also delivered an address on 'Sustainable Progress' as Guest of Honour in the plenary session. Prof. Vrat had discussions with Executive Secretary BK Mrityunjay, Chairman of Education Wing to have 'Thought Laboratories' in Universities to inculcate good human values among students. He also interacted with Dadi Janaki, the 101 years old Chief of the Brahma Kumaris at the World

Head Quarters of Prajapati Brahma Kumaris Ishwariya Vishwa Vidyalaya at Shantivan, Mount Abu.

During the stay, Prof. Vrat visited different facilities including the state-of-art food processing factory of Brahma Kumaris with latest technology, Asia's biggest solar thermal plant fully funded by Govt. of India and UN agencies.

A 20-minute interview of Prof. Prem Vrat on 'Role of Values in Education' was recorded in the studio of Brahma Kumaris, Shantikunj, Mount Abu. The interview was telecast on the 'Peace of Mind' Channel on 28 August 2016 under 'Ek Mulakat' programme.



Prof. Prem Vrat was invited as a speaker at the 7th World Higher Education Summit at Hotel Le Meridien, Delhi on 5-6 August 2016. He was also conferred with the honour of 'Higher Education Leadership Award-2016' at the award ceremony held on 5 August 2016.

- ❑ Prof. Prem Vrat attended a meeting of the Technology Foresight and Management Forum at Indian National Academy of Engineering (INAE), Gurgaon on 19 July 2016.
- ❑ Prof. Prem Vrat has been appointed as the Governor-Chancellor's nominee on the Executive Council of the YMCA University, Faridabad for a period of 2 years from 1 August 2016 by His Excellency the Governor of Haryana.
- ❑ Prof. Prem Vrat was invited as a guest at the 'Protsahan Samaroh' of Surajmal Memorial Education Society (MSES), Delhi on 14 August 2016 to honour newly appointed candidates in Indian Civil Services.
- ❑ Prof. Prem Vrat attended a meeting of ASQ's Advisors of Eminence and ASQ Experts from USA on 20 August 2016 at Hotel Surya, New Delhi. The meeting also celebrated the conferment of ASQ's prestigious John Edward Award on Dr Krishan Kumar, Former Director Maruti Suzuki Ltd, who is the first Indian to win such an award of ASQ.
- ❑ Prof. Prem Vrat was invited by Shri Pawan Agarwal, IAS, CEO, Food Safety & Standard Authority of India (FSSAI) to attend a Commemorative Event with two panel discussions on 'Food Safety in the unorganized sector: Challenges and Opportunity' and 'Food Safety: A shared responsibility', at Hotel Ashok, New Delhi on 22 August 2016. The event was followed by the main programme with Shri Jagat Prakash Nadda, Hon'ble Union Minister of Health & Family Welfare, as the Chief Guest.
- ❑ Prof. Prem Vrat attended a function including release of Prof. MGK Menon Festschrift Volume, the conferment of the second Prof. MGK Menon Lecture Award organized by National Academy of Sciences India (NASI) at Indian National Science Academy (INSA), New Delhi on 27 August 2016.
- ❑ Prof. Prem Vrat attended the meeting of Advisory board of SPIC MACAY at India International Centre, Delhi on 29 August 2016.
- ❑ A paper entitled 'Resource Wastage Due to Stock Induced Consumption Phenomenon: A Case Study of Water Supply System in A Cluster of Residence' by Neeta Sharma and Prem Vrat published in Industrial Engineering Journal, Vol No. IX, Issue No. 02, Feb 2016 has been chosen for the 'Best Student Paper Award 2015-16' by IIIIE. The award was presented to Mrs Neeta Sharma, NCU Research Scholar working under the guidance of Prof. Prem Vrat on 22 October 2016 at 58th National Convention of IIIIE at Nagpur.

## Outreach Activities of Brig. SK Sharma (Retd.)

Pro Vice-Chancellor & Senior Professor, The NorthCap University



**Brig. SK Sharma (Retd)**  
Pro Vice-Chancellor &  
Senior Professor

- Brig. SK Sharma (Retd) attended the 3rd World Summit on Accreditation (WOSA-2016), organized by National Board of Accreditation (NBA) on 19 March 2016 at The Leela Ambience Hotel, Gurgaon on the theme 'Quality Assurance Through Outcome Based Accreditation'. Eminent speakers from industry, corporate

and academia from India and overseas facilitated a free discussion on subjects of concern, including 'best practices' in accreditation and means to improve quality of education.

- Brig. SK Sharma (Retd.) attended the award ceremony of Startup Programme under Happening Haryana Global Investors submitted 2016, held at The Leela Ambience Hotel, Gurgaon on 8 March 2016.
- Brig. SK Sharma (Retd) attended the National Conference on 'Reforming & Rejuvenating Indian Higher Education – A Stakeholders' Perspective' organized by Education Promotion Society for India (EPSI) on 18 May 2016 at India Habitat Centre, New Delhi. The Conference was inaugurated by Hon'ble Minister of HRD, Smt. Smriti Zubin Irani, who spoke about the

forthcoming release of the New Education Policy, the committee for which is headed by Sri TSR Subramanian, Ex-Chief Secretary, Govt. of India.

- Higher Education Review Magazine of May 2016 featured an article of Pro-Vice Chancellor, Brig SK Sharma (Retd) titled, 'The NorthCap University: Tying Parallel Tracks of Education and Research'. The Higher Education Review also ranked NCU as No. 1 Emerging University All India and listed NCU amongst the Top 10 Universities of the country, for Academic Excellence.



Brig. SK Sharma (Retd) and Dr Shilpy Wadhwa were invited by Columbia Asia Hospital, Gurgaon to grace the occasion and celebrate the Blood Donor Day on 14 June 2016. The event was attended by officials from Columbia Asia Hospital and other invitees. NCU extends support to further the endeavours of Columbia Asia Hospital in promoting blood donation. Columbia Asia Hospital is our partner to provide medical services under terms of an existing MoU.

## News and Events

### NCU Students shine in Startup Competition of Happening Haryana



The Happening Haryana Global Investors Summit 2016, organized by Government of Haryana in association with the Startup Accelerator Chamber of Commerce, culminated at Hotel Leela Ambience, Gurgaon on 8 March 2016. The students of NCU performed excellently and bagged two of the top three positions in the Startup Programme of Happening Haryana. Team 'Tag on' comprising Shubham Gupta, Shubham Dawra, Shubhashree Das and Sugshosh Pandey (all from Dept. of CSE&IT) stood first in the competition, while Team 'Bloodline' comprising Vineet Gupta, Pranav Jain, Palash Chhabra and Artika

Manchanda also from Dept. of CSE&IT stood third.

Startup Accelerator Chamber of Commerce (SACC) conducted the prize distribution ceremony for Happening Haryana Global Investors Summit- Startup Weekend 2016 on 11 June 2016 at Rajiv Gandhi Technology Park, Chandigarh. The ten finalist teams were awarded with cash prizes and certificates of recognition. The Prize Distribution Ceremony was presided over by Sh. Devender Singh IAS, Principal Secretary to Govt. of Haryana, Electronics & IT Department.

The budding entrepreneurs had earlier pitched their innovative and fresh ideas which were appreciated by one and all present. The event aimed to encourage students to realize their dream of becoming entrepreneurs. The final day of the Summit at Hotel Leela was graced by the presence of the Chief Minister of Haryana, Mr Manohar Lal Khattar; Education Minister, Mr Ram Bilas Sharma; Finance Minister, Capt Abhimanyu and many senior dignitaries from Govt of Haryana and industries.

In the preliminary rounds, over 300 students from about 50 colleges and universities from 22 districts of Haryana participated and pitched their ideas for startups. In the semi-finals held at The NorthCap University from 4-6 March 2016, 10 teams were selected for the final round, out of which 5 teams were from NCU. The Executive Director of Startup Accelerator Chamber of Commerce, Mr Sumeer Walia was highly impressed with the students' enthusiasm performance and complemented the Vice Chancellor for taking a lead role in this direction.

### National Science Day

To spread the message of importance of science and its applications among students, the University celebrated National Science Day on 29 February 2016 which is organized every year in the honour of Indian Physicist and Nobel Prize winner, Sir CV Raman. The celebration of the National Science Day kicked off with the final round of the National Science Quiz, which was organized with an aim to motivate school children towards taking up science in their higher studies and contributing to the national mission. The preliminary rounds were held earlier in which about 1000 students from 22 different schools from Delhi/ NCR participated. The students also had a tour of the University and its various facilities including labs and library.

On this occasion students of the University demonstrated their innovative ideas and research work in the form of science projects. Some of the main



projects included a new toll gate system, coconut cutting machine, features in an FM radio, polymer matrix, drug detection, and a new water purification system etc. The exhibits were appreciated by the audience including the visiting school students.

Later, the school children attended a special lecture by Prof. A Sen Gupta who delivered a scintillating talk on

'Antarctica- A Fascinating Continent'. The school children were spellbound and awestruck at the unique information they got to know about Antarctica. The awards for the winners of Science Quiz were given by the Pro-Chancellor, Prof. Prem Vrat, while the Pro Vice-Chancellor, Brig. SK Sharma (Retd.) gave away the prizes to the winners of Science exhibition.

## Technovation 2016



The School of Engineering and Technology (SOET) organized Technovation – The Annual Project Day, on 14 April 2016, to provide students a platform to showcase their innovative ideas in the form of projects. During the event, 61 students of BTech Final Year

showcased their innovation through 25 major projects. The event was graced by the presence of eminent educationists including Prof. KL Chopra, former Director IIT Kharagpur; Prof. Kehar Singh, Hon. Distinguished Research Professor, NCU; Prof. Karmeshu,

Professor and Dean School of Computer and System Sciences, JNU; Prof. Ved Prakash Sandlas, Ex Chief Controller DRDO and Ex Director General, Amity Institute of Space Science and Technology (AISST) and Prof. Prem Vrat, Pro-Chancellor, NCU. The visitors were impressed by the passion of the students, the quality of the engineering ideas and the socially-relevant projects displayed. They appreciated the level of projects and talent of the students at NCU. They also provided suggestions for improvement in terms of funding the projects, providing extra credits to students involved in such hardware related projects and encouragement for scalability, saleability and indigenization of parts. Technovation'16 formed the basis for the Best B Tech project awards at NCU which were declared during June 2016 and are covered elsewhere in the magazine.

## NCU gets NAAC Accreditation

A six-member National Assessment and Accreditation Council (NAAC) Peer team visited The NorthCap University, Gurgaon for assessment and accreditation of the University. The University volunteered for NAAC accreditation on becoming eligible i.e. on completion of 5 years as a university with two batches passing out. The visit by the NAAC peer team is significant in the light of the recent good ranking of the University under the National Institutional Ranking Framework (NIRF) issued by Ministry of Human Resource Development, Govt of India, wherein NCU has been ranked as the top and only private university in Haryana and Delhi/NCR to feature in the list. The University has undergone National Board of Accreditation (NBA) earlier for its BTech Programmes and also has earned the Premier University status from Accreditation Services for International Colleges (ASIC), UK.



The NAAC team visited the University from 9-11 May 2016 and inspected the various aspects of the University relating to admission process, research facilities and publications, academic and extracurricular activities, infrastructure facilities, administration, library, students and faculty achievements, medical facilities etc. As of now only 255

universities in the country have been accredited by NAAC out of over 750 universities. We have since received the NAAC accreditation in the 'Good Category' which is yet another mark of distinction for NCU.

## Special Lecture by Prof. Kehar Singh



A special lecture on 'From Physics to Optical Engineering' by Prof. Kehar Singh, SS Bhatnagar awardee and Honorary Distinguished Research Professor was organized on 18 March 2016. The lecture was divided in two sessions of fifty minutes each and was attended by faculty members and students of the Department. During the

informative lecture, Prof. Singh emphasized on all-pervasive nature of optical techniques in various fields of engineering cutting across all disciplines. The topics covered during the lecture included: 2015 as the International year of light and light based technologies, optics/photonics, application areas of optics such as communications, remote sensing, health, manufacturing, energy, environment, defence, astronomy, non-destructive testing, displays, agriculture etc. Glimpses on role played by optical coherence tomography, digital microscopy, negative refractive index metamaterials, light interferometry gravitational observatory, holographic videos etc. were also provided. [APS2016G001]

## Special Lecture on 'International Dimension of Erasmus+ for India'



The University organized a special lecture on 'International Dimension of Erasmus+ for India' by Mr Sanjeev Roy on 25 April 2016. Mr Roy is currently engaged as Senior Higher Education Expert – European Union Diplomacy and Outreach in India and SAARC and DAI Europe for the European Union Delegation to India. Erasmus+ is the European Union student exchange programme for education, training, youth and sports.

The lecture was attended by students and faculty of all the three Schools of the University. Addressing the audience, Mr Roy elaborated about different opportunities of education, training and scholarships for Indian students, research scholars and academic staff in Europe. He also talked about joint Masters degree programme offered by a consortium of European and non-European higher education institutions. He welcomed the students and faculty to apply for Erasmus+ and get benefits of liberal funding available even for a four-day workshop and international exposure.

The session was very informative and the participants interacted with the speaker who responded to their queries aptly.

## Talk on Need for a more Feminised State and Jurisprudence



Ms Mrinal Pande, Indian television personality, journalist, author and ex- chairperson of the Prasar Bharati, delivered a talk on 'Need for a more feminised State and Jurisprudence' on 2 April 2016. Ms Mrinal Pande has been awarded the Padma Shri in 2006 and has written many books apart from her strong presence in the media.

At the outset, she was welcomed by Pro Vice-Chancellor, Brig SK Sharma (Retd). Her lecture drew attention of the audience towards some very important aspects of our society and law. It raised many important questions related to equality, gender parity, crime against women, illiberal laws, women rights and most importantly the true meaning of jurisprudence. She shared her experiences on the subject matter and explained the true meaning of equality of law and the problems faced in the implementation of laws that already exist.

The session was coordinated by Ms Purnima Bajpai from the Department of Civil & Environmental Engineering.

## Special Lecture on Air Pollution



**D**r Pramila Goyal, Distinguished Professor Emeritus delivered a lecture on 'Status of Air Pollution in India' on 19 May 2016. As per 2008-13 study by WHO for PM2.5 data, out of world top 100 polluted cities, 31 are in India. Delhi, one of the most polluted cities of the world, is facing the impact of increasing number of premature deaths due to air pollution related diseases. A major cause of this is high rate of urbanization and increasing number of vehicles on roads.

Dr Goyal also discussed a few serious events related to air pollution in India,

like Bhopal Gas tragedy of 1984 due to the leakage of poisonous gas Methyl Iso Cyanide; study of air pollution during the night of Deepawali in 2015, which revealed that concentrations of PM2.5 and PM10 exceed the prescribed limits (NAAQS) by 5-6 times at all locations in Delhi; study of air pollution during the government's implemented scheme of 'odd-even' in Delhi for 15 days in January 2016. In conclusion she said that emphasis should be laid on reducing emissions at source itself by going for alternative fuels and technology.

## Outreach Activities of Hony. Distinguished Research Professor



**Prof. Kehar Singh**  
Honorary Distinguished  
Research Professor

- ❑ Prof. Kehar Singh, Honorary Distinguished Research Professor, delivered an invited talk on 'Optical Holography: Fundamentals and Applications' at a workshop on 'International Year of Light and Light-based Technologies' held in Dehradun on 13-14 February 2016. The workshop was jointly organized by Doon University and IRDE (DRDO), Dehradun.
- ❑ Prof. Singh served as an expert member on the selection/ assessment committee for the selection of Professors, Assoc. Professors, and Asst. Professors in Applied Optics and Photonics at the University of Calcutta, on 23 February 2016.
- ❑ Prof. Singh delivered a lecture on the Science Day on 29 February 2016 at CSIR-CSIO (Central Scientific Instruments Organization) Chandigarh.

## Outreach Activities of Director SOET



**Prof. Ravindra Ojha,**  
Director  
School of Engineering &  
Technology

**P**rof. Ravindra Ojha, Director School of Engineering and Technology attended a conference on 'Industrial Scenario in Haryana and its future', organized by Business Standard Smart Business at Gurgaon on 8 April 16. During the conference, Prof. Ojha said that emphasis should be on manufacturing excellence and organizations should not have myopic view of their employees.

## Agreement with Indian Meteorological Department (IMD)



**T**he NorthCap University signed a Letter of Agreement (LOA) with Indian Meteorological Department, Ministry of Earth Sciences, Govt. of India for establishment of an Automatic Weather Station (AWS) and

scientific cooperation. Under the agreement, the AWS will be established at the NCU campus. Considering the increased demand of weather data & products and improving weather and climate services, it was felt that both the organizations would mutually benefit in the field of weather monitoring and research. The data will be available for academic and research purposes and to help the public in general awareness. Indian Meteorological Department will provide necessary meteorological instruments and technical maintenance and guidance for the AWS. The agreement has been resulted by the initiatives and efforts taken by Dr Pramila Goyal, Professor Emeritus, Dept of Civil & Environmental Engineering and Applied Sciences, NCU.



## MoA with University of Regina, Canada



The NorthCap University signed a Memorandum of Agreement (MoA) with University of Regina, Canada for Student Exchange Program in MTech (ECE) and MTech (CSE). Under the agreement, MTech students of ECE and CSE at NCU can study at University of

Regina in their second year, after successfully completing their first two semesters at NCU with a minimum GPA of 8. They will get a Canadian degree on successful completion of the course. The students get the advantage of earning a Canadian M.Engg. degree in the same period, i.e. a total of two years, thus reducing the expenses on a foreign degree. The eligible MTech students can contact their Heads of Departments for details.

## NCU's OSA Student Chapter received grant



An OSA grant of Rs. 15,647 has been awarded to The NorthCap University OSA Student Chapter on 7 March 2016 for its functioning and carrying out various activities.

Materials such as posters and banners for promotional events have also been received. The Chapter looks forward to performing student activities both on and off campus under the guidance of Dr Hukum Singh, Chapter Advisor and Associate Professor, Department of Applied Sciences. [APS20160008]

## Interaction with Founder of 91springboard



Mr Pranay Gupta, a successful Entrepreneur and co-founder of the incubation centre – 91springboard visited the University on 13 May 2016 and interacted with Pro Vice-Chancellor, Brig SK Sharma (Retd), Heads of Departments and some faculty members. Mr Gupta shared his exciting entrepreneurship journey after IITD, IIMA to Lehman Brothers. During the interactive session he addressed a wide range of queries pertaining to creating an

E-Cell, facilitating ideation, providing mentoring support to budding entrepreneurs, getting associated with ISBA, funding aspects, role of an incubation manager and support from 91springboard. He would also be addressing the NCU students on this subject in the near future. Director SOET, Prof. Ravindra Ojha would be facilitating further engagement of NCU with 91springboard.

## NCU is Committed University for QEEE

Towards its continuous commitment for quality enhancement activities, The NorthCap University has been participating in the Indian Institute of Technology, Madras QEEE programme. The Committee for Reforms in Technical Education under the chairmanship of Prof. Ashok Jhunjhunwala, IIT Madras, has been constituted by the Ministry of Human Resources and Development (MHRD) with a mandate to bring about comprehensive reforms in technical education.

## Students on Dean's List receive Scholarships



The students on the Dean's List received scholarship awards in a well-attended ceremony on 23 May 2016. The Pro-Vice Chancellor, Brig SK Sharma (Retd) distributed the certificates to the students. 66 out of 84 students were present at the event to receive the awards in person. Brig. Sharma congratulated the students and wished them to continue and achieve better results in the coming semesters.

The 'Dean's List of Students' is prepared each semester to recognize outperformers. Any student who achieves a CGPA of 9.5 and above or has secured the top position in the batch is featured in it.

Congratulations to the candidates on their achievement!

## Best BTech Project Awards

To encourage the young minds to strive for excellence in their BTech projects and recognize their efforts in their graduation journey, the Project Award Committee at The NorthCap University declared the Best BTech Projects on 2 June 16. The projects are evaluated by the Committee keeping in mind 'FOCUS', an acronym of Financial viability of the project, Originality-Innovativeness, Customer-end applicability, Usefulness to society and Sustainability of the environment. The best three projects are awarded with cash prizes of Rs. 1 Lakh, Rs. 75,000 and Rs. 50,000 for 1st, 2nd and 3rd positions respectively and certificates.

The Best BTech Projects for 2016 are:

- a) **1st Prize:** 'Design & Analysis of Controller for Plastic Injection Moulding machine', by Chaitanya Jhanji of Dept of Mechanical Engineering. The faculty guides were Mr Pradeep Rohilla & Mr Abhishek Pratap Singh.

The project provides a low cost solution to control the coolant parameters of a plastic injection mould by controlling the cooling line flow of water using arduino UNO microcontroller, temperature sensors, a solenoid valve and relay. No such technology is commercially available in the market to control the coolant parameters.

- b) **2nd Prize:** 'Low- cost Multi-point Interactive Whiteboards using the WIIMOTE', by Dikshima Guglani, Sandeep Sachdev & Vineet Gupta of Dept of CSE. The project guide was Dr Shilpa Mahajan.

It is a low cost interactive display device that aims to convert a projection surface onto a touch screen resulting in enhancing the human computer interaction. Through this tool Items can be dragged, clicked and copied. A Java application known as PRISM is

also developed to further enhance its usage.

- c) **3rd Prize:** 'Security Box', by Sharad Bansal & Nishant Chaturvedi of Dept of ECE. The faculty guide was Ms Anjali Garg.

It comprises a compact, movable, detachable, expandable security box meant to cover security aspects right from our homes to an individual and beyond.



## Students' Orientation 2016



The University conducted the Orientation Programme for the new batch of students admitted to all the three Schools on 23 July 2016. The event was graced by the presence of the Pro Chancellor, Prof. Prem Vrat; the Pro Vice-Chancellor, Brig. SK Sharma (Retd); the Registrar, Col Bikram Mohanty (Retd), Directors of Schools and Heads of Departments along with faculty members and staff of the University. The programme started with lamp lighting and Saraswati Vandana. After the welcome address by Dr Payal Khurana, Prof. Prem Vrat addressed the

students and motivated them about importance of education and hard work. Brig SK Sharma talked about student activities in NCU, its infrastructure and facilities offered by the University. Col Bikram Mohanty briefed the students about discipline and anti-ragging measures. The briefing to the students continued with examinations, evaluation/grading system, placements, psychological counselling etc. by their respective Functional Heads.

Later, the Departments guided the students to various facilities in the

University and Departments. The students familiarized themselves with a walkthrough of the University.

It was a day of excitement for the new students as they entered a world of higher learning. Expectedly, the students had mixed emotions of anxiety, but with lots of excitement and expectations. The University warmly welcomed the fresh batch of students and wished them all the best during their stay at the University.

The event was coordinated by Dr Payal Khurana, CLL.

## Faculty Orientation Programme

The University organized a Faculty Orientation Programme on 16 July 2016 with an aim to acquaint the faculty with the new processes at the University in its functioning in various domains. The new faculty members were given a warm welcome and were motivated to become effective teachers by Prof. Prem Vrat, Pro-Chancellor who guided them about teaching effectiveness and the rules and zero deviation policy followed in the University. Pro Vice-Chancellor, Brig. SK Sharma (Retd) acquainted the faculty with the result moderation, appraisal process and various other issues. Talking about Research and Publications, he said that faculty should ensure that they send papers in reputed journals and avoid



paid journals. Dean (Academics), Prof. Swaran Ahuja gave guidelines about the procedure to be followed in the new process for labs and lab workbooks. In practicals and lab work, there will

henceforth be more self-work by students and zero tolerance to copying will be enforced.

## Workshop on Authentic Leadership



The University organized a workshop on Authentic Leadership conducted by Dr Pramath Raj Sinha, Founding Dean of Indian School of Business, Hyderabad and Managing Director, 9.9 Mediaworx Pvt Ltd on 28 May 2016, as a part of its outreach activities to share the wisdom of its esteemed faculty. Mr Sinha has a vast and enriching experience with a

multitude of blue chip Indian companies and MNCs. His module on 'Authentic Leadership' focussed on three key lessons:

1. Leaders deliver results and they strive to deliver in all situations. Steve Jobs founded Apple on this philosophy and his famous quote, 'Real artists ship' speaks about the importance of delivering results.
2. Your team's eyes should shine with the vision. Believe in the people who are following you. As astrophysicist Neil deGrasse Tyson summed it up, 'If you want to build a ship, don't drum up people together to collect wood and don't assign them tasks and work, but rather teach them to long for the endless immensity of the sea.'
3. Thank people who have made your life better – they are leaders for you. Leadership is about these small things. Gratitude is vital, it keeps us humble and connected to the people and organizations upon which our success is built.

## Open Workshop on Business Fundamentals

The University organized a one-day Open workshop on Business Fundamentals for aspiring students of Management on 9 June 2016. The workshop was conducted by Mr Pushkal Kumar Pandey, an IIT and IIM graduate and a higher education professional and well-known specialist in Quantitative Techniques, Finance Systems & General Management, Ms Shailaja Manocha, an expert in Consumer Behaviour, IMC and Brand Management and Mr Hitesh Manocha, an IIM Graduate with over 32 years of experience in Sales and Marketing. Mr Pandey is Professor of Finance at SOM, NCU and a visiting faculty in the areas of finance and quantitative methods at various Management institutions.

The workshop, attended by about 50 students and faculty members, provided the students a platform to identify the gaps in their knowledge and practical requirement and helped them solve their queries. It also opened avenues for networking and connecting with their



peers and experienced faculty members.

The workshop commenced with a welcome speech by Dr Ruchi Nayyar, Head, School of Management during which she apprised the participants of the various facilities offered by the School and the teaching pedagogy adopted. In the first two sessions, Ms Shailaja Manocha and Mr Hitesh Manocha introduced the various forms of marketing, the importance of branding and customer relationship and the need to

implement an effective marketing strategy in a rapidly changing business environment. In the subsequent session, Mr Pushkal Kumar Pandey enabled the participants to understand the nuances of finance in a practical and fun format using everyday tools such as newspapers, magazines and real life examples.

## Quality Improvement Initiatives



The first meeting of the Internal Quality Assurance Cell (IQAC) at NCU, post-NAAC accreditation was held on 13 August 2016. The Officiating Vice-Chancellor, Brig. SK Sharma (Retd) welcomed the new members, including two student representatives. The Chairman of the Cell, Brig. Sharma highlighted the initiatives taken by IQAC prior to the NAAC visit, which majorly included review of curriculum, adoption of NBA methodology (program objectives, program educational objectives and course objectives), introduction of Faculty Course Booklet, faculty mentoring scheme and online courses initiative besides numerous industry-academic engagement activities. Quality assurance affects the objectives of the University and helps to achieve it in a systematic manner according to a time plan. He urged the members to work towards achieving the objectives of the University in this regard.

## Workshop on Data Analysis

School of Leadership organized a Workshop on Data Analysis and its best practices at 91springboard, Gurgaon on 2 July 2016. The workshop focused on current trends in data analytics, building blocks of analytics for better business outcomes, how to improve quality of data analytics for startups and large enterprises and how to align analytics with business strategies. The workshop was led by Mr Vivek Mehra, Senior Vice President of Digital Experience, NTT Data Americas, one of the world's leading global analytics and consultancy companies. Mr Mehra has over 20 years of consulting experience in IT strategy, systems integration, and digital technologies implementation. The School of Leadership aims to create a world of business in India that can deal with the challenges of the future, the basic structures, challenges and solutions of data analytics.

## Workshop on The Essence of Leadership and The Art of Communication

School of Leadership organized another workshop on 'The Essence of Leadership and The Art of Communication' on 9 July 2016 with a mission to enable effective leadership in an era of technological and digital disruption in business. The workshop was led by Ms Preeti Singh who has 18 years of experience in communications with organizations including Mckinsey and Company, Indian School of Business and USIS. The workshop also included a lecture by Mr Sanjay Saraf, an expert in corporate training. Some of focus areas of the workshop included the perspectives on what it takes to become a high impact leader, the tools needed to lead others and oneself, and the different types of dialogue which are key to authentic leadership. The workshop was attended by professionals from different institutions and students of the University.



## School of Engineering and Technology

### Department of Electrical, Electronics and Communication Engineering

#### Guest Lectures

An expert lecture on 'Biological Effects of EM Radiations' by Dr Satya Kesh Dubey was conducted by Department of EECE on 18 March 2016. Dr Satya Kesh Dubey is currently working as a scientist in Microwave Measurement group at National Physical Laboratory, New Delhi and holds a PhD from IIT BHU. His areas of research include biological effects of EM radiations, electromagnetic induced transparency, e-field probes and sensors, SAR probes, micro strip antenna, millimetre wave, and computational modeling of biological tissue in EM radiations.

The lecture was attended by research scholars and students of 3rd and 4th year



ECE and EEE along with Prof. Amitava Sen Gupta, Mentor RDIL and other faculty members. It was an informative session where students and faculty got an idea of the latest trends in this domain.

The event was coordinated by Mr Mandeep Singh and Mr Saurabh Sachdeva, Assistant Professors, EECE Department. [ECE2016G003]



A guest lecture by Mr Anand Pimparkar, National Head Transmission, Nokia Siemens Networks, was organized by the

Department on 9 February 2016 which was attended by students of 3rd year and 4th Year ECE along with faculty members

of the Department. During the informative lecture, Mr Pimparkar covered Big Data, Internet of things, 3G (LTE), 4G, followed by latest developments in 5G in industries. He also connected Optical communication and OSI layer model with the present scenario of telecommunication. The lecture extended with career oriented talks on job opportunities for ECE graduates. The session was coordinated by Ms Anjali Garg and Ms Kusum Grewal Dangi. [ECE2016G017]

Ms Gayathri Magie from IBM Team North America addressed students and faculty members of the University on 3 August 2016 to build their awareness on Internet of Things. Ms Magie is the Business Development Executive leading the IBM Watson Internet of Things Academic Initiative. She collaborates with educational institutions worldwide to help faculty and students build IoT skills leveraging IBM resources and platforms available for academia.

Ms Gayatri introduced the concept of 'IoT' to the students and faculty using examples and case studies with the help



of slides and videos. She also introduced the concept of IBM Watson to the students. The students were required to register on the IBM Watson website from which they could download various open source software and even design IoT

applications. The lecture was followed by a Q&A session, where students inquisitively asked questions which Ms Gayatri answered them informatively. [ECE2016G004]

## Workshops Organized

- The Department of EECE organized a workshop on GSM Evolution with emphasis on LTE (long term evolution) on 14 March 2016. The workshop was conducted by Mr Nishant, Sr Manager, Mobile Comm Technologies (India) Pvt. Ltd., Gurgaon. Mobile Comm is a US-based company working in the field of telecom solutions and corporate trainings.

The workshop gave an insight into the latest telecom technology and applications with an industry perspective, which were discussed in an interactive session. The students gained from the insights of the speaker and learned how to fulfill key technical some of the key technical industry requirements. The event was coordinated by Ms Anita Sharma.

- The Department organized a workshop on Virtual Labs by IIT Delhi for students of BTech First Year (ECE, CSE, ME, CE) and BTech 2nd, 3rd and 4th year (ME) on 8 March 2016. The expert team of three members Mr Sajeew Soni, Mr Ashish Ranjan and Mr Prateek Sharma gave knowledge of accessing and performing experiments on virtual labs to the students. They also demonstrated various laboratories under the disciplines of Chemical/Physical Sciences, Computer Science & Engineering, Electronics & Communication Engineering, Civil and Mechanical Engineering. The workshop was organized by Dr Neeraj K Shukla and coordinated by Ms Geetu Lalit, Mr Mandeep Singh and Ms Rakhi Nangia. [ECE2016WO009]
- The Department organized a workshop on 'Hands-on session on Matlab' for students of BTech EEE 3rd year on 17 March 2016. The workshop aimed to give a practical exposure to students on Matlab. The topics covered in the workshop



A one-day workshop on PLC and SCADA was organized by Dept of EECE on 25 February 2016. The workshop was conducted by APTRON Solutions Pvt. Ltd. The workshop had four sessions and covered introduction & career prospects of automation, experience on programmable logic controller designing (PLC), tagging, simulation & practice exercises and SCADA tools & usage.

