

Newsletter



Vol. 99 January 2020

THE NORTHCAP UNIVERSITY

(For internal circulation only)

NCU Activities

71st Republic Day Celebrations

India's 71st Republic Day was celebrated at The NorthCap University with great enthusiasm & zest. The day began with flag hoisting at the campus, followed by National Anthem. This was followed by other speeches, patriotic songs, poem, dance & cultural programmes.



focus on a specific theme every year. For this year, the theme is 'Electoral Literacy for a Stronger Democracy.' India is the largest democracy in the world with about 91 crore citizens registered as voters. The ECI initiated the celebration of National Voters' Day in India to highlight the value and importance of every vote. Its main purpose is to encourage, facilitate and maximize the enrolment of new voters and active participation of the active voters. (SOL2020002)



MoYAS Survey

UN Volunteers (UNV) India is supporting the Ministry of Youth & Sports Affairs (MoYAS) in review and revision of National Youth Policy 2014. We appeal to everyone to fill the survey which will collect your perspective in various aspects affecting young people.

National Voters Day Celebration

School of Law, The NorthCap University, Gurugram celebrated National Voters' day on 24 January 2020. Voters Day is celebrated in India on 25 January since the year 2011 to mark the foundation day of Election Commission of India (ECI).

ECI is a constitutional body that was established in 1950 to overlook the smooth running of elections in India that guarantee universal adult suffrage to the citizens of India above the age of 18. National Voters' Day celebrations

Cleanliness Drive

Aim of the event:

The primary objective of the event was to cognize everyone about cleanliness, hygiene as well as to conduct a cleanliness campaign in and around the college campus.

About the event:

The drive started with around 50 students, faculty and non-faculty members gathering for a rally. The volunteers spread the message of 'Hum sab ka ho ek hi naara, saafsuthra ho Desh Hamara' and 'Ab sabko jagaana hai, gandagi ko door bhagaana hai'. The main motive of the rally was to sensitize the students about the vitality of a clean environment. To start with, the volunteers proceeded towards the University ground and other areas within the campus along with banners on cleanliness. This was followed by a cleaning drive which included the collection of litter. The cleanliness drive was a huge success and an enlightening experience for all the volunteers and crowd. The drive was coordinated by Dr Jahanvi Bansal (SAL sub-committee Member) and Dr Shilpa Sindhu (NSS Co-ordinator).



Aim of the event:

The Primary objective of the event was to cognize everyone about cleanliness, hygiene as well as to conduct a cleanliness campaign in and around the college hostel.

About the event:

The campaign with the participation of hostel girls, hostel warden and co-workers, came with a motive to clean the hostel and surroundings of the hostel. The volunteers spread the message to not only clean themselves but the area where they are living in. The main motive was to aware the girls about how they can maintain a good hygienic level in their hostels, from proper disposal of the sanitary pads, to how they can keep themselves away from many skin or internal diseases. The students also helped in cleaning the kitchen area and the dining area. This makes a huge contribution to the cleanliness drive successful. The event was coordinated by Dr Jaharvi Bansal (SAL sub-committee member) and Dr Shilpa Sindhu (NSS Coordinator).



News from the School of Engineering and Technology

Department of EECE

- EECE department organized an industrial visit to Green star Research and Development India Pvt.Ltd at IMT Manesar, on 20 January 2020 for BTech 6th Sem. ECE students. In the beginning, students were given a presentation about their ongoing BLE project and after that project



coordinators of Green Star have suggested things to students which students are expected to be incorporated and company officials have shown the EVM and asked students to work on this EVM and also explore more opportunities for the rest of the students to work on live projects .The visit was coordinated by Dr Anjali Garg and Ms Amanpreet Kaur. (ECE2020V001)

- EECE department organized a session on 'Vocabulary building' with TIME education on 15 January 2020 for 2nd, 3rd year ECE students under SPIE Society. The objective of the session was to understand how to build up effective vocabulary and its usage in daily lives. Students actively participated and learnt good vocabulary and tips to remember the synonyms and sentence formation using effective vocabulary words. This session was coordinated by Dr Anjali Garg and Ms Amanpreet Kaur. (ECE2020W001)



- EECE department organized a session on Group Discussion Preparation and Mock GD for 2nd, 3rd and 4th year ECE students, conducted by Ms Tarannum Raza from TIME Education under SPIE Society. The objective of the session was to develop basic communication skills and develop a sense of bonding among the students. Students enjoyed the GD tips shared by the speaker which was followed by a mock GD session in two groups and put forward their views on different topics in a healthy manner. This session was coordinated by Dr Anjali Garg and Ms Amanpreet Kaur. (ECE2020W002)



- Tree Plantation programme was organized by the The NorthCap University on 17 January 2020 under SPIE Society. Students showed great enthusiasm in planting many saplings to keep the environment clean and maintain the sufficient level of oxygen in the environment. This event witnessed a keen response from the students as well as faculty members. The event was coordinated by Dr Pankaj Rakheja and Ms Amanpreet Kaur. (ECE2020O003)



- ❑ Mr Pankaj Rakheja (Regn. No. 15ECD004) defended his PhD thesis on 4 January 2020 on the topic 'Enhanced Image Encryption and Water marking Systems using Hybrid Techniques' under the guidance of Dr Rekha Vig and Dr Phool Singh. (ECE2020001)
- ❑ Mr Himanshu Khanna (Regn. No. 15ECD003) defended his PhD thesis on 4 January 2020 on the topic 'Performance Evaluation of FSO and Mixed RF-FSO systems using various Relaying Protocols for Different Channel Conditions' under the guidance of Prof. Swaran Ahuja and Dr Mona Aggarwal. (ECE2020002)

Department of CSE

Faculty Activities

- ❑ Department of CSE organised a session on 'Group Discussion Preparation' for third year CSE students on 16 - 17 January 2020. The sessions were conducted by Ms Tarannum Naseem Raza from TIME Education. She is a professional career counsellor having more than 20 years of experience in education and training industry. Students voluntarily participated in mock GDs. The Speaker also shared the tips for preparing for group discussions and personal interviews (PI). The event was coordinated by Dr Sumanlata Gautam and Ms Prema Singhal. (CSEO2020001)



