



## **Guru Nanak Dev Engineering College, Ludhiana**

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**NEWSLETTER**  
**2020**



ਗੁਰੂ ਨਾਨਕ ਦੇਵ ਇੰਜੀਨੀਅਰਿੰਗ ਕਾਲਜ, ਲੁਧਿਆਣਾ  
**Guru Nanak Dev Engineering College, Ludhiana**

(Punjab Govt. Aided Status)

An Autonomous College Under UGC Act - 1956 [2(f) and 12(B)]

AICTE Approved - NBA Accredited - Affiliated to PTU, Jalandhar



Guru Nanak Dev Engineering College,  
**NEWSLETTER – 2020 (Vol. 8)**

**From The Principal's Desk**

It gives me immense satisfaction that next issue of GNDEC Times is ready for the readers. Through this platform, I take the opportunity to share that GNDEC is an Autonomous College U/s UGC Act since 2012 and is accredited by NAAC (A Grade), TCS and IE(I). GNDEC has the local SWAYAM-NPTEL Chapter and attained the TEQIP-III grant. It is due to the persistent efforts made by faculty, staff and students for taking the institution one step ahead. Success story of any organization is written only due to the collaborative and committed efforts made by its workforce. Continuing with the tradition, this issue of GNDEC TIMES has thrown immense light on commendable contribution made by all members of GNDEC family. I congratulate everyone for sincere input in the progress of institution and do expect the same in times to come. I also congratulate the editorial team for bringing out present issue of newsletter. Wish you good luck!



**Inside this Issue**

550<sup>th</sup> Parkash Purab Celebrations, Celebration of 63<sup>rd</sup> Foundation Day, 12<sup>th</sup> Rank of Student in UPSC Engineering Services Exam – 2019, Annual Convocation – 2019, Winner Of Silver Medal in Asia Cup – 2019, Patent for Wire-Cutting Technology, Continuing Education, Moocs-Massive Open Online Courses, Faculty Achievements, Student's Corner, Faculty Publications, Students Projects

# GURU NANAK DEV ENGINEERING COLLEGE, LUDHIANA

## 550<sup>th</sup> Parkash Purab Celebrations at GNDEC

*“Sab Da Ik Onkaar Nanak”*



**Dignitaries of the Programme**



**Participants in the Programme**

As is preached by **Shri Guru Nanak Dev Ji**, God is One, so is believed and followed by generations. The teachings of Guru Nanak Dev have been the guiding light for generations in the entire world. This was stated by Canadian Member of Parliament Sukh Dhaliwal during an international symposium at Guru Nanak Dev Engineering College (GNDEC) Ludhiana, to

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commemorate the 550<sup>th</sup> birth anniversary of the first Sikh Guru. He said the Guru promoted ideas of union and equality which were still relevant in society. For the same, a seminar was organized at GNDEC on 3<sup>rd</sup> October 2019, which was inaugurated by S. Gobind Singh Longowal, Pradhan, SGPC which was followed by a pious shabad gyan. While presiding over the seminar, Shiromani Gurdwara Parbandhak Committee (SGPC) President, Gobind Singh Longowal said that the SGPC will set up an NRI cell to ensure participation of maximum number of people during the 550<sup>th</sup> birth anniversary celebrations of Guru Nanak Dev. Dr. Sehijpal Singh, Principal of the College, thanked the SGPC president for choosing the institution for the function and expressed gratitude to God for giving GNDEC a chance for commemorating the 550<sup>th</sup> birth anniversary of the first Sikh Guru. Over forty eminent personalities, including Air Marshal Raj Karan Singh Seehra, Punjab State Power Corporation Chairman, Baldev Singh Sra and, PTU Vice Chancellor, Ajay Sharma, were honored at the event.

### Blood Donation Camp

As a gesture of gratitude at the auspicious eve of 550<sup>th</sup> Prakash Parv of Shri Guru Nanak Dev Ji, 332<sup>nd</sup> blood donation camp, in collaboration with Bhai Ghaniya Ji Society and Lions Club, was organised in GNDEC under the umbrella of NSS wing. Inaugurated with Ardas, the camp boasted of an exhilarating response as many participants from college contributed for the social cause. The organizers of the camp, Dr. Harpuneet Singh, Incharge of NSS, GNDEC and Pf. Jaswinder Singh Khalsa, Member, NSS, GNDEC were deeply pleased to contribute to the cause by donating blood themselves.

Nearly 200 students followed their suit during this camp. Varun Chandok, President of Lions Club, Ludhiana was also present on the site. Dr. Sehijpal Singh, Principal GNDEC mentioned that Bhai Ghaniya Ji Mission Seva Society has always come forward with such initiatives and thanked the



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members. He also expressed gratitude towards the contributors for donating blood by raising the slogan 'Rakt Daan Maha Daan'.

### **Er. Akashdeep Singh, student of 2012-2016 Batch secured AIR 12<sup>th</sup> in UPSC Engineering Services Exam - 2019**

A series of achievements entail the saga of GNDEC success stories. Akashdeep Singh, student of 2016 (Civil Engineering Batch), GNDEC, contributes to it by securing AIR 12 in UPSC conducted Engineering Services Exam (ESE) 2019. Akashdeep Singh, who is currently working as a Management Trainee (Civil) in Coal Limited, Bokaro, Jharkhand since February 2018, couldn't contain his happiness in mere words and was overwhelmed with his stellar result.

Belonging to a small town of Malerkotla, Sangrur and a kin to Mr. Daljit Singh, retired second in command (2iC), CRPF, he had completed his schooling from various Kendriya Vidyalayas. He also cracked the GATE examination in the year 2016 by scoring AIR 276, he secured an admission in IIT Bombay in Structural Engineering. Thanking God Almighty, his parents and his professors of GNDEC Civil



Engineering under whose guidance he was able to acquire the learning and excellently skilled environment, he shows full enthusiasm for moving ahead with full zeal and fervour. Principal of GNDEC, Dr. Sehijpal Singh and Dr. H.S Rai, H.O.D, Department of Civil Engineering, congratulated Akashdeep Singh and his family on this wonderful success and hold this testimony as an encouragement for the students as a motivational factor to move ahead. The promising future of the students rests on getting stimulated from the success stories and that is precisely what GNDEC is compassionate about building.

### **Celebration of 63<sup>rd</sup> Foundation Day of GNDEC**

GNDEC celebrated its 63<sup>rd</sup> Foundation Day on April 8, 2019. GNDEC was established under Nankana Sahib Education Trust (NSET). The first President of India, Late Dr. Rajendra Prasad laid its foundation stone on 8<sup>th</sup> April, 1956. The celebration of 63<sup>rd</sup> Foundation Day of GNDEC started with a religious event in college Gurdawara sahib. Bhai Sukhjinder Singh, the Hajuri

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Ragi and Bhai Balwinder Singh from Darbar Sahib Amritsar recited the shabad kirtan and shabad vichar respectively. Dr. Surinder Bir Singh (Ex principal GNDEC), explained the historical progress of the college and shared the vision and mission of the college. He called upon the students to maintain the legacy and benchmarks established by the alumni of GNDEC. As a part of 550<sup>th</sup> celebration Parkash Purav of Guru Nanak Sahib, a number of competitions based upon the teachings of Guru Nanak Sahib including spot poster making, paintings, photography, poems, debates, dastar-bandi etc. were organized by the students.



### **Students exhorted to preserve the fading culture on 63<sup>rd</sup> Foundation Day of GNDEC**

Dr. Sehijpal Singh, Principal remarked that college had celebrated this day as “Engineering Innovations Day” as many technical events including technical project exhibitions, book exhibitions, debates, quizzes, and research project presentations were conducted throughout the day. The young engineering students showcased their innovative skills in several ways during these events. Attractive prizes were given to the participants. Er. N.S Tiwana, Ex-Chairman of Punjab State Science and Technology Council and CPCB, New Delhi and a GNDEC alumnus of 1963 batch, granted financial grants to the novel projects presented by the undergraduate students. He disclosed that their batch has set up a ‘corpus fund’ to fund the innovative projects with the aim of incubating the fresh ideas of the students. Out of 21 presentations, five best projects were given financial grants for converting the ideas into actual products. Another event named as “Jugaad Mela” was organized to bring out the inherent

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skills and entrepreneurial spirit where the students were given a platform to share their skills and ideas. Dr. P. S Bilga, HoD Mechanical Engineering Department thanked Er. Ranjodh Singh, G.S Auto Group Ludhiana and Er. Charanjit Singh, an entrepreneur from Geneva for their help in giving this initiative wings. Prof. Deepinder Singh congratulated all the students who participated in religious and technical events. A group of students related to “Eco-Sikh”, organized a new conceptual event where the prototype of a sustainable and green environment was displayed and explained. More than 100 saplings of conventional trees were distributed to promote a clean environment. At this Foundation Day, Dr. R.P Singh, Dr. H.K. Grewal (both ex principals of GNDEC), Director Trust were also present to grace the occasion.

### **Annual Convocation – GNDEC 2019**

Annual convocation of GNDEC, Ludhiana was held on 11<sup>th</sup> March, 2019. Dr. S.S Sandhu, Addl. secretary MHRD, Govt. of India (New Delhi) was the chief guest. While focusing on the quality technical education he motivated the degree recipients and invited them to take challenging engineering opportunities at global level. He said that the technology is transforming very rapidly and needs serious involvement of technocrats. Dr. Ajay K Sharma, Vice chancellor, IKG-PTU, Kapurthala, conferred the degrees to 7 PhD, 100 M.Tech, 50 MBA, 30 MCA and around 625 B.Tech graduates. He elaborated about several initiatives taken by the University for upgrading the level of technical education in Punjab. He disclosed that IKG-PTU is investing huge money for developing state-of-the-art labs for engineering students. The convocation began with a majestic and grand academic procession followed by recitation of Mool Mantar. The college Principal, Dr. Sehijpal Singh welcomed the guests and students. He read the progress report of the college and shared salient developments, collaborations and collaborative research, awards, student achievements, placements etc.

Three prominent alumni, Er. P.S. Grewal, Ex- CMD-National Fertilizer Limited, Lt. Gen (Retd.), Er. Gurmukh Singh, Dr. Satish Saini, IEEE section chairman Toronto were the guests who graced the occasion. While presiding over the function, Er. P.S. Grewal mentioned the legacy of GNDEC and called the students to maintain and glorify the name of their alma mater. S. Maheshinder Singh Grewal, Ex - Cabinet Minister and member of Nankana Sahib Education Trust presented vote of thanks and congratulated the graduated students. The convocation ended with the National Anthem sung by the students of the Institute.

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**Annual convocation of GNDEC, Ludhiana on 11<sup>th</sup> March, 2019**

## **Major Project Exhibition**

A massive project exhibition was held on 24<sup>th</sup> December in GNDEC, Ludhiana. The exclusive project display exhibited by various UG and PG degree engineering students attracted huge rush as novelty and innovation was the key feature depicted in the display. It was major attraction for the researchers & Ph.D. scholars of various streams of engineering.