The workshop helped the students to get hands on experience on PLC & SCADA, which is nowadays in demand for automation in the industries. The students also learnt the programming software, program uploading/downloading and integration between these concepts. Students also practiced the concepts and virtual simulation of Allen Bradley PLC kits. They were assigned some practice problems in the form of projects so that they can apply the gained knowledge towards automation. The workshop was coordinated by Mr Mandeep Singh and Mr Nitin Garg. [ECE2016WO007]

were matrix operations, 2D and 3D plots, basics of programming e.g 'for loop', 'if else statements', 'case statements', declaring functions, image processing, arithmetic operations on images, spatial domain transformations etc. The workshop was coordinated by Mr Mandeep Singh and Mr Pankaj Rakheja. [ECE2016WO010]

- The Department organized a session on 'Small cells and their significance in 4G and LTE' by Mr Rajesh Gupta on 14 April 2016 for students of ECE 6th sem. Mr Gupta is currently working in Engineering Service Group and Research & Development group at Qualcomm Technologies Incorporated, USA. He gave students tips about how to prepare for competitive exams for studying abroad, what to prepare and job opportunities in the US. The students showed keen interest and interacted with the expert. The event was coordinated by Ms Anita

Sharma and Ms Nidhi Sharma. [ECE2016WO016]

- IEEE NCU Students Chapter organized a two-day workshop on 'CISCO Networking' on 17-18 March 2016, in association with Brain Tech (an official partner of IIT Kanpur). Around 70 students from various branches participated in the workshop and got theoretical and practical exposure on computer networking concepts. [ECE2016WO015]



E-Club of EECE Department organized a two-day workshop on LTE and LTE Advance on 21-22 April 2016 for ECE BTech and MTech students. 36 students participated in the workshop which was conducted by personnel from Mobile Communication Technologies (India) Pvt. Ltd. Gurgaon. Practical aspects of LTE were taught on the kits provided by the company in addition to theoretical concepts. The participants also underwent a test at the end of the training. The students found the workshop very informative and useful. [ECE2016WO017]

## Industrial Visits

- On 26 February 2016, the Department organized an industrial visit to Nokia Siemen's Networks, Gurgaon. Around 30 students of BTech ECE 6th sem and MTech ECE were taken for the visit to understand the concepts of wireless and mobile communications better. The students were first briefed about the components of GSM, WCDMA, LTE and their working and then they were introduced to the practical scenario in the labs. The students were very interactive and their queries were aptly responded to by Mr Kashif from the company. The visit was coordinated by Ms Anita Sharma, Ms Mona Aggarwal and Ms Naresh Kumari. [ECE2016V004]
- An industrial visit was organized for BTech 6th sem students on 26 February 2016 to Krishna Maruti Ltd., Manesar. The visit was useful for students to give them practical exposure to manufacturing of electronics components of car and assemblies for motor vehicles and their engines, stamping etc. which they study in their course curriculum. The visit was coordinated by Mr Pankaj Rakheja, Mr Sidharth Bhatia and Ms Amanpreet Kaur. [ECE2016V005]
- An industrial visit was organized for BTech 6th sem students on 4 March 2013 to Sonakoyo Steering. The Sona Group has engineering capabilities in the areas of electronic power steering, machining and assembly, precision forging, cold & hot forging and heat treatment. The group's range of products primarily consists of steering and driveline components for the automotive OEM segment namely passenger cars, utility vehicles, commercial vehicles and specialty vehicles. The students got an opportunity to visit research and development lab. The visit was coordinated by Mr Pankaj Rakheja, Mr Mandeep Singh and Ms Nidhi Sharma. [ECE2016V006].
- The Department organized an industrial visit for BTech EEE 6th sem students on 18 March 2013 to Maruti Suzuki Ltd. Students got an opportunity to visit 11 KVA substation plant, which has 3 gas based and 2 steam based plants. Students learnt about the working of transformers, circuit breakers etc. and visited the control room. The visit was coordinated by Mr Mandeep Singh, Mr Nitin Garg and Mr Pankaj Rakheja. [ECE2016V007].
- A group of 20 students of BTech 4th sem EECE visited Napino Automobiles and Electronics Ltd., Manesar on 25 February 2016. After a session of company's introduction given by Head Corporate-HR, Napino Automobiles, students were taken for a company tour. The students visited different places where various parts were assembled and stored. They also visited design and testing labs where they learned about surface mount technology (SMT) and principles of various machines and observed the automated and physical mounting on the PCBs. Head-HR motivated the students about the future opportunities in the company for summer internships in the electronics section. The visit was coordinated by Ms Pooja Saberwal and Ms Shaveta Arora. [ECE2016V003]
- An industrial visit to mobile switching centre at Aircel Limited was organized for 16 students of BTech 6th sem ECE on 13 April 2016. The students got an opportunity to learn about mobile switching station (MSS server), a 2G core network element which controls the network switching subsystem elements. MSS can also be used in GSM networks. The representative at Aircel Ltd. demonstrated functioning of various networking components including the transmission and receiving stations. The visit was coordinated by Ms Shaveta Arora and Ms Rakhi Nangia. [ECE2016V008]
- The Department organized an industrial visit to BBNL, Ghaziabad for 4th and 6th sem EECE students on 13 April 2016. During the visit, students got a practical exposure to telecommunication, networking



and learned about switching systems, transmission lines, optical communication, 2G, 3G, 4G, networking and PSTN etc. They visited labs and were explained about working and significance of various equipment and their components. They also explored the possibility of summer internship in the company which included a module on telecom switching and networking. The visit was coordinated by Ms Ashu Gautam, Ms Nidhi Sharma and Mr Pankaj Rakheja. [ECE2016V009]

### Alumni Interactions

- The Department organized an interactive session with our alumnus Mr Jagtar Singh (2011 batch) on 11 March 2016. Mr Singh interacted with pre-final year students of BTech and delivered a special talk on 'System on Chip design verification and role of Intellectual Property'. Mr Jagtar Singh is currently working as Design and Verification Engineer at Qualcomm Technologies India Pvt. Ltd. He has worked on the projects related to IP sub-system, SoC verification, development of complete verification suite for IP (AMBA of Synopsys) verification. The session helped the students understand the corporate world practices and future requirements of the industry so that they could prepare themselves for various companies. The event was coordinated by Mr Mandeep Singh and Ms Nidhi Sharma. [ECE2016WO0012]



- The Department organized an interactive session of students with our alumnus, Mr Siddhartha Jaitley on 3 March 2016. Mr Jaitley delivered a lecture on 'Robotics' which helped the students understand the hardware interfacing of the peripherals with the controller. This further gave the possible solutions and outcomes that robotics industry provides. The session was attended by pre-final year BTech students of EECE Department. The event was coordinated by Mr Mandeep Singh, Ms Ashu Gautam and Ms Sheila Mahapatra. [ECE2016WO013]
- The Department organized an Alumni Meet for the students of ECE and EEE 6th sem on 5 March 2016. Eight alumni from different batches visited the University to interact with the students. They talked to the students on how to prepare for different placement tests and interviews. The students raised a lot of queries about various companies and their recruitment processes, which were aptly responded to by the alumni. The students also asked about off-campus recruitment. The HoD EECE, Prof. Swaran Ahuja and

Director SPA, Mr BK Gupta also participated in the alumni meet. The event was coordinated by Ms Anita Sharma. [ECE2016WO008]

- The Department organized an alumni interaction session about the career guidance after BTech for 2nd year students of Electrical Engineering. Mr Deepak Goyal, currently working with TCS, discussed options of higher studies as well as jobs in core or IT sector. He also shared his experience in TCS and provided tips to crack interviews. The session was coordinated by Ms Amanpreet Kaur, Ms Nidhi Sharma and Ms Ashu Gautam. [ECE2016WO018]

### Pre-Placement Interviews

- Pre-Placement Interviews (PPI) for the students of ECE and EEE 6th sem were conducted on 5 March 2016. Panels comprising faculty members and alumni interviewed the students who appeared for the mock interviews. Technical as well as HR questions were asked and tips given to the students for further improvement. The students were appreciative of the feedback they got from the interaction with alumni and placed students.

### Faculty Development Programme



*EECE Faculty during the Faculty Development Programme*

The Department organized a Faculty Development Programme from 1-8 July 2016 which included an IBM capsule on Big Data Analytics for four days and a Java course for two days. Mr Gaurav and Ms Richa presented a brief introduction to Java Programming and hands-on training on Java platform 'Eclipse' to the faculty of EECE. Mr Jithin and Mr Dev, experts from IBM delivered lectures on fundamentals of Big Data, introduction to InfoSphere BigInsights, Apache Hadoop, HDFS and demonstrated different functionalities of BigSheets. On the concluding day of FDP, a test was organized in which Ms Kusum Dangi and Ms Naresh Kumari scored highest. A small quiz session was also conducted for the participants.

## Other Activities

- ❑ The staff development programme on Libre Office was organized for technical staff of the Department on 16 April 2016 through Spoken Tutorials, IIT Bombay. The staff members learned about the installation and working on Libre Office which is a full-feature office suite including word processor, spreadsheet, presentation tool, drawing package and database. Certificates from IIT Bombay were distributed to the participants after the session.
- ❑ The Department invited Ms Bijal Ganatra, Regional Talent Acquisition Lead, Reliance Communication Ltd. for hiring of our BTech ECE and MBA students. The organization conducted an aptitude test followed by personal interview on 21 April and 10 May 2016. The organization was pleased with the quality and technical knowledge of our BTech ECE students and offered placement to seven students. Reliance Group's flagship company, Reliance Communications is India's foremost and truly integrated telecommunications service provider. The interaction with the company and subsequent follow up was done by Mr Saurabh Sachdeva. [ECE2016II001]
- ❑ A mock test was organized by the Department on 29 April 2016 for the 6th sem ECE and EEE students with an objective to prepare them for the upcoming placement drives. Around 180 students appeared for the mock test. The test covered questions on aptitude, logical reasoning, verbal reasoning and C, C++ programming. The test was



Students during Mock Test

coordinated by Mr Saurabh Sachdeva.

- ❑ The Department organized in-house summer training for ECE BTEch 1st year students on 25 and 26 May 2016. This is a unique initiative by the Department to provide hands-on learning experience, starting right from first year. The objective of the training was to cover basic electronic components, use of various electronic equipment and measurement devices. After the training, students were allocated projects for their summer vacation as a part of training. The event was coordinated by Mr Mandeep Singh and Mr Naman Joshi.



- ❑ An IGATE test was organized by the Department on 25 May 2016 for students of 2nd, 4th and 6th sem ECE, 6th sem EEE and 4th sem EE. The objective behind organizing the IGATE test was to prepare students for placements, PSUs, GRE, GMAT, GATE and other competitive exams. Around 410 students appeared for the test. The test covered questions on aptitude, logical reasoning, verbal reasoning, technical and general knowledge. The test was coordinated by Ms Geetu Lalit and Ms Deepti Chahar with support of EECE and CSE technical staff.
- ❑ The Santulan Society organized a poster making competition on the theme 'Save Tigers' on 29 July 2016 in support of the international campaign to save the tigers. Participants made colourful posters and wrote pertinent articles on the subject. The prize winning poster was made by Ms Kanika. The event was coordinated by Ms Kusum Dangi, Asst. Professor.

## Faculty Activities

- ❑ Mr Mandeep Singh along with three EEE students of pre-final year attended a Conference on 'R&D for Energy Sustainability' on 31 March 2016 at Power Management Institute (PMI), Noida. The theme of the conference was on emerging technologies for facing the future challenges of power industry to achieve the ambitious mission by GOI to provide affordable & clean power to all by 2022. The conference was organized by NTPC Energy Technology Research Alliance (NETRA). [ECE2016A001]
- ❑ Dr Mayank Srivastava chaired a session on 'Image Processing and Applications' at IEEE International Conference on Computing, Communication and Automation –2016 (ICCCA- 2016), held at Galgotias University, Greater Noida on 30 April 2016. The conference focused on latest trends in image processing.
- ❑ Dr Neeraj Kr Shukla participated in the 'Workshop on Cadence, Synopsys and Mentor Graphics' held at BITS Pilani K K Birla, Goa Campus from 16-20 May 2016. The objective of the workshop was to train beginners and to crack technical and design issues for current researchers using EDA tools such as Mentor Graphics, Synopsys and Cadence. [ECE2016WA006]

## Orientation Programme

The Department organized an Orientation Programme for 1st year ECE Students on 23 July 2016. The students were made aware of credit programme details, outcome based learning concept, attendance rules and other information about the Department. They were taken to Departmental labs to give them an overview of the practical exposure they are going to have in their BTEch programme.

## Department of Computer Science and Engineering & Information Technology

### Departmental Activities

#### Guest Lectures

- ❑ A special lecture on 'Importance of Mathematics in Engineering' by Prof. Karmeshu from JNU, New Delhi was conducted on 28 March 2016. Students of BTech CSE 2nd sem attended the lecture and interacted with the guest speaker. The lecture was coordinated by Mr Sandeep Singh. [CSE2016G022]
- ❑ The Department organized a guest lecture on 'Introduction to Security Enhanced Linux (SELinux) and its applications in Android (SEAndroid)' by Mr Mayank Maheshwari, Senior Architect, Hughes Systique Corporation on 7 April 2016. Mr Mayank covered multiple topics like satellite communication, TCP protocols, Linux kernel etc. The faculty coordinators for the event were Ms Meghna Sharma and Mr Anil Kumar Mishra. [CSE2016G023]
- ❑ Mr BS Pandey conducted a guest lecture on 'IT recruitment trends in USA, UK and India' on 19th April 2016 for BTech third year students. The session was coordinated by Mr Anil Kumar Mishra. [CSE2016G027]
- ❑ The Department organized a lecture by Prof. BK Gupta, Director SPA on 18 April 2016 for 1st year students. The students were updated about how to prepare for placements and the expectations that industry holds from a Computer Science student. They were also motivated to focus more on programming to perform well during placements. The session was coordinated by Dr Latika Singh, Ms Geetika, Ms Supriya Raheja, Ms Poonam and Ms Yogita Gigras. [CSE2016G026]
- ❑ The Department organized the second lecture of 'Pedagogy Training' series for the Department faculty on 2 April 2016. Dr Naveen Prakash, in an interactive session, explained Bloom's Taxonomy,



A guest lecture on 'Deep Learning' by Prof. RK Agrawal, Dean, School of Computer & Systems Sciences, JNU, New Delhi was organized by the Department on 11 March 2016. During the lecture, Prof. Agrawal enlightened an audience of around 50 students and 10 faculty members on the vast applications of deep learning like computer vision, character recognition, automatic speech recognition, natural language processing and bio informatics. He explained the basic concepts of classification and neural networks and covered the concepts of deep learning based on set of algorithms that attempt to model high-level abstractions in data by using multiple processing layers with complex structures. He could capture the attention of the audience very well as he explained the concepts with practical examples on character recognition. The lecture was organized by Ms Rita Chhikara. [CSE2016G021]

Cognitive, Affective and Psychomotor domain. With the help of the simple story of 'Little Red Riding Hood', he formulated various questions. The questions were from various categories like Remember, Understand, Apply, Analyse, Evaluate and Create which helped faculty to understand how to go about improving the quality of question papers. It was coordinated by Ms Richa Chhabra.



working as CEO of Pyramid Cyber Security – NexGen Cyber Security & Forensics and has more than 25 years of experience in ICT industry. Mr Gupta advised and provided deep insights into how Indian enterprises and Government leverage can use ICT and Information Security to compete and grow in the global economy. The lecture was attended by MTech students and PhD scholars along with faculty members who got to know about job opportunities, latest



- ❑ The Department organized an expert lecture on 'Cyber Crime and Digital Forensics' by Mr Alok Gupta on 8 April 2016. Mr Gupta is

tools, technologies and trends in the field of cyber security. The event was coordinated under the guidance of Dr Latika Singh, HoD CSE/IT, Dr Meena Kumari, Dr Prachi and Mr Anil Kumar Mishra. [CSE2016G024]

- The Department organized a guest lecture on 'Recent Industry Trends of Information Technology' by Mr Pankaj Bajpai, Solutions Architect, Bharti Airtel Ltd on 6 August 2016. The lecture discussed about the future of IT industry, mobiles, cloud computing, Big Data and opportunities for engineers in IT industry. The lecture was attended by Director SPA, Mr BK Gupta and students of CSE 3rd semester. It was organized by Dr Kavita Khanna, Associate Professor. [CSE2016G001]
- Mr Sharad Marathe, Founder, Universal Technical Systems (India) Pvt Ltd., a US based company visited the Department on 6 August 2016. He interacted with the final and pre-final year students of CSE and discussed about the 'Ticket Solver Software', designed by his company. He also provided an opportunity to our students to explore and work on the software. The session was very interactive and students benefitted by knowing the utility of the software. The interaction also opened up some real time projects for development of our students. [CSE2016G002]



Mr Sharad Marathe interacting with students

## Workshops Organized

- The Department organized a workshop on 'Developing Course Descriptions' from 26- 30 May 2016. Prof. Naveen Prakash started the session with basic differences in terminologies like course, curriculum, and programme and then explained how to define course objectives, outcomes, lecture plan and lab experiments. All participating faculty members and PhD scholars worked in groups and developed the required material for the subjects that are to be taught in the next semester. The workshop was coordinated by Ms Richa Chhabra.
- The Data Sciences group of the Department organized a 5-week Summer Training Programme on Big Data Analytics in which topics like big data and Hadoop, map reduce framework, machine learning were covered. During the training, students did hands-on practice on various tools. Dr RK Aggarwal from JNU and Dr Himanshu Gupta from IBM delivered lectures in the programme under the coordination of Dr Latika Singh, HOD, CSE&IT.

## Other Activities

- The Society of Cyber Security Education and Research (SOCER) was launched to work in the domain of cyber security, cryptography, ethical hacking and related areas. The Society serves as an appropriate platform to exchange information and ideas by organizing talks of eminent speakers on the latest research topics, conducting workshops, promoting research projects on cyber security and



hacking, providing trainings and more. The Society offers courses in network security & cryptography, intrusion detection systems, cyber security, reverse engineering & malware analysis, secure coding & vulnerability, ethical hacking and SQL injection & web hacking.

- Working in the area of cyber security, the SOCER society of the Department has taken the Data Security Council of India (DSCI) Membership in April 2016. DSCI was set up in 2008 by NASSCOM and has around 500 members across different sectors. DSCI through its Corporate Membership program provides topical, validated, globally acknowledged and action oriented services to its member companies to promote data protection in the various industry verticals and build trustworthiness of Indian companies at the global arena.
- The Department conducted second phase of Pre-Placement Interviews (PPI) for 3rd year CSE&IT students on 5 March 2016. Six alumni working in reputed software industries like Gartner, Inc., Infosys-Business Technology Consulting, Guavus Network Systems, Tata Consultancy Services Limited and Evolphin Software were invited to conduct the PPI for 50 students. Students were given the detailed feedback regarding their technical/attitude parameters. The event was organized jointly by Alumni Cell and Industry Institute Interaction Cell.



- A team including Senior Data Scientist, Senior Data Analyst and HR Manager from Annik Technology Services Pvt Ltd visited the CSE/IT Department to conduct

the internship interviews in the specialized field of data sciences and analytics for the final year students of Data Analytics group. The visiting team was impressed with the technical skills of students in the area of data sciences and offered placement to one of our students, Akshay Nagpal (12CSU022).

- The Department organized a session on 'Pedagogy Training' for the faculty on 19 March 2016 which was conducted by Dr Naveen Prakash. During the session Dr Prakash covered various aspects including importance of vision and mission for an organization. He also involved faculties in various activities based on case studies.
- The Department of CSE&IT has signed an MoU with Michigan Technological University (MTU), USA for the 3+1+1 program wherein a BTech student can complete his fourth year from MTU. He/she can also complete his post-graduation in one year from MTU. Teacher training and academic research programmes are also a part of the collaboration.
- The Department of CSE&IT is pleased to share that an MoU has been signed with Doctor Insta, a software venture based in Gurgaon offering us various opportunities for summer internship, joint projects and consultancy projects.
- The Department is pleased to share that an in-house BTech project of 'Temperature Monitoring' under the guidance of Dr Prachi has been deployed in the University that helps in monitoring of the temperature.
- To teach art & science of cryptanalysis of ENIGMA machine which was used in World War II, a movie screening of 'Imitation Game' was organized for students of BTech IT 6th sem and MTech Computer Science with specialization in Cyber Security, on 15 March 2016 in the auditorium. The audience experienced it as fun-filled, educational and enlightening event which was coordinated by Dr Meena Kumari.
- The Department took an initiative for FOSS (Free and Open Source Software) training by IIT Bombay through Spoken Tutorials project for 2nd, 4th and 6th semester students in the areas of FOCP, OOPS II, DBMS and Software Engineering. 220 out of 225 enrolled students of 2nd sem cleared FOCP, 206 out of 210 enrolled students of 4th sem cleared OOPS II and DBMS, and 105 out of 108 enrolled students of 6th sem cleared Software Engineering. The qualifying students received certificates from IIT Bombay. The event was coordinated by Ms Mehak Khurana and Ms Garima Sharma.
- The Department organized a mini project competition on 19 April 2016 for 6th sem students of CSE. Ten groups participated in the event and demonstrated their projects based on the latest technologies in the field including android application development, web mining etc. The competition was judged by an industrial expert Mr BS Pandey from New Vistas, Noida who was impressed with the performance of students. The competition was organized by the faculty members Ms Neha Sahu and Dr A Charan Kumari.
- Dr Amardeep Kahlon, Professor of Computer Science at Austin Community College, Texas visited the Department on 11 and 12 August 2016. She addressed the students and faculty regarding the online resources and various methodologies that we can follow in the classroom teaching. She also had a discussion with different research groups in the Department. The meeting was interactive and very fruitful. Her suggestions for improvement in curriculum & academics at the CSE Dept have been taken up for implementation at the University level as well.
- The Department organized CCNA Module-1 CISCO Certification course from 1–27 July 2016 which was attended by 35 candidates. The participants enthusiastically learnt the concepts and protocols of Computer Networking. Besides regular training, this certification course also comprised quizzes and tests which were appreciated by the participants who enjoyed the hands-on configuration sessions on routers and switches. The event was coordinated and conducted by Dr Shilpa Mahajan, Ms Hitesh Yadav and Ms Neeti Kashyap.
- The Department conducted a short term course on Digital Repository and Storage Management in association with NITTTR Chandigarh from 1-5 August 2016. The course covered concepts on tools for digital repository, normalization techniques for storage management, Cloud technology etc. The course was conducted through live sessions and was attended by the CSE&IT faculty members. It was coordinated by Ms Jyotika Pruthi and Ms Poonam Sharma under guidance and support from Dr Latika Singh, HoD, Dept of CSE&IT. [CSE2016WA03]
- The Department has taken initiatives to tie up with IIT Madras for conducting Quality Enhancement in Engineering Education (QEEE) program for students to bridge the gaps and enhance their all-round development towards employability. In the current semester, course on Cloud Computing has been introduced for final year students where live lectures are being delivered by IIT Delhi Faculty, Prof. SC Gupta and projected in remote classrooms including NCU.
- Data Analysis group and Research group of NCU, DRAGON, conducted a test on 21 August 2016 for final selection of the students who would be involved in data analysis related projects as well as preparation for the placement in the related domain.
- The Department organized CCNA Module-1 CISCO Certification

## Industrial Interaction

Ms Anuradha Dhull and Dr Akansha Singh visited DeitY, Delhi, Department of Electronics and Information Technology on 11th April, 2015 along with 24 CSE 4th sem students, to create awareness regarding Digital India and various projects being worked upon.

## Society Activities

- ❑ A workshop and competition on HTML, CSS and JavaScript was conducted by the Google Students' Club on Basic Web Designing on 13 April 2016 where all the first year students flocked in to master their web designing skills. The session was delivered by final year IT students, Rashi Aggarwal and Vineet Gupta. Google Students' Club President (Alpha), Rishabh Nainani thereafter enlightened about the programming language, JavaScript which helps in improving designs of a webpage. The event was coordinated by Ms Jyotika Pruthi and Ms Rita Chikkara.
- ❑ A coding event was organized on 2 March 2016 by the student coordinators of CSI Student Chapter, under the guidance of faculty members Dr Deepti Gaur and Dr A Charan Kumari. 39 students participated in the event. Sandeep Yadav, Rohit Malhotra and Sachin Kushwaha of CSE 4th sem students held the first three positions respectively.
- ❑ The final year students Vineet Gupta, Siddharth Ahuja, Shyam Shaw and Pranav Jain conducted a training session followed by an overnight competition on cyber security for 6th sem students (CSE &IT) on 21 April 2016. Out of 40 students 4 winners were selected on the basis of approach of solving the question and the time taken by them. Himanshu Yadav, Kunal Gulia, Mayank Sharma and Shubham Bansal were declared winners of the competition. The event was organized by Ms Mehak Khurana.

- ❑ Alumni Cell of the Department organized a webinar on 'Data Analytics' on 12 April 2016. The talk was given by our alumnus, Mr Vishal Gupta who is an Associate Consultant with Microsoft Global Services. Mr Gupta covered brief introduction of Data Analytics followed by its application areas. He provided information related to various opportunities available in data analytics and how to acquire adequate skills to excel in this upcoming field. The event was coordinated by Ms Neeti Kashyap and Ms Poonam Sharma. [CSE2016G025]

## Industry Institute Interaction Cell Activities

- ❑ The IIIC Cell of the Department conducted the final round of pre-placement interviews on 16 April 2016 in which a total of 25 students were interviewed by four alumni.
- ❑ The Cell started a paid summer internship drive for 3rd year CSE/IT students. After interviewing, three students were selected for internship in Daksha Imaging Technologies Pvt. Ltd, Gurgaon, two in AgBe Technologies, Gurgaon, three in VDoIT Technologies, two in Doctor Insta and three in Protinus Infotech Pvt. Ltd.
- ❑ Mr Yogesh Gupta, a Cyber Security expert from Federal Govt. of USA visited the SOCER group working on cyber security and discussed about various latest issues and opportunities in this domain.
- ❑ With the efforts of IIIC Cell for internships, two students got selected in Pyramid Cyber Security and Forensic Pvt Ltd., two students got selected in Hughes Systique Software, two students got opportunity to work with DRDO and three students with Deity.

## Faculty Development Programmes

- ❑ The Department organized a two-day FDP 'Saksham' to give impetus to the National Mission of Education through ICT (NMEICT) of MHRD with a common objective to building connectivity and knowledge network among and within institutions of higher learning in the country. Saksham enables faculty of higher education institutions to navigate through new technologies and hone the skills required to be an effective mentor and ICT champion. A team of two, Mr Vamsidhar Pothula and Ms Hemlatha conducted the FDP at NCU from 27-28 June 2016 and trained the faculty to make productive use of the tools and MS products/programmes. 21 faculties attended the FDP which was conducted under coordination of Dr Latika Singh, HOD CSE&IT and was organized by Ms Neha Sahu. It was an initiative taken up by Mr Deepak Satyarthi.



- ❑ The Department conducted a Faculty Development Programme on 'Digital Forensics' from 4-7 July 2016 by Mr Manoj, alumnus of ITB, Ireland. The FDP was attended by PhD scholars and faculty members. During the comprehensive workshop, students and faculty members solved criminal cases in the field of Digital Forensics with the help of latest tools and technologies. The event was coordinated by Dr Prachi under the guidance of Dr Latika Singh, HoD.
- ❑ The Department organized an FDP on 'Application development using IBM BlueMix' in collaboration with IBM from 11-14 July 2016. Mr

Anupam Bhattacharya, an IT Architect from IBM conducted the session. All the faculty members of the Department enthusiastically participated. The four-day workshop included hands-on practice of Boilerplate which is a container for an application and its associated runtime environment. The event was coordinated by Ms Richa Chhabra.

## Faculty Activities

Dr Naveen Prakash was invited as a resource person for Outcome based training at Siliguri Institute of Technology from 11-13 March 2016, to conduct the pedagogy training session for the faculty.

Prof. Prabha Sharma attended the Central Council Meeting of the Operational Research Society of India at Kolkata, on 12 March 2016.

Prof. Sharma was invited for the meeting of Central Council of Operations Research Society of India, as a member and also to be a part of the celebrations of Mahalanobis Day at the SV University, Tirupati, Andhra Pradesh on 29 June 2016.

Dr Akansha Singh chaired a session on Evolutionary Algorithms for Image Processing applications on 18 March 2016 during 10th INDIACOM 2016 organized by BVICAM, New Delhi. She also participated as a chairperson in a special session during the conference.

Mr Anil Kumar Mishra was invited to deliver a live lecture on 'Principles of Software Engineering' on EDUSAT network which was telecast live through VYAS channel by Consortium for Educational Communication (CEC), an inter-university Centre of University Grants Commission (UGC).

Ms Anuradha Dhull reviewed the manuscript for the International Journal of Rough Sets and Data Analysis (IJRSDA).

Ms Anuradha Dhull, Ms Poonam

Sharma, Ms Neha Sahu and Ms Jyotika Pruthi were part of technical program committee during INDIACOM 2016 organised by BVICAM, New Delhi.

Dr A Charan Kumari served as a Programme Committee (PC) member for CICN 2016 Conference and reviewed three papers for an International Conference on Computational Intelligence and Communication Networks.

Dr Charan Kumari was invited as a Plenary Speaker to the prestigious 2nd World Bio Summit & Expo during 10-12 October 2016 at Dubai, UAE. Bio Summit 2016 is a specially designed cluster conference which is being organized on the theme 'Recent Advances in Bioscience'. It created a platform for the interaction between experts around the world.

Dr Vijendra Singh has been appointed as International Program Committee Member, 10th International Conference on Computing Technology and Information Management, held on 5 - 7 July 2016 at Seoul, South Korea.

Dr Singh has also been appointed as an Editorial Board Member in International Journal of Information and Decision Sciences, Inderscience, UK and Editor of the International Journal of Social Computing and Cyber-Physical Systems.

Dr Latika Singh, Dr Meena Kumari, Mr Anil Kumar Mishra and Ms Prachi visited Pyramid Cyber Security – NexGen Cyber Security & Forensics, New Delhi on 4 April 2016 and interacted with Mr Alok Gupta. The discussion was held regarding an MoU, providing summer internships to our students and conducting guest lectures at the University. The lead was provided by Departmental Placement Coordinator, Mr Anil Kumar Mishra.

Prof. Meena Kumari had a discussion with Dr Anu Khosla, Director, DRDO, Ministry of

Defence and the team members Dr Rajesh Pillai, Scientist G and Ms Sarvjeet Kaur, Scientist F on 14 June 2016, to discuss the possibilities of getting projects in the area of cyber security. During the visit a discussion was also done with Dr Dhananjay Dey, Scientist F, SAG, DRDO, Ministry of Defence to take the feedback and inputs on the progress of three B.Tech students, who are doing internships in the area of 'Hash Functions'.

25 faculty members from the Department visited about 42 companies for students' industrial feedback. The feedback received has been excellent in terms of technical knowledge and proficiency of students. Two of our 3rd year students have also been offered placements, one in VDoIT Technologies and other in Opinia 360.

Ms Jyotika Pruthi was declared Runner-up in Northern Zonal Level in IET UK's PATW (Present Around the World) Competition 2016, held at Bhartiya Vidyapeeth, New Delhi on 13 August 2016. It is third time in a row that she represented the Delhi Zone in the competition.



Ms Jyotika Pruthi at PATW Competition 2016

## New Faculty

- Dr Kavita Khanna joined the Department as Associate Professor.
- Ms Jyoti Sahni joined the Department as Assistant Professor.

We welcome them to the Department.

