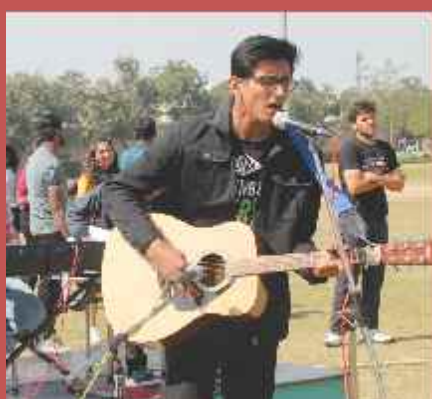


Vol. 20 No.13

# VectorTech

## Magnitude & Direction



# QUALITY BENCHMARKS



The University continues to be ranked No. 1 Private University in Delhi and Haryana, in the NIRF Ranking released on 3rd April 2017 by MHRD



Established under Haryana Private University Act No. 25 of 2009 (Third amendment)



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.



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



University is accredited by the National Assessment and Accreditation Council (NAAC) for period 2016-2021



The NorthCap University Testing Centre established as per ISO/IEC:17025-2005, is NABL Accredited for the Mechanical Testing of Building & Construction Materials.



Accredited by Accreditation Services for International Colleges (ASIC), United Kingdom, in the category of 'Premier' Universities, with 'Commendable' Grades, for 2016-2020



Member of Association of Indian Universities



Member of the Association of Commonwealth Universities



Recognized as the University of the year-2016 for Value Based Education by Higher Education Review - Dec 2016



Institutional Member of American Society for Quality (India)



Member of International Students Exchange Programme



University has tied up with IBM Career Education and set up an IBM Lab for Emerging Technologies. IBM conducts courses for the students of ECE, CSE & MBA programmes



iNurture, our knowledge partner is an educational solution company in the business of designing and delivering of innovative industrial relevant jobs in the field of Animation and VFX, Information Technology, Mobile Application and Analytics



Recognised as the BEST@govcampus



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



School of Management NCU Rank No. 61 amongst all India Top 100 in Business School Ranking for 2016-17 by MBA Universe :

September 2016 - Feb 2017

All information upto 28 February 2017 issued under authority of Chancellor

The NorthCap University

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## DISCLAIMER

While every effort has been made to ensure that the information contained in this publication is accurate at the time of publication (July 2017), 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

Take a moment to sit down, relax and catch up on what's happening at The NorthCap University, Gurugram. We are ready with another issue of VectorTech, your own biannual magazine which brings to you all the news of the University.

The current issue carries our academic progress, accreditation, awards and rankings, interviews with distinguished academics, collaborations with leading industries in India and abroad, ASQ activities, University level Faculty Development Programme and more. In the News from the Schools section, I hope you enjoy reading about some of the varied events, celebrations and individual and collective achievements of our Schools and Departments.

We believe there should be a right balance between work and play, finding time to be active in the service of society – all of these are ways of discovering a new meaning and a deeper enjoyment of life. These are showcased in the later section of the magazine.

I am thankful to the staff and students of the University for their continued contribution and cooperation in sharing the information for the magazine. It is a request to all the readers to pen down their ideas and 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 to make it an interactive tool or write in to the Editorial Cell.

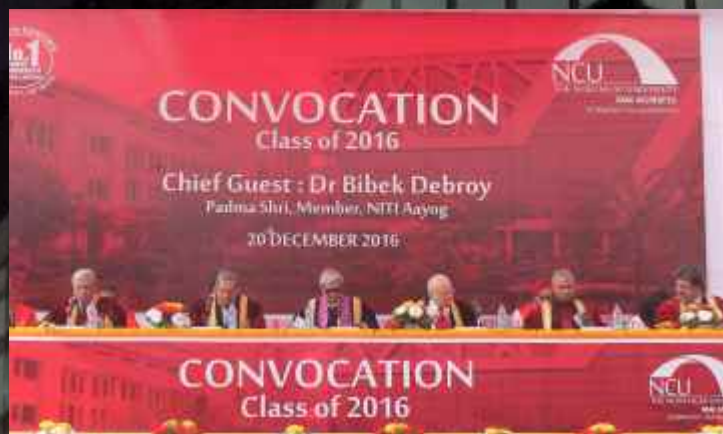
Happy Reading!

**Rekha Mathur**

Sr Editor

Email: [rekhamathur@ncuindia.edu](mailto:rekhamathur@ncuindia.edu)

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# 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
<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 Daulet Singh
<b>Pro-Chancellor</b>	:	Prof. Prem Vrat, PhD, FNAE, FNASc, FWAPS, FISTE, FIIE
<b>Pro Vice-Chancellor</b>	:	Brig. SK Sharma (Retd.), FIE, FIA, FITP
<b>Registrar</b>	:	Col. Bikram Mohanty (Retd)
<b>Student Population</b>	:	Undergraduate    3109 Postgraduate    217 PhD                134
<b>Student Gender Profile</b>	:	Female 30%, Male 70%
<b>Faculty</b>	:	207
<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.

Tel : 0172 - 2740654, 2742548, FAX - 0172 - 2740557, E-mail : bakhvinder@yahoo.com

## Message from the Pro Vice-Chancellor



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

*As we look to the future one thing is certain – application of knowledge and skills will be a key resource you have to equip yourself with to be highly sought after. Our challenge is to help generate ideas that will benefit society and learn to work in domains where you will be valued both for your specialized knowledge as well as for your ability to research, communicate and solve problems. We are continually developing new ways to support and empower you and transform your careers through access to high quality education.*

*To remain contemporary the University undertook a major exercise in Curriculum Development and Course Design. Credits have been reduced and to enhance self-learning and practical work, the number of contact hours per day too have been reduced. NCU has taken a new initiative to facilitate evaluation of students through scientific and structured Aptitude Tests through third party assessments for graduating students. The aim is to improve the success rate of our students in industry driven evaluation tests.*

*Besides academics we offer the best facilities for extracurricular activities that 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 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.*

*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*

*In association with this University from the last three years. The progress it is making is marvellous and it is growing day by day not only in academics but in research too. I wish it the best luck for its future growth.*

**Prof. Pradeep Kumar**

*Professor, Department of Mechanical &  
Industrial Engineering, IIT Roorkee  
Former Vice-Chancellor,  
Delhi Technological University, Delhi*

---

*Wonderful progress and highly innovative. Just keep doing the best.*

**Prof. SK Kak**

*Founder Vice-Chancellor  
Mahamaya Technical  
University, Noida*

---

*University is doing extremely well.*

**Dr Girdhar J Gyani**

*Director General, Association  
of Healthcare Providers (India)*

---

*Impressively moving forward institution.*

**Prof. KL Chopra, Padma Shri**

*Former Director, IIT Kharagpur  
SS Bhatnagar Awardee*

---

*I have, during my short visit to NCU been impressed with their vision of the future and work that challenges the conventional mode of instruction and learning.*

**Justice Syed Rafaat Ahmed**

*High Court Division,  
Supreme Court of Bangladesh*



## Recent Achievements

**Accreditation Services for International Colleges (ASIC) UK:** A respected international accreditation body for academic institutions worldwide, reaccruited The NorthCap University with a status of 'Premier University' for a period of four years from Nov 2016. The University was awarded 'Commendable' grade in seven out of eight measurable areas of a university's operations.

### Higher Education Review

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



### Dr CR Prasad honoured with Life time Achievement Award



*Dr CR Prasad  
Chairman & Managing Director  
Everest Power Pvt Ltd.  
Former Chairman &  
Managing Director of  
Gas Authority of India Ltd.*

Dr CR Prasad, a distinguished Faculty Mentor at NCU, was awarded the Petrotech 2016 Lifetime Achievement Award (Category - Midstream) by the Chief Guest, Hon'ble Finance Minister Shri Arun Jaitley on 7 December 2016 at Vigyan Bhavan, New Delhi.

NCU's School of Law has been recognized as the Best Emerging Law School in India in the survey conducted by Careers 360 in January 2017.



### Prof. Prem Vrat conferred the MC Puri Memorial Award 2016

Prof. Prem Vrat, Pro-Chancellor, The NorthCap University, Gurugram was conferred with the MC Puri Memorial Award for 2016 at the inaugural function of the 49th Annual Convention of the Central Council of Operational Research Society of India on 12 December 2016.

The NorthCap University Gurugram, congratulates Prof. Prem Vrat on his continued achievements and recognitions.



### Prof. KL Chopra conferred with honorary DSc by Jadavpur University



*Prof. KL Chopra  
Padma Shri  
Former Director,  
IIT Kharagpur  
SS Bhatnagar Awardee*

A stalwart from the scientific community, Prof. KL Chopra, has been recognized as one of the seven most cited scientists of India during a period of two decades.

The Jadavpur University, Kolkata conferred an Honorary DSc on Prof. KL Chopra at its convocation held on 24 December 2016. Prof. KL Chopra is an eminent Member of the Academic Advisory Board and a distinguished Faculty Mentor at the The NorthCap University.

### Prof IK Varma receives ICCDM Trivedi Lifetime Achievement Award



Prof. IK Varma received the ICCDM Trivedi Lifetime Achievement Award 2015 on 30 September 2016 at Taj Hotel, Mumbai for her contribution to Indian Chemical Industry. Prof. Varma is an Honorary Research Professor at NCU and an expert in Polymer Science.

### University records historic win for the 16<sup>th</sup> time in Garden Competition

The NorthCap University has won the First prize continuously for the 16<sup>th</sup> time in the 'Educational Institutional Category' during Annual HUDA Flower Festival held on 25 & 26 February 2017. This time, one more trophy has been won as First prize by the University in Cut Flowers category. Our gardeners deserve all praise for their tireless work of taking care of the plants and protecting of them from the cold and rainy weather. The variety of seasonal flowering plants were prepared in pots and placed in a magnificent stepped formation to make the garden very colourful and giving it a good look.

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



## Interaction with Prof. Pradeep Kumar



**Prof. Pradeep Kumar**  
Professor, IIT Roorkee  
Former Vice Chancellor,  
Delhi Technological  
University, New Delhi

On the sidelines of the Sixth Academic Advisory Board Meeting held on 18 February 2017, Prof. Pradeep Kumar, Professor, Department of Mechanical & Industrial Engineering, IIT Roorkee, Former Vice-Chancellor, Delhi Technological University, Delhi shared his insights on some key issues in higher education. In an interaction with Ms Rekha Mathur, Sr Editor, NCU, Prof. Pradeep Kumar mentioned that to be better equipped for the changing world there should be special emphasis on enhancing competencies and skills of students. Motivation of faculty for research in thrust areas and involvement of students towards project based learning are crucial for taking academic and research standards of relevance to the next level. Students be provided more

opportunities for hands-on experience in almost all fields and gain expertise in the use of software based analysis tools.

Speaking from his vast experience as a distinguished academic and as the Vice-Chancellor, DTU, Prof. Pradeep Kumar was of the opinion that recognition and rewards to faculty go a long way in encouraging them to bring in more consultancy and sponsored projects. Recognitions and awards such as the Best Teacher and publication of names of Achievers of the University are factors that motivate the best minds to the field of higher education.

## Outreach Activities of Professor Prem Vrat

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



**Prof. Prem Vrat**  
Pro-Chancellor,  
Professor of Eminence  
& Chief Mentor

- ❑ Prof. Prem Vrat attended the International Seminar on 'India's Leap to Methanol Economy- Opportunities and Option for Energy Security' organized by NITI Ayog on 6 September 2016 at Manekshaw Center, New Delhi.
- ❑ Prof. Prem Vrat attended the Foundation Day Celebrations of Technology Alumni Association (TAA)-Delhi Chapter of IIT Kharagpur at The Ashok, Delhi on 10 September 2016. Dr Mahendra Nath Pandey, Hon'ble Minister of State, HRD, GOI was the Chief Guest at the event.
- ❑ Prof. Prem Vrat attended the 43rd National Management Convention 'India in the Asian Century: Cleaner, Smarter, Faster' organized by All India Management Association (AIMA) at Hotel Le Meridien, New Delhi on 21 and 22 September 2016.
- ❑ Prof. Prem Vrat attended the 8th Meeting of Management Evaluation and Accreditation Committee (MEAC) of National Board of Accreditation (NBA) on 23 September 2016 at NBA, New Delhi.
- ❑ Prof. Prem Vrat was examiner of BTech Major Projects in Industrial Engineering at IIT Delhi on 23 September 2016.
- ❑ Prof. Prem Vrat was the Chief Guest at the Valedictory Session and also chaired the Panel Discussion on Intellectual Property Rights (IPR) in the National Workshop on IPR: Culmination of Research at Bhaskaracharya College of Applied Sciences, New Delhi on 24 September 2016.
- ❑ Prof. Prem Vrat delivered lectures on 'Decision Theory' on 2 and 23 September 2016, 'Statistical Process Control' on 23 September 2016 and 'Multi-Criteria Decision Making' on 30 September 2016 as Honorary Professor of IIT Delhi.
- ❑ Prof. Prem Vrat has been appointed as a member of the Expert Committee by Ministry of Railways, GOI to prepare a report to set-up a world standard Railway Advanced Institute 'SHRESTHA' (Special Railway Establishment for Strategic Technology and Holistic Advancement). The Committee is expected to give its report in a year's time.
- ❑ Prof. Prem Vrat attended a meeting of the 'Advisory Group of Expert on Upgradation of Technology and Leveraging Make in India' in Indian Railways, at NITI Aayog on 4 October 2016.
- ❑ Prof. Prem Vrat attended a luncheon meeting as a member and Governor-Chancellor's nominee to the Executive Council of YMCA University of Science and Technology, Faridabad to meet NAAC visiting team to their University on 13 October 2016.
- ❑ Prof. Prem Vrat delivered lectures at IIT Delhi on 14 and 21 October 2016 as an Honorary Professor.
- ❑ Prof. Prem Vrat graced a cultural evening programme as a Distinguished Guest of Honour, organized by a well-known literary organization 'Suruchi Sahitya Kala Parivar' Gurugram on 23 October 2016 at Government Post Graduate College, Gurugram. At the occasion, Outstanding Teachers were honoured under 'Shikshak Gaurav Samaroh'.
- ❑ Prof. Prem Vrat delivered a lecture on 'Goal Programming' and 'CUSUM' Control Chart at IIT Delhi on 4 and 5 Nov 2016. He also delivered lectures on 11 and 12 Nov 2016 as Honorary Professor IIT Delhi.
- ❑ Prof. Prem Vrat attended the Annual General Body Meeting of Surajmal Education Society and participated in the process of electing their next Executive Council on 6 Nov 2016.
- ❑ Prof. Prem Vrat attended the 21st meeting of the Executive Council of YMCA University of Science & Technology at their university on 17 Nov 2016.
- ❑ Prof. Vrat was a guest of honour and delivered a lecture in a session on 'Human Values in Education' at Om Shanti Retreat Centre, Manesar, Gurugram on 20 Nov 2016.
- ❑ Prof. Prem Vrat attended Meeting of Committee formed for guidance of preparation of DPR for establishment of SRESHTHA in Railways at NITI Aayog on 25 Nov 2016.
- ❑ Prof. Prem Vrat was External Examiner in the Final BTech project evaluation in Industrial Engineering at IIT Delhi on 25 Nov 2016.
- ❑ Prof. Prem Vrat was invited as the Chief Guest in the Conference on the Theme of 'Value Engineering: The Game Changer' organized by Indian Value Engineering Society at Hotel Radisson, Delhi on 29 Nov 2016.
- ❑ Prof. Prem Vrat attended a meeting to pay homage to late Prof. MGK Menon, India's Most Outstanding Scientist at the India International Centre, New Delhi on 30 Nov 2016.
- ❑ Prof. Prem Vrat reviewed a book proposal from Professors of University in Mexico, submitted for publication to Springer.



- ❑ Prof. Prem Vrat was invited as the Chief Guest to a three day conference on Operations Management at BHEL, Noida on 1 December 2016. He participated in a session on 'Issues & Concerns in Managing Operations under Uncertainty & Complexity'. His talk was well received by the participants from BHEL Engineering & Management Departments for whom the programme had been arranged.
- ❑ Prof. Prem Vrat attended the conference on 'India Onward-Scaling Digital India' organized by IBM at Taj Mahal Hotel, Delhi on 9 December 2016.
- ❑ Prof. Prem Vrat was invited to the ASQ South Asia Conference on 'Manifesting Intent through Execution' at Hotel Taj Vivanta, New Delhi on 16 and 17 December 2016.
- ❑ Prof. Prem Vrat attended the networking lunch with Silver Jubilee Batch of Alumni of 1992 batch. He was later felicitated by them in a function in the presence of Director, IIT Delhi.
- ❑ Prof. Prem Vrat was invited as a Guest of Honour in 'Innovation in Science Pursuit for Inspired Research'(INSPIRE)-Science Camp organized by JSS Academy of Technical Education on 26 December 2016 at the academy at Noida.
- ❑ Prof. Prem Vrat delivered a lecture to a delegation of Sri Lankan officers from Ministry of Education during a week-long training organized by ASQ, South Asia on 27 December 2016 at Hotel Radisson Blue, Faridabad.
- ❑ Prof. Prem Vrat attended a meeting of the Executive Council of Sharda University on 31 December 2016 at the university at Noida.
- ❑ Prof. Prem Vrat delivered lectures on 'Supply Chain Management' at IIT Delhi as Honorary Professor on all Fridays in Jan 2017.
- ❑ Prof. Prem Vrat was invited by Ghaziabad Management Association (GMA) as a Distinguished Speaker in Technical Session-1 titled 'E - Education and Healthcare' in the 27th National Annual Convention on 'Digital India for Growth and Empowerment-power to empower' at Hotel Radisson Blu, Kaushambi, Ghaziabad on 21 January 2017.
- ❑ Prof. Vrat attended the annual convocation ceremony of Dr APJ Abdul Kalam Technical University, Lucknow (APJAKTU) (earlier known as UPTU, Lucknow) on 23 January 2017. He also attended the pre-convocation dinner at Hotel Renaissance together with the Chief Guest Dr VK Saraswat, Member, NITI Aayog and Hon'ble Minister of Technical Education Uttar Pradesh.
- ❑ Prof. Prem Vrat attended the Railway Meeting of the Committee on 'SRESTHA' at Research Designs and Standards Organisation (RDSO), Lucknow on 23 January 2017.
- ❑ Prof. Prem Vrat was invited as a Very Special Guest at the inauguration of SPIC MACAY's 'VIRASAT' Programme organized by IIT Delhi at IIT Delhi on 24 January 2017 for a Veena recital by Padma Bhushan, Pt Vishwa Mohan Bhatt.
- ❑ Prof. Prem Vrat was invited to the Inaugural Event by Brahmakumaris at Leisure Valley Ground, Gurugram, on 2 Feb 2017.
- ❑ Prof. Prem Vrat was the Keynote Speaker in the international conference on 'Interdisciplinary Research in Supply Chain Management and Decision Sciences Applications in Business Practices' on 3 and 4 Feb 2017 at the Department of Management Studies, IIT Delhi.
- ❑ Prof. Prem Vrat delivered lectures on 'Supply Chain Management' at IIT Delhi as Honorary Professor on all Fridays in Feb 2017.
- ❑ Prof. Prem Vrat was invited by Shri Pawan Kumar Agarwal, IAS, Addl Secretary & CEO, FSSAI (Food Safety and Standards Authority of India) for discussion on Structure and Functioning of FSSAI at FDA Bhawan, New Delhi on 8 Feb 2017.
- ❑ Prof. Prem Vrat attended the 2nd Convocation of YMCA University of Science and Technology as a Member of the Executive Council and was the Guest of Honour and delivered the Convocation address on 15 Feb 2017.
- ❑ Prof. Prem Vrat attended the meeting of AICTE-INAE Programmes Committee for selection of Distinguished Visiting Professors and Research Fellows at INAE Office, New Delhi on 16 Feb 2017.
- ❑ Prof. Prem Vrat attended a meeting of faculty & staff of the Department of Mechanical Engineering, IIT Delhi at an annual get-together followed by lunch as an invitee, being an Honorary Professor, on 19 Feb 2017.

### Outreach Activities of Director SOET



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

Prof. Ravindra Ojha visited Jamna Auto Industries Ltd Jamshedpur along with their Corporate HR and Plant-Head on 18 & 19 January 2017. He interacted with the plant's leadership team to provide inputs in the areas of Value Flow, Organisation Structure, Continuous improvement projects, Industrial Relations and Leadership Skill Improvement.

## 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 a round table discussion organized by Careers 360 on the New Education Policy for submission of recommendations to MHRD, GOI at New Delhi on 12 September 2016. A set of 14 major recommendations were submitted by Careers360 to MHRD which were moderated based on the discussions at the round table, dealing mainly with private universities.
- ❑ Brig. Sharma (Retd) attended a meeting of Vice-Chancellors of State and Private Universities in Haryana under the Chairmanship of the Chief Minister of Haryana on 29 September 2016 at Chandigarh. The meeting discussed university academic and cultural events to be undertaken by all universities of Haryana during the Swarna Jayanti Celebrations year of the State from 1 November 2016 to 31 October 2017.
- ❑ Brig. SK Sharma (Retd) attended the Foundation Day Celebrations of Technology Alumni Association (TAA)-Delhi Chapter of IIT Kharagpur at The Ashok, Delhi on 10 September 2016. Dr Mahendra Nath Pandey, Hon'ble Minister of State, HRD, GOI was the Chief Guest at the event.
- ❑ Brig. SK Sharma (Retd) attended a

Panel Discussion on 'Ecosystem for Internationalization of Higher Education' on 8 September 2016 at PHD House, New Delhi, jointly organized by the Education Promotion Society for India (EPSI) and BIMTECH.

- ❑ Brig SK Sharma (Retd) attended the Haryana Swarna Jayanti Celebrations at the Tau Devi Lal Stadium, Gurugram on 1 Nov 2016 along with the Registrar.
- ❑ Brig. SK Sharma (Retd), Pro Vice-Chancellor attended the North Zone Vice Chancellors' Meet 2016-17 on 23 December 2016 at Amity University, Noida. The theme of this year's Zonal Conference was 'Celebrating Success in Higher Education – Best Practices'. Around 50 Vice-Chancellors from different universities located in the North Zone exchanged views on the subject and best practices under various sub themes were exchanged.
- ❑ Brig. SK Sharma (Retd) attended the 3<sup>rd</sup> meeting of the Professional Network Group of India (PNGI) on 17 December 2016 at Gurugram. The theme of the seminar was 'Demonetization, its impact on the nation and how it should be managed'.
- ❑ Brig. Sharma attended the conference on 'India Onward-Scaling Digital India' organized by

IBM at Taj Mahal Hotel, Delhi on 9 December 2016.

- ❑ Brig. SK Sharma (Retd) was invited to a dinner reception at German House, Chanakypuri, New Delhi on 17 February 2017 on the occasion of the launch of the German Study & Research Expo New Delhi 2017 held at New Delhi & Hyderabad. He took the opportunity to invite the Director (Marketing) of DAAD Regional Office, South Asia to deliver a talk at NCU on German DAAD Scholarship Opportunities for Indian students.
- ❑ Brig. SK Sharma (Retd) attended the Economic Times Best Education Brands 2017 at Hotel Taj Palace, New Delhi on 24 February 2017. A Panel Discussion was held on five issues that are likely to change education i.e. Diverse time & place – the future of e-learning, Personalized learning, Field experience and application based learning, The future of exams and Unconventional course content. A coffee table book on Best Education Brands was launched by the Chief Guest Mr Manish Sisodia, Dy Chief Minister of Delhi.

### Outreach Activities of Registrar & COE

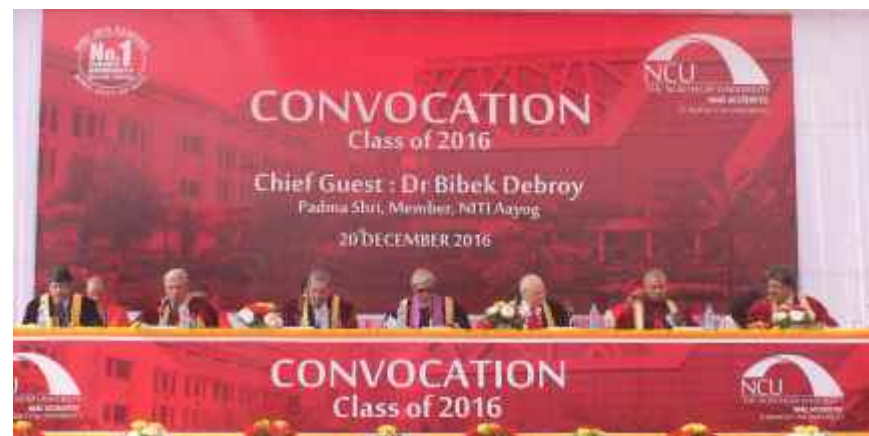
The Registrar, Col Bikram Mohanty (Retd) and Controller of Examinations, Wg Cdr Manohar Vasudev (Retd) attended a Workshop on 'The Future of Higher Education Assessments: Developing an Eco System of Quality Examination' on 9 Nov 2016. Prof. Ved Prakash, Chairman UGC was the Chief Guest at the occasion. To standardize assessment and grading of students passing out from different State Education Boards in India, the distinguished panellists dwelt on the urgent need for introducing Scholastic Aptitude Test (SAT) for admission to Indian Universities. Prof. Sanjay Govind Dhande, former Director of IIT Kanpur, stressed on the urgent need for an 'out-of-the-box thinking' and for redesigning examinations and conduct methodology by adopting best practices worldwide so that Indian Universities find a place amongst the top 100 World Universities.

## News and Events

### The NorthCap University, Gurugram celebrates its 5<sup>th</sup> Annual Convocation

The NorthCap University, Gurugram held its 5<sup>th</sup> Annual Convocation Ceremony for its various undergraduate and postgraduate courses on 20 December 2016. The event, a memorable one, was presided over by Dr Bibek Debroy, Padma Shri, Member, NITI Aayog and Chairman, High Level Committee, Indian Railways. Other luminaries present at the event included, The NorthCap University's Founder Members Shri Avdhesh Mishra and Shri Shiv Saran Mehra; Chancellor and Founder Member, Shri V Daulet Singh; Pro-Chancellor, Prof Prem Vrat and Pro Vice-Chancellor, Brig SK Sharma (Retd).

A total of 835 students were awarded degrees in their respective disciplines, including 506 from BTech, 128 from MTech, 10 from BSc Maths (Hons), 14 from MSc (Maths), 38 from BBA, 30 from BCom (Hons), 16 from BSc Eco (Hons), 34 from MBA, 53 from BBA-



LLB(H), 3 from LLM. 3 PhD scholars from the University also received their degrees during the Convocation. Gold, Silver and Bronze medals were awarded to 38 candidates who topped the list in their respective streams.

In his convocation address, Dr Bibek Debroy said, "You are now setting out on a new path ready to take on the world. Your

stint at The NorthCap University has equipped you with the requisite skills and you are now a very important part of the society. Only about 10% of the youth are fortunate to get higher education in India and you are a privileged part of it."

For the first time, the event was streamed live on Facebook and thousands viewed it.

### Annual Scholarship Distribution Ceremony held at NCU

To celebrate the spirit of Haryana Swarna Jayanti Celebrations which began on 1 November 2016, The NorthCap University held its Fee Concession and Merit Scholarship Distribution Ceremony 2016 on 9 December 2016. The University awarded scholarships on merit and means basis to deserving students. The ceremony was presided over by Prof. Furqan Qamar, Secretary General, Association of Indian Universities, New Delhi.

A total of 266 students received the scholarships and fee concessions amounting to Rs 1.41 crores. The Chief Guest, Prof. Furqan Qamar, while speaking at the event said, "The efforts of The NorthCap University, Gurugram in providing fee concessions to



economically weaker sections and scholarships to meritorious students is laudable. Every university should follow the 3Es i.e. Equality, Expansion and Excellence and I am happy to see that NCU believes in it."



## Visit of Prof. John Wilson from ASIC, UK

Prof. John Wilson, Head of Accreditation from Accreditation Services for International Colleges (ASIC), UK visited the University from 13 to 15 September 2016, for assessment and extension of accreditation of the University. Prof. Wilson inspected the various aspects of the University related to research facilities, publications, academic and extracurricular activities, infrastructure facilities, administration, placements, library, laboratories, students and faculty achievements and was appreciative of the various facilities at the University. Thereafter, the University has been reaccredited in the category of 'Premier' Universities with 'Commendable' Grades for 2016-20.

It is worth mentioning that The NorthCap University was the first university of Haryana to get ASIC Accreditation of UK in 2012, when it was awarded a Premier University status.



## Haryana Universities Review Committee visits The NorthCap University

Prof. Brij Kishore Kuthiala, Chairman along with Dr. Om Prakash, Convenor of the Haryana Universities Review Committee visited The NorthCap University on 23 September 2016. The purpose of the visit was to bring in uniformity amongst different universities, even as they enjoy adequate freedom given the diversity of the academic work. The buzzword was 'to make the Universities more autonomous on one hand and more accountable on the other' and to overall improve the standard of higher education in the State.

The Committee members interacted with various groups of faculty, students, researchers and administrative staff who in turn provided valuable suggestions which can provide leadership in skill development, innovation and research for the benefit of society in the State. A presentation about the University by the Vice-Chancellor, Brig. SK Sharma (Retd) was well received by the Chairman. The Committee spent nearly three hours at the University and conveyed their appreciation to the Vice-Chancellor for a well conducted visit.



## Department of Science & Technology (DST) Meetings held at NCU

A five day DST sponsored Women Scientist Project Evaluation and Monitoring Meeting was organized by NCU for the Engineering and Life Sciences research areas on 14-15 Oct and 16-18 Oct 2016 respectively. The meetings were coordinated by faculty members of the Dept of Applied Sciences with Dr Ambika Devi and Dr Sangeet Srivastava overseeing the process.

The reviewers and experts from DST, Dr Chander Mohan, Dr H B Singh and Dr Vandana Singh, apart from 20 domain experts from various premiere organizations visited NCU to evaluate over 120 projects submitted under WoS-A scheme to DST. Progress of about 32 ongoing projects was also evaluated by the DST monitoring committee. The experts and participants were appreciative of the management of this important DST meeting.



## Sixth Academic Advisory Board Meeting



The sixth Academic Advisory Board Meeting of the University was held on 18 February 2017 to review the progress made during the year and advise on future plans for the growth and

development of the University. The Academic Advisory Board is the think tank and the appellate body comprising of eminent educationists and industry experts drawn from across the country.

Honourable members exchanged views, presented new and refreshing ideas, and advised on actions to improve the academic life and other essential deliverables so that the University could achieve its ultimate aim of attaining a position of pre-eminence. They discussed key issues such as the Strategic Plans for the University, road map for improvement of the curriculum, introduction of new programmes and placements for the students.