**Students displaying their innovative projects**

As many as 60-70 innovative technical projects from B.Tech. students and around 40-50 from M.Tech. students were displayed in the exhibition. The chief guest for the day, Er. Ranjodh Singh MD of GS Autos himself belonging to technical expertise showed full excitement and fervor in attending the event. Also, experts from various IITs & NITs and some leading industries were called as judges for evaluating the quality of projects. From all the projects, top two positions in each branch were declared as winners and were awarded by the college authorities. Dr. Sehijpal Singh, Principal, and Faculty appreciated the enthusiasm shown by the students and congratulated them for their participation in the event. "The winners were

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provided with financial aid and encouraged to get the innovative projects patented with financial support from the college and alumni of 1963 batch", Dr Parminder Singh, Coordinator of the event disclosed.

### **GNDEC student winner of Silver medal in Asia Cup - 2019**

Harshveer Singh Sekhon, student of final year, CSE branch, GNDEC, Ludhiana, bagged second position in senior 4 km team pursuit track cycling in Asia Cup 2019, held at New Delhi from 9<sup>th</sup> to 11<sup>th</sup> September 2019.



**GNDEC student Harshveer Singh Sekhon winner of Silver medal in Asia Cup**

Citing the Asian Games 2022 and Commonwealth Games 2022, Harshveer Singh thanked the college authorities who supported him full throttle to come to this level. Being selected as an Indian representative for Asian Track Cycling to be held in South Korea, Harshveer Singh extends his gratitude to his Head of the Department, Dr. Parminder Singh who not only supported him academically but has always motivated him to rise above the rest.

GNDEC has always been acclaimed for its contribution in the field of sports and has also supported its deserving candidates financially. So was the case with Harshveer Singh, fetching a financial support of about Rs. 6 lacs, Harshveer Singh owes the credit of his success and thorough training regime to Nankana Sahib Education Trust & GNDEC.

After recognizing his earlier wins like an Asian Champion in skating in China (2014 & 2018) and an Indian Skating representation in Asian Games in 2018, Dr. Sehijpal Singh,

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Principal recommended him for financial support. He mentioned that such talent cannot be kept concealed and should be encouraged as much as possible for the national achievements.

### **Patent for wire-cutting technology**

An Indian patent has been granted to GNDEC for developing a technology for wire cut Electrical Discharge Machining (EDM). The EDM is a well known machining process used to cut the hard and tough materials for a variety of applications in manufacturing dies, tools and moulds. The patented technology involves cryogenic treatment to the wire that is used to cut the material. Sharing the details of the patent Dr. Jatinder Kapoor, a faculty member of the Mechanical Engg Department disclosed that the developed wire will not only enhance the production rate of the component but it will also improve the surface quality. The manufacturers of wire or EDM may get a lot of benefit by commercializing the technology. The patent was filed through Technology Information, Forecasting and Assessment Council (TIFAC), a Govt. of India agency. Dr Kapoor said, “The patent is an outcome of research work which I carried out under the supervision of Dr. Sehijpal Singh, Principal who was my PhD guide. We have published a number of international research papers based upon this research work.”

### **CONTINUING EDUCATION**



#### **MoU signed by GNDEC with Punjab State Science and Technology Council**

With a view to giving further push to its ‘Mission Innovate Punjab’, the State Government organized an ‘Innovation and Technology Summit-2019’ on November 5 with an objective to promote Punjab as the Global destination for Innovations & Research. Science Technology and

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Environment Department hold this summit in collaboration with Punjab Chambers of Commerce and Industries. A MoU with Punjab State Science and Technology Council was signed with GNDEC, Ludhiana in this summit.

**A TEQIP III/ Industry sponsored workshop** was organized in association with M/s. Entuple Technologies, Bengaluru at GNDEC, Ludhiana. The participants gained insight on WAVECT real-time control prototyping system which is an ideal for leading edge research and development commencements in power conversion systems nowadays. The session which began with a welcome note by Dr. Arvind Dhingra was followed by an address by Dr. Sehijpal Singh, Principal GNDEC, in which he updated the audience about latest in the field of sustainable energy and why we should make the maximum utility of these in contrast to the non renewable energy resources. The expert sessions by resource personnel from Entuple Technologies illustrated how the high end FPGA WAVECT Controller, comprising of fast computing and IO devices, is designed to address today's complex problems. Dr. K.D. Singh, HOD, Department of Electrical Engineering, accentuated the use of modern device controller Micro grid Lab for industrial & research applications, wherein the easy and powerful model based development environment brought up in the Power System Lab of Department of Electrical Engineering, GNDEC can be used as a RCPTT dedicated instrumentation for a complete control prototyping research & innovation problems.

**Enabling Technologies for Wireless and Optical Networks**, A six day TEQIP III sponsored FDP was organized by Department of Electronics and Communication Engineering, GNDEC, Ludhiana in sync with Atal Bihari Vajpayee Government Institute of Engineering & Technology, Pragatinagar, Shimla under Ministry of Human Resource Development (MHRD), New Delhi from June 10<sup>th</sup> to June 15<sup>th</sup>, 2019 at Testing and Consultancy Hall, GNDEC, Ludhiana. Dr. Manoj Kumar, Keynote Speaker, talked about various Optical Networks, Optical Laws, Opto-electrical Conversions, Dispersion Management and WDM System.

**Machine Learning Applications in Engineering:** To address specific areas of Machine Learning, a five day short term course sponsored by Quality improvement program on "Machine Learning Applications in Engineering" from February 4, 2019 to February 8, 2019 was organized by the Department of Electronics and Communication Engineering, GNDEC, Ludhiana. The keynote speaker Dr. Kanav Kahol (Guest of honor), Chief Technical Officer in Pink Rickshaw Design Organization discussed numerous applications of Machine Learning designed by him serving in various rural areas.

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UKIERI Concrete Congress “Concrete: The Global Builder”, was organized from 5<sup>th</sup> to 8<sup>th</sup> March, 2019 in collaboration with Dr B R Ambedkar National Institute of Technology, Jalandhar.



STTP on "Analysis and Design of RC Buildings: Concepts and Practice" was organized by



Civil Engineering Department from 19<sup>th</sup> to 23<sup>rd</sup> February, 2019.

QIP sponsored five day FDP on Energy Conservation by Alternate Sources of Energy-ECASE19 was conducted by Electrical Engineering Department from 29/01/2019 to 02/02/2019 at Workshop Seminar Hall at the college premises. Main areas of discussion were Energy Management Standards, Solar Energy, Wind Energy, Energy from Biomass & Biofuels, Fuel cells and Energy from Geothermal/tidal.



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A five-day hands-on practice session in the form of short term course (STC) was organized by Information Technology department from 31 December, 2018 - 4 January, 2019. This quality improvement programme (QIP) STC titled “Artificial Intelligence (AI), Big Data and HPC Aligned Applications - A Modern Approach of



Computing” was inaugurated in consultancy seminar hall. Dr Sukhwinder Singh, Director, Computer Centre, Panjab University, Chandigarh, was the chief guest and a keynote speaker. DrSukhwinder pointed out various innovative ideas implemented at industry and government level related to AI and high performance computing. Ramandeep Singh Suri, who was the guest of honour, elaborated on the role of social media and cloud computing. DrKuldeep Kumar from Dr BR Ambedkar National Institute of Technology, Jalandhar, discussed topics titled “Practical Approach to Research Methodologies and Industry-Academic Research Trends in Computing”. He demonstrated the contents by sharing live examples. Dr Kiran Jyoti, HOD, and faculty coordinator shared her views on social network analysis and big data deluge.

**One week National Level AICTE and IKGPTU sponsored FDP** was organized by the Department of Information Technology. The course which brought about the state-of-the-art imaging analysis was scheduled from 30<sup>th</sup> Dec 2019 to 3<sup>rd</sup> Jan 2020. The course



aimed at introducing the participants to the diverse strategies of image processing techniques, student teacher interaction, Ethics in learning and tools related to Data Visualization in imaging. The participants were expected to understand, apply and analyze image processing techniques with the help of latest software techniques like MATLAB, ORNAGE, WEKA. Participants from more than 20 colleges of Punjab and other states enrolled for the course.

**A Three Day TEQIP-III sponsored short term course on “Examination Reform Policy”** was organized by AICTE, New Delhi at NITTTR, Chandigarh between 9<sup>th</sup> – 11<sup>th</sup> December 2019. Dr. Joshi and Dr. Tiwari were the resource persons (experts) from KLE University to explain the Examination Reform Policy through Outcome Based Education in different

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universities and colleges. They shared their ideas for reducing and eliminating the College/University-Industry gap through examination reformation Policy.

**A Five Day TEQIP-III sponsored short term course on “Pedagogical Tools and techniques – Effective Teaching and Comprehensive Progress”** was arranged by ABVGIET, Pragati Nagar, Shimla and organized at GNDEC, Ludhiana between 27<sup>th</sup> May – 1<sup>st</sup> June 2019. Dr. Prem Kumar, Former Vice Chancellor, GNA University, Phagwara was the chief guest of the programme and he gave the overview of tools and techniques to be used for effective education in different universities and colleges.

### **One week Faculty Development**

**Programme** under TEQIP-III (a project under MHRD, India) on the theme of Data Analytics was organized by the Department of Computer Science and Engineering. Er. Shivank Laul from Infosys Ltd. was the chief guest of the function.



He elaborated upon the mechanics of data analysis with its various application areas. Dr. Sehijpal Singh, Principal also justified the emerging trends in data analytics and congratulated the department on this endeavour. Dr. Harwinder Singh, (TEQIP-III) coordinator emphasised on the importance of such initiatives in enhancing the knowledge of the faculty. Dr. Parminder Singh, HOD welcomed the participants and assured them that this programme will benefit them in identifying the research trends prevailing in data analytics. Dr. Sumeet Kaur Sehra, programme coordinator provided an insight into the contents to be covered in the programme. The participants from various institutes attended this programme from 24<sup>th</sup>- 29<sup>th</sup> June, 2019.

**A Five Day QIP short term course on “AI, Big data and HPC Aligned Application - A Modern Approach of Computing”** was organized by department of Information Technology at GNDEC, Ludhiana from 31<sup>st</sup> December 2018 to 4<sup>th</sup> January 2019. Dr. Sarbjot Singh from Co-founder and chief data scientist was the guest of the programme and he gave the overview of Big data and Data Analysis techniques to be used for effective data mining in different domains.

**A one day Outcome Based Education workshop**, sponsored by TEQIP-III was held at GNDEC, Ludhiana. The resource personnel for the workshop was Dr. Mohan Kumar Nagerwara Gupta, SVCE College, Hyderabad.

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### **Outcome Based Education workshop held in GNDEC for faculty skill enhancements**

The main purpose of the workshop was to make the faculty of GNDEC aware about the implementation of outcome based teaching learning arrangement as per the guidelines of National Board of Accreditation. The faculty was also made aware of the curriculum and syllabus design as per the needs of the industry. Dr. Jatinder Kapoor, ME Department, GNDEC & coordinator of the event said that the content coverage of the workshop has been specially designed to edify the faculty about the latest in the field required for the upgradation of the university status nationally. Dr. Sehijpal Singh, Principal GNDEC, appreciated the gusto of faculty shown during the conduct and also encouraged such practices to be held in the due course.