## Department of Mechanical Engineering

### Departmental Activities

#### Automotive Technical Festival – Saksham 2016

The SAE Collegiate Club of the University organized its technical-cum-automotive festival, 'Saksham' 2016 from 10-12 March 2016. The fest, based on 'Make in India' theme, witnessed support from core industries like Maruti, iCAT, Mahindra, John Deere, etc. About 250 students from over 30 different universities and colleges across North India participated in the fest and showcased their projects and technical skills. Technical events were a prime attraction in the fest and included the SAENIS student convention, national level project display competition, battle of bots, cross-bow design and manufacturing, aero-model design and manufacturing, national design challenge amongst others. Leisure activities like LAN gaming event, mini-militia event and cultural performances were also organized. The automotive events with display of modified cars,



TSD navigation rally and off-road rally event were appreciated by all.

The idea behind organization of this fest was to enhance the technical capabilities of the students. This vision is not only to teach students about the theoretical knowledge and the concepts but also to make them learn about the practical usage of that knowledge by making them

apply to real life challenges. Being organized for the first time in North India, the event inspired the students to organize more such automotive-cum-technical festivals and encourage students to imagine and innovate. [MED2015WO008]

#### Workshops organized



A workshop on 'Renewable Energy – Solar PV Cells' was organized for 6th sem students of Mechanical Engineering from 27-29 April 2016 under the aegis of Indian Society of Heating, Refrigerating and Air Conditioning Engineers (ISHRAE). The workshop was coordinated by the Society Coordinator, Dr Amit Arora along with Dr Rohit Singh Lather and Dr Pramod Bhatia. It witnessed talks from speakers from Prime Vision Automation Solutions, Gurgaon. A total of 74 students participated in the workshop and had hands-on experience on solar panel sizing and design calculations. [MED2016WO001]

The Department organized a two-day Auto-Mob Workshop on 22-23 April 2016 in the University premises for its students. The experts from Go4tech, New Delhi shared brief knowledge about 'Current trends in Automobile and Internal-Combustion Engines'. The key attraction of the workshop was hands-on practice on two-wheeler and four-wheeler engines by disassembling-assembling the engines. The workshop helped the students understand the concept in a better way which will ultimately help them during their placements. The workshop was coordinated by Mr Deepak Monga, Mr Gagan Baradia and Dr Ankur Gupta. [MED2016WA005]



*Auto-Mob Workshop*



## Alumni Interactions

- Mr Vijay Singh Dalal (alumnus 2015 batch) visited the Department on 16 March 2016. Mr Dalal interacted with the first year Mechanical Engineering students and motivated them to pursue higher education. Mr Dalal has been selected for Masters programme of EBS University for Business and Law, Germany. He shared his insights on pursuing higher education in engineering in foreign universities for PG programmes. The interaction was coordinated by the alumni team members Mr Anmol Bhatia, Mr Gagan Baradia, Ms Deepa Manani and Dr Sunil Hans (APS). [MED2016G002]

## Industrial Interactions

- The Department organized an industrial visit to a Maruti Suzuki authorized workshop in Gurgaon on 16 March 2016 for students of Mechanical Engineering 8th sem. Students learnt about the latest technologies in the field of repair and maintenance of vehicles, layout of workshops, procedures of various maintenance and preventive maintenance of the



vehicles. They also got a practical exposure on opening and closing of job cards and inventory demand and consumption procedures. The visit was coordinated by Prof. JK Gera, Mr Ravinder Kumar and Mr Mukesh Kumar.

- The Department organized an industrial visit to Multitex Filtration Engineers Ltd. (MFEL), Greater Noida for BTech (Mechanical) 4th and 6th semester students on 22 April 2016.

The Department organized pre-placement interviews for the 3rd year students on 19 March 2016. Four alumni, Mr Prateek Sirohi (Sr Engineer, Sona Okegawa Precision Forging Limited), Mr Aman Singh (Design Engineer, CB& I, Gurgaon), Mr Kunal (Design Engineer, CB& I) and Mr Vivek Sihag (Business Development Manager, Flour Daniel, Gurgaon) conducted the process. The experts interviewed the pre-final year students and gave scores on the required parameters like technical knowledge, communication, HR skills etc. Students were given detailed feedback after the session. The session was coordinated by the Alumni Cell Coordinators, Mr Anmol Bhatia, Mr Gagan Baradia and Dr Sunil Hans and Departmental Placement Coordinators, Mr Ashwini Sharma and Mr Anuj Sharma. [MED2016O011]



## Society Activities

- The Personage Society of Department of Mechanical Engineering organized a Group Discussion on 'Is Make in India initiative, fruitful?' on 5 February 2016. The students participated in the discussion with zeal and expressed their views for and against the motion. The session was worthwhile for the students to understand an Engineer's roles in Make in India initiative. It was a healthy discussion in which various new ideas were floated. The session concluded with the proposal that youth should be facilitated with proper skills & training to make this initiative fruitful. Mr Anmol Bhatia and Mr Gagan Baradia from



Mechanical Engineering Department judged the students and their presentations. The session was coordinated by Ms Deepa Manani (faculty coordinator for Personage Society). [MED2016O008]

- A debate activity was organized under Personage Society on 15 March 2016, for students of BTech 6th sem. The competition was adjudged and moderated by Mr Anmol Bhatia and Mr Gagan Baradia. The teams were well prepared and they used various skills like overstatement, definitions, irony etc. to put forward their viewpoints. The participants, armed with statistics and data made their arguments emphatic with their positive body language. The event was coordinated by Ms Deepa Manani. [MED2016O009]
- A two-day Mock Aptitude Test was organized under Personage Society for Mechanical Engineering students of 6th sem on 12-13 April 2016. The session was coordinated by the Society Coordinator, Ms Deepa Manani. [MED2016O010]
- Under the aegis of Indian Society of Heating, Refrigerating and Air Conditioning Engineers (ISHRAE),

the Society Coordinator Dr Amit Arora organized a quiz competition for the students of Mechanical Engineering on 10 May 2016. A total of 107 students participated in the competition. In a tough competition, Divyang Suri stood first while second position was shared by Abhimanyu Ohlyan, Ashish Gupta and Chirag Singhal whereas third position was shared by Chandranshu Bhardwaj, Karan Mahipal and Yatin Chawla. [MED2016O016]

### Faculty Activities

- Mr Gagan Baradia, Assistant Professor worked as a Program Coordinator in Yuva Prerna Yatra 2016 from 3-9 April 2016. Yuva Prerna Yatra is an initiative of I For Nation Foundation, Noida with the motto 'Empowerment through Enterprise'. During the journey, the participants got an opportunity to interact and learn from 'Champions of Change', the unsung heroes, who have not only dared to dream but also realized their dreams into sustainable enterprises by utilizing the local

resources and talent, thereby creating local livelihood opportunities and reducing migration in the Himalayan region. [MED2016WA003]

Mr Baradia had an interaction with Mr Suneel Abrol, General Manager (Projects) ALP Polymer Park (P) Ltd., Gurugram on 10 June 2016 to discuss the opportunities for collaboration with The NorthCap University. This may bring some sponsored projects for the faculty members of the department and good internship and placement opportunities for students. [MED2016O021]

- Mr Ashwini Sharma attended a 3D Design summit of Solid Edge organized by Siemens and Sapcon Systems at Crown Plaza, Okhla, Delhi on 15 July 2016. [MED2016WA004]

Mr A Sharma was selected as the member of Academic Advisory Board by Fraternity of Mechanical Engineers (FMAE), a national level society involved in improving the degree of learning and the standard of design challenges such as

Formula kart design challenge in the country. [MED2016O018]

- Dr K Mathiyazhagan has been nominated as an examiner to evaluate the PhD thesis and was invited to conduct the public viva-voce examination at Anna University, Chennai. [MED2016O019]
- Dr Feras Al-Hakkak visited Honda Cars India factory at Greater Noida on 21 July 2016 to supervise the industrial training of University's Mechanical Engineering students. [MED2016O020]

### New Faculty

Mr Kishore Kumar Guru joined the Department as Assistant Professor (Sr Scale).

Ms Arohi Mathur, Mr Mohit Kataria, Mr Sanchit Mewar, Mr Praveen Singh,

Mr Satnam Singh and Mr Jag Parvesh Dahiya joined the Department as Assistant Professors.

We welcome them on board.



## Department of Civil and Environmental Engineering

### Departmental Activities

#### Guest Lectures

- The Department organized a guest lecture for the students of 4th and 6th sem on 4 March 2016, conducted by Mr Ashok Garg, Deputy General Manager, Project Division, Engineers India Limited. Mr Garg has over three decades of experience in the field of engineering and project management on construction practices and management.

Through the lecture, Mr Garg shared his experiences with the students and discussed the problems faced at construction sites. He also shared some interesting videos and case studies on the subject. [CEE2016G004]

- The Department organized an expert session on 'Design of inter modal terminal at Varanasi along Ganga river' by Mr Ram Avtar Garg on 15 March 2016, for the students of 4th and 6th sem. Mr Garg has a vast experience of over 45 years, serving at varied posts in Irrigation Department UP, Utrakhand and Lok Nirman Vibhag Utrakhand.

During the interactive lecture, Mr Garg presented the actual project details of the design of inter modal terminal at Varanasi along Ganga river. He demonstrated the construction of well foundations used in the project and had an in-depth discussion on the project cost. The lecture was coordinated by Ms Purnima Bajpai. [CEE2016G005]



- The Department organized a guest lecture on Quality Control of Roads by Mr Om Prakash Sharma, IDSE (Retd Chief Engineer) on 17 March 2016, for the students of BTech 4th, 6th and 8th sem. The session was very informative as he shared and discussed the real time challenges and problems faced at the site during the construction of roads. He gave an overview about the Pradhan Mantri Gram Sadak Yojana (PMGSY). Mr Sharma also discussed various quality tests to be conducted to render the construction materials suitable for the construction of roads. During the interactive session, he discussed some case studies on the subject and responded to the queries of the students. [CEE2016G006]



- The Department organized a guest lecture on 'Critical Issues for Water Supply Projects in Haryana' by Mr Ram Niwas Malik, Engineer-in-Chief (Retd) from Haryana State Industrial Development Corporation Limited (HSIDC) on 16 August 2016 which was attended by 5th semester BTech students. Mr Malik is presently associated as Advisor to DLF group on SEZ Project. During the session, Mr Malik shared his vast experience of 37 years and discussed about the maintenance problems suffered by various rural and urban water supply schemes. He further elaborated on the deteriorating quality and insufficient yield of raw



*Guest Lecture by Mr Ram Niwas Malik, in progress*

water sources in urban areas of Haryana. The faculty coordinator of the session was Mr Shubham Bansal. [CEE2016G007]

- The Department organized another guest lecture on 'Values and practices of a good engineer' by Mr DK Goel, Sr Vice-President, Reach Promoters Pvt. Ltd., Gurgaon (RPPL) and owner and CEO, Greenmax Infrastructure, Gurgaon, on 20 August 2016 for 3rd semester students. Mr Goel has more than 28 years of experience in the infrastructure and real estate industry.

In an interactive session, the speaker shared his real life experiences and practical application of various techniques with the students which they are currently studying. [CEE2016G008]

#### Workshops Organized

- The Department organized a workshop on Revit Architecture software on 24 February 2016 for the 2nd year students. The workshop was conducted by CADD Centre, MG Road, Gurgaon. The objective of the workshop was to make the students understand the software applications of estimation and costing. The workshop helped the students understand the importance of Revit Architecture software and its applications in the field of Civil Engineering.

Trainers from the CADD Centre illustrated the applications of the software and its practical approach in order to simplify the work at construction sites. The event was coordinated by Ms Purnima Bajpai.

[CEE2016WO003]



## National Level Design Competition



Ashutosh Goyal, 2nd year student of Civil Engineering, qualified at the zonal level and moved to the State level conducted on 12 March 2016. [CEE2016WO002]

The Department organized a National Level Design Competition for the students of Civil Engineering and Mechanical Engineering, in association with CADD Centre, Dwarka. The preliminary screening round was conducted at the University on 23 February 2016 in which a total of 70 students of both departments participated. A total of 20 students were shortlisted for the second round. The second round at the zonal level was conducted on 3 March 2016 which witnessed participation of students from more than 30 colleges/universities from Delhi/NCR. The event was coordinated by Ms Purnima Bajpai.



## National Science Day

5 teams from Dept of Civil & Environmental Engineering participated in project exhibition held on the occasion of National Science Day on 29 February 2016. Laxman Yadav and Ankit Walia won the 1st prize in the competition for their project on 'Experimental Analysis of Permeable Concrete Pavement' under the guidance of Ms Garima Srivastava and were felicitated by the Pro Vice-Chancellor, Brig SK Sharma (Retd). The Department congratulates all the participants and the winners.



## Faculty Development Programme

□ A 5-day faculty development programme on bridging the gap between industry and academia was organised by the Department from 6-13 June 2016. The FDP consisted of various events and sessions taken by experts from the industry as well as academia. The FDP included sessions on orientation of faculty on improving the teaching-learning process and curriculum design and development by Brig SK Sharma

(Retd), Pro Vice-Chancellor NCU; Cyclone Monitoring, Prediction and Disaster Management by Dr Jenamani from the Indian Meteorological Department; on bridging the gap between industry and academia by Mr Nitin Sethi, AGM Punj Lloyd Ltd; on communications skills by Ms Aditi Bhola from Centre for Languages Learning; and on moderation, tracker criteria, BTech projects, improvements in laboratories, VC

innovation fund etc. by different department faculty members.

□ The last day of the FDP consisted of a visit to India Metrological Department (IMD) located at IGI Airport, New Delhi where the metrological scientist briefed the faculty members about the working of the advance metrological equipment like CAT-I, CAT-II, CAT-III, automatic weather station, Doppler radar and air quality



monitoring systems.  
[CEE2015FO003]

### Staff Development Programme

- A Staff Development Programme was organized by the Department on 25 June 2016 where two lab engineers, Mr Rajpal and Mr Sohan Lal along with a faculty member Mr Shubham Bansal got hands-on training for cement, aggregate and hardened concrete testing. The training was conducted by Mr Lalit Kumar Vermani, Deputy Manager (Retd) NCB Ballabgarh and Mr SC Huria, Ex-GM, NCBM. The speakers gave suggestions to digitalize the testing machines in order to improve existing laboratory facilities. They also enlightened about the significance of maintaining IS standards to get accurate test results.

### Pre- Placement Interview

- On 5 March 2016, the Department organized pre-placement interviews for the 3rd year students who will be appearing for placements in the next semester. The main purpose of conducting the PPI was to give the students an experience of appearing in an interview and also to make them understand the importance of preparedness during an interview. The PPI was conducted by five alumni of the Department from different batches, working in different areas of Civil Engineering. The students were

judged on the basis of their technical skills, HR skills, overall grooming, GK, presentation etc. Feedback was provided to the students for their improvement. [CEE2016O005]

### Consultancy

- The NorthCap University Testing Centre (NCUTC), established for the mechanical testing of construction materials in the field of Civil Engineering, has been actively involved in providing the consultancy services to the external agencies. NCUTC follows the guidelines provided by NABL and quality management system as discussed in ISO 17025–2005. Recently, the testing centre has received consultancy works from

various agencies both private and government existing in Delhi-NCR region. The Centre now awaits the final assessment by NABL.

### SRC Meeting

- The Department conducted SRC of four PhD students, Ms Vaishali Sahu, Ms Anju Bala, Ms Ruchi Gupta and Ms Geetha Varma on 4 July 2016 and four students, Ms Niragi Dave, Mr Sameer Gaur, Ms Monika Rani Malhotra and Mr DK Srivastava on 6 July 2016 under the chairmanship of Prof. Pramila Goyal and Prof. SK Kaushik respectively.

### Online Course for Knowledge Enhancement

Under an initiative of Dr Amit Srivastava, HoD & Mr Akx Malik, Assistant Professor, the Department is participating in QEEE (Quality Enhancement in Engineering Education) programme initiated by MHRD partnered with IIT Madras. In this programme, IIT-M faculty delivers live lecture classes to approximately 25 participating colleges at a time around the country. The programme provides supplement study material with lecture notes, live class videos, discussion forums, and assessment & evaluation tools for QEEE courses. At the end, a proctored quiz is conducted and auto-evaluated. Finally, digital certificates are provided to successful students. [CEE2016WO004]

The following lectures under QEEE programme were conducted for students in the months of August and September 2016:

Sr. No	Name of the course	Date & Month
1	<b>Shear Force &amp; Bending Moment Diagram</b> (aligned with Structural Analysis – I - CEL 201)	9 August 2016
		10 August 2016
		12 August 2016
2	<b>Bending &amp; Stresses in Beam</b> (aligned with Structural Analysis – I - CEL 201)	16 August 2016
		19 August 2016
		23 August 2016
3	<b>Tests on Concrete</b> (aligned with Building Materials & Construction - CEL 209)	9 September 2016
		12 September 2016
		19 September 2016

## Alumni Interactions

- Mr Raghav Gupta (2008-2012 batch) interacted with students of 3rd year, Civil & Environmental Engineering and guided them about scope of PG courses in Family Managed Businesses. He completed his PG in FMB from SP Jain Institute of Management and Research, Mumbai and is now running his own company GD Buildtech Pvt. Ltd., Delhi. He shared his experience after completing his BTech in Civil Engineering, and highlighted some tips to set up a new company. [CEE2016O006]



- Mr Deepanshu Yadav (2011-15 batch) interacted with CEE students of first year on 27 April 2016 to guide them on various options they can pursue after graduation. He highlighted the scope of MTech, MS, PSUs, MBA and business, stressing on the major differences between each one of them. He suggested the students to plan towards the domains of their interest and start working towards it early. He shared his experiences regarding procedures to apply for admissions in foreign universities



Mr Deepanshu Yadav with students of CEE

for pursuing higher studies. Students were highly enthusiastic and keenly participated in the interaction. [CEE2016O008]

- The faculty of the Department interacted with Mr Mayank Gupta (2009-2013) who is currently pursuing Masters in Construction Technology and Management from IIT Delhi. They had a discussion regarding preparations required for cracking GATE/ IES. Mr Gupta highlighted various important aspects of preparations required for competitive exams and suggested that the Department should plan for providing certification in specialized areas. [CEE2016O012]
- The faculty of the Department interacted with Mr Dilpreet Singh (2009-2013) who has completed his Masters in Civil Engineering with specialisation in Structures from The NorthCap University. They had discussions on preparations required for cracking GATE/ IES. Mr Singh highlighted the use of white board in teaching practices and stressed that there should be interactive learning and discussions between students and teachers rather than only teachers giving instructions to the students. [CEE2016O013]

## Mentor-Mentee Interactions

- The Department organized mentor-mentee meetings with Dr YP Anand, Former Chairman, Railway Board, Ministry of Railways, Govt. of India on 24 February 2016. Faculty members of the Department discussed various aspects of teaching and the progress in their individual research works with their mentor. The mentor provided various inputs and feedback to the Department to improve the quality of work culture and research activities. [CEE2016O007]
- Dr Anand had a second mentor-mentee meeting on 30 May 2016. After the discussions, Dr Anand also delivered short lectures on the topic, 'The Role of Prefabrication in Construction Industry' and 'Wastage of Water in Distribution System' for the faculty members of Department. [CEE2016O010]
- The Department organized mentor-mentee meeting with Prof. PK Swamee on 9 May 2016. Faculty members of the Department discussed various aspects of teaching and the progress in their individual research works with the mentor who provided various inputs and feedback. [CEE2016O009]

## Summer Internship Visits

The following faculty members of the Department visited industrial sites/ corporate offices to interact with the officials and obtain feedback on summer internships of 2nd and 3rd year BTech Civil Engineering students. The visits also helped in developing liaison with industries for consultancy, projects, placements and other academic activities in which industry professionals can be involved. The visiting faculty members received positive feedback of students and a good response for consultancy, training and research projects. Some suggestions were also given regarding upgradation of laboratory testing facilities by introducing certain new equipment. The Department looks forward to working on the same in the near future. [CEE2016O011]

Site Visited	Faculty
National Highway Authority of India	Ms Megha Kalra
DLF Home Developers	Dr Anil Kumar Mishra
M3M India	Ms Garima Srivastav
CSMRS, Mahindra Luminaire & CPWD	Mr Lokesh Choudhary

## Faculty Activities

- ❑ Ms Purnima Bajpai, Asst Professor was invited as a panellist for the discussion on 'Emerging Issues and Opportunities in Power and Transport Infrastructure' on 15 March 2016 held at IIT Delhi, where representatives from Ministry of Power, Ministry of Road Transport and Highways, Planning Commission, CERC, CEANHAI and Ministry of Railways were present. She gave a presentation on her area of research to the panel which was appreciated by all.
- ❑ On invitation, Prof. S Krishnamoorthi attended an event on 'Digital Landscape' co-hosted by Google and Unipro Education, a certified Google Partner on 14 March 2016 at Google, Gurgaon. The latest insights and trends including sessions from Google experts were held to show how digital platforms can help propel higher education.
- ❑ Dr Amit Srivastava received an invitation to be the Guest Editor for the special Issue of International Journal of Forensic Engineering (Inderscience Publishers), on the topic Structural failures, Professional Negligence, Risk, Reliability and Liability in Forensic Civil Engineering.
- ❑ Mr Lokesh Choudhary and Mr Dhruv Sood, Asst Professors attended the 3rd Edition of World of Concrete, India organized jointly by Informa Exhibitions US and Inter Ads Exhibitions Pvt. Ltd. from 18-20 May 2016 at Pragati Maidan, New Delhi. The event witnessed participation of more than 3,500 professionals from India and overseas and included showcase of various innovative technologies and sustainable construction materials. Some of the companies at the event showed interest in being invited to the university for seminars/ guest lectures on the innovative technologies used in the construction field.
- ❑ Mr Shubham Bansal along with Dr Amit Srivastava visited three

Mr Lokesh Choudhary was invited at the inauguration function of a new block of Guru Daksh Industrial Training Center, Hisar and was felicitated by Mr Ranbir Singh Gangwa, MLA (Nalwa Constituency) and former MP Rajya Sabha and Mr Bhupender Singh Gangwa, Ex-Chairman, Haryana Mati Kala Board, for being a source of inspiration to students.

On invitation, Mr Choudhary also went as an External Examiner on 11 April 2016 for conducting practical examination for Material Testing-I Lab of BTech Civil Engineering (4th semester) students at Amity University, Manesar.



industrial sites/offices and interacted with the officials to obtain feedback of summer internships of 2nd and 3rd year BTech students. They also interacted to develop a liaison with industries for consultancy, projects, placements and other academic activities. They received a good feedback about students and positive response for consultancy, training and research projects.



Some suggestions were given regarding upgradation of laboratory testing facilities by introducing some tests such as Bend Rebind Test for steel reinforcement and Centrifuge Extractor for determination of bitumen content. The Department will be working on the same in the near future.

- ❑ Dr Anil Kumar Misra was invited to join as a member of Advisory/ Organising Committee of Asian

Advanced Materials Congress (ASAMC) and solicit his advice and support in organizing the Congress to be held during 11-16 March 2017.

## Student Placements

The Department congratulates the following students of final year on their job placements:

S. No.	Name	Company
1.	Mr Apoorve Gupta	SKC Infrastructure Pvt Limited
2.	Mr Ashish Ahlawat	SKC Infrastructure Pvt Limited
3.	Mr Samarpit Chauhan	M/s Jainco Pvt Limited

## GATE Qualifiers

The Department congratulates the following students of the final year for qualifying GATE with flying colours:

S.No	Name of Student	Percentile
1.	Gaurav Singh Mann	99.54%
2.	Gaurav Goet	98.95%
3.	Aditya Singla	95.96%

## New Faculty

Mr Akx Malik joined the Department as Assistant Professor.

We welcome him on board.

## Department of Applied Sciences

### Departmental Activities

#### International Conference on Engineering Physics, Materials and Ultrasonics

The University organized an International Conference on Engineering Physics, Materials and Ultrasonics (ICEPMU) from 3-4 June 2016, in association with Materials Research Society of India (Delhi Chapter) and Ultrasonics Society of India. The aim of the Conference was to bring together researchers from India and abroad to present and discuss their latest research and developments in a range of topics in Physics with applications in engineering which would give an impetus to new ideas and directions to research in these areas. The inaugural address was delivered by Dr Satheesh Reddy, Scientific Advisor to Raksha Mantri, on the Role of Academia, Research institutes and industry in growth of futuristic technologies in India, wherein he emphasized that materials research is important for technological growth of India. Prof. Vikram Kumar, President, Ultrasonics Society of India and Professor IIT Delhi spoke about materials and ultrasonics research needed for improved sensors, for detection of diseases, defects in explosives etc. In the plenary session, three keynote addresses were delivered by Prof. ESR Gopal, SS Bhatnagar Awardee, former Director, National Physical Laboratory and Emeritus Professor at Indian Institute of Science Bangalore, on 'New Temperature Scale based on precision sound velocity measurement'; Prof. KL Chopra, SS



Bhatnagar Awardee, former Director of IIT Kharagpur and Hon. Distinguished Research Professor, NCU on 'Thin Films - From Fifth State to Nano-State of Matter' and Prof. Niloy Dutta, Department of Physics, University of Connecticut, USA on 'Optical Correlators'.

More than 70 participants from all over India and abroad, from universities and research institutes attended the conference. Over 70 research papers including invited talks were presented in nine oral and two poster sessions. The eminent invited speakers included Dr Mekonnen Abebe, Defence University, Ethiopia; Prof. Kehar Singh, SS Bhatnagar Awardee, former Professor IIT Delhi and Hon. Distinguished Research Professor, NCU; Dr AK Gupta, former Director, Instruments Research and

Development Establishment, Dehradun and DRDO Fellow and Prof. Amitava Sengupta, former Acting Director, National Physical Laboratory, New Delhi and Director, RDIL, NCU.

Prof. Prem Vrat, Pro-Chancellor, NCU commended the Department of Applied Sciences in successfully organizing the conference. Speaking on the occasion the Pro-Vice Chancellor, Brig. SK Sharma (Retd) expressed the hope the conference would help forge new linkages among participants and faculty from The NorthCap University for more research collaborations.

The Conference was sponsored and supported by Science and Engineering Research Board (SERB) and Defence Research and Development Organization (DRDO). [APS2016CO001]

### Guest Lectures

- A series of lectures on 'Information Optics' by Prof. Kehar Singh, SS Bhatnagar Awardee and Honorary Distinguished Research Professor at NCU, was organized by the Department of Applied Sciences. The first lecture was held on 21 April 2016 and the second in continuation was held on 5 May 2016. The topic of Information Optics is a part of the curriculum of first year CSE students. The lectures were attended by 50 CSE students of 1st year and faculty members teaching Physics.



*Lecture on Information optics by Prof. Kehar Singh, in progress*



During the first session, Prof. Singh emphasized that the 21st century is the century of optics in which optical information technology is going to play a major role. He compared the optical information technology to electronic information technology and optical computers to electronic computers. He explained the fundamental concepts of optical information technology in which Optical Fourier Transform (OFT) of the object domain is obtained using optics into the Spatial Fourier Frequency Domain and vice-versa.

During the second lecture, Prof. Kehar Singh talked about Liquid Crystal Spatial Light Modulator (SLM) and explained about optically addressable SLM using photo refractive crystals and electrically addressable E-SLM using liquid crystals. He explained the working principle of NLC – SLM using many intricate diagrams. Many applications of E-SLM were also mentioned in the lecture. [APS2016G002, APS2016G003]



*Dr Shankar Aggarwal addressing students*

Dr Shankar Aggarwal, Senior Scientist, National Physical Laboratory, Delhi was invited to deliver an expert talk on 'Air-pollution monitoring'. The session was attended by faculty members of the Department and students. During the lecture, Dr Aggarwal explained many state-of-the-art equipment used to monitor and measure air quality and air pollution. Later, Prof. Pramila Goyal, Prof. Amitava Sen Gupta and Dr Sangeet Srivastava discussed with Dr Aggarwal to explore the possibility of conducting air quality monitoring and modelling at NCU. [APS2016G004]

## Industrial Visits

- An industrial visit to Roop Automotives, Sohna was organized by the Department on 7 May 2016 for Mechanical and ECE students. The organization is one of the largest OEM Suppliers of auto components and has a strong presence in Tier-II segment of the industry.

The visit started with an orientation conducted by Head HR followed by the visit to the Plant 1 and 2. The students visited the manufacturing division of the company in which various machining processes like turning, boring, knurling, thread cutting etc. were explained. The students visited the assembly department in which the steering assembly was explained to the students. A talk from Director Roop Automotives Ltd., Mr Gaurav Jain was well received by the students.

The visit was very useful as students were able to link the theoretical concepts with the practical techniques. The organization has also agreed to provide industrial training and placement opportunities for students. The visit was coordinated by Dr Sunanda Vashishth (APS Dept.) and Mr Anmol Bhatia (ME Dept.). [APS2016V002]

- An educational trip was organized by Dr Rashmi Tyagi for 1st year BTech CSE students to Indian Agricultural Research Institute, New Delhi on 19 March 2016. The Krishi Unnati Mela was inaugurated by our Prime Minister, Mr Narendra Modi. The students learnt the practical aspect of topics related to the course Environmental Studies through exhibition of models, posters at the Mela. Some of the

exhibits were related to sustainable agricultural techniques, like drip irrigation, variety of bio-fertilizers for different crops, types of bio-pesticides, models for vermin-compost production, various genetically modified crops, CO<sub>2</sub> incubators, poly-house and glass-house models, etc. They also observed the models of water conservation methods, various renewable energy systems like, wind mill, solar drying systems, etc. [APS2016V001]

## Faculty Development Programme

A six-day Faculty Development Programme on 'Enhancing Research and Teaching Capabilities' was jointly organized by Dept of Applied Sciences and Centre for Languages Learning from 1-8 July 2016. Expert lectures were delivered by eminent academicians including Prof. CV Baxi on 'How to Improve Teaching and Learning'. Padam Shree Prof. KL Chopra gave a talk on 'Solar Photovoltaics', while Prof. Prem Vrat spoke on 'How to Improve Research Productivity'. Prof. Kehar Singh spoke on 'Light with a Twist', Shri JC Kapoor on 'Understanding and Managing Health and Safety Issues of Nano-materials', Padam Shree Prof. Pushpesh Pant on 'Problems in Quality Research', Prof. Amitava Sengupta on 'Atomic Clocks: How do they work and why do we need



*FDP in progress*

them', Prof. SK Jain on 'Quality System Requirements of ISO 17025 as applied to Research Laboratories', Ms Praneet Kaur on 'Make a Difference' and Dr Sangeet Srivastava on 'Image Forensics'. The effective videos, impressive presentations and real world examples had immense effect on the audience. A total of 32

faculty members from Dept of APS and CLL participated in the FDP. Prof. AK Yadav gave concluding remarks and a vote of thanks. The programme was coordinated by Dr Sunanda Vashisth, Dr Pranati Purohit and Dr Divyabha Vashisth. [APS2016FO001]

## Orientation Programme for Students of BSc (Hons) Maths and MSc Maths

The Department organized Orientation Programme for newly admitted students in BSc (Hons) Mathematics and MSc Mathematics on 23 July 2016. On this occasion, senior faculty members of the Department addressed the newly admitted students. Dr Rashmi Tyagi, HoD congratulated the students for taking the decision opting for Mathematics. She encouraged them to remain disciplined and apprised them of various aspects of the University. Prof. AK Yadav assured the students about giving the best of academic instructions and assisting them in their quest for knowledge and developing key skills for success. The students appreciated the quality and vision of the Department and expressed enthusiasm to learn in this nurturing environment of NCU.