Members of the Board also interacted with faculty and students on the Dean's List, sharing their thoughts and inspiring them to be innovators, ground breakers and nation builders.

## The Annual Faculty Mentors meeting

The Annual Faculty Mentors meeting was held on 3 February 2017 at the University. Our Faculty Mentors, who are eminent academicians, scientists and renowned experts from different fields, met the Pro-Chancellor, Prof. Prem Vrat, the Chief Mentor and the Officiating Vice-Chancellor, Brig. SK Sharma (Retd) in the presence of the Governing Body members to review the outcome-based progress of their respective mentees, and to plan the way forward for improving and making the scheme more effective.

At the outset, Prof. Prem Vrat welcomed Prof. Pushpesh Pant (Emeritus

Professor, SOL) and congratulated Dr CR Prasad who had been conferred the Petrotech-2016 Lifetime Achievement (Category – Midstream) Award and Prof. KL Chopra who had been conferred with an honorary DSc by Jadhavpur University in Dec 2016. He then welcomed Prof. Yadav as the new Convener & Coordinator of this Mentoring Scheme. Brig. S K Sharma (Retd) informed the members that Prof. Prem Vrat himself had been conferred with the MC Puri Memorial Award 2016 at the Annual Convention of the Central Council of Operational Research Society of India in December 2016.

Mentors reaffirmed that faculty mentoring has proved its value of enriching the faculty, the departments and the University as a whole and should be continued with all seriousness. It was unanimously agreed that the Annual Faculty Mentors meeting should be held on a fixed date on the 3rd Friday of January every year. It was decided that the Faculty Mentor's expertise should be shared across disciplines to facilitate interdisciplinary interaction and research proposals.

## Quality Conclave on 'Creating Value through Quality'

American Society of Quality (ASQ) Student Chapter of The NorthCap University, organised a Quality Conclave on the theme 'Creating Value Through Quality' on 18 November 2016.

The conclave was attended by eminent personalities namely Mr Ciby James- Dir ASQ South Asia, Mr Shekhar Dasgupta, Founder & CEO Greenfield Software, Mr Ashish Basu, Co-founder of SafetiPin and Mr Pawan Datta, VP Head Quality at Max Healthcare. The conclave began with a motivational talk by Prof Prem Vrat, Pro-Chancellor, who explained the various aspects of quality included in our lives by quoting from his experiences. Ms Jyotika Pruthi, Asst Prof. recited a thought provoking poem. It was followed by inspirational talks on entrepreneurship and quality by the other speakers.

The highlight of the day was the quiz competition wherein six teams participated. The quiz was conducted by Ms Sheetal Soni AGM, Quality & Service Delivery GMR. The top three winning teams have been provided internship with reputed companies. The event ended with a vote of thanks by Prof Ravindra Ojha, Director SOET.





## White Belt Training in Six Sigma and Lean Basics



To bring quality in every facet, the University's knowledge partner, ASQ organized a one day programme in White Belt Training in Six Sigma and Lean Basics on 24 September 2016. A total of 102 students from the Schools of Engineering, Law and Management, took part in various brainstorming activities. The students were introduced to impossible situations which could only be solved if they adopted 'out of the box' thinking. This year, the theme of the conference was 'Make in India'.

After several fun and thought provoking activities, students at the end of the conference, were able to understand the concept of efficiency, to set challenging yet achievable objectives, to implement a uniform approach to resolve all the problems and to keep working to achieve breakthrough processes to improve employee performance. The training was highly appreciated and proved to be extremely beneficial for the participants.

## ASQ Vice- Chair Students, Ms Stephanie Thompson visited NCU

Ms Stephanie Thompson, Vice- Chair Students, Quality Management Division, ASQ was at NCU on 22 December 2016. She had an interactive session with our ASQ-NCU Student Chapter and Director SOET, Prof. Ravindra Ojha. The interaction was aimed at bringing out measures to help students to have better exposure to



opportunities in the industry. Students presented their ideas and viewpoints. She also shared the ASQ webportal named Gennext and asked students to share their feedback, queries and data across the globe.

## ASQ students visit Honda, Tapukara plant Learning by Seeing

ASQ organised an industrial trip to the world-class two-wheeler Honda Plant situated at Tapukara, Alwar on 23 Feb 2017. The ASQ- NCU team consisted of 23 students and four faculty members led by Prof. Ravindra Ojha, Director, SOET.



The plant offered a learning opportunity from Human Resources to technical aspects. In accordance with 'Make in India' Honda has recently launched Honda Navi, first 'Made in India' bike. NCU team got an opportunity to understand assembly line technology, production planning systems, testing processes, 5S and human behaviour.





## Collaborations

### MSME collaborates with NCU

Government of India recognizes The NorthCap University as a leading professional educational institute in the area of design/innovation/ engineering. Micro Small & Medium Enterprises (MSME) is collaborating with NCU under the Design Clinic Scheme (DCS) that aims to enable 'design' as a tool for improving manufacturing competitiveness of respective MSMEs in the manufacturing sector. Details are available at <http://www.designclinicsmsme.org/>

Under the Design Clinic Scheme faculty and students of NCU will collaborate with the MSME sector in Haryana through the following activities:

- Design Awareness Seminar for MSME clusters.
- Design Awareness programme consisting of need assessment survey and design clinic

workshop for identified manufacturing cluster.

- Student Design Projects taken up by graduating students as their final project along with MSME.
- Professional Design project taken up by professional industrial design experts along with MSME.

Dr Ashwini Sharma, Dept of Mechanical Engineering is the faculty coordinator for MSME collaboration.

### Mitsubishi extends collaboration with NCU

Mitsubishi Electric India Private Limited signed an MoU to extend its agreement with NCU to provide Mitsubishi Electric Factory Automation training equipment worth over Rs 23 lakh for demonstration, learning and training of students and faculty at NCU. In a formal ceremony held at NCU on 26 September 2016, Mr



Makoto Yokoyama, Director, Mitsubishi Electric India Pvt. Ltd. and Prof. Prem Vrat, Pro-Chancellor, NCU exchanged the MoUs. The ceremony was graced by the presence of Mr Hiroshi Kitamura, GM - Factory Automation Centre, Mitsubishi Electric India Pvt. Ltd. Delegates from Mitsubishi Electric also inaugurated the PLC kits that were provided to the University under the MoU.

## MoU with Beijing Wave Spectrum Science & Technology Co. Ltd, China

The NorthCap University inaugurated its new Mechanics Lab, set up in collaboration with Beijing Wave Spectrum Science & Technology Co. Ltd. China, on 26 November 2016. This lab is a unique model of international collaboration with a private Indian university. The Lab was inaugurated by Mr Lyons Zhu, Managing Director, Beijing Wave Spectrum Science and Technology Co. Ltd. China, and Prof. Prem Vrat, Pro-Chancellor. The Mechanics Lab has been setup with an approximate cost of USD \$60,000 (INR 40 lakhs) by Beijing Wave Spectrum under a five year MoU with NCU. Beijing Wave Spectrum is a Chinese company, dedicated to research and development of vibration measurement technology, measurement and control and sensor technology. The new set up is a multidisciplinary lab with test equipment and instruments for mechanical, civil and electronics engineering disciplines. The lab has 16 research instruments relating to vibration, design and data acquisition



(testing equipment, sensors with software), along with hardware updates and maintenance. This lab is a part of the Central Research Facility and will help in boosting BTech, MTech and PhD programmes at the University. Dr Rohit Singh Lather, Associate Professor, Mechanical Engineering, facilitated the collaboration and will also co-manage the lab and its activities along with Beijing

Wave Spectrum engineers. The lab will be used by Beijing Wave Spectrum and the University as a platform to continuously improve and develop research instruments and testing systems. Mr Lyons Zhu, Managing Director, Beijing Wave Spectrum is agreeable to take lectures as a Visiting International Faculty at the University.

## Visit to Mitsubishi Electric Private Ltd, Gurugram



Prof. Ravindra Ojha, Prof. Swarn Ahuja, Dr Anjali Garg, Dr Shiv Manjaree Gopaliya and Ms Shaveta Arora visited the office of Mitsubishi Electric Private Limited, Gurugram on 31 January 2017.

The NCU team met Mr Manoj Gupta, Head & Incharge – MEL with his Japanese team members and Ms Ripanjeet Kaur, MoU Coordinator, MEL. A detailed discussion was held on the future directions of the MoU signed between NCU and MEL. Following areas of collaboration were discussed :

- Workshops/trainings for students and faculty members.
- Proper integration of Mitsubishi PLC kits into the laboratory experiments for various Courses at NCU.
- Participation of NCU in various workshops/seminars conducted by MEL as a part of academic institutions and industries linkages.
- Participation of our students in various events of MEL.

NCU faculty participated in the two day training programme on 'iQ-R PLC Hardware' on 1 and 2 Feb 2017.

## NCU signs MoU with Delta Power Solutions



The NorthCap University signed an MoU with Delta Power Solutions India Pvt. Ltd on 3 January 2017 to develop and execute education and research projects, promote development of syllabi and activities that support research and development through work-integrated learning programmes.

The MoU was signed by Ms Rituparna Ghosh Vats, Dy GM HR and Mr Vimal Pandey, Assistant Manager, Delta Electronics India Pvt. Ltd and Prof. Ravindra Ojha, Director, SOET in the presence of Pro-VC, Brig. SK Sharma (Retd). Delta Electronics Group is a multi-billion dollar global company and the world's leading producer of power supplies for the top names in industrial, medical and consumer electronic devices. Delta shall support research fund, education promoting budget and allow use of material equipment and buildings in carrying research and development. During the interaction with Ms Ghosh, other avenues for future engagement such as internship, creation of Centre-of-Excellence, live projects for students and campus placements were also explored.

## Delta Electronics organized project training at NCU

National training on automation, drives and robotics by industry experts from Delta Electronics Ltd, was held from 3-7 Feb 2017 at NCU. 75 students were selected from six different universities to participate in this national level training programme i.e. The



NorthCap University, IIT- Roorkee, NIT- Kurukshetra, Amity University- Noida, LPU- Punjab and VIT-Vellore. Nine students were selected from NCU's Dept of EECE and six from Dept of Mechanical Engineering for this valuable training. Faculty coordinators Ms Charu Rana and Dr Shiv Manjaree Gopaliya also participated in this training which was conducted under 'Delta Cup Contest' at South Asia Level to be held in July 2017 in China.

## NCU signs MoU with American Society of Civil Engineers

The NorthCap University signed an MoU with The American Society of Civil Engineers (ASCE), Reston, Virginia, USA for conducting ASCE's webinars with a local expert and also for holding conferences and educational activities at NCU. The University will provide all logistic and infrastructure support for conducting such academic activities at the University campus. With the signing of this MoU, Dept of CEE hopes to impart knowledge to the students as well as professionals working in the field of construction, environmental, geotechnical, hydraulics and water resources.



## ❑ Dr Tom Nolan of ITB Ireland visits NCU



Dr Tom Nolan, International Academic Network Manager, Institute of Technology Blanchardstown (ITB), Dublin 15, Ireland visited The NorthCap University on 24 February 2017 to review the ongoing collaboration between the two institutions and to discuss the roadmap for expansion in the collaborating domain. During the visit he was accompanied by Dr Latika Singh, Head, Dept of CSE & IT and Mr Manoj Kumar Gopaliya, MoU Coordinator, NCU-ITB.

Dr Tom Nolan's met NCU delegates representing the Departments of EECE, ME and SOM to discuss possibilities of student exchange for various programmes offered in their respective departments/schools. Dr Nolan informed that ITB is pleased to offer entry to our BTech (Mechanical) students in their BEngg (H)-Mechatronics programme after successful completion of their 3<sup>rd</sup> Year at NCU. This requires a one week bridge course in the area of Control Engineering at ITB after joining. It was also agreed to send course curriculum of EECE programmes to ITB for possible mapping for student exchange in B Engg (H) and MEngg/MSc Programmes at ITB.

Dr Nolan interacted with NCU students and updated them about various programmes offered at ITB, Ireland and the benefits of opting for the student exchange programme. Students also interacted through Skype with

NCU students currently studying at ITB under one of the many exchange options available through this MoU.

## ❑ Dr Glenwood Irons visits the University

Dr Glenwood Irons, Vice President-International, Global Tutoring Hub, visited the University on 17 February 2017 and interacted with the Pro Vice-Chancellor, Brig S K Sharma (Retd), Registrar, Col Bikram Mohanty (Retd), Dean-Academics, Prof. Swaran Ahuja and Head, Dept of CSE&IT, Dr Latika Singh.

Global Tutoring Hub (GTH) is a Barbados based corporation focused on worldwide delivery of education. Their aim is to create,

develop and use a highly specialized eService's platform 'Podium' for dissemination of a wide range of educational programmes, which can be effectively used for mass dissemination of educational knowledge and skills. Dr Glenwood Irons gave a demo of 'Podium', its connectivity and core services etc. He was accompanied by Director of City Innovates, Mr Kashish Jhamb.



## Delegation from Curtin University Australia visits NCU



A delegation from Curtin Business School, Curtin University, Australia visited The NorthCap University on 24 November 2016. Curtin Business School is one of the leading Business Schools in Australia and has a AACSB accreditation. Ranked a notch above the IITs at 210 in Times World Rankings, Curtin is amongst the top 10 education providers in Australia with on-campus student population exceeding 35,000. Last year they had formalized their research tie ups-through Curtin India Research Academy with quite a few IITs and IIMs.

The delegation included Prof. Peter Galvin and Prof. Steve McKenna from Curtin Business School who delivered prestigious lectures to students on different perspectives of management education, apart from discussing opportunities in research, industry tie ups and student mobilization. The delegation also met the Dean and the faculty members of The School of Management to explore future collaborations in areas of research.



## Special Lectures

### □ Talk on 'Course Design and Programme Credit Structure'

Prof. Dheeraj Sanghi, Dean Academic Affairs and Dean of External Relationships IIIT Delhi, delivered a talk on 'Course Design and Programme Credit Structure' to the DOS/HODs and Programme Coordinators of all the three Schools. During his talk, Prof. Sanghi highlighted that while designing courses, at least 10-15% of non-STEM (Science, Technology, Engineering and Mathematics) should be taken into consideration. He stressed the fact that the world is becoming more complex and it requires multiple skills to solve problems and therefore, the University needs to have a more inter-disciplinary



approach in the subjects offered. He reiterated that variants in programming like Minor, Double Minor, Dual Degree and UG-PG dual degree should be examined in detail so that the aspirations of parents and students are adequately addressed.



### □ Experiential Learning

Prof. Ravindra Ojha, Director SOET invited Mr Rohit Agarwal, Asst General Manager, Dalmia Bharat Ltd. for delivering a guest lecture on 'Some experiential learning from handling large projects' on 26 October 2016. Mr Agarwal shared his professional experience with students of Project Management which comprised of students from the Dept of CSE& IT and MBA. He shared interesting experiences about challenges faced by Project Managers, growing need of project management in software industries, reasons behind delay of projects, how to restore the original plan and how to be mentally and physically fit in a high demanding job profile of a Project Manager.

### □ Cyber Security

The University through the good offices of Prof. Amitava Sen Gupta, Mentor RDIL invited Dr Gulshan Rai, the first Chief Information Security Officer (CISO) at Prime Minister's Office, India on 17 November 2016 to deliver a special lecture to students and faculty. Prior to this Dr Rai was working as Director General, CERT-In (Indian Computer Emergency Response

Team) and was Group Coordinator of E-Security and Cyber Law Division, Ministry of Communications and Information Technology.

He spoke about the Digital Revolution and its impact on Internet and Cyber Security. He explained about the Indian Cyber Space, what it constitutes and importance of Cyber Security. He also discussed how criminals use malware (customized software in order to perform malicious activities) to hack systems and commit various types of frauds. Further, he stressed upon the importance of preparing the student's workforce in the field of Cyber Security to cater to the ever increasing demand of Cyber Security Experts in our country.

Dr Rai appreciated the University's efforts of running an MTech programme with specialization in Cyber Security but suggested that more needs to be done in this direction by collaborating with



industries and Government organizations. The faculty and students of Dept of CSE&IT actively participated in the interactive session with Dr Rai.

## University Level Winter FDP

To enhance our academic and intellectual environment and give opportunities to faculty members to update their pedagogical and research skills, a University level six day Faculty Development Programme was conducted on different topics from 8-14 December 2016. Faculty from all the Schools and Departments participated in the FDP and gained from the insights of senior

academicians and industry experts.

□ Pro-Chancellor, **Prof. Prem Vrat**, spoke about 'Enhancing Learning Effectiveness in Higher Technical Education: Opportunities & Challenges'. The FDP was organized on 8 December 2016 and coordinated by Dr Payal Khurana, CLL.

□ **Prof. KL Chopra** talked on 'Plasma processing of thin films and nanomaterials'. The talk was delivered on 8 December 2016, coordinated by Dr Payal Khurana, CLL.

□ **Prof. Pushpesh Pant** shared his views on the topic 'Excellence in teaching and research: challenges

and problems in contemporary India'. The lecture was conducted on 9 December 2016 and coordinated by Ms Pallavi Bajpai, School of Law.

- ❑ **Prof. AK Ghatak**, Honorary Distinguished Research Professor, NCU, shared his expertise on 'Importance of light' which has fascinated mankind ever since he could see. The talk was delivered on 9 December 2016, coordinated by Ms Pallavi Bajpai, School of Law.



- ❑ **Prof. Swaran Ahuja** shared his views on 'Review and implementation of teaching learning processes at NCU-new guidelines'. He proposed a comprehensive review of curriculum aligned with the current and futuristic market requirements. The FDP was organized on 10 December 2016

and coordinated by Dr Rekha Vij, Dept of EECE.

- ❑ **Prof. Ravindra Ojha** delivered a lecture on 'Employability Assessment Test for students – CoCubes'. The FDP was held on 10 December 2016 and coordinated by Dr Rekha Vij, Dept of EECE.
- ❑ **Maj Gen AK Chaturvedi (Retd)** gave a session on 'Energy Security of India'. The FDP was organized on 10 December 2016 and coordinated by Dr Rekha Vij, Dept of EECE.
- ❑ **Mr Sachin Jain** delivered a talk on 'Ethos of Management'. The FDP was held on 12 December 2016 and coordinated by Ms Jiveta Chaudhary, SOM.
- ❑ **Prof. Karmeshu's** talk was on 'Mathematical Modelling and its pervasiveness across disciplines'. The FDP was organized on 12 December 2016 and coordinated by Ms Jiveta Chaudhary, SOM.
- ❑ **Dr Vinnie Jauhari** spoke on 'Technology leading to engaged experiences in learning'. The FDP was organized on 13 December 2016 and coordinated by Dr Kavita Khanna, Dept of CSE&IT.



- ❑ **Dr Pramath Raj Sinha** conducted an insightful session on 'Incorporating 21st century learning in classrooms'. The FDP was organized on 13 December 2016 and coordinated by Dr Kavita Khanna, Dept of CSE&IT.
- ❑ **Mr Avijit Das** delivered a talk on the topic 'Entrepreneurship and startups – some experiential facts'. The FDP was organized on 14 December 2016 and coordinated by Ms Shikha Kashyap, Dept of Mechanical Engg.
- ❑ In the interactive session on 'Leading in the knowledge worker era', **Mr Krishnan** was of the view that in today's time we should inspire and not just motivate. The FDP was organized on 14 December 2016 and coordinated by Ms Shikha Kashyap, Dept of Mechanical Engg.

## Prof. B Chandra joins NCU as Faculty Mentor



**Prof. B Chandra, PhD**  
Professor-Department  
of Mathematics  
Indian Institute of  
Technology Delhi

Prof B Chandra who has joined the University as a Faculty Mentor is working with the Computer Science group of the Department of Mathematics, IIT, Delhi where she is currently a Professor and was the Department Chair from 2004 to 2007. Her areas of interest include Statistical Classification & Clustering for Data Mining, Neural Networks for Statistical Pattern Recognition, NLP, Databases, Adaptive Control Models. Her specialization is in the area of Data Mining, Neural Networks, Machine Learning and feature selection for Gene Expression data.

Prof. Chandra has been a Visiting professor at the University of Pittsburgh, USA and Penn State University, USA. She has also been a visiting scientist at NIST, Gaithersburg, Maryland during 2012. She has chaired many sessions in Data Mining and Machine Learning in international conferences organized in USA, UK, Canada, Singapore and France. She has been a Principal Investigator of many sponsored research projects in the area of Clustering of Gene Expression Data, Pattern Classification, Feature Selection and consultancy projects with stock market companies.

We welcome Prof. B Chandra to The NorthCap University's panel of eminent Faculty Mentors.

## Internal Audit of the School of Engg, Management & Law

The Fifth Internal Audit of all three Schools of Engineering, Management and Law was conducted from 13 -16 Jan 2017.

All departments under SOET performed quite well with the top honours being taken by the Dept of EECE and the Dept of CSE&IT coming a close second.

The School of Law and School of Management also performed well and have resolved to put up a stellar performance in the forthcoming BCI inspection in 2018 and NBA accreditation respectively.



## Students awarded the VC's Innovation Fund for Research



The details of the projects and award amounts are as follows:

S. No.	Students	Faculty Mentor	Title	Award
1	Harshit Juneja (13CSU050), Kriti Aggarwal (13CSU066)	Dr Shilpa Mahajan	Wifi powered indoor navigation system with multilingual support (Nav Me Bot)	Rs 43,000
2	Tushar Chadha (13meu111), Ketan Singhal (13eeu019)	Dr Anjali Garg, Dr Feras Al-Hakkak	Power generation through moving vehicles on road	Rs 60,000
3	Suyash Abhay Ghirnikar (13meu107), Tanmay Dhanote (13meu109)	Dr Feras Al-Hakkak, Mr Anuj K Jain	Design and fabrication of a hybrid rocket engine	Rs 75,000

The NCU VC Innovation Fund is a funding pool that can be accessed by faculty members, researchers and students of the University to carry out innovative and socially relevant research especially when external funding is not readily available. This year the VC Innovation fund was awarded to three student projects on 24 January 2017.

At the event, Prof. Prem Vrat and Brig Sharma gave practical advice to the students. This was followed by Prof Prem Vrat distributing the cheques to the students. The Innovation Fund Scheme was coordinated by Dr Feras Al-Hakkak.

## Awards to Faculty Members



# TEACHERS' DAY

## 5<sup>th</sup> September 2016

### BEST TEACHER AWARD




**DR AMBIKA DEVI**  
Applied Sciences

**DR SHARDA VASHISTH**  
EECE

### BEST RESEARCH PAPER AWARD





**DR ANIL K MISRA**  
Civil & Env. Engg.

**MS VANDANA KHANNA**  
EECE

**MS RITA CHHIKARA**  
CSE & IT

The University celebrated the Teachers' Day with great enthusiasm and passion on 5 Sep 2016. The University paid homage to Dr Sarvapalli Radhakrishnan and remembered his contributions to society. The celebrations started with a welcome address by HR Manager, Ms Deepika Deswal lauding the teaching

fraternity for having chosen this noble profession. A special tribute was given to the NCU faculty by the students through song recital and dance performance and by Ms Jyotika Pruthi commemorating the words of a teacher in her moving poetic rendition and truly represented the lasting impressions a teacher has on students.

To honour the teachers for their praiseworthy contribution to the University, the Best Teacher and Best Research Paper Awards were awarded. The Pro-Chancellor, Prof. Prem Vrat and the Pro Vice-Chancellor, Brig SK Sharma (Retd) gave away the awards to the Star Performers of the University. The Best Teacher awards of The NorthCap University, Gurugram went to Dr Ambika Devi, Dept of Applied Sciences and Dr Sharda Vashisth, Dept of EECE for their overall contribution to teaching, research and administration. The Best Research Paper awards were given to Ms Vandana Khanna, Dept of EECE; Dr Anil Kumar Misra, Dept of Civil and Environmental Engineering and Ms Rita Chhikara, Dept of CSE and IT, for their outstanding research papers. A flash mob show by students at the cafeteria during tea after the event was quite entertaining and amusing.



## School of Engineering and Technology

### Department of Electrical, Electronics and Communication Engineering

#### Training programme for teachers conducted by NITTTR, Chandigarh

The National Institute of Technical Teachers Training & Research (NITTTR), Chandigarh has been offering faculty training programmes in a wide variety of areas to train teachers, propagate ICT skills and Induction Training Programmes to improve quality of technical education at NCU, which is a Nodal Centre of NITTTR. The Dept of EECE organized a short term course in association with NITTTR Chandigarh on 'Tools for Engineering Research through ICT' from 30 January to 3 February 2017 at the University.

The objective of the course was to train teachers in the emerging and upcoming topics of research and introduce them to various tools that can help researchers improve their research and problem solving skills. The programme was designed around the following major topics:

- Ethics in Scientific Research
- Design of Experiments
- Optimization Techniques (ANN Genetic Algorithms)
- Data processing and Statistical Analysis
- Technical Writing and LATEX software.

- Introduction to MATLAB/SIMULINK for modeling engineering (Power Electronics and Power System) problems.
- Hardware validation for MATLAB/SIMULINK models using Arduino, dSpace and opal-RT.

The Course upgraded knowledge and programming skills in interdisciplinary fields of the faculty from the Depts of EECE, APS, ME, research scholars and technical staff. The training was coordinated by Ms Amanpreet Kaur, Nodal Coordinator, Dept of EECE.

### Special Lectures

- A lecture on 'Future Trends in IT Infrastructure Services' by Mr Aman Chandna, Service Delivery Manager, TCS was organized on 10 Nov 2016. Mr Chandna focused on future trends in IT infrastructure services like cloud computing and Internet of Things. He discussed career opportunities in the field of Electronics and Communication Engineering. The lecture was coordinated by Ms Shaveta Arora and Ms Kusum Grewal Dangi. (ECE2016G006)



Anjali Garg, Ms Kusum Grewal Dangi and Dr Shardha Vashishth. [ECE2016G005]

- A Guest Lecture on 'Smart Cities' was delivered by Mr Jeevan Talgaonkar, General Manager & Head Practice Business Operations, Ericsson India Pvt. Ltd. on 27 Oct 2016. The lecture was attended by 3<sup>rd</sup> Year, 4<sup>th</sup> Year BTech and 2<sup>nd</sup> Year MTech ECE students. Mr Talgaonkar spoke about Internet of Things, 3G(LTE) and 4G followed by latest developments in 5G. He also discussed about job opportunities for students of Electronics and Communication Engineering. The event was coordinated by Dr



Applications of IoT. He gave a live demonstration of some IoT based devices related to home security and smart watch. The talk was coordinated by Ms Naresh Kumari and Ms Charu Rana. (ECE2017G001)

- Mr Pankaj Som Chaturvedi, Country Head, ConnectXcite Mobi (India) Pvt. Ltd. Delivered a special lecture on the topic 'Emerging Areas in Applied Technology for the Indian Context - How to align Education for Career Success' on 16 February 2017.
- A Guest lecture on the topic 'Introduction to IoT with Applications' was delivered by Dr SPS Saini, Former Sr Scientist-CEERI-Pilani on 23 Feb 2017.

## Faculty Activities

- Dr Rekha Vig, Associate Professor was invited as a Session Chair at ICCCS-2016, a Taylor and Francis conference at Dronacharya College of Engg, Gurugram, held from 9-11 September 2016. Papers on signal processing and communication areas were presented by delegates from various universities across and outside India. During the conference Dr Vig was awarded a certificate and a memento.

Dr Vig was also invited as a Session Chair at ICMETE-2016, an IEEE conference at SRM University, Modinagar on 23 September 2016 in which papers on Signal processing and



Communication were presented by delegates.

- Dr Sharda Vashisth chaired a technical session in an IEEE sponsored International Conference on Micro-Electronics and Telecommunication Engineering (ICMETE-2016) on 23 September 2016 at SRM University, Modinagar.
- Dr Sharda Vashisth, Associate Professor was invited as a Session Chair at REDSET-2016, a Springer Conference held at GD Goenka University, Gurugram on 21 and 22 October 2016. REDSET-2016 focused on experimental, theoretical and application aspects of innovations in computational intelligence. Dr Vashisth was felicitated with a memento after the event.

## Externships

- Dr Sharda Vashisth was on an externship at Exicom Telesystems Pvt Ltd (Exicom), Gurugram from 21-24 Dec 2016. Exicom is an Indian company set up in

collaboration with Exicom Ltd, Australia, a leading manufacturer of SMPS based Power Plants for telecom applications. The objective of the externship was to gain real world experience and learn the latest technological advancements in hardware and software. Possibilities for internship, placements and industrial visits were also discussed. Other departments also propose to initiate similar externships.



- Ms Shaveta Arora, Assistant Professor was on an externship at Beumer India Limited from 2- 4 January 2017. Beumer Group has been a supplier of systems and equipment for transportation of bulk and piece goods in the fields of conveying, loading, palletizing, packaging, sortation and distribution technology, serving core sectors of Airports, Logistics, Cement, Petro-Chem, Mining, Power Plant etc. around the world for many years. The objective of the externship was to gain real-world experience and learn the latest technological advancements in hardware and software. Possibilities for internships, placements and industrial visit were discussed.

## Faculty Development Programme (FDP)

A six day long Faculty Development Programme (FDP) was organized in December 2016 for the faculty members of the Department. The theme of the FDP was 'Synergy for Growth' and it had a synergistic impact on the team to work together efficiently.

The FDP covered expert talks on 'Team Building' by Ms Chanda Sindhwani on 8 and 12 December 2016. Ms Chanda has trained over 500 individuals on skills like

team building, professional etiquette, problem solving, communication etc. She discussed the importance of team work for the success of an organization.

Dr Virendra N Mahajan, a graduate of the College of Optical Sciences, University of Arizona, delivered a lecture on 'Optical Imaging: Geometrical and Diffraction Approaches' on 13 December 2016. This talk was sponsored by SPIE Society, NCU.

Mr Mahendra Singh Rajawat delivered an expert lecture on 'Expectation Management in the competitive world' on 14 December 2016. It touched all the aspects for maintaining a stress free mind. He spoke about the changing mindset of the new generation and how the teaching fraternity can counter the young generation's impatient behavioural anomaly related to higher expectations from life.