**Two weeks AICTE sponsored FDP on “Multivariate Data Analysis”** was organized by Mechanical Engineering, from 11<sup>th</sup> to 24<sup>th</sup> December 2019.



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The objective of the course was to understand, apply and analyze statistical techniques with the help of latest software techniques like Minitab, AMOS, SPSS etc for MDA. Experts from across the nation have been invited to present a profound insight to the topic (Multivariate Data Analysis) MDA and make participants proficient on data handling capabilities once they finish the course. The major attraction of the program was the hands-on practice of the techniques taught during the course which enhances the exquisiteness of the course. Participants from more than 40 states for instance Bihar, Jammu, MP, Sikkim, Pondicherry, Mumbai, Maharashtra, Delhi, UP, Manipal, Punjab, Chandigarh etc have been enrolled for the course. The event was inaugurated by welcoming speech by Mr. Upkaar Singh Ahuja, President CICU, the chief guest for the day. The event continued by an introduction note by principal, Dr Sehijpal Singh speaking about the massive data available on cloud and how this data should be managed. He mentioned that the FDP is going to equip the participants about the effortless techniques that can be applied for data management. Further, Dr. P.S. Bilga, HOD, Mechanical showed full enthusiasm about the huge participation and was glad that he could bring about an FDP of the topic MDA which is the need of the hour for the society. Dr. Harwinder Singh, coordinator & Dr. Raman Sehgal, co-coordinator of the FDP express gratitude to God and to all the experts who have accepted the invite for professional presentations and skilled lectures and helped making the event a success.

### **GNDEC - Promoting Renewable Energy Resources**

GNDEC has one of its kind rooftop “Grid Connected Solar Power Plant” in college premises, initiated by Department of Electrical Engineering. Two plants having capacity of 150KWp &

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100 kWp are catering to the loads of MBA block & Administrative blocks singularly. Further, it is proposed to install more such units in the parking area & drawing halls of the premises converting the college into 70 % green Institute of the region

### **MOOCS-MASSIVE OPEN ONLINE COURSE**

#### **GNDEC Faculty Bags First Position In National Level MOOC Examination**

Prof. Gulvir Singh, Assistant Professor, Department of Mechanical Engineering, GNDEC, Ludhiana bagged first position in the nation's one of the toughest levels of technical examinations under MOOC (NPTEL). The three month course which was on the topic "Principles of Metal forming Technology ", conducted under the umbrella of National Program on Technology Enhanced Learning (SWAYAM-NPTEL) from the month of July till September, 2019. Prof. Gurvir Singh secured 91% in the final evaluation examination which includes participants from all over the nation. He bagged first position and was honored with a Gold Medal by NPTEL. Dr. Sehijpal Singh, Principal, GNDEC, also congratulated Prof. Gurvir Singh and the entire NPTEL team for this accomplishment. He also encouraged other faculty members of GNDEC to actively participate in these types of activities and enhance their skills with MOOC scheme.

Dr. Hardeep Singh Rai, Professor & Head, Department of Civil Engineering, completed an online course on "Joy of Computing using Python" offered by *NPTEL at Swayam* in the session July-November, 2019.

Yuvraj Singh, Assistant Professor, Department of Civil Engineering, completed an online course on "Academic Writing" offered by *UGC at Swayam* in the session July-October, 2019 also completed 2<sup>nd</sup> self learning online course on "Understanding Open Educational resources" offered by *Commonwealth of Learning, Canada* on October 30, 2019.

Dr. Navneet Singh, Assistant Professor, Department of Civil Engineering, completed an online course on "Advanced Topics in the Science & Technology of Concrete" offered by *IITM at NPTEL* in the session Jan-Feb, 2019.

Prof. Gurjit Kaur, Prof. Harkomalpreet Kaur and Prof. Shailja Sharma attended workshop on "MOOC's awareness workshop for faculty" organized at GNDEC, Ludhiana. Prof. Gurjot Kaur, Prof. Simranjit Kaur, Prof. Preeti Pannu and Prof. Gurneet Kaur, Department of Electronics has successfully completed SWAYAM NPTEL course for July-Nov 2019 duration.

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## MOOCS completed by students

Sr. No.	Name of Student	College Roll no.	Course Name	Certificate Type
1	Ujjwaldeep Singh	1814106	Wastewater Treatment and Recycling - Online	Elite+Silver
2	Charanpreet Singh	1814027	Wastewater Treatment and Recycling - Online	Elite+Silver
3	Manpreet Kaur	194517	Reinforced Concrete Road Bridges - Online	Elite+Silver
4	Arzoo Jain	194503	Reinforced Concrete Road Bridges - Online	Elite+Silver
5	Tashpinder Singh	130136	Principles of Construction Management	Elite
6	Harkanwarvir Singh	1814040	Wastewater Treatment and Recycling - Online	Elite
7	Karambir Singh Grewal	1814144	Wastewater Treatment and Recycling - Online	Elite
8	Manpreet Singh Bains	1814069	Wastewater Treatment and Recycling - Online	Elite
9	Devansh Shrivastav	1714038	Design of steel structures - Online	Elite
10	Gaurav Kumar	1714041	Design of steel structures - Online	Elite
11	Japjyot Singh	1814050	Wastewater Treatment and Recycling - Online	Successfully completed
12	Aman Mittal	1814009	Foundation Engineering - Online	Successfully completed
13	Agamjot Singh	1814003	Foundation Engineering - Online	Successfully completed
14	Vinkle Kumar	1814117	Fluid Mechanics - Online	Successfully completed
15	Nikhil Rattu	1814077	Integrated Waste Management for a Smart City - Online	Successfully completed
16	Shivam Kumar Singh	1814093	Operating System Fundamentals - Online	Successfully completed
17	Dev InderSharda	1714037	Design of steel structures - Online	Successfully completed

## Royal Charter Day Celebration

13<sup>th</sup> September manifested the celebrations of the Royal Charter Day, with the theme “Engineering Advancement for Nation Building” in the Testing & Consultancy Hall, GNDEC, and Ludhiana. The 99 years of Relentless Journey of IE (I), Ludhiana Local Chapter exhibited contribution towards the Engineering Advancements for Nation Buildings initiating the day with a beautiful lamp lighting ceremony. Then, the welcome

address by Er. R.L. Mahajan, FIE, Er. in Chief (retd.) IEI, Ludhiana familiarized the engineering students with the recent advances in the field of contribution of engineers in uplifting the nation’s technical facet. Er. Sukhjinder Singh, FIE presented an expert talk on the engineering advancements thereafter. The theme of the Engineer’s day was very well justified by Dr. Arvind Dhingra, A.P. Dept. of E.E., GNDEC, by illustrating a bio sketch of Sir M.Visvesvaraya followed by a theme lecture by student member, IE(I). Dr. Sehijpal Singh, Principal, GNDEC, being a mechanical engineer himself expressed gratitude to the institute for successfully finishing 99 odd years and emphasized on progressive thinking practically.

### Royal Charter Day celebrated at GNDEC



Officials during the Royal Charter Day celebrations at GNDEC in Ludhiana. TRIBUNE PHOTO

#### TRIBUNE NEWS SERVICE

LUDHIANA, SEPTEMBER 14  
Guru Nanak Dev Engineering College (GNDEC), in collaboration with the Institute of Engineers (India), celebrated Royal Charter Day. The theme of the celebrations was “Engineering advancement for nation building”.

The 99 years of relentless journey of the Institution of Engineers (India), Ludhiana local chapter, exhibited contribution of engineers

towards engineering advancements for nation buildings.

RL Mahajan, former engineer in chief, IEI, Ludhiana, pioneered engineering students with the recent advances in the field of engineering which have in uplifted the nation’s technical facet.

Sehijpal Singh, principal, GNDEC, expressed gratitude to the institute for successfully finishing 99 years and laid emphasis on progressive thinking.

### Expert talks delivered

Dr. Harvinder Singh, Civil Engineering Department has delivered expert take on “Concrete: Improving performance using small tricks” during Tiscon Discovery PRO on 6<sup>th</sup> April, 2019 organized by TATA Steel.

Dr. Baljeet Kaur, ECE Department delivered expert talk on "Recent trends in wireless communication and SDR" on June 12, 2019 during six days TEQIP sponsored Faculty Development Program on "Enabling technologies for optical and wireless communication networks"

Prof Tarandeep Singh, ECE Department delivered expert talk on "Essentials of Machine Learning Algorithm" on Feb 6, 2019 during five days TEQIP sponsored Short term course on

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"Machine Learning applications in Engineering"

Prof. Harminder Kaur, ECE Department delivered expert talk on "Recent trends in wireless communication and SDR" on June 11, 2019 during six days TEQIP sponsored Faculty Development Program on "Enabling technologies for optical and wireless communication networks".

Prof. Kuldeepak Singh and Prof. Gurinder Singh, Electronics and Communication Engineering Department delivered hands on sessions on "Optisystem Software" on June 12, 2019 during six days TEQIP sponsored Faculty Development Program on "Enabling technologies for optical and wireless communication networks".

Mr. Major Singh, Assistant Librarian attended STC on Building Library using Greenstone Software at NITTTR, Chandigarh from 11.3.2019 to 15.3.2019. He got practical training on computer regarding Greenstone software.

Mr. Harminder Singh, Library Assistant and Ms. Vipaljit Kaur, Library Restorer attended five days National workshop on Library Automation and Digitalization from 17.6.2019 to 21.6.2019, University of Delhi, South Campus at New Delhi under TEQIP-III Projects.

Mr. Avninder Singh, Library Assistant attended STC on Information Literacy at NITTTR, Chandigarh from 17.6.2019 to 21.6.2019 and got information on the subject.

Mr. Major Singh, Asst. Librarian and Harminder Singh, Library Asst. attended EBSCO workshop at Chandigarh on 18.10.2019.

Er. Rupinderjit Singh received award for GNDEC Ludhiana at 21<sup>st</sup> ISTE Students National Convention.

Er. Shivani Abrol receiving Award for being Expert Speaker on 51<sup>st</sup> Engineer's day also received RULA AWARD-International Best Researcher in Renewable Energy.

Er. Simranjit Kaur, Electronics and communication Engineering Department, organized Expert Talk on Intellectual Property Rights on 28<sup>th</sup> Nov, 2019.

TEQIP-III sponsored workshop was organized by Dept. of CSE, IIT Guwahati from 3, June-7, June 2019. Dr. Navneet Kaur, Department of ECE, GNDEC joined this course. The main objective of this course was making "teaching-learning process" more effective by emphasizing on innovative practices. Total 38 participants from various institutes of around 10 states were segregated into four groups for the panel discussion and group activity.