## Alumni Interactions

The Department organized an alumni interaction with the students on 28 March 2016. Mr Vishal Sangwan (alumnus of 2011 batch) interacted with Mechanical Engineering 1st year students and motivated them to pursue

higher studies. Mr Sangwan has been selected for a Master's Program of European Business School, Germany. He shared his insights on admissions into foreign universities for postgraduate programmes. The session was coordinated by Dr Sunil Hans (Dept of APS) and Mr Anmol Bhatia (Dept of ME). [APS2016O007]

## Other Activities

### NCU receives I-MADE award

The University received Mobile App Development Ecosystem (I-MADE) award for mobile app development. The faculty and students under the guidance and training provided by I-MADE will now be able to develop NCU mobile apps without any additional charges. This will help in initiation of in-house projects for BTech students, under guidance and coordination of Dr Latika Singh, Head Dept of CSE. A MoU has also been signed in this regard. Dr Bharti Arora had earlier applied on behalf of NCU for I-MADE Program which is a joint initiative of Dept of Telecommunications (DoT) & Telecom Centres of Excellence (TCOE), India to set up mobile app for educational institutions in India. [APS2016O011]

### Special Issue on IYL 2015 features NCU event

The year 2015 was celebrated as the International Year of Light (IYL). In order to commemorate IYL celebrations in India, Optical Society of India (OSI) in association with Laser Association and the Photonics Society of India published a special issue dedicated to IYL activities in India with an idea to bring all IYL activities organized in every corner of the country in one volume. This special issue features 'One-day Workshop on Optics: To celebrate International Year of Light (IYL-2015)' organized by SPIE-Student Chapter at NCU on 14 October 2015. The event was coordinated by Dr Sunanda Vashisth. [APS2016O010]

### Summer Internship

Ms Pooja Sharma (15MSM014) has been selected for summer internship at IIT Roorkee. Her training will be under Dr (Prof.) SP Yadav, Department of Mathematics. The internship was enabled by Dr Sandeep Mogha.

## Society Activities

### Inauguration of NCU's OSA Student Chapter



The NorthCap University's OSA Student Chapter celebrated its inaugural day through a ceremony on 4 March 2016. The event witnessed the presence of OSA NCU Student Chapter fraternity led by

Prof. Kehar Singh, a prominent OSA Fellow. The ceremony marked its beginning with the traditional lamp lighting by the Guest of Honour, Prof. Singh, followed by a brief presentation on

the emergence, evolution and objectives of the Optical Society, as well as NCU's OSA Student Chapter.

Prof. Kehar Singh addressed the gathering and talked about the importance of optics in contemporary technologies. The winners of the recently held Science Quiz Competition were given tokens of appreciation by the Chief Guest. The ceremony concluded with Prof. Kehar Singh wishing success for all the students and faculty associated with OSA and a vote of thanks by OSA's President. Dr Hukum Singh, Dept of Applied Sciences is the OSA-Chapter Advisor.

### Mathemactive Society Activity 'Fit-in-One'

The Mathemactive Society organized an intellectual event on the occasion of the technical fest 'Saksham'. The event 'Fit-in-one' comprised two rounds. First round was a rapid fire round. 12 students were qualified for the second round in a tough competition. Six teams, each consisting of two students, were formed. The event was coordinated by Prof. Kalika Srivastava from Department of Applied Sciences. [APS2016O004]



## Faculty activities

- ❑ Dr Hukum Singh has been awarded the Recognized Reviewer Status of prestigious Journal of Elsevier (Optics and Lasers in Engineering) in January 2016. [APS2016O005]
- ❑ Dr Bharti Arora was invited to take a session in one day lecture series at Maharaja Surajmal Institute of Technology (MSIT), New Delhi on 12 March 2016. She delivered a lecture on 'Insight into Structural Polymorphism of DNA'. [APS2016I001]

Dr Arora was also invited to attend the Higher Education Technology Conference 2016 on 18 March 2016,

organized by EdTech Review held at The Leela Ambience Hotel, Gurgaon. During the event, four panel discussions were held and attended by higher education institution leaders, wherein she participated on various sub-themes on behalf of the University. [APS2016CA002]

- ❑ Dr Amita Bhagat has been invited as the reviewer for 'Computers and Industrial Engineering', Elsevier.
- ❑ Prof. AK Yadav and Dr Phool Singh delivered extension lectures to BSc students of three Govt. colleges in Gurgaon on 8 and 11 April 2016.

They visited Govt. PG College, Sector 9; Dronacharya Govt. College, Railway Road and Govt. Girls College, Sector 14 to interact with the students there. They covered lectures on 'Fascinating World of Mathematics' which highlighted the real-world applications of Mathematics. Some of the faculty members too attended the lecture and expressed keen desire to have similar lectures and workshops in future. This has helped in creating awareness about our BSc and MSc programmes. After the lectures, they also conducted a Mathematics quiz for all the

participants. [APS2016I002, APS2016I003]

- ❑ Dr Phool Singh delivered an invited talk on ‘Programming in MATLAB’ and conducted a hands-on session during National Workshop on Computational Software-MATLAB, held at KR Mangalam University, Gurgaon on 18 March 2016. [APS2016I004]

He also delivered an invited talk on ‘Programming in Scilab’ and its application and conducted a hands-on session during National Workshop on Numerical Methods using Scilab, held at Jaypee Institute of Information Technology, Noida on 8-9 April 2016. [APS2016I005]

- ❑ Dr Kamlesh Sharma received a Publication Award from King Abdulaziz University, Saudi Arabia, for her research paper, ‘One Pot Synthesis, Photophysical and X-ray Studies of Novel Highly Fluorescent Isoquinoline Derivatives with Higher Antibacterial Efficacy Based on the In-vitro and Density Functional Theory’ published in

Journal of Fluorescence (2015) 25:503–518.[APS2016O006]

- ❑ Dr Sanjay Yadav attended the ‘Advanced Summer School on Hyperbolic Conservation Laws’ held at TIFR- Centre for Applicable Mathematics, Bangalore from 16 May to 4 June 2016. The School started with formal introduction and interaction with the eminent scientist and participating students. The topics discussed at the School included hyperbolic conservation laws, hyperbolic PDEs, numerical analysis computational science, dynamical systems and non-linear analysis, hyperbolic non-linear systems and non-linear partial differential equations. [APS2016O009]

- ❑ Prof. AK Yadav has been nominated on the Academic Advisory Board of Kamrah Institute of Information Technology (KIIT), affiliated to MD University Rohtak. He attended a meeting of the Academic Advisory Board held on 9 July 2016 at KIIT Campus, Gurgaon.

- ❑ Prof. SK Jain visited the following universities to hold PhD viva-voce

examination of two candidates:

- a. Ms Shivani Sharma, Department of Physics, NIMS University, Jaipur on 13 August 2016.
- b. Mr Prem Kishore Patnala, Department of Chemistry, Dayalbagh Educational Institute (Deemed University), Agra on 22 August 2016.

Prof. Jain attended the Executive Council Meeting of Ultrasonic Society of India on 3 August 2016 at the National Physical Laboratory. Prof. Vikram Kumar, President of the Society and SS Bhatnagar Awardee appreciated the successful organization of International Conference on Engineering Physics, Materials and Ultrasonics held at The NorthCap University, Gurgaon on 3-4 June 2016, organized in association with Ultrasonics Society of India.

### New Faculty

Ms Deepika Rani and Dr Anshu Malhotra joined the Department as Assistant Professors.

We welcome them on board.



## School of Management

### Departmental Activities

- ❑ School of Management organized sessions on MS Word, Excel and Power Point presentation for the students of MBA 1st year, on 16, 22 and 29 April 2016. The sessions were conducted by Jatin Arora, pursuing MBA (1st year) from The North Cap University. [SOM2016WO001]



- ❑ School of Management organized Pre-Placement Interviews for its students on 19 March 2016. The students were given a detailed feedback for necessary improvement from employability point of view. [SOM2016O007]
- ❑ School of Management organized an orientation session for the visiting faculty members on 6 August 2016. The objective of the session was to acclimatize them with the system, processes and policies of the university. The session included discussions on common issues of faculty, ERP, examination and result related activities. Mr Deepak Satyarthi briefed them on LMS and OTMS. The session was coordinated by Dr Saumya Dixit, Dr Mohd. Hussain Kunroo and Dr Sushmita B Waraich.
- ❑ A Pre-PhD seminar of Ms Sunaina Sangwan, Research Scholar SOM was organized on 26 August 2016. The topic of the seminar was 'Modelling and Analysis of Employability of Management Graduates'.



*Prof. Sajnay Goyal, Dean SOM addressing students*

School of Management organized an event 'Meet the Dean' for BBA, BCom (H), BSc Eco (H) and MBA students on 10 August 2016 with an objective to create a common platform for all SOM students to interact with Dean School of Management, Prof. Sanjay Goyal. During the event, Prof. Goyal shared his rich experience of 28 years with students and presented the importance of environmental sustainability. SOM alumni Mr Puneet Khanduja, Asst Manager Sales & Marketing Stratbeans Consulting and Mr Yatin Malik, Pre Sales, Customer Support Sales, Gartner shared their learnings at NCU and its implementation in corporate life. Mr Pranav Jain, BTech CSE student with an internship opportunity at Google, shared his experiences and extended his guidance to SOM students. The event was coordinated by Ms Jaya Ahuja.

### Faculty Development Programme



*FDP in progress*

School of Management organized a Faculty Development Programme on 'Essentials of Business Intelligence' from 5-12 July 2016. During the FDP, Dr Vipin Khurana from IBS Gurgaon, Mr Pratyush Praveen and Mr Dinesh Dhiman, both from IBM covered different topics including Descriptive and Predictive analytics using R, multivariate techniques, factor analysis, cluster analysis, different types of data and associated mining methods, analysis and sharing of data using IBM Cognos Insight, modeling and reporting through IBM Cognos BI. The FDP was coordinated by Dr Ruchi Nayyar. [SOM2016FO001]

## Industrial Visits

- An industrial visit to Carrier Aircon (Gurgaon Plant) was organized on 11 March 2016 for the students of BBA and MBA. Carrier Aircon is world's leader in high technology heating, air-conditioning and refrigeration solutions. The visit comprised a presentation about the organization showing their vision, core values, training for the employees, achievements and a tour of the factory. The company officials responded aptly to the queries of the students during the visit with a dedicated Q/A session at the end. The visit was coordinated by Dr Sushmita Biswal Waraich. [SOM2016V001]

## E-Cell Activities

The Entrepreneurship Development Cell (E-Cell) of NCU organized a lecture session, 'Journey of an Entrepreneur' by Mr Amit Chaudhary, Co-founder and COO, Lenskart, on 16 March 2016. The session was attended by around 100 enthusiastic students. In the interactive session with the students, Mr Chaudhary narrated his journey from student life at BIT Mesra to becoming an entrepreneur. He encouraged the students to give it a kick-start, if they are passionate about any venture. He stayed back for a mentoring session on students' request, many of whom were ready with their own entrepreneurial ideas. Mr Chaudhary also gave away Certificates to participants of the Essay Competition organized earlier on 2 March 2016 by E-Cell. Vaibhav Kaushik (ME 6th sem) was declared winner of the competition. The event was coordinated by Vimal Dahiya (MBA 2nd sem), Harshit Goel (CSE&IT 4th sem), Priya Bhargava (MBA 2nd sem), Prateek (CSE 2nd sem) and Pankaj (CSE 2nd sem). [SOM2016G002]

## Faculty Activities

- Dr DR Agarwal, SOM, was invited by GD Goenka University as a chairperson in the 'International Conference on Flattening the Globe: Propelled by E-Commerce and Supply Chain' held on 4-5
- Mr Mohd Hussain Kunroo, Asst Professor earned his PhD degree in Economics from Department of Economics, Jamia Millia Islamia, New Delhi. On 14 March 2016, he defended his PhD thesis on the topic

## Alumni Interactions



School of Management organized an alumni interaction with Mr Kanva Sharma, Process Associate, Royal Bank of Scotland on 16 April 2016. Mr Sharma interacted with students of MBA 2nd and 4th sem and discussed the recruitment process at RBS, competencies required, internships opportunities etc. The event was coordinated by Ms Jaya Ahuja. [SOM2016O015]



February 2016. About 10 research papers were presented in the technical session. He gave his valuable inputs on quantitative methods, which were well received by the participants. [SOM2016O008]

Dr Agarwal was also invited by the TV Channel Haryana News on 29 February 2016 to give his comments on the Union Budget 2016. The programme was a live telecast during which questions were asked from persons of different fields. He responded to the questions as a teacher of Economics. [SOM2016O009]

'Optimum Currency Area: An Empirical Analysis of Euro-zone and Non-Euro Countries'. [SOM2016H001]

- Dr Sushmita Biswal Waraich was invited to attend the Business Today HR Knowledge Forum on 9 March 2016 at ITC Maurya, New Delhi. There were panel discussions on job crisis and talent acquisition by senior managers from the corporate world. [SOM2016O006]

Dr Waraich participated in the Case Method Workshop organized by Indian Institute of Management Calcutta Research Center (IIMCCRC) on 28-29 March 2016. [SOM2016WA001]

An article, 'Education sans the art of giving' by Dr Sushmita Biswal Waraich was published in the Indian Express Blogs. The article can be accessed at <http://indianexpress.com/article/blogs/education-sans-the-art-of-giving/>.

A Bridge Course on Employee Training and Development was offered, during the even semester, to the MBA first year students. The course, spread over 16 sessions on Saturdays, ended with the final evaluation on 14 June, 2016. The course was conducted by Dr

Sushmita Biswal Waraich.  
[SOM2016O016]

- ❑ Ms Sunaina Sangwan, Dr Shilpa Sindhu and Dr Ruchi Nayyar, Asst Professors attended a short term course on 'Advances in Business Analytics', under Continuing Education Programme at Department of Management Studies, IIT Delhi from 19-22 March 2016. [SOM2016O010, SOM2016O011, SOM2016O012]
- ❑ Ms Jiveta Chaudhary and Ms Sunaina Sangwan have earned Diploma in Training and Development from Indian Society for Training and Development. It is a professional course recognized by Govt. of India for training of trainers and is designed to meet today's training/HRD challenges. It is recognized by the Ministry of Human Resource Development, Govt. of India, for the purpose of recruitment to superior posts under

the Central Government and is approved by the Department of Personnel and Training (DoPT), DGR, Army HQ, Ministry of Defence, [SOM2016O013]

- ❑ Ms Sunaina Sangwan, Assistant Professor, participated in the review process of the Academy of Management Annual Meeting scheduled to be held in California from 5-9 August 2016. She also reviewed the project 'Human Dramas & Dilemmas at Work: New Gen Cases in Organization Behavior' to be published by McGraw-Hill Education. [SOM2016O014]
- ❑ Ms Parul Munjal attended Faculty Development Programme on 'SPSS and Research Methods' on 5-6 May 2016 at FORE School of Management, New Delhi. [SOM2016WA002]

Ms Munjal completed online course 'The Factors that influence the

Effectiveness of Boards and the Governance Process' on Coursera offered by The State University of New York. [SOM2016O001]

Ms Munjal attended a short term course on 'Data Analysis for Research & Publication' on 18-19 June 2016 organized by Department of Management Studies and Continuing Education Centre, IIT Roorkee. [SOM2016WA003]

### New Faculty

Dr Sanjay Goyal joined the Department as Professor and Dean, SOM.

Mr Pushkal Pandey joined the Department as Professor.

We welcome them on board.



## School of Law

### Departmental Activities

#### Guest Lectures

With an objective of highlighting the lacunae in the criminal justice delivery system, the School of Law organized a special lecture on 'What ails the Judicial System?' by Mr RS Dalal, IPS, Former Director General of Police, Haryana on 3 March 2016. During his lecture to the students of Law, Mr Dalal expressed concerns on the rise in number of backlog cases before the courts and unusual delay in the justice delivery process. He also emphasized on the fact that the overflowing of litigation should be addressed urgently and judiciously. Having served as a senior officer in the Police force for long years, Mr Dalal shared his experiences including the challenges encountered during his service. He strongly urged everyone to



combat perennial issues like corruption to build up a more accountable society. The students were motivated by a documentary shown by him which was based on various phases of his service in

Police. Mr Dalal also encouraged them to join Indian Police Services to contribute meaningfully towards the society. [SOL2016G004]

- With an aim of highlighting the international and national provisions of Juvenile Law, the School of Law organized a special lecture on 'Right to Equality and Juvenile Justice Act 2014' on 10 March 2016 by Prof. Ved Kumari, Professor-in-charge Law Center I, University of Delhi.

Prof. Ved Kumari in her lecture compiled the various national and international legal instruments as well as legal provisions of other countries dealing with the issue. She gave an analytical view on the legal



protections and penal provisions of our juvenile justice system. Considering the magnitude of the problem, she underlined that the number of factors including neglect and delinquency are common and interrelated, based on socio-economic and psychological issues. Prof. Ved Kumari also shared the summations of her experience of over 30 years in the field of juvenile law. [SOL2016G005]

#### Workshops Organized

- On 1 March 2016, the School of Law organized a workshop on 'Charting Your Way through Law School' in association with myLaw.net for the 1st and 2nd year students of Law. The workshop was organized to encourage and guide the students in planning their career during their studies at our Law School. The objective of the workshop was to discuss the basic skills that Law students particularly in their preliminary years require to develop a strong foundation for

their studies as well as in their legal career. Mr Nikhil Chandra, CEO of myLaw.net was the speaker and key resource person for the day. Sharing his experiences, Mr Chandra said that the students should start planning for their future right from the initial years including choosing their internships meaningfully. He insisted that Law students must have an analytical mind and good communication skills – both written and oral. At the end, a short aptitude test was also conducted for the participating students. [SOL2016W001]





School of Law organized a Workshop on Equality, Justice and Gender Sensitization – A Human Rights Issue on 16 April 2016 which focused on a primary theme of ‘Gender Sensitization’ with sub-themes on empowerment of women through legislations - reality or myth, misuse of women oriented laws- need for the change and media and gender sensitization- fourth pillar of the democracy. The workshop also included events like essay competition, legislative drafting competition and poster making competition on the theme of gender sensitization. Hon’ble Justice Rekha Sharma, Former Judge, High Court of Delhi, graced the occasion as the Chief Guest during the inaugural session of the workshop along with Brig. SK Sharma (Retd), Pro Vice-Chancellor. She was of the view that no court ruling or judgment will bring the required change unless the society changes its attitude.



The workshop provided an opportunity to academicians, law students, scholars or other stakeholders to understand the concepts of gender, sex and gender equality and to put a small but effectual effort in this direction. The workshop also discussed the sensitive issues related to transgenders in the society. The

deliberations proceeded in three parallel sessions chaired by academicians from different universities. During the valedictory session, the participants were awarded certificates and prizes.

[SOL2016WO002]

- To celebrate ‘World Intellectual Property Rights Day’ and spread awareness about the Intellectual Property Rights, the Centre for IPR-Advocacy, Research and Training (CIPRART), School of Law, NCU organized a workshop in collaboration with Institute of Patent Attorneys, India (IPAI) on 26 April 2016. The theme of the workshop was on legal aspects of Intellectual Property, its protection and remedies in case of infringement. Students from all the three Schools, viz. School of Engineering and Technology,

School of Management and School of Law participated in the workshop. The Chief Guest, Dr Raman Mittal, Associate Professor, Faculty of Law, Delhi University familiarized the audience with the history of property law and the need for intellectual property law in the modern times. He also talked about the judicial approach to IP disputes, the lacuna in our IP laws and also about the changing concept of parallel imports.

The workshop also witnessed a lecture on Indian Patent laws by Mr RK Nair, Director Institute of Patent Attorneys, India and Regd. Patent

Attorney. Mr Nair covered concepts of patent, conditions for obtaining patent and its application procedure. At the culmination of the workshop the students of School of Law who had successfully drafted the opposition of DRDO’s Patent application and who had completed the certification course on Basic IPR by WIPO were felicitated by Dr Raman Mittal and Dr Pushpesh Pant, Dean SOL, NCU. [SOL2016WO004]

- In the recent years, the legal profession has witnessed enormous diversification in job opportunities in corporate firms, companies, LPOs, etc. While the students take various initiatives to equip themselves for the changing professional environment, they at times fail to project themselves in an appropriate manner. Considering this problem, School of Law, NCU held a workshop with experts from Mylaw.net on 19 April 2016, to train our students on curriculum-vitae (CV) writing and advise them about



taking the right moves. Mr Kunal Mehra, Sr. Partner, Mylaw.net had an interactive session with the Law students discussing about various nuances of the CVs and how to project oneself better in this competitive professional world. He provided tips to highlight the success stories and also how to write cover letters. Students enthusiastically participated in the workshop. [SOL2016WO003]

### Law Quiz-Fresher Edition, 2016

School of Law organized a Law Quiz for the students of 2016 batch of BBA-LLB (Hons.) programme on 25 July 2016. The event, conducted by Quizwale Inc., was facilitated by Mrs Ritu Gupta and Mr Subhradipta Sarkar and mentored by Dean SOL, Prof. Pushpesh Pant. The quiz was organized as an induction-cum-interactive session for the new batch of students. Prof. Pushpesh Pant congratulated and felicitated the winners at the end.

### Talk and Movie Screening by 'We, The People' group

School of Law organized a talk and movie screening on 19 April 2016 by 'We, The People', a network of organizations and like-minded individuals. The mission of the organization is to expand an informed, active and responsible citizenry in India.

The film was based on a dialogue of five citizens who take up important public causes and whose legal interventions result in a path-breaking principle related to the Constitution of India. Their intervention therefore, went on to benefit large numbers of citizens across the country. These citizens were Mr Parman and Katara, Ms Lilly Thomas, Ms Shreya Singhal, Ms Nandini Sundar and Ms Kusum Jain (from Parents Forum Delhi) who filed Public Interest Litigations (PILs) for a cause and brought a change.

### Rendezvous with the Dean

Higher education colleges/universities are markedly different from Schools and therefore, the students require a bit of hand-holding, ushering them to a new

### Faculty Development Programme

School of Law conducted a Faculty Development Programme from 4-11 July 2016. The objective of the FDP was professional and academic development of faculty members and legal professionals. The purpose of this programme was to provide an opportunity to distinguished scholars, researchers and teachers to engage with the faculty members and share their experiences relating to teaching and research. During the programme, Mr Sumit Gandhi from Lexis Nexis delivered a lecture on utilization of Lexis Nexis database for legal research, and Mr Satendra Kumar from Manupatra shared his views on secondary research tools provided by Manupatra. Mr Piyush from We the People talked on dissemination of legal aid and assistance. Mr Manoj Gopaliya, Dy Dean (Academics) and Mr Deepak Sharma, Asst Librarian spoke on moderation & academic rules and plagiarism in legal research, respectively.



*Mr Manoj Gopaliya interacting with faculty members during FDP*

path of life. Considering this issue of the students, School of Law organized 'Rendezvous with the Dean' on 22 August 2016 facilitating an interaction of Dr Pushpesh Pant, Dean, SOL, with the 1st year BBA-LLB (Hons) students. Dr Pant gave an overview of the subjects they are going to study and methodology of teaching and learning process. Being in a professional course, he emphasized on the importance of discipline and dress code for the students. He also explained the seriousness of internships and encouraged students to take part in various activities like moot court competitions, debates, etc. The students also shared their experiences of their short stay in the campus till date. Towards the end, Dr Pant encouraged the students to meet him for any assistance required in the coming days.

### Law students visit Juvenile Home

With an aim to provide a first-hand opportunity to the students of Criminal Law and Criminal Justice Administration and to have an understanding of juvenile justice system and rehabilitation at

juvenile homes, the School of Law organized a visit to an Observation Home in New Delhi on 21 April 2016. 61 students of School of Law visited the home which is run by the Prayas Institute of Juvenile Justice under the MoU signed with the Department of Women & Child Development, New Delhi. The observation home is a short-stay home for juveniles in conflict with law, who are custodial children and their inquiry is conducted by the Juvenile Justice Board located in the same premises. An orientation programme was conducted by the Supervisor of the Home followed by an interaction with the inmates and the instructors providing various training to the children of various age groups. The students were accompanied by two faculty members of School of Law, Ms Archana Sarma and Ms Isha Khurana.

## Law Student creates history for University Placement Records



Mr Mandeep Kalra from School of Law achieved high benchmark in terms of placements. He bagged four confirmed job opportunities with different leading organizations across the country and has

also achieved the highest CTC offered to any graduate/post-graduate from the University.

Mandeep has finally decided to join Karanjawala & Company, India's top and Tier 1 litigation law firm which has represented many luminaries in their respective matters, previously.

During his journey at NCU, he excelled not just in academics by being Batch Rank – 1 but also did justice to the various leadership positions delegated to him including Convener Recruitment Committee, ILSA Chief Office, ASQ Co-Chair, Convener Legal Service

Committee. He was the only student from the entire Law Department to have bagged 100% scholarship for five consecutive years and also one among a dozen from the country to be selected as a Chair in the International Association of Law Schools Conference -2013, which witnessed Deans from about 400 law schools across the world.

## Faculty Activities

- ❑ Dr Praveen Kr Lohchab was invited to judge the National Moot Court Competition at SGT University, Gurgaon on 5 March 2016.
- ❑ Dr Rahul Nikam, Assistant Professor was invited to National Law University of Assam, Guwahati, to deliver a series of lectures on 8 and 9 February 2016, for students of BA-LLB. The lectures were on different topics including company law, international trade law and moot court skills and orientation.
- ❑ On invitation of University School of Law and Legal Studies (USLLS), GGSIP University, Delhi, Dr Arvind P Bhanu, Associate Professor went to judge All India USLLS First Year Students' Moot Court Competition 2016, held on 27 February 2016.

Dr Bhanu was also invited as a judge at 4th International Moot Court Competition, 2016, organized by Amity Law School, Centre II, Amity University, Noida from 10-12 March 2016. The competition focused on laws related to the sports.

Dr Arvind P Bhanu published a review article of the book, 'Crime and Justice in India' by N. Prabha Unnithan (Sage Publications), in

International Criminal Justice Review, Vol. 26, No. 1, 58 – 59 (2016).

- ❑ Ms Archana Sarma, Assistant Professor, was invited to attend the Joint PhD Workshop under Indo-Norwegian Cooperation Program in Law between National Law University Delhi and Faculty of Law, Norway, organized at NLUD on 19 – 22 May 2016. (SOL2016A001)
- ❑ Two doctoral dissertations of Mr Subhash Kumar and Mr Manish Bhardwaj have been submitted to

Shri Venkateshwara University, Gajraula (Uttar Pradesh) on 9 April 2016 under the supervision of Dr Arvind P Bhanu, Associate Professor, SOL.

### New Faculty

Dr Kanu Priya joined the Department as Associate Professor.

Mr Bilal Ahmed Kuchey and Ms Manika Kamthan joined the Department as Assistant Professors.

We welcome them on board.



## Placements

### School of Professional Attachment (SPA)

With remarkable statistics of over 95% placements of eligible students in Management, Engineering and Law, the year has been very good, as almost all students graduating from the University had a placement in their hands. Regular efforts are also being made to assist them who could not be in the pool of placed students.

#### Placements

- ❑ On 14 March 2016, a team of senior human resource personnel from Tata Consultancy Services, along with technical experts visited the University to address pre-final year students and made them acquainted with the latest TCS industry practices. Students showed a great level of engagement, while raising many relevant queries from the delegates. This in turn led TCS officials to take back a positive feedback of our upcoming batch 2017 for the next year campus placements.
- ❑ IDBI, Connaught Place Delhi branch visited the University to run a drive for summer internship and selected 15 students from our University.
- ❑ Asahi India Glass, a company for core branches conducted their on-campus placement drive on 19 March 2016.
- ❑ Daikin a well-known company in the sphere of air conditioning visited the University for hiring engineers. Senior officials from the organization noted with satisfaction



Vegazva Group, an EPC firm visited the University on 16 March 2016 to conduct an on-campus placement drive. 9 students got selected in the organization.



- the knowledge and skills of our Mechanical Engineering students. They shortlisted 5 students for the final round of interviews in their corporate office in Gurgaon and finally offered placement offers to 2 students.
- ❑ EY ran a session on cyber security for our pre-final year students conducted by Cyber Security Head of EY Bangalore. The session was very interactive during which the students of CSE learned about cyber security and its implications. EY officials were delighted to receive a warm response from the audience.
- ❑ Reliance Communication conducted a placement drive for the students of Management and Electronics Engineering on 22 April 2016.
- ❑ Mr Pulkit Garg and Mr Abhishak Gridhar, two alumni of our university, ventured together to form an organization, 'edgyscribblers' and visited our university to hire interns from School of Law and School of Management on 27 April 2016.
- ❑ Officials of Ducat visited the University on 11 May 2016 for an internship drive and extended offers to seven students.
- ❑ Indigo Airlines visited the University on 19 May 2016 for a placement drive for Mechanical and Electronics Engineering students. The officials were impressed with the students, their discipline and state of art infrastructure of the university. They later invited three students for the final interview.
- ❑ On 26 May 2016, Mr Neeraj Kumar, Director Deloitte visited the University to address our pre-final students. He was impressed to witness the standards and participation of our students during the session.
- ❑ Feeder Bus, a growing startup has offered internships to four students in the digital marketing vertical of their firm.
- ❑ ICAT, a reputed organization for core engineering, visited the University for an on-campus placement drive on 15 May 2016. The firm later offered placements to 12 students from Mechanical, Electrical and Electronic Engineering branches.

- ❑ A prestigious, over 6 decades old foreign manufacturing core organization, Contrinex conducted its placement drive on 10 June 2016 for core branches of engineering.



*Mr Venkatramani, Regional Head Marketing, Contrinex, being welcomed by Mr BK Gupta, Director SPA*

- ❑ 9.9 Media, conducted a successful campus placement drive on 15 June 2016.
- ❑ SMS India, a reputed EPC firm, conducted their campus placement for students of Mechanical Engineering on 17 June 2016.
- ❑ Flexiele Consulting Services a renowned consulting firm visited the University on 18 June 2016 and offered placements to 2 students. The company officials were delighted to see the state-of-the-art infrastructure of the University.
- ❑ Kicking off the placement session for 2017 batch, SPA conducted an online aptitude test for all pre-final year students on 25 July 2016. The scores were later published on the placement portal of the University.
- ❑ Tata Consultancy Services conducted a pre-placement session on 27 July 2016 and interacted with students aspiring to appear in the



*Mr Sameer Sabarwal, Research Head, TCS being welcomed by Mr B K Gupta*

current year placement session. Mr Sameer Sabarwal, Research Head, TCS also interacted with Heads of Departments and discussed about placement and internship opportunities.

- ❑ Mind Merchant, a Law firm based in Gurgaon has rolled out a placement offer to one Law student.
- ❑ Shriram Pistons, a renowned automobile firm has extended a placement offer to one student of Mechanical Engineering as a Junior Engineer Trainee.
- ❑ Online test was conducted by Deloitte on 2 August 2016. Students appeared for the test with great optimism and enthusiasm. 17 students have been selected.

### Other Activities

- ❑ School of Professional Attachment believes that to sustain in today's competitive environment, it is essential to uplift the quality of students in both technical and soft skills. In an effort to sharpen up the presentation skills of the students, Aarohan Club organized 'Prastuti' 16', a powerpoint presentation competition. Over 100 students from all the three Schools of the University enthusiastically participated in the competition and showcased their presentation skills. The event was aimed at building confidence, teamwork, leadership skills, soft skills and public speaking among the students. The Pro-Chancellor, Prof. Prem Vrat, the Pro Vice-Chancellor, Brig. SK Sharma (Retd) and Director SPA, Mr BK Gupta inaugurated the competition and encouraged students with their motivating words.
- ❑ Deloitte, one of the important placement partners of NCU, organized a national level competition, 'Deloitte Collegiate Cyber Threat Competition' for young aspirants to sharpen their skills in Cyber Threat vertical. On 21 March 2016, Deloitte professionals visited the University to conduct the preliminary round of the competition. 120 students participated in the competition. Three groups qualified for the next rounds.
- ❑ A group of students of Class 11 and teachers from Salwan Public School,

Gurgaon visited the University on 27 May 2016 to gain an insight about the courses offered by the University. They were given a brief presentation by different departments followed by a tour of labs and departments.