## Industrial Visit

An industrial visit to Milestone Switchgear Pvt. Ltd was organized by the Dept for 24, BTech (EE) 6<sup>th</sup> Semester students. The industry is a switchgear company which constructs panels starting from sheet bending, powdering, polishing to circuit designing, switch boards, CT designing, capacitor panels, relay panels, control panels, AC/DC drive control, etc. The students were given a chance to visit various sections of the industry and explained each and every component of the panels. Having a real life experience of power boards, control panels, designing etc. allowed the students to have a better understanding of these components which they had studied. [ECE2017V001]



## Workshop Attended

Dr Anjali Garg and Ms Shaveta Arora, attended a workshop organized by Mitsubishi Electric India Pvt. Ltd. on the topic 'Programmable Logic Controller (PLC)' on 1 and 2 February 2017 at MEL, Gurugram. It was based on the trainer hardware kits provided by Mitsubishi to NCU as a part of the MoU between NCU and Mitsubishi. During the workshop, a training on Mitsubishi's PLC and its programming with hardware interfacing was also deliberated. The workshop was a blend of theoretical and practical content.[ECE2016WA004]



## Alumni Interaction

The Department organized an expert talk and interactive session on 'Career Prospects after Engineering' by alumni Ms Agrata Kumar, ECE (Class of 2014) on 25 January 2017. The lecture was attended by 3<sup>rd</sup> year (BTech, ECE) and 1<sup>st</sup> year (MTech, ECE) students. Ms Agrata spoke about various options available after engineering in the private and public sector; how to prepare for opportunities in higher education (MBA, MTech, MS from India and abroad) and what to look for when considering studying abroad. In the interactive session students clarified queries related to GRE, TOEFL preparation, how to choose a university and a major, while considering for MS abroad and how to prepare for the aptitude test and group discussion. The event was coordinated by Dr Sharda Vashishth and Ms Kusum Grewal Dangi.



## Placements facilitated by the Department

- Shikha Sharma (Class of 2016) and Himanshu Sharma, MTech VLSI (Class of 2017), got internship at Synopsys.
- Neetu Goel, MTech VLSI (Class of 2017) placed with a salary package of more than Rs 8.5 lakhs per annum at Wizchip, Bengaluru.
- Neha Yadav, MTech VLSI (Class of 2017) got an internship at Intel Technology India Pvt. Ltd, Pune. Intel is the world's largest and highest valued semiconductor chip maker and the inventor of the x86 series of microprocessors.



Shikha Sharma



Himanshu Sharma



Neetu Goel



Neha Yadav

## Students Speak



**Toshiyanka Goswami**  
EECE (Class of 2013)

*"I feel honoured to have been a part of Institute of Technology and Management (now NCU) as it was the steppingstone in my career. I am grateful to all my professors for assisting me to acquire comprehensive knowledge in Electronics and Communication. My undergraduate study became more valuable and directional when I got an opportunity to work under the supervision of Prof. (Dr) Neeraj Kr Shukla. I actively participated in several workshops, projects, internships and research work in VLSI Design under his guidance which helped me to enhance my technical skills and prepared me to get admission in Arizona State University USA, for Masters. These technical and personal skills helped me during my Masters and in getting a job at Intel Corporation at a package of USD 100,000 p.a. I feel privileged to have had such a mentor and supervisor in my life."*



**Mr Shivam Garg**  
EECE (Class of 2016)

*"I feel privileged to be part of The NorthCap University's growing family. After pursuing the competitive BTech programme in Electronics and Communication Engineering, working for a US based multinational company dealing in electronic design automation for electric engineering and electronics is a dream come true for me! I still remember my initial days at the University when my professors created a fascination in me to various subjects in this area of study. Of all the subjects, I developed a special interest in Digital & VLSI Design. It was under the guidance and supervision of Dr Neeraj K Shukla that I got the opportunity to develop this interest further. He encouraged and motivated me to undertake various research projects, trainings and workshops. He trained me and helped me grow professionally. I dedicate my job with a Rs 10 lakh plus package at a leading EDA company to him, the Dept of EECE and the University!"*





**Himanshu Gautam**  
MTech VLSI Design  
(Class of 2016)

*Being a part of the MTech Programme in VLSI Design at The NorthCap University, Gurugram has been a life-changing event of my life. Under the guidance of Dr Neeraj Kr Shukla and Dr Vinay Budhraj, I learned not only the technical concepts but they also helped me in conditioning my overall personality. All faculty members helped me in achieving my dream of joining Cadence.*

*The overall content of this MTech programme was industry-oriented. More focus was always on doing the things practically and spending more and more time on working on the design tools, available in the labs.*

*The University also has a very good campus and supports a lot of sports activities, in which quite often I was involved. I feel thankful to God that I got such good mentors who guided me all the way through to where I am today at Cadence at a package of Rs 14 LPA."*

## PhD Viva-Voce

The PhD Viva-Voce of Ms Sheila Mahapatra, PhD scholar, Dept of EECE was held on 11 February 2017 on 'Intelligent Control Techniques for TSC Implementation in Power Transmission System'. It was conducted under the guidance of Dr Nitin Malik, Prof. AN Jha and Dr BK Panigrahi. The event was attended by faculty members and research scholars.



## Department of Computer Science and Engineering & Information Technology

### Departmental Activities

#### Guest Lectures

- ❑ The Department organized a guest lecture by Ms Shweta Juneja, Associate Partner, McKinsey & Co on 9 September 2016. Ms Juneja has over 14 years of experience in building digital teams and is instrumental in defining and implementing various talent management frameworks to attract, cultivate and retain top talent. She was accompanied by Mr Gaurav Chaturvedi, NCU alumnus, currently working as Full Stack Developer at McKinsey & Co.

The speakers discussed upcoming trends in industry and suggested that students should work on diverse real life projects. The lecture was organized by Dr Latika Singh, Head, Dept of CSE&IT and Dr Prachi. [CSE2016G002]

- ❑ A guest lecture on 'Network Security and Routing Algorithms' by Mr Ashok Kumar Dhaktode, Network Manager, Nimbuzz Technologies Pvt. Ltd was delivered on 26 October 2016. Mr Dhaktode is a CCIE (R&S) candidate with an experience of 14 years and has expertise in designing, implementation, optimization and operations in Computer Networks. The event was coordinated by Ms Hitesh Yadav. [CSE2016G004]

- ❑ The Department organized a guest lecture on 'Risk Management' by Ms Aparajita Sinha, Security Analyst at Ernst & Young Global Delivery Services, Gurugram on 22 October 2016. Ms Sinha is a certified Privacy Lead Assessor by Data Security Council of India. The event was coordinated by Dr Yogita Gigras and Dr Latika Singh. [CSE2016G006]

- ❑ A guest lecture was delivered on 'Security and Privacy Aware Analytics' by Dr Sameep Mehta, Senior Researcher and Manager,

IBM Research India and an eminent speaker of ACM India. The session was coordinated by Ms Geetika Munjal and Dr Latika Singh. [CSE2016G008]

- ❑ Dr Himanshu Gupta delivered a lecture on the topic 'Apache Spark' on 10 October 2016. Apache Spark is a fast and general search engine for large-scale data processing and can handle big data efficiently. An alumnus of IIT Kanpur and IIT Delhi, Dr Himanshu Gupta is a Technical Staff Member at IBM India Research Lab, Gurugram. The session was attended by over 50 students including BTech 5<sup>th</sup> and 7<sup>th</sup> sem and MTech 1<sup>st</sup> and 2<sup>nd</sup> Year. The lecture focussed on Apache Spark along with added features as compared to Hadoop, Spark core, Spark SQL. The concepts were discussed with practical examples. The event was coordinated by Ms Meghna Sharma and Dr Latika Singh. [CSE2016G009]



- ❑ A lecture on 'Cyber Security' was delivered on 7 Nov 2016 by Ms Dhvanik Miglani. She is currently working in EY, at their Dublin-based advisory team. She discussed about different tools and futuristic opportunities in cyber security with 3<sup>rd</sup> and final year students. She shared her experiences on information security and forensics. The event was organized by Ms Mehak Khurana. [CSE2016G011]

- ❑ The Dept organized an expert lecture on 'Mobile and IoT: Use-

cases and Possibilities' by Mr Nitendra, Research Manager and Senior Researcher, IBM, Delhi on 15 Nov 2016. He elaborated on how IoT captures data about the environment using external sensors and the important features of Mobile and IoT. Mr Nitendra focused on the type of data that can be derived from mobile sensors, the data analytics that can be performed on such data and the potential use-cases that can be derived through such mobile data analytics. The lecture was attended by over 170 BTech 3<sup>rd</sup> Year students and faculty members. The lecture was coordinated by Dr Vijendra Singh.

- ❑ An expert lecture on 'Multithreading in Java' by Mr Ramanjee, Samsung Research Institute, Noida was organized by the Dept on 12 Nov 2016. He discussed about the importance of multithreading in Java and explained various applications of multithreading such as producer-consumer problem and reader writer problem and the importance



of synchronization in Java.

- ❑ The Department organized a lecture on 'Cloud Computing career opportunities, by Mr Narinder





Kamra, Co-Founder and CEO, vDoIT Technologies on 16 Nov 2016. Mr Narinder outlined the rapidly evolving demand for Cloud based solutions and its effect on the job market. The talk included the specifics of the service layers that may be involved in developing a cloud based solution and the tools that are needed to be mastered for each one of these. The lecture was relevant for 7<sup>th</sup> semester students of CSE who are now ready to explore the market for placements.

- A guest lecture on 'Applications of Graph Theory in Computer Science' was organized on 19 Nov 2016. The lecture was delivered by Prof. BS Panda, Department of Mathematics, IIT Delhi. It was attended by 38 BTech students and the faculty. The objective of the lecture was to introduce students to the fundamental concepts in Graph Theory. With its wider applicability in DNA sequencing, Computer Network Security, Web designing, DNA sequencing is not only an emerging area in the field of research but it is also extensively applied in Pharmacogenomics. The talk was organized by Prof. Prabha Sharma, Dr Yogita Gigras and Ms Jyoti Sahni. [CSE2016G012]

- Prof. B Chandra, Professor, Department of Mathematics, IIT Delhi and Faculty Mentor, NCU delivered a lecture on 12 December 2016 on 'Concepts of Machine Learning'. Machine Learning is a must-have skill for all aspiring data analysts and data scientists. The lecture was coordinated by Ms Meghna Sharma and Dr Kavita Khanna.

- Prof. Ramesh Kumar Agarwal, Professor, School of Computer & Systems Sciences, JNU, Delhi delivered a lecture on 14 December 2016 on 'Deep Learning'. The transition from artificial neural networks to deep learning, reasons for such transitions and the benefits of this

transition were explained along with application and research areas in the field. The lecture was coordinated by Ms Rita and Dr Kavita Khanna.

- The Dept organized a guest lecture by Mr Varun Rao, Associate Product Manager, Walker Digital Table Systems on 'Agile Software Development Model' on 21 Feb 2017. The lecture was coordinated by Ms Hitesh and Ms Suman Bhatia.



- A lecture on 'Data Mining: Industry Applications' was delivered by Ms Prachi Saraph on 7 February 2017. Ms Prachi has done her Masters in Computer Science at University of South Florida and has spent over 13 years in the IT industry, business intelligence and analytics.



## Workshops

- A Special Cyber Security Session was organized by Department for Cyber Security CSE (BTech, MTech and PhD) students on 12 November 2016. The session was conducted by three industrial experts from PwC Gurugram: Mr Manoj Kumar (Senior Consultant-Cyber Security) on 'Secure Coding', Mr Varun Pathak (Senior Consultant-Cyber Security) on 'Network Security' and Mr Prakhar Kaushik (Consultant-Information Security). They

discussed about different aspects of security like how to make secure software, latest algorithms used for network security etc. They also guided and interacted with CSE-PhD students. The event was coordinated by Dr Supriya Raheja and Dr Shilpa Mahajan. [CSE2016G010]

- Mr Mohan Venkataraman and Mr Upesh from Universal Technical Systems (India) Pvt Ltd discussed the status of projects undertaken by students and clarified their doubts on 27 Oct 2016. A total of seven teams of CSE/IT students are working on five different projects.



## Faculty Activities

- Ms Jagdeep Kaur was invited as a reviewer for the Journal of Information Processing Systems.
- Dr Kavita Khanna was selected as reviewer/ member Technical Programme Committee during 5<sup>th</sup> International Conference on Reliability, Infocom Technologies and Optimization, organized by Amity Institute of Information Technology, Amity University, UP from 7-9 September 2016.

Dr Khanna delivered a talk on 'Artificial Neural Networks using Scilab' on 30 September 2016 for a short term course on 'Scilab Programming' held at Kasturba Institute of Technology, Delhi from 26-30 September 2016.

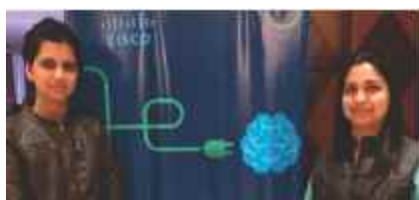
- Dr Vijendra Singh was selected as reviewer/ editorial board member, Journal of Organizational and End User Computing (JOEUC), Indexed in SCI, IGI Global, USA.
- Ms Neeti Kashyap attended CISCO Instructor training Programme on





CCNA Module 3 & 4 at Amity University, Noida from 5-16 December 2016.

- ❑ Dr Latika Singh and Ms Anuradha Dhull attended a National Employability Conclave conducted by Aspiring Minds on 19 January 2017 at Delhi. Among the gathering were luminaries from both academia and industry. The agenda of the conclave was to discuss problems, challenges and gap analysis associated with academia and industry so that national employability can be improved.
- ❑ Ms Meghna Sharma delivered a talk on 'Information Security' at Bharti College, University of Delhi. 70-80 undergraduate students attended the session.
- ❑ Ms Meghna Sharma, Ms Geetika and Dr Akansha conducted a workshop on 'Data Analytics ® Package' on 8 February 2017 at HMR Institute of Technology and Management, Delhi. The workshop was attended by 150 students and faculty members of the Dept of CSE, HMR Institute. The workshop was well appreciated by the students.
- ❑ Ms Jyotika Pruthi conducted a session on 'Outcome based curriculum design: Framing of course objectives' for the faculty of the Dept of CSE/IT. She recently trained at BITS Pilani.
- ❑ Ms Hitesh Yadav and Ms Neeti



Kashyap attended the 2017 CISCO Networking Academy Instructor Conference which brought together academy instructors and managers from across India with a focus on professional development, networking and best practice sharing, as well as insight from CISCO on what to expect in the year ahead. The event aimed at supporting CISCO's active instructors to learn, use and teach relevant topics concerning the programme, technology and industry.

- ❑ Ms Mehak Khurana attended a workshop on 'CyberEye Endpoint Security- Offence and Defence' at IIIT Delhi on 10 Feb 2017. It focused on the increasing difficulty of keeping track of cyber-attack as well as advancements and defence mechanisms against threats across various attack surfaces. Participants were able to understand and analyze endpoint security threats and implement defensive controls in a multi layered approach. The workshop was conducted by Mr Ram Ganesh, Director, Cyber Eye team.

- ❑ Ms Mehak Khurana attended the 5<sup>th</sup> Privacy and Security Symposium at IIIT Delhi on 11 Feb 2017. She was also appointed as session Chair for an invited talk on 'Cognitive Security & Impact on National Security and Workforce' by Mr Felix Mohan, CEO, CISO Cybersecurity.

- ❑ Ms Neeti Kashyap and Ms Sumanlata Gautam attended a national level programme on 'MSMEs and Start-Ups revolution 2017-Driving India Growth' organised by Indian Institute of Corporate Affairs at the Russian Centre of Science & Culture, New Delhi on 28 Jan 17. The event included discussions on interesting talks on Start-up Management.

## Departmental Activities

- ❑ The Department organized a short term course on Open Source Technologies in association with NITTTR Chandigarh from 29 Aug-2 Sep 2016. The course covered various open source tools and was coordinated under the guidance of Dr Latika Singh, Ms Jyotika Pruthi and Ms Poonam Sharma with support from Mr Himmat Singh. [CSE2016G004]
- ❑ The Department has taken an initiative to tie up with IIT Madras for conducting Quality Enhancement in Engineering Education (QEEE) programme for students to bridge gaps and enhance their all-round development.
- ❑ In the current semester a course on 'Non-Linear Data Structures and Applications' was introduced for 2<sup>nd</sup> year students wherein live lectures were delivered and projected in remote classrooms by the faculty of IIT Bombay, Prof. Supratim Biswas. 38 students participated in these lectures. The sessions were coordinated by Ms Suman Lata and Ms Mehak Khurana.
- ❑ Similarly, another course on 'Priority Queues and Trees - Data Structures' was introduced for 2<sup>nd</sup> year students where live lectures were delivered and projected in remote classrooms to all students by Prof. G Venkatesh, IIT Madras. 40 students attended these lectures. The sessions were coordinated by Ms Suman Lata and Ms Mehak Khurana.
- ❑ The Dept took an initiative for FOSS training (Free Source Software Training) by IIT Bombay for students through Spoken Tutorials software project for 1<sup>st</sup>, 3<sup>rd</sup> and 5<sup>th</sup> Semester students in the areas of C, CPP, Java. Students were issued certificates by IIT Bombay. The event was coordinated by Ms Mehak Khurana and Ms Garima Sharma.

- ❑ In association with Aptech, Noida, the Department conducted N A S S C O M N A C T e c h examination for students of BTech CSE&IT 4<sup>th</sup> Year on 10 September 2016. NACTech is applicable for engineering students of all disciplines who are interested in working for IT companies across India. NASSCOM NACTech has been conceived as an industry standard assessment and certification programme. The event was coordinated by Dr Vijendra Singh.
- ❑ The Department organized a research lecture on 'Piece wise Feature Extraction and Artificial Neural Networks: An Approach towards Surface Modeling' by Dr Kavita Khanna, Associate Professor, on 17 September 2016.
- ❑ As a part of the Department's academic outreach activities, the Cyber Security team of the Department conducted a workshop on 'Cyber Security Essentials' at the Global Institute of Engineering and Technology, Gurugram on 20 October 2016. A team of four faculty members, namely Dr Prachi Ahlawat, Dr Supriya Raheja, Dr Shilpa Mahajan and Ms Mehak Khurana interacted with the students of GITM and demonstrated the theoretical as well as practical applications of Cyber Security. The workshop was attended by 35 final year students and 40 pre-final year students who got hands-on experience about fundamentals of cyber security.
- ❑ A research lecture on 'Symmetry based automatic evolution of patterns: A new approach' was delivered by Dr Vijendra Singh to CSE faculty members on 22 October 2016. The objective of the lecture was to show how new line symmetry based method is able to evolve optimal pattern solutions without prior knowledge of the actual number of patterns. A comparative analysis of the results was presented during the lecture.
- ❑ A research lecture on 'Landslide Detection from Satellite Images'

was delivered by Dr Akansha Singh, Associate Professor, to CSE&IT faculty members on 6 October 2016. Dr Singh focused on a semi-automatic approach for landslide detection from remote sensing images and digital terrain information.

- ❑ To make students aware of NCU's collaboration with Michigan Technological University, USA an interactive session was conducted by Ms Rita Chhikara on 9 January 2017. 53 students of BTech, 3<sup>rd</sup> Year attended the session. The aim of the session was to identify students genuinely interested in pursuing their final year at MTU and address their concerns.
- ❑ The Department is delighted to inform that 61 students have successfully completed CISCO certification course in Module 1. The Certificate distribution ceremony was held on 15 Nov 2016.
- ❑ Ms Anuradha, Ms Akansha and Ms Surbhi (JRF) along with six CSE BTech 4<sup>th</sup> Semester students visited 'Sonal Smriti – Center for Special Children' an organisation providing specialised services for neurologically impaired children on 17 Feb 2017. The objective of the visit was to familiarize students with the needs of special children, who lack learning ability and get an idea about the kind of learning IT projects that can be created for them as part of BTech project (under socially relevant projects). Ms Akansha and Ms Surbhi have a DST grant for a project on emotion recognition of Autistic students.

### Faculty Development Programme (FDP)

A week long Faculty Development Programme was organized by the Department of CSE&IT from 8-14 December 2016 on 'Latest Industry Trends and Needs'. It was based on target oriented teaching instead of conventional teaching practices in order to cope with the changing requirements.

### Alumni Interactions

- ❑ An expert talk and interactive session with Mr Akhil Arora, alumnus CSE&IT (Class of 2010) was organized on 9 September 2016. Mr Arora is currently working as a researcher in the Text & Graph Analytics group at Xerox Research Centre India (XRCI). Mr Arora delivered a talk on 'Influence Maximisation' which is a new research area in the data mining field. He supported his talk with real time examples. The session was attended by engineering students of 3<sup>rd</sup> and 4<sup>th</sup> year and faculty members from the Departments of CSE and ECE. The event was coordinated by Ms Jyotsna Singh. [CSE2016G003]
- ❑ The Department organized an expert talk and interactive session on 'Project Management and IT Infrastructure' by alumnus Mr Nitish Arora, CSE (Class of 2008). Mr Arora is working as Unit Manager, IT infra project programme, Metlife Global Operations. The session was coordinated by Alumni Cell of the Department. [CSE2016G005]
- ❑ The Department of CSE&IT organized an expert talk and interactive session on 'Basic Organizational Ethics' by Mr Pranav Bhardwaj, CSE (Class of 2010) on 6 October 2016. Mr Bhardwaj is currently working as an Instructional Designer and Business Developer at Genpact. During the interactive session, Mr Bhardwaj shared his professional journey with the students. The event was coordinated by Ms Jyotsna, Asst Professor, Dept of CSE&IT. [CSE2016G007]



## Club and Society Activities

- ❑ The Google Students Club (GSC) conducted an ice-breaking session on 12 October 2016 that included introduction of the GSC team members. The 'Best introductory slide' competition was held which was attended by 40 extended team members and coordinated by Arushi Thakur, Abhishek Barry and faculty coordinator, Ms Jyotika Pruthi.
- ❑ Team CapCoders (CodeChef Student Chapter, NCU) conducted CodeStorm V2.0 on 8 October 2016 with an aim to promote competitive programming among students. 48 participants registered for the competition including from outside the University, who put in over 300 submissions.
- ❑ 'ProLan, the Professional Lantern' organized by Association of Computing Machinery, Student Chapter in which a lecture was delivered by Mr Rohan Dev Talwar, Analyst, KPMG on the topic 'Demographic Dividend of India' on 15 Feb 2017. Mr Talwar has worked with KPMG as an Analyst and also founded an educational startup encouraging students to think out-of-the-box and training them for successful professional lives. The event was coordinated by Ms Meghna Sharma, Assistant Professor, Dept of CSE&IT.
- ❑ The CSI Student Chapter of NCU organized competitions in Coding, Watch and Respond, Quiz and IT-Tambola on 3 November 2016 for BTech students of the Dept of CSE

## Mentor-Mentee Interaction



**Prof. Karmeshu**  
Prof & Dean, School of Computer  
& Systems Sciences,  
JNU, New Delhi  
SS Bhatnagar Awardee



**Prof. B Chandra, PhD**  
Professor, Department of Mathematics  
IIT Delhi

- ❑ Prof. Karmeshu, Faculty Mentor, visited the Department on 19 January 2017. Associated mentees discussed their research progress. The interaction was further followed by a lecture on 'Information Theory' which was attended by a large number of faculty members.
- ❑ Faculty Mentor, Prof B Chandra visited the Department on 17 Feb 2017 to discuss research problems of scholars and suggested names of agencies for sponsored projects and other aspects regarding publications.

& IT. The snapshots of these events were published in the CSI Communications magazine, January 2017 issue. The event was organized by Dr A Charan Kumari, CSI Students Branch Counsellor and Dr Prachi, CSI member.



## Internship/ Placements

- ❑ The Dept organised a mock placement test to prepare students for placements and to provide them guidance and strengthen their technical and aptitude skills. This test was conducted in collaboration with Solution Bell, a venture of our Alumni Mr Sumit Singla (Class of 2011). He is ready to provide guidance for placements to NCU students through this platform.





## Department of Mechanical Engineering

### QEEE Sessions

The Department organized QEEE sessions on 'Basic Machine Tools and Metal Cutting Principles' for 2<sup>nd</sup> Semester students on 9, 10 and 16 February 2017 and on 'Convection Heat Transfer and Fluid Dynamics Fundamentals' for 6<sup>th</sup> Semester students from 8-10 Feb 2017. The students were able to get enhanced in-depth knowledge of the subject from subject experts Dr Ajay Kumar Chattopadhyay, Professor, Dept of Mechanical Engineering, IIT Kharagpur and Dr SR Kale, Professor, Dept of Mechanical Engineering, IIT Delhi.

The Department organized a special lecture on 5 October 2016 under the aegis of Indian Society of Heating, Refrigerating and Air Conditioning Engineers (ISHRAE). Mr Kapil Singhal from BP RefCool, Gurugram who has more than 15 years of experience in HVAC&R industry delivered the talk on past, present and future refrigerants. A total of 22 student participants attended the session. The event was coordinated by the Society coordinator, Dr Amit Arora. [MED2016G003]



### Guest Lectures

- Mr S Maitra, MD, IFB Binola delivered a lecture on the important topic 'KAIZEN' to final year Mechanical Engg students on 28 January 2017. He shared his rich professional experience and challenges in the automotive sector with the students who interacted with him enthusiastically.
- The Department organized a Health Talk by Ms Jyoti, Senior Executive, Department of Science, Yakult Danone Pvt Ltd, Sonipat on 21 February 2017. Ms Jyoti discussed about the importance of intestinal Micro-flora in health and disease, the role of Probiotics and daily routine activities to maintain good health. Mr Gagan Baradia and Mr Deepak Monga coordinated the event.

### Faculty Activities

- Dr Ashwini Sharma attended the '4<sup>th</sup> Indo-German Workshop on Sustainable Engineering' at BITS, Pilani from 17-18 September 2016. The theme of the workshop was related to learning factories, educating sustainability, IoT and Industry 4.0. Its objective was to raise awareness and train the participants about the role of sustainability in manufacturing,
- the new concept of learning factories in educating and training of employees and the role of IoT in manufacturing. [MED2016WA005]
- Dr A Sharma attended the launch of 'A Million Innovators (AIM)' platform & 'Worldwide Academia-Industry Network' (WAIN), at New Delhi on 8 September 2016. [MED2016O022]
- Dr Ashwini Sharma was invited as keynote speaker at MSME cluster of Jalandhar industries on 21 October 2016 where he delivered a talk on 'Design for MSMEs'. [MED2016I002]
- Dr Ashwini Sharma was selected as a Panel Member of the National Workshop on Design Clinic Scheme for MSMEs and delivered a talk on 'Role of the scheme for the students of Engineering' at India Habitat Centre, New Delhi on 28 and 29 December 2016. [MED2017I001]
- Dr Ashwini Sharma presented a paper in the 'International Conference on Smart Strategies for Digital World – Industrial Engineering Perspective' at Nagpur from 22-23 Oct 2016 on 'Quality Management in Food Processing'. (MED2016CA001)
- Mr Anuj Kumar Jain attended an FDP on 'E-Resources: A Gateway for Research' from 5-9 September

2016 organized by Central Library, DTU, Delhi. [MED2016FA001]

- Mr Anuj Kumar Jain attended the National level programme on 'MSMEs & Start-ups 2017 revolution - Driving India Growth' at Russian Centre of Science and Culture, New Delhi on 28 Jan 2017. (MED2017CA001)
- Mr Anuj Kumar Jain presented a paper in the 2<sup>nd</sup> International Conference on Cutting Edge Technological Challenges in Mechanical Engineering (CETCME-2017) at Greater Noida from 18-19 Feb 2017 on 'Dynamic Modelling and Validation of Continuous Beam with Free-Free Boundary Conditions'. (MED2017CA002)



- Dr K Mathiyazhagan worked on a joint research project at the Center for Engineering Operations Management, Department of Technology and Innovation, University of Southern Denmark, Odense under Prof. Kannan Govindan (Head and Professor) from 15 December 2016 to 13 January 2017. The research focused on 'Development of Sustainable indicators for Indian Industries'. The outcome of the research has been communicated to the SCI journal. [MED2017O002]

Dr K Mathiyazhagan presented a paper titled 'Application of decision making trial and evaluation laboratory to identify the influential indicators towards sustainable adoption in auto components sector: A case study from India' in the International Workshop on Sustainable Supply Chain Management. The workshop was held at the University of Southern Denmark in Odense, Denmark on

19 December, 2016. [MED2017WA001]

- Dr Pramod Bhatia was invited for a guest lecture by MVN University, Palwal on 18 January 2017. The topic of the lecture was 'Introduction to Computational Fluid Dynamics and its Applications' and was attended by 60 students of BTech, Mechanical Engineering. The lecture was appreciated by the students as well as faculty members of MVN University. Thereafter, Dr Bhatia discussed the road ahead for strengthening interuniversity ties between NCU and MVN University. [MED2017I002]



- Mr Gagan Baradia participated in a panel discussion on the theme 'Tech-innovation' in the 'Entrepreneur Summit 2017' from 27-29 Jan 17 organized at IIT Bhubaneswar. Mr Baradia discussed about the importance of innovation in the journey of an entrepreneur while interacting with the young entrepreneurial minds at IIT Bhubaneswar during the Q/A session. (MED2017WA001)
- Mr Abhishek Pratap Singh attended a workshop organized by Mitsubishi Electric India Pvt. Ltd. on the topic 'Programmable Logic Controller (PLC)' on 1 and 2 February 2017 at MEL, Gurugram. It was based on the trainer hardware kits provided by Mitsubishi to NCU as a part of the MoU between NCU and Mitsubishi. [ECE2016WA004]

## Workshop

Society of Automotive Engineers NCU conducted a workshop on 'Shape your imagination-training' for students from 12 Dec 2016 to 12 January 2017. The workshop included inputs regarding Design, Manufacturing, 3D Printing and Robotics. The event was organized by the society coordinator Dr Ashwini Sharma. [MED2017O001]

## Faculty Achievements

Mr Praveen Singh, Assistant Professor, Dept of Mech Engg has been awarded the 'Gold Medal' at the 11<sup>th</sup> Convocation of Malaviya National Institute of Technology, Jaipur for MTech degree in Metallurgical & Materials Engineering.

## Industrial Visits

- Dr Ashwini Sharma organized a visit for students of 1<sup>st</sup> Year (ME) to the fabrication facility of trucks for transporting Maruti cars on 18 September 2016. During the visit, students saw different aspects of

truck body welding. [MED2016O023]

- Mr Abhishek Pratap Singh and Dr Shiv Manjree Gopaliya visited JS Enterprises, Manesar along with BTech final year students on 16 September 2016 to discuss the planning and execution of ongoing live project 'Design and Fabrication of Progressive Dies.' [MED2016O026]

- The Department conducted an industrial visit to Yakult Danone Pvt. Ltd. Sonapat, Haryana on 1 October 2016 for the students of BTech 1<sup>st</sup>, 2<sup>nd</sup> & 3<sup>rd</sup> year. 45 students benefited by understanding the plant layout of an FMCG industry, automation facility, packaging etc. Mr Deepak Monga and Mr Gagan Baradia coordinated the visit. [MED2016O031]

- Mr Yogesh Kalia, Director, CTO, Medhaavi Center for Automotive Research, Hoshiarpur, visited I.C

Engines Lab, Dept of Mechanical Engineering, NCU on 10 November 2016. Dr Rohit Singh Lather and Mr Yogesh Kalia mentored BTech final year Mechanical and Electronics students, for their BTech final year project titled, 'Development of Low Cost Fuel Injection System', being jointly carried out by Dept of ME & EECE, NCU.