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## Faculty Achievement

1. Dr. Parminder Singh is chairman, BOS, IKGPTU, Kapurthala.
2. Dr. Sumeet Kaur Sehra has reviewed the articles in IEEE Transactions on Software Engineering, IEEE Access and Journal of Information and Software Technology.
3. Dr. Sumeet Kaur Sehra is member of BOS of IKG Punjab Technical University, Kapurthala.
4. Prof. Ameeta Seehra, HOD, ECE department, GNDEC is Editorial Board member of International Conference on Innovative Computing Communication (ICICC-2020) held from 21 to 23, Feb, 2020
5. Dr. Narwant Singh Grewal of ECE Department has reviewed papers of some reputed journals includes PIER, OPTIK and International Journal of Electronics in the duration of Jan 2019 - Dec 2019.
6. Dr. Navneet Kaur and Dr. Harsimranjit Singh Gill, Assistant Professor, Department of Electronics and Communication Engineering, were awarded with Ph.D degree in the year of 2019 from I.K Gujral Punjab Technical University.
7. Dr. Baljeet Kaur and Dr. Munish Rattan, Electronics and Communication Engineering Department, has successfully reviewed papers for International Conference "INDIA Com-2019" held on March 13-15, 2019.
8. Kuljit Kaur, Priyanka Arora, Kapil Sharma, Prabhjot Kaur and Gagandeep Kaur Gill attended the TEQIP-III sponsored STC on "3 Magical Steps to Teaching Excellence" organized at GNDEC,Ludhiana.
9. Gagandeep Kaur Gill attended the TEQIP-III sponsored FDP on "Pedagogy workshop on elective teaching" organized at IIT Guwahati.
10. Dr. Munish Rattan, ECE dept., GNDEC, Ludhiana has enhanced his knowledge at IIM Visakhapatnam by taking Management Development Training on "Professional Development Training Programme for faculty and Administration" organized by TEQIP-III from July 15,2019-July 19,2019.
11. Kamaldeep Kaur and Priyanka Arora attended STC on "Academic Writing and Research Productivity" organized at IKGPTU, Kapurthala.



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12. Jasmine Kaur, Gurjit Kaur and Prabhjot Kaur attended STC on “Big Data and HPC aligned Applications-A modern approach of computing” organized at GNDEC, Ludhiana.
13. Dr. Inderjit Singh Dhanoa attended STTP on “Collaborative Data Processing & Resource Optimization in IoT(CRIoT 2019)” organized at SVNIT, Surat(Gujarat).
14. Dr. Parminder Singh, Kuljit Kaur, Kamaldeep Kaur, Dr. Sumeet Kaur Sehra, Jasdeep Kaur, Jasmine Kaur, Gurjit Kaur, Daljeet Singh, Harkomalpreet Kaur, Gurjiwan Singh, Mandeep Kaur Khalsa, Hardeep Singh Kang, Manpreet Kaur Mand, Jasbir Singh Saini, Prabhjot Kaur attended the TEQIP-III sponsored FDP on “Data Analytics-Trends and Applications” organized at GNDEC, Ludhiana.
15. Kuljit Kaur, Jasdeep Kaur, Daljeet Singh, Dr. Inderjit Singh Dhanoa, Harkomalpreet Kaur, Hardeep Singh Kang, Kapil Sharma, Shailja Sharma attended workshop on “Effective Classroom Communication” organized at GNDEC, Ludhiana.
16. Dr. Daljeet Singh attended FDP on “Enabling technologies for wireless and optical networks “organized at GNDEC, Ludhiana.
17. Dr. Inderjit Singh Dhanoa attended FDP on “InfyTQ Based Foundation Program” organized by Infosys Limited.
18. Dr. Sumeet Kaur Sehra, Kuljit Kaur, Mandeep Kaur Khalsa attended TEQIP-III sponsored “Pedagogical Tools & Techniques- Effective Teaching & Comprehensive Progress” organized at GNDEC, Ludhiana.
19. Jasmine Kaur and Gurjit Kaur attended STC on “Recent Trends in Engineering and industry-4.0” organized at SPEC college, Bombay.
20. Kamaldeep Kaur, Dr. Inderjit Singh Dhanoa, Manpreet Kaur Mand, Jasbir Singh Saini, Priyanka Arora, Kapil Sharma attended STC on “Recent Trends in Networks, Communications & Security” organized at GNDEC, Ludhiana

## **STUDENT’S CORNER**

### **Student Achievements**

**Krishna Murari** (1806121), student of Department of Civil Engineering (M. Tech – Structural Engineering, 2018-20)

- is Zonal Winner (North) at 18<sup>th</sup> National Competition on “Best Innovative Structural Steel Design: Theme – Design of Car Service Station “conducted by Institute of Steel Development and Growth, Kolkata and received an award by Director General Mr.

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Sushil Banerjee on February 16, 2019

- got 2<sup>nd</sup> Prize for the project titled “Parametric study to decide the optimal rebar grade for flexural member” in Project Exhibition held at GNDEC, Ludhiana on December 24, 2019

**One-day Entrepreneurship seminar** was conducted in the month of September for all students of ECE department, GNDEC, Ludhiana at STEP GNDEC, Ludhiana. During the visit, they were imparted knowledge about entrepreneurship and its importance in today's era. They also took the students for visit to all workshops in STEP. Lastly, the TNP Coordinator guided the students regarding the ongoing projects in their organization and encouraged them for new projects.



During “STEP visit for Students”

### Pre-Orientation Programme (For Batch 2016-20)

Two-week pre-orientation programme for final year students before their six-month industrial training at GNDEC, Ludhiana for 2016-20 batch from June 3, 2019- June 19, 2019. It was designed to make students aware of Industry work, sensitize them to the on-going projects in various Government sectors. Prof. Diljit Singh and Prof. Preeti Pannu, Assistant Professor, ECE Department, coordinators highlighted the benefits of this programme to UG students. Er. Kamal Bhalla, Deputy Executive Engineer, Punjab



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Communication Limited delivered expert lecture on "Power Line Carrier Communication" during Pre-Orientation Program on 4 June, 2019. Er. Mandeep Singh, Founder, Pargas Integrators, Ludhiana highlights the need of "Cyber Security". Dr. H.S Jatana, Group Head, SCI/Engr 'G', SCL Mohali mentioned about "Introduction to VLSI". Also, Dr. Hitesh Pahuja, Project Engineer, CDAC Mohali has delivered expert lecture on "fin FET based Memory design and challenges" and "Nano Scale Semiconductors Devices" on 13-14 June, 2019.

### **Student's Publications**

1. **Varinder Singh**, Prashant Garg and Charnjeet Singh (2019) Economic Analysis of Flexible Pavement by Using Sub-grade Soil Stabilized with Limestone Dust and Corn Cob Ash. International Journal of Research and Analytical Reviews (IJRAR).
2. **Ahmad**, Charnjeet Singh and Pardeep Singh (2019) Soil Nailing Beneath the Footings to Reduce Settlement and Increase the Shear Strength of Cohesive Soil. Journal of Civil Engineering and Environmental Technology (JCEET), p-ISSN: 2349-8404; e-ISSN: 2349-879X; Volume 6, Issue 3; pp. 158-163.
3. **Javeed Ahmad Khan, Baljit Singh**, Prashant Garg and Charnjeet Singh (2019) Improving the Bearing Capacity of Circular Footing on Silty Clay with Pond ash Pile in Skirt. Journal of Civil Engineering and Environmental Technology (JCEET), p-ISSN: 2349-8404; e-ISSN: 2349-879X; Volume 6, Issue 3; pp. 134-137.
4. **Rahul Gupta & Jagbir Singh** (2019) Optimum design of RC columns. International Conference - Concrete: The Global Builder, UKIERI 978-93-5351-262-0.
5. Harpal Singh & **Akash Aneja** (2019) Parametric study of Multistorey RCC building with plan irregularity. International Conference - Concrete: The Global Builder, UKIERI 978-93-5351-262-0.
6. **Shoaib Nisar Bodha**, Prashant Garg and Pradeep Singh (2019) A Study on Behaviour of Stone Columns on Compacted Pond ash Bed." Journal of Civil Engineering and Environmental Technology (JCEET) p-ISSN: 2349-8404, e-ISSN: 2349-879X, Volume 6, Issue 4; pp. 179-183.
7. **Balihar Singh** and Puneet Pal Singh Cheema (2019) Comparison of Heavy Metals in unused and used Sanitary Napkins of Women. Journal of Civil Engineering and Environmental Technology (JCEET) p-ISSN: 2349-8404, e-ISSN: 2349-879X, Volume 6, Issue 4; pp. 190-193.

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8. **Fahmeed Shafi** and Harpal Singh (2019) Fiber Reinforced High Performance Concrete at Elevated Temperature. Journal of Civil Engineering and Environmental Technology (JCEET) p-ISSN: 2349-8404, e-ISSN: 2349-879X, Volume 6, Issue 4; pp. 210-213.
9. **Gourav**, Pardeep Singh and Charnjeet Singh (2019) Cupola slag Granular Column-A Replacement to Natural Aggregate Granular Column in Weak Soils. Journal of Civil Engineering and Environmental Technology (JCEET) p-ISSN: 2349-8404, e-ISSN: 2349-879X, Volume 6, Issue 4; pp. 237-240.
10. **Mavjot Kaur**, **Krishna Murari** and Inderpreet Kaur (2019) Techniques and various efficiency evaluation tests for self- healing cement-based matrix: state-of-the-art. International Conference on Sustainable Innovations in Civil and Mechanical Engineering (ICSICME-2020)
11. **Mavjot Kaur**, **Krishna Murari** and Gurbuneet Singh (2019) Influence of Multi-walled carbon nanotubes on mechanical properties of cement concrete. International Conference on Sustainable Innovations in Civil and Mechanical Engineering (ICSICME-2020)

### Student's Participation in STCs/STTPs/Workshops/Conferences

Sr. No.	Name of Student	Name of Workshop/Conference/FDP/STC/STTP	Name of Organizing Department/Institute	Month/Year
1	Krishna Murari and Mavjot Kaur	International Conference on "Sustainable Innovations in Civil and Mechanical Engineering"	SKN Sinhgad College of Engineering, Korti, Panharour, Maharashtra	January 03-04, 2020
2	Tejas Singh Walia, Dikin Mittal	Workshop on "Zero Energy Building"	IIT Bombay	January 02-05, 2020
3	Krishna Murari	Advanced course on "Wind loads and effects on Structures"	CSIR-SERC, Chennai	December 18-20,

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				2019
4	Abhishek Nandan, Amir Hussain Bhat, BasitMushtaq	STC on "Advances in Structural Engineering"	NIT Kurukshetra	December 09-14, 2019
5	Krishna Murari, Rohan Mehta	International Seminar on "Performance based design of buildings abd bridges for enhanced resilience"	Indian Association of Structural Engineers, New Delhi	November 08-09, 2019
6	Ankit Kumar	Indian Geotechnical Conference – 2019 (IGC 2019 GeoINDUS)	IGS, Surat Chapter and SardarVallabh ai NIT, Surat	December 19-21, 2019
7	Charanjit Singh	72th Session of CHEMCON - 2019	IIT Delhi	December 16-19, 2019
8.	Sadam Hussain Shah, Kaisir Ahmad Bhat, Javeed Ahmad Khan, AsnaYani	International Conference on contemporary issues in Engineering, Agriculture, Applied Sciences and Humanities	NIT Srinagar	June 22- 23, 2019
9	Ankit Kumar	International Conference in Science, Engineering and Management ICTSEM - 2019	Gulzar Group of Institutes	June 14- 15, 2019