- ❑ The Department of CSE and IEEE NCU organized a skill development program on Internet of things for B. Tech CSE, ECE and ME students on 22 January 2020. The focus of the session was to give a practical exposure to students on IoT. Around 40 students from different years and all over branches attended the session. Students created a webserver for controlling electrical appliances, made a web page form, obtained entries on remote system and interfaced LED dot matrix under the guidance of Dr Pankaj Rakheja and Dr. Sumanlata Gautam with the help of EECE lab technician Mr Pinaki Dutta and student coordinators Mr Anshdeep Singh Sehgal and Mr Vishesh Kurseja. The event was coordinated by IEEE student members Mr Virendra Pratap Singh and Mr Soumye Kumar along with Dr Pankaj Rakheja, Ms Srishti Sharma and Ms Vaishali Kalra. (CSEO2020002)



- ❑ IEEE NCU organized poster designing, slogan writing and speech competition on theme 'Swachhta' on 20 January 2020. Around 25 students from SOET, SOM & SOL participated in the event and showcased their creativity and innovative ideas. The event was coordinated by Dr Pankaj Rakheja, Ms. Srishti Sharma and Ms. Vaishali Kalra with help of student coordinators Mr Rohit Negi, Mr Siddharth Katoch, Mr Shobhit, Mr Virendra Pratap Singh and Ms Yamini. (CSEO2020003)



- ❑ Four students from the university Mr Virendra Pratap (17CSU207), Mr Yashdeep Lamba(17CSU210), Mr Divyam Sachdeva (17ECU007) and Mr Vatsalya Upadhyay (19CSU341) participated in the Sub-Section Congress (RSC-2020) organized by IEEE Student Branch Manipal University Jaipur, Rajasthan on 12 January 2020, an initiative by the IEEE Rajasthan Sub-section and IEEE Delhi Section to improve networking among the student branches. The event was intended to attract inquisitive minds from across the state to interact, participate and discuss the evolving and changing technology. Mr Virendra (17CSU207) was also a part of the organizing committee of RSC 2020. (CSEO2020005)



- ❑ As the search for the most brilliant interns began with the beginning of New Year 2020, on 16 January, The NorthCap University witnessed unusual energy when MTV came to the campus to kick start the new season of MTV LinkedIn 'Get a Job' bringing in some exciting internship opportunities with popular firms like HCL, Microsoft, Swiggy, LinkedIn, Ajo, etc, for students in the fields of business development, brand marketing, AI engineering and event management. Over 500 students registered themselves during the event, with some being specially recommended. (CSEO2020006)
- ❑ An educational movie screening of 'Snowden' was organized for second and third year Cyber Security students on 15 January 2020. Edward Snowden was a top contractor at the National Security Agency. He exposed the virtual mountain of data that is being assembled to track all forms of digital communication - not just from foreign governments and terrorist groups, but from ordinary citizens as well. When Snowden decided to leak this classified information, he became a traitor to some, a hero to others and a fugitive from the law. It was organized by Ms Kanika Gupta and Dr Mehak Khurana. (CSEO2020007)

Industrial Visit

- ❑ Department of Computer Science Engineering, The NorthCap University, Gurugram organized Industrial Visit at MSIL, Gurugram on 14 January 2020 for BTech Students. The objective of this visit was knowledge sharing i.e. making the students aware about the latest tools and technologies that Maruti Suzuki India Ltd. uses like: robotics etc. and to explore the job opportunities in IT department of MSIL. The visit was

attended by 21 B.Tech. students along with three Faculty members. The team at Maruti Suzuki, guided the students through the entire process, giving them details about the functions of the gigantic automatic machines. The whole event included the following activities: Presentation about MSIL by Mr Alok Srivastava (member, PR Team) and Plant Visit – facilitated by Mr Alok Srivastava and his team (Member PR Team). This visit was coordinated by Dr Sujata, Ms Meghna Luthra and Mr Pratik Malik from CSE department of The NorthCap University. (CSEO2020008)



- ❑ Ms Neeti Kashyap has completed an UdeMy online course on JavaScript: Build Real Projects. (CSEO2020011)
- ❑ CSE department has taken a new initiative to set up the NPTEL/SWAYAM local chapter in The NorthCap University which will be led by faculty member, Ms Vaishali Kalra. The purpose of taking this initiative is to conduct the MOOC Courses successfully in the university. NPTEL courses will help students in getting in-depth knowledge on subjects and to prepare for GATE Examination. Upon successful completion of a course, the students will get a certificate from IITs/IIS. This program will give our University a visibility and recognition at larger group. (CSEO2020012)

Department of Applied Sciences

CBSE-National Science Exhibition from 16-18 January 2020 at Suncity School, Gurugram



- ❑ To mark India's 71st Republic Day, NCU Chapter of the Institute of Electrical and Electronics Engineers Computer Society organized a Quiz Competition on 24 January 2019. The motive of the quiz was to enhance patriotic fervour in the students and celebrate the occasion when the Constitution of India came into effect. A total of 29 students, along with five IEEE coordinators participated in the same. The quiz comprised of 25 questions related to both, Republic Day and the Constitution of India, and was conducted on Kahoot.it platform. Ms Srishti and Ms Poonam Chaudhary were the faculty coordinators for the event. Tarun, Harshit, and Deeksha bagged the first, second, and third positions, respectively. The event was a success, and everyone appreciated the gesture of organizing events that promote patriotism. (CSEO2020009)



Sustainable development is the pathway to the future we want for all. It offers a framework to generate economic growth, achieve social justice, exercise environmental stewardship and strengthen governance.

Dr Hukum Singh (APS department) was invited by CBSE as Esteemed Judge for judging the science projects and models at Suncity School Gurugram which had been chosen to host the CBSE National Science Exhibition/Fair 2019-20 on 16, 17 and 18 January 2020. There were around 600 projects across the country of CBSE affiliated Indian Schools. It showcased the projects and research of the students from schools across the country. These schools had emerged victorious at the regional levels of the event. The event was inaugurated by Ms Anita Karwal IAS, Chairman CBSE.

The event was aimed at providing a platform to the students to demonstrate such learning which encourages construction of knowledge by connecting new ideas to existing concepts. The theme was 'Science and Technology for Sustainable Development' with a thrust on Water Conservation and sub-themes were Sustainable Agricultural Practices, Cleanliness and Health, Resource Management, Industrial Development, Future Transport and Communication, Educational Games and Mathematical Modelling.