- Prof. Ravindra Ojha, Director, SOET and Ms Shikha Kashyap, Assistant Professor visited Sellowrap on 27 February 2017. The company supplies to leading OEMs different products like pressure sensitive adhesive coated door film, products that are based on foam, plastics for interiors of vehicles. Two ME final year students, Kunal Upadhayay and Dishant Aghi were selected by Maruti Centre for Excellence (MACE) for internship and based on their performance their approval

to work with MACE was extended and converted to final year BTech project. These students have been allotted live problems at Sellowrap where they are working to improve Overall Equipment Efficiency (OEE) of a critical machine named Pressure Sensitive Adhesive Coating Machine. Our students delivered good work with suggestions and recommendations worth implementing.

- Dr Shiv Manjaree Gopaliya and Mr Manoj Kumar Gopaliya visited

AG Industries, Gurugram on 5 October 2016. Various possibilities of summer internships, live projects and industrial visits were discussed with Mr Ashok Gupta, GM Corp. H R , A G I n d u s t r i e s . [MED2016O032]

- Prof. R Ojha and Ms Shikha Kashyap visited IFB Binola plant on 15 October 2016, to review progress of students' performance, engaged with the industry for their major projects. Two ME students, Omkar Kaushik and Saket Jha have

pursued their summer internships with IFB and continue work for their major project. During the visit, inventory related issues were identified to be critical in the industry and same were finalized as problem areas for the project. The visit was guided by Mr Ruchir Mathur, Plant Head and mentor for N C U s t u d e n t s a t I F B . [MED2016O033]

### Visit of German Delegation



A German delegation visited the University on 15 September 2016 to discuss the concept of 'Learning Factories'. The concept provides an opportunity to students to simulate a real life environment of a typical manufacturing organization with almost all the variables giving experiential learning to them. The concept is developed by IWF TU Braunschweig, FESTO and BITS, Pilani. The visit was organized by Department of Mechanical Engineering, following which Dr Ashwini Sharma visited BITS Pilani to learn more about the concept. [MED2016O021]

### Mentor- Mentee Interaction



**Dr C R Prasad**  
Chairman & Managing Director  
Everest Power Private Limited.  
Former Chairman & Managing  
Director of Gas  
Authority of India Ltd.

The Department organized a mentor-mentee meeting with Dr C R Prasad on 9 Nov 2016. Faculty members discussed various aspects of teaching and the progress in their individual research works with the mentor who provided various inputs and feedback for the improvement of the Department, quality of work culture and research activities at the individual level.

### Society Activities

- Society of Automotive Engineers (SAENCU) in association with FMAE organized a two day workshop for the Quad Bike Design Challenge participants from 1-2 September 2016. The



workshop brought together the participating teams from 18 different institutions across North India. The coordinators of this workshop were Dr Ashwini Sharma and Mr Anuj Kumar Jain. [MED2016WA006]

- SAE initiated a 'Product Design Challenge for Waste Management' from 19 September 2016. In this challenge students had to design an innovative system for the management of organizational wastage. The event was coordinated

by Dr Ashwini Sharma and Mr Gagan Baradia. [MED2016O024]

- SAE conducted a 'Robot Design and Manufacturing Workshop' on 19 September 2016. The workshop covered basic aspects of designing a robot on Inventor and making the same by 3D Printing. Dr Ashwini Sharma, Mr Gagan Baradia and Mr Anuj Kumar Jain coordinated the event. [MED2016O025]
- 30 colleges from North India participated in the rulebook workshop for SUPRASAINDIA



national competition. The workshop was organized by SAENCU in collaboration with SAEINDIA conducted on 1 February 2017. The coordinator of this workshop was Dr Ashwini Sharma. (MED2017WO001)

- ❑ A team of 10 students from the Department participated in the 'Effi-Cycle', a national competition at Jalandhar initiated by SAEINDIA North India Section from 12-15 October 2016. 'Effi-Cycle' promotes the objective of providing opportunity to students to conceive, design and fabricate a three-wheel configuration vehicle powered by human-electric hybrid power. The objective is to promote innovation and generate consciousness amongst the young engineers towards an environment friendly mobility solution. [MED2016O035]

### Alumni Interactions

- ❑ The Alumni Cell of the Department organized an interactive session with alumnus Mr Prabhat Tiwari (Class of 2013), Masters in Design from IIT Guwahati; for the 1<sup>st</sup> Year Mechanical Engineering students on 20 August 2016. Mr Tiwari conducted a session on 'Design of Mechanical Systems and Products with focus on Aesthetics using Solid works and Photoshop and emphasized on the importance of aesthetics in product design. [MED2016O029]
- ❑ Mr Tejasvi Mohan, Mr Rachit Yadav, Apollo Tyres, Gurugram and Mr Amit, NCU Alumnus Automobile Engineering (Class of 2013) working at Mercedes interacted with 25 members of SAE Supra team on 3 September 2016 regarding vehicle making for participating in the Supra Event and the future scope of Mechanical Engineers in the Automotive sector. [MED2016O030]
- ❑ An interactive session was organized on the topic 'Power Plant

Engineering and Design' by alumnus Ms Stuti Kaushal (Class of 2012), Sr Executive Engineer, Larsen and Toubro, S & L Division on 31 January 2017. She discussed various thermodynamic cycles used in Power Plants along with the Design aspects of Power plants. She correlated theoretical concepts with the practical scenario in the industry and also shared her work experiences with the students. Ms Kaushal has offered to help in arranging internships for students at L&T.

The interaction was coordinated by Mr Anmol Bhatia. (MED2017O003)

- ❑ A Pre-placement Interview session for Mechanical 3<sup>rd</sup> Year students was organized on 12 Nov 2016. The interview session was conducted by Alumni Mr Ritesh Sethi, (Class of 2006) Deputy Marketing Manager-Network 18, CNN; alumni Mr Kushal Kalra, (Class of 2007) Design Engineer-CB&I; Mr Rakesh Kumar, (Class of 2009) Manager-ICAD; Mr Prakash Pandey, (Class of 2009) Director- U W E S and Mr Surbhit Arora, (Class of 2009) Manager-Crea Forma India and faculty members of the Department. The panel analyzed students on various aspects like technical knowledge, communication skills etc.

The session proved to be beneficial as students were able to identify their strengths and weaknesses and were better prepared for future placement interviews. The session was coordinated by Mr Anmol Bhatia, Dr Ashwini Sharma and Mr Gagan Baradia. (MED2016O036)

### ISHRAE Student Chapter Installation

The Department invited Mr Dhiraj Rastogi, President of ISHRAE Sub-Chapter Gurugram for establishing its Student Chapter at NCU on 5 October. ISHRAE is an international associate of ASHRAE (American Society of Heating,

Refrigerating and Air Conditioning Engineers). It has more than 10,000 HVAC&R professionals and 3,000 students as members with 40 chapters and sub-chapters across India. Mr Dhiraj Rastogi presented the Charter of Student Chapter to the faculty coordinator, Dr Amit Arora. The installation of the ISHRAE Chapter is expected to give a boost to the industry-institute interaction in Mechanical Engineering. [MED2016O034]

### Faculty Development Programme (FDP)

A week long Faculty Development Programme was organized by the Department in December on the theme 'Manufacturing Excellence and Industrial Safety'. The FDP was facilitated by **Mr R B Madhekar**, CEO, RBMSS Consultancy. He talked about the latest trends that are followed in the automobile industry to match up with the ever increasing customer expectations.

**Mr Sudam Maitra**, MD, IFB covered the topic, 'VAVE - the Game Changer'. He shared valuable information regarding the requisites expected in any engineering entrant in the auto industry.

**Dr Amit Tyagi**, Scientist 'E' DRDO, led a session on 'Industrial Fire Safety'. He discussed types of fire and best suitable fire extinguishing agents that are to be opted.

**Dr SP Nigam**, Emeritus Visiting Faculty, NCU led a session on 'Time Management'. He shared how time management skill set helped him throughout his life to perform his best in varied profiles, which he has been handling for the past 50 years. He concluded with the quote "Manage your minutes and hours will be managed automatically".

## Department of Civil and Environmental Engineering

### National Conference on 'Smart, Sustainable, Resilient Civil Infrastructure Development'

The Department of Civil & Environmental Engineering organized a National Conference on 'Smart, Sustainable & Resilient Civil Infrastructure Development (SSRCID – 2016)' on 9 September 2016. The importance of the three keywords chosen for the conference, i.e., Smart, Sustainable and Resilience in civil & infrastructure development cannot be understated in today's relevance. Infrastructure that supports human well-being should be smart enough to conserve the 3Es, i.e., Energy, Environment and Ecology of the natural systems. Sustainability in growth should ensure that our reserves are kept for future generations as well. Also, a resilient infrastructure should absorb the sudden shocks imposed by the nature or environment. The conference was supported by major Civil Engineering societies, such as, ASCE – India section, IGS-Delhi Chapter and DFI (India). Decision makers, practitioners and experts from across India participated in the conference to share views, ideas and techniques in real time conversations. [CEE2016WO005]



Dept of CEE established The NorthCap University Testing Centre (NCUTC) in December 2016, to provide professional services to customers involved in real estate business. NCUTC, an entity of NCU, is well equipped to carry out mechanical testing of building and construction materials, such as, cement, sand, aggregates, soil, bitumen, concrete etc.



In February 2017 the Department obtained the National Accreditation Board for Testing and Calibration Laboratories (NABL) accreditation for its testing facility 'NCUTC' which also provides professional services to outside customers who are involved in real estate business and construction industries. NCUTC follows the managerial and testing procedure guidelines as per ISO: 17025 - 2005 and NABL is a Constituent Board of Quality Council of India. NCUTC provides 3<sup>rd</sup> party assessment of quality in the area of mechanical testing of building and construction materials such as cement, aggregate, concrete, soil, bitumen, etc. [CEE2017O004]

### Visit by Prof. Gajanan M Sabnis

Prof. Gajanan M Sabnis, P.E., M.ASCE, Emeritus Professor, Howard University, USA visited the Department from 8-9 September 2016 and suggested initiating MTech in Infrastructure Engineering where other branches of Civil Engineering can be involved to prepare students for infrastructure support and growth of the country. He delivered a lecture on 'Infrastructure Growth in India & Future of Civil Engineering Profession' for undergraduate and postgraduate students of the Department. Prof. Sabnis also presided over the Conference SSRCID – 2016 as the Chief Guest during the opening ceremony and delivered the keynote address on the topic 'Infrastructure US Experience putting in to work in India' on 9 Sept 2016. [CEE2016O014]



### Guest Lectures

- ❑ Dr RK Jenamani, Scientist-F, India Meteorological Department (IMD), New Delhi, delivered a special lecture on 'Cyclone, Drought and Floods and their relation with Monsoon Circulation' on 28 September 2016. Dr Jenamani has over 25 years of experience in weather monitoring and forecasting, early warning systems, disaster management and mitigation techniques. The session was



attended by BTech students of 8<sup>th</sup> Sem of ECE, CSE&IT and ME branches for the Open Elective course 'Disaster Management'. [CEE2016G009]

- ❑ A lecture on 'Climate Change' was delivered by Dr SD Attri, Dy Director General, of India Meteorological Department, New Delhi on 21 December 2016. He spoke about the present condition of India in terms of climate change, pollution levels, rainfall fluctuations etc. He also explained the various changes happening in the country with respect to the global scenario in terms of temperature and various atmospheric parameters.



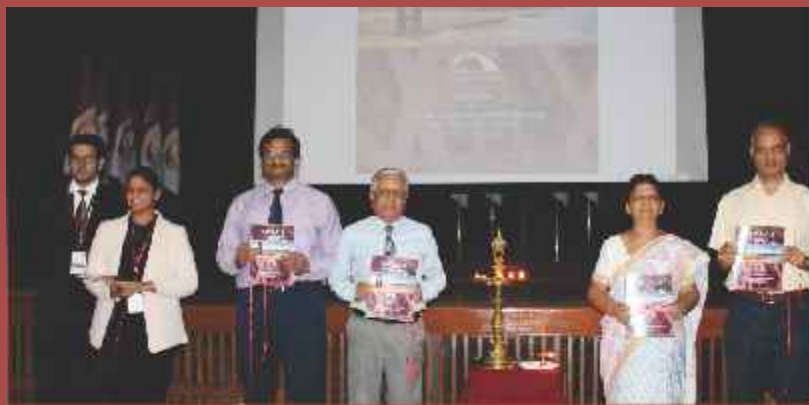
- ❑ The Department organized an expert session by Dr KN Rai, Former Chief Executive (CW&E) and Advisor (Special Projects) DRDO, Ministry of Defence for the 2<sup>nd</sup> and 3<sup>rd</sup> Year students on 10 January 2017 on the topic 'Real Estate and application of Solar Energy'. Dr KN Rai's expertise is in the domain of Works and Financial Procedures adopted by MES, DRDO, CPWD, NBCC, EIL, RITES, NPCC etc. The session dealt with the scope of solar energy development in India, the National Solar Mission, its salient features and targets by 2020. He shared his practical experiences on the development of the real estate sector and various new upcoming technologies to harness solar energy and shared



## Space Day Celebrations

The Department of Civil & Environmental Engineering organized their annual technical fest 'SPACE Day' on 4 October 2016. SPACE is the Society in Pursuit of Advances in Civil Engineering. The fest was inaugurated by the Pro-Vice Chancellor, Brig. SK Sharma (Retd), Director SOET, Prof. Ravindra Ojha, Distinguished Professor Emeritus, Dr Pramila Goyal and HOD Civil & Environmental Engineering, Dr Amit Srivastava, Head, Dept of CEE. The first edition of 'SPACE' magazine was launched and the new SPACE team for 2016-17 was announced. Pro Vice-Chancellor, Brig Sharma (Retd) emphasized the importance of Civil Engineering.

The SPACE Day constituted of various technical and non-technical events like Bridge making competition, wherein 25 teams from different batches participated in the quiz, dance competition and photo contest etc. Dr Amit Srivastava distributed certificates and prizes to the winners of different competitions. [CEE2016O016]



- technical insights about new methodologies being developed in different parts of the world. [CEE2017G001]
- ❑ An expert lecture on 'Construction Contracts & Safety' was delivered by Mr Saurabh Jolly, Vice President, Seafaradays Pvt Ltd on 11 Feb 2017 for final year students of CEE.
- Mr Jolly shared his practical expertise and experiences with students studying Construction Practices. He discussed the practical application of Construction Contracts and FIDIC in the Indian construction industry and spoke about the importance of safety at construction sites and how it effects labour productivity. He also shared technical insights about the latest methodologies being developed in India and focused on the practical application of various construction practices. [CEE2017G002]
- ❑ Mr Gursharanjit Singh Rosha, President, ASCE – India Section (Northern Region) delivered an expert talk on the topic 'Civil Engineering Career Prospects - A Pragmatic View' on 18 Feb 2017. He stressed on the need of ASCE – Student Chapter to be more active and showed the benefits that students can derive from it.



## Workshop

### MoU with CADD Centre

- The Department signed an MoU with CADD Centre, Dwarka for conducting Auto CADD workshops for a duration of 10 weeks (on every Wednesday) that commenced from 24 August 2016. The workshop provided certified training to BTech students and working knowledge of the drafting software which is essential before they step into the industry. [CEE2016WO006]

The Department in association with CADD Centre conducted the first round of the national level quiz 'Engineeria' on 21 September 2016. About 180 students from the Civil and Mechanical Engineering departments participated in the quiz.

The Department signed an MoU with CADD Centre for conducting various software trainings, workshops and competitions and for imparting and sharing rich knowledge of Civil Engineering with NCU graduates as well as professionals working in the field of Civil Engineering. The MoU is in effect from February 2017 to January 2018. [CEE2017O003]

- A two day workshop on 'Structural Design and Analysis' using STAAD.Pro software was organized on 10 and 11 Nov 2016 for MTech, final year and 3<sup>rd</sup> Year BTech students. 25 students were selected for the training programme which was sponsored and supported by Autodesk Authorized Training and Certification Centre, TIET. [CEE2016WO007]
- A certified workshop on 'Revit' was organised for 3<sup>rd</sup> Year students on 23 Nov 2016. It focused on basic tools of the software and its utility. A total of 25 students participated in the training programme. The software training was conducted by Apron Solutions Private Limited. [CEE2016WO008]

## INDUSTRIAL VISITS

- An industrial visit was organized by the Department on 23 September 2016 to visit a highway widening/ 4-6 laning site of NH-9. Students of MTech (Structures) along with faculty member Mr Lokesh



Choudhary, were exposed to live construction of various road sections, vehicular underpasses etc. The site extended from Hisar to Fatehabad districts of Haryana with a total stretch of 57 km. Students saw the processes involved in the design of vehicular underpasses, flexible and rigid sections of flyover, and road markings. [CEE2016V002]

- Ms Megha Kalra and Mr Akx Malik organized an industrial visit to Ultratech RMC Plant, Gurugram on 24 October 2016 for the 2<sup>nd</sup> Year BTech and 1<sup>st</sup> year MTech students. The plant produces 60 m<sup>3</sup> of concrete per hour and has also manufactured concrete of M90 grade. The officials at the Plant agreed to associate with the University regarding guest lectures and summer internships of students. [CEE2016V003]
- 2<sup>nd</sup> Year students along with faculty members Mr Lokesh Choudhary and Mr Shubham Bansal visited NDMC's 200 KLD sewage treatment plant (STP) based on an innovative Soil Biotechnology technique at Gole Market, New



Delhi on 15 February 2017. Student were able to understand how to cope with different challenges faced in the processes involved in sewage treatment. [CEE2016V001]

## Faculty Development Programme

The Department organized an FDP on 'Industry Institute Interaction' from 8 - 14 December 2016. The FDP comprised of various events including expert sessions by eminent persons from the industry.

A session was organised on 'Need to look beyond mainstream renewables- the next big thing' by **Mr Saurabh Jolly**, Vice President-Business & Strategy, Seafaradays Pvt Limited. Another lecture by **Brig. Amrit Sandhal (Retd)** on 'Seismic Behaviour of Buildings' was held. Some of the sessions were headed by our faculty: **Prof. Pramila Goyal** led the session on EIA/EMP in Power plants and **Ms Prerna Chauhan (CLL)** on 'Say it with words', a session on vocabulary building.

The FDP included a visit to the Construction Bauma Conexpo Show and International Trade Fair to see latest construction equipments, machinery, building materials, construction vehicles etc.

The FDP also included a visit to the India Meteorological Department, Ministry of Sciences, New Delhi, where the faculty got an opportunity to interact with their functional heads. [CEE2015FO004]

## Faculty Activities

- Dr Anil Kumar Misra was awarded with a Certificate for good reviews by Elsevier Journal 'Energy Conversion and Management' for manuscripts published in October 2016.

Dr Misra chaired a technical session on Civil and Environmental Engg at the International Conference on 'Recent Developments in Science, Engineering and Technology' – REDSET2016, which was organized by School of Engineering, G D Goenka University on 21 Oct 2016. [CEE2016O017]

- Ms Purnima Bajpai was invited to deliver a special lecture on 'Power Infrastructure' at IIT Delhi to MTech and BTech students of Civil Engineering on 5 Nov 2016. It was followed by an interactive session with active participation from students. They also discussed associating some of our students with ongoing projects at IIT Delhi, especially at MTech level. [CEE2016O018]

- Mr Shubham Bansal was invited to attend a seminar on 'Upgradation of Surveying Lab Equipment' organized by Janak Positioning & Surveying Systems Pvt. Ltd., Noida on 18 October 2016. The theme of the seminar was, How to train your students with modern surveying systems. Live demonstration and hands on training on modern surveying equipment such as digital theodolite and digital GPS system were provided to the participants.

- Dr Amit Srivastava, Associate Professor & Head attended an international conference on 'Forensic Geotechnical



Engineering' at Indian Institute of Science (IISc), Bangalore. He presented papers on 'Geotechnical perspectives of failure cases in Head walls of Hume pipe culverts and their forensic investigations'. [CEE2016CA002]

- Ms Megha Kalra attended an international workshop on 'Inclusive Cities' from 19-20 December 2016 held at Jamia Millia Islamia, New Delhi. [CEE2016WA001]

- To increase awareness about The NorthCap University and its academic programmes, outreach activities are being organized in educational institutions in the neighbouring areas. On 18 Jan 2017, senior faculty members of NCU delivered Guest Lectures to students and faculty at MVN University, Palwal. Dr Anil Kumar Mishra, delivered a talk on 'Climate Change and its impact on Water Resources'. It was attended by about 60 participants consisting of faculty members and BTech (Civil Engineering) students of 4<sup>th</sup> Year. A short Concept Quiz was also conducted after the lecture. [CEE2017I001]



- **Dr Amit Srivastava conferred PE (Professional Engineer) by ECI**

The Engineering Council of India (ECI) jointly with the Construction Industry Development Council (CIDC) with the approval from Board of Registration of Professional Engineers (BRPE) conferred Dr Amit Srivastava, Associate Professor & Head, Department of Civil & Environmental Engineering, with the title of Professional Engineer (PE).

## Mentor- Mentee Interaction

The Department organized a mentor-mentee meeting with Prof. PK Swamee on 7 Nov 2016. Faculty members discussed various aspects of teaching and the progress in their individual research works with the mentor who provided various inputs and feedback for the improvement of the Department, quality of work culture and research activities at the individual level. [CEE2016O009]

## Alumni Interaction

- Ms Nidhi Verma (Class of 2016) working as a Graduate Engineer Trainee, Seafaradays Energy Pvt. Ltd. interacted with students regarding importance of internships and summer projects. She along with her colleague, Mr Saurabh Jolly (VP- Business & Strategy) briefed students about the potential of wave energy in India, a renewable energy resource. [CEE2016O020]

- Mr Chirag Singla (Class of 2013), interacted with students of 3<sup>rd</sup> Year, on 19 January 2017. The interaction was based on importance of honing interpersonal Skills and Body language. Mr Singla, an entrepreneur, is running his company named QuickDoctorIN Pvt. Ltd. [CEE2017O001]



## Department of Applied Sciences

### Workshop

A workshop on Optics sponsored by SPIE student Chapter was organized for BTech 1<sup>st</sup> Year students on 16 Nov 2016. Prof. Ajoy Ghatak, Professor Emeritus, IIT Delhi and SS Bhatnagar awardee conducted the workshop. The programme was attended by more than 90 students. Prof. Ghatak enlightened the participants on various aspects of optics such as polarisation, laser, fibre optics etc. In addition, there was a demonstrative session on fibre optics and polarization. The event was coordinated by faculty advisor SPIE-student chapter Dr Sunanda Vashisth. The student coordinators were Mr Mohit Yadav (President) and Ms Neha Gosain of SPIE- student chapter.



### Industrial Visit

Dr Sunanda Vashisth and Dr Sunita Sharma coordinated a visit to the National Physical Laboratory (NPL), Delhi on 27 September 2016 for 30 students of 1<sup>st</sup> Sem BTech CSE, Mech Engg and PhD Scholars. NPL celebrated CSIR Foundation Day in which scientists explained the basics and advanced work in various research areas being carried out at NPL. Students gained knowledge about optics through an optical microscope, using of femto second laser and how laser is used for sputtering etc. Students also visited the solar cell lab and had a feel of designing hybrid solar cells. Students interacted with the scientists and gained exposure to the recent research work in the field of Physics. [APS2016V003]



### Society Activities

- The Mathemactive Society of NCU conducted an event named 'TIC for TAC' on 6 October 2016. The event tested the speed, presence of mind and the mathematical skills of the

participants. There were around 30 participants and the top 3 were declared winners. [APS2016O009]

- The Optical Society (OSA) Student Chapter organized an educational visit to the 'Nehru Memorial Museum and Planetarium' on 20 January 2017. Students interested in astronomy and space joined OSA students. The Planetarium provided information about constellations and planets using visuals such as cartoons, computer animations, video clippings and other special effects. The show was followed by an interactive session with the Director of Nehru Planetarium. Students viewed a series of interlinked exhibitions in the Museum which provided a vivid account of the life and works of Jawaharlal Nehru. The visit was coordinated by Chapter advisor Dr Hukum Singh.

Learning Effectiveness' and Prof. Pramila Goyal on 'Air Quality Mathematical Modeling'. The FDP was coordinated by Dr Sunanda Vashisth, Dr Pranati Purohit and Dr Divyabha.

### Faculty Activities

- To increase awareness of the University's academic programmes in the neighbouring institutions, Prof. AK Yadav delivered a talk on 'Some interesting facets of Mathematics in the real world' at MVN University, Palwal to Maths faculty and 60 students of BSc on 18 Jan 2017. A short Concept Quiz was also conducted after the lecture.



### Faculty Development Programme

An FDP on 'Innovation in Teaching and Learning' was organized by Dept of Applied Sciences (APS) and Centre for Languages Learning (CLL) from 8-14 December 2016 at NCU. Eminent academicians delivered expert lectures: Prof. Amitava SenGupta on 'Recent Developments in Primary Standard of Mass', Dr Virendra N Mahajan on 'Optical Imaging using Geometrical approach', Prof. Baxi on 'Teaching and



- Dr Hukum Singh presented a paper on 'Fiber Optics and Photonics 2016' in PHOTONICS-2016, the 13<sup>th</sup> Biennial International conference held at IIT Kanpur from 4–8 December 2016. (APS2016CA003)



- Dr Anshu Malhotra and Dr Deepika Rani attended the Regional Workshop on Indian Women and Mathematics (IWM) from 6-7 February 2017 at Punjabi University, Patiala. The objective of IWM was to encourage women to pursue higher education in Mathematics. The workshop proceeded with a discussion on various topics on Mathematics, research work presentations and discussions about career opportunities in Mathematics. (APS2017WA001)
- Dr Amita Bhagat participated in an international conference, the Asian Mathematical Conference (AMC-2016) from 25- 29 July 2016 at Bali, Indonesia. She was also invited to chair a session of oral presentations at the conference. (APS2017CA001)

## Guest Lecture

Dr Pankaj Attri delivered a guest lecture on 'Plasma Technology: A Greener Remediation for Environmental and Health Problems' on 25 Jan 2017. During his talk, Dr Attri discussed about plasma and interacted with BTech students about upcoming technologies based on plasma. He spoke about the applications of plasma in health and water purification. His talk gave an exposure to students about newer approaches of plasma in different scientific areas. Dr Attri is currently a Research Professor at Plasma Bioscience Research Center; Assistant Professor, Dept of Electrical and Biological Physics, Kwangwoon University, Seoul (South Korea) and a Visiting Professor at Graduate School of Information, Science and Electrical Engineering, Kyushu University, Fukuoka, Japan. The event was coordinated by Dr Bharti Arora, Dy Dean-RDIL.



## Mentor-Mentee Interaction

Prof. KL Chopra interacted with his mentees on 25 January 2017 about their research interests and the factors which should be considered for writing a worthy project proposal that can attract funding. He emphasized the need to identify project topics of social relevance. Faculty members also discussed various aspects of effective teaching learning processes with the learned academician. A group of BTech students met him regarding ideas for making innovative projects to be displayed on National Science Day.



Prof. KL Chopra  
Padma Shri  
Former Director,  
IIT Kharagpur  
SS Bhatnagar Awardee

## PhD Degree Awarded

PhD degree has been awarded to Mr N Kumar Swami, research scholar in Physics for his thesis 'Investigation of structural, magnetic and transport properties of doped manganites and multiferroic materials' on 23 December 2016. He pursued his PhD under the guidance of Prof SK Jain, Professor, Dept of Applied Sciences and Prof BK Das, Professor, Dept of Electronics and Communication Engineering. (APS2017O001)



## School of Management

### Departmental Activities

#### Arthashastra



'Arthashastra', the Annual Management Fest was organized on 11 January 2017. The aim of the event was to offer participants a taste of diversity and let their imagination and creativity run wild. 'Arthashastra' not only provided the participants a platform to display their core skills but also a cultural rejuvenation and joyous experience.

Mr Rajiv Chadda, Director Sales, Ericsson, Gurugram was invited as the chief guest to inaugurate the ceremony. More than 70 students from NCU and other colleges attended the event. The fest gave the participants an insight into the world of management through various activities namely Quibble, Seal the Deal, Asset Mapping, and Idea Buzz. They tested the entrepreneurial skills, selling potential, policy-making decisions and quizzing skills of the participants.

- ❑ A soft skills and technical skills bootcamp for School of Management, MBA Final Year students was held from 12-17 December 2016.
- ❑ SOM organised an Orientation session for its visiting faculty members on 3 January 2017. The aim of the session was to familiarize members with the processes and policies of the Department/University. ERP, examinations, results and day-to-day academic activities were discussed. Mr Deepak Satyarthi briefed members about LMS and OTMS and Ms Chetna Taluja explained ERP processes. The session was coordinated by Dr Nirupma Gupta, Dr Saumya Dixit and Dr Sushmita B Waraich.
- ❑ Dr Sushmita Biswal Waraich was invited by Mr Anshu Gupta, founder of Goonj and Magsaysay award winner, for their annual meeting on 26 February 2017 at New Delhi. The invitees were corporates, academics, consultants etc, who have been associated with Goonj. Two students, Vimal Dahiya and Priya Bhargava who accompanied Dr Sushmita appreciated the efforts of Goonj in addressing critical issues of the lowest strata of society.

### Guest Lecture

- ❑ A guest lecture on 'Competency Mapping' by Dr Seema Sanghi, Managing Director, Styrax Consulting Pvt. Ltd was organized for MBA students on 30 September 2016. Dr Sanghi shared her work on competency framework developed for PSUs, UPSC and many other private organizations. The lecture was coordinated by Ms Jaya Ahuja.
- ❑ A lecture on 'Human Capital Management and the Role of Technology' was organized on 11 Nov 2016. The lecture was delivered by Mr Neeraj Narang, Director – HCM Product Strategy for students of MBA, BBA and BCom. Mr Narang shed light on how human



capital management has achieved prominence in today's corporate world. He elaborated on the journey of HCM and leveraging technology for the same. The students discussed work-life balance initiatives, performance measurement and retention strategies at Oracle. The lecture was coordinated by Dr Sushmita Biswal Waraich, enthusiastically assisted by students; Sajal, Jatin, Tanya (BBA) and Vimal and Jatin (MBA).

- ❑ SOM organized an Industry Guest Session by Mr Achalesh Sharma, Founder & CEO, Prime Consulting on 19 January 2017. The interactive session focused on how to approach interviews, the emerging sectors and skills required and how to start a corporate journey.