*Brig. SK Sharma (Retd) addressing students of Salwan Public School*

- ❑ On 25 July 2016, SPA team welcomed all the final year students of Engineering and MBA. Mr Gupta congratulated them on completing their internship. We feel proud that some of our students have strengthened our relationship with the hiring companies after demonstrating a promising spirit during their stay as intern.
- ❑ School of Professional Attachment conducted interviews for Student Coordinators for its student club on 9 August, 2016. They received an overwhelming response from students from across all the three Schools and departments with a participation of 107 students.
- ❑ To equip students with the latest interview tactics and to harness those pre-requisite skills, SPA conducted pre-placement interview session of students with the industry experts on 10 August 2016. Mr Viney Kaushik, Vice-President HR, Samsung Industries and Mr Ajay Kumar, Vice-President HR, Prudent had a detailed and interactive session with the students. While having an in-depth discussion with regard to placements, both the delegates were positive on offering placements and internship opportunities to our students.
- ❑ For preparation of students for interviews and sensitize them about upcoming placement opportunities, SPA conducted sessions of pre-placement interviews of CSE students from 3-12 August 2016. The PPI for ECE students is in the pipeline.

School of Professional Attachment (SPA) organized a 'HR Conclave' followed by the annual group discussion competition 'Soch Vichar III' in association with Aarohan Club, NCU on 23 August 2016. The HR conclave targeted an important issue of 'Scaling Employability' during which experts presented their views and opinions on the topic. The event was graced by the presence of Pro Vice-Chancellor, Brig. SK Sharma (Retd); Director SPA, Mr BK Gupta; Mr Subhodh Saluja, Head North India, Manpower Group; Mr JS Jangra, retired Chief Judicial Magistrate; Mr Chetan Soni, Serial Entrepreneur; Ms Yoshika, Femina Miss India 2014 Finalist; Mr Ashwini Kumar Dhingra, Sr Manager HR, Omniglobe Internationals; Mr Anil K Gaur,



HR Conclave 2016

Entrepreneur and Owner, Cybergurukul; Mr Satya Prakash, Director Tricore Solutions Pvt Ltd; Mr Puneet Khanduja, Asst Manager, Startbeans; Mr Chetan Singh, Placement Officer SPA and a large gathering of faculty and students of the University.

### Some of our Recruiters



## News from the Centre for Languages Learning (CLL)

### Faculty Development Programmes

- ❑ A Faculty Development Programme on Communication Skills was conducted on 5 March 2016 by Dr Divyabha and Dr Payal Khurana. The focus of the session was on improving the oratory skills especially correct pronunciation, coherence of ideas, proper intonation and speech to improve verbal and non-verbal communication. [CLL2016FO001]  
The second session of the FDP was conducted on 19 March 2016 by the same team. The session focused on the speaking skills of the participants. [CLL2016FO002]
- ❑ CLL conducted four sessions of 'Presentation Delivery and Body Language' FDP on Communication Skills from 1-4 June 2016. The sessions were conducted by Dr Payal Khurana and Dr Divyabha. The speakers stressed on presenting information clearly and effectively; a key skill to get your message or opinion across. Keeping this important aspect in mind, all the participants made presentations to learn more about public speaking and body language. They were explained the importance of body language during public speaking since body language is a vital form of communication. [CLL2016FO003]
- ❑ CLL conducted a third FDP session on 'Enhance the Way you Speak' on 15 June 2016. The session conducted by Ms Aditi Bhola, Visiting Faculty, CLL, covered a vast range of language concerns like analytical reading and listening skills. With an in-depth deliberation of a poem 'The Chaos', trainees observed the way some often used words are mispronounced. The participants studied different commonly used words and learnt the correct way to pronounce them. In the second segment of the session, the word-play in stories offered an interesting discussion with different trainees presenting vivid meanings of them. [CLL2016FO004]
- ❑ A fourth session of Faculty Development Programme on Communication Skills titled 'Make a Difference' was conducted by the

Centre on 8 July 2016. The session was conducted by Ms Praneet Kaur, Visiting Faculty, CLL. The session highlighted the need to harness intrinsic motivation for the individual faculty members in their everyday lives. The session was designed to pay attention towards personal development, igniting creative energies and to infuse motivation among the participants. It also highlighted the effectiveness of communication in our daily life.

Ms Kaur provided a handy distillation of research on motivation and used examples and anecdotes to bring the presentation to life. It was a highly interactive session that helped the audience to learn tangible techniques to implement positive change in their lives. The session was thought provoking and encouraged everyone to make a difference in their lives. [CLL2016FO005]

### Network 'n+i' Engineering Education Seminar



The University organized Network 'n+i' Engineering Education Seminar on 14 March 2016, wherein PhD and Master's Degree study options in France were discussed. The seminar was attended by final year engineering

students of the University. Ms Golda Malhotra, Coordinator for network n+i Engineering Studies in France interacted with the students and responded to their queries. She elaborated that Network 'n+i' is an online portal for making a single application to 50+ elite engineering institutes in France. The Network trains highly qualified, multilingual engineers who can lead effectively on international projects in a multicultural environment. The n+i Network offers various packages and scholarship options for international students in France. The Seminar included

information about all areas of engineering (like agriculture, telecommunications, civil engineering, mechanics, informatics, biotechnology, chemistry, materials, electronics, environment, etc.) The applications for the courses can be made online through the n+i website. Ms Malhotra briefly interacted with the Pro-Chancellor, Prof. Prem Vrat and the Pro Vice-Chancellor, Brig SK Sharma (Retd) after the event. [CLL2016WO001]

## Altercation: The Great Debate



Abhivyakt, the Debating Society of NCU under Centre for Languages Learning (CLL), organized Altercation: The Great Debate, an inter-departmental debate competition on 'Sedition (124A IPC) and Freedom of Expression' on 26 April 2016. After assessing the teams meticulously on the basis of their articulation and oration skills in the preliminary rounds, one team from each Department/ School was selected for the final round. With Prof. Pushpesh Pant as its moderator, the debate brimmed with intellectual arguments on the existing sedition laws and the idea of free speech in India.

The judges declared the team of School of Law as the winner of the debate, while team of CSE Department secured the second position. The faculty coordinators for the event were Dr Divyabha and Ms Shivani Sharma. The student coordinators were Sachin Rajawat, Sukrit, Vineet, Naman and Sunetra.

## Student Seminar



Centre for Languages Learning organized a Student Seminar on 'Enhancement of Memory, Brain Power and Health' by Maj. Gen. (Retd.) CM Seth on 28 April 2016. Students of 2nd year CSE participated in the seminar. The speaker highlighted the fact that an average person uses 2-4% of his brain power, that too the left side of the brain. The right side of the brain by and large remains unutilized. The best scenario would be if both sides of the brain are active so that full potential of the brain is utilized. Maj Gen Seth demonstrated some simple techniques on how to activate both sides of the brain so that students can excel in exams as well as in their profession. Along with this, the techniques to enhance lasting memory and tips to maintain good health to keep the brain active were also elaborated. Techniques to control stress and anger were also explained in the talk.

## Industrial Visits

- ❑ An educational visit to Vegazva Engineering Pvt. Ltd was organized for students of CSE 1st and 2nd year on 26 February 2016. The students got an opportunity to interact with the alumni of the University at Vegazva Engineering and also got an exposure of corporate culture. They were also shown a presentation on 'Various Engineering Projects' of the company. They got a positive response for their interest in doing internship with the company. The visit was coordinated by Dr Shrutimita Mehta and Dr Kalika Srivastava. [CLL2016V001]
- ❑ An Industrial visit to POSCO-IDPC, Bawal Industrial Area was organized for Mechanical Engineering 4th sem students on 27 April 2016. The visit started with an orientation session conducted by Head HR followed by visit to Plant 1 and 2. As the complete plant was fully automated, students got an opportunity to experience the real engineering involved in conversion of raw material into finished product. The organization has also agreed to provide industrial training and internship to the Mechanical Engineering students. The visit was coordinated by Dr Divyabha (CLL) and Dr Sunanda Vashisth (Dept of APS). [CLL2016V002]



## News from the Library

### Training on Knimbus Database

The Library and Information Resource Centre (LIRC) of the University organized a training programme on Knimbus Database on 9 March 2016. The training on the newly subscribed federated search engine was held to provide an overview of the tool and hands-on experience to users. Mr Saurabh and Mr Kaushal, Training Managers from Knimbus conducted the session, attended by faculty members of different departments of the University.

Knimbus team is also working on an Android app for our University, which is expected to be provided to us soon. As we know, Knimbus provides access to subscribed content across over 13000 open access journals in a single window.



Substantial content from Youtube, Wikipedia, Slide share etc. are available in single search tab through Knimbus. The training session was coordinated by

Mr Deepak Sharma, Assistant Librarian. More such training programmes are planned in the future for the benefit of faculty members.

### NCU Library Launched Library App

Extending its support to make the Government's campaign of 'Digital India' a success, the Library and Information Resource Center (LIRC) of NCU launched the first University Library app called 'NCU Library App' which is available free of cost for download at Google Play Store. Mr Deepak Sharma, Assistant Librarian informed that this app is designed by 'Knimbus' a software company based at Gurgaon. The app helps the users access library from anywhere through their mobiles. They can read books, journals, newspapers or watch videos online. Mr Sharma further added that the library at NCU is advanced and fully computerized. The library resources can be accessed from home through remote access facility. It has a rich collection of books and online resources.

### Library Committee Meeting

The Library Committee Meeting was held at the University on 23 August 2016. Chairman of the Library Committee, Dr Hukum Singh informed the members about the latest updates and inclusions in the NCU Library. Ms Shivani Govil, Asst librarian requested all the members to

increase the use of DELNET and recommend its service to all faculty members and research scholars. She also encouraged the members to increase more e-resources for academic and research purposes. She proposed to subscribe to databases with more resources and stop

libraries. Mr Deepak Sharma proposed to take up with INFLIB NET to provide free access to online resources to private universities also. In addition, it was decided to form a consortium of online resources for private universities to take up case of providing resources on subsidized rates to private universities, as applicable to central and state universities.

### Mr Deepak Sharma attended LIPS 2016

Mr Deepak Sharma, Assistant Librarian attended two-day International Library and Information Professional Summit (LIPS) 2016 on 'From Ownership to Access: Leveraging the Digital Paradigm', held at Ambedkar University, New Delhi on 19-20 May 2016. The summit was attended by over 200 participants from all over the world and inaugurated by Prof. Shyam B Menon, Vice-Chancellor, Ambedkar University, New Delhi. Dr Jagdish Arora, Director, INFLIBNET gave the inaugural address on innovative practices in

libraries. Mr Deepak Sharma proposed to take up with INFLIB NET to provide free access to online resources to private universities also. In addition, it was decided to form a consortium of online resources for private universities to take up case of providing resources on subsidized rates to private universities, as applicable to central and state universities.

## Student Activities



Pranav Jain (4th from left) along with other participants and Hon'ble President of India

Pranav Jain, student of BTech (CSE) was invited to Rashtrapati Bhavan on 19 March 2016 for a day long Hackathon for Social Innovation. He was one of the 95 selected participants across all age groups selected throughout the nation. The participants were personally mentored by Honourable President of India, Shri Pranab Mukherjee and other industry leaders. Pranav's team project works

on the app, 'Monitoring of Toilets in public places' which helps in keeping the toilets clean by use of smart sensors and lists all the nearby toilets in an area. The project has been selected by Chairman of New Delhi Municipal Council for implementation across the capital region.

Pranav Jain has been selected to receive the scholarship by Tata Trusts & Google India for the Udacity Android Developer Nanodegree program.

He has been selected for Google Applied CS program which is a programme by Google to promote and teach CS - Android and Java in campuses. They have selected students from different campuses after a round of video and written interviews.

He has also been selected for GSoC 2016 under which he worked with Debian. Pranav won a stipend of USD 6000 for his project which works on making Android libraries and adding new functionality to K9 mail so that they can communicate over Session Initiation Protocol (SIP).

The Google Summer of Code (GSoC) is an international internship programme organized by Google, where a student performs as an independent developer with an open source organization on a 3 month programming project during summer. A selected few students across the globe, code and invent new ideas vigorously for 3 months.



With an aim to inspire and impart research training and skills to PG students, Dr Arvind P Bhanu,

Associate Professor, SOL, has guided Pushti Gupta to write a Research Paper entitled 'A critical study of surrogacy in perspective of human rights'. She did notable research in the area of surrogacy laws and presented the research paper in National Seminar on Science of surrogacy and Prospect of Proposed Law in India, organized by Indian Society of International Law (ISIL), Delhi on 19 March 2016.

- IIIT Delhi, in collaboration with The NorthCap University, IGDTUW, IIIT and Thapar University has started an MTech Infosec group to bring researchers

and technocrats to a common gathering to exchange and share the recent developments in different fields of research and to make this accessible to all. On 19 March 2016, students from our University attended and actively participated in the session at IIIT Delhi which provided them with the details of the real world practices and future requirements of industry so that they can gear up and work in right direction.

- Under the Guidance of Dr Arvind P Bhanu, Anil Sharma, student of LLM, presented a paper titled 'Gender Discrimination-A Challenge before Corporate sector' at the National Seminar on 'Corporate Sector in India: Socio Legal Issues and Challenges' organized by the University Institute of Law and Management Studies, MD University Rohtak on 17 April 2016 at UILMS, Gurgaon.
- Two doctoral dissertations of Mr Subhash Kumar and Mr Manish

Bhardwaj have been submitted to Shri Venkateshwara University, Gajraula (Uttar Pradesh) on 9 April 2016 under supervision of Dr Arvind P Bhanu.

- Suyash Srivastava (12LLB077, 8th Semester) and N Sai Phanindra Kumar (12LLB058, 8th Semester) participated in International Air and Space Law Academy (IASLA) Space Moot Competition from 5-8th April 2016 at International Air and Space Law Academy, Sydney, Australia. Eight teams were qualified to participate in the Moot Competition. Team from NCU Law School was selected along with two other teams from India to participate.
- The students of MTech Structural Engineering 1st year (Dept of Civil and Environmental Engineering) participated in the finals of IBCC Bridge Design Competition held at IIT Bombay on 1 April 2016. The NCU team stood at the 7th position in the All India final round. Earlier,

after qualifying in the preliminary round at NCU on 7 October 2015, the NCU team qualified the semi-finals from among a total of 40 teams from different colleges from all over India.

- Bhrigu Joshi, B Tech Civil Engineering Final Year, presented a research paper titled 'Damage sensitivity investigations of EMI technique on different materials through coupled field analysis', at the Sensors and Smart Structures Technologies for Civil, Mechanical, and Aerospace Systems Conference, as an oral presentation on 23 March 2016. This conference was a part of SPIE Smart Structures/NDE 2016 which was held between 21-24 March at Las Vegas, Nevada, United States.
  - Three students of third year, Mechanical Engineering, Shamoan Irfan, Rishabh Bounthiyal and Suyash Ghimikar went for summer internship in July 2016 to Utah, USA to work under Prof. David Fullwood, Department of Mechanical Engineering, Brigham Young University, Utah, USA. They worked on study of micro-structure and properties of magnesium based alloys and TRIP steels using Electron Back Scattered Diffraction (EBSD) techniques.
- Another student from the same

batch, Prince Mathews worked with Prof. Francisco Manuel Braz Fernandes, i3n CENIMAT, Universidade Nova de Lisboa, at Lisbon, Portugal. He worked on heat treatment characteristics of NiTi shape memory alloys applied to orthodontic and endodontic applications.

These internships have been arranged under guidance and support of Dr Ritwik Basu, Associate Professor, Dept of Mechanical Engineering.

- A test on C programming was conducted by IIT Bombay under Spoken Tutorials programme which was taken by 48 students of Dept of CSE&IT. 46 students cleared the test with 5 students getting more than 80% marks.
- The following industry related BTech final year projects (Dept of Mechanical Engineering) have been successfully completed by the students:

- 1) **Design and Fabrication of Crop Cutting Machine'** by Mohit Vij (12MEU056), Siddharth Sood (12MEU084), Varun Gulia (12MEU089) and Yatharth Gupta (12MEU098) under supervision of Mr Abhishek Pratap Singh and Mr Pardeep Rohilla. The project is associated with Gian's Meditronics, Bawana, Delhi.

[MED2016O012]

- 2) **'Design, Fabrication and Analysis of the cooling of a Desert Cooler'** by Darpan Vashishtha (12MEU027), Chaitanya Bhatia (12MEU025) and Manveer Singh (12MEU049) under supervision of Mr Abhishek Pratap Singh and Mr Pardeep Rohilla. The project is associated with Sidharth Enterprises, Faridabad. [MED2016O013]

- 3) **Design & analysis of controller for Plastic Injection Moulding Machine'** by Chaitanya Jhanji (12MEU026) under supervision of Mr Pardeep Rohilla and Mr Abhishek Pratap Singh. The project is associated with Vishesh Technologies, Gurgaon. [MED2016O014]

- 4) **Design of Multilevel Height Adjusting Industrial Trolley: Using Ergonomic Approach'** by Aman Kumar (12MEU011), Anshul Chanana (12MEU019), Anurag Bhakar (12MEU021) and Ashish Yadav (12MEU023) under supervision of Mr Deevesh Sharma. The project is associated with RICO Auto Industries, Gurgaon. [MED2016O015]

- Yashasvi and Sourabh Gupta have developed 'NCU-Mcare: Medical HealthCare System' for the medical professionals of NCU under the supervision of Dr A Charan Kumari. The main purpose of the system is to computerize the existing manual system and to develop a user-friendly system that can assist the doctors in their tasks including maintenance of patient records, stock control and report generation.

- Mehak Chawla, MTech VLSI student got selected for six month internship at Cadence Design System (India) Pvt Ltd, Noida which is an American electronic design automation (EDA) software and engineering services company. This internship was facilitated by Mr Pankaj Rakheja.



Palash Chhabra and Mansi Kamboj, students of BTech (IT) final year won the first prize in Skyfi Labs Project Competition 2016, a national level competition for search of India's

Best Engineering Final Year Project. About 500 projects across the nation from different streams of engineering participated in this competition. The project developed by Palash and Mansi, 'Shikshak - A Tutor System for the Blind' is an audio, visual and tactile device capable of facilitating Braille tutoring among the blind. The project guides for the project were Ms Jyotika Pruthi & Ms Mehak Khurana, Dept of CSE&IT.

The project had earlier won the Best Project Award for Social Cause at GD Goenka Project Exhibition.

- ❑ Shubham Dawra, Tushar Khatri and Aishwarya Basotia of BTech ECE 6th sem were selected for 'Verification of Electronic Design and Systems using System Verilog' training programme organized by the Mentor Graphics for this year. This internship was facilitated by Mr Pankaj Rakheja.
- ❑ Gaurav Sharma of MTech VLSI and Shivam Garg of BTech ECE got selected as interns in Mentor Graphics with a salary package of Rs. 10 lacs per annum each. Mentor Graphics Corporation is a world leader in Electronic Design Automation (EDA) Tools business. It is headquartered at the USA and is listed in NASDAQ.
- ❑ Mohit Yadav (13ECU087) has been awarded a grant of US \$2500 from SPIE to attend SPIE Optics + Photonics 2016 Conference at San Diego, USA from 27 August to 1 September 2016 and represented our University Chapter there on the recommendation of the Faculty Advisor, Dr Sunanda Vashisth. One student member from the Chapter can avail this grant each year. Last year Ms Manica Kathuria (13ECU081) former Vice-President of SPIE Student Chapter at NCU had got the opportunity to attend this conference.



The Society for Optics & Photonics (SPIE) is an international society advancing an interdisciplinary approach to the science and application of light. SPIE Optics + Photonics 2016 is the largest international, optical sciences and technology meeting in North America where the latest research in optical engineering, sustainable energy, nanotechnology, organic photonics, and astronomical instrumentation is presented.

NCU Student Chapter of SPIE was established in November 2014. It has 57 student members and 7 faculty members and has received an activity grant of \$1500 for the functioning of the Chapter for this year. SPIE is the only society which offers activity grant for the student chapter as well as scholarship grants to students to attend international conferences.

- ❑ Divya Sharma (13CSU038) and Kunal Arora (13CSU067) of BTech 7th semester (CSE) have proceeded for one year study abroad at Institute of Technology, Blanchardstown (ITB), Dublin, Ireland under the MoU between the NorthCap University and ITB, Ireland.



They are studying Bachelor of Engineering Hons in Computer Engineering in Mobile Systems at ITB, Ireland and have been offered a 40% tuition fee waiver by ITB, Ireland and a 50% scholarship as fee reimbursement by NCU.

We wish them a pleasant and productive stay abroad.

- ❑ Surbhi Dewan, MTech (CSE) student under the guidance of Ms Sumanlata Gautam has developed an educational Android application in Hindi and English language for improving the communication skills of Indian children suffering from cognitive disabilities like autism, dyslexia, aphasia and specific language impairment. The application has been matured at three different levels depending upon the severity of the child. It was tested with a group of special kids and has obtained excellent positive results.



## Team Rcubers Activities

The students of NCU had constituted a group Rcubers a year ago. During their journey on the path of creativity and uniqueness, the team put forward projects in different domains including painting, crafts, art work, posters, handicrafts, DIY, sketching and more. Through their initiative R\_Jyoti, they joined together to help the needy and

underprivileged section of the society. R\_Jyoti aimed to support old age homes, child care centres, blind schools, blood donation centres etc. through regular visits and providing logistics and resources, hosting events with NGOs on social issues and raising funds to alleviate the plight of those suffering.

Celebrating the success of one year,

Rcubers member Vineet Gupta shares his experience, "The journey has been amazing, one to be remembered for long. We've had obstacles to encounter, challenges to come across and a path full of commitments, but Rcubers as a team, has made it. With over 30 projects successfully completed and many more in pipeline, we are all on board for another



year of fun-filled work, projects, shared success and much more along with regular social visits to make a small difference to this world!"

A hand-made painting by Vineet Gupta was gifted as a token of love and gratitude from Team Rcubers and is at display at NCU Medical Room, which imbibes NCU's essence - "Yatha Drishti, Thatha Srishti" meaning "As the Vision, so the World".



Team Rcubers kicked off their another campaign on 13 March 2016 and collaborated with Asha Grih Foundation, Dwarka, New Delhi to visit a child care school for the underprivileged and needy children. The team interacted with around 80 underprivileged kids and distributed refreshments and other items to them.

The aim of the visit was to spread awareness in the society, particularly among the youth about welfare of underprivileged sections of the society.



Team Rcubers under its banner of R\_Jyoti visited Sai Baba Kushtha Ashram, old Gurgaon on 10 July 2016. The team interacted with orphans and senior citizens in the Ashram and distributed food items to them. The team was accompanied by Mr Sanjay Jain, CTO, DEN Networks and ex-CTO, Airtel India who supported Rcubers in this initiative of helping the needy people.

R\_jyoti is an initiative by Rcubers with an aim to do good for the needy and encourage everyone to support the cause. With a promise to continue this initiative, Rcubers plans to organize many more similar visits.

## Student Speak



**Aditi Jain**  
BBA-LLB 1st Sem

### How was your first day at the University?

My first day at the University was amazing. I was impressed with the infrastructure that NCU has. The faculty here is phenomenal. I was a little unsure at first but NCU filled me with confidence. The University is guiding me towards my dreams and inspires me to achieve what I want. It is worth being a part of NCU.

### What do you expect from NCU in future?

Being a Law student, exposure is extremely important. Every student dreams of an excellent placement. NCU fulfils the dreams of every student by providing the best education, the best exposure and most importantly every possible way of communicating with the students and helping them overcome the obstacles.

## Sports

- ❑ The Volleyball team of the University participated in the Inter-College Sports Fest, Triquetra 2016 organized by Netaji Subhas Institute of Technology NSIT, Delhi from 25-27 March 2016. The NCU team secured second position in the competition.
- ❑ Shubham Jain, student of BTech CSE participated in Table Tennis tournament during the inter-collegiate festival Converge organized by IIIT Noida from 5-6 March 2016. Shubham bagged the runner-up position in the tournament.
- ❑ The University introduced Netball for the first time in the campus which was very well appreciated by the students. Practice matches were played between different teams comprising students from all the three Schools of the University on 26 and 27 April 2016. The students showed a warm response and participated in large numbers for Netball.



The Judo Club of the University, under guidance of Ms Gurusikha Kundu, conducted training classes for the registered students. Ms Kundu and Ms Sunil Malik demonstrated the basic principles of Judo and trained the students on stance, gripping, movement pattern, and other techniques. The students were also taught off-balance and defence skills.



A friendly tournament was organized between the students of final year and present students to strengthen the bond between them. The matches were played between the team of Final year students and team of students of 1st, 2nd and 3rd years from all the three

Schools of the University. The Football Farewell Match was played on 13 April 2016, in which the team of 1st, 2nd and 3rd year students defeated the team of Final year students. The Cricket Farewell Match was played on 20 April 2016, in which the team of Final year emerged winners.

### Indoor Sports Tournaments at NCU

The University's Inter-Department Indoor Sports Tournaments were held from 16-19 August 2016. Teams from different departments participated in the tournaments presenting spectacular sports skills.

The results were as follows:

Events	Boys		Girls	
	Winners	Runners up	Winners	Runners Up
Table Tennis	CSE	CIVIL	CSE	SOM
Chess	CSE	SOL	CSE	SOM
Carrom	ME	CSE	ECE	CSE



## Miscellaneous

### International Women's Day Celebrated



To empower and celebrate the strength of women, the University celebrated the International Women's Day on 8 March 2016. The School of Law organized an event in association with Indian National Bar Council (INBA) and Prachi Educational Society (PES) in the morning session. Ms Rekha Lohani (IPS), DIG, CRPF and Ms Helene Tremblay, an internationally acclaimed inspirational speaker, author and photographer from Canada graced the occasion as special guests. Prof. (Dr) Rama Patnayak, President, Prachi Education Society, Professor Delhi University and a renowned social activist and Ms Archana Agarwal, National Bar

Council were special invitees at the event. The programme highlighted the achievements and challenges that women have encountered to gain acceptability and their efforts towards achieving an equal footing with men. Ms Lohani spoke about the strong women leaders of modern India who have played important roles in different fields. She emphasized that women should be self-motivated and nothing should dampen their 'self-drive'. Through a visual presentation Ms Helen Tremblay highlighted the status of women in many parts of the world. Prof. (Dr) Rama Patnayak (PES) appreciated NCU's sincerity towards women empowerment.

Students, Mukul Sharma and Manmohit Grewal, BBA-LLB (H) were felicitated for their outstanding social work during their internship at Prachi Educational Society. Besides the lectures by the distinguished guests, there were performances by the University Choir, dedicated to the cause of women. This was followed by a debate, extempore and interpreting the picture competitions related to women issues. The event was coordinated by Mr Subhradipta Sarkar (SOL) and Dr Divyabha Vashisth (CLL).

To celebrate the spirit of womanhood, informative talks continued in the afternoon in coordination with Columbia Asia Hospital, Gurgaon, coordinated by Ms Deepika Deswal and Dr Shilpi Wadhwa. A talk on 'Health and Fitness' was organized for girl students and female staff members and delivered by Columbia Asia Hospital's team of Rheumatologist, Dr Shaloo Bhasin Gagneja, Dietician, Dr Honey Khanna and Gynecologist, Dr Amita Shah. An interactive session followed the talks which highlighted several common issues related to women.

### Mini Marathon

The University organized Mini Marathon on 5 March 2016, in association with Brahmakumaris and Haryana Police. The marathon was organized in line with 'Sashakt Neev', a campaign run jointly by Brahma Kumaris and Haryana Police, for women empowerment and gender equality. About 400 participants joined the marathon, including students, faculty and staff of the University along with family and friends and members of Brahma Kumaris fraternity. The occasion was graced by the presence of Prof. Prem Vrat, Pro-Chancellor NCU, Sister Asha and Sister Urmil from Brahma Kumaris, Mr Alok Mittal, IG-NIA, and Mr TL Satyaprakash, DC Gurgaon.

The sprinters ran for 5.5 km for a social cause and message for all to remain



healthy and fit. The highlight of the event was the desire of the institutions involved to express their support for women empowerment and gender equality. The runners were provided with Certificates of Participation and refreshments after the marathon. Mr Chetana Oly (Rotary Public School), Mr Jagdeep Dhull (Dronacharya School) and Mr Shravan Rathore (BBA,

NCU) were winners in the male category, while Ms Jyoti Gulati (Brahma Kumaris), Ms Indu Badgajar (COR, NCU) and Ms Mamta Rohilla (SOM, NCU) were winners in the female category. Many students, faculty and staff of NCU participated in the marathon with full enthusiasm and 'josh'.

## Annual Alumni Meet 2016

To take a walk down the lanes of memories and bond with the alumni, the University organized its Annual Alumni Meet 2016 on 16 April 2016, coordinated by School of Professional Attachment. The occasion was graced by the presence of alumni from different batches who had gathered from various parts of the country, along with senior officials of the University, HoDs and many faculty members. Speaking on the occasion, Prof. Prem Vrat welcomed the alumni with his compassionate words and explained the objective of holding such events. Brig. SK Sharma (Retd) underlined and praised the achievements of alumni in various walks of life. Brig. Sharma also inaugurated the NCU Alumni Association (NCUAA) and felicitated some alumni for their outstanding contribution in supporting students for their internships and placements.



This was followed by a cultural programme by our Music Society, 'Encore' which included dances and songs. The performance by Mr Atharv Nanda was appreciated by the audience. A palpable bonhomie was in evidence with old students reviving their memories with their batchmates, seniors, juniors and faculty members. They shared their

experiences, achievements and future plans. Mr BK Gupta expressed his gratitude and appreciation to all the alumni for making the evening a memorable one. The event was compered by students, Mr Anjney Sangal, Ms Namami, Mr Ayush Pandey and Ms Navi under the guidance of SPA.

## Yukti organizes Earth Day Celebrations



Yukti, the social service cell at the University aims at bringing the faculty members and students together to make life better for the negligent and suffered, regardless of caste, color, religion or status. In continuation of its previous social activities, Yukti Club organized an event 'Earth Day Celebrations' at Gurukul Kalpataru, Caterpuri, Gurgaon on 2 May 2016. The Gurukul is run by a non-profit organization, Arvindam Foundation and focuses on skill building of students of lower strata of the society besides helping them cope with their studies at schools.

Yukti organized the event to promote the importance of environment among young students and create awareness among them regarding our planet and how they can contribute in saving it.

The volunteers screened a documentary and conducted some fun activities and a drawing competition. To encourage the students, they were awarded with gifts and goodies. The event ended with a quiz and everybody pledged to keep the environment clean.

## Society Activities – Enactus



Enactus Society at NCU participated in Seminar on Women Entrepreneurship on 19 February 2016, organized by Enactus Miranda House, Delhi, in collaboration with Enactus India and Popxo, a culture, beauty, health and lifestyle website for women. Priyanka

Gill and Namrata Bostrom, Co-founders of Popxo spoke to the audience on themes of entrepreneurship during the cultural fest of Miranda House, Tempest 2016. The NCU Enactus team interacted with the team members of Enactus at other institutions. It was a good platform for them to socialize and spread their networking.



Enactus NCU team also visited Kaizen, a one-day social extravaganza in collaboration with Design Innovation Cell and Professional Ethics and Social Responsibility (PESR) held at IIT Delhi on 13 March 2016. The event was a convention witnessing convergence of numerous social bodies from across the nation, NSS bodies of various colleges, prominent NGOs and distinguished change makers in the field of social work. The NCU team attended the different lecture events of prominent speakers such as Mr Akshay Saxena, President of Avanti Fellows, representatives from Gandhi fellows and Teach for India. It served as an opportunity to learn and strengthen networking for the Enactus NCU team.

## NCU Enactus team participates in Enactus India National Competition

NCU Enactus team participated in the Enactus India National Competition held at Hotel Taj Lands End, Mumbai on 21 and 22 July 2016. The team comprising 25 student members, showcased their two projects, 'Project Ehsaas' and 'Project Kumhaar'; which were well appreciated by the audience. Enactus is an international non-profit organization dedicated to improve the society through business actions which organizes a national competition every year. This year 70 teams participated in the competition.

Project Ehsaas is concerned with the

plight of Bhandwari village where around 1500 metric tons of unprocessed waste is sent to the landfills, leading to high levels of pollution and thereby creating health issues. The team was successful in increasing the waste collectors' income by 10% and reducing the waste being sent to the landfills by 65 tonnes.