After judging all the projects best 27 projects were declared winners. (APS2020004)

- ❑ Dept of CSE organized an FDP on Penetration Testing. The purpose of this FDP was to expose CSE faculty members to real-time vulnerabilities, launching attacks and testing the security of computers. This training included different ways of gathering information about the target and consequently discuss various ways to discover and exploit many vulnerabilities to gain access of the target machine. This was conducted from 17- 24 Dec 2019 and was conducted by Dr Mehak Khurana. (CSEO2020010)



Mentor-Mentee Meetings



Prof. Kehar Singh
Ex-Dean & Emeritus Fellow,
IIT Delhi
SS Bhatnagar Awardee

Faculty Mentor, Prof. Kehar Singh, Hony. Distinguished Research Professor visited the Department of APS to motivate Ph.D. research scholars and faculty members on 24 January 2020. Faculty members of APS, CSE and ECE Departments interacted about the current research area. Prof. Singh motivated them to inculcate best research practices and to aim for publications in reputed journals. He also discussed various topics related to optical image processing and other emerging areas. (APS2020005)

Department of Mechanical Engineering

Alumni Interaction and Contextual Learning

- The Department of Mechanical Engineering organized an Alumni Interactive session on Supply Chain Management: A case study on OYO-for final year mechanical Engineering students studying Supply Chain management course on 21 January 2020. The session was conducted by our Alumnus Mr Kunal Upadhyay (Alumni of 2013 batch) working as area supply manager with OYO. The speaker discussed the basic concepts of Supply chain management like Bullwhip effect, Just In time etc. The speaker linked those theoretical concepts with the practical case study of the same in context of OYO. The session was coordinated by Mr Anmol Bhatia, Assistant Professor. (MED2020O001)



- Mr Ritik Bhatia, student of Mechanical Engineering Department participated in the university project exhibition to showcase the projects done in Tinkering Lab ECE IEI students' chapter on 12 and 13 December 2019. His project 'Automatic Gas Stove Controller' won the first prize (cash Rs 1000 + appreciation certificate). The project was mentored by Dr Satnam Singh, Assistant Professor, Mechanical Engineering Department. Patent on this project has been published in the month of December 2019 'Automatic universal LPG stove control device for boiling of liquids, Publication No.: 51/2019'. Further, to commercialize the project, team is working on development of small size saleable product through Vice-Chancellor Innovation Funding Scheme (VCIF, NCU). (MED2020O002)



Department of Civil & Environmental Engineering

Department Activity

Interactive session on 'Entrepreneurial Opportunities for students in Real Estate'

An interactive session on 'Entrepreneurial Opportunities for students in Real Estate' was organized for Civil and Mechanical Engineering Final year students on 20 January 2020. The speaker was Prof. Anupam Saxena, Associate Dean and Director, School of Real Estate & Structures, Noida. Prof. Saxena provided the insight to the skills required to become an entrepreneur. He discussed various areas where students can explore opportunities for

innovative ideas. He suggested students to continuously work to improve their skills and engage in good project works and assignments. He discussed about the work of a few young entrepreneurs. He also provided information regarding latest technologies like 3D Printing and building information system (BIM). Students were enthusiastically engaged during the session and gained vital information. It was organized and coordinated by Dr Vaishali Sahu. (CEE2020G001)



Special Drive on Water Conservation Under Swachhta Pakhwada Scheme 2020

The Students of Department of Civil & Environmental Engineering conducted a special drive on 'Water Conservation' under Swachhta Pakhwada Scheme 2020, Ministry of Jal Shakti, GOI on 28 January 2020. The prime objective of hosting this drive was to bring positive change in people towards water conservation. The students on the event day created awareness about the need to conserve water by distributing Dos and Don'ts and conducted quizzes. The team of students were highly motivated and made the general masses also realize the importance and need to take steps for conservation. The event was coordinated by Mr Lokesh Choudhary. (CEE2020O001)



Conference on 'Empowering Students to be Industry Ready' attended by Faculty

Dr Ram Karan Singh attended The National Conference on 'Empowering Students to be Industry Ready and how to Select Right Career Path' as the resource person from The NorthCap University (NCU) held on 28 January 2020 at Vigyan Bhawan, New Delhi. The Conference was organized by Panasonic India, where it launched education solutions CAREEREX and XCELLT to help students upskill and be future ready. The event was graced by Mr Anil Sahasrabudhe – Chairman, AICTE, Mr M P Poonia – Vice-Chairman, AICTE and Dr Antriksh Johri- Director, CBSE. The conference aimed at bridging the existing skill gap between current education and employment needs for the future. There were several speakers at the occasion including Mr Atsushi Motoya, Head – Panasonic India Innovation Centre and Mr Pankaj Rana, Business Chief, Sanyo and e-commerce, Panasonic India. Dr Ram Karan Singh also interacted and addressed different stake holders and familiarized them with the systems and processes followed at NCU. (CEE2020CA001)



Visit to Gurujal under the aegis of MCG, Gurgaon

Dr Archanaa Dongre and Dr Vaishali Sahu attended a meeting with Ms Shubhi Kesarwani, Program Coordinator & her team of Gurujal, under MCG on 31 January 2020 at their office. The meeting was to explore collaboration with Gurujal. Dr Vaishali Sahu presented an overview of The NorthCap University and the Department of Civil and Environmental Engineering. Ms Kesarwani shared different projects of pond rejuvenation in Gurugram and ways to involve MTech and BTech students in live projects. Competency of the department as third party assessor, student internship and faculty externship was presented. They suggested to submit proposal for possible collaboration. Proposal has been prepared and is under review. (CEE2020V001)

Conference on 'Strategies for Drug Free Campuses' by HSHEC attended by faculty

Dr Ram Karan Singh participated in a conference as a resource person from the NorthCap University, organized by Haryana State Higher Education Council with Art of Living as knowledge partner. The conference was themed on Strategies for Drug Free Campuses with the major objective to establish the importance of the role of higher management in the movement against drug and alcohol abuse. The conference was held on 22 January 2020 at Panchkula. Dr Singh made important recommendations for Higher education policy to make the University campuses drug free. (CEE2020CA002)