## In talk with Prof. Sanjay Goyal



**Prof. Sanjay Goyal**  
Professor & Dean,  
School of Management

Prof. Sanjay Goyal, Ex 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 Gurugram, ISB and XLRI. His vast industry experience includes Ericsson-India, America, Australia and New Zealand; Tennyson Technologies, Australia etc.

Prof. Goyal shared his views in a talk with Ms Rekha Mathur, Sr Editor, NCU, 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. 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 that 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 was 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 with each other, the students would be able to get an in-house wholesome experience in a techno-pervasive environment.

## Industrial Visit

To provide industry exposure to students, a visit to Air Cargo, Exports & Imports was organised for students of BSc, BCom, MBA on 26 Oct 2016. Students gained first hand insights into import and export documentation requirements, procedures, cargo management/handling and related issues. The students also got an opportunity to visit the export and import warehouses. The visit was coordinated by Dr Sushmita Biswal Waraich.



## Seminar



SOM in collaboration with PHD Chamber of Commerce & Industry and MSME organized a seminar on the 'Role of Intellectual Property Rights in Promoting Innovation and Commercialization of Technology' on 10 Nov 2016. The seminar highlighted the significant role played by intellectual property rights in helping a business gain and retain its innovation-based advantage and converting an

innovation into a commercially viable product. The speakers and the delegates from PHDCCI made the seminar enriching, taking students through an array of live cases and examples from the industry. The seminar was coordinated by Dr Sushmita Biswal Waraich along with MBA students Vimal Dahiya, Sheetal Tiwari and Jatinder Arora.



- ❑ A seminar on 'Rethinking and Redefining Human Capital in Today's Fast Changing Business Horizon: Dialogues & Perspectives' was organized on 25 February 2017. The speakers were industry stalwarts. Mr Jagjit Singh, Chief People Officer, PwC and Mr P Dwarkanath, Head, Group Human Capital, Max India.

The speakers shared their experiences related to challenges faced by employees in today's competitive environment and the changing nature of jobs/employment. Factors like agility, adaptability and adding value to business were highlighted. Students from SOM and SOET attended the seminar which was coordinated by Dr Mansi Khurana and Dr Sushmita B Waraich with a team of student coordinators from BBA, BCom and MBA.

### Faculty Activities

- ❑ Dr Sushmita Biswal Waraich attended 'Responsible Hoteliering Conclave 16' on 5 December 2016 at The Park, New Delhi. Discussions were held on minimizing the carbon footprint of hotels while maximizing productivity, the emerging green innovations, and why CSR is much more important than a pursuit of percentages.
- ❑ The Indian Express published an article, 'MBA: How the changing face of management courses is helping gen-next managers' written by Dr Sushmita Biswal Waraich on 20 December 2016.
- ❑ Dr Sushmita Biswal Waraich participated in the workshop on 'Case study writing and development' organised by IIM Lucknow (Noida Campus) on 5 January 2017.

### Faculty Development Programme



A Faculty Development Programme was held on 'Research Methodology using SPSS and AMOS' from 13-15 December 2016 to facilitate scholars, academicians, and practitioners for research. The FDP aimed at providing research stimulus to keen learners. The resource person at the programme was **Dr Shilpa Jain**, Assistant Professor, School of Management Studies, GGSIU, New Delhi.

The FDP focused on the theoretical explanation of tools viz. Correlation Analysis, Regression Analysis, Exploratory Factor Analysis and Confirmatory Factor Analysis, Partial Least Square. The FDP concluded with a valedictory session along with award of certificates to the participants.



## School of Law

### UK Law Mission Visits SOL

Delegates of Law Mission, organised by the British Council visited the University on 14 February 2017 and interacted with faculty and students. The eminent speakers included Prof. Mark Wing, Southampton Solent University; Prof. Paul Arnell, Robert Gordon University and Prof. Andy Unger, London South Bank University. The distinguished delegates delivered lectures on contemporary issues which are relevant for any Law graduate. Discussion focused on the emerging areas of IPR, Extradition and Human Rights. The students got a chance to interact and gain from the insights of international professors. NCU's School of Law also got an opportunity for considering MoUs with the respective universities of these eminent professors. (SOL2017WO003)



### MoU with Navjyoti India Foundation

NCU Law School signed an MoU with Navjyoti India Foundation (NIF) on 31 January 2017. The MoU is aimed towards fulfillment of 6-P Project proposed by Dr Kiran Bedi, founder of Navjyoti India Foundation. The 6-P Project focuses on crime prevention to ensure safety of women. The 6P concept brings together the six important contributors -Parents/Principals, Police, Prosecution/Courts, Politicians, Prisons and the Press - to prevent crime against women and children. SOL will depute its students on the 6-P Project and will organize seminars, legal aid camps, conferences, visits etc to achieve the objectives of the 6-P Project. NIF will also involve the SOL in its various other community development programmes. (SOL2017O001)

### Guest Lectures

- ❑ School of Law organized a guest lecture on 'The Skills and Techniques of Mooting' by Ms Chhaya Bhardwaj, Scholar, Vermont Law School on 30 September 2016 for 1<sup>st</sup> Year students. [SOL2016G006]
- ❑ SOL organized a special lecture on 'Merger and Acquisition, Private Equity and Corporate Social Responsibility' by Ms Rachna Jain, Partner, Desai Dewanji, on 7 October 2016. She spoke about basic legal rules of the corporate



world and discussed various areas of Business Mercantile Law. The students were given an insight into issues faced by the legal corporate industry like stamping and areas of law that are still not covered by Indian provisions even though they are internationally recognized. [SOL2016G007]

- ❑ To discuss the importance of Trademark protection and the procedure for it, a guest lecture by IP attorneys, Mr Rajeev Suri and Ms Rachna Bhaskhu, partners at RNA (a legal firm) was delivered on 13 October 2016. The purpose of Trademark Rights and their importance to a business were discussed. Speakers laid emphasis on the registration process for a mark, possible delays as well as expenses involved during the registration procedure. They inspired the students to pursue a career as a Trademark Attorney and discussed common problems faced by brand owners like infringement, unfair competition, counterfeiting, etc., along with their possible solutions. [SOL2016G008]

- ❑ A lecture on 'Energy Sector: Contemporary Legal Regime' was delivered by Mr Shashi Kant Yadav on 23 Nov 2016. Students interacted with the researcher and also the owner of an NGO working in the field of sustainable development. The students of 4<sup>th</sup> and 5<sup>th</sup> Year, BBA-LLB (Hons) appreciated the practical aspects of the energy sector. The talk motivated students to initiate a drive to prevent an energy crisis through optimal utilization of energy resources.
- ❑ A special lecture was delivered to 1<sup>st</sup> Year BBA-LLB (H) students on 'Professional Avenues for young Legal Professionals' by Mr Pratiksh Rai, Mr Ankit Joseph and Mr Kunal Mehra, Mylaw.net on 7 February 2017. They discussed the job market for lawyers and observed that employers are looking for young lawyers who have acquired extra skillsets. They introduced students to various newer learning tools to enhance their knowledge base. They also emphasized on the importance of moot courts and debates. The lecture was followed by an interactive session. Mylaw.net is an online learning platform and an initiative of Rainmaker, a nationally recognized learning, content, and test management company focused on the legal profession. (SOL2017G002)

### Seminar

With an aim to invite experts on Cyber Security and Forensic Science and to impart training on new dimensions and emerging trends in Cyber Security and Forensics, CPGLS & SOL in association with Cyber Gurukul, New Delhi



organized a Seminar on 'Cyber Security and Forensics Awareness' on 20 September 2016. Ms Astha Tiwari, Company Coordinator, Mr Deepak Kumar Nath, Cyber Security Expert and Ms Meena Ruhal, Forensics Expert conducted sessions on threats to cyber security and various methods of forensic science to collect evidence. Mr Nath inspired the Law students to learn effective tools of cyber security and motivated them to become cyber security experts.

## Departmental Activities

### Second Client Consultation Competition–2016

SOL organized the 2<sup>nd</sup> Edition of The Client Consultation Competition on 21 October 2016. About 60 students from different Law schools across India participated in the competition. The final round was chaired by Mr Abhishek Phutela, Hon'ble Chief Judicial Magistrate-cum-Secretary, District Legal Services Authority, Gurugram. Mr Phutela highlighted the need for such clinical activities to be undertaken by Law schools in preparing students for the legal profession.

The competition was aimed at promoting greater knowledge and interest among Law students in the preventive law and counselling functions of a legal practice. It encouraged students in developing interviewing, planning, and analytical skills in the lawyer-client relationship in the law office. Tanya and Vishakha from University of Petroleum and Energy Studies, Dehradun emerged as the winners of the competition, defeating Divya and Nidhi of Vivekananda Institute of Professional Studies, New Delhi in the final round. Mementos and certificates were awarded to the participants.

Quizwale Inc in association with SOL, organized the 2<sup>nd</sup> Edition of the NorthCap Quiz on 22 Nov 2016. The quiz was attended by 50 teams from colleges across India including teams from prominent colleges such as NALSAR, GNLU, and others. The quizmasters were Puranjay Bhatt and Shuham Yadav. The 1<sup>st</sup> Position was bagged by Dyal

Singh College, Delhi University, 2<sup>nd</sup> position by YMCA College, Faridabad and 3<sup>rd</sup> position by IGNOU.



### SOL students felicitate CJI

On 20 January 2017, 4<sup>th</sup> & 5<sup>th</sup> Year students along with faculty members Mr Subhradipta Sarkar, Ms Pallavi Bajpai and Mr Bilal Ahmed were present at the felicitation programme organized by the Bar Council of India on the elevation of Justice J S Khehar as the Chief Justice of India. CJI J S Khehar urged the Bar Council of India to train young lawyers to make them understand the profession and its work ethics. He also asked the apex lawyers' body, BCI, to improve the quality of legal institutions by training and helping litigants and making lawyers competent enough to discharge their obligations towards society. He stated that lawyers serve society and should be the best. The students got an opportunity to interact with the legal fraternity.



### Training Session organized by LexisNexis

Ms Panchali Moitra, LexisNexis conducted a training session for Law students on 18 January 2017. LexisNexis is a leading global provider of content-enabled workflow solutions designed specifically for professionals in the legal field. New dimensions with user friendly approach in LexisNexis were elaborated by Ms Panchali Moitra.

### AD-MAD Competition

AD-MAD Competition was organized on 7 February 2017 in which teams had to

prepare an advertisement for a maximum duration of four minutes. The teams were given creative and innovative products like Trump Hair Gel, Dancing shoes etc. on the basis of which the teams had to prepare their Ad, with a little bit of madness, hence the name Ad-Mad. The 1<sup>st</sup> Prize was bagged by the team that enacted the theme 'Mitron Energy Drink' and 2<sup>nd</sup> Prize was won by the team that enacted the theme 'Black and White converting App.' (SOL2017O002)

### Mock Trial Competition

To inculcate court procedures in jury trials, a Mock Trial was conducted for students with basic 5 on 5 trial with roles of barristers, lawyers and witnesses. The case was confined to a simple civil matter heard in the district courts. The participating teams used all their skills against the opposition and it was a close call where the Jury gave the verdict 'Not Guilty' in favour of the defendants. The event had six members in the Jury from different departments of NCU and they had a difficult job choosing the winners. (SOL2017O003)

### Legal Awareness poster making competition

The Legal Awareness poster making competition was open for all NCU students. The theme of the competition was issues related to women and children and human rights violations. Its aim was to help students show their creativity as well as empathy towards such issues. The participants were asked to express their ideas by making posters. A total of 10 teams participated in the competition. The winning team comprised of Vanshika and Prerna and the First Runners Up were Lakshay Setia, Lakshita and Rakshit. Consolation prizes were given to all the participants. (SOL2017O003)



### SOL students visit Bhondsi Jail

Students of 2<sup>nd</sup> Year BBA-LLB (Hons) visited the Bhondsi Jail as part of their 6P





project in association with Navjyoti Foundation on 16 February 2017. They learnt about two types of inmates: convicts and under-trials, facilities provided to them, their daily engagements, their source of earning as well as the process of reformation of criminal minded individuals to make them better citizens of tomorrow.

The inmates were trained in various skills at the training centres within the prison like tailoring, art, creative designing, web application, salon services, etc. The students observed that out of 2000 male inmates, more than 50% were undertrials and the rest were convicts. (SOL2017V002)

#### School of Law conducts Legal Aid Camp

SOL in association with Full Gospel Trust of India conducted a Legal Aid Camp in New Delhi on 28 January 2017. Adv. Sulacha, and Adv. Babitha (Advocates, High Court of Delhi) chaired the legal aid clinics. The student volunteers from the Legal Aid Cell of NCU participated in the event and assisted the advocates in the legal aid clinics. The event witnessed good public participation and around 20 cases were reported in the clinics. (SOL2017V001)

#### 'Manupatra' Conducts Training Session

The School of Law organized legal research training by the online research portal 'Manupatra' on 30 January 2017. The students enthusiastically undertook the certificate training session. Manupatra is the largest content aggregator of Indian and international legal material, linking primary information, secondary material and proprietary analytical content.

It has a database of over 20 lakh Case Laws with Citation Search on 300+ equivalent citations in addition to other content. (SOL2017WO002)



#### Workshop

Adv. RK Nair, IP Attorney delivered a lecture on 'Patent Filing in India and Abroad' on 24 January 2017. He explained the basic concepts of a patent and criteria for patentability. He also explained the process of filing a patent, what can be patented, why India is lagging behind in filing the number of patents every year and the legal requirements for filing a patent, cost incurred and the process through which an international patent may be filed.

#### Faculty Activity

Dr Kanu Priya, Ms Archana Sarma and Ms Pallavi Bajpai visited Navjyoti Foundation, a not-for-profit society with the objective of crime prevention through welfare policing, education of street children, vocational skills for women drug peddlers and detox programmes, in December 2016.

#### Faculty Development Programme

A Faculty Development Programme was organized by the School of Law from 9-14 December 2016. Prof. Pushpesh Pant delivered an insightful lecture on the 'Role of Technology in Legal Science' and spoke about how Science and Technology play an important role in the legal regime. Prof. Elumalai in his talk on 'Recent Development in Juvenile Justice System' highlighted the major changes brought by the Juvenile Justice (Care and Protection of Children) Amendment Bill 2015. Dr Jaswant Singh, Assistant Professor, MDU Rohtak shared his views on 'Mentorship'. His main focus was the problems faced by the teachers in today's scenario while dealing with students. The FDP also included a lecture by Dr Kanu Priya on the topic of 'Outreach Based Research'.



## Placements

### School of Professional Attachment (SPA)

- ❑ Tanya Pahuja, BTech (IT) was placed with **Amazon** with a salary package of Rs 10 Lakh in Sept 2016.
- ❑ Five Mechanical Engineering students got offer letters from **Denso** in Sept 2016.
- ❑ **Gemini Solutions** conducted their on-campus placement and gave job offer to one student of Computer Science Engineering on 9 September 2016,
- ❑ **Fidelity** conducted an on-campus placement drive on 13 and 14 September 2016 and extended offers to 12 students.



- ❑ **Secure Meters** during their campus placement drive in Sept 2016 extended job offers to one CSE and two ECE students.
- ❑ On 21 September 2016, **Libsys**, a library management organization awarded offer letters to three students of CSE&IT.
- ❑ A fast growing start-up firm in IT and consultancy, **Globus 8**, conducted an on-campus placement drive on 3 October 2016. Mr Alok Sinha, CEO was delighted to witness the conduct and preparation of the students, which in turn led to 16 job offers.



- ❑ **Coral Research**, our hiring partner with an expertise in research work, conducted their first level of screening for Management students on 4 October 2016.
- ❑ A product based firm located in Gurugram, **Nagarro**, conducted a pre-placement talk and online test on 20 October 2016. They shortlisted 16 students for the next round.
- ❑ **Beijing Wavespectrum**, China conducted an on-campus placement drive on 24 October 2016 for Mechanical Engineering students and offered placements to two students. They shall proceed to China for training.
- ❑ **EY** visited the University on 25 and 26 October 2016 to conduct an on-campus placement drive for final year engineering students. The officials of the organization were happy to see the state-of-art infrastructure of the University. After the drive, EY officials conferred 11 students with offers and the welcome on-board kit.
- ❑ On 4 Nov 2016 **Newgen** visited NCU for an on-campus placement drive and gave offers to eight students.
- ❑ **Orkash**, Gurugram visited The NorthCap University on 7 Nov 2016 and made job offers to five students.
- ❑ **eLitmus**, an online assessment test company did its Placement process on 10 Nov 2016.
- ❑ **Rane Group**, an esteemed manufacturing firm gave an opportunity to Mechanical Engg students to appear for campus placement.
- ❑ **Virtuos Solutions**, a startup based in Gurugram with exponential growth, gave a placement opportunity to our students on 17 Nov 2016.
- ❑ On 21 Nov 2016, **ELGI**, a manufacturing firm and a regular

hiring partner at NCU conducted a placement drive for Mechanical Engg students.

- ❑ **'Whizchip'** visited the NCU campus from 10-11 December 2016. It is a core firm of Electronics. The officials travelled from Bangalore to hire both undergraduate and post graduate



students. Two students secured placement offers from the esteemed company.

- ❑ On 12 December 2016, a Mechanical Engineering core company **'VEGAZVA'** carried out campus placement drive and offered jobs to two students.
- ❑ **Merit-Nation**, an online education company with core focus in the same domain visited the campus, to conduct their campus placement drive and gave job offers to eight students.
- ❑ A startup firm in the field of Civil Engineering, **Eco-system Resource**

### Third Party Assessment

- ❑ In pursuit of good academic outcomes and to check the quality of our students, we have collaborated with 'CoCubes' for an external evaluation of our students before final placements. The first Pre-Assess test for the final year B Tech students was conducted on 13 December 2016.
- ❑ Employability aptitude test by Cocubes was conducted for 3<sup>rd</sup> Year Students on 11 Feb, while the Domain Test was conducted on 25 Feb 2017. 444 students appeared in the test.

**Management** carried out a placement drive on 19 December 2016 and offered jobs to two Civil Engineering students.

- ❑ **Channelplay**, a hiring partner of NCU, conducted their placement drive on 21 December 2016 and offered jobs to three students.
- ❑ A startup firm based in Gurugram, **Social Curry** conducted campus placement on 21 December 2016.
- ❑ Another startup firm based in Gurugram, **NEST Education** conducted their on-campus placement drive on 22 December 2016 and offered jobs to two students.
- ❑ **Hatch Tact Innovations** conducted an on campus placement drive on 23 December 2016.



- ❑ Three students of the Dept of EECE, Mohit Yadav, Aishwarya Basotia and Khushaal Batra were placed in **Magneti Marelli Powertrain India Pvt. Ltd.** as trainee engineers in December 2016. After successful completion of the training period they are expected to be absorbed with a starting package of 4.5 LPA.
- ❑ A renowned startup firm, **Magictap**, based in Gurugram with premium global clients during an on-campus placement drive made job offers to 6 students. CEO of Magictap was



happy to interact with our students. He and his team also appreciated the state-of-the-art infrastructure for the holistic development of our students.

- ❑ **Daikin**, a core company for engineers visited NCU on 5 January 2017 for an on-campus placement drive.
- ❑ **Orange Business Services** visited NCU for a two day process which comprised of a Pre-placement talk, aptitude test, GD and interviews. Post the exhaustive campus placement drive, six students were extended job offers.
- ❑ **Reliance Communication** visited NCU for an on-campus placement drive on 19 Jan 2017 and three Electronics students received job offers.
- ❑ **Real Time Data**, our prestigious hiring partner for Computer Science students visited the University on 24 January 2017 and hired five students.
- ❑ **Channelplay** our esteemed hiring firm ran a drive for our engineering students and rolled out job offers to two students on 25 January 2017.
- ❑ **FlexiEle**, our existing hiring partner for CSE & IT students visited NCU on 4 February 2017 and hired one student.
- ❑ **Denso**, a core company for Engineers conducted the selection process on 8 February 2017 for our



Mechanical Engineering students. Five students were extended job offers in March 2017.

- ❑ **GrapeCity Inc.** is a privately held multinational software corporation based in Sendai, Japan conducted the selection process for our CSE|IT students.

- ❑ **IIMJOBS** an exclusive job board for mid to senior management professionals in India conducted campus selection on 11 February 2017.

- ❑ **VARITE** Inc conducted placement process for our CSE, IT and ECE students on 16 and 17 February 2017 and five students were extended job offers.

- ❑ **New Age Instruments & Materials**



visited NCU for the first time for an on-campus selection process for ECE, EEE and MBA students and two students got job offers.

### Workshop

- ❑ Nagarro, an information technology and consulting enterprise conducted a workshop on 'Game Development' on 15 Nov 2016. Students were invited to exercise on coding, during the session.
- ❑ Fidelity International conducted a workshop at the University from 20-25 February 2017 for the 12 selected students.



## Some of our Recruiters



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

### Faculty Development Programme

- CLL conducted two consecutive FDP sessions on Communication Skills on 3 and 5 September 2016. The sessions gave insights on improving spoken English skills by using standard pronunciation and giving adequate importance to pauses while speaking for better assimilation by listeners. The sessions introduced the critical aspects of correct grammatical structures for immaculate speech with practice sessions for participants, duly facilitated by Ms Perna Chauhan. [CLL2016FO006]



- CLL conducted an FDP for NCU faculty on 17 February 2017. The interactive session provided inputs and practice on speaking with appropriate description of situations. It also included practice on speaking confidently before an audience. Tips on conversation along with grammar inputs were shared with the participants. The session was conducted by Ms Perna Chauhan. (CLL2017FO001)

### Faculty Activities

Dr Payal Khurana, Asst. Professor, was invited to judge the Inter-School English Debate Competition at NK Bagrodia School, Dwarka on 30 August 2016. The motion of the debate was 'School should be a Techno hub for students' which witnessed participation of around 20 schools. [CLL2016O006]

### Industrial Interaction

As a part of industrial outreach, Ms Perna Chauhan conducted a session at vDoIT Technologies Gurugram on 'Task Ownership' and role of related aspects in fostering a productive environment at the workplace, on 10 September 2016. The session dwelt on a better understanding of the concept of 'ownership' and

'accountability', progressively building on trust and motivation amongst employees. It included inputs on how ownership can be effectively transferred to employees based on an understanding of required competencies using RACI matrix for the tasks at hand. The interactive discussion also emphasized appropriate delegation of authority and effective communication for achievement of objectives. [CLL2016O007]

### Departmental Activity

#### Students meet French delegation

BTech<sup>2nd</sup> and 3<sup>rd</sup> Year students attended the Education Fair held at the Embassy of France, New Delhi on 7 February 2017 and met a delegation from Network 'n+i' with whom we have an MoU. It is a consortium of 50 elite French Engineering Institutes covering all domains of engineering studies. The students had a one-on-one interaction with the delegates.

The Network 'n+i' Engineering Institutes presented a programme known as 'Path to Success' for students / young engineers with a degree in engineering science such as BTech / BEng / BSc / BPhil / Licenciatura etc. who wished to study for a Masters or a PhD in France. Information about the French institutes and the programmes they offer etc. was provided to the students. Some of the French institutes include EPF, ENSICAEN, ENSIAME, ENSGTI, ISIFC, ENSISA, ENSEEIHT and Mines Albi. Dr Divyabha coordinated this n+i visit. (CLL2017O004)

### Guest Lecture

CLL organised a special lecture on 'Self-Empowerment for success in life' by Dr Mohit D Gupta, Associate Professor of Cardiology, GB Pant Hospital on 24 January 2017 for 2<sup>nd</sup> Year students. This lecture was one of the lecture series under the course 'Human Values and Professional Ethics' where experts deliver special lectures. He gave tips to unleash the power of the inner self, "By taking responsibility for yourself, challenging your inner critic, being comfortable with boundaries, meditating and following the path of those that have succeeded, you can't lose. Self-empowerment is a sought



after quality by employers, so it is a great asset for your career too". The lecture was coordinated by Dr Divyabha. (CLL2017G001)

### Club/Society Activities

#### Altercation- The Great Debate

During the week of Mahatma Gandhi's birthday, student members of 'Abhivyakt', the debating society hosted 'Altercation', a national level debate competition that urged participants to think and articulate on the principles of secularism and freedom of religion as laid down in the Constitution of India.

The debate consisted of two rounds held on 7 Oct 2016. 15 teams from various colleges from all over the country enthusiastically participated and argued their stand. After the preliminary round, six teams qualified for the final round in which they spoke for and against the motion 'Interpretation of secularism works in opposition to the freedom of religion which undermines its constitutional validity'. Prof. (Dr) Gnyana Gurunathan was the chief guest and special judge at the event. After a heated session of arguments which flew back and forth, Anuj Bansal and Sahil Yadav from Dr Ram Manohar Lohia National Law University, Lucknow emerged as winners, while Sidharth Arora and Rajat Bawaniwal, Faculty of Law, Jamia Millia Islamia were declared as the runners-up. Dr Divyabha coordinated the event. (CLL2016O008)



- ❑ Mainstream Club organized an event 'Dynamic Minds- Let's Get It' on 9 February 2017. The objective of the event was to test the awareness level and general knowledge of the students. The Quiz competition consisted of three rounds in which the first two rounds were knockout rounds and the 3<sup>rd</sup> round was the final deciding round. The 1<sup>st</sup> Prize was bagged by Rohit Yadav, 3<sup>rd</sup> Year, Dept of ME. (CLL2017O001)
- ❑ Club Success Mantra conducted an activity 'Analytical Thinking' on 6 February 2017 in which 13 participants played a game named 'Psych'. The participants, in groups of four, were given an online application 'Psych'. Each group was given questions in different categories and had to provide correct answers. The winners of 'Analytical Thinking' were Sudeepa, Yukti and Sanchit, 1<sup>st</sup> Year, Dept of EECE. The student coordinators for the event were Surbhi, Yukti, Ritika and Shrey, Dept of EECE 1<sup>st</sup> Year. (CLL2017O002)
- ❑ Club Lingua Franca organised an event 'Aircrash' on 9 February 2017 in which participants were required to write their experiences as a famous personality stuck in an aircrash. They had to give reasons as to why they should be the lucky one to survive the plane crash. The winner was Dhruv, 1<sup>st</sup> Year, Dept of CSE&IT. (CLL2017O003)
- ❑ Club Abhivyakt organized an extempore competition 'YUMS' (Yes, U May Speak) on 9 February 2017. It was a competition of quirky and offbeat topics created to test the creativity and humour potential of the speakers. Around 18 speakers from NCU participated in the event and their extempore was adjudged on the basis of creativity in content,

humour value and confidence. The main aim of YUMS was to use a formal and serious format, and turn it into something where everyone enjoyed and had fun. Rahul Ghosh was the winner, Rishika Deswal the Runner Up and Tanay Aggrawal received Special Mention for speaking on a bonus topic. The event was coordinated by CSE 1<sup>st</sup> Year students Rajat Bajaj, Rohan Kevin Broach, Rohin Singh and Rohan Grover under the guidance of Dr Divyabha. (CLL2017O005)





## Centre for Leadership

### Departmental Activities

#### Orientation Week

Centre for Leadership hosted its first Orientation Programme on 31 August 2016. It was a four day event with professionals from the business and academic world interacting with the students. The Director, Ms Deepa Kapoor welcomed the founding batch of PGDM students and Dr Pramath Raj Sinha, Managing Director, 9.9 Mediaworx Pvt Ltd, focused on what to expect from the course.

The Orientation Week included talks about various aspects of professional life in the business world. Mr Rajeev Tewari, Former Director, Canon India Pvt Ltd delivered a lecture on bringing passion into profession on 1 September 2016. On the same day, Ms Shreyasi Singh, columnist, gave the students a view of the business world from outside as a journalist and as an author working on a book about business world and its ways.

The Orientation Week culminated with a talk by Mr Dhruv Shringi, Founder CEO of yatra.com on 3 September 2016, where he spoke of how and why he set up Yatra. The session witnessed the success story of an entrepreneur and challenges faced by him while embarking on the journey. He also spoke about why he chose to do a one year MBA programme from INSEAD and not a two year programme.



#### Meet the Mentor session

A 'Meet the Mentor' session with Ms Kavita Mathur was organized at Grant Thornton on 6 September 2016.

#### Mentor-Mentee interaction

Mr Rajesh Kumar, Head-Marketing, SAP India mentored Mohammad Anish who was looking for a career in the cloud computing industry.



Rajesh Kumar Jindal  
Vice President,  
Experiential Marketing,  
Asia Pacific and Japan, SAP

Mr Rajesh is a Mechanical Engineer (NIT Kurukshetra) and MBA from IIM-Calcutta. He qualified in Leadership & Change Management, Wharton. His areas of expertise include Startups, Marketing, Sales, Trade & Alliances Management, Operations & General Management. Mr Rajesh is adept at hiring, motivating, coaching high performance teams and stakeholder management in highly matrixed, multicultural, international environments.

#### North meets South exchange programme

Students for Term 3 were part of the North meets South exchange programme. For this exchange programme they studied at the Crescent School of Business, Chennai where they were part of a classroom with students of a different cultural background. The students ended the year 2016 by bidding farewell to their friends at Crescent School of Business and started Term 4 on 9 January 2017.

#### Guest Lectures

- ❑ The Centre organized a guest Lecture by Mr Abhinav Kishore, Business Lead-APAC, Google Apps for Work on 16 September 2016. Mr Kishore spoke about digital transformation. He said that digital transformation is not just putting something on the digital platform but also building a complete digital culture in the office.
- ❑ On 17 September 2016, Dr Baba Prasad delivered a lecture on 'Strategic Management'.
- ❑ A special lecture was delivered by Mr Nitin Dheer, MBA, XLRI, Jamshedpur, on 28 Oct 2016. He spoke about the hand and glove relationship that exists in organizations and the

interdependence of departments. Mr Nitin has 18 years of experience in the HR sector in stellar companies such as Capgemini, Mercer Consulting and Andersen.

- ❑ Mr Vikas Gupta, Founder & Director, 9.9 Mediaworx Pvt. Ltd delivered a lecture on the balance between Digital Marketing and the 'Old School' Marketing on 10 Nov 2016. Mr Gupta has been associated with ABP (Ananda Bazar Patrika), Unilever and Coca Cola. Mr Vikas Gupta's expertise is in the domain of marketing, and is an MBA from XLRI, Jamshedpur.
- ❑ Ms Shivani Kapoor, a graduate from IIT Delhi who completed the Executive Management Programme at IIM, Calcutta, spoke to the students about how she established 'Intellitots', on 17 Nov 2016. Ms Shivani has more than a decade's experience in Fortune-500 companies. She has worked in various countries such as UK, US, Japan and Canada.
- ❑ The students had a guest lecture with Karthik Harith, Head of KraftHeinz's UK Frozen Ready Meals, Infant Feeding and Oriental Food Businesses in December 2016. The session on FMCG and brand trends was a mix of classroom learning and a live visit to a nearby supermarket, enabling the application of theoretical concepts to real life scenarios. The session concluded with an interactive presentation on the analysis.
- ❑ A lecture by Joe Abraham on Retail and Corporate banking along with the concept of credit scores and how



it is decided was held in December 2016. The parameters used to design banking products and how an individual is evaluated before a loan is approved were discussed.