Project Kumhaar is an initiative towards saving pottery, our traditional art, from the verge of extinction. NCU Enactus team also focused on Kumhaargram, a potter's village in Uttam Nagar, New Delhi. The project led to employment of 14 people along with providing empowerment to 5 women.

## Orientation Programme of Enactus NCU



An Orientation Programme for Enactus NCU was organized on 4 August 2016. The event saw an attendance of around 200 students. It started with a brief presentation about Enactus Society, its objectives and role of students in the organization followed by the reasons why students should join and how they will get benefitted. The introduction session was followed by videos of some ex-members like Dhruv Aneja, Aina Gilani, Ananya Goel, and Gaurav showing their journey in Enactus and how they evolved through it. The Enactus team also presented their ongoing projects, business models, implementation strategy and sustainability of the projects.

The present Student President of Enactus NCU is Rahul Gupta (Dept of CSE&IT) and Faculty Advisor is Dr Dipti Vaya of Dept of Applied Sciences.

## University bids Farewell to its final year students



The University organized a farewell ceremony for the final year students of Engineering, Management and Law on 11 May 2016. The adieu was full of excitement of entering into a new, matured and professional world, mixed with the pain of departing from the alma mater. The event was graced by the presence of the Pro-Chancellor, Prof. Prem Vrat; Pro Vice-Chancellor, Brig SK Sharma (Retd); Registrar, Col Bikram Mohanty (Retd); Heads of Departments and faculty members.

Student representatives from different Departments and Schools revived old memories, with mixed emotions. The outgoing students also expressed their feelings for their Alma Mater and shared some of their fond memories. The event witnessed many dance and song performances by the students who brought the evening live by their acts. Dressed to the nines, the students were all in high spirits as they clicked away, capturing moments of joy, laughter and smiles and wanted to make the best of the last day as students at the University. The outgoing students were given different titles by the pre-final year students as they were called on stage and given mementoes.



## Eye Check-up Camp organized at NCU



The University hosted an on-campus 'Vision Investigation & Consultation Camp' in partnership with TITAN on 29 February 2016. The objective of the camp was to bring eye investigations to our doorstep. Around 150 students, faculty and staff members of the University participated in the camp and benefitted from the advice of the technicians. The camp was organized by Dr Shilpy Wadhwa and supported by Dept of Civil & Environmental Engineering.

## Health Check Camp at the University

A Preventive Health Check Camp, Nivaran- II was held at the University on 27 April 2016. In keeping its commitment to provide feasible health and diagnostic facilities for its staff and students, the University organizes such health camps. Nivaran - II was undertaken through a diagnostic camp for Vitamin D3, Calcium, Hb & RBS, B12 and Lipid Profile to make everyone self-aware about the value of prevention in keeping diseases at bay and maintaining a healthy lifestyle. The screening/diagnostic campaign was conducted in association with Mantracare, a major Diagnostic Centre. Around 50 people availed the specialized diagnostics at Nivaran - II, which was coordinated by Dr Shilpy Wadhwa, Medical Consultant, The NorthCap University. Organizers and coordinators of Nivaran - II placed a vote of thanks to the Management for their support.



## Staff Development Programme on Work-Life Balance



A Staff Development Programme on 'Work-Life Balance' was conducted by Dr Shweta Sharma, Clinical Psychologist, Columbia Asia Hospital on 4 May 2016, for admin and technical staff of the University. The

objective of the workshop was to equip the employees with proper prioritizing between work i.e. career and ambition vis-a-vis lifestyle i.e. health, pleasure, leisure, family and spiritual development. During the enlightening and interactive

session intertwined with examples, stories, real life experiences, case-studies, exercises and thought experiments, the participants were made aware and equipped about the general stressors and hassles that they face in their day to day lives. They were also trained on the techniques to cope with such stresses and issues. Over 100 participants attended the motivational workshop and learnt practical tools to build better balance between work and lifestyle. The workshop was organized and coordinated by Ms Nikita Kapoor, Psychologist-cum-Counsellor, NCU.

## First Aid Workshop Organized



The University organized a 'First Aid workshop' for its staff on 4 June 2016. The objective of this workshop was to make the campus 'first aid' ready and sensitize the staff members about how to handle the situation in an emergency. Around 70 staff members of the University availed the specialized training, which was conducted under the direction of Dr Babban from Columbia Asia Hospital. Dr Babban provided vital information and guidance on providing first aid to an injured person. The University staff participated in the workshop with full excitement and their queries and doubts were aptly answered by the expert. The workshop was coordinated by Dr Shilpy Wadhwa, Medical Consultant at NCU.

## Dental Health Checkup

The University organized an on-campus 'Dental Health Investigation & Consultation Camp' in association with Columbia Asia Hospital on 10 August 2016. The objective of the camp was to bring about awareness about oral health among students and faculty of the University and to bring specialized investigations within their reach. A lot of interest was generated for routine investigations and specialized onsite consultation. More than 150 participants including students, faculty and staff members of the University benefitted from the health camp and consultation. Dr Bharti from Columbia Asia Hospital sensitized them about the importance of oral health in prevention of several diseases and maintaining a healthy lifestyle. The camp was coordinated by Dr Shilpy Wadhwa, Medical Consultant at NCU.



## Fire Fighting Training to Security Staff



As a part of the awareness programme, the University organized training for fire management in the campus on 21 July 2014. The training was conducted with an objective to train the security staff to handle the situation in case of a fire, assist the orderly movement of people and initiate fire control. This would help them protect life and property in the University in an

emergency. To train the University staff which included security guards, housekeepers and KSB staff, the Security Officers, Mr Sanjeev Kumar and Mr Ravinder Singh organized a demonstration of different types of fires, the precautions to be taken and the effective ways to extinguish it by using different types of extinguishers for different types of fire. The staff was also provided information about fire protection systems in the campus, safety measures, evacuation procedures, emergency procedures etc.

## Independence Day Celebrations



The University celebrated the 70th Independence Day with a lot of enthusiasm and gaiety on 15 August 2016. The faculty members, staff, students and children gathered at the occasion to celebrate the day. The ambience at the University was full of patriotic fervor. The celebrations started with the flag hoisting by the Registrar, Col Bikram Mohanty (Retd). After unfurling the National Flag, Col Mohanty took the salute, with the Security Staff of the University marching past the dais.

The atmosphere came alive with patriotic songs. After the march past, Col Mohanty addressed the audience and greeted all faculty members, staff and students on the occasion. He praised the efforts and dedication of the security staff for maintaining high standards and traditions of the University in the march past. He also mentioned some of the major achievements of the University in last one year and thanked all the faculty and staff members for their dedication, support and cooperation in keeping the University's



name at the top. He also urged the audience to have patience in different realms of life as it is the key for success.

The celebrations ended with sumptuous refreshments for all.

## Books / Book Chapters Published

### Book

#### International

1. Anu Batra and **Vijendra Singh** (2016) 'Predictive Methodology to Diagnose Chronic Kidney Disease', pp. 1-80, LAMBERT Academic Publishers, ISBN - 978-3-659-89641-5, **CSE2016B001**.

#### Book Chapters

#### International

- 1 Saloni Bhatia, **Sharda Vashisth** and Ashok Salhan (2016) 'Cellular radiations effect on human health' in Proceedings of First International Conference on Information and Communication Technology for Intelligent System, Chapter 23, pp. 213-219, Springer International Publishing Switzerland, ISBN - 978-3-319-30932-3, **ECE2016BC001**.
- 2 **Supriya Raheja**, Reena Dadhich and Smita Rajpal (2015) 'Fuzzy Based Multilevel Feedback Queue Scheduler' in Smart Innovation, Systems and Technologies, pp. 373-380, Springer India, ISBN - 978-81-322-2528-7, **CSE2016BC001**.
- 3 **Meghna Sharma and Niharika Garg** (2016) 'Inventory Control and Big Data' in Optimal Inventory Control and Management Techniques, Chapter 11, pp. 222-235, Business Science Reference, ISBN - 978-1-4666-9888-8, **CSE2016BC002**.
- 4 Pooja Kundu, **Neeti Kashyap** and Neha Yadav (2016) 'Literature

Survey on Intrusion Detection Systems in MANETs' in Information Systems Design and Intelligent Applications, pp. 357-366, Springer India, ISBN - 978-81-322-2755-7, **CSE2016BC003**.

- 5 **Jyotika Pruthi and Gaurav Gupta** (2015) 'Image Segmentation Using Genetic Algorithm and OTSU' in Advances in Intelligent Systems and Computing, Chapter 43, pp. 473-480, Springer, ISBN - ISBN 978-981-10-0450-6 and ISBN 978-981-10-0451-3, **CSE2016BC004**.
- 6 KK Singh, **Akansha Singh** and M Phulia (2016) 'Unsupervised Change Detection in Remote Sensing Images Using CDI and GIFP-FCM Clustering' in Advances in Intelligent Systems and Computing, Chapter 29, pp. 305-313, Springer, ISBN - 978-981-10-0450-6, **CSE2016BC005**.
- 7 **Ashwini Sharma**, Dixit Garg and Ashish Agarwal (2016) 'Supply Chain for Disaster Management: An Empirical Study. In Managing Humanitarian Logistics' in Managing Humanitarian Logistics, Chapter 17, pp. 241-254, Springer, ISBN - 978-81-322-2416-7, **MED2016BC001**.
- 8 **Bharti Arora**, Eun Ha Choi, Masaharu Shiratani and Pankaj Attri (2016) 'Cellulose: A Smart Material for Water Purification' in Smart Materials for Waste Water Applications, Chapter 13, pp. 335-346, Wiley-Scrivener Publisher, USA, ISBN - 9781119041184, **APS2016BC001**.
- 9 **Bharti Arora**, Masaharu Shiratani, Eun Ha Choi and Pankaj Attri (2016)

'Influence of Atmospheric Pressure Plasma on Biomolecules' in Atmospheric Pressure Plasmas: Processes, Technology and Applications, Chapter 1, pp. 1-18, Nova Science Publishers, USA, ISBN - 978-1-63485-214-2, **APS2016BC002**.

- 10 **Sushmita Biswal Waraich** (2016) 'Beyond Philanthropy' in Corporate Social Responsibility: Emerging Issues and Challenges, Chapter1, pp. 7 -19, Cambridge University Press, ISBN -978-93-85386-14-5, **SOM2016BC001**.

#### National

- 1 **Anil Kumar Misra** (2016) 'Earth to air heat exchange systems for small houses and industrial buildings in changing Indian climatic conditions' in Emerging Energy Alternatives for Sustainable Environment, Chapter 22, pp. 459-477, Teri Press, New Delhi, ISBN - 9788179934111.00, **CEE2016BC001**.
- 2 **Srishty Banerjee** (2016) 'Legal Aid: An Apparatus for achieving Equality before Law' in Law and Community: A Socio-Legal Perspective, Chapter 10, pp. 132 - 144, Satyam Law International, New Delhi, ISBN-97893828-23490, **SOL2016BC001**.
- 3 **Jaya Ahuja** and Vani Narula (2015) 'Streamlining Recruitment Process and Competency Mapping in Indian Paint Industry (Haryana Region)' in People Management, Chapter 11, pp. 91-113, Bharti Publications, New Delhi, ISBN - 978-93-85000-22-5, **SOM2016BC002**.

## School of Engineering and Technology

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

#### Research Papers Published/Presented

#### Journals

#### International

- 1 **Kusum Dangi and Supriya P Panda** (2016) 'Networking Aspects of Wireless Body Area', Advances in Computer Science and Information Technology, Vol. 3, No. 1, pp. 33-36, **ECE2016J001**.

- 2 **Anjali Garg**, Kanwar Singh Sandhu and Lalit Mohan Saini (2016) 'Design and Implementation of Fuzzy Logic Controller for Static Switching Control of Voltage Generated in Self-Excited Induction Generator', Energy Systems Optimization, Modeling, Simulation,

and Economic Aspects, Vol. 6, No. 1, pp. 1-17, **ECE2016J002**.

- 3 **Nitin Garg, Mona Aggarwal, Akansha Solanki and Swaran Ahuja** (2016) 'Data Communication in Linear Wireless Sensor Networks via Unmanned Aerial Vehicles using

- FSO Communication', International Journal of Innovations in Engineering and Management, Vol. 5, No. 1, pp. 1-6, **ECE2016J004**.
- 4 **Naresh Kumari**, Amar Nath Jha and **Nitin Malik** (2016) 'Development of Wind Power Generation Model with DFIG for Varying Wind Speed and Frequency Control for Wind Diesel Power Plant', International Journal of Engineering and Technology, Vol. 8, No. 2, pp. 596-603, **ECE2016J005**.
  - 5 **Pankaj Rakheja and Rekha Vig** (2016) 'Image Denoising using Combination of Median Filtering and Wavelet Transform', International Journal of Computer Applications, Vol. 141, No. 9, pp. 31-35, **ECE2016J006**.
  - 6 Anita Dangi and **Pankaj Rakheja** (2016) 'Increasing Single Image Resolution and Denoising Using Combination of Bicubic Interpolation and Sparse Representation', International Journal of Engineering Applied Sciences and Technology, Vol. 1, No. 7, pp. 5-9, **ECE2016J007**.
  - 7 **Nitin Garg, Mona Aggarwal** and Nikita Ishpuniani (2016) 'Outage Analysis of Dual Hop FSO System with Multiuser Scheduling Over Gamma-Gamma Turbulence', International Journal of Engineering Trends and Technology, Vol. 35, No. 6, pp. 237-242, **ECE2016J010**.
  - 8 **Nitin Garg, Mona Aggarwal**, Akansha Solanki and **Swaran Ahuja** (2016) 'Outage performance of Dual-Hop Parallel AF Relayed FSO System', International Journal of Engineering Trends and Technology, Vol. 35, No. 7, pp. 344-349, **ECE2016J011**.
  - 9 Anushka Singh and **Vandana Khanna** (2016) 'Technical Performance Evaluation and Modelling of 150kw PV Array System Installed at NCU', International Journal of Engineering Research and Technology, Vol. 5, No. 5, pp. 53-56, **ECE2016J012**.
  - 10 Akancha Shekher and **Vandana Khanna** (2016) 'Modelling and Prediction of 150KW PV Array System in Northern India using Artificial Neural Network', International Journal of Engineering Science Invention, Vol. 5, No. 5, pp. 18-25, **ECE2016J013**.
  - 11 Devi Shivraman, Ajith Kumar, Sundaramoorthy and **Neeraj Kumar Shukla** (2016) 'Design and Analysis of Two Stage Model for Effective Beam forming using MATLAB and VerilogHDL', International Journal of Signal Processing, Image Processing and Pattern Recognition, Vol. 9, No. 4, pp. 141-150, **ECE2016J014**.
  - 12 Shivani Garg and **Neeraj Kumar Shukla** (2016) 'A Study of Floor planning Challenges and Analysis of Macro Placement Approaches in Physical Aware Synthesis', International Journal of Hybrid Information Technology, Vol.9, No.1, pp. 279-290, **ECE2016J015**.
  - 13 Mohit Yadav, Kartik Kanodia, **Kusum Grewal Dangi and Supriya P Panda** (2016) 'A Survey of Bluetooth and ZigBee WPAN Standards', International Journal of Engineering Development and Research, Vol. 4, No. 2, pp. 651-654, **ECE2016J016**.
  - 14 **Kusum Grewal Dangi and Supriya P Panda** (2016) 'Performance Analysis of Patient Monitoring Wireless Body Area Networks using Queueing Models', International Journal of Applied Engineering Research, Vol. 11, No.9, pp.6671-6675, **ECE2016J017**.
  - 15 Nitij Vashisht, Radhika Ramtri, Prince Oberoi and **Kusum Grewal Dangi** (2016) 'Application of Energy Harvesting System in Hybrid Automobiles', International Journal of Research in Engineering and Technology, Vol. 5, No. 4, pp. 391-394, **ECE2016J018**.
  - 16 **Sharda Vashisth**, Bharat Sharma and Munna Khan (2016) 'Assessment of Simulated Blood Pooling in Forearm of an Aircraft Pilot', Aerospace Medicine and Human Performance, Vol.87, No.3, pp.183-184, **ECE2016J019**.
  - 17 **Sheila Mahapatra and Mandeep Singh** (2016) 'Analysis of Symmetrical Fault in IEEE 14 Bus System for Enhancing Over Current Protection Scheme', International Journal of Future Generation Communication and Networking, Vol. 9, No. 5, pp. 51-62, **ECE2016J020**.
  - 18 Smriti Tikko and **Nitin Malik** (2016) 'A Hybrid Approach for Secured Optimal Power Flow and Voltage Stability with TCSC Placement', International Journal of Advanced Science and Technology, Vol. 89, No. 1, pp. 1-8, **ECE2016J021**.
  - 19 Smriti Tikko and **Nitin Malik** (2016) 'Detection of Face using Viola Jones and Recognition using Back Propagation Neural Network', International Journal of Computer Science and Mobile Computing, Vol. 5, No. 5, pp. 288-295, **ECE2016J022**.
  - 20 **Pooja Sabherwal** (2016) 'Modelling of ECG Signal Using Fourier Series', International Journal of Emerging Science and Engineering, Vol. 4, No. 4, pp. 31-33, **ECE2016J023**.
  - 21 **Mona Aggarwal**, Parul Garg and Parul Puri (2016) 'Multiple User Pair Scheduling in TWR Assisted FSO Systems', IEEE/OSA Journal of Optical Communication & Networking, Vol. 8, No. 5, pp. 290-301, **ECE2016J024**.
  - 22 Deepika Jain, **Amanpreet Kaur and Swaran Ahuja** (2016) 'Enhanced Cognitive Radio Energy Detection Technique Based on Estimation of Noise Uncertainty', International Journal of Advanced Research in Computer Engineering and Technology, Vol. 5, No. 5, pp. 1339-1342, **ECE2016J025**.
  - 23 **Mona Aggarwal** and Poonam Kumar (2016) 'Performance Analysis of Parallel Relayed Power Line Communication', International Journal of Engineering Research and Technology, Vol. 5, No. 5, pp. 320-324, **ECE2016J026**.
  - 24 Anjana Yadav and **Pankaj Rakheja** (2016) 'Integration of Elliptical Cryptography with RSA and

- Steganography using Biometric Authentication’, International Journal of Computer Applications, Vol.144, No.4, pp.32-36, **ECE2016J027**.
- 25 **Saurabh Sachdeva**, Ashutosh Chandra and Deepti Chahar (2016) ‘CNT Antennas: A Comparison Between GHz & THz Regimes’, International Journal of Engineering development and research, Vol. 2, No. 2, pp. 1585-1589, **ECE2016J028**.
- 26 **Amanpreet Kaur, Rekha Vig and Swaran Ahuja** (2016) ‘Biometrics: Analysis of Fingerprint using Hybrid Transformations’, International Journal of Computer Applications, Vol. 144, No. 2, pp. 20-23, **ECE2016J030**.
- 27 Arindam Mondal and **Amanpreet Kaur** (2016) ‘Comparative Study of Feature Level and Decision Level Fusion in Multimodal Biometric Recognition of Face, Ear and Iris’, International Journal of Computer Science and Mobile Computing, Vol.5, No.5, pp.822-842, **ECE2016J031**.
- 28 **Amanpreet Kaur**, Mohit Ahlawat and **Swaran Ahuja** (2016) ‘Optimization of Femtocell Network Using Estimation Techniques’, International Journal of Computer Science and Mobile Computing, Vol. 5, No. 6, pp. 466-475, **ECE2016J032**.
- 29 Komal, Mohit Saxena, Shashank Chaturvedi and **Neeraj Kumar Shukla** (2015) ‘A Novel Optimal 2-D Layout for Cache Memory at 45nm CMOS Technology’, International Journal of Advanced Science and Technology, Vol. 82, No. 4, pp. 33-44, **ECE2015J058**.
- 30 Shipra Sharma, **Rakhi Nangia and Neeraj Kumar Shukla** (2016) ‘Design and RTL Implementation for AHBAPB Bridge on SoC’, Journal of VLSI Design Tools and Technology, Vol. 6, No. 2, pp. 44-52, **ECE2016J033**.
- 31 Renu Saini, **Sharda Vashisth** and Ruchika Bhatia (2016) ‘Classification of Pressure Gradient of Human Common Carotid Artery and Ascending Aorta on the Basis of Age and Gender’, International Journal of Computer Applications, Vol.145, No.1, pp.15-19, **ECE2016J034**.
- 32 Ruchika Bhatia, **Sharda Vashisth** and Renu Saini (2016) ‘Wall Shear Stress Analysis in Stenosed Carotid Arteries with Different Shapes of Plaque’, International Journal of Computer Applications, Vol. 145, No.4, pp.9-12, **ECE2016J035**.
- 33 Neha Rani and **Sharda Vashisth** (2016) ‘Brain Tumor Detection and Classification with Feed Forward Back-Prop Neural Network’, International Journal of Computer Applications, Vol. 146, No. 12, pp. 1-6, **ECE2016J036**.
- 34 **Sharda Vashisth**, Munna Khan, Ritu Vijay and Ashok K Salhan (2016) ‘Non-Invasive Measurement and Subsequent Analysis of Human Carotid Pulse for Ground Based Simulation of G-Stress’, International Journal of Bioinformatics Research and Applications, Vol. 12, No. 3, pp. 227-237, **ECE2016J037**.
- National**
- 1 **Nitin Garg, Mona Aggarwal** and Nikita Ishpuniani (2016) ‘Study of Implementation of VANET Network on Intervehicular Communication System’, Scientific Technical Medical Journal of Network Security, Vol.4, No.1, pp.7-13, **ECE2016J003**.
- Conference Proceedings**
- International**
- 1 Pranay Bhardwaj, Ramnik Ahuja, **Kusum Grewal Dangi and Charu Rana** (2016) ‘Analysis and Statistical Verification of Relation of Call Drop Rate and Handover Behavior to the User Density’, Second International Conference on Computational Intelligence & Communication Technology, pp. 484-488, **ECE2016P003**.
- 2 **Jyothi Varanasi** and Madan Mohan Tripathi (2016) ‘A Comparative study of Wind Power Forecasting Techniques – A Review Article’, Indiacom-2016, pp. 4809-4814, **ECE2016P004**.
- 3 Tanvi Nara, **Naman Joshi and Swaran Ahuja** (2016) ‘Performance of Free-Space Optical MIMO system in S-Distributed Turbulence’, International Conference on Computing, Communication and Automation, pp. 1-5, **ECE2016P005**.
- 4 **Mona Aggarwal**, Parul Garg and Parul Puri (2015) ‘Relay Selection with Reduced CSI for TWR Assisted FSO Networks, ISPC 2015, Jaypee Wagnaghat, pp. 371-376, **ECE2016P006**.
- National**
- 1 Neetu Goel and **Neeraj Kumar Shukla** (2016) ‘Exploration of scan based testing overhead in design for testability, ACSE-2016, pp. 1-5, **ECE2016P007**.
- Conference Presentations**
- International**
- 1 **Mona Aggarwal**, Parul Garg and Parul Puri (2016) ‘Outage Analysis of Hybrid Df Relaying in Optical Wireless Communication Systems’, SPIN 2016, Amity University, **ECE2016C002**.
- 2 **Mona Aggarwal**, Shubham Sehgal and Akshat Mathur (2016) ‘Intelligent Transportation System and Applications’, ICEPMU-2016, NCU, Gurgaon, **ECE2016C003**.
- 3 **Mona Aggarwal**, Jyoti Chauhan, **Sharda Vashisth and Swaran Ahuja** (2016) ‘Visible Light Communication in Healthcare Applications’, ICEPMU-2016, NCU, Gurgaon, **ECE2016C004**.

## Department of CSE & IT

### Research Papers Published/Presented

#### Journals

##### International

- 1 Swati Arya and **Neeti Kashyap** (2016) 'QOS Based Routing Protocols- A Review', International Journal of Computer Science Engineering and Information Technology Research, Vol. 6, No.1, pp. 87-94, **CSE2016J005**.
- 2 Payal and **Jyotsna Singh** (2015) 'Patterns of Calcium Signaling based on HH Model', International Journal of Engineering Research & Technology, Vol.4, No. 12, pp. 660-663, **CSE2016J006**.
- 3 **Jagdeep Kaur** and Pradeep Tomar (2015) 'Four tier architecture of component selection process using clustering', International Journal of Software Engineering, Technology and Applications, Vol. 1, No. 2/3/4, pp. 155-171, **CSE2016J007**.
- 4 **Supriya Raheja**, Reena Dadhich and Smita Rajpal (2015) 'Designing of Vague Logic Based multilevel feedback queue scheduler', Egyptian Informatics Journal, Vol. 17, pp. 125-137, **CSE2016J008**.
- 5 **Jagdeep Kaur** and Pradeep Tomar (2016) 'A Retrospection of Software Component Selection Techniques Using Computational Intelligence Techniques', International Journal of Latest Trends in Engineering and Technology, Vol.6, No.4, pp.489-495, **CSE2016J009**.
- 6 **Vijender Singh** (2016) 'Application of Artificial Neural Networks for Predicting Generated Wind Power', International Journal of Advanced Computer Science and Applications, Vol.7, No.3, pp.250-253, **CSE2016J010**.
- 7 **Anuradha and Gaurav Gupta** (2015) 'Fuzzy Decision Tree Construction in Crisp Scenario Through Fuzzified Trapezoidal Membership Function', Internetworking Indonesia, Vol. 7, No.2, pp. 21-28, **CSE2016J011**.
- 8 Surbhi Dewan and **Sumanlata Gautam** (2016) 'Language Specific Speech Feature Variation', International Journal on Computer Science and Engineering, Vol.8, No.4, pp.128-132, **CSE2016J012**.
- 9 Surbhi Dewan and **Sumanlata Gautam** (2015) 'How Assistive Technologies can help Autistic Children: A Survey', International Journal of Innovation & Advancement in Computer Science, Vol.4, No.9, pp.16-22, **CSE2016J013**.
- 10 Priyanka Rastogi and **Vijendra Singh** (2016) 'Systematic Evaluation of Social Recommendation: Systems: Challenges and Future', International Journal of Advanced Computer Science and Applications, Vol. 7, No. 4, pp. 158-166, **CSE2016J014**.
- 11 **A Charan Kumari** and K Srinivas (2016) 'Hyper-heuristic approach for multi-objective software module clustering', The Journal of Systems and Software, Vol. 117, pp. 384-401, **CSE2016J015**.
- 12 **A Charan Kumari** and K Srinivas (2016) 'Comparing the Performance of Quantum-inspired Evolutionary Algorithms for the Solution of Software Requirements Selection Problem', Information and Software Technology, Vol.76, pp.31-64, **CSE2016J016**.
- 13 Swati Arya and **Neeti Kashyap** (2016) 'Optimization of Routing using Hybrid of Genetic and Hill Climbing Algorithm for MANET', International Journal of Innovative Science, Engineering & Technology, Vol.3, No.4, pp. 137-143, **CSE2016J017**.
- 14 Pooja Kundu and **Neeti Kashyap** (2016) 'Collaborative Attack Detection in MANET using MD5 Grid Positioning BDS', International Journal of Multidisciplinary Approach and Studies, Vol. 3, No. 2, pp. 82-92, **CSE2016J018**.
- 15 Richa Sharma, Pooja Paliwal and **Yogita Gigras** (2016) 'Importance of Genetic Testing for Cancer Genes Association', International Journal of Soft Computing and Engineering, Vol.6, No.2, pp.23-27, **CSE2016J019**.
- 16 **Yogita Gigras**, Nikita Jora and **Anuradha Dhull** (2016) 'Comparison between Different Meta-Heuristic Algorithms for Path Planning in Robotics', International Journal of Computer Applications, Vol. 142, No. 3, pp. 6-10, **CSE2016J020**.
- 17 Abhinav Kharbanda and **Meena Kumari** (2015) 'Analysis and Detection of DMA Malware for Peripheral Devices', International Journal of Innovative Technology and Exploring Engineering, Vol. 5, No.6, pp.28-33, **CSE2016J021**.
- 18 Pratibha Rana and **Jyotsna Singh** (2016) 'Classification of EEG Signal Data Using Hybrid of Neuro-Fuzzy', International Journal of Engineering Sciences & Research Technology, Vol.5, No.5, pp.182-187, **CSE2016J022**.
- 19 Ekta and **Hitesh Yadav** (2016) 'An Analysis on Various Approaches to Model Variability', International Journal of Innovative Science, Engineering & Technology, Vol. 3, No. 5, pp. 542-546, **CSE2016J023**.
- 20 **Mehak Khurana and Meena Kumari** (2016) 'An Approach of Zero Correlation Linear Cryptanalysis', International Journal of Computer Science & Engineering Technology, Vol.7, No.5, pp.228-232, **CSE2016J024**.
- 21 **Mehak Khurana** and Gazal Chawla (2016) 'Performance and Accuracy Analysis of Range-Free Localization Algorithms In Wireless Sensor Network', International Journal of Computer Science & Engineering Technology, Vol. 7, No.5, pp.223-227, **CSE2016J025**.