Visit to workshop on Redefining Water Space at TERI School of Advanced studies, New Delhi

Dr Vaishali Sahu along with MTech. students, Mr Divyank Suman and Mr Amit Poonia attended a one-day workshop on 'Redefining Water Space', organized by Teri School of Advanced Studies, New Delhi on 28 January 2020. The workshop focused on issues and challenges related to urban water bodies and rejuvenation of ponds. The keynote speakers were from NITI Aayog (Advisor), DHAN Foundation (Chief executive officer), Gurujal (Program Manager) and Delhi Jal Board (Technical Advisor). Success stories of pond rejuvenation from various states of India were presented by various speakers and good practices



towards clean water bodies was also discussed. Breakout session was conducted in small groups on different topics and the outcome of the brainstorming was presented to the audience. The workshop was a good learning and interactive platform. (CEE2020WA001)

News from the School of Management

Visit by students and faculty from University of Massachusetts, Boston

The School of Management at NCU hosted students and faculty members from the University of Massachusetts, Boston on 9 January 2020. The group comprised of students from Europe and America. Vice Chancellor Prof. HB Raghvendra interacted with the group on arrival. Prof. Ram Karan Singh (Dean RDIL, Chairperson – International Cell), Prof. Hemant Trivedi (Officiating Dean-SOM), Prof. Surjit Tinaikar (Faculty UMAas Boston) and Prof. Mohan Agarwal, under the leadership of ViceChancellor Prof. HB Raghvendra discussed about global immersion program for students of The NorthCap University. Student level interaction was led by Prof Agarwal, where students from UMass Boston interacted with students of School of Management. After informal interactions, students from UMass Boston collectively participated in a case workshop along with MBA and BBA students of School of Management, NCU discussing the famous Mumbai Dabbawala case, from various angles of management. At the end of the workshop students from NCU and UMass Boston jointly presented the case learnings. Visitors were delighted to interact with students and learn about the Indian culture. In today's dynamic world, students need multinational and multicultural exposure so that they can learn and develop with global mindset. Such events enable students to collaborate and exchange ideas openly. The event was coordinated by Dr Akshat Aditya Rao, faculty at SOM, NCU. (SOM2020WO002)



Invited as Keynote Speaker in National Conference

Dr Esha Jain was invited as a Keynote Speaker in the National Conference on 'Emerging Technologies Redefining the Financial Sector'. The conference was organized by the Department of Commerce, Management and Computer Science, Mahatma Jyoti Rao Phoolle University, Jaipur on 18 January 2020. She delivered a one hour talk on '10 Technologies that will disrupt Financial Services in the next 5 years' which was well received and appreciated by the audience. (SOM2020CA002)



Best Paper Presentation Award

Dr Swaranjeet Arora, Associate professor at School of Management, The NorthCap University, Gurugram received the best paper presentation award for the paper titled 'Entrepreneurial Intention among Medical Students: A Comparative Study' at XIV International Conference on Rethinking Strategies for Leadership and Governance in Emerging Global Scenario organized by Prestige Institute of Management and Research, Indore sponsored by All India Council for Technical Education, New Delhi on 10-11 January 2020.

News from the School of Law

Workshop on 'Cyber Security'

Legal Aid Society, School of Law, The NorthCap University, Gurugram organized a workshop on 'Cyber Security' in association with The District Legal Services Authority, Gurugram, Haryana, on 22 January 2020. The event was inaugurated by the Chief Guest Sh. Pardeep Choudhry, Chief Judicial Magistrate cum Secretary District Legal Services Authority, Gurugram, Haryana in the presence of keynote speaker Advocate Mr Manish Manocha, Vice-Chancellor Professor HB Raghvendra, Head, School of Law, Dr Archana Sarma, Faculty coordinator & Head Legal Aid Society, Ms Pallavi Bajpai and Member Legal Aid Society, Ms Shiksha Dahiya. The NorthCap University, Gurugram. Sh. Choudhry chiefly talked about cyber-attacks and Adoption of Model Law, 1996 which led to the passing of IT Act and encouraged students to seek help from DLSA as and when required. The Workshop aimed to bring vigilance among the students to remain safe and secure in the virtual world. It was conducted by the renowned IT law expert Mr Manish Manocha who enlightened the students with his vast knowledge in the field of cyber law. The event was attended by 400 students of School of law. The session was concluded with various protective measures by highlighting the importance of antiviruses and password hacks that could keep the society safe and prevent from falling prey to these cybercrimes. (SOL2020WO001)



News from the School of Professional Attachment (SPA)

Recruitment details

DATE	NAME OF THE COMPANY	DEPARTMENT	CORE COMPETENCIES	NO. OF STUDENTS
2 January 2020	Encore Capital Group	CSE	Encore Capital Group is a global specialty finance company with operations and investments across North America, Europe, Asia and Latin America. Through its subsidiaries around the globe, Encore purchases or services portfolios of receivables from major banks, credit unions and utility providers.	3 Selections
6 January 2020	McDermott (CB & I)	Civil Engg.	McDermott is a premier, fully-integrated provider of technology, engineering and construction solutions to the energy industry. For more than a century, customers have trusted McDermott to design and build end-to-end infrastructure and technology solutions—from the wellhead to the storage tank—to transport and transform oil and gas into the products the world needs today.	1 selection

DATE	NAME OF THE COMPANY	DEPARTMENT	CORE COMPETENCIES	NO. OF STUDENTS
6 January 2020	BYJU'S	UG & PG (All students)	BYJU'S is the world's most valuable ed-tech company and the creator of India's most loved school learning app which offers highly adaptive, engaging and effective learning programs for students in classes 1 - 12 (K-12) and competitive exams like JEE, NEET, CAT, and IAS. BYJU'S - The Learning App, the flagship product for classes 4-12 was launched in 2015.	2 selections
10 January 2020	TARAPAN SOLUTIONS	ECE	TaraSpan is a multinational company with headquarters in Canada and India. Our customers include some of the World's foremost technology companies and India's prominent corporates. Our solutions enable Global companies to accelerate and de-risk their business growth and Indian companies to enjoy the benefits of market-leading technology solutions from the world.	1 selection
18 January 2020	CINIF TECHNOLOGIES	ECE & Civil Engg.	CTL is one of the world's leading communication service providers. Our Group was established in the year 2009. CTL has strategic business alliances for a broad spectrum of products and services which allow us to offer the most cost-effective solution to the customer.	1 selection
27 January 2020	Blue Star	ME,EECE	Blue Star is India's leading air conditioning and commercial refrigeration company, with an annual revenue of over 5200 crores (over US\$ 750 million), a network of 32 offices, 5 modern manufacturing facilities, 2800 employees, and 2900 channel partners.	3 Selections
30 January 2020	PLASSER INDIA	CSE	Plasser India manufactures the most up-to-date high performance and highly sophisticated machines for track maintenance, track laying as well as track renewal. The machines for Indian Railways are tailor-made designs with special emphasis on applying the technology most appropriate for the local conditions.	1 Selection