- ❑ A special talk was delivered on 7 February 2017 by Ms Shreyasi Singh, Director, Careers at Vedica Scholars Programme and Columnist at MINT. Ms Shreyasi discussed about leadership traits and how to acquire them.

Ms Shreyasi has been associated with companies such as 9.9 Media Worx and The Diplomat. She works for women empowerment and is Co-founder of The Foundation of Working Women (TFWW). TFWW seeks to create an ecosystem where public policy, awareness and infrastructure come together and help women do their choice of work.

Ms Shreyasi Singh has authored a book with an interesting title 'The Wealth Wallahs'.



### Workshop

- ❑ A workshop on 'Digital Marketing' was conducted by Mr Vikas Gupta, Founder & Director, 9.9 Mediaworx Pvt. Ltd on 18



Nov 2016 to familiarize students with different techniques to maximize from Digital platforms.

- ❑ A two day workshop on CV making and interview skills with Mr Ujval Nanavati was held in December 2016. He conducted a group discussion followed by a one-on-one interaction to work on each and every CV in the class. Mr Ujval brought to the workshop his 20 years of experience in the corporate sector. He has conducted CV and interview skills workshops at a number of leading MBA institutions.



Dr Sriparna Basu, Professor, Fore School of Management delivered a lecture on 'Managing Performance in the Digital Age' on 6 February 2017. She spoke about the difference between 20<sup>th</sup> and 21<sup>st</sup> century work environment and how today it has become a knowledge-based economy and companies need employees to ideate, no matter at what position they are working at. Employees in 21<sup>st</sup> century organizations are expected to be budding with ideas and having the ability to execute them as well.

At the Centre for Leadership, students are equipped to understand team work as well as agility. The classroom structure and ambience promote understanding of individual strengths and how to leverage it in the business world.

### Industrial Visit

Students visited Ashok Leyland as part of a field trip on completion of their Supply Chain and Logistics course. The students were accompanied by Mr Gurunath. The students got real life exposure to what they had learnt in their classrooms. The students were exposed to the different ways of manufacturing processes and assembly line systems.



## News from the Library

LIRC's collection of Law books and journals are now available in close proximity to the School of Law, Room No. 308 (Main building) since January 2017.

- ❑ New Titles Added by LIRC in Jan-Feb:

SOET- 78 titles

SOL- 34 titles

SOM- 08 titles

- ❑ E-Resources renewed by LIRC for the year 2017:

ASME

ASCE

E Brary Proquest Technology Collection

## Student Activities

- ❑ Pulkrit Choudhry (CEE) attended a three day national conference organized by AIESEC India from 9-12 September 2016. The aim of the conference was to develop leadership skills among the youth and it was attended by 300 Delegates from 12 different cities. Pulkrit was declared as the Best Delegate by the Conference Chair and was awarded a six week free winter internship abroad. [CEE2016O015]

- ❑ A team of 25 students from the Dept of ME participated in the 'QUADTORC' National Competition at Chandpur (UP) from 27-30 August 2016. The competition challenges students to design, fabricate, test and race the four-wheeled bike. The vehicle developed by NCU team was designed under the supervision of Dr Ashwini Sharma. [MED2016WA007]

- ❑ 60 students from the Dept of ME participated in the International Quiz Competition 'Engineeria' organized by CADD Centre. The quiz held at NCU was coordinated by Mr Abhishek Pratap Singh. [MED2016O027]

- ❑ **Sushma Y** (15CSU243), one of the founding members of the University's Optical Society (OSA) Chapter represented OSA Student Chapter at a student leadership conference and FiO Congress held at New York, USA from 15-21 October 2016. She presented reports on youth education outreach programmes and NCU Student Chapter activities.



- ❑ Urvika Gola and Pranav Jain, CSE were invited as student delegates at three conferences in September 2016. They attended CII Startup Conclave 2016 at Hotel Taj Palace,

Mohit Yadav, final year student, BTech (EECE) and President of SPIE Student Chapter attended the International Conference of SPIE Optics and Photonics held at San Diego, California, USA from 26 Aug – 1 Sep 2016. He got a good international exposure and many internships/ higher studies offer at the job fare held at the conference. He also got an opportunity to interact with senior professors and functionaries of various organizations, thus establishing a good professional network with eminent professors and experts for The NorthCap University and himself. Mohit had received a grant of \$3300 from SPIE to attend the conference.



Delhi on 20 September 2016. The conference was about upcoming ventures and Government support for startups. On 23 September 2016, they attended CII Leveraging Technology in Education at ITC Maurya, Delhi which was graced by the presence of Vice-Chancellors, Principals, HoDs, Deans from leading universities and colleges across the nation. They finally attended the PyCon India 2016 held at JNU, Delhi from 24-25 September 2016. PyCon India, the premier conference in India on using and developing the Python programming language is conducted annually by the Python developer community.

- ❑ Alumna Kirti Sirohiwal, BTech CSE (Class of 2009) qualified the prestigious Haryana Civil Services Exam and is serving as BDPO on initial posting.

- ❑ Alumnus, Yashbir Khatri, BTech ECE (Class of 2009) cleared the prestigious Indian Foreign Services Exam. Last year he had cleared the Indian Civil Services Exam and had joined the Indian Railway Accounts Service.

The University is proud of its alumni and congratulates them on their success.

- ❑ A team of three Law students, Ankush Chattopadhyay and Kshitez Kaushik, 4<sup>th</sup> Year and Brijesh Ladwal, 3<sup>rd</sup> Year participated at the Ranka – Manipal Moot Court Competition organized by Manipal University, Jaipur from 1-3 October 2016. The NCU team won the Best Researcher's Prize.

- ❑ Neha Yadav, MTech VLSI Design got an internship offer in October 2016, with the prestigious Intel Technology India Pvt Ltd. The University wishes her all the best in her future endeavours.



Pranav Jain and Urvika Gola, 3<sup>rd</sup> Year CSE participated in a 24 hour Hackathon which took place at Taj Palace, New Delhi from 7-8 Nov 2016. It was inaugurated by the Prime Minister, Shri Narendra Modi and Rt Hon Theresa May, Prime Minister of UK. Only 14 teams across all age groups were selected from more than 100 teams across India. NCU team was the only one to receive the award from Microsoft for their overall performance. They also won the Best Team Name Award for our solution named 'Janhit mein Jaari'



- ❑ Pranav Jain, CSE was invited to Helsinki, Finland to represent India at Ultrahack, a global three day hackathon that aims to bring together developers, startups and corporations to solve world-class challenges with the latest technologies. He was also invited in Slush conference, one of the largest technological event in Europe.

Pranav participated in the Jagriti Yatra 2016 for which he received a 50% scholarship from them.

- ❑ The Computer Society of India



(CSI), students' wing organized workshops on Game Development and Internet of Things (IoT) for students of BTech (CSE) from 12-17 December 2016. The students developed interesting games and also built security systems using IoT. The event was organized under the guidance of CSI Student Branch Counsellor, Dr A Charan Kumari.

## Placements

MTech Civil Engineering student Ujjwal Prabhakar (Class of 2016) has obtained the 'Youngest Project Led Position' in JLL, India's premier professional services firm specializing in real estate. The firm was awarded the Property Consultant of the Decade at the 10<sup>th</sup> CNBC-Awaaz Real Estate Awards 2015 and the Best Property Consultancy in India at the International Property Awards Asia Pacific 2016-17.

Ujjwal is a student of our 1<sup>st</sup> batch of Construction Engineering & Management at the Dept of CEE at the University. Congratulations!

## Trip to Goa

NCU Recreation Club organised a seven day long trip to Goa for all the pre final and final year students of the University. 87 students joined this trip, from 13 - 19 December 2016. This trip was full of fun, adventure and learning for students. The students visited historical places like Fort Agauda and Fort Chapora. Adventure activities like jet skiing and ride on banana boat was organised. Boat ride out to the sea for dolphin viewing was memorable.



- ❑ Yashasvee Khanna and Akshay Aggarwal, CEE are among the Top 100 students, All India who have been selected for the 'Top Rokers Scholarship' at the National Institute of Construction Management-NICMAR, a prime institute for Construction Management in India and abroad. They have both obtained admission for Advanced Construction Management (ACM) at their Pune Campus for Masters in ACM.
- ❑ CSI, Student Chapter organized a gaming event on 9 February 2017, during the Club Week. The objective of the event was to motivate students to learn and apply current trends. Several games were developed by CSE 1<sup>st</sup> Year students: 'Star Wars' by Ranjeet Singh Rajput, 'Ninja Warrior' by Ravi Rathee, 'Platform' by Ravi Kundu, 'Bounce' by Rohit Chahar and 'Walking Dead' by Pulkit Talwar. Students and faculty from various branches came forward enthusiastically to play the games. All the developers were awarded prizes.



The event was coordinated by Rachita Gupta and Rahul under guidance of Dr A Charan Kumari, CSI Students Branch Counsellor.

- ❑ CSI Student Chapter organized a one hour awareness session for 1<sup>st</sup> and 2<sup>nd</sup> Year Computer Science students on 7 Feb 2017. The objective of the session was to make students aware of competitions and opportunities for which they can gear themselves up.
- ❑ Abhay Abraham and Urvika Gola, CSE 3<sup>rd</sup> Year, had an interactive session with CSI students. Abhay gave a live-demo on how to get started with competitive programming through enrolling on

## NCU's first student magazine 'Hashtag' launched

Students of NCU launched their first student magazine titled 'Hashtag' on 24 January 2017. Pro Vice-Chancellor, Brig. SK Sharma (Retd) released the first issue. The guests at the occasion were alumni Pulkit Garg, Abhishek Girdhar and Tushar Girdhar. The event started with a panel discussion on topics such as 'Quality vs Quantity', 'Kashmir Unrest' and 'Expression & Communication'.

The event included a recital of a poem by Ms Jyotika Pruthi; heart-warming medley of songs by Hashtag team member Rakshit Bhatia and a vibrant performance of Bhangra. Mandeep, President of Hashtag introduced each member of the team to the audience. The magazine gives the students a platform to exchange ideas and information on various socio-economic issues and scientific developments at the national and international level.



platforms like 'HackerRank'. He encouraged students to go for one challenge per day. Since they have two or three years left for their graduation, this is the right time for them to learn and enjoy the essence of coding. Abhay also gave a brief introduction to LISP programming language and taught few lines of code using LISP.

Urvika talked about her experience being an Open Source Developer at Outreachy as an intern. She explained on 'How to get started with Open Source'. She also briefed about the selection procedure and the work she is doing using Android Development and Java in her project.

This session was coordinated by Dr Prachi Ahlawat.

## NCU students selected for FOSSASIA 2017, Singapore

Urvika Gola and Pranav Jain, Dept of CSE & IT were selected as speakers for the FOSSASIA Conference at Singapore. Speakers



Urvika Gola

at FOSSASIA Summit are usually the industry leaders from Google, UNESCO, IBM etc. It was a great opportunity for our two bright students to share the stage with distinguished speakers and other International students.

For FOSSASIA 2017 (<http://2017.fossasia.org/>) held in Singapore in March 2017, Pranav was sponsored by Debian and Outreachy.

Urvika and Pranav discussed about their project under Google Summer of Code and Outreachy while Urvika shared her journey of getting into Outreachy so as to inspire budding female developers like her. Pranav shared his work and learning experience during Google Summer of Code'16 with Debian.



Pranav Jain



## NCU students win KPMG Business Ethics Grant

It is a pleasure to share that Enactus NCU won the KPMG Business Ethics Grant 2016 of Rs 50,000/- for its new project 'Inaayat'. This is a paper pencil project in association with the NGO Family of Disabled, details of which are available at the link: <https://docs.google.com/document/u/1/d/1ajVpWTVhZjp25udkcPY9eNuCyBNjcynqLK9RSn3aDtM/mo bilebasic>

For this project, Enactus NCU also received the Walmart Women Economic Award 2016-17 of Rs 20,000/- in November 2016. Our congratulations to Team Enactus and for her inspiration to faculty coordinator, Dr Dipti Vaya.



## Our Engineering students do us proud

NCU bagged three prizes in the 3<sup>rd</sup> National Student Project Exhibition on Engineering Design among 36 colleges with more than 150 projects on display. The competition was organized by GD Goenka University on 17 Feb 2017. Our project 'SUPRA VEHICLE' won the Best Project in Mechanical and Civil Engineering category. 'Coconut Opener' won the Best Project in the Open category, while the 'IOT Device for home automation' won the Best Project in electronics engineering. The participation was mentored by Dr Ashwini Sharma, Dept of ME.



Sachin Kushwaha, Akarshan Ganotra and Sandeep Yadav, 3<sup>rd</sup> Year CSE students participated in a Hackathon at Shiv Nadar University, Greater Noida in February 2017 and won the First prize. They presented their idea to angel investors and some well-known companies and won \$15 coupons of Digital Ocean. NCU students designed an innovative working project on Health Care. More than 15 teams from various renowned colleges including DTU participated in the event.





## Social Service

### Old Age Home Visit by NCU students

In continuation with its previous activities i.e. cleanliness drive and performance during Momentum, the Yukti team visited the old age home 'Tau Devi Lal' Gurugram, under Suvidha and Khushi Cell, on 19 Nov 2016. Efforts were to provide support and spread cheer among the mentally and physically challenged women residents of the old age home.

Students spent time with each resident, donated basic amenities and shared refreshments. It was a great experience meeting the inmates, many of whom had been abandoned by their family but still did not lack in spirit. We must remember that they do not need gifts or money, all they need is our time.



### Clothes Collection Drive

The University in collaboration with NGO Goonj organised a Clothes Collection Camp covering entire Gurugram on 6 Nov 2016, under Goonj's campaign 'Odha Do Zindagi'. The student coordinators from School of Management – Vimal Dahiya, Priya Bhargava,



Tushant Satija, Purvanshi, Priyanka Prajapati, Vipul Arora and Tanya took the initiative, right from campaigning, collection and transportation to the Goonj Processing Centre. People from all over Gurugram came in large numbers to contribute.

### Students Interact with Under Privileged Kids

15 students of 2<sup>nd</sup> Year alongwith Dr Charan Kumari, Ms Rita, Mr Sandeep, Dept of CSE visited the Shakuntalam Shiksha Kendra, for underprivileged kids on 12 Nov 2016. The objective of this visit was to encourage students to contribute



to the needs of the society. The students got an opportunity to interact with the kids who responded enthusiastically. The kids were highly talented, full of energy and exhibited their many skills.



Dr Kavita Khanna, Ms Meghna Sharma, Ms Hitesh along with nine students of 2<sup>nd</sup> and 3<sup>rd</sup> Year, Dept of CSE visited the orphanage Asha Greha on 25 Feb 2017. The aim of the visit was to develop empathy, care and gratitude in our students so that they turn out to be better individuals and contribute to the needs of the society. The visit was heart-touching as the students' interaction with the kids brought a smile on their faces. The kids participated in dancing and singing together with our students.

## Annual NSS Camp



NSS Self Financing Unit of NCU organized an annual seven day camp at Abhaypur village under Sohna Subdivision from 25 – 31 Jan 2017. The theme of this year's camp was 'Youth for Eco Development'.

45 Students of the University enrolled as NSS volunteers attended the camp, out of which 26 were girl students. SDM Sohna, Mr Satish Yadav along with the 'Sarpanch' of both Abhaypur and Damdama villages visited the Camp, site on 28 Jan 2017 and

witnessed the students actively participating in the Digital India Campaign, performing street plays and delivering awareness lectures on Swachh Bharat Abhiyan, Plantation of trees and Women Empowerment. The activity was coordinated by the University's NSS Programme coordinator, Ms Jyotsna Singh. Speaking on the occasion, Mr Satish Yadav, highlighted the need to conserve the ecosystem.

Registrar of the NCU, Col. Bikram Mohanty (Retd) visited the camp and highlighted the need for the current generation not only to work for eco development but also to understand the culture of our villages, the need for sharing and helping society at large.

## Annual NSS Certificate Distribution Ceremony



NCU's Self-Financing Unit of National Service Scheme (NSS) completed two years since its establishment in February 2015. The NSS motto 'Not me but you' has been well understood by our student volunteers and they believe that the welfare of an individual can ultimately lead to the welfare of the society. In the past two years our NSS unit has conducted various activities like blood donation camps, cleanliness drive, right to exercise your vote, tree plantation, educating villagers about digital payments and street plays on women empowerment, yoga, meditation and self defence for girls.

To acknowledge the efforts of NSS volunteers the Annual Certificate

Distribution Ceremony was organized at the University on 8 February 2017. Shri Vinay Pratap Singh, IAS, the then Additional Deputy Commissioner, Gurugram was the Chief Guest at the event. Speaking on the occasion, Shri Vinay Pratap Singh said, "There is need for selfless service, to develop and appreciate the other's point of view, give a patient hearing to a needy person and to understand his problem. One good deed a day is all that is required." 42 student volunteers who had completed two years of service with NSS were awarded NSS certificates by the Chief Guest.

## Yukti conducts Cleanliness Drive



Yukti is students' initiative at the University which aims at bringing the faculty and students together to make life better for the society, regardless of caste, colour, religion or status. Yukti conducted a cleanliness drive in and around the University on 6 October 2016 under its Jagriti Cell. The campaign was conducted to spread awareness amongst our students and staff, and residents of the neighbourhood about need of a clean environment and to improve the appearance of the residential sector. As in the past, the student volunteers gathered in large numbers to clean the designated areas. Roads from the University campus to Tau Devi Lal Park, Sector 23 A, Gurugram were cleaned and garbage was collected. The students pledged to continue the drive and make the Swachh Bharat Mission a success.



## Sports



The University's Inter-Department Sports Tournaments for the session 2016-17 continued with Volleyball and Basketball matches. Teams from all the three Schools of the University participated with full zeal. The volleyball competition was held from 16-19 September 2016. In the final

match of 'Boys group', the team of Civil Engineering defeated team CSE with a score of 3-2 in a match of 5 sets. The final match of 'Girls group' was played between teams of BTech and SOL, in which team BTech emerged as the winner with a score of 2-0 in a match of 3 sets.

The Basketball matches were played from 20-23 September 2016. In the finals, the team of CSE emerged as the winner by defeating the team of Civil Engineering in 'Boys group', while in the 'Girls group', the team of SOL was declared the winner and the team of BTech was declared the runner-up.



The Cricket tournament under University's Inter-Department Sports for the session 2016-17 was held from 11-17 Nov 2016. Nine teams from the three Schools participated with full zeal and showcased their sports skills. The final match was played between Depts of Mech Engg and CSE, in which Dept of Mech Engg emerged as the winner.

- The University encouraged all faculty members to don the University cap and get themselves down on the cricket field on 24

December 2016. A limited over cricket match was played between Red Team led by Dr Latika Singh and Blue Team led by Prof. Ravindra Ojha. The best shots were in the air by the Registrar, Col. Bikram Mohanty and Pro Vice-Chancellor, Brig. SK Sharma. The match came to an end with the declaration of Red Team being the winner. The match was followed by a snack party enjoyed with togetherness and bonding.





NCU team participated in the Inter-University Table Tennis match held at the LNM Institute of Information Technology (LNMIIT), Jaipur, Rajasthan from 20 - 22 January 2017. In the Final Match: NCU vs Rajasthan University, the NCU team comprising of Shubham Jain (15CSU226) and Kartavya Atri (15CSU094) won the First prize.



A new batch of Judo session 2016-17 was started in the University in which 35 students of different departments enrolled. The students are being trained on different techniques and practices of Judo. Introduction to Judo and fundamentals of Judo techniques (off balance, defence, stance, gripping, styles of falls etc.) were introduced to students by the student trainer, Gurushikha Kundu, BBA-LLB and Akash Lal, Dept of Mech Engg. The Judo Club coordinator is Ms Sunil Malik of the Sports Section.



An Athletic meet was organized in the University from 21-24 Feb 2017. There were many events like long jump, high jump, javelin throw, discus throw, shot- putt, 100, 200, 400, 800, 1500, 3000 mts races, relay race 100 x 4, 200 x 4, for boys and girls. The event was followed by the prize distribution ceremony on 24 Feb 2017 and prizes were awarded to all the winners by the Pro Vice-Chancellor Brig. SK Sharma, Registrar Col. Bikram Mohanty, Chairman Sports Committee, Director SOET Prof. Ravindra Ojha, Vice Chairman Sports Committee Dr Gaurav Gupta, Dept of APS, Secretary Sports Committee Dr Praveen Lochab, SOL. They emphasized on the importance of participating in sports. All events were supervised by Sports Officer Mr Sudesh Kumar.



## Miscellaneous

### Freshers' Formal Introduction to the University

The University organized a welcome party for the new batch of students on 17 September 2016 to formally absorb the new students into the University in a friendly atmosphere. Freshers of all the three Schools of the University participated in an ambience of fun, frolic, dance and laughter. It was a happening experience for the newly inducted students of the University.

The senior students organized a scintillating show and welcomed their new companions in an environment of harmony and friendliness. The audience was enthralled by the performances of dances, songs, fashion show and much more. Students were seen swaying to the beats of the Bhangra and Bollywood numbers. The fresh batch put up an attractive and a stimulating fashion show by walking the ramp for the coveted titles. The contest, held in a number of rounds was keenly contested wherein the participants were judged on different parameters of talent, quirkiness,



presentability and smartness. Participants were supported and encouraged by everyone as they performed on stage. Mahek Sangwan of BTech CSE and Rajat Bajaj of BTech CSE bagged the titles of

Miss and Mr Fresher 2016, while Mohit Bamel of BBA and Yashika Kapoor of LLB were declared winners of the Fashion Show.

### 'Momentum' and 'Cerebration' 2016

The NorthCap University celebrated its much awaited annual cultural and tech fests 'Momentum' and 'Cerebration' 2016 from 3-5 Nov 2016, which saw a plethora of cultural and technical events, providing students a platform to showcase their talent. Over 25 colleges and universities from Delhi-NCR, besides NCU, participated in the fest and more than 500 participants from various colleges and institutes contested in different competitions, making the event a grand success. During the inaugural ceremony the students presented Ganesh Vandana and a Bhangra dance which was much appreciated by the audience. A musical play on Ramayan was quite entertaining. NCU's theatre society, Abhimanch presented a street play on social harmony and religious brotherhood which was thought-provoking. The technical shows were equally attractive and fascinating showing creativity and innovation by the students.





## TEDx at NCU

The University organized a mega event TEDx on 22 October 2016 which witnessed participation of eminent speakers from various walks of life. TED (Technology, Entertainment and Design) is a global set of conferences run by a private non-profit organization, Sapling Foundation, under the slogan 'Ideas Worth Spreading'. The goal of TEDxTheNorthCap University was to bring together bright minds and social influencers to give talks that are idea – focused and inspirational. The list of notable personalities at the event included Mr Adil Hussain, actor; Mr Aseem Trivedi, cartoonist and activist; Mr Oscar Fernandes, politician and a senior leader of the Congress party; Padmashri Prof. Pushpesh Pant, a food critic and academician; Mr Manish



Tyagi, stand-up comic; Mr Anubhav Wadhwa, the youngest entrepreneur in India; Mr Rijo Thomas, musician; and Ms Shubhra Puri who launched Gurgaon First. The speakers shared their views on the theme 'Tracing the mind of influencers'. Addressing a large gathering

which included students and faculty of the University, they revealed their journey of struggle and success. The students were excited to interact with the luminaries and were motivated by their talks.

## Club Fiesta 2K17 – Make it Spark

NCU celebrated 'Club Fiesta 2k17 - Make it Spark' on 10 February 2017. It saw a culmination to the week-long activities organized by various student clubs of the University. During the Club Week, celebrated from 6-10 February 2017, different student clubs of the University organized extracurricular activities and competitions which were technical and non-technical.

On 10 Feb 2017 Fiesta Day started with Club Encore's musical performance under the guidance of Mr Ravinder Monty followed by a Flash Mob dance performance by the students. There were many offstage events, most popular amongst which were roses and song dedication to fellow students. Other events included wrestling,



musical chairs, paper dance, Pepsi bottoms up, draw the movie, wire buzzer, aim it, tug of war etc., in which students participated enthusiastically winning

many exciting prizes. The DJ music was enjoyed by one and all throughout the event.

## Blood Donation Camp

To spread awareness and encourage its students and staff for social service, the University organized a Blood Donation Camp on the Campus on 22 September 2016. The camp conducted with the assistance of medical staff and attendants of Rotary Blood Bank, Gurugram, was inaugurated by the Vice-Chancellor, Brig. SK Sharma (Retd) and Registrar, Col Bikram Mohanty (Retd). Many students of the University did voluntary service the whole day and encouraged

their fellow students to donate blood. Students queued up for this noble cause and faculty and staff members turned up at the camp for service to the society. Many of the students were in fact first time donors. Over 250 donors were registered by the end of the day,





who went through a series of medical checkups before donating blood and were given refreshments, a memento and a certificate of appreciation for this service

to humanity. The University regularly conducts this event in partnership with the Rotary Club, Gurugram with the desire to spread a culture of community

support and bring about dedicated services for the upliftment of society.

## Health check-up camp Nivaran III

NCU's commitment towards a 'Disease free' society is infallible and in line with this mission, 'निवारण'-III- Preventive Health Check Camp, was organised at the University on 18 January 2017. It was undertaken in the format of a diagnostic campaign to make people aware about their role in the prevention of diseases and for maintaining a healthy lifestyle. The screening/diagnostic campaign was conducted in association with Mantracare, a major Diagnostic Centre. Around 50 people made good use of the specialised diagnostics camp. 'निवारण'-III was coordinated by Dr Shilpy Wadhwa, Medical Consultant, NCU.



## Diagnostic Camp

In line with NCU's commitment towards 'Disease free Fraternity' a free of cost Diagnostic Camp, was organised in a tie up with Vijaya Diagnostic Centre on 5 February 2017. The camp was undertaken in the format of a diagnostic campaign for lipid and diabetes management and to make people aware about their role in the prevention of several diseases by maintaining a healthy lifestyle. Around 30 members of our fraternity which included guards, housekeeping staff, drivers etc benefited from the camp coordinated by Dr Shilpy Wadhwa, Medical Consultant, NCU.

## Workshop on Positive Psychology



A workshop on Positive Psychology and Permanent Well-being was conducted by Ms Srividya Rajaram on 10 September 2016. The workshop documented the role of judgement, perception and other related processes in our lives and helped to spread awareness that these processes are the filter through which we look at the world, people, emotions and at our environment. The workshop was

informative, and interactive with practical applications. It attempted to engage the audience through the use of audio-visuals to learn about psychology of perception and judgement, how these affect our decision making, how these are reflected in larger issues like politics, religion, gender and how to work on these processes. Around 100 participants benefitted from the workshop who learnt the practical tools of judgement and perception and how these can be honed and sharpened so as to become more equipped in handling our day-to-day issues. The workshop was organized and coordinated by Ms Nikita Kapoor, Psychologist-cum-Counsellor, NCU.

## Workshop on relationships

A workshop on 'Thinking beyond yourself with empathy and compassion' was conducted by Ms Sonia Puar on 25 February 2017 for faculty, admin and technical staff of the University. The workshop focused on 'apathy' a disturbing pattern in society. Despite our education and experience, we often fail to pick up subtle signs regarding the effect of our words, actions and behaviour on others. The workshop intended to re-sensitize ourselves, reflected on how we are impacting others and taught us how we can find a way to create warmth and respect in our interaction with others.

## The Qutbi Brothers perform at The NorthCap University

The NorthCap University takes pride in being the nodal centre for SPIC MACAY activities in Gurugram. The Society for the Promotion of Indian Classical Music and Culture Amongst Youth (SPIC MACAY) is a movement that promotes Indian music, classical dance, and other aspects of Indian culture amongst students. NCU, apart from aspiring for academic excellence, has always been promoting the values and wisdom embodied in the Indian heritage amongst the youth, with a hope that these events will influence their way of life and inspire them to become a better human being.

On 28 September 2016, the University invited Haji Mohd. Idris and Mohd. Ilyas, popularly known as the Qutbi Brothers, one of the most significant Qawwali artists in contemporary Indian music. The Qutbi Brothers presented



many melodious and popular qawwalis engrossing the audience completely. The students, faculty and staff of the University were overwhelmed by the heart-touching performance of the artists. Through the performance and interaction with renowned artists, the audience was privileged to understand and appreciate some of the intricacies of our classical music. The students were enthralled by the beauty of qawwalis and joined the eminent singers by clapping to their tunes.

## Performance by Russian Artists



The Brahmakumari establishment in our neighbourhood invited a team of Russian artists, 'Divine Light' on 5 October 2016 for an Art and Culture Programme at the University. The Divine Light group is associated with Brahmakumaris and constitutes of youth of different educational and professional background from Russia.

The Russian artists presented a mesmerizing cultural show filled with different forms of dances to a large

gathering of faculty, staff and students of the University, members of Brahmakumaris and invited guests. Their performance offered the audience a rainbow consisting of different rhythms, costumes, videos, songs and a blend of Russian folk dances, Hindi classical dances, elements of Russian classical ballet etc. The artists delivered a message of universal brotherhood which left an impression of peace and harmony on one and all.

The troupe was accompanied by Sister Santosh, Director Divine Light, St Petersburg, Russia. Sister Santosh complimented the University for its beautiful ambience and said that cleanliness connects you to divinity and brings in purity and happiness.

## NCU celebrates Road Safety Week-2017



To create awareness about road safety measures, the University, organized a 'Road Safety Week' from 11-17 January 2017 as part of the National Road Safety Week. The event was organized in association with the Secretary, Regional Transport Authority (RTA), Gurugram, presided over by the Chief Guest, Shri

appreciated the initiative taken by the University. He said, "We lose many precious lives every year in road accidents, it is the need of the hour to focus on road safety measures especially by the youth."

The week-long event included various

Balbair Singh, H P S , D C P T r a f f i c , Gurugram and Shri Dharmender, HCS, Secretary RTA, Gurugram. The event was also attended by RTA officials.