### IETE Students' Forum (ISF)

IETE Students' Forum (ISF) of the department of Electronics and Communication Engineering organized a Fun-Techno event named "Musicorum". This event was planned to check memory test of the students and has given them the



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opportunity to showcase their listening and vocabulary skills. Winners were awarded with certificates. Winners of the event are

Priya Kumari (D<sub>3</sub>ECE)

Bhavan Singh (D<sub>3</sub>ECE)

Dinesh (D<sub>3</sub>ECE)

### **Sports Achievements**

In the IKG PTU Inter College Tournament for year 2018-19 held at various colleges, GNDEC has won “Overall Championship Trophy” (Boys/Girls). In an event organized at IKG Punjab Technical University, Kapurthala held on 11.06.2019, GNDEC was awarded the Overall trophy(Boys/Girls) and a cheque amounting to Rs. 2.00 Lakh. During the event, honorable Vice-Chancellor Dr. Ajay K. Sharma, Dr. Amrit Kaur Gill, Director (Sports), Punjab, S. Gurbaz Singh, Hockey Olympian, Dr. Jagmeet Bawa, Incharge (Sports), IKGPTU, Dr. Manoj, DAVIET, Dr. R.P.S.Bedi, Joint Registrar, IKGPTU, S. Suminder Singh, Director (Sports), GNDEC, S. Harjinder Singh, Director, Sports, GNDEC, Ludhiana appreciated the students, who had participated in the various events held under Tournament. Mr. Harshvir Singh Sekhon, B.Tech., D3, CSE, Roll No. 1606693 was also honoured for his performance in All India Inter University (Cycling) being the Gold Medalist. Dr. Sehijpal Singh (Principal, GNDEC), congratulated all the participants for their great performances in various fields of sports and winning the overall championship trophy.



**Participants having great performances in various fields of sports and winning overall championship trophy**

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Various positions of GNDEC sports teams achieved in PTU Inter-college tournaments are

<b>S. No.</b>	<b>Game</b>	<b>Position</b>
1.	Lawn-tennis	Second
2.	Cricket	Third
3.	Athletics	Second (Boys & Girls)
4.	Swimming	Third
5.	Badminton	First
6.	Table tennis	First
7.	Cross country	Girls (Second ) & Boys (Third)
8.	Football	Second
9.	N/S Kabaddi	Third
10.	Basketball	Boys (Second) & Girls (Third)
11.	Cycling	First (Boys & Girls)
12.	Lawn tennis	Third (Boys& Girls)
13.	Power lifting & Best Physique	Third (Best Physique Boys)
14.	Hockey	First

## **INTERNATIONAL & NATIONAL STARS OF GNDEC**

<b>S. No.</b>	<b>Name, Class &amp; Roll No.</b>	<b>Game</b>	<b>Achievement</b>
1.	Harshveer Singh D4CSE-1606693	Cycling & Roller Skating	2 <sup>nd</sup> in Track Asia Cup, New Delhi & 3 <sup>rd</sup> in All India Inter-varsity Cycling Competition
2.	Punarpratap Singh Sidhu D1CSE-1905032	Shooting (SKEET)	2 <sup>nd</sup> in North Zone Shooting Championship

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## IKGPTU STARS OF GNDEC

S. No.	Name, Class & Roll No.	Game	Achievement
1.	Harshveer Singh D4CSE-1606693	Cycling	BEST CYCLIST
2.	Jaismeen Sandhu D1.B.Arch.-1917583	Cycling	BEST CYCLIST
3.	Paramveer Singh D3ECE-1706756	Athletics	BEST ATHLETE

## Faculty Publications

1. Puneet Pal Singh Cheema, Akepati S. Reddy and Arshjot Singh (2019) Conceptualizing a Sustainable Water Management System for Rural Human Settlements. Proceedings of 16<sup>th</sup> Small Water & Wastewater Systems Conference, Murdoch University, Perth, Australia.
2. Harpreet Kaur and Rajvir Kaur, “Adsorptive removal of Amido black 10B from aqueous solution using Ricinus communis as adsorbent” Asian J. Chem. 31(5) (2019) 1071-1076. Doi:10.14233/ajchem.2019.21813 (Scopus, UGC listed)
3. Devinder Singh, Rajneesh Kumar, Kulwinder Singh (2019) “ Shear wave propagation in an initially stressed piezoelectric layer imperfectly bonded over micropolar elastic half space” Int.J. Of structural Engg and Mechanics, vol.69, no.2, 121-129, 2019 (SCI)
4. Devinder Singh, Rajneesh Kumar, Kulwinder Singh (2019) “Effect of Micro polarity on the propagation on shear waves in a piezoelectric layered structure” ISSN (Print): 2008-3505, Vol.11, No.1,J of Solid Mechanics, (Scopus)
5. Devinder Singh Pathania with Gaurav Verma (2019) “Temperature and pressure depend dependent creep stress analysis of spherical shell”, Int.J. Of applied mechanics and Engg, vol.24, No1, pp 105-115, (Scopus)
6. Musaab Ahmad, Charnjeet Singh and Pardeep Singh (2019) “Soil Nailing Beneath the Footings to Reduce Settlement and Increase the Shear Strength of Cohesive Soil.” Journal of Civil Engineering and Environmental Technology (JCEET), p-ISSN: 2349-8404; e-ISSN: 2349-879X; Volume 6, Issue 3; pp. 158-163.

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7. Javeed Ahmad Khan, Baljit Singh, Prashant Garg and Charnjeet Singh (2019) “Improving the Bearing Capacity of Circular Footing on Silty Clay with Pond ash Pile in Skirt” Journal of Civil Engineering and Environmental Technology (JCEET), p-ISSN: 2349-8404; e-ISSN: 2349-879X; Volume 6, Issue 3; pp. 134-137.
8. Rahul Gupta and Jagbir Singh (2019) “Optimum design of RC columns” International Conference - Concrete: The Global Builder, UKIERI 978-93-5351-262-0.
9. Sukhwinder Singh and Jagbir Singh (2019) “Cost optimisation of RC beams using a metaheuristic technique”. International Conference - Concrete: The Global Builder, UKIERI 978-93-5351-262-0.
10. Harpal Singh and Akash Aneja (2019) “Parametric study of Multistorey RCC building with plan irregularity” International Conference - Concrete: The Global Builder, UKIERI 978-93-5351-262-0.
11. Sonia Chutani and Jagbir Singh (2019) “An economical design of reinforced concrete frame structure” International Conference - Concrete: The Global Builder, UKIERI 978-93-5351-262-0.
12. J N Jha, A.K. Choudhary, K S Gill, (2019) “Tri-Axial Behaviour of Steel Fiber- Reinforced Sand” International Conference - Eighth International Conference on Case Histories in Geotechnical Engineering. <https://doi.org/10.1061/9780784482117.037>, 363-372.
13. Harvinder Singh and K S Bedi (2019) “Shear Capacity of self consolidating concrete beams” International Journal - Building and Structures, ICE, UK <https://doi.org/10.1680/jstbu.16.00178>.
14. ShoaibNisarBodha, Prashant Garg and Pardeep Singh (2019) “A Study on Behaviour of Stone Columns on Compacted Pond ash Bed” Journal of Civil Engineering and Environmental Technology (JCEET) p-ISSN: 2349-8404, e-ISSN: 2349-879X, Volume 6, Issue 4; pp. 179-183
15. Avneet Kaur and Puneet Pal Singh Cheema (2019) “Formation of Aerobic Granules in Lab Scale Sequential Batch Reactor for Waste Water Treatment” Journal of Civil Engineering and Environmental Technology (JCEET) p-ISSN: 2349-8404, e-ISSN: 2349-879X, Volume 6, Issue 4; April-June, 2019, pp. 184-189.
16. Balihar Singh and Puneet Pal Singh Cheema (2019) “Comparison of Heavy Metals in Unused and Used Sanitary Napkins of Women” Journal of Civil Engineering and

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Environmental Technology (JCEET) p-ISSN: 2349-8404, e-ISSN: 2349-879X, Volume 6, Issue 4; pp. 190-193.

17. FahmeedShafi and Harpal Singh, (2019) “Fiber Reinforced High Performance Concrete at Elevated Temperature”. Journal of Civil Engineering and Environmental Technology (JCEET) p-ISSN: 2349-8404, e-ISSN: 2349-879X, Volume 6, Issue 4; pp. 210-213.
18. Gourav, Pardeep Singh and Charnjeet Singh (2019) Cupola slag Granular Column-A Replacement to Natural Aggregate Granular Column in Weak Soils. Journal of Civil Engineering and Environmental Technology (JCEET) p-ISSN: 2349-8404, e-ISSN: 2349-879X, Volume 6, Issue 4; pp. 237-240.
19. Mavjot Kaur, Krishna Murari and Inderpreet Kaur (2019) Techniques and various efficiency evaluation tests for self- healing cement-based matrix: state-of-the-art. International Conference on Sustainable Innovations in Civil and Mechanical Engineering (ICSICME-2020)
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21. Inderjit Singh Dhanoa (2019), A Review of Energy Efficient Optimization Techniques for VM Placement in Cloud Data Centers, Proceedings of 6th International Conference on Computing for Sustainable Global Development, 13th - 15th March, 2019 (SCOPUS Indexed),
22. Chahat Jain, Saroop Singh (2019). Feed Point Optimization of KOCH-MINKOWSKI hybrid boundary antenna for ISM band. Wireless personal communication,108, pp. 2403-2414.
23. Suman Pattnaik, Shyam S. Pattnaik, Balwinder Singh Dhaliwal(2019). Modelling of circular fractal antenna using BPO-PSO based selective ANN ensemble. International Journal of Numerical Modelling : Electronic Networks, Devices and Fields,32,1-12.
24. Rachna Mainh, Narwant Singh Grewal, Chahat Jain(2019). Design and analysis of Planar Antenna for Mobile Handset Applications. International al journal of Research in Electronics and Computer Engineering,7,1-7.
25. Karanjeet Kaur, Sandeep Singh Gill, Navneet Kaur(2019). A review on Non-Conventional Analog Circuit Design Techniques for Low Voltage Low Power Operation. International al Journal of Research in Advent Technology,567-572.