Blue Star campus team during the Pre Placement Talk

Student Speak



Dollie Juneja
Placed with: Deloitte
USI Advisory:
Technology Analyst
Batch 2016-20
BTech - CSE

Courage - "Sometimes not taking a risk is a greater risk". Nothing is worth achieving if it isn't hard. In fact, if something is too easy, there's not much gratification to it. No matter how difficult or challenging the task at hand, even if I didn't feel that I was

getting the right assignment or the proper recognition, I might have given myself permission to mope for a couple of days, and that was it. My goal was to move ahead with even greater conviction, believing that yes, I can make it, and yes, I can do it.

The feeling of being selected in the very first placement drive among around 500 students is something which cannot be explained in words. All the achievements you made in your 20 years life span is on one side and the achievement of being placed in a dream company is on the other side, equivalent to all those achievements.

NCU is the reason behind the holistic development, ready to face contemporary challenges of the corporate world and for your smooth transition from the campus to the corporate world, SPA will equip you with the right kind of skills and attitude so that you can become more effective, efficient and productive in your employer's organization. Efforts of SPA have resulted in quality placements of students over the years, in premier companies like Deloitte Consulting.

All of us need to adopt a simple attitude that we are the CEOs of our own careers and we are responsible for the opportunities we make and the path we take. We have to set the goals and find a way to reach them as nobody else is going to do it for us. That's the attitude I had when I sat for the placement drive to Deloitte.

Dream Big - "Far away in the sunshine are my highest aspirations. I may not reach them, but I can look up and see their beauty, believe in them, and try to follow where they lead." Today, I feel lucky that me and my parents chose NCU to pursue my engineering.

RESEARCH PUBLICATIONS IN JANUARY 2020

APPLIED SCIENCES



DR TEJPAL SINGH CHUNDAWAT
Assistant Prof. - Sel Gr

TITLE 1: Bio-Inspired Synthesis of Platinum Nanoparticles From Fungus *Fusarium Oxysporum*: its Characteristics, Potential Antimicrobial, Antioxidant and Photocatalytic Activities

JOURNAL: MATERIALS RESEARCH EXPRESS

TITLE 2: High Catalytic Activity of Pd Nanoparticles Synthesized From Green Alga *Chlorella Vulgaris* in Buchwald-Hartwig Synthesis of N-Aryl Piperazines

JOURNAL: CURRENT ORGANOCATALYSIS

TITLE 3: Microwave-Assisted One-Pot Synthesis of 2-Substituted Quinolines by Using of Palladium Nanoparticles as a Catalyst developed from Green Alga *Botryococcus braunii*

JOURNAL: CURRENT ORGANOCATALYSIS

TITLE 4: Silica Supported Piperazine Sulfosalicylic Acid: A Reusable and Efficient Catalyst for Synthesis of 2-aryl-benzimidazoles

JOURNAL: INDIAN JOURNAL OF CHEMISTRY, SECTION-B

TITLE 5: Role of Enzymes in Synthesis of Biologically Important Organic Scaffolds

JOURNAL: ASIAN JOURNAL OF CHEMISTRY



TITLE 1: AC Conductivity and Dielectric Relaxation of $\text{Se}_{80-x}\text{Te}_{20}\text{Bi}_x$ ($x=6, 12$) Glasses

JOURNAL: PHYSICS AND CHEMISTRY OF GLASSES: EUROPEAN JOURNAL OF GLASS SCIENCE AND TECHNOLOGY PART B

DR HUKUM SINGH
Associate Prof.

ELECTRONICS AND COMMUNICATION ENGINEERING



PROF. SWARAN AHUJA
Dean-Academics

TITLE 1: On end-to-end performance of variable gain AF relayed cognitive underlay networks

JOURNAL: AUSTRALIAN JOURNAL OF ELECTRICAL AND ELECTRONICS ENGINEERING



DR VANDANA KHANNA
Assistant Prof. - Sel Gr

TITLE 1: DC Analysis and Inference of Noise Margins for FINFET Inverters

JOURNAL: INTERNATIONAL JOURNAL OF ADVANCE RESEARCH AND INNOVATION

TITLE 2: Analysis of 6T SRAM Cell in Different Technologies

JOURNAL: INTERNATIONAL JOURNAL OF ADVANCE RESEARCH AND INNOVATION

TITLE 3: Design of CMOS Operational Amplifier in 180 nm Technology

JOURNAL: INTERNATIONAL JOURNAL OF ANALOG INTEGRATED CIRCUITS

TITLE 4: Design of Voltage Controlled Oscillator using CMOS 180 nm Technology

JOURNAL: INTERNATIONAL JOURNAL OF ANALOG INTEGRATED CIRCUITS



PROF. SWARAN AHUJA
Dean-Academics



DR MONA AGGARWAL
Assistant Prof. - Sel Gr

TITLE 1: End-to-end performance analysis of hybrid VLC-RF system using decode and forward relay in E-health medical applications

JOURNAL: OPTIK

TITLE 2: Error analysis of dual-hop DF relayed underlay cognitive networks over EGK fading channels

JOURNAL: SN APPLIED SCIENCES

TITLE 3: Down-link performance of an LED based visible light communication system through dynamic control of semi-angle

JOURNAL: PHYSICAL COMMUNICATION

TITLE 4: Directional Beam Based LED Deployment for a Short Range Indoor LED Light Communication System

JOURNAL: JOURNAL OF OPTICAL COMMUNICATIONS

TITLE 5: A novel project-and-forward relay-assisted mixed RF-FSO system design and its performance evaluation

JOURNAL: TRANSACTIONS ON EMERGING TELECOMMUNICATIONS TECHNOLOGIES

TITLE 6: Hamiltonian Graph Analysis – Mixed Integer Linear Programming (HGA-MILP) Based Link Failure Detection System in Optical Data Center Networks

JOURNAL: JOURNAL OF OPTICAL COMMUNICATIONS

COMPUTER SCIENCE AND ENGINEERING



DR REKHA VIG
Associate Prof.