Shri Balbir Singh

## Enthralling Theatre Performance by 'Naya Theatre'



On 3 February 2017 the NCU Chapter of SPIC MACAY organized a theatre performance by 'Naya Theatre' founded by renowned playwright, poet and actor Late Habib Tanvir. The play 'Raj Rakta' is based on two novels of Late Ravindra Nath Tagore namely, Rajarshi and Visarjan. The lively performance enthralled the audience with its unique blend of culture of Chhattisgarh and traditional music from Bengal. Naya Theatre, an institution comprising of folk artists from the remote tribes and villages of Chhattisgarh has contributed a great deal in the growth and popularity of folk theatre in India.

activities that focused on the importance of road safety through movie screenings, on electronic notice boards in the University, quiz competition and display-boards throughout Gurugram. The Road Safety Week culminated with a road safety walk through HUDA sector 23 – A, flagged off by Shri Balbir Singh, HPS, DCP Traffic, Gurugram. The event was coordinated by Dr Rohit Lather and Mr Anmol Bhatia, Department of ME.

## PET Recycling Machine installed at NCU

Hand Care Foundation, in association with Enactus Chapter at The NorthCap University, has installed a plastic bottle recycling machine in the University campus near the Cafeteria. The used PET bottles can be recycled through this machine and can be converted into T-shirts, bag packs, caps etc. About 12 PET bottles can be recycled to produce a T-shirt. Using the machine not only encourages recycling, but also helps in reducing littering and maintaining a clean environment. The collected waste is recycled or reused as per the legal and environment norms. Recycling of all kinds of packaging waste (such as PET, plastics, paper etc.) and marketing / promotion of recycled products ensures a greener and safer environment for the present and future generations.



## Books / Book Chapters Published

### NATIONAL

- ❑ **Brig. SK Sharma (Retd)** (2017) 'Sustainable Development: Response to Global Warming and Climate Change', in 'Smart Cities and Sustainable Development' Chapter 8, pp. 84-93, APH Publishing Corporation, New Delhi. ISBN No.: 978-93-313-2974-5. ECE2017BC001
- ❑ **Subhradipta Sarkar\*** (2016) 'Role of the National Human Right Commission in Protecting Victims' Right to Adequate Response' in Law as

a Catalyst of Social Change in Present Scenario, Chapter 20, pp. 176-189, Twentyfirst Century Publications, ISBN - 978-93- 85448-95-9, SOL2017BC001.

- ❑ **Archana Sarma\*** (2016) 'Computer Forensics in Criminal Investigation: Challenges for Law Enforcement Agencies in India' in Law as a Catalyst of Social Change in Present Scenario, Chapter 23, pp. 206-216, Twentyfirst Century Publications, ISBN - 978-93-85448-95-9, SOL2017BC002.

### INTERNATIONAL

- ❑ **Supriya Raheja\*** (2017) 'Intuitionistic Fuzzy Set Theory with Fair Share CPU Scheduler: A Dynamic Approach' in Theoretical and Practical Advancements for Fuzzy System Integration, Chapter 6, pp. 126-153, IGI Global, ISBN - 9781522518488, CSE2017BC001.

## School of Engineering and Technology

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

#### Research Papers Published/Presented

#### INTERNATIONAL JOURNALS

- ❑ **Shaveta Arora**, Madasu Hanmandlu and Gaurav Gupta (2016) 'Edge detection of digital color images using information sets', Journal of Electronic Imaging, Vol.25, No.6, pp.1-10, ECE2016J038.
- ❑ **Madasu Hanmandlu, Shaveta Arora, Gaurav Gupta and Latika Singh** (2016) 'Underexposed and overexposed colour image enhancement using information set theory', The Imaging Science Journal, Vol.64, No.6, pp.321-333, ECE2016J039.
- ❑ **Prachi Dewan, Rekha Vig, Neeraj Shukla** and Bijoy Kishore Das (2016) 'Novel VLSI Architectures for Image Segmentation and Edge Detection Algorithm', International Journal of Computer Applications, Vol. 149, No. 10, pp. 32-36, ECE2016J040.
- ❑ **Himanshu Khanna\*, Mona Aggarwal and Swaran Ahuja** (2016) 'Performance analysis of an inter-relay co-operation in FSO communication system', Journal of Optical Communications, ECE2016J041.
- ❑ **Shubham Ahuja\* and Amanpreet Kaur** (2016) 'An automated car parking system with scratch resistant system', International Journal of Electronics, Electrical and Computational System, Vol. 5, No. 12, pp.01-05, ECE2016J042.
- ❑ **Mohit Yadav\* and Kusum Grewal Dangi** (2016) 'Cellular generations: comparative analysis', International

Journal of Modern Embedded System, Vol.4, No.5, pp.01-06, ECE2016J043.

- ❑ **Sonam Jain\* and Neeraj Kumar Shukla** (2016) 'Low leakage asynchronous PP based single ended 8T SRAM bit-cell at 45nm CMOS technology', International Journal of Hybrid Information Technology, Vol. 9, No. 6, pp. 117-126, ECE2016J044.
- ❑ **Ashima Gandhi\* and Neeraj Kumar Shukla** (2016) 'Functional verification of AMBA AHB-Lite using layered testbench technology of system verilog', Journal of VLSI Design Tools and Technology, Vol. 6, No. 2, pp. 104-112, ECE2016J045.
- ❑ **Sonia Sharma\* and Neeraj Kumar Shukla** (2016) 'Design and analysis of 4 bit Johnson counter using clock gating', International Journal of Hybrid Information Technology, Vol. 9, No. 8, pp. 359-366, ECE2016J046.
- ❑ **Ashima Gandhi\* and Neeraj Kumar Shukla** (2016) 'Reusable verification of AMBA AHB-Lite Protocol using HDVL and UVM', Journal of VLSI Design Tools and Technology, Vol.6, No.2, pp.62-72, ECE2016J047.
- ❑ **Naresh Kumari\*, AN Jha and Nitin Malik** (2016) 'Performance comparison of PSO based state feedback gain (K) controller with LQR-PI and integral controller for automatic frequency regulation', WSEAS Transactions on Power Systems, Vol.11, pp.299-308, ECE2016J048.
- ❑ **Sharda Vashisth\*, Munna Khan, Ritu**

Vijay and Ashok K Salhan (2017) 'A review of high G-stress induced problems and their solutions', International Journal of Medical Engineering and Informatics, Vol. 9, No. 1, pp. 47-60, ECE2017J001.

- ❑ **Naresh Kumari\*, Nitin Malik, AN Jha and G Mallesham** (2017) 'Design of PI Controller for automatic generation control of multi area interconnected power system using bacterial foraging optimization', International Journal of Engineering and Technology, Vol. 8, No. 6, pp. 2779-2786, ECE2017J002.
- ❑ **Pankaj Rakheja\* and Rekha Vig** (2016) 'Image Denoising using Various Wavelet Transforms: A Survey', Indian Journal of Science and Technology, Vol. 9, No. 48, pp. 1-7, ECE2016J049.
- ❑ **Rekha Vig\*** (2016) 'Implementation of a Hearing Aid using Texas TMS320C6713 Digital Signal Processor', Indian Journal of Science and Technology, Vol. 9, No. 48, pp. 1-6, ECE2016J050.
- ❑ **Vandana Khanna, Bijoy Kishor Das\*, Vandana, Prakram Singh, Prabha Sharma and Sushil Kumar Jain** (2016) 'Statistical analysis and engineering fit models for two-diode model parameters of large area silicon solar cells', Solar Energy, Vol. 136, pp. 401-411, ECE2016J051.
- ❑ **Hemani Kaushal and Georges Kaddoum\*** (2016) 'Optical Communication in Space: Challenges and Mitigation Techniques', IEEE Communications Surveys and Tutorials,



pp. 1-41, **ECE2016J052**.

- ❑ **Hemani Kaushal\*** and Georges Kaddoum (2016) 'Underwater Optical Wireless Communication', IEEE ACCESS, Vol. 4, pp. 1518 - 1547, **ECE2016J053**.

## NATIONAL

### CONFERENCE PRESENTATION

- ❑ **Rekha Vig** and Bhawna Kaliraman (2016) 'Iris recognition using hybrid transform', International Conference on Communication and Computing System-2016, Dronacharya College of Engineering, **ECE2016C005**.
- ❑ **Alpa Choudhary** and **Rekha Vig** (2016) 'Mobile Biometric Using Face Recognition-A survey', International Conference on Communication and Computing System-2016, Dronacharya College of Engineering, **ECE2016C006**.
- ❑ **Anjali Garg**, Tushar Chadha, Ketan, Manika Sharma (2016) 'Smart Recharging Vehicle System', REDSET 2016, G.D. Goenka University, Gurgaon, **ECE2016C007**.
- ❑ **Himanshu Khanna**, **Mona Aggarwal** and **Swaran Ahuja** (2016) 'Outage analysis of a variable-gain amplify

and forward relayed mixed RF-FSO system', INDICON 2016, ISC Bangalore, **ECE2016C008**.

- ❑ **Anshul Vats**, **Mona Aggarwal**, **Sharda Vashisth** and **Swaran Ahuja** (2016) 'Hybrid RF-VLC system for real time health care applications', Optronix 2016, UEM Kolkata, **ECE2016C009**.
- ❑ **Himanshu Khanna**, **Mona Aggarwal** and **Swaran Ahuja** (2016) 'Outage analysis of an inter-relay assisted free space optical communication system', Optronix 2016, UEM Kolkata, **ECE2016C010**.
- ❑ **Sakshi Gupta**, **Amanpreet Kaur** and Mohit Yadav (2016) 'A brief survey on organic light emitting diode', Asia Student Photonics Conference 2016, SPIE, Manipal University, Karnataka, India, SPIE, **ECE2016C011**.

### CONFERENCE PROCEEDINGS

- ❑ **Sanghmitra Arora** and **Rekha Vig** (2016) 'Comparison of speech intelligibility parameter in cochlear implants by spatial filtering and coherence function methods', IEEE International Conference on Micro-Electronics and Telecommunication Engineering, pp. 573-577,

**ECE2016P008**.

- ❑ **Ram Sharma**, **Mona Aggarwal** and **Swaran Ahuja** (2016) 'Performance analysis of indoor FSO communication systems under receiver mobility', IEEE International Conference on Micro-Electronics and Telecommunication Engineering, pp. 652-657, **ECE2016P009**.
- ❑ **Anita Sharma**, **Mona Aggarwal**, **Swaran Ahuja** and Moin Uddin (2016) 'Outage analysis of DF-relayed cognitive underlay networks over EGK fading channels', IEEE International Conference on Micro-Electronics and Telecommunication Engineering, pp. 564-569, **ECE2016P010**.
- ❑ **Aditi Kaushik** and **Pooja Sabherwal** (2016) 'Monitoring electrocardiogram using Android based smart phone A real time approach', India Conference (INDICON), 2015 Annual IEEE, pp. 1-6, **ECE2016P011**.
- ❑ **Vandana Khanna**, Akancha Shekher, Anushka Singh, Vinay Budhraj (2016) 'Performance of Grid Connected Photovoltaic System in North of India', 2016 IEEE 43rd Photovoltaic Specialists Conference (PVSC), pp. 3165-3167, **ECE2016P012**.

## Department of CSE & IT

### Research Papers Published/Presented

#### BOOK

- ❑ **Nikhat Ikram**, **Shilpa Mahajan** (2016) 'Designing of Accident Avoidance Application in Wireless Sensor Network', pp. 1-93, LAMBERT Academic Publishing, ISBN - 978-3-659-97059-7, **CSE2016B002**.

#### INTERNATIONAL JOURNALS

- ❑ **Supriya Raheja** (2016) 'Designing of Vague Logic Based 2-Layered Framework for CPU Scheduler', Advances in Fuzzy Systems, Vol. 2016, pp. 1-11, **CSE2016J052**.
- ❑ **Kavita Khanna**, Navin Rajpal and Shaifali Madan Arora (2016) 'Piecewise feature Extraction and Artificial Neural Networks: An approach towards Curve Reconstruction', Indian Journal of Science and Technology, Vol. 9, No. 28, pp. 1-9, **CSE2016J053**.
- ❑ **Rita Rana Chhikara**, Prabha Sharma and **Latika Singh** (2016) 'An Improved Dynamic Discrete Firefly

Algorithm for Blind Image Steganalysis', International Journal of Machine Learning and Cybernetics, **CSE2016J054**.

- ❑ **Jagdeep Kaur** and **Pradeep Tomar** (2016) 'Frefcosco: A Fuzzy Relation-Based Fuzzy Clustering of Software Components', International Journal of Control Theory and Applications, Vol.9, No.11, pp. 5443-5448, **CSE2016J055**.
- ❑ **Krishna Kant Singh** and **Akansha Singh** (2016) 'Identification of Flooded Area from Satellite Images Using Hybrid Kohonen Fuzzy C-Means Sigma Classifier', Egyptian Journal of Remote Sensing and Space Sciences, **CSE2016J056**.
- ❑ **Poonam Sharma** and **Anjali Garg** (2016) 'Neural Networks for Hindi Speech Recognition', International Journal of Engineering Applied Sciences and Technology, Vol.1, No.8, pp.108-112, **CSE2016J057**.
- ❑ **Nikhat Ikram**, **Shilpa Mahajan** (2016)

'Road accidents: Overview of its causes, avoidance scheme and a new proposed technique for avoidance', 3rd International Conference on Computing for Sustainable Global Development (INDIACom), 2016, pp.497-499, Rita Rana

- ❑ **Anil Kumar Mishra\*** and **Latika Singh** (2016) 'A Fuzzy Entropy-based Method for Texel Identification', International Journal of Innovations in Engineering and Technology, Vol.7, No.1, pp.22-28, **CSE2016J058**.
- ❑ **Divya Jain\*** and **Vijendra Singh** (2016) 'Utilization of Data Mining Classification Approach for Disease Prediction: A Survey', International Journal of Education and Management Engineering, Vol. 6, No. 6, pp. 45-52, **CSE2016J059**.
- ❑ **Akansha Singh**, **Krishna Kant Singh** (2017) 'Satellite Image classification using Genetic Algorithm trained Radial Basis Function neural network, application to the detection of flooded areas', Journal of Visual

Communication and Image Representation, Vol. 42, pp. 173-182, CSE2016J060.

- ❑ Pooja Kundu, **Neeti Kashyap** (2016) 'Securing DSR for Mobile Ad hoc Network with Message Digest Algorithm', I.J. Wireless and Microwave Technologies, Vol.5, No.4, pp.54-60, CSE2016J061.
- ❑ Shaifali Madan Arora\*, Navin Rajpal, **Kavita Khanna** and R Purwar (2016) 'Improved accuracy in initial search center prediction to fasten motion estimation in h.264/AVC', IETE Journal of Research, No. 6, CSE2016J062.
- ❑ **Prachi\*** (2016) 'Usage of machine learning for intrusion detection in a network', International Journal of Computer Networks and Applications, Vol.3, No.6, pp.139-147, CSE2016J063.
- ❑ **Prachi** and Shikha Sharma\* (2016) 'Energy efficient clustering protocol for sensor network', International Journal of Computer Network and Information Security, Vol. 8, No. 12, pp. 59-66, CSE2016J064.
- ❑ **Jagdeep Kaur\*** and Pradeep Tomar (2016) 'Software component selection using fuzzy relation-based fuzzy clustering', International Journal of Software Engineering, Vol. 9, No. 2, pp.35-44, CSE2016J065.
- ❑ **Jagdeep Kaur\*** and Pradeep Tomar (2016) 'Validation of software component selection algorithms based on clustering', Indian Journal of Science and Technology, Vol. 9, No. 45, pp. 1 to 4, CSE2016J066.
- ❑ **Kavita Khanna\***, Navin Rajpal, **Ajay Dureja** and Shaifali Madan Arora (2016) 'Surface reconstruction using feature based approach with radial basis function neural network', International Journal of Control Theory and Applications, Vol. 9, No. 19, pp.9239-9250, CSE2016J067.
- ❑ **Jyoti Sahni\*** and Deo Prakash Vidyarthi (2016) 'Heterogeneity-aware adaptive auto-scaling Heuristic for improved QoS and resource usage

in Cloud environments', Computing, pp.1-31, CSE2016J068.

- ❑ Shikha Sharma and **Prachi\*** (2016) 'Balanced and energy efficient clustering protocol', International Journal of Control Theory and Applications, Vol. 9, No. 19, pp. 9117-9127, CSE2016J069.
- ❑ **Supriya Raheja\***, Geetika Munjal and Shagun (2016) 'Analysis of Linux Kernel Vulnerabilities', Indian Journal of Science and Technology, Vol.9, No.48, pp.1-6, CSE2016J070.
- ❑ **Shilpa Mahajan\*** and **Shilpa Yadav** (2016) 'Analyzing HTTP Traffic Patterns for Monitoring and Analyzing User Behavior', Indian Journal of Science and Technology, Vol.9, No.48, pp.1-7, CSE2016J071.
- ❑ Pooja Yadav\*, **Anuradha** and **Poonam Sharma** (2016) 'An Efficient Incremental Density based Clustering Algorithm Fused with Noise Removal and Outlier Labelling Technique', Indian Journal of Science and Technology, Vol.9, No.48, pp.1-7, CSE2016J072.
- ❑ Surbhi Dewan\*, **Akansha Singh**, **Latika Singh** and **Sumanlata Gautam** (2016) 'Role of Emotion Recognition in Computive Assistive Learning for Autistic Person', Indian Journal of Science and Technology, Vol. 9, No. 48, pp. 1-9, CSE2016J073.
- ❑ **Vaishali Chahar\***, **Rita Chhikara**, **Yogita Gigras** and **Latika Singh** (2016) 'Significance of Hybrid Feature Selection Technique for Intrusion Detection Systems', Indian Journal of Science and Technology, Vol. 9, No. 48, pp. 1-7, CSE2016J074.
- ❑ Shreshtha Gaur\* and **Rita Chhikara** (2016) 'Memory Forensics :Tools and Techniques', Indian Journal of Science and Technology, Vol. 9, No. 48, pp. 1-12, CSE2016J075.
- ❑ **Kavita Khanna\*** and Shaifali Madan Arora (2016) 'Ant Colony Optimization towards Image Processing', Indian Journal of Science and Technology, Vol. 9, No. 48, pp. 1-9, CSE2016J076.

- ❑ **Prachi\*** (2017) 'An Energy Efficient and Secure Clustering Protocol for Military based WSN', I. J. Computer Network and Information Security, Vol.9, No.1, pp.47-53, CSE2017J001.
- ❑ **Geetika Munjal\***, Hanmandlu, Sangeet Srivastava and Deepti Gaur (2017) 'Assessing and Mining Phylogenetic Trees', International Journal of Database Theory and Application, Vol. 10, No. 1, pp. 67-78, CSE2017J002.

## NATIONAL

### CONFERENCE PRESENTATION

- ❑ **Kavita Khanna**, Navin Rajpal, Ajay Dureja and Shaifali Madan Arora (2016) 'Surface reconstruction using feature based approach with radial basis function neural network', SCESM-2016, HIERANK Business School, Noida, CSE2016C001.

### CONFERENCE PROCEEDINGS

- ❑ Mamta Rawat and **Akansha Singh** (2016) 'A review of exudates detection using retinal images', 3rd International Conference on Computing for Sustainable Global Development, pp. 4019-4022, CSE2016P017.
- ❑ Deepa and **Akansha Singh** (2016) 'Review of brain tumor detection from MRI images', 3rd International Conference on Computing for Sustainable Global Development, pp. 3997-4000, CSE2016P018.
- ❑ **Geetika**, M Hanmandlu and Deepti Gaur (2016) 'Analyzing DNA strings using information theory concepts', 2nd International Conference on Information and Communication Technology for Competitive Strategies, CSE2016P019.
- ❑ **Rita Rana Chhikara** and Meena Kumari (2016) 'Significance of Feature Selection for Image Steganalysis', International Conference on Computational Systems and Information Systems for Sustainable Solutions, pp. 75-79, CSE2016P020.

## Department of Mechanical Engineering

### Research Papers Published/Presented

#### INTERNATIONAL JOURNALS

- ❑ Sparsh Bhayare, **Shikha Kashyap** and **Ravindra Ojha** (2016) 'Production Cost Optimization in Food Processing Industry: Review and Analysis', Journal of Basic and

Applied Engineering Research, Vol.3, No.11, pp.1015-1018, MED2016J034.

- ❑ Prateek Kalra, Rishab Bhardwaj, **Shikha Kashyap** and **Ravindra Ojha** (2016) 'To Increase Overall Equipment Effectiveness using Value Stream

Mapping: Review and Analysis', Journal of Aeronautical and Automotive Engineering, Vol. 3, No. 2, pp. 69-72, MED2016J035.

- ❑ Dishant Aghi, Kunal Upadhayay, **Shikha Kashyap** and **Ravindra Ojha**

- (2016) 'Efficiency Improvement and Productivity Enhancement in Tier II Automotive Companies: Review and Analysis', Journal of Aeronautical and Automotive Engineering, Vol. 3, No. 2, pp. 66-68, **MED2016J036**.
- ❑ **Abhishek Pratap Singh**, Anuj Kumar Jain, Prateek Mahajan (2016) 'Design and Fabrication of a Ball Projecting Machine', International Journal of Advance Research and Innovation, Vol. 4, No. 3, pp. 587-590, **MED2016J037**.
  - ❑ **Anmol Bhatia\***, **Deepa Manani**, Anubhav Grover, Jatin Kumar and Eshan Gupta (2016) 'Design of multi spindle drilling machine', International Journal of Advance Research and Innovation, Vol. 4, No. 1, pp. 420-423, **MED2016J038**.
  - ❑ Akansha Bhatia\*, **Jyoti Rani**, **Rohit Singh Lather** and **Anmol Bhatia** (2016) 'Development of Lab Scale Pyrolysis setup to convert waste plastic into oil', International Journal of Advanced Engineering Research and Applications, Vol.2, No.8, pp.537-543, **MED2016J039**.
  - ❑ **Abhishek Pratap Singh**, **Anuj Kumar Jain\***, Darpan Vashishtha, Manveer Singh and Chaitanya Bhatia (2016) 'Development of desert cooler design to control humidity and temperature', International Journal of Advance Research and Innovation, Vol.4, No.2, pp.600-601, **MED2016J040**.
  - ❑ **Abhishek Pratap Singh**, **Anuj Kumar Jain\***, Darpan Vashishtha, Manveer Singh and Chaitanya Bhatia (2016) 'Design and fabrication of low cost crop cutting machine', International Journal of Advance Research and Innovation, Vol.4, No.2, pp.607-609, **MED2016J041**.
  - ❑ **Abhishek Pratap Singh\*** and Leena Sharma (2016) 'Computational Study of Indoor Pollutant Dispersion of an Apartment', Indian Journal of Science and Technology, Vol. 9, No. 48, pp. 1-8, **MED2016J042**.
  - ❑ **Shiv Manjaree\*** and Mitsu Thomas (2016) 'Modeling of Multi-DOF Robotic Manipulators using Sim-Mechanics Software', Indian Journal of Science and Technology, Vol. 9, No. 48, pp. 1-7, **MED2016J043**.
  - ❑ **Sumit Bhat\*** and **Rohit Singh Lather** (2016) 'Production of Oil from Waste Plastics and Polythene using Pyrolysis and its Utilization in Compression Ignition (C.I.) Engine', Indian Journal of Science and Technology, Vol. 9, No. 48, pp. 1-16, **MED2016J044**.
  - ❑ Darpan Dahiya\*, **Rohit Singh Lather** and **Pramod Bhatia** (2016) 'Improvement of the Domestic LPG Cooking Stoves: A Review', Indian Journal of Science and Technology, Vol. 9, No. Special Issue-1, pp. 1-16, **MED2016J045**.
  - ❑ **Satnam Singh\***, Rajveer Singh, Dheeraj Gupta and Vivek Jain (2017) 'Preliminary Metallurgical and Mechanical Investigations of Microwave Processed Hastelloy Joints', Journal of Manufacturing Science and Engineering, Transactions of the ASME, Vol.139, No.6, **MED2017J001**.
  - ❑ **Pramod Bhatia\*** and Ravinder Singh (2017) 'Effect of Oxygen Enrichment in Propane Laminar Diffusion Flames under Microgravity and Earth Gravity Conditions', Microgravity Science and Technology, pp. 1-14, **MED2017J002**.
  - ❑ Navneet Kumar, **Manoj Kumar Gopaliya** and Deo Raj Kaushal\* (2016) 'Modeling For Slurry Pipeline Flow Having Coarse Particles', Multiphase Science and Technology, Vol.28, No.1, pp.1-33, **MED2017J003**.
  - ❑ **Satnam Singh\***, Dheeraj Gupta and Vivek Jain (2017) 'Processing of Ni-WC-8Co MMC Casting through Microwave Melting', Materials and Manufacturing Processes, **MED2017J004**.
- ### NATIONAL
- ❑ Saket Jha, **Shikha Kashyap** and **Ravindra Ojha** (2016) 'Evaluation of Performance Parameters of End of Line (EOL) Testing Machine in Automotive Industry Using AHP Technique', Journal of Aeronautical and Automotive Engineering, Vol. 3, No.2, pp. 73-76, **MED2016J032**.
  - ❑ Omkar Kaushik, **Shikha Kashyap** and **Ravindra Ojha** (2016) 'Analysis of Rotary Gas Metal Arc Welding (GMAW) Process in Automotive Industry using 7 QC Tools', Journal of Basic and Applied Engineering Research, Vol.3, No.11, pp.1025-1029, **MED2016J033**.
- ### CONFERENCE PRESENTATION
- ### CONFERENCE PROCEEDINGS
- ❑ **Anmol Bhatia** and Reeta Wattal (2016) 'Paradigm shifts in friction stir welding research: A critical review', International Conference on Advanced Production and Industrial Engineering, **MED2016P001**.

## Department of Civil & Environmental Engineering

### Research Papers Published/Presented

#### INTERNATIONAL JOURNALS

- ❑ Geetha Verma and **Anil Kumar Misra** (2016) 'Equilibrium and Kinetic Studies on the Adsorption of Copper onto Carica Papaya Leaf Powder', Membrane Water Treatment, Vol. 7, No. 5, pp. 403-416, **CEE2016J009**.
- ❑ **Vaishali Sahu**, **Amit Srivastava** and V Gayathri (2016) 'Effect of Lime and Gypsum on Engineering Properties of Badarpur Fly Ash', International Journal of Engineering and Technology Innovation, Vol. 6, No. 4, pp. 294-304, **CEE2016J010**.
- ❑ **Megha Kalra\*** (2016) 'Effect of coarse aggregate size on strength of high performance concrete', International Journal of advance research and innovation, Vol. 4, No. 4, pp. 619-621, **CEE2017J002**.
- ❑ **Vaishali Sahu**, **Amit Srivastava**, **Anil Kumar Misra\*** and **Anil Kumar Sharma** (2016) 'Stabilization of fly ash and lime sludge composites: Assessment of its performance as base course material', Archives of Civil and Mechanical Engineering, Vol. 17, pp. 475-485, **CEE2017J003**.
- ❑ **Amit Srivastava\*** and Chaitanya R Goel (2016) 'Characterization of strength and stiffness parameters of clayey soil partially replaced with plastic granules', Indian Journal of Science and Technology, Vol. 9, No. 48, pp. 1-6, **CEE2016J011**.
- ❑ **Mega Kalra\***, **Purnima Bajpai** and Dilpreet Singh (2016) 'Effect of wind on multi storey buildings of different shapes', Indian Journal of Science and Technology, Vol. 9, No. 48, pp. 1-5, **CEE2016J012**.



- ❑ **Amit Srivastava\*** (2016) 'Seismic upgradation of non-ductile reinforced concrete framed building- a case study', Indian Journal of Science and Technology, Vol. 9, No. 48, pp. 1-9, **CEE2016J013**.

#### NATIONAL

- ❑ **Ujjwal Prabhakar\*** and **Purnima Bajpai** (2017) 'Understanding quality

in construction', Journal of Construction Engineering, Technology and Management, Vol. 6, No. 3, pp. 70-74, **CEE2017J001**.

#### CONFERENCE PRESENTATION

#### CONFERENCE PROCEEDINGS

- ❑ **Amit Srivastava** and **Dharmendra Kumar Srivastava** (2016) 'Geotechnical prespective of failure

cases in head walls of hume pipe culverts and their forensic investigations', 5th international conference on forensic geotechnical engineering, pp.448-457, **CEE2017P001**.

## Department of Applied Sciences

### Research Papers Published/Presented

#### INTERNATIONAL JOURNALS

- ❑ **Hukum Singh** (2016) 'Cryptosystem for securing image encryption using structured phase masks in Fresnel wavelet transform domain', 3D RESEARCH, Vol. 7, No. 34, pp. 1-18, **APS2016J023**.
- ❑ **Tejpal Singh Chundawat, Poonam Kumari,** Nutan Sharma, Sunita Bhagat (2016) 'Strategic synthesis and in vitro antimicrobial evaluation of novel difluoromethylated 1-(1, 3-diphenyl-1H-pyrazol-4-yl)-3, 3-difluoro-1,3-dihydro-indol-2-ones', Medicinal Chemistry Research, Vol. 25, pp. 2335-2348, **APS2016J024**.
- ❑ **Phool Singh\***, Anju Rani and Ashok Jangid (2016) 'Genetic algorithm based approach to study aligned magnetic field with unsteady forced convection', CSI Transactions on ICT, **APS2016J025**.
- ❑ **Shri Dhar\***, **Jyotsna Singh** and **Phool Singh** (2016) 'Insights into various dysfunctions in Parkinson's disease: a survey', CSI Transactions on ICT, **APS2016J026**.
- ❑ **Phool Singh,** Anil Kumar Yadav\* and Kehar Singh (2016) 'Phase image encryption in the fractional Hartley domain using Arnold', Optics and Lasers in Engineering, Vol.91, pp. 187-195, **APS2016J027**.
- ❑ Nutan Sharma, **Tejpal Singh Chundawat,** Subash Chandra Mohapatra and Sunita Bhagat\* (2016) 'Synthesis of Novel Fluorinated Multisubstituted Pyrimidines and 1,5-benzodiazepenes via Fluorinated N, S-Acetals', SYNTHESIS, Vol. 48, No. 24, pp. 4495-4508, **APS2016J028**.
- ❑ **S Meena, Dipti Vaya\*** and Bijoy Kishore Das (2016) 'Photocatalytic degradation of Malachite Green dye by modified ZnO nanomaterial',

Bulletin of Material Science, Vol. 39, No. 7, pp. 1735-43, **APS2016J029**.