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26. Shruti Sharma, Munish Rattan(2019). An Improved Segmentation and Classifier Approach based on HMM for Brain Cancer Detection. The Open Biomedical Engineering Journal,13,33-39.
27. Harpreet Kaur Gill, Gurjot Kaur Walia, Narwant Singh Grewal (2019). Performance Analysis of mode division multiplexing IS-OWC system using Manchester, DPSK and DQPSK modulation techniques,177,93-101.
28. Harpreet Kaur Gill, Narwant Singh Grewal, Gurjot Kaur Walia (2019). Comparative investigation of CSRZ-DQPSK, DRZ-DQPSK and MDRZ-DQPSK modulation techniques in MDM IS-OWC system,61,1802-1809.
29. Suman Pattnaik, Balwinder Singh Dhaliwal, SS Pattnaik(2019). Impact Analysis of Mobile Phone Electromagnetic Radiations on Human Electroencephalogram, 44, pp. 1-12.
30. Singh, P., Gupta P., and Jyoti, K.(2019). Triangulation Resource Provisioning for Web Applications in Cloud Computing. A Profit-Aware Approach, Scalable Computing. Practice and Experience Vol. 20, No. 2, pp. 207-222
31. Singh, P., Gupta P., Jyoti K., and Nayyar, A. Research on Auto-Scaling of Web Applications in Cloud: Survey, Trends and Future Directions, Scalable Computing, Practice and Experience Vol. 20, No. 2, pp. 399-432
32. Sharma S., Verma S., Jyoti K. (2019) A New Bat Algorithm with Distance Computation Capability and Its Applicability in Routing for WSN. In: Wang J., Reddy G., Prasad V., Reddy V. (eds) Soft Computing and Signal Processing. Advances in Intelligent Systems and Computing, vol 898. Springer, Singapore
33. Gill, J. &Girdhar, A. & Singh, T. (2019). Enhancement-based background separation techniques for fruit grading and sorting. International Journal of Intelligent Systems Technologies and Applications. 18. 223.
34. Kamra, A. &Sood, P. &Girdhar, A. (2019). Investigation on ROI size and location to classify mammograms. International Journal of Biomedical Engineering and Technology. 29(68).
35. Bhambri, P., Sinha, P.K. and Jaiswal, M.(2019). Change in Iris Dimensions as a Potential Human Consciousness Level Indicator International Journal of Innovative Technology and Exploring Engineering ,Volume-8, Issue-9
36. Kawatra,M., Singh, J. and Bagga,S. (2019)Wheat Yield Prediction using Data Mining, International Journal of Recent Technology and Engineering, Volume-8 Issue-3

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37. G Singh, H Kumar, S Singh (2019) "Performance evaluation-PET resin composite composed of red mud, fly ash and silica fume" *Construction and Building Materials* 214, 527-538
38. PK Wadhwa, PS Bilga (2019) "Development of Aircraft Safety Program Model to Handle Human Factors Under Emergency Conditions" *Journal of Aerospace Engineering & Technology* 7 (2), 17-25
39. Sehijpal Singh and Vikas Dhawan and Amrinder Singh Pannu (2019) "Composite manufacturing techniques-A review on injection, compression, pultrusion and extrusion process" *Journal of Advanced Scientific Research* 10 (03), 146-151
40. KJ Singh, J Kapoor (2019) "Chemical Assisted USM of Acrylic Heat Resistant Glass" *Manufacturing Engineering*, 167-183
41. Vasudev Hitesh, Thakur Lalit, Bansal A., Singh Harmeet, Zafar Sun (2019) "High temperature oxidation and erosion behaviour of HVOF sprayed bi-layer Alloy-718/NiCrAlY coating" *Surface and Coatings Technology* Volume 362, 366-380.
42. G. Singh, Sukhinderpal Singh, J S Grewal "Erosion wear characterisation of DLC and AlCrN-based coated AISI-304/316 steels" (2019) *Surface Engineering*
43. *Advances in Sciences and Engineering* "Occupational health hazards among wholesalers: A case study" (2019) Harsimranpreet Singh, Paramjeet Singh Bilga
44. Paramjit Singh Bilga, Sehijpal Singh, Raman Kumar "Optimization of active cutting power consumption for rough turning of EN 353 alloy Steel by Taguchi Method" (2019) *Journal of Cleaner Production*
45. Paramjit Singh Bilga, Sehijpal Singh "Optimization of turning parameters using taguchi for reducing active cutting energy" (2019) *ICAET-2019*
46. P Singh, JS Dureja, H Singh, MS Bhatti (2019) "Environment friendly milling of Inconel-625" *International Journal of Materials and Structural Integrity* 13 (4), 274-292.
47. D Singh, H Singh, J Singh, R Kumar (2019)" Exploring the relationship between dimensions of quality management practices and business performance" *International Journal of Productivity and Quality Management* 28 (1), 128-142.
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49. A Singh, LP Singh, S Singh, H Singh (2019) “Whole-body vibration exposure among tractor drivers” *International Journal of Vehicle Performance* 5 (3), 286-299.
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### **Expert Lectures Delivered**

1. **Dr. Kanwardeep Singh** -Delivered an Expert Talk titled "Use of Optimization Tools in Context to Deregulated Power System Environment" on 3<sup>rd</sup> December 2019 in TEQIP –III sponsored faculty development Programme on "Recent Research Direction and Key concepts in Electrical Engineering" organized in the Department of Electrical Engineering, Delhi Technological University, Delhi.
2. **Dr. Harwinder Singh** delivered Expert Talk
  - a) on January 26, 2019 (Research Funding Opportunities and Proposal Writing) for TEQIP-III sponsored Short term Course on "Recent Tools and Techniques for Research" held at NIT, Jalandhar from January 25, 2019 to January 29, 2019.
  - b) on August 18, 2019 (Relevance of Industries 4.0: A Case Study)for TEQIP-III sponsored Short term Course on "Industrial Engineering and Future Factory IIEFF" held at NIT, Jalandhar from August 14, 2019 to August 18, 2019.
3. **Dr. Arvind Dhingra**
  - a) Delivered an Expert lecture on "Personal growth through competency enhancement" at SBBSU Jalandhar from 8<sup>th</sup> to 12<sup>th</sup> July, 2019.
  - b) Contributed as Session Chair in Electrical Engineering and Allied Branches during 22<sup>nd</sup> Punjab Science Congress held at DAV Institute of Engineering and Technology from 7<sup>th</sup>- 9<sup>th</sup> Feb, 2019.
  - c) One day Expert lecture on "Green Buildings" at NITTTR Chandigarh on 2<sup>nd</sup> January, 2019
  - d) Expert Lecture on "Biomass"- as an Alternate source of energy at NITTTR Chandigarh on 18<sup>th</sup> March 2019.

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- e) Expert Lecture on "Solar System Designing Software" at NPTI, Nangal on 15th March 2019
- f) Expert Lecture on Ethics and Time Management, January 25,2019 at CT University, Ludhiana.
- g) Expert Lecture on architects & contractors under Tata Tiscon Program organized at Hotel Romanza, Mansa on Good and innovative practices in electrical installations for a single dwelling unit, April 6,2019.
- h) Expert Lecture on Personal Growth through competency enhancement organized by CSE Deptt., UIET, SBBSU, Padhiana, Jalandhar on teaching as profession, July 9,2019
- i) Expert Lecture on bridging the standardization Gap, World Telecommunication Day celebration, IE(I), Ludhiana Local Centre, July 27,2019.
- j) Expert Lecture on NAAC workshop at SD College, Moga on Emerging Trends in Higher Education and its impact on society, August 31,2019.
- k) Expert Lecture on delegates of IE(I) Ludhiana chapter organized Charter day celebrations on Charter of IE, September 13,2019.
- l) Expert Lecture on the Interfacing with leading institutions for business plan appraisal to participants of WEDP, held at Swami Ganga Giri College, Raikot, January 24,2019.
- m) Expert Lecture on history of entrepreneurship to participants of EAC organized at DAV University, Jalandhar November 14,2019.
- n) Expert Lecture on Why to become Entrepreneurs to participants of EAC organized at MGKC, Kottan Sahib, Ludhiana on November 21,2019.

## Media Coverage

**बिना ड्राइवर सड़कों पर दौड़ेगी 'रोबो कार'**

• गुरु नानक देव इंजीनियरिंग कालेज के रोबो क्लब ने तैयार किए मॉडल

अखिरी ट्रयाल में पहुंचा प्रोजेक्ट, कला-जुष्ट काम पूरा कर पेटेंट होगा मॉडल

लुधियाना, 10 अप्रैल (मनवीर) : हरिण को या वाहन का ट्रैकिंग, हर अंदरूनी को तुरंत कर अपना रास्ता खुद बनाएंगे रोबो कार, जो पूरी तरह ऑटोमैटिकली काम करेंगी। रास्ते के खतरों से लेकर ट्रिपलेंडर को पार करने में पूरी तरह से स्वयं यह कार भौतिक अपने महानुभाव दुर्घटना के काम खुद करेगी। इस रोबो कार को तुरंत कलकत्ता के इंजीनियरिंग कालेज के रोबो क्लब ने तैयार किया है।

दुर्घटना खतरों से स्वयं ये कार काम करेगी। इस रोबो कार में कलकत्ता के इंजीनियरिंग कालेज के रोबो क्लब के सदस्यों ने तैयार किया है, जिसे फुली ऑटोमैटिक रोबो कार व मोबाइल ऑपरेटिव रोबो को कालेज के इंजीनियरिंग कालेज के रोबो क्लब ने तैयार किया है। इस रोबो कार को तुरंत कलकत्ता के इंजीनियरिंग कालेज के रोबो क्लब ने तैयार किया है।

जि.एन.डी. कालेज के रोबो क्लब द्वारा तैयार रोबो कार मॉडल।

मामला गेहलेवाल रोड पर अवैध बनी फैक्टरी की सील खुलवाने का

व्यापक समाज सेवकों को होकर आगे बढ़ने का संदेश दिया। कुशलतापूर्वक कामवाग या कमवाग को यू.ए.एन. विवरण प्रदान नहीं करता है। एक कर्मचारी अपने पी.एन. के योगदान के लिए सम्मानपर परिक्रमों भी वैधानिक कार्य

## प्रदर्शनी में दिखाए 70 टेक्निकल व 50 रिसर्च प्रोजेक्ट जी.एन.ई. के स्टूडेंट्स ने मरीजों के लिए बनाई स्ट्रैचर में बदलने वाली व्हीलचेयर

**टू-इन-वन के रूप में करेगी काम**

लुधियाना, 25 दिसम्बर (विश्वकी): गुरु नानक देव इंजीनियरिंग कालेज के विद्यार्थियों ने मरीजों के लिए एक ऐसी व्हीलचेयर बनाई है जो कि स्ट्रैचर में बदल जाती है। इसके साथ उन मरीजों को आसानी होगी जो अपने पैरों पर चल नहीं सकते। यह स्ट्रैचर-कम-व्हीलचेयर एमरजेंसी के समय जिन मरीजों को एक अस्पताल से दूसरे अस्पताल शिफ्ट करना या किसी मरीज को ऊपरी मंजिल से नीचे वैन तक लेकर आना होता है, उनके लिए बहुपयोगी साबित होगी। कालेज में आज आयोजित प्रोजेक्ट प्रदर्शनी में इस व्हीलचेयर को प्रदर्शित किया गया। इसके अलावा वर्ष 2019 में बनाए गए प्रोजेक्ट दिखाए गए। यह प्रोजेक्ट प्रदर्शनी आम लोगों के साथ साथ रिसर्चर्स और पीएच.डी.