DR PANKAJ RAKHEJA
Assistant Prof. Sel Gr

TITLE 1: An asymmetric hybrid watermarking mechanism using hyperchaotic system and random decomposition in 2D Non separable linear canonical domain

JOURNAL: PROCEEDINGS OF THE INDIAN NATIONAL SCIENCE ACADEMY



DR SHILPA MAHAJAN
Asstt Prof. Sel Gr

TITLE 1: A comparative study of various existing malware analysis methods

JOURNAL: INTERNATIONAL JOURNAL OF NETWORKING AND VIRTUAL ORGANISATIONS



HITESH YADAV
Asstt Prof. Sr Scale



DR RITA CHHIKARA
Associate Prof.

TITLE 1: Feature Selection Optimization of software product line using metaheuristic techniques

JOURNAL: INTERNATIONAL JOURNAL OF EMBEDDED SYSTEM

SCHOOL OF LAW



UNANZA GULZAR
Assistant Prof.

TITLE1: Vanishing Themes of Indian Victim Compensation Law: An Exploration

JOURNAL: JOURNAL OF VICTIMOLOGY AND VICTIM JUSTICE

TITLE 2: Catastrophe of protection of accused under Criminal Justice administration In India

JOURNAL: LEX JURALAW JOURNAL

TITLE 3: Voids and Abysses in Information Technology Act, 2000 Vis-à-vis E-commerce: Defes Ahead

JOURNAL: INTERNATIONAL JOURNAL OF RESEARCH IN MANAGEMENT AND SOCIAL SCIENCES

Research Papers Published

JOURNALS

INTERNATIONAL

- ❑ Khushbu Gupta* and **Tejpal Singh Chundawat** (2019) 'Bio-Inspired Synthesis of Platinum Nanoparticles From Fungus Fusarium Oxysporum: its Characteristics, Potential Antimicrobial, Antioxidant and Photocatalytic Activities', Materials Research Express, Vol.6, No.10, pp. 1-11, **APS2020J001**.
- ❑ Vaibhav Mishra*, Anju Arya and **Tejpal Singh Chundawat** (2019) 'High Catalytic Activity of Pd Nanoparticles Synthesized From Green Alga Chlorella Vulgaris in Buchwald-Hartwig Synthesis of N-Aryl Piperazines', Current Organocatalysis, Vol.7, No.1, pp.23-33, **APS2020J002**.
- ❑ Anju Arya*, Akhil Mahajan and **Tejpal Singh Chundawat** (2019) 'Microwave-Assisted One-Pot Synthesis of 2-Substituted Quinolines by Using of Palladium Nanoparticles as a Catalyst developed from Green Alga Botryococcus braunii', Current Organocatalysis, Vol. 7, No.1, pp.1-7, **APS2020J003**.
- ❑ Khushbu Gupta* and **Tejpal Singh Chundawat** (2019) 'Role of Enzymes in Synthesis of Biologically Important Organic Scaffolds', Asian Journal of Chemistry, Vol.13, pp. 2698-2706, **APS2020J005**.
- ❑ **Mahendra Singh Sodha*** and Sujeet Kumar Agarwal (2019) 'Application of Boltzmann's Transfer Equation to Nonlinear Propagation of a Plane Polarized Monochromatic EM Wave in Ionospheric Plasma', Physics of Plasmas, Vol. 26, No. 10, pp. 102902, **APS2020J006**.
- ❑ **Pranati Purohit***, Indu Elizabeth, S.Sheela Kumar and Sushil Kumar (2019) 'Optimization of a Piezoelectric Mechanical Amplifier Actuator for Nano- Indentation', Integrated Ferroelectrics, Vol.202, No.1, pp.144-150, **APS2020J007**.
- ❑ Deepika* and **Hukum Singh** (2019) 'AC Conductivity And Dielectric Relaxation of Se_{80-x}Te₂₀Bix (x=6,12) Glasses', Physics and Chemistry of Glasses: European Journal of Glass Science and Technology Part B, Vol. 60, No. 6, pp. 222-230, **APS2020J008**.
- ❑ Namita Dahiya and **Shilpa Mahajan*** (2019) 'A comparative study of various existing malware analysis methods', International Journal of Networking and Virtual Organisations, Vol.21, No.2, pp.268-276, **CSE2020J001**.
- ❑ **Hitesh Yadav***, A Charan Kumari and **Rita Chhikara** (2020) 'Feature Selection Optimization of software product line using metaheuristic techniques', International Journal of embedded system, Doi: 10.1504/IJES.2020.10026155, **CSE2020J002**.
- ❑ Smridhi Seth, Shreya Sharma and **Vandana Khanna*** (2019) 'DC Analysis and Inference of Noise Margins for FINFET Inverters', International Journal of Advance Research and Innovation, Vol.7, No.2, pp.129-132, **ECE2020J001**.
- ❑ Prithu Jain, Shalabh Bansal and **Vandana Khanna*** (2019) 'Analysis of 6T SRAM Cell in Different Technologies', International Journal of Advance Research and Innovation, Vol.7, No.2, pp.133-135, **ECE2020J002**.
- ❑ Anshul Vats*, **Mona Aggarwal** and **Swaran Ahuja** (2019) 'End-to-end performance analysis of hybrid VLC-RF system using decode and forward relay in E-health medical applications', Optik, Vol. 187, pp. 297-310, **ECE2020J003**.
- ❑ Prashast Sharda, Tanisha Tyagi and **Naresh Kumari*** (2019) 'Medical and Astronomical Applications of Raman Spectroscopy', International Journal of Advanced Engineering Research and Applications, Vol. 5, No. 2, pp. 50-55, **ECE2020J004**.