- ❑ **Bulkesh Siwach\*, Sunita Sharma** and Devendra Mohan (2016) 'Structural, optical and morphological properties of ZnO/MWCNTs nanocomposite photoanodes for dye sensitized solar cell (DSSC) application', Journal of Integrated Science and Technology, Vol.5, No.1, pp. 01-04, **APS2016J030**.
- ❑ **Sunita Sharma\***, Bulkesh Siwach, SK Ghoshal and Devendra Mohan (2017) 'Dye sensitized solar cells: From genesis to recent drifts', Renewable and Sustainable Energy Reviews, Vol. 70, pp. 529-537, **APS2017J001**.
- ❑ **Sunita Sharma\*** and Divyansh Mahajan (2016) 'Cost-effective synthesis and properties of graphene', Indian Journal of Science and Technology, Vol.9, No.48, pp.1-4, **APS2016J031**.
- ❑ **Deepika\*** and **Hukum Singh** (2016) 'Role of Sb Substitution on Electrical properties of Se-Te Glasses', Indian Journal of Science and Technology, Vol. 9, No. 48, pp. 1-8, **APS2016J032**.
- ❑ **Luxmi Verma** and **Sangeet Srivastava\*** (2016) 'A Data Mining Model for Coronary Artery Disease Detection using Noninvasive Clinical Parameters', Indian Journal of Science and Technology, Vol. 9, No. 48, pp. 1-6, **APS2016J033**.
- ❑ **Manoj Kumar** and **Sangeet Srivastava\*** (2016) 'Identifying Photo Forgery using Lighting Elements', Indian Journal of Science and Technology, Vol. 9, No. 48, pp. 1-5, **APS2016J034**.
- ❑ **Pranati Purohit\***, Dilip Kumar Roy, Shankar Prasad Pati and Sukadev Sahoo (2016) 'Conduction of Electrons in Quantum Wires of Circular Crosssection', Indian Journal

of Science and Technology, Vol. 9, No. 48, pp. 1-6, **APS2016J035**.

- ❑ **Ayushri Bhargava, Amita Bhagat\*** and Jaspreet Singh (2016) 'Modelling and performance analysis of cellular Mobile Networks', Indian Journal of Science and Technology, Vol. 9, No. 48, pp. 1-22, **APS2016J036**.
- ❑ **Antariksha Kar, Sidharth Bhatia** and **Gaurav Gupta\*** (2016) 'Multilevel thresholding for image segmentation based on similarity filtering', Indian Journal of Science and Technology, Vol. 9, No. 48, pp. 1-5, **APS2016J037**.

#### NATIONAL

- ❑ **Pranati Purohit\*** and Sushil Kumar Jain (2016) 'A Piezo-resonator Method for Shear Attenuation Measurement of Rubber', Journal of Pure and Applied Ultrasonics, Vol.38, No.2, pp.43-46, **APS2016J022**.

#### CONFERENCE PRESENTATION

- ❑ **Bharti Arora** (2016) 'Self Association of Guanine Rich DNA Oligonucleotides Under Varied Solution Conditions', A Tributary Symposium on 100 Years of Chemical Bonding - 2016, CSIR - Indian Institute of Chemical Technology Hyderabad, India, **APS2016C18**.
- ❑ **Dipti Vaya** (2016) 'Application of nanomaterial in waste water treatment', Poster, Special Centre for Nanoscience, Jawaharlal Nehru University, New Delhi, India, **APS2016C19**.
- ❑ **Anshu** (2016) 'An Algorithm to detect S-Consistency in Common Edge Sigraph', 3rd International Conference on Recent Developments in Science, Engineering and Technology (REDSET 2016), School of Engineering G.D Goenka University, **APS2016C20**.

**CONFERENCE PROCEEDINGS**

- ❑ Anshula and **Hukum Singh** (2016) 'Asymmetric image encryption scheme by using random phase masks in Fourier transform domain', 13th International Conference on Fiber Optics and Photonics, pp. W3A.4, **APS2016P006**.
- ❑ Deepika Choudhary, **Hukum Singh** and K S Rathore (2016) 'Effect of Bi addition on optical properties of Se-Te thin films', 13th International

Conference on Fiber Optics and Photonics, pp. Tu4A.50, **APS2016P007**.

- ❑ **Hukum Singh** (2016) 'Optical image encryption using random-vortex structured phase masks in fractional Hartley transform domain', 13th International Conference on Fiber Optics and Photonics, pp. Tu4A.68, **APS2016P008**.

- ❑ **Sunita Sharma**, Vijay Singh Dalal and Vasu Mahajan (2016) 'Synthesis of zinc oxide nano flower for photovoltaic applications', RAINSAT Materials Today, pp. 1359-1362, **APS2016P009**.

**School of Management****Book Chapters****JOURNALS****INTERNATIONAL**

- ❑ **Alpana Agarwal and Prem Vrat** (2016) 'A bio-inspired model of organizational excellence', Journal of Advances in Management Research, Vol. 13, No. 2, pp. 130-153, **SOM2016J011**.
- ❑ Archana Mehra and **Dhani Ram Aggarwal** (2016) 'Impact of Self-help group scheme of microfinance on the economic development of Mewat in Haryana', International Journal of Development Research, Vol. 6, No. 8, pp. 9185-9193, **SOM2016J012**.
- ❑ Karishma Chaudhary\* and **Prem Vrat** (2016) 'Optimal location of precious metal extraction facility (PMEF) for E-waste recycling units in National Capital Region (NCR) of India', OPSEARCH, **SOM2016J014**.
- ❑ **Jaya Ahuja** (2016) 'Modelling the Critical Success Factors of Virtual Teams', Indian Journal of Science and Technology, Vol.8, No.48, pp.1-9,

**SOM2016J015.**

- ❑ **Shilpa Sindhu\***, Sahil Khatkar and Anupama Panghal (2016) 'Fiscal Federalism and States' Economic Growth in India - An Analytical Study', Indian Journal of Science and Technology, Vol. 9, No. 48, pp. 1-7, **SOM2016J016**.
- ❑ Ajay Bohtan\*, **Prem Vrat and Anil Kumar Vij** (2017) 'Supply Chain of the Indian Public Distribution System: a new paradigm.', Journal of Advances in Management Research, Vol.14, No.1, pp.110-123, **SOM2017J002**.

**NATIONAL**

- ❑ **Prem Vrat** (2016) 'Technological Change and Skill Development', RITES, Vol. 18, No. 2, pp. 7.1 -7.14, **SOM2016J013**.
- ❑ **Ruchi Nayyar\*** (2017) 'Digital Marketing at NorthCap University: A Case Study', Indian Journal of Computer Science, Vol. 2, No. 1, **SOM2017J001**.

**CONFERENCE PRESENTATION**

- ❑ Mahima Anand and **Sushmita Biswal Waraich** (2016) 'Employer branding with a flexible workplace: A comprehensive review', International OB & HR Conference on Riding the New Tides: Navigating the Future through Effective People Management, FORE School of Management, Delhi, **SOM2016C004**.
- ❑ **Vibha Dua Satija** (2017) 'Noise Trading in India: An Empirical Study', International Conference on Global Transformation: Unleash, Augment and Reinforce", Delhi Institute of Advanced Studies, **SOM2017C002**.
- ❑ **Ruchi Nayyar** (2017) 'Consumer Buying Behavior: A changed scenario', International Conference on Global Transformation: Unleash, Augment and Reinforce", Delhi Institute of Advanced Studies, **SOM2017C001**.

**School of Law****Research Papers Published/Presented****JOURNALS****INTERNATIONAL NATIONAL**

- ❑ **Pallavi Bajpai** (2016) 'The Sunshine Law under a Cloudy Regime: Transparency and Accountability of RTI Act', In Law, Vol. 3, No. 3, pp. 24-27, **SOL2016J007**.

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**Centre for Languages Learning****Research Papers Published/Presented****INTERNATIONAL JOURNAL**

- ❑ **Divyabha** (2016) 'Dalit Literature: An Insurrectionary Voice', Contemporary Literary Review India, Vol. 3, No. 3, pp. 110-119, **CLL2016J009**.

## Career option after graduation in Civil Engineering



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Hello Friends,

I am sure while reading the title of this article you must be surprised as well as curious to know various options available for Civil Engineering graduates. Normally we imagine a civil engineer working at a construction site, wearing a helmet and struggling with the labourers to get the work done or climbing on an elevator in a high rise building, understanding the complicated drawings of concrete dams or bridges, executing construction work with huge and complicated construction equipments. I know that life is tough for a Civil Engineer and there is no scope for mistakes. It's not easy to undo and redo in the Civil Engineering profession. About one thing I am very sure, in the current scenario, simple graduation will not work just like simply acquiring an MBBS degree takes you nowhere. Today is an era of specialization and post-graduation or specialization is a must.

I will help you choose one of the many options available after you graduate in Civil Engineering. In my opinion, Civil Engineering is real ground engineering where you plan, analyze, design, construct and maintain the built environment. When I see the word

CIVIL, I read it as 'SEE I WILL'. In every phase, the driving force behind a Civil Engineer is passion to construct facilities that help improving the human establishment and to work for the betterment of the society. A Civil Engineer closely works with the needs of the society and for their built environment. From morning till night whatever facilities you use is constructed by a Civil Engineer like supply of safe drinking water after treatment from various intakes; sanitary and sewage collection and their treatment before final disposal; parking facility for your vehicle; roads, railways, highways, tunnels, mass transit system, like Metros, for the safe and efficient transport of passengers and goods; Bridges for crossing river bodies etc. You name it and you will find a Civil Engineer working around you.

### Careers after BTech (Civil Engineering)

What can you pursue after your BTech if you are a Civil Engineering graduate? You have many options and the only prerequisite to be successful is to ensure thorough understanding of the concepts and their applications. There is no short cut to success. You can go for higher studies in India or abroad, Government sector jobs like IES / IAS, PSUs, private jobs in major construction companies like L&T, Tata projects, Gammon India, HCC, SPCL, etc. You can also opt for the teaching profession and join any academic institution as a Lecturer/Assistant Professor after post graduation (minimum) and then PhD, which is a must degree to survive longer in Academics.

### IES / Civil Services Exam by UPSC

Union Public Service Commission (UPSC) conducts national level exams like IES (Indian Engineering Services) and Civil Services exams, annually, and one has to crack these exams to work as civil servants or administrator / officials at various governmental organizations or in the public sector like railways, roads, defence, manufacturing, inspection,

supply, construction, public works, power, telecommunications, etc. For details related to course content, eligibility and selection procedure, and future prospects please visit the website <http://www.upsc.gov.in/>. Aspirants for these competitive exams have to start preparing during the early years of their graduation. Apart from maintaining a good CGPA or score during their course work in the BTech programme, it is important to work on your soft skills and personality development.

### GATE Exams

The important national level competitive exam is GATE (Graduate Aptitude Test in Engineering) which is conducted by any one of the IITs or IISc, on rotation basis. In India, cracking GATE with a good score and All India Rank is an essential requirement to get entry to various public sector units (PSUs) as well as for pursuing higher studies, i.e., MTech in various branches of Engineering in any of the IITs, IISc or Institute of national importance. MHRD recommends monthly scholarship to GATE qualified students pursuing higher studies in Government institutions or AICTE approved colleges. Cracking GATE also requires preparation during the early years of graduation and one has to be technically very strong with thorough understanding of the concepts and related theoretical knowledge.

### Pursuing Higher Studies (MTech/ MBA)

Students with valid GATE score can pursue MTech as well as avail teaching assistantship (TA) at a University. One can also opt for a management programme like MBA after cracking another important national level exam CAT (Combined Aptitude Test) or opt for management courses in Construction Engineering from reputed institutions like IIM NICMAR, Pune, National Institute of Industrial Engineering (NITIE) – Mumbai, School of Planning and Architecture, Delhi and many more. In any case, qualifying and scoring good rank in one national level exam is a must



to excel in your professional life. So fasten your belt to fly!!!

### Higher Studies Abroad

Through GRE, TOEFL, IELTS, you can also choose going abroad and pursue higher studies abroad in countries like US, UK, Australia etc. Through student exchange programmes in universities and colleges you can get a chance of studying abroad, spend two years in the foreign university (after your 3<sup>rd</sup> year) and get an MS degree from abroad.

### Law / Arbitration / Auditing

A qualified civil engineer can also become an independent arbitrator and proceed for empanelment in various

government organizations or associate himself/herself with private organizations. This requires a degree in Construction Law as well as a full time course on arbitration. Auditing is another field where a Civil Engineer can try his/her luck. Nowadays various civil engineering labs require NABL accreditation as per Government norms. This requires auditing of management and technical procedures of the lab under scrutiny. To be a qualified auditor, one has to go through various training programmes conducted by Bureau of Indian Standard (BIS), NCB-Ballabhgarh or any other organization as recognized by NABL. One can visit the offices of these organizations or explore through the information available on their website.

For proper guidance one has to get in touch with qualified auditors and discuss to explore various possibilities.

### Interior Designing

Another upcoming field is interior designing and there are many institutions that offer certification courses in interior designing. If you have a passion for it just go for it! Many big players are waiting to hire you!

Never Lose Hope!! Just move on .....Life is a journey, Enjoy it with a smile on your face!

All the best

## Letter of a daughter to her divorced parents



**Ms Jyotika Pruthi**  
Assistant Professor  
Dept of CSE&IT, NCU

Dear mom and dad,  
Do you remember me?

You gave birth to someone and that someone is ME.

Your blood flowing in my veins, my eyes brown like you mommy, my nature is just like you daddy!!

I was three years old: you both got divorced since then I have been giving divorce to myself every day!!

My heart does not call you my parents anymore – it's just the childhood pictures that say so as that's the only last

place I saw you both together with me!!

When my teacher asks me to draw painting of my family, my pencil falls down as I do not know nor will I ever, know what it's like to have happily married parents.

When parent's day is celebrated in my school, my classmates dedicate their performance for their parents and I dedicate a feeling of frustration.

My friends tell me how it feels when parents take them for an outing, I can't even tell how it feels to sit down with the parents and have dinner, I can't tell how it feels to open presents together on birthday, I can't tell how it feels to go on a vacation with your family.

What I can tell them is how it feels when you have to spend two days with mom, two days with dad, and four days with mom, four days with dad. This cycle is repeated and I call it my vacation, I am with mom I miss you daddy, I am with dad I miss you mommy and it goes on and on.

This world horrifies me as a monster –I have no safe place to hide myself!

Home you said is the safest place, I have no home now, and I am even not orphan, may be orphans are happier than me, I

pack my bags and keep roaming, I fall down and I keep falling, I bleed and I keep bleeding, I cry and I keep crying.

I was like an egg, you had to shield me and now I am an egg that's fallen from the nest, all unshielded from the world!!

So much unshielded that a man comes every night and forcefully pushes me onto the bed and then I call you daddy –help-help-help!!

My pain does not matter to you, for you both winning arguments over each other is more important.

I realise every day that you both married a wrong person, then I took a birth from a wrong person so, I am somehow wrong too.

Books teach me that sorry makes every argument come to an end but you both proved that ego is far stronger than the word sorry.

Romeo and Juliet are dead for me now; you both have proved there is nothing like "unconditional love".

I am sad, mad, scared, worried, ashamed, guilty, confused, shocked, and angry.

I hate men now and you have taught me

that I should never marry -If my own parent's marriage didn't work out, how can mine work?

I would make sure that I do not fall in love, because at the end only arguments win, love loses the game!!

Daddy since now you have got married again, but step mother hits me every

morning, I hate her daddy!!

Can you please be my parents again? Can you both give me birth again??

Can you give me my life exactly as it was when I was 3 years old!!

I need love, attention, nurturing, affection, pampering, I want to sleep on your lap.

I don't want to be called as a child of

divorced parents.

I wish to draw a painting of a happy family and write another poem titled as "Letter of a daughter from happily married parents"

With Love,

Your daughter

## Personality Grooming vis-à-vis Communication Skills: Ladder to Success



**Dr Payal Khurana**  
Head, Centre for Languages  
Learning, NCU

Personality is an unbroken series of successful gestures. - F.Scott Fitzgerald

Personality grooming plays a crucial role to attain success in life and especially at workplace. A well-groomed person is able to create a niche for himself in this highly competitive corporate world. Effective Communication skills are a part of personality grooming.

Communication skills also play an important part in the success of an organization. Organizations directly dealing with customers face-to-face prefer employees those who have excellent communication skills because they help in building relationship, planning, organizing, directing and controlling. They are the brand ambassadors of a company and people know about or judge the company through its employees. It is important that one should have technical knowledge but conveying one's ideas

effectively with convincing ability is the key requirement. Those who are well-versed in the trade are sought after. Communication skills cannot be taught, but can be developed through proper training.

Personality grooming and communication skills are dependent on each other and they both in combination are the stepping stones to success. A person, who wants to be successful, should imbibe these traits for a confident and impressive personality. A person's success and promotions in career depend on these two mainly. Therefore, one should train himself to make a difference in life. People who lack these skills will surely lag behind since these play an important role in career enhancement.

Personality grooming, in fact, starts from childhood and includes one's outlook to perceive things, develop positive attitude, interpersonal skills, decision-making and problem solving. Environment at home and school, experiences in life, culture, family background, peers etc. also play an impactful role in developing one's personality. It happens mostly that we are impressed with some people and would like to see them again, whereas some people seem to be repulsive in the first meeting itself, this is because of their persona which they have developed over the growing years.

Effective communication being an important part of personality grooming, plays a major part in grooming a person's personality because it trains a person to say the right thing, at the right time and the

right place, and is an essential ingredient for success. It makes a person confident and expressive. The way one expresses himself and conveys his ideas is a very important factor. It helps in developing an impressive personality and also improves interpersonal skills of an individual. This further leads to better relationships at work and in personal life, which is again very crucial to succeed in today's competitive world. Lacking good interpersonal skills lead to stress in life.

Along with better communication, personal grooming also improves one's body language, which is a very important tool of non-verbal communication. As the popular adage goes, "Actions speak louder than words", body language should be worked on to enhance personality manifold. Personality grooming also includes being an active listener, giving chance to others to voice their concerns and also understanding other person's viewpoint and being empathetic, if the situation requires.

All the above are potent ingredients to enhance one's personality and help to reach the heights of success.

## A Unique Start-up Culture in the making



**Dr Sushmita Biswal Waraich,**  
Associate Professor, Head,  
School of Management, NCU

While a clarion call for ‘Make in India’ and ‘Startup India’ has been made, the success of all such ventures largely depends on the values and beliefs inculcated by student during the early years, without which the dream of entrepreneurial India will be distant

When we talk about ‘start-up culture’, what is it all about? The Cambridge dictionary defines ‘start-up’ as a small business that has just been started. Culture refers to values, beliefs, attitudes, customs and social behaviour. Attaching the word ‘culture’, it is to be automatically understood that culture cannot be created in a day.

The Government has been very ambitiously planning and playing a critical role in encouraging the start-up culture. Apart from the Government, other entities too play a significant role in instilling the entrepreneurial spirit. This role needs to be played (and the required mind-set developed) during the earlier part of life rather than when the student is stepping into higher education. Here, it is crucial to ponder on the role played by parents and educational institutions.

Start-ups, with the accompanying challenges, are quite vulnerable in the business world. Though ‘start-up’ is used for new entrepreneurial ventures, in today’s world of privatisation and competition a ‘start-up culture’ is very pertinent even for established businesses.

Looking at it proactively, this spirit needs to be inculcated, nourished over a period of time — ie including the formative years. Subsequently, at the higher educational level, this spirit can be further built on and skills can be honed. Imbibing certain values and beliefs for the entrepreneurial attitude needs to be done from a very young age. Parents being the first point of contact play an active role. During the growing-up period, apart from academics, exposure to different experiences is equally important.

Thus, the entire process of personality development plays a crucial role. As it is said, “Rome wasn’t built in a day”. Similarly, time needs to be dedicated to developing this culture. Parents need to inculcate certain values and beliefs which at a later stage culminate in an entrepreneurial personality. Children from a very early age need to be put into situations where they need to take independent decisions. These decisions may be in terms of making a choice of subjects, career options, following one’s passion as well as in other situations.

The desire for autonomy should be reinforced rather than being forced upon. This would contribute to their self-confidence as well as a better decision-making ability at a later stage. Today, with the rise of ‘helicopter’ parents imbibing the right attitude could be a matter of concern. Too protective an environment by parents would only be an impediment in the risk-taking ability of the younger generation.

Children should be made to realise early in life that shouldering responsibility and achieving the same is important and more satisfying than money. Parents may go over-board in motivating their young ones through external rewards, whereas it would be better if the young ones realise it sooner that they need to do things for internal satisfaction and be motivated intrinsically.

Moreover, the youngsters need to be educated about solving problems in the midst of adversity and scarce resources rather than comfort and abundance, which would be in sync with the start-up culture. Additionally, they must be encouraged to

look at problems as challenges. They must come up with not one but many alternative solutions to the problems.

Needless to say, educational institutions do play an equally important role. These should become grounds for encouraging experimentation and thinking differently. Even if certain mundane activities need to be done, there should be enough scope for critical and creative thinking and generating innovative ideas.

Students must be encouraged to be unique in their thinking and outlook. A ‘can-do’ attitude, when it comes to taking up new assignments, should be rewarded. Instead of looking down upon failure while experimenting, ample opportunity should be provided to learn and prove oneself.

Enough platforms should be created for students to exhibit certain qualities like creativity, leadership, team-building, risk-taking ability etc. Projects entailing solving different problems of the society through new ideas need to be encouraged. Instead of the tried and tested methods of teaching new ways need to be incorporated. Teachers play a very crucial role when it comes to nurturing these attributes. Schools should not let it go, assuming that it would be taken up at higher levels.

Yes, there is a lot of emphasis being put on ‘Make in India’, ‘Skill India’, ‘Startup India’ etc. However, unless these values and beliefs are inculcated during the early years, entrepreneurial India may remain a distant dream. Rather than giving importance only to academics, fostering the required skills should be paid equal attention too. But personality development, for becoming entrepreneurs should not take a back seat.

Dr Sushmita Biswal Waraich, Associate Professor, Head, School of Management

The above article was published in the national daily, Pioneer, on 4 June 2017



## Make in India - a Boon for Indian education system



**Ms Rekha Mathur**  
Sr Editor, NCU

The 'Make in India' initiative by Prime Minister Narendra Modi that is aimed at transforming India into a manufacturing hub can prove to be relevant in the education sector too. India is a huge reservoir of talent with the demographic dividend in its favour and having the highest number of scientists, doctors, engineers, businessmen and opportunities in the young age profile.

China and India as two powerful emerging economies are strengthening their business and trade ties for mutual benefit. Both countries hold ample opportunities that can be exploited in the best possible manner through 'closer developmental partnership'. 'Make in India' is acting as an excellent facilitator in inviting potential partners and investors around the world. It has significantly attracted China, having vast foreign exchange reserves waiting to be deployed overseas to invest in India where the cost of capital is still relatively high.

Economic development and enhancing human capabilities through higher education and skill development go hand in hand. In May 2016, Hon'ble President Shri Pranab Mukherjee witnessed the signing of MoUs between ten universities of India and China to create a "collaborative platform for academic cooperation in the areas of research and education, joint seminars and exchange of faculty and students". The collaborative research projects with Chinese institutions could lead to better academic synergy apart from understanding of issues of mutual interest. The MoUs aim to bridge regional educational disparity in both countries and fill the knowledge gap.



Under the 'One Belt, One Road' (OBOR) initiative, Chinese institutions are increasingly encouraged to go abroad in search of new investments and new opportunities. The recent London Times Higher Education Supplement ranking of the world's top 200 universities included three in China and one in India (an Indian Institute of Technology at number four, the specific campus was not specified). Joshua Mok Ka-Ho, vice-president and Chair professor of comparative policy at Hong Kong's Lingnan University says, "As a developmental state with a strong political will to do well globally, the Chinese regime will try every means to position the country and steer the resources from the whole nation to make sure some of their selected universities become globally leading". China is building some research-based universities that are able to compete with the world's best institutions.

In his first class on 5 Nov 2014, after taking over as Honorary Professor at Peking University, former President Late Dr APJ Abdul Kalam called for Sino-Indian joint space collaboration and interface between universities of the two countries on development themes. "I believe that the very act of universities of the world working together will be a major factor in better understanding of the different cultures and contribute significantly to the peace and prosperity of the world", Dr Kalam said.

Many Chinese universities and industries have shown keen interest in the Prime Minister's call, and have collaborated with Indian universities in recent times. We can name a few like, The Indian

Institute of Technology, Bhubaneswar; MDI, Gurugram, The NorthCap University, Gurugram; Xavier Institute of Management and Entrepreneurship, Bangalore; Nalanda University, Bihar and others. Such Indo-Chinese collaborations can bring revolutionary changes in the education system of both India and China. It can potentially eliminate the existing flaws of the Indian education system along with strengthening education as well as the economy of the country.

### *What benefits will the students get?*

#### **Knowledge exchange and technology transfer**

Both the countries are developing rapidly where technology transfer and knowledge sharing can act as a catalyst for development. The common goals can be achieved through cojoint efforts. When two universities collaborate, it results in abundant knowledge sharing not only at the student level but the faculty too undergo new experiences. It assists in opting for the best academic practices and standards.



### ***Excellent exposure via student exchange programmes***

'Make in India' in the education sector has called upon many Chinese universities that are offering student exchange programmes. It offers an extensive platform to students in terms of fostering greater intellectual and cultural exchanges that lead to better understanding between the two countries. This enhances the overall learning experience of the student that further adds to the overall grooming of the student.

Better scholarship opportunities for Indian students

Collaborating with Chinese universities can further widen the scope of scholarships for Indian students making the migration smoother. The swift migration will not only open the door of employment opportunities for individuals but enhances the adaptability.

### ***Increased employability through multidisciplinary skills***

The collaborations of Chinese industries

with Indian universities will not only lead to knowledge sharing but also in imparting vocational skills which will definitely increase the employability of students. Industry academia collaboration will also provide access to industry environments for applied and problem based research activities. The industry will provide education, relevant skill training and certification and assessment support to the university. Indian students equipped with Chinese manufacturing skills will tend to be absorbed quickly by the Indian industry.

### ***Flexibility in courses and jobs***

Our education system is known to be rigid, generally following the conventional theoretical approach to learning. Collaborative programmes will encourage the Indian universities to adopt a more practical approach having flexibility in courses to meet the changing needs of the students. Generally students now-a-days prefer to work while getting their education for

simultaneous industrial exposure.

### ***To Sum up***

India's export earnings presently depend on a few sectors, like information technology, pharmaceuticals and specialized auto parts, but to match China in its range of manufacturing capacity and tech capabilities the youth capital has to be well educated, tech-savvy, possessing expertise in vocational and industry/business relevant skills. If India and China set aside their differences and cooperate and collaborate in the field of higher education, limited resources will turn into vast resources that will bring peace and prosperity to the region. Policy framework and modalities should be specifically worked out to leverage full benefit of collaborations as issues regarding regulations remain key challenges.

## Short Poems



**Deepika Deswal**  
Dy Manager - HR

*Expose the layer beneath the surface  
A stab won't do, all it needs is a caress  
My wings cannot walk  
Delirious with knowledge  
No one matches my pace  
My whereabouts no one can stalk*

*Would take a lifetime  
If I am heard at this rate  
We are divided by love  
Let's come together by hate.*

*You see blacks, I focus on whites  
The wrongs for you are my rights  
Pat me your way fine, by me  
But chide me the way I deserve to be  
I have learnt the trick  
Leave before I come  
Pour not me your wine  
I prefer my venom*

*Bizarre is the state  
Black is my ink  
Black is my fate*

*I follow my inner call  
Write even if it's not read  
Don't fight for life  
Live it before you're dead  
Be your own person  
make your own road  
Don't lose face  
If others have raced ahead*

*They won't stop to look  
All have their keys  
Let them go mad and deranged  
Cos the locks are changed.*

*Air between you and me is held by a secret  
Craving for audience before we forget  
Plans and promises remain intact  
Am keeping my part of the pact  
You hide yours I hid some  
Hush I say, You become mum  
Let them search they can hit us  
Without any revelation there's no fuss  
Warm in our disguise we carry on  
The secret shall remain unknown*

*Shouting silence is bound to be heard  
It calls you without a word  
Peer into me take a look  
Search every corner every nook  
My joy is locked away in pain  
I try to jump but all in vain  
Hand me those smiles which you put on  
I wanna seem happy before I'm gone*

## Proud to be part of Dean's List

### Dec 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.



#### Odd Semester 2016

##### SCHOOL OF ENGINEERING & TECHNOLOGY

SAHIL SHARMA  
SARTHAK AGARWAL  
NITIN  
PANKAJ DAGAR  
SUKRIT SHARMA  
AADITYA VERMA  
ABHISHEK JAIN  
AKANSHA MALLICK  
ARCHITA RAJ  
CHARISHA PHIRANI  
GEETIKA SINGH  
PIYUSH  
RAHUL  
SHUBHAM GARG  
SMIRITHI RAMASUBRAMANIAN  
SURBHI PAPREJA  
VARUN KAPUR  
AADISH GOEL  
ADITI GUPTA  
CHHAVI JAIN  
DINKY KHATRI  
MADHUR BAHL  
RUCHI ARORA  
SAKSHI GARG  
DEVANSH BHATIA  
GARIMA BHAYANA  
LAKSHAY CHAUDHARY  
NANDINI GUPTA  
ROHIT MALHOTRA  
SHREYA CHADHA

AKSHAY KUMAR BHATIA  
DIVYA BAJAJ  
RITIKA SHARMA  
SIDHARTH SHARMA  
VIBHOR MITTAL  
ABHISHEK JAIN  
AISHWARYA BASOTIA  
HEMANT HASIJA  
ISHANT BHARDWAJ  
RADHIKA AGRAWAL  
SIMAR PREET KAUR  
MEHEK CHANDNA  
RAHUL SHARMA  
SAMBHAV DALAL  
VIKAS KUMAR  
VINIT  
BALJINDER SINGH  
MAYANK JUNEJA  
NIKHIL JUNEJA  
JITENDER VERMA  
SUMIT JAIN  
TANYAM  
DINESH DANGI  
SUYASH ABHAY GHIRNIKAR  
LAVEENA GARG  
PREETI DAGAR  
SCHOOL OF MANAGEMENT  
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SANDHYA  
APOORVA MANGLA  
KAJAL JAIN  
NIHARIKA MARYA

RAVEENA  
RISHAB GABA  
AARUSHI GILOTRA  
GUNJAN SHRIVASTAVA  
KIRTI  
SURBHI SHAH  
VANDANA SONI

##### SCHOOL OF LAW

OJASWI KULSHRESTHA  
MUKUL SHARMA  
TANISH KHANDELWAL  
AROHI KASHYAP  
MOHIT VATS  
TASHI VAISH  
HIMANGSHU RATHEE  
ANUBHA YADAV

##### PG

##### SCHOOL OF ENGINEERING & TECHNOLOGY

ANKITA GUPTA  
NINNI VAISHNAV  
PURNIMA YADAV  
NEETU GOEL

##### SCHOOL OF MANAGEMENT

MITASHA SAPRA  
JATIN ARORA  
VIMAL DAHIYA

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.





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