**व्हीलचेयर कम स्ट्रैचर बनाने वाले स्टूडेंट्स अपने प्रोजेक्ट के साथ।**

स्कॉलर्स के लिए आकर्षण का केंद्र रही। प्रदर्शनी में बी.टेक के विद्यार्थियों द्वारा तैयार किये गए कुल लगभग 70 टेक्निकल प्रोजेक्ट और एम. टेक के विद्यार्थियों द्वारा तैयार किए गए लगभग 50 रिसर्च और टेक्निकल प्रोजेक्ट प्रदर्शित किए गए।

## मरीज को बार-बार नहीं पड़ेगी उठने की जरूरत

व्हीलचेयर प्रोजेक्ट को बनाने वाले विद्यार्थी जसदीप सिंह, शिवा चावला, कार्तिक ठाकुर, पंकज गुप्ता ने बताया कि इसके साथ उन मरीजों को आसानी होगी जो अपने पैरों पर चल नहीं सकते। यह स्ट्रैचर-कम-व्हीलचेयर एमरजेंसी के समय जिन मरीजों को एक अस्पताल से दूसरे अस्पताल शिफ्ट करना होता या किसी मरीज को ऊपरी मंजिल से नीचे वैन तक लेकर आना होता है उनके लिए बहुपयोगी साबित होगी। जब मरीज को एम्बुलेंस में शिफ्ट करते हैं या एंबुलेंस से अस्पताल के अंदर लेकर जाने के समय पर स्ट्रैचर से व्हीलचेयर पर बिठाते हैं, उस समय उन्हें बड़ी परेशानी का सामना करना पड़ता है। इस व्हीलचेयर को स्ट्रैचर में बदला जा सकता है और जरूरत पड़ने और स्ट्रैचर से फिर व्हीलचेयर में बदल सकते हैं। प्रोजेक्ट के गाइड प्रोफेसर जसदीप सिंह डिप्लॉमेंट ने बताया कि इससे मरीजों को बार-बार उठाने की जरूरत नहीं पड़ेगी।

## सभी प्रोजेक्टों में टॉप 2 को मिला सम्मान

इससे पहले प्रदर्शनी में रणजीत सिंह ने मुख्य अतिथि के रूप में शिरकत की। सभी प्रोजेक्टों में से टॉप-2 प्रोजेक्ट चुने गए जिनको तैयार करने वाले विद्यार्थियों को कालेज द्वारा अवार्ड से सम्मानित किया गया। प्रोजेक्टों की चुनाव करने के लिए आई.आई.टी. और एन.आई.टी. से मास्टर अफ थे

## इंडस्ट्री के लिए वरदान साबित होगी नई तकनीक से बनी गैंग ड्रिल मशीन

इसी तरह कालेज के मैकेनिकल विभाग के विद्यार्थियों ने नई तकनीक से लैस गैंग ड्रिल मशीन बनाई है। यह प्रोजेक्ट रमनदीप सिंह, राजन तायल, सहिबजीत सिंह समूह और शिखर सिंह ने बनाया है जो कि मैकेनिकल विभाग के चौथे वर्ष के मेधावी विद्यार्थी हैं। यह मशीन एक ही बार में 2 ड्रिल इच्छुक करने के लिए काम आएगी। इस मशीन इस तकनीक से बनाई गई है कि जरूरत के हिसाब से 2 ड्रिल के बीच की दूरी में बदलाव किया जा सके। वर्णनीय है कि ड्रिल की दूरी में बदलाव करने के बाद ड्रिल भी सारा कुछ एक ही मोटर पर चलता है और इसका बैटल साइज पर भी कोई प्रभाव नहीं पड़ता। प्रो. रुफिंद्र सिंह डिप्लॉमेंट, मैकेनिकल विभाग, जिनकी देखरेख में बच्चों ने यह प्रोजेक्ट बनाया है, ने बताया कि यह मशीन हर तरह की इंडस्ट्री के लिए कारगर साबित होगी, क्योंकि यह मशीन बहुत ही आसानी से हर तरह की दूरी के ड्रिल मार सकेगी जिस की फिजिकल में सब से अधिक जरूरत है। डॉ. पी.एस. बिलगा, प्रमुख, मैकेनिकल विभाग ने विद्यार्थियों की सराहना करते करते हुए कहा कि इस जैसे प्रोजेक्ट हर तरह की प्रोडक्शन के काम आसान और किफायती बनाने के अलावा मिजली और समय भी बचाएंगे।

## प्रिंसिपल डा. सहजपाल ने वषयपाई स्टूडेंट्स की पीठ

प्रिंसिपल डा. सहजपाल सिंह ने विद्यार्थियों द्वारा बनाए गए प्रोजेक्ट पर खुशी व्यक्त की और विद्यार्थियों को इन प्रोजेक्टों को समाज के में साकर लगेगी की जिदगी और आसन करने के लिए प्रेरित किया। कालेज द्वारा प्रोजेक्टों को फाइनेशियल मदद भी दी जाएगी। प्रदर्शनी के को-आर्डीनेटर और सी.एस.ई. विभाग के प्रमुख डा. परमिंद सिंह ने बताया कि जी.एन.ई. के बैच 1963 द्वारा भी बढ़िया प्रोजेक्टों को फाइनेशियल तौर पर सपोर्ट किया जाएगा।

## Two-day international conference on waste management through design

RUBY DHAWAN  
Ludhiana, November 3

Disposal of industrial and agricultural waste in a sustainable manner is a herculean task before the engineers/technocrats. To address the issue a two day International Conference on "Sustainable Waste Management through Design" is being organized by Department of Civil Engineering, Guru Nanak Dev Engineering College, Ludhiana. Dr K S Gill, Professor & Head, Civil Engineering Department, GNDEC, in his introductory speech highlighted the relevance of this conference quoting the current stubble burning problem in this part of north India. He also emphasized the multidisciplinary role of engineers to find a viable solution



for the utilisation of various types of wastes. Dr Sehijpal Singh, Principal, GNDEC, said that joint research aiming sustainability is the need of an hour. He congratulated Civil Engineering Department, GNDEC for bringing a much needed topic of concern in the form of this two day International Conference. He further highlighted that this event

will enable different researchers and practitioners to exchange their experience and share best practices for sustainable development. Chief Guest of the inaugural function Dr G L S Babu, President, Indian Geotechnical Society, released the conference proceedings published by Springer an International publisher. Renowned experts who delivered their

key note lectures during the inaugural session include, Er M I S Saini, Founder, Indus Consultants Pvt Ltd., Dr G L S Babu, President, Indian Geotechnical Society, Dr J N Jha, Principal, MIT Muzaffarpur, Dr Kaushik Bandyopadhyay from Jadhapur University, Dr Raj Calay from Norway and Dr S S Malik from Pune.

Organizing Secretary, Dr Jagbir Singh, welcoming all delegates outlined that the conference aims to provide a unique opportunity to highlight recent advances, new directions, and opportunities for sustainable and resilient approaches to design and protect infrastructure and the environment. Dr H.S. Rai, Dean consultancy, proposed the vote of thanks.

HINDUSTAN TIMES, JALANDHAR  
TUESDAY, DECEMBER 18, 2018



A guest being honoured during the inaugural function of course on 'Green Buildings and Techniques' at Guru Nanak Dev Engineering College in Ludhiana on Monday.

## Five-day course on 'Green buildings' starts at GNDEC

HT Correspondent  
ludhiana@hindustantimes.com

LUDHIANA: A five-day course on 'Green building and techniques' is being organised at Guru Nanak Dev Engineering College (GNDEC), Ludhiana. The course, which began on Monday, is being organised by

Research (NITTTR), Chandigarh. K S Gill, head, civil engineering department, GNDEC, highlighted the relevance of the course quoting the current environmental issues. He said the course will enable teachers to learn new technologies being followed in

Limited, congratulated GNDEC for providing quality engineers for the society. Course coordinator Himmi Gupta, assistant professor, NITTTR, Chandigarh, said during the five-day course, various topics, including global environmental issues, concepts and



## 812 degrees conferred on GNDEC students

LUDHIANA, MARCH 11

Seven PhD scholars, 100 MTech, 50 MBA, 30 MCA and around 625 B Tech graduates were conferred degrees at Guru Nanak Dev Engineering College (GNDEC) here today.

Dr SS Sandhu, Additional Secretary, Ministry of Human Resource and Development, was the chief guest. He motivated students and asked them to take challenging engineering opportunities at global level. He said technology was transforming very rapidly and needs serious involvement of technocrats.

Dr Ajay K Sharma, Vice-Chancellor, IKG-PTU, Kapurthala, conferred



Students in a jubilant mood after receiving their degrees during the convocation at GNDEC College in Ludhiana. ASHWANI DHIMAN

degrees to the students. He elaborated on initiatives taken by the university for upgrading technical education in Punjab. Dr Sharma disclosed that the IKG-PTU was investing money for

developing state-of-the-art labs for engineering students.

The convocation began with a majestic and grand academic procession followed by recitation of "Mool mantar". Principal Dr Sehij-

pal Singh read the progress report of the college and shared salient development including publications, collaborations and collaborative research, awards, student achievements and placements, among others.

Alumni Er PS Grewal, E CMD, National Fertilisers Limited, was also present on the occasion. He discussed the legacy of GNDEC and asked the students to maintain and glorify the name of their alma mater.

Maheshinder Singh Grewal, former Cabinet Minister and member of the Nankar Sahib Education Trust, presented the vote of thanks and congratulated the students. —TNS

## NCC pan-India cycle rally leaves for Delhi

LUDHIANA, SEPTEMBER 22

The pan-India cycle rally organised by the National Cadets Corps (NCC), which had started from Leh, reached Ludhiana on Saturday evening and left for Delhi on Sunday morning.

A baton-exchange programme was organised by the Ludhiana NCC group. Cyclists from the Jalandhar NCC group handed over the Swachhta baton to the NCC cadets of Ludhiana at Guru Nanak Dev Engineering College (GNDEC), Ludhiana.

Poonam Preet, Additional Commissioner, Ludhiana, said, "The Swachhta Pakhwada campaign is meant to make people aware about the importance of cleanliness and motivate the youth to contribute in keeping the country clean."

Brig Niten Bharti appraised the cadets of the relevance of the pan-India cycle rally.

Sehijpal Singh, principal, GNDEC, welcomed the guests. A nukkad natak was also staged by the NCC cadets of GNDEC. —TNS



Participants of the pan-India cycle rally in Ludhiana on Saturday evening. They left for Delhi on Sunday morning. PHOTO: INDERJEET VERMA

“The Swachhta Pakhwada campaign is meant to make people aware about the importance of cleanliness and motivate the youth to contribute in keeping the country clean.”