- ❑ Uttpal Raj and **Naresh Kumari*** (2019) 'Wired and Wireless Modes of Communication and their Comparison', International Journal of Advance Research and Innovation, Vol. 7, No. 3, pp. 253-255, **ECE2020J005**.
- ❑ Anita Sharma*, **Swaran Ahuja** and Moin Uddin (2019) 'On end-to-end performance of variable gain AF relayed cognitive underlay networks', Australian Journal of Electrical and Electronics Engineering, Vol. 16, No. 4, pp. 305-318, **ECE2020J006**.
- ❑ Anita Sharma*, **Mona Aggarwal, Swaran Ahuja** and Moin-Uddin (2019) 'Error analysis of dual-hop DF relayed underlay cognitive networks over EGK fading channels', SN Applied Sciences, Vol.1, No.7, **ECE2020J007**.
- ❑ **Pankaj Rakheja*, Rekha Vig** and Phool Singh (2019) 'An asymmetric hybrid watermarking mechanism using hyperchaotic system and random decomposition in 2D Non separable linear canonical domain', Proceedings of the Indian National Science Academy, Doi: 10.16943/ptinsa/2019/49590, **ECE2020J008**.
- ❑ Abhijeet Kumar, **Vandana Khanna***, Sahaj Khurana and Devanshi Bhatia (2019) 'Design of CMOS Operational Amplifier in 180 nm Technology', International Journal of Analog Integrated Circuits, Vol.5, No.1, pp.5-14, **ECE2020J009**.
- ❑ Saksham Arora, Piyush Yadav and **Vandana Khanna*** (2019) 'Design of Voltage Controlled Oscillator using CMOS 180 nm Technology', International Journal of Analog Integrated Circuits, Vol. 5, No. 1, pp. 32-37, **ECE2020J010**.
- ❑ Ram Sharma, A. Charan Kumari, **Mona Aggarwal*** and **Swaran Ahuja** (2019) 'Down-link performance of an LED based visible light communication system through dynamic control of semi-angle', Physical Communication, Vol. 33, pp. 222-230, **ECE2020J011**.
- ❑ Ram Sharma, A. Charan Kumari, **Mona Aggarwal*** and **Swaran Ahuja** (2019) 'Directional Beam Based LED Deployment for a Short Range Indoor LED Light Communication System', Journal of Optical Communications, Doi: <https://doi.org/10.1515/joc-2018-0214>, **ECE2020J012**.
- ❑ Himanshu Khanna, **Mona Aggarwal*** and **Swaran Ahuja** (2019) 'A novel project-and-forward relay-assisted mixed RF-FSO system design and its performance evaluation', Transactions on Emerging Telecommunications Technologies, Doi: <https://doi.org/10.1002/ett.3584>, **ECE2020J013**.
- ❑ Rajat Gupta, **Mona Aggarwal*** and **Swaran Ahuja** (2019) 'Hamiltonian Graph Analysis – Mixed Integer Linear Programming (HGA-MILP) Based Link Failure Detection System in Optical Data Center Networks', Journal of Optical Communications, Doi: <https://doi.org/10.1515/joc-2019-0090>, **ECE2020J014**.
- ❑ **Unanza Gulzar** (2019) 'Vanishing Themes of Indian Victim Compensation Law: An Exploration', Journal of Victimology and Victim Justice, Vol. 2, No. 2, pp. 1-10, **SOL2020J001**.
- ❑ **Unanza Gulzar** (2018) 'Voids and Abysses in Information Technology Act, 2000 Vis-à-vis E-commerce: Defies Ahead', International Journal of Research in Management and Social Science, Vol.6, No.1, pp.127-133, **SOL2020J003**.

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- ❑ Vaibhav Mishra* and **Tejpal Singh Chundawat** (2019) 'Silica Supported Piperazine Sulfosalicylic Acid: A Reusable and Efficient Catalyst for Synthesis of 2-aryl-benzimidazoles', Indian Journal of Chemistry, Section-B, Vol. 58B, pp. 1153-1161, **APS2020J004**.
- ❑ **Unanza Gulzar** (2019) 'Catastrophe of protection of accused under Criminal Justice administration In India', Lex Jura Law Journal, pp. 54-70, **SOL2020J002**.

BOOK CHAPTER**INTERNATIONAL**

- ❑ Deepika Bansal*, **Kavita Khanna, Rita Chhikara, Rakesh Kumar Dua** and Rajeev malhotra (2019) 'A study on dementia using machine learning technique' in Communication & Computing Systems (Proceedings of the 2nd International conference on Communication and Computing Systems (ICCCS 2018), Chapter 66, pp. 414-420, CRC Press - Taylor & Francis, ISBN-978-0-367-00147-6, **CSE2020BC001**.
- ❑ **Unanza Gulzar** (2020) 'A Critical Appraisal of Crime over Social Networking Sites in the Context of India: Social Networking Sites' in New Media and Visual Communication in Social Networks, Chapter 6, pp. 93-112, IGI GLOBAL, ISBN-9781799810452, **SOL2020BC001**.
- ❑ **Unanza Gulzar** (2020) 'Problems faced by E-commerce Transactions with Special Emphasis on Digital Economy in Indian and European Union' in Impact of Mobile Services on Business Development and E-commerce, Chapter 5, pp. 89-107, IGI GLOBAL, ISBN-9781799800507, **SOL2020BC002**.

CONFERENCE PRESENTATION**INTERNATIONAL**

- ❑ **Unanza Gulzar** (2019) 'Assessment of alternative Dispute resolution In Resolving Environmental Hitches', Arbitration and Conciliation: Challenges and new Horizons, Lucknow University, **SOL2020C001**.
- ❑ **Shrutimita Mehta** (2020) 'Chimamanda Ngozi Adichie's We Must All Be Feminists: Understanding 21st Century Feminism', Through a (new) Looking Glass: Challenges for Women in the 21st Century, Shamlal College (University of Delhi) in association with Indian Council of Social Science Research, **CLL2020C003**.