- 22 **Mehak Khurana** (2016) 'Analysis of Node Localization Parameters on DV-Hop Algorithm in WSN', International Journal of Computer Science & Engineering Technology, Vol. 7, No. 5, pp. 219-222, **CSE2016J026**.
- 23 **Kanika Jora and Jyotika Pruthi** (2016) 'Detection of Coronary Plaque and Sensing Risks Factors of Heart at Early Stages Using Various Image Processing and Segmentation Techniques', International Journal of Current Engineering and Technology, Vol. 6, No. 2, pp. 417-422, **CSE2016J028**.
- 24 **Yatharth Garg and Jyotika Pruthi** (2016) 'Sentiment Analysis and Opinion Mining: A Review of Various Applications in Multivaried Domains', International Journal of Computer Science and Engineering Technology, Vol. 7, No. 3, pp. 65-67, **CSE2016J029**.
- 25 **Pooja Dang and Jyotika Pruthi** (2016) 'Novel Approach for Detection of Brain Tumor using Segmentation Techniques', International Journal of Computer Science and Engineering Technology, Vol. 7, No. 3, pp. 60-64, **CSE2016J030**.
- 26 **Pooja Dang and Jyotika Pruthi** (2016) 'Detection of Brain Tumor from MRI Images Using MATLAB', International Journal of Computer Science and Mobile Computing, Vol. 5, No. 2, pp. 174-179, **CSE2016J031**.
- 27 **Pratibha Rana and Jyotsna Singh** (2016) 'A Review on Classification of EEG Signal Data', International Journal of Engineering Sciences & Research Technology, Vol. 5, No. 5, pp. 188-193, **CSE2016J032**.
- 28 **Swati Arya and Neeti Kashyap** (2016) 'An Efficient Utilization of Genetic and Hill Climbing Algorithm in MANET', International Journal of Advance Foundation and Research in Computer, Vol. 3, No. 4, pp. 30-36, **CSE2016J033**.
- 29 **Neeti Kashyap** (2016) 'Era To Move From Internet of Things to Web of Things', International Journal of Advance Foundation and Research in Computer, Vol. 3, No. 4, pp. 25-29, **CSE2016J034**.
- 30 **Poonam Sharma and Shivani Sihmar** (2016) 'A Hybrid Feature Extraction and Recognition Technique for Offline Devnagri Handwriting', International Journal of Computer Science Engineering, Vol. 5, No. 3, pp. 156-161, **CSE2016J035**.
- 31 **Akansha Singh, Poonam Sharma and Krishna Kant Singh** (2016) 'A Detail Preserving Filter for High Density Salt - and - Pepper Noise', International Journal of Engineering Applied Sciences & Technology, Vol. 1, No. 7, pp. 120-123, **CSE2016J036**.
- 32 **Poonam Sharma and Anjali Garg** (2016) 'Feature Extraction and Recognition of Hindi Spoken words Using Neural Networks', International Journal of Computer Applications, Vol. 142, No. 7, pp. 12-17, **CSE2016J037**.
- 33 **Sumanlata Gautam and Latika Singh** (2016) 'Classification of the Speech of Normally Developing and Intellectually Disabled Children', International Journal of Data Mining and Emerging Technologies, Vol. 6, No. 2, pp. 28-37, **CSE2016J038**.
- 34 **Rahul Kakkar and Akansha Singh** (2015) 'Image Segmentation Using Hybrid PSO-FCM', International Journal of Innovative Science, Engineering & Technology, Vol. 2, No. 7, pp. 215-218, **CSE2016J039**.
- 35 **Deepa, Akansha Singh and Krishna Kant Singh** (2016) 'Brain Tumor Detection from MRI Images Using Hybrid Genetic FCM', International Journal of Engineering Applied Sciences & Technology, Vol. 1, No. 7, pp. 179-184, **CSE2016J040**.
- 36 **Mamta Rawat, Akansha Singh and Krishna Kant Singh** (2016) 'Exudates Detection from Retinal Fundus Images Using Probabilistic Neural Network', International Journal of Engineering Applied Sciences & Technology, Vol. 1, No. 7, pp. 124-128, **CSE2016J041**.
- 37 **Krishna Kant Singh and Akansha Singh** (2016) 'Detection of 2011 Sikkim Earthquake-Induced Landslides Using Neuro-Fuzzy Classifier and Digital Elevation Model', Natural Hazards, pp. 1-18, **CSE2016J042**.
- 38 **Monika Yadav, Neha Goyal and Jyoti Yadav** (2015) 'Comparison of Open Source Crawlers-A Review', International Journal of Scientific Engineering and Research, Vol. 6, No. 9, **CSE2016J044**.
- 39 **Ankita Srivastav and Neha Sahu** (2016) 'Segmentation of Devnagari handwritten Characters', International Journal of Computer Applications, Vol. 142, No. 14, pp. 15-18, **CSE2016J045**.
- 40 **Mayank Sahai and Neha Sahu** (2016) 'A Review to Different Approaches Used for Devnagari Character Recognition', International Journal of Computer Applications, Vol. 142, No. 14, pp. 8-11, **CSE2016J046**.
- 41 **Jagdeep Kaur** (2016) 'The Verification of Fuzzy Clustering Algorithm according to Requirements for Component Selection Process', International Journal of Applied Engineering Research, Vol. 11, No. 11, pp. 7551-7556, **CSE2016J047**.
- 42 **Jata Shankar Yogesh and Gaurav Aggarwal** (2016) 'Overview of Reduction of Dimensionality', International Journal of Innovations in Engineering & Technology, Vol. 6, No. 4, pp. 137-146, **CSE2016J048**.
- 43 **Neha Sahu and Richa Chhabra** (2016) 'A Review on Hyper Local E-Commerce', Journal of Network Communications and Emerging Technologies, Vol. 6, No. 6, pp. 22-24, **CSE2016J049**.
- 44 **Neha Sahu and Richa Chhabra** (2016) 'Review on Search Engine Optimization', Journal of Network Communications and Emerging Technologies, Vol. 6, No. 6, pp. 19-21, **CSE2016J050**.
- 45 **Sapna Kataria and Meghna Sharma** (2016) 'A Review Paper on Predictive Analysis of Student Performance and Outlier Detection', Journal of Basic

and Applied Engineering Research, Vol. 3, No. 6, pp. 528-531, **CSE2016J051**.

#### National

- 1 Kanika Jora and **Jyotika Pruthi** (2016) 'Extraction of coronary artery blockage and determining risk factors of heart attack at the earliest using image enhancement and K means clustering segmentation technique', Journal of Basic and Applied Engineering Research, Vol.3, No.6, pp.487-492, **CSE2016J027**.
- 2 Mansi Sethi and **Sandeep Singh** (2016) 'Parallel approach for Global Sequence Alignment', Imperial Journal of Interdisciplinary Research, Vol. 2, No. 7, pp. 315-317, **CSE2016J043**.

#### Conference Proceedings

##### International

- 1 **Anjali Garg** and **Poonam Sharma** (2016) 'Survey on Acoustic Modeling and Feature Extraction for Speech Recognition', Indiacom-2016, pp. 3698-3702, **CSE2016P003**.
- 2 Shivani Singmar and Poonam Sharma (2016) 'Image Processing techniques for Offline Handwritten Recognition', Indiacom-2016, pp. 7690-7694, **CSE2016P004**.
- 3 **Rita Rana Chhikara** and **Latika**

**Singh** (2015) 'An Improved Discrete Firefly and t-test based algorithm for Blind Image Steganalysis', 6th International Conference on Intelligent Systems, Modeling and Simulation, 2015, pp.58-63, **CSE2016P005**.

- 4 Anu Batra, **Usha Batra** and **Vijendra Singh** (2016) 'A Review to Predictive Methodology to Diagnose Chronic Kidney Disease', IEEE 2016 3rd International Conference on 'Computing for Sustainable Global Development', pp.3735-3738, **CSE2016P006**.
- 5 Surbhi Dewan and **Sumanlata Gautam** (2016) 'Gender Specific Speech Feature Variation in Hindi and English Language', 3rd International Conference on Computing for Sustainable Global Development, pp.7456-7458, **CSE2016P007**.
- 6 **Sumanlata Gautam** and **Latika Singh** (2016) 'A Comparative Study: Spectral Parameter in Speech of Intellectually Disabled and Normal Population', 3rd International Conference on Computing for Sustainable Global Development, pp.4658-4662, **CSE2016P008**.
- 7 Kriti Chaudhary and **Divya Sharma** (2016) 'Body Area Networks: A Survey', 10th INDIACOM-2016; IEEE Conference, pp. 4845-4849, **CSE2016P009**.
- 8 Monika Yadav, **Neha Goyal** and **Jyoti Yadav** (2015) 'Agile

Methodology over Iterative Approach of Software Development – A Review, IndiaCom, pp. 326-331, **CSE2016P011**.

- 9 **Ankita Srivastav** and **Neha Sahu** (2016) 'A Review to Different Approaches Used for Devnagari Character Segmentation, IndiaCom, pp. 4594-4598, **CSE2016P012**.
- 10 Mayank Sahai and **Neha Sahu** (2016) 'Segmentation of Devnagari characters, IndiaCom, pp. 8281-8284, **CSE2016P013**.
- 11 Anjali Pahwa and **Gaurav Aggarwal** (2016) 'A Machine Learning Approach of Identification and Diagnosing Features of Neurodevelopmental Disorder Using Speech And Spoken Sentences, IEEE-ICCA2016, **CSE2016P014**.
- 12 Ritika Gupta and **Gaurav Aggarwal** (2016) 'Human Speech Sentiments Recognition: A Data Mining Approach for Categorization of Speech, IEEE-IndiaCom-2016, **CSE2016P015**.

##### National

- 1 Nikhat Khan and **Shilpa Mahajan** (2015) 'Designing of Accident Avoidance Algorithm in Mobile Wireless Sensor Networks, Sixth International Joint Conference on Advances in Engineering and Technology, AET-2015, pp. 1-5, **CSE2016P010**.

## Department of Mechanical Engineering

### Research Papers Published/Presented

#### Journals

##### International

- 1 Zhigang Wang, **K Mathiyazhagan**, Lei Xu and Ali Diabat (2016) 'A decision making trial and evaluation laboratory approach to analyze the barriers to Green Supply Chain Management adoption in a food packaging company', Journal of Cleaner Production, Vol. 117, No. 20, pp. 19-28, **MED2016J006**.

- 2 **Anmol Bhatia**, Vishal Sanghwan, Tushar Kaistha, Vismit Varshney and Sumit Dalal (2016) 'Energy Harvesting Through Footsteps', International Journal of Advanced Engineering Research & Applications, Vol. 1, No. 10, pp. 405-412, **MED2016J009**.

- 3 **Abhishek Pratap Singh**, **Pramod Bhatia** and KK Chaudhary (2016) 'Effects of Elevated Metro Rail Tracks on Pollutant Dispersion in

Urban Street Canyons', International Journal of Applied Environmental Sciences, Vol. 11, No. 2, pp. 425-439, **MED2016J010**.

- 4 **Pradeep Rohilla** and **Abhishek Pratap Singh** (2016) 'To Control Nonlinear Pneumatic System using Fuzzy Logic Controller', International Journal of Engineering Research & Technology, Vol. 5, No. 4, pp. 491-494, **MED2016J011**.

- 5 **Pradeep Rohilla**, Jitender, Amit and Akshay Dhingra (2016) 'Design and Analysis of Controller for Antilock Braking System in Matlab/Simulation', International Journal of Engineering Research & Technology, Vol. 5, No. 4, pp. 583-589, **MED2016J012**.
- 6 Tomoyuki Naito, Takafumi Yoshida, Hidehiko Mochizuki, Hiroyuki Fujishiro, **Ritwik Basu** and Jerzy A Szpunar (2016) 'Vortex Pinning Properties of Dense Ti-doped MgB<sub>2</sub> Bulks Sintered at Different Temperatures', IEEE Transactions on Applied Superconductivity, Vol. 26, No. 3, pp. 1-5, **MED2016J013**.
- 7 **Pradeep Rohilla**, Shubham Mittal, Vikas Hooda and **Abhishek Pratap Singh** (2016) 'Improving Productivity by Implementing Lean Manufacturing', International Journal of Engineering Research and General Science, Vol. 4, No. 3, pp. 29-36, **MED2016J014**.
- 8 **Ashwini Sharma**, Dixit Garg and Ashish Agarwal (2016) 'Identification of Influential Quality Management Variables Using ISM Approach', International Journal Advanced Operations Management, Vol. 8, No. 1, pp. 38 - 63, **MED2016J015**.
- 9 Gadadhar Sahoo, IS Wani, SB Kumar, Balbir Singh, Atul Saxena and **Ritwik Basu** (2015) 'Effect of Ni on the Formability and Texture of Hot Rolled Weathering Steel', Journal of Metals, Materials and Minerals, Vol. 25, No. 2, pp. 23-29, **MED2016J016**.
- 10 **K Mathiyazhagan**, A Noorul Haq and Varun Baxi (2016) 'Analysing the Barriers for the Adoption of Green Supply Chain Management – The Indian Plastic Industry Perspective', International Journal of Business Performance and Supply Chain Modelling, Vol. 8, No. 1, pp. 46-65, **MED2016J017**.
- 11 **Amit Arora**, PMV Subbarao and Ravinder S Agarwal (2016) 'Development of Parametric Space for the Vortex Generator Location for Improving Thermal Compactness of an Existing Inline Fin and Tube Heat Exchanger', Applied Thermal Engineering, Vol. 98, pp. 727-742, **MED2016J019**.
- 12 **Anuj Kumar Jain**, Vikas Rastogi and Atul Kumar Agrawal (2016) 'Experimental Investigation of Vibration Analysis of Multi-Crack Rotor Shaft', Procedia Engineering, Vol. 144, pp. 1451-1458, **MED2016J020**.
- 13 **Manoj Kumar Gopaliya** and D. R. Kaushal (2016) 'Modeling of Sand-Water Slurry Flow Through Horizontal Pipe Using CFD', Journal of Hydrology and Hydromechanics, Vol. 64, **MED2016J021**.
- 14 Anil Kumar and **Gagan Baradia** (2015) 'Design and Development of Multi-Cavity and Multi Product Casting Process', International Journal of Applied Engineering Research, Vol. 10, No. 78, pp. 117-121, **MED2016J022**.
- 15 Ujjwal Verma, Tushar Tanwar, Vikas Yadav, Tushar Sharma, **Rohit Singh Lather** and Abhinav Gupta (2015) 'Computational Analysis of Multi Cylinder S.I. Engine Intake Manifold for Power Improvement', International Journal of Applied Engineering Research, Vol. 10, No. 78, pp. 1-5, **MED2016J023**.
- 16 Vijay Singh Dalal, Vibhor Kakkar and **Anmol Bhatia** (2015) 'The Bullwhip Effect Phenomenon in Indian Automotive supply chains', International Journal of Applied Engineering Research, Vol. 10, No. 78, pp. 194-198, **MED2016J024**.
- 17 **Ravindra Ojha** and **Prem Vrat** (2016) 'Strategies to Accelerate Manufacturing Growth in India: A System Dynamics–Interpretive Structural Modelling Analysis', Vision: The Journal of Business Perspective, Vol. 20, No. 2, pp. 1-16, **MED2016J025**.
- 18 Yagya Dutt Sharma and **Pramod Bhatia** (2016) 'Review of Solar Powered Air Conditioning Systems', International Journal of Multidisciplinary and Current Research, Vol. 4, pp. 490-492, **MED2016J026**.
- 19 Ankit Kumar and **Pramod Bhatia** (2016) 'Review of Aircraft Emission Reduction', International Journal of Multidisciplinary and Current Research, Vol. 4, pp. 493-495, **MED2016J027**.
- 20 **Pramod Bhatia** (2016) 'Oxygen Enhanced Microgravity Ethane Flames', International Journal of Current Research, Vol. 8, No. 6, pp. 33322-33326, **MED2016J028**.
- 21 **Pramod Bhatia** (2016) 'Conditioning Monitoring of Gear Boxes in Real Time', International Journal of Current Research, Vol. 8, No. 6, pp. 33313-33321, **MED2016J029**.
- 22 Naveen Gaur, Darpan Dhaiya and **Rohit Singh Lather** (2016) 'Experimental Investigation of a Single Cylinder S.I Engine Fuelled with Gasoline-Butanol Blends', Carbon Science and Technology, Vol. 8, No. 4, pp. 36-45, **MED2016J030**.

#### National

- 1 **Deevesh Sharma**, Anshul Chanana, Ashish Yadav, Aman Kumar, Awadhesh Kumar Bhardwaj and Anurag Bhakar (2016) 'Design of Multilevel Height Adjusting Industrial Trolley: Using Ergonomic Approach', Journal of Material Science and Mechanical Engineering, Vol. 3, No. 2, pp. 81 - 85, **MED2016J004**.
- 2 **Deevesh Sharma**, Bhavnesh Goswami and Awadhesh Kumar Bhardwaj (2016) 'Ergonomic Assessment and Low Cost Workstation Design for Hand Drilling and Tapping Operation on Sewing Machine Body Cast', Journal of Material Science and Mechanical Engineering, Vol. 3, No. 2, pp. 86 - 89, **MED2016J005**.

- 3 **Deepak Monga** and Anuj Sharma (2016) 'Review of Power Generation from Exhaust Heat using Thermoelectric Generators and Heat Pipes', Journal of Energy Research and Environmental Technology, Vol. 3, No. 1, pp. 38-41, **MED2016J007**.
- 4 Anuj Sharma, **Deepak Monga** and Anuj Kumar Jain (2016) 'Review on advancement of Carbon Nanotubes Composites', Journal of Material Science and Mechanical Engineering, Vol. 3, No. 2, pp. 136-139, **MED2016J008**.
- 5 Ravinder Singh, **Gagan Baradia** and Ankur Gupta (2016) 'Hybrid Solar Lighting System for Energy Conservation-A Review', Journal of Material Science and Mechanical Engineering, Vol. 3, No. 4, pp. 309-315, **MED2016J018**.
- 6 **Ravindra Ojha, Prem Vrat** and Niraj Sharma (2016) 'Long-term Implications of Highway Quality and Length in the Growth of Indian Manufacturing Sector: A System Dynamics Analysis', Journal of Scientific and Industrial Research, Vol.75, pp. 466-474, **MED2016J031**.

## Department of Civil & Environmental Engineering

### Research Papers Published/Presented

#### Journals

##### International

- 1 Anju Bala, Kishan Singh Rawat, **Anil Kumar Misra and Amit Srivastava** (2015) 'Assessment and Validation of Evapotranspiration using SEBAL Algorithm and Lysimeter Data of IARI Agricultural Farm, India', GeoCarto International, Vol. 31, No. 7, pp. 739-764, **CEE2016J001**.
- 2 Geetha Varma V and **Anil Kumar Misra** (2015) 'Equilibrium and Kinetic Studies on the Adsorption of Copper onto Paddy Straw Powder', Desalination and Water Treatment, Vol.57, No.28, pp.13081-13090, **CEE2016J002**.
- 3 **Anil Kumar Misra**, Nikita Gupta, Anupriya Gupta, Ankur Shivhare and Manav Wadhwa (2016) 'Designing and Testing of a Portable Filter for Groundwater Defluoridation and Desalination, Equipped with Non-Woven Geotextiles', Desalination and Water Treatment, Vol.57, No.23, pp. 10593-10603, **CEE2016J003**.
- 4 Gaurav Kumar and **Megha Kalra** (2016) 'Review Paper on Seismic Analysis of RCC Frame Structures with Floating Columns', International Journal of Advanced

Technology in engineering and science, Vol. 4, No. 1, pp. 125-128, **CEE2016J004**.

- 5 **Megha Kalra** (2016) 'Seismic Analysis of Six Storeyed RC Framed Building With Bracing Systems', International Journal of Innovative Research in Science and Engineering, Vol.2, No.5, pp.297-305, **CEE2016J005**.
- 6 Kumar Kislay, Gaurav Goet and **Lokesh Choudhary** (2016) 'Electricity form Ocean Waves: A Review of the Existing Facilities', International Journal of Advanced Research In Science and Engineering, Vol.5, No.5, pp.308-316, **CEE2016J006**.
- 7 Ujjwal Prabhakar and **Purnima Bajpai** (2016) 'Understanding and modelling of key performance factors in the airport sector', International Journal of Science technology and management, Vol. 5, No. 6, pp. 175-183, **CEE2016J007**.
- 8 Sahil Rana and **Purnima Bajpai** (2016) 'Preparation of Pre-Qualification System for Indian Road Projects Based on DEA Technique', International Journal of Advanced Technology in Engineering and Science, Vol.4, No.6, pp. 305-312, **CEE2016J008**.

#### National

##### Conference Proceedings

##### International

- 1 **Rohith P Poyil**, S Dhanalakshmi and **Pramila Goyal** (2016) 'Predicting Future Changes in Climate and its Impact on Change in Land Use: A Case Study of Cauvery Basin, Land Surface and Cryosphere Remote Sensing III, pp. 1-12, **CEE2016P001**.
- 2 **Amit Srivastava** (2016) 'Stability Assessment of Granular Filters Provided in Water Retaining Structures for Protection Against Piping, Indian Geotechnical Conference, **CEE2016P002**.

## Department of Applied Sciences

### Research Papers Published/Presented

#### Journals

##### International

- 1 **Sandeep Kumar Mogha**, Shiv Prasad Yadav and Sukh Pal Singh (2016) 'Estimating Technical Efficiency of Public Sector Hospitals of Uttarakh and (India)', International Journal of Operational Research, Vol. 25, No. 3, pp. 371-399, **APS2016J006**.
- 2 Anil Kumar Yadav, **Sunanda Vashisth**, **Hukum Singh** and **Kehar Singh** (2015) 'An Asymmetric Cryptography System For Water marking Of Phase-Images Using Gyrator Transform', Asian Journal of Physics, Vol. 24, No. 12, pp. 1611-1624, **APS2016J007**.
- 3 K Thyagarajan and **Ruchi Gupta** (2016) 'Coherent Tunnelling Adiabatic Passage In Optical Fibres Using Superimposed Long-Period Fiber Gratings', Journal of Modern Optics, **APS2016J008**.
- 4 Chetna Tyagi and **Ambika Sharma** (2016) 'Optimization of structural and dielectric properties of CdSe loaded poly(diallyl dimethyl ammonium chloride) polymer in a desired frequency and temperature window', Journal of Applied Physics, Vol. 119, pp. 14108(1-11), **APS2016J009**.
- 5 Kumari Anshu and **Ambika Sharma** (2016) 'Study of Se based quaternary Se Pb (Bi,Te) chalcogenide thin films for their linear and nonlinear optical properties', Optik, Vol. 127, pp. 48-54, **APS2016J010**.
- 6 Vyoma Bhalla, Devraj Singh and **Sushil Kumar Jain** (2016) 'Mechanical and Thermophysical Properties of Cerium Monopnictides', International Journal of Thermophysics, Vol. 37, No.3, pp. 1-17, **APS2016J011**.
- 7 **Sandeep Kumar Mogha** (2016) 'Application of Differential Evolution for Data Envelopment Analysis', International Journal of Data Science, Vol. 1, No. 3, pp. 247-258, **APS2016J012**.

- 8 Deepika, **Hukum Singh** and Narendra Sahai Saxena (2016) 'Stability and Percolation Threshold of  $Ge_{42-x}Pb_xSe_{58}$  ( $9 \leq x \leq 20$ ) Glasses', Transactions of the Indian Ceramic Society, Vol. 75, No. 1, pp. 20-24, **APS2016J013**.
- 9 Tanisha Manchanda, **Rashmi Tyagi** and Durlubh Kumar Sharma (2016) 'Application of Nutrient Stress Conditions for Hydrocarbon and Oil Production by *Botryococcus Braunii*', Biofuels, **APS2016J014**.
- 10 Luxmi Verma, **Sangeet Srivastava** and Prakash Chandra Negi (2016) 'A Hybrid Data Mining Model to Predict Coronary Artery Disease Cases Using Non-Invasive Clinical Data', Journal of Medical Systems, Vol. 40, No. 178, pp. 1-7, **APS2016J016**.
- 11 **Tejpal Singh Chundawat**, **Dipti Vaya**, Nalakathu Kolanadiyil Sini and Indra Kumar Varma (2016) 'Blast Mitigation using FRP retrofitting and Coating Technique', Polymer Composite, DOI: 10.1002/pc.24116, **APS2016J017**.
- 12 **Satwanti Devi** and Anbu Swaminathan (2016) 'Inclusion Properties of Generalized Integral Transform Using Duality Techniques', Moroccan Journal of Pure and Applied Analysis, Vol. 2, No.2, pp. 91-106, **APS2016J018**.
- 13 **Phool Singh** and Vikas Poply (2015) 'Impact of Free Stream Velocity and Variable Heat Flux Over a Permeable Stretching Surface', International Journal of Applied Engineering Research, Vol. 10, No. 94, pp. 69-75, **APS2016J019**.
- 14 **Amita Bhagat** and Madhu Jain (2016) 'N-policy for Mx/G/1 Unreliable Retrial G-queue with Preemptive Resume and Multi-services', Journal of Operations Research Society of China, DOI: 10.1007/s40305-016-0128-0, **APS2016J020**.
- 15 Fong Fan Wang, **Amita Bhagat** and Tsian Ming Chang (2016) 'Analysis of Priority Multi-Server Retrial Queueing Inventory Systems With

MAP Arrivals and Exponential Services', OPSEARCH, DOI: 10.1007/s12597-016-0270-9, **APS2016J021**.

##### National

- 1 Vyoma Bhalla, Devraj Singh, **Sushil Kumar Jain** and Raj Kumar (2016) 'Ultrasonic Attenuation in Rare Earth Mono-arsenides', Pramana-Journal of Physics, Vol.86, No.6, pp.1355-1367, **APS2016J015**.

##### Conference Proceedings

##### International

- 1 **Chetna Tyagi** and **Ambika Sharma** (2015) 'Study of optical and structural properties of CdSe quantum dot embedded in PVA polymer matrix', Advanced Materials and Radiation Physics, pp.030055(1-4), **APS2016P001**.
- 2 Preeti Yadav and **Ambika Sharma** (2015) 'Effect of Sn doping on nonlinear optical properties of quaternary Se-Sn-(Bi,Te) chalcogenide thin films', Advanced Materials and Radiation Physics, pp. 030043(1-4), **APS2016P002**.
- 3 **Pranati Purohit** and **Sushil Kumar Jain** (2016) 'Status of Polycrystalline Relaxor-PT Piezoelectric Ceramics, International Conference on Nanotechnology for Better Living, 2016, pp. 24, **APS2016P003**.
- 4 **Chetna Tyagi** and **Ambika Sharma** (2015) 'Linear and Nonlinear Optical Study of Pure PVA and CDSE Doped PVA Nanocomposite, International Conference on Condensed Matter and Applied Physics, pp. 020151(1-4), **APS2016P004**.
- 5 Preeti Yadav and **Ambika Sharma** (2015) 'Temperature and Frequency Dependence of AC Conductivity of New Quaternary Se-Te- Bi-Pb Chalcogenide Glasses, International Conference on Condensed Matter and Applied Physics, pp. 020189(1-4), **APS2016P005**.

**Conference Presentations****International**

- 1 **Dipti Vaya** (2016) 'Development of polyurethane coating for protection of building to high velocity projectiles', International Conference on Materials Science & Technology, Delhi University, **APS2016C002**.
- 2 **Kamlesh Sharma** and Ketan Singhal (2016) 'Organic Electronic Materials Designing by Using Computational Statagies', International Conference on Engineering Physics, Materials and Ultrasonics, NCU, Gurgaon, India, **APS2016C005**.
- 3 Deepika, **Hukum Singh** and N S Saxena (2016) 'Temperature and Composition Dependence of Crystallization Rate Constant for Se<sub>90</sub>In<sub>10</sub>-xSbx (0≤x≤10) Glasses', Third International Conference on Nanotechnology for Better Living, NIT Srinagar and IIT Kanpur, Srinagar, **APS2016C006**.
- 4 **Pranati Purohit**, Dilip Kumar Roy and Shankar Prasad Pati (2016) 'Analysis of Electronic Motion in a Triangular Quantum Well Structure', International Conference on Engineering Physics, Materials and Ultrasonics, NCU, Gurgaon, **APS2016C007**.
- 5 **Pranati Purohit**, **Sushil Kumar Jain**, Yudhisther Kumar Yadav, Reeta Gupta and Selvrak Sheel Kumar Titus (2016) 'Low Force Measurement Based on Impedance of a Piezo-Resonator', International Conference on Engineering Physics, Materials and Ultrasonics, NCU, Gurgaon, **APS2016C008**.
- 7 **Sangeet Srivastava**, **Gaurav Gupta** and Manoj Kumar (2016) 'Lighting Based Image Splicing Detection', International Conference on Engineering Physics, Materials and Ultrasonics, NCU, Gurgaon, **APS2016C009**.
- 8 **Phool Singh**, **AK Yadav** and **Kehar Singh** (2016) 'Optoelectronic Image Encryption in the Fractional Hartley Domain, Using Arnold Transform and Singular Value Decomposition', International Conference on Engineering Physics, Materials and Ultrasonics, NCU, Gurgaon, **APS2016C010**.
- 9 Malvika Negi and **Sunanda Vashisth** (2016) 'Image Encryption Using the Photon Counting Technique in Gyrator Domain', International Conference on Engineering Physics, Materials and Ultrasonics, NCU, Gurgaon, **APS2016C011**.
- 10 **Ambika Devi** (2016) 'Substrate Dependent Optical Properties of Se-Te-Bi Chalcogenide Thin Films', International Conference on Engineering Physics Materials and Ultrasonics, NCU Gurgaon, **APS2016C013**.
- 11 **Ambika Devi** (2016) 'Temperature Dependent Structural and Optical Properties of CdSe Quantum Dots and CdSe/PVA Nanocomposite', International Conference on Engineering Physics Materials and Ultrasonics, NCU Gurgaon, **APS2016C014**.
- 12 **Pranati Purohit**, Rahul Chawla, Neeraj Dahiya and Sushil Kumar Jain (2016) 'Design and Fabrication of an Improved Piezo-force Actuator', International Conference on Engineering Physics Materials and Ultrasonics, NCU Gurgaon, **APS2016C016**.

**National**

- 1 **Aditya Sharma** (2016) 'Quantum Dot Monolayer based Surface Plasmon Resonance Biosensor for DNA Hybridization Detection', BIOTIKOS 2016 National Symposium on Nanobiotechnology, TERI University, **APS2016C003**.
- 2 **Bharti Arora** (2016) 'Self Association of Guanine Rich DNA Oligonucleotides under Varied Solution Conditions', BIOTIKOS 2016 National Symposium on Nanobiotechnology, TERI University, **APS2016C004**.
- 3 **Sangeet Srivastava** (2015) 'Data Mining Techniques for Cardio Vascular Heart Diseases', CYNOSURE-2015, IIT Ropar, **APS2016C012**.
- 4 **Sanjay Yadav** and Rajan Arora (2015) 'Analytical Solution of Blast Wave Problem in Non-Ideal Medium', CYNOSURE-2015, IIT Ropar, **APS2016C015**.
- 5 **Pranati Purohit** (2016) 'Quantum Confinement Effect in a Spherical Quantum Dot', Advanced Materials and Nanotechnology AMN-2016, NIT, Durgapur, **APS2016C017**.

**Centre for Languages Learning**

## Research Papers Published/Presented

**Journals****International**

- 1 **Payal Khurana** (2016) 'Angst and Rebellion in Black American Literature', International Journal of Multilingual and Multifaceted Studies, Vol. III, No. IV, pp. 1-4, **CLL2016J001**.
- 2 **Payal Khurana** (2016) 'The Western Influence on Post-Colonial Indian Women in Anita Nair's 'Mistress'', Asian Journal of Multidisciplinary Studies, Vol. 4, No. 6, pp. 72-74, **CLL2016J002**.
- 3 **Payal Khurana** (2016) 'Dilemmas in Life of Women in Contemporary Indian Society', International Journal of Multifaceted and Multilingual Studies, Vol. III, No. V, pp. 1-7, **CLL2016J003**.
- 4 **Divyabha** (2016) 'Purging Excruciation of Women in the Works of South Asian Writer Anjana Apachana', International Journal of

- Multifaceted and Multilingual Studies, Vol. 3, No. 5, pp. 1-4, **CLL2016J004**.
- 5 **Divyabha** (2016) 'The Pursuance of Endurance: A Postcolonial Discourse of Cultural Diaspora in the Works of Jhumpa Lahiri', Creative Writing and Criticism, Vol. 13, No. 2, pp. 117-122, **CLL2016J005**.
- 6 **Payal Khurana** (2016) 'Dystopian Reality of Human Existence in Contemporary Human Society', International Journal of English Language, Literature and Humanities, Vol. 4, No. 4, pp. 251-255, **CLL2016J006**.
- 7 **Divyabha** (2016) 'The Changing Phase: Search for Individuality in Binding Vine', Global English-Oriented Research Journal, Vol. 2, No. 1, pp. 162-167, **CLL2016J007**.
- 8 **Shrutimita Mehta** (2016) 'Globalisation and Multiculturalism in Contemporary Indian Literature: Reflections on the Works of Shashi Deshpande', Creative Writing and Criticism, Vol. 13, No. 2, pp. 77-85, **CLL2016J008**.
- Conference Presentations**
- International**
- 1 **Payal Khurana** (2016) 'Dystopia Vs Utopia: Realistic Picture of Contemporary Human Society', Towards Praxis: Literature, Society and Politics, MELUS-India / MELOW and GGSIP University, New Delhi, **CLL2016C003**.
- National**
- 1 **Payal Khurana** (2016) 'Dr BR Ambedkar: Great Reformer and Architect of India', Interdisciplinary Seminar on Relevance of Dr Ambedkar's Thoughts in Contemporary India, Dronacharya Govt. College, Gurgaon, Haryana, **CLL2016C004**.
- 2 **Shrutimita Mehta** (2016) 'Conceptualising Gender Equality: Women and Hierarchy in Ambedkar's Writings', Interdisciplinary Seminar on Relevance of Dr Ambedkar's Thoughts in Contemporary India, Dronacharya Govt. College, Gurgaon, Haryana, **CLL2016C005**.
- 3 **Divyabha** (2016) 'Minority Literature: A Revolutionary Utterance', Interdisciplinary Seminar on Relevance of Dr Ambedkar's Thoughts in Contemporary India, Dronacharya Govt. College, Gurgaon, Haryana, **CLL2016C006**.