NATIONAL

- ❑ **Unanza Gulzar** (2019) 'An Evaluation of prominence of textile Industries Under GI in India', Role of intellectual property rights in a Global Economy: Challenges and Issues, Rajiv Gandhi National University of Law, **SOL2020C002**.
- ❑ **Unanza Gulzar** (2019) 'Catastrophe of Protection of accused under criminal Justice Administration in India', Criminal justice Administration in India: Emerging Dimensions, Aiding Hands Foundation, **SOL2020C003**.
- ❑ **Unanza Gulzar** (2019) 'Payback of ADR Structure under Criminal Justice System in India', Alternative Dispute Resolution: emerging Issues, Sharda University, **SOL2020C004**.
- ❑ **Divyabha** (2019) 'Women Speak: Class, Gender and Identity', Women Empowerment in English Literature, IB(PG) College, Panipat, Kurukshetra University, **CLL2020C001**.
- ❑ **Shrutimita Mehta** (2019) 'Emerging Identities: Breaking Bonds of Repression and Exclusion-Women in the Works of Shashi Deshpande', Women Empowerment in English Literature, IB (PG) College, Panipat, Kurukshetra University, **CLL2020C002**.

Note: * for Corresponding Author

CALL FOR PROPOSALS

S.No	Call for Proposals	Last Date
1.	Department of Science and Technology- Integrated Technology Interventions for Sustainable Environment	31.03.2020
2.	DST -Science and Engineering Research Board - Women Excellence Award	10.02.2020

Student Activities

Students Achievements

- Best wishes from Department of Applied Sciences to Mr Shubham Pandey (19BSP010) of BSc (H) Physics and Ms Alisha Khatoon (19BSP010) of BSc(H) Maths for getting the award of fellowship from NCU. All your hard work and dedication deserve this achievement. Congratulations and all the best for your achievement. We wish you good luck for all your future endeavours. (APS2020O001)



- Jyoti Yadav (MSc Mathematics 4th semester student) has been awarded with a Certificate of Participation for presenting her paper on the topic 'Efficient solutions of the bi-criterion bi-index Bulk Transportation Problem' in the 4th International Conference on Recent Advances in Mathematical Sciences and its Applications (RAMSA-2020) organised by the Department of Mathematics, Jaypee Institute of Information and Technology (JIIT), Noida, during 09 January 2020. (APS2020O002)



- A PhD viva voce of Mr Vaibhav Mishra, Scholar of the Department of Applied Sciences on the topic 'Design and Synthesis of Piperazine based Scaffolds to Explore their Catalytic and Antimicrobial Activity' was held on 18 January 2020. It was conducted under the guidance of Dr Tejpal Singh Chundawat, Assistant Professor in Chemistry, Department of Applied Sciences. (Regn No. 16ASD001) (APS2020O003)



- Karan Kataria, 3rd year Law student attended 'Global Goals Summit' in Kuala Lumpur Malaysia from 23-25 January 2020, and gave a presentation in the International conference on the topic 'Access to Education: Sustainable Development Goal-4' and focused on improving the quality of education for the poor and marginalized section of our society and efforts of Indian government and other Non Governmental organizations in furtherance of the same. He was also awarded as Global Action Ambassador 2020 for United Nations Sustainable Development Goals. More than 150 Delegates across the globe represented their country on this international forum. (SOL2020O003)



- The team from SOL participated in 1st edition of Mediation Competition held at IMS Unison University; Dehradun dated 28 & 29 January 2020. The team composition was One Mediator and One Advocate. Mr Saubhagya Chauriha participated as a Mediator and Mr Pratyush Arora participated as an Advocate. The problem revolved around the provisions of Indian Penal Code, 1860 and Indian Contract Act, 1872. With the help of our prestigious faculty we were able to clear Preliminary Rounds but due to unusual causalities we didn't clear further but it was knowledge enhancing experience. We would like to thank Ms Pallavi Bajpai, Moot Court Coordinator and Dr Archana Sharma, HOD, School of Law for giving us such a prestigious opportunity. (SOL2020O004)



- Kashish Rehan (16LLB035), student of School of Law, The NorthCap University participated in an International Conference on philosophy of Guru Nanak Dev ji organized by Bar Council of Haryana and Punjab at Panjab University, Chandigarh from 31 January to 1 February 2020. Her research paper was titled as 'women empowerment, gender justice and role of law'. The Paper was presented in front of Chief Justice of Haryana and Punjab High Court. (SOL2020O005)
- SOL organized a guest lecture on judiciary as a career option, lecture was delivered by the representative from Pahuja Law Academy. Pahuja Law Academy is a training center which provides coaching for preparation of Judicial Services Examination. The guest lecture aimed at motivating and educating students for judicial preparation. (SOL2020G001)



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



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

- ❑ Prof. Prem Vrat chaired the Standing Appellate Committee (SAC)/ Standing Hearing Committee (SHC) of AICTE at AICTE, New Delhi on 10 January 2020.
- ❑ Prof. Prem Vrat was invited as Chief Guest in the Annual Day celebration of Maharaja Surajmal Institute of Technology (MSIT) and Maharaja Surajmal Institute (MSI) at their campus on 11 January 2020.
- ❑ Prof. Prem Vrat attended the meeting of board of Governors of NITIE, Mumbai at their campus on 16 January 2020. He represents AICTE on the BOG of NITIE as member.
- ❑ Prof. Prem Vrat delivered a lecture on 'Emerging trends in Industrial Engineering 4.0' to NITIE faculty on 16 January 2020 entire faculty of NITIE attended and his lecture was widely appreciated.
- ❑ Prof. Prem Vrat attended the Peace Day celebration of Brahmakumaris Palam Vihar centre on 18 January 2020.
- ❑ Prof. Prem Vrat attended the meeting of Executive Council of Central University of Haryana (CUH) on 27 January 2020 as a member of EC at their Gurugram Office.
- ❑ Prof. Prem Vrat attended the 2nd meeting of the Planning Board of the Delhi Technological University at their campus on 31 January 2020.
- ❑ Prof. Prem Vrat attended the Silver Jubilee Reunion dinner hosted by 1979 graduating batch of IIT Delhi at the India Habitat centre on 31 January 2020. He was felicitated by the students of that batch during the event. Some 130 alumni from all over the world attended.
- ❑ Prof. Prem Vrat delivered lectures at IIT Delhi on 'Project Management' during the month of January 2020 as Honorary Professor of IIT Delhi.