## School of Management

### Book Chapters

#### Journals

##### International

- 1 **Neeta Sharma and Prem Vrat** (2016) 'Resource Wastage Due to Stock Induced Consumption Phenomenon: A Case Study of Water Supply System in a Cluster of Residences', Industrial Engineering Journal, Vol. IX, No.2, pp. 15-21, **SOM2016J002**.
- 2 **Saumya Dixit and Anant Jyoti Badgaiyan** (2016) 'Towards an Improved Understanding of Reverse Logistic: Examining Mediating Role of Return Intention', Resources, Conservation and Recycling, Vol.107, pp.115-128, **SOM2016J003**.
- 3 **Prem Vrat** (2016) 'Strategic trigger to facilitate manufacturing excellence for success of 'Make in India' vision', RITES Journal, Vol.18, No.1, pp.11.1-11.12, **SOM2016J004**.
- 4 **Sushmita Biswal Waraich and Ajay Chaturvedi** (2016) 'Entrepreneurship Development in Business Schools: An Analysis of Initiatives in Delhi and NCR', South Asian Journal of Management, Vol.23, No.1, pp.189-209, **SOM2016J006**.
- 5 **Shilpa Sindhu and Anupama Panghal** (2016) 'Robust retails supply chains-the driving practices', International Journal of Advanced Operations Management, Vol. 8, No. 1, pp. 64-78, **SOM2016J007**.
- 6 **Jaya Ahuja and Vani Narula** (2015) 'Quality of Work Life at Different Career Stages', Journal of Business Management, Commerce and Research, Vol.4, No.14, pp.1-22, **SOM2016J008**.
- 7 **Jaya Ahuja and Vani Narula** (2016) 'A Demographic Study on Organizational Climate: Indian vs. Multinational IT Companies', Pacific Business Review International, Vol. 8, No. 8, pp. 59-79, **SOM2016J009**.
- 8 **Mohd Hussain Kunroo, Irfan Ahmad Sofi and Naushad Ali Azad** (2016) 'Trade Implications of the Euro in EMU Countries: A Panel Gravity Analysis', EMPIRICA, Vol.43, No.2, pp.391-413, **SOM2016J010**.

##### National

- 1 **Archana Mehra and Dhani Ram Agarwal** (2016) 'Review of Microfinance schemes in Haryana with focus on Mewat', Journal of Technology Management for Growing Economies, Vol.7, No.1, pp. 27-54, **SOM2016J005**.

##### National

- 1 **Jiveta Chaudhary** (2016) 'Organizational Drivers of Innovative Leadership', Mantra for 21st Century Managers: Initiate, Innovate and Integrate, Delhi Institute of Advanced Studies, New Delhi, **SOM2016C002**.
- 2 **Jiveta Chaudhary** (2016) 'Modelling the Soft Enablers of Successful Lean Transformations: An ISM Approach', National Conference on Changing Organizations through Strategic, Technological, Structural and Behavioural Interventions, University School of Management Studies, Guru Gobind Singh Indraprastha University, New Delhi, **SOM2016C003**.

## School of Law

### Research Papers Published/Presented

#### Journals

##### International

- 1 **Arvind P Bhanu** and Ramesh Kumar Chhabra (2015) 'Right To Safe Travel for Women: A Human Right Perspective', Research Expo International Multidisciplinary Research Journal, Vol. 5, No. 12, pp. 96-103, **SOL2016J001**.

##### National

- 1 **Ritu Gupta** (2015) 'On Regulation of Celebrity Endorsing the Brands in India', NLUA Law Review, Vol. 1, No. 1, pp. 125 - 138, **SOL2016J002**.
- 2 **Rahul Nikam** (2016) 'Unmanned Aircraft Systems into National Aviation System: Challenges and Responses', Indian Journal of Air and Space Law, Vol. 2, pp. 3-22, **SOL2016J003**.
- 3 **Praveen Kumar** (2015) 'Role of BCI in Reforming Legal Education in India: Issues and Challenges', CPJ Law Journal, Vol. 5, pp.172 -175, **SOL2016J004**.
- 4 **Subhradipta Sarkar** (2016) 'Protection of Right to Adequate Housing in Post-Disaster Situations in India: An Assessment in the Light of International Law and Practice', NLIU Law Review, Vol. 5, No. 1, pp. 161-190, **SOL2016J005**.

- 5 **Subhradipta Sarkar** (2016) 'Justice on Flames: Legal Remedy in Cases of Fire Disasters in India', VBU Journal of Law and Governance, Vol. 3, No. 1, pp. 93 - 122, **SOL2016J006**.

#### Conference Presentations

##### International

##### National

- 1 **Subhradipta Sarkar** (2016) 'Role of the National Human Rights Commission in Protecting Victims' Right to Adequate Disaster Response', National Conference on Law as a Catalyst of Social Change in Present Scenario, Dept. of Law, Maharishi Markandeshwar University, Ambala, **SOL2016C001**.
- 2 **Archana Sarma** (2016) 'Computer Forensics in Criminal Investigation: Challenges for Law Enforcement Agencies in India', National Conference on Law as a Catalyst of Social Change in Present Scenario, Dept. of Law, Maharishi Markandeshwar University, Ambala, **SOL2016C002**.
- 3 **Pallavi Bajpai** (2015) 'Will the dawn of the New Amended JJ Bill bring in a brighter future for Indian Delinquents', National Seminar on Juvenile Justice and Human Rights:

Contemporary Issues, Challenges and Opportunities, Faculty of Law, The ICFAI University, Dehradun, **SOL2016C003**.

- 4 **Pallavi Bajpai** (2016) 'How far is the umbrella for the third gender protected in the Indian society? Myth and realities - A way forward', National Seminar on Third Gender Rights: Emerging Trends and Issue, IMS Unison University, Dehradun, **SOL2016C004**.

- 5 **Arvind P Bhanu** (2016) 'Gender Discrimination of Work Places', National Seminar on Corporate Sector in India: Socio Legal Issues and Challenges, University Institute of Law and Management Studies, Gurgaon, **SOL2016C005**.

- 6 **Arvind P Bhanu** (2016) 'A Critical Story of Surrogacy on Perspective of Human Rights', National Seminar on Science of Surrogacy and Prospect of Proposed Law in India, Indian Society of International Law, New Delhi and Faculty of Law, Meerut College, **SOL2016C006**.

- 7 **Arvind P Bhanu** (2015) 'RTI and Judiciary', National Seminar on An Audit of the 10 years of RTI Act, 2005: Issues and Challenges, Modern College of Law, **SOL2016C007**.



## Role of Higher Education in the Transformation of India



**Ms Prerna Chauhan**  
Counsellor  
Centre for Languages Learning  
The NorthCap University,  
Gurgaon

As per the Higher Education in India-Vision 2030 (FICCI & Ernst and Young), India will be amongst the youngest nations in the world in the coming decade. With nearly 140 million people in the college-going age group, one in every four graduates in the world will be a product of the Indian higher education system. India will have the largest population in the world in the higher education age bracket by 2030. Increasing urbanization and income levels will drive demand for higher education. India's economy is expected to grow at a fast pace; industry and services sectors

will further dominate the economy. Industry and services sectors in India would require a gross incremental workforce of Rs. 250 million by 2030. India could potentially emerge as a global supplier of skilled manpower. A transformative and innovative approach would be required across all levels of higher education: from curricula and pedagogy to the use of technology to partnerships, governance and funding. Making rapid progress over the next two decades would require a committed and concerted effort from all stakeholders involved i.e. academia, industry, and Government.

The NorthCap University located in Gurgaon, is one of the leading Management Universities in Haryana that is aligned with this vision and serves to incorporate a multipronged approach towards this transition. Its learner centered paradigm of education allows students to be lifelong learners stoking their passion for learning. The University fosters independent and critical thinking among its graduates alongside helping them keep pace with the changing nature of work environment. NCU offers industry-aligned courses that produce industry-ready graduates for a wide range

of white collar jobs. Apart from its focus on functional skills that are core to the profession/industry of the students' course, there is adequate focus on developing entrepreneurship and related soft skills for growth in communication and Interpersonal Skills.

One of the top Management Universities in Haryana, NCU attracts the best in class faculty to conduct research and as world class facilitators mentor students to reach their potential. It takes proactive measures to strengthen industry-academia linkages across all aspects of the education value chain, from curricula and faculty to infrastructure, research, and placements.

By 2030, the already existing challenges for Indian higher education – access, equity and quality – will only be greatly exacerbated unless we significantly transform our higher education model. India needs to pioneer a higher education model that is not just the best in the world, but the best for the world, delivering social, economic and intellectual value par excellence.

*(With excerpts from: Higher Education in India-Vision 2030)*

## E-commerce vs E-business : Stepping into the digitized world



**Dr Ruchi Nayyar**  
Assistant Professor &  
Head Of Department  
School of Management  
The NorthCap University,  
Gurgaon

Broadband connectivity and increased usage of credit cards have provided a favourable infrastructure for the growth of online shopping in India. Continued liberalization in the telecom sector has shown positive effects in the past few years. The Indian Telecom Policy recognized the convergence of different media and permitted direct inter-connectivity amongst various service providers. Presently full – duplex communication for transmission of voice, data and information services is permissible under the telecom policy. Today, internet services can be conveniently obtained from telecommunication providers at

affordable rates. Internet has reached common individuals, thanks to sprawling cyber cafes, inexpensive broadband connections and government initiatives of e-kiosks.

E-commerce offers customers maximum convenience. They can visit the websites of multiple vendors in the comfort of their homes and offices and are able to compare prices and make purchases. It is also easier to negotiate price and terms of delivery as the internet can help companies efficiently obtain competitive bid information. From the sellers' perspective too, e-commerce increases sales opportunities of the sellers. They do not need to build, staff, or maintain

a physical store or print and distribute mail order catalogs. Besides, use of automated order tracking and billing systems can cut additional labor costs. Sellers can also enjoy the benefit of selling on international platforms and are therefore not limited by the physical location of a store. Internet technologies also help sellers to capture the consumer buying behaviors on the internet which could be used to build an ongoing relationship with the customer by customizing products and services to meet the customer's needs.

Despite providing innumerable benefits to the customers, e-commerce has its limitations too. There are a number of businesses (such as involving perishable foods and custom-designed jewelry) that cannot be successfully implemented on the internet. These products, regardless of the technology are difficult to get

inspected from a remote location. There is also a universal standard of e-commerce. Taxation and data transmission over the internet cause a lack of trust in e-commerce. Technically speaking also, companies face problems while integrating their existing databases and transaction-processing software designed for traditional commerce into the software that enables electronic commerce. This resists a number of firms to invest into e-commerce.

E-business refers to the transformation and streamlining organizations value chain activities through the use of internet technologies. Sometimes e-business is equated with e-commerce but many contend that e-commerce is only a part of a much bigger picture. Although the terms e-commerce and e-business are used interchangeably, they are distinct concepts. In comparison to e-commerce,

e-business is a more generic term as it refers not only to information exchanges related to buying and selling but also to B2C perspective. E-business enables companies to link their internal and external processes more efficiently and flexibly, work more closely with suppliers and better satisfy the needs and expectations of their customers. Besides, while e-commerce utilizes information and communication technology (ICT) in inter-business transactions, e-business deploys ICT to enhance the business in terms of production, customer relationship management and internal management. Therefore E-business is a key component of Higher Management Education to enable students to best utilize the power of the internet to improve customer delivery.

## Microwave Heating: From Cooking of Food to Materials Processing Technologies



**Satnam Singh**  
Assistant Professor,  
Deptt. of Mechanical  
Engineering, NCU, Gurgaon

If you think that microwave oven can only be used for cooking potatoes or food, then you should read this article.

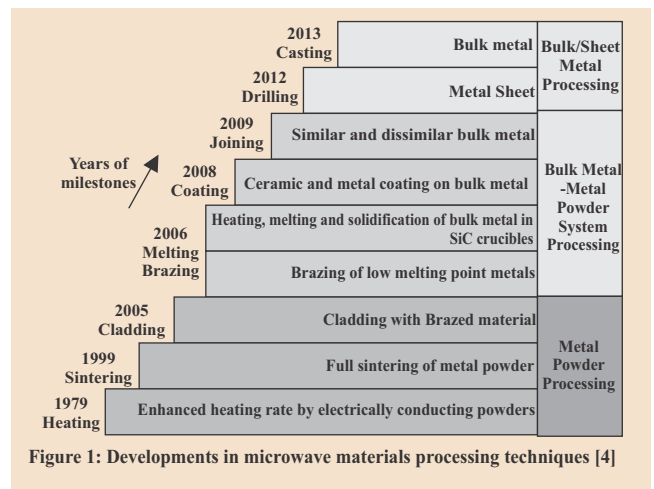
The first commercial application of microwaves was primarily in the field of communications, but later on the heating effects of microwaves was accidentally discovered [1]. PL Spencer filed the patent for microwave heating of foodstuffs in 1945 [2]. Later on, the microwave heating effects were utilized by many researchers in processing of various materials but at lower

temperatures. Applications of microwaves at that time were confined to the wood drying process, cooking food, rubber processing, enhanced chemical reactions etc.

Microwave heating is totally different from the conventional heating techniques. In microwave heating, heat is generated at molecular level, by absorption of radiations. This causes heat generated from within the material moving towards the outer surface. Further, heating is volumetric in nature, means microwaves are absorbed throughout the volume of materials. In contrast to conventional heating starts from the surface of materials and progresses towards the core of the material. Due to the volumetric heating nature of

microwaves, heating is intense and rapid.

Earlier it was thought that microwaves cannot be used for processing of metals due to reflection of radiations from the surface, but later it was discovered that microwaves can be effectively used in the processing of metallic based powders [3]. This allowed wide application of microwaves in the materials processing world. The developments in metallic materials processing by microwaves are shown in Figure 1, which depicts the



chronological order of various research innovations in this novel field.

Figure 1: Developments in microwave materials processing techniques [4]

The technology changed from microwave sintering of ceramics to efficient microwave sintering of metallic powders. This area was further targeted and microwaves were used for joining of bulk metallic steels [5]. Afterwards, researchers successfully developed the novel microwave cladding process at IIT Roorkee and developed claddings of metallic powders/ composites/ cermets on bulk steels [6]. In recent times, microwaves were successfully employed for the casting of metallic powders by using domestic ovens [7].

References:

- [1] Singh, S, Gupta, D, Jain, V, & Sharma, AK, Microwave processing of materials and Applications in manufacturing industries: a review. Mater. Manuf. Process., 30, 1, 2015.
- [2] Spencer, PL, Method of treating foodstuffs, US patent 2495429 A, assigned to Raytheon Mfg Co., 1945.
- [3] Roy, R, Agrawal, D, Cheng, J, & Gedevanishvili, S, Full sintering of powdered-metal bodies in a microwave field. Nature, 399, 668-670, 1999.
- [4] Mishra, RR, & Sharma, AK, A Review of Research Trends in Microwave Processing of Metal-Based Materials and Opportunities in Microwave Metal Casting. Crit. Rev. Solid State Mater. Sci. 41, 217–255, 2016.
- [5] Srinath, MS, Sharma, AK, & Kumar, P, Investigation on microstructural and mechanical properties of microwave processed dissimilar joints. J. Manuf. Process. 13, 141–146, 2011.
- [6] Gupta, D, & Sharma, AK, Development and microstructural characterization of microwave cladding on austenitic stainless steel. Surf. Coatings Technol. 205, 5147–5155, 2011.
- [7] Singh, S, Gupta, D, & Jain, V, Novel microwave composite casting process: Theory, feasibility and characterization. Mater. Des. 111, 51–59, 2016.

## Intelligent Transportation System



**Akshat Mathur**  
(14ECU115)



**Shubham Sehgal**  
(14ECU087)

With the advent of smart technology in every field, it is imperative to establish the transportation system as smart. Considering the spread of transport network, a method needs to be devised which can easily be used with the present technology. The following text focuses on Intelligent Transportation. There is no technology being used presently that assists transportation through visible light. According to World Health Organization, a major cause of deaths in the 21st Century is road accidents. Therefore, using the intelligent transport system as a measure to controls such

things will act as a boon. Some of the techniques of this system that we quote here include Smart Obstacle Intimation System and Smart Speed Control Mechanism. Some of the advantages of implementing this technology are decrease in the number of road accidents, proper and easy maintenance of traffic rules, assistance in learning driving for amateurs, control of traffic light timers. For measuring traffic density, Vehicle reidentification method is used which requires sets of detectors mounted along the road. In this technique, a unique serial number for a device in the vehicle is

detected at one location and then detected again further down the road. Speed is calculated by comparing the time at which a specific device is detected by a pair of sensors.

In Visible Light Communication (VLC), communication takes place using visible light in which LEDs perform two functions simultaneously - illumination and communication. ITS using visible light would use the light from the street lamp posts as a source to communicate. In VLC system, modulation of intensity of light is done in such a way that it is undetectable to human eye and has no effect on the illumination functionality. LEDs are used for transmission purpose because of its certain advantages such as high lighting efficiency, long durability, being environment friendly and low power consumption. The transmitters and receivers have same configuration as most of the general analog communication systems. LEDs are used in head/tail lights of vehicles, street lights and traffic lights which makes the deployment of this smart and intelligent transportation system easy using VLC technology. Using this technology the vehicles are able to communicate about the speed, routes,

destination, and traffic conditions. Vehicular communication can be Vehicle to Vehicle, Vehicle to Infrastructure, or Infrastructure to Vehicle. The most challenging project which is under consideration of many scientists worldwide is development of visible light communication for advanced driver assistance.

Other applications like Smart Obstacle Intimation System, Blind Turn Assistance etc. are also used in intelligent transport system. Use of VLC in transportation system will be very advantageous since it will make the transportation system faster, easier and safer.

ITS holds a promising sustainable future

and can play a vital role in reducing pollution, maintaining better traffic management and enhancing road security. A great initiative has been taken in the field of ITS in many countries including India.

## The Murder



**Akshat Mathur**  
14ECU115

I didn't know what got them  
After all I had helped them, murder  
They were searching for their member  
Brutal they were, none other  
I had found the black American  
I handed him over, to murder  
Were they thanking me? I don't know  
Its the language of the fearless, I can't decipher.  
It is the animal law to care for their young

The adrenaline makes them fearless and ferocious

Might they be weak when not,  
Even a mole becomes a tiger, when it comes to their precious

Off they flew for their hunt  
Shouting their throats out, the murder  
They were black, large and far less scary  
Crows they were, no other!!

When the morning light pinch my eyes  
I came across a murder  
They were black, large and part scary  
Like crows they were, no other

All were shouting their throats out  
Was it danger there, I should be leaving  
It didn't seem so  
Since they were searching!

From the bushes, over the trees  
Into the buildings, on a mad spree  
No one dared to cross them- they were unpredictable  
When they came across young Henry

Henry as they call me  
I meant them no harm, tried to scare one or two,  
They were armed with weapons, I handed them their lurking alike  
And took three steps back, with a sound of phew!

## Sketches



**Ishaan Malik**  
16CSU152



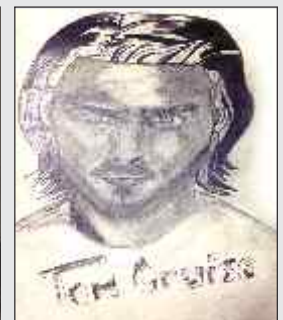
**Bhagat Singh**



**Harry Potter**



**Michael Jackson**



**Tom Cruise**

In the News

# City to get automatic weather system at Sector 23 university

By Gurpreet Singh

**GURGAON:** The city is slated to get its first automatic weather station (AWS) to provide accurate and real-time data of maximum and minimum temperatures, humidity, wind speed and direction, pressure and solar radiation.

India Meteorological Department, Ministry of Earth Sciences and Government of India will set up the AWS at the premises of NorthCap University in Sector 23 at Gurgaon. The machine will provide basic meteorological data and improve weather and climate services.

At present, the India Meteorological Department has the weather data from an AWS installed at Palam and Anandpur in the Delhi-Gurgaon border. These were half-solar based and share 10 per cent from AWS for Gurgaon.

The university officials have signed a letter of agreement (LOA) with India Meteorological Department for automatic operation and maintenance of AWS.

According to India Meteorological Department, there are about 2,000 AWS machines (including the station length and breadth of the ground), each costing about ₹7 lakh.

A display board celebrating the different weather patterns will also be set up. This will mainly show existence as the increased climate conditions will be shown well in station, officials said.

Officials said that the meteorological and environmental data will be available for academic and research purposes.



The machine will provide Gurgaon specific meteorological data, temperature and climate services.

# Nine students win start-up contest at investors' meet

**GURGAON:** 10 participants of age group 18-25 were selected to participate in the Haryana start-up contest at a start-up competition held as part of the Happening Gurgaon Global Investors Summit 2016. The winners were Pratikha Gupta, Anshu Singh, Shikhar Arora, Shikhar, Pratikha, Vikas Gupta, Pratikha, Pratikha, Pratikha and Pratikha.

While the Haryana government announced financial support of ₹20 crore to the winning teams, the Startup Acceleration Cell of Government will provide support with necessary facilities to the winners.

In the preliminary rounds, more than 300 students from about 20 colleges and universities across 23 districts pitched their ideas for start-ups. In the semi-finals, held at The NorthCap University, 10 teams were selected for the final round.

In the final round at the Happening Gurgaon Summit, the entrepreneurs pitched their innovation and showed their ability to meet investor demand.

# लॉ कॉलेज के लिए प्रक्रि

दुर्गा: कुल पदवी

लॉ कॉलेज के लिए प्रक्रि

लॉ कॉलेज के लिए प्रक्रि

लॉ कॉलेज के लिए प्रक्रि

लॉ कॉलेज के लिए प्रक्रि

लॉ कॉलेज के लिए प्रक्रि

लॉ कॉलेज के लिए प्रक्रि

लॉ कॉलेज के लिए प्रक्रि

### COURSECHAT



**दो डिजिटल स्टार्टअप**

The NorthCap School of Computer Science and Information Technology (SCSIT) has been selected to participate in the National Start-up Competition 2016. The competition is organized by the Ministry of Education, Government of India.

The competition is open to all students of SCSIT. The winners will receive a cash prize of ₹20,000 and a certificate of appreciation.

The competition is a great opportunity for students to showcase their skills and ideas. It is also a chance to win a cash prize and a certificate of appreciation.

The competition is a great opportunity for students to showcase their skills and ideas. It is also a chance to win a cash prize and a certificate of appreciation.

### द नॉर्थकेप यूनिवर्सिटी के प्रो. प्रवेश पंत को पदमंश्री का

द नॉर्थकेप यूनिवर्सिटी के प्रो. प्रवेश पंत को पदमंश्री का

द नॉर्थकेप यूनिवर्सिटी के प्रो. प्रवेश पंत को पदमंश्री का

द नॉर्थकेप यूनिवर्सिटी के प्रो. प्रवेश पंत को पदमंश्री का

### Nine Gurgaon students among winners of start-up competition at 'Happening Haryana'

Nine Gurgaon students among winners of start-up competition at 'Happening Haryana'

Nine Gurgaon students among winners of start-up competition at 'Happening Haryana'

Nine Gurgaon students among winners of start-up competition at 'Happening Haryana'

### द नॉर्थकेप यूनिवर्सिटी में आयोजित तीन दिवसीय टेक फेस्ट कार्यक्रम सम्पन्न

द नॉर्थकेप यूनिवर्सिटी में आयोजित तीन दिवसीय टेक फेस्ट कार्यक्रम सम्पन्न

द नॉर्थकेप यूनिवर्सिटी में आयोजित तीन दिवसीय टेक फेस्ट कार्यक्रम सम्पन्न

द नॉर्थकेप यूनिवर्सिटी में आयोजित तीन दिवसीय टेक फेस्ट कार्यक्रम सम्पन्न

# द नॉर्थकेप यूनिवर्सिटी में आयोजित तीन दिवसीय टेक फेस्ट कार्यक्रम सम्पन्न



द नॉर्थकेप यूनिवर्सिटी में आयोजित तीन दिवसीय टेक फेस्ट कार्यक्रम सम्पन्न

द नॉर्थकेप यूनिवर्सिटी में आयोजित तीन दिवसीय टेक फेस्ट कार्यक्रम सम्पन्न

द नॉर्थकेप यूनिवर्सिटी में आयोजित तीन दिवसीय टेक फेस्ट कार्यक्रम सम्पन्न

द नॉर्थकेप यूनिवर्सिटी में आयोजित तीन दिवसीय टेक फेस्ट कार्यक्रम सम्पन्न

द नॉर्थकेप यूनिवर्सिटी में आयोजित तीन दिवसीय टेक फेस्ट कार्यक्रम सम्पन्न

द नॉर्थकेप यूनिवर्सिटी में आयोजित तीन दिवसीय टेक फेस्ट कार्यक्रम सम्पन्न

द नॉर्थकेप यूनिवर्सिटी में आयोजित तीन दिवसीय टेक फेस्ट कार्यक्रम सम्पन्न

द नॉर्थकेप यूनिवर्सिटी में आयोजित तीन दिवसीय टेक फेस्ट कार्यक्रम सम्पन्न

द नॉर्थकेप यूनिवर्सिटी में आयोजित तीन दिवसीय टेक फेस्ट कार्यक्रम सम्पन्न

द नॉर्थकेप यूनिवर्सिटी में आयोजित तीन दिवसीय टेक फेस्ट कार्यक्रम सम्पन्न

# Gurgaon student, Pranav Jain, bags Google internship

Gurgaon student, Pranav Jain, bags Google internship

Gurgaon student, Pranav Jain, bags Google internship

Gurgaon student, Pranav Jain, bags Google internship

Gurgaon student, Pranav Jain, bags Google internship

Gurgaon student, Pranav Jain, bags Google internship

Gurgaon student, Pranav Jain, bags Google internship

Gurgaon student, Pranav Jain, bags Google internship

Gurgaon student, Pranav Jain, bags Google internship

Gurgaon student, Pranav Jain, bags Google internship

Gurgaon student, Pranav Jain, bags Google internship

Gurgaon student, Pranav Jain, bags Google internship

Gurgaon student, Pranav Jain, bags Google internship

Gurgaon student, Pranav Jain, bags Google internship

Gurgaon student, Pranav Jain, bags Google internship

# द नॉर्थकेप यूनिवर्सिटी: मिस्टर फ़ेशर रजत बजाज तथा मिस फ़ेशर महक सांगवान को चुना

द नॉर्थकेप यूनिवर्सिटी: मिस्टर फ़ेशर रजत बजाज तथा मिस फ़ेशर महक सांगवान को चुना

द नॉर्थकेप यूनिवर्सिटी: मिस्टर फ़ेशर रजत बजाज तथा मिस फ़ेशर महक सांगवान को चुना

द नॉर्थकेप यूनिवर्सिटी: मिस्टर फ़ेशर रजत बजाज तथा मिस फ़ेशर महक सांगवान को चुना

द नॉर्थकेप यूनिवर्सिटी: मिस्टर फ़ेशर रजत बजाज तथा मिस फ़ेशर महक सांगवान को चुना

द नॉर्थकेप यूनिवर्सिटी: मिस्टर फ़ेशर रजत बजाज तथा मिस फ़ेशर महक सांगवान को चुना

द नॉर्थकेप यूनिवर्सिटी: मिस्टर फ़ेशर रजत बजाज तथा मिस फ़ेशर महक सांगवान को चुना

द नॉर्थकेप यूनिवर्सिटी: मिस्टर फ़ेशर रजत बजाज तथा मिस फ़ेशर महक सांगवान को चुना

द नॉर्थकेप यूनिवर्सिटी: मिस्टर फ़ेशर रजत बजाज तथा मिस फ़ेशर महक सांगवान को चुना

द नॉर्थकेप यूनिवर्सिटी: मिस्टर फ़ेशर रजत बजाज तथा मिस फ़ेशर महक सांगवान को चुना

द नॉर्थकेप यूनिवर्सिटी: मिस्टर फ़ेशर रजत बजाज तथा मिस फ़ेशर महक सांगवान को चुना

द नॉर्थकेप यूनिवर्सिटी: मिस्टर फ़ेशर रजत बजाज तथा मिस फ़ेशर महक सांगवान को चुना

द नॉर्थकेप यूनिवर्सिटी: मिस्टर फ़ेशर रजत बजाज तथा मिस फ़ेशर महक सांगवान को चुना

द नॉर्थकेप यूनिवर्सिटी: मिस्टर फ़ेशर रजत बजाज तथा मिस फ़ेशर महक सांगवान को चुना

द नॉर्थकेप यूनिवर्सिटी: मिस्टर फ़ेशर रजत बजाज तथा मिस फ़ेशर महक सांगवान को चुना

# NAAC Peer Team visits The NorthCap University



NAAC Peer Team visits The NorthCap University

NAAC Peer Team visits The NorthCap University

NAAC Peer Team visits The NorthCap University

NAAC Peer Team visits The NorthCap University

NAAC Peer Team visits The NorthCap University

### (Mentors and Team Post 2016 - Day 1)

(Mentors and Team Post 2016 - Day 1)

(Mentors and Team Post 2016 - Day 1)

(Mentors and Team Post 2016 - Day 1)

(Mentors and Team Post 2016 - Day 1)

(Mentors and Team Post 2016 - Day 1)

(Mentors and Team Post 2016 - Day 1)

(Mentors and Team Post 2016 - Day 1)

(Mentors and Team Post 2016 - Day 1)

## Proud to be part of Dean's List

### JUNE 2016 DEAN'S LIST

#### Dean's List of Students

To promote excellence in academics and to recognize outperformers, students scoring a CGPA of 9.5 and above are included in a selected Dean's List. This achievement is reflected in their degrees. They form a think tank for the University's academic reforms, and enjoy special privileges and pride of place in the University. They are specially invited to conduct distinguished visitors to the University. This policy has worked significantly to encourage students to strive towards making the grade to be on the Dean's list.



The June 2016 UG students' Dean's List:

#### School of Engineering & Technology

Aadish Goel	Garima Bhayana
Chhavi Jain	Lakshay Chaudhary
Dinky Khatri	Nandini Gupta
Madhur Bahl	Shreya Chadha
Pragya Jain	Shubham Sehgal
Rachita Gupta	Radhika Agrawal
Ruchi Arora	Jitender Verma
Sakshi Garg	Sumit Jain
Sahil Sharma	Tanyam
Sarthak Agarwal	Akshay Kumar
Sidharth Sharma	Divya Sharma
Baljinder Singh	Divya Bajaj
Mayank Juneja	Kunal Arora
Nikhil Juneja	Sukrit sharma
Nitin	Abhishek Jain
Pankaj Dagar	Aishwarya Basotia
Devansh Bhatia	Hemant Hasija

Ishant Bhardwaj
Neha Gosain
Simar Preet Kaur
Mehek Chandna
Dinesh Dangi
Suyash Abhay Ghirnrikar
Balram Sharma
Sanya Gambhir
Bhrigu Joshi
Kumar Abhishek
Rajvi Kaushik
Rashi Aggarwal
Tanya Pahuja
Gaurav Chauhan
Laveena Garg
Preeti Dagar

#### School of Management

Gunjan Shrivastava
Kirti
Surbhi Shah
Vandana Sony
Rishabh Chaudhary
Apoorva Mangla
Kajal Jain
Niharika Marya
Raveena
Rishab Gaba
Vanshika Jain

#### School of Law

Mukul Sharma
Tanish Khandelwal
Arohi Kashyap
Mohit Vats
Tashi Vaish
Himangshu Rathee
Anubha Yadav
Mandeep Kalra

The June 2016 PG students' Dean's List:

#### School of Engineering & Technology

Neetu Goel	Dilpreet Singh
Kriti Chaudhary	Priyanka Rastogi
Ankita Gupta	Tanuajap Bhandari

#### School of Management

Jatin Arora
Vimal Dahiya
Supriya Rajpal

Dean's List students had a date with the Vice-Chancellor on 27 October 2016 - a dream occasion for a student of The NorthCap University, to be in the company of an exclusive gathering and to be recognized amongst his or her peers. The inspirational meeting with the Pro-Chancellor and the Vice-Chancellor was followed by a group photograph.





**Editors :** Ms Rekha Mathur, Mr Ritesh Ranjan  
**Graphic Designer :** Mr Lalit Narayan Lal  
**Photography :** Mr Akhilesh Kumar  
**Information & Support :** Mr Ashutosh Sharma

**Website :** [www.ncuindia.edu](http://www.ncuindia.edu)  
**VectorTech, Newsletter of**  
**The NorthCap University**  
**Vol. 19 No. 12**  
**Printed by :** The Print Zone, Gurgaon

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