Poonam Preet,  
ADDITIONAL COMMISSIONER, LUDHIANA



## **GURU NANAK DEV ENGINEERING COLLEGE, LUDHIANA**

### **GNDEC Alumni Celebrates their 40<sup>th</sup> Year of Graduation**

The alumni of 1975-1979 Batch of GNDEC, Ludhiana celebrated their 40<sup>th</sup> Alumni Meet in the college premises. More than 60 alumni, along with their family, participated in the event. The eve proved to be a constellation of shared memories and reflected nostalgia. Principal Dr. Sehijpal Singh welcomed the 1979 batch alumni and the members of Eco Sikh Foundation, imbuing the event with grace and enthrall.

This elevated the alumni meet as a dedicated day to 550<sup>th</sup> Parkash Utsav of Shri Guru Nanak Dev Ji. The meet started with Shabad Gayan followed by a Vaar. A number of alumni also participated in various cultural items, making the occasion even more colorful and memorable.

More than 150 students of final year were also a part of the meet and as well as tree plantation drive. Many alumni shared their professional experiences with students and guided them about career planning and also answered their queries related to job opportunities.

Such initiatives embody a sense of belonging to an institute which in itself is a record of the oldest alumni meet in the region and a lesson to look up to for the future generations to come.



**40<sup>th</sup> Alumni Meets - Alumni Members celebrating the 550<sup>th</sup> Prakash Parv of Guru Nanak Dev ji by planting 550 trees in college premises.**

# GURU NANAK DEV ENGINEERING COLLEGE, LUDHIANA



Alumni Members of 1975-1979 Batch at GNDEC

## A 36 hours Non-stop Hackathon 19 organized for the First time in Punjab at GNDEC



A 36 hours non-stop journey of excitement and thrill, TEQIP-III sponsored Hackathon 19, was organized for the first time in Punjab at GNDEC, Ludhiana. Inauguration for this event was done by Er. Navdeep Singh Gill, college alumnus and CEO, Xenon Stack, Chandigarh. He advised students not to run after pay packages but rather become entrepreneurs and cited examples of data analytics, cloud computing. The program commenced by giving students a problem, which had to be solved by them in the next 36 hours. This had to be accomplished by

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coding and creating software to serve the required purpose. A total of 24 teams participated in the event, each team consisting of 4 members and 2 mentors. There were 5 judges, out of which, 3 judges consisted of college faculty and the other 2 were industrialists. The students were awarded with handsome cash prizes.

### **GNDEC winning overall runner-up championship trophy with 7 gold medals at Interzonal Youth Fest**

The IKGPTU Inter-zonal Youth Festival concluded on a high note at IKGPTU, Kapurthala on Wednesday. IGP Naunihal Singh was the chief guest on the last day of the festival.

Delivering a spectacular performance, GNDEC won the overall runner-up championship trophy and overall dance trophy with seven gold medals, one silver medal and three bronze medals. The Gold medal winning events were: Bhangra, Skit, Folk Singing, Vaar singing, Quiz, Classical Instrumental (Percussion) and Classical Instrumental (Non-Percussion). While the Gidha team bagged the silver medal, One-act play, Individual Quiz and Classical Vocal Solo bagged the bronze medals. Apart from this, Avneet Kaur, Simarjit Singh and Karandeep Singh were declared Best Gidha dancer, Best Actor and Best Bhangra dancer, respectively. The exhilarating point of the fest was the college Bhangra team winning fourth in a row continuously.

College principal Dr Sehijpal Singh and Cultural Coordinator Dr. Jagbir Singh attributed the mega success of the festival to students, teachers and teams in charge.



**Inter Zonal Youth Festival Award Ceremony 18<sup>th</sup> to 20<sup>th</sup> November, 2019**

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## ISTE Section Student Convention

The ISTE Section Student Convention was organized at GNDEC, Ludhiana. The convention is held every year to recognize the efforts of the ISTE students Chapter volunteers in the various technical institutes. ISTE section comprises technical institute members from Punjab, Haryana, Himachal Pradesh & Jammu & Kashmir. Students from 12 colleges participated in the event. 21 student volunteers were facilitated for their contribution to the ISTE students' chapter in their institutions. Also an inter college competition was organized in which students showed their presentation skills on the theme "Emerging Trends in Engineering".

The Chief Guest of the occasion was Dr. R.P.Singh Sukerchakia, Director PCTE and ISTE Section Committee member, said that the world was changing at a fast pace and young technocrats needed to be tech savvy to keep pace with the world. He also stressed upon the need to further the cause of technical education by organizing more such events.



**ISTE Section Student Convention organized at GNDEC, Ludhiana**

## Placement drive picks up in GNDEC

In the aspiring campus of GNDEC, various MNCs came out for recruitment process for engineering students. The Genconians proved that nothing is too big for them to achieve. The

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recruitment process for the 2020 passing out batch began in the month of August, 2019 and is continuing with a full swing. Prominent recruiters like Airtel, Accenture, TCS, Codevita and HackWithInfy were welcomed with elan. The companies followed the customary procedure for short listing the students i.e. on the basis of aptitude and mental ability test and lastly through interviews. 125 students were selected for the Accenture with CTC with lucrative packages of the range 4.5 lakh to 6.5 lakh per annum which seems highest in the region till now. 94 students got selected for the round 2 of Hack with Infy out of which two were finalised with the package of 8 lakh per annum. Around 100 students cleared TCS codevita scrutiny. Airtel, considered to be the most rigorous recruiters of all times, was also impressed by the Genconians. 8 dynamic students were selected with a package of 4.68 lacs per annum. Young Genconians are charged up completely for the recruitment season & are ready to exhibit their competence with flying colors.

The recruiters expressed their satisfaction with the knowledge and soft skill competencies of GNDEC students. Dr. Sehijpal Singh, Principal, GNDEC, expressed, ‘overall the beginning of the placement session has been successful and we hope this journey continues to bring out the best from our students.’



**Placement drive picks up Seminar in GNDEC Auditorium**

## GURU NANAK DEV ENGINEERING COLLEGE, LUDHIANA



**Placement Cell Members**

### **GNDEC National Level Skeet Shooting Student Makes the Nation Proud**



Punar Pratap Singh Sidhu, Student of D1 Computer Science Engineering of GNDEC is a National level Skeet Shooting sportsman. His hard work and consistency shows in the level of achievement that he has obtained at such a young age. Stating his achievements, his uphill struggle paid back recently in September 2019, when he got a bronze medal in Punjab State (ISSF) Shotgun Shooting Championship held at Patiala. In addition, he also bagged a silver medal in Skeet Shooting in the 39<sup>th</sup> North Zone Shooting Championship which just concluded at Dr. Karni Singh Shooting Range, New Delhi. He started taking training in skeet shooting at a very tender age, and in 2016 was the

victor of a silver medal in junior men (under 21) category in Punjab State Shotgun Shooting Championship. In the same year, he also won a silver medal in junior men's level and bronze medal in senior men's level category in 36<sup>th</sup> North Zone Shooting Championship held at New Delhi.

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But as composed as he is, he didn't let success go into his head but marched ahead with persistent efforts and dedication and participated in the National Shotgun Shooting Championship in the year 2018, for the 3<sup>rd</sup> time and got selected in the junior national camp for the selection of Indian team for international matches. Although, due to the studies saddle, undergoing his 12 board exam as well as engineering competitive exams, he couldn't give it his best shot. Adhering his brother Abinash Partap Singh Sidhu (who is an international level Skeet Shooter) as his inspiration, he gets motivated by him in every way and also seeks training from him in all aspects. He is currently looking forward to a good position in the All India Inter-University Shooting Championship and National Shotgun Shooting Championship to be held next month and is working day and night for the same. Punar, inspiringly states that his aim is to get selected in the Indian National shooting team and make his country and GNDEC proud by securing a top position in the forthcoming 2020 World Cups and World Championships.

### **GNDEC students develop cost effective Smart Blind Stick**



Technology is a boon if used in a right direction. With such vision in mind, final year Electrical students of GNDEC developed an innovative product named Smart Blind Stick for blind people.

Gurpreet Singh & Hardeep Singh, final year Electrical Engineering students, who are the inventors of the project, mentioned that the intelligent stick is capable of detecting the distance from the patient by use of ultrasonic sensors and Arduino technology. Even during dark or night time, the LDR sensor would enable the detection of the object from a distance. Furthermore, proximity sensors are used for water detection. Inclusion of a single module

remote helps in sending and receiving signals to a distance and hence detects the position of the stick in case of loss.

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Professor Ravinder Kaur of the Electrical Engineering Department, under whose guidance the project was framed, commented that the features of the stick can be further enhanced by the use of solar empowered batteries and usage of fibre handcuffs. She mentioned that the stick was built in half the cost and with more advanced features as compared to the already available sticks in the market.

Dr. K.D. Singh, H.O.D, Electrical Engineering Department is very happy by the efforts of the students for creating such a user friendly gadget which can help a thousands of deprived populace. Dr. Sehijpal Singh, Principal, GNDEC, expressed happiness and commented that innovation always adds value to the products and our students are doing very well in product development.

### **Automatic Stamping Machine**

Students of GNDEC have once again tried to contribute to society by making a low cost automatic stamping machine. The stamping is a monotonous and sometimes tedious task that claims huge labour hours at many places and offices like post offices and offset printing presses. The project guide Prof Sukhinderpal Singh claimed that such cumbersome tasks can be easily replaced by a mechatronics based automatic machine designed by our students. The project consists of a consolidated feeding mechanism, page sensing unit, stamping unit and controlling console, collectively capable of stamping 40 loose pages in a minute.

The team consisting of Sahil Kumar, Sahil, Rohan Patnaik and Pankaj Bansal have completed this indigenous project by getting sponsorship grant from GNDEC 1959-63 alumni batch. The device has been designed and manufactured solely by the students and most of the parts are either arranged from junk or procured from the local market to keep it easily maintainable and affordable for local presses. This product caters to the needs of the contemporary market, especially of printing presses, which, otherwise, can't afford the exorbitantly priced machines from branded companies. Dr. P.S Bilga, Head of Mechanical Engg. Department said, "Such advances are sure to bring about a revolution in the printing market with young contributors efforts". Principal Dr Sehijpal Singh appreciated the project and promised the students to get the product patented with the help of Science and Technology Entrepreneurship Park (STEP) and alumni research funds.



**GNDEC students develop Automatic Stamping Machine**

### **Team SciFiDevs of GNDEC secured second position in National Level contest- TCS InfraMind Season III**

Students of GNDEC College outperform in yet another event of its kind, TCS InfraMind Season III. The contest which had a series of 3 rounds was a tough and a mind boggling experience for the contenders.

Accomplices from all over the country participated in it in which Damanpreet Singh & Gurmeet Singh of the Information Technology Branch of GNE bagged second prize. Sharing their experience, they said that they have created an application for kiriana shops that identifies different products from their images & generates corresponding bills as well not from their images but from their visual appearances and size; which happens to be the first computational technology in image detecting in the country.

The competition had three rounds of grilling the participating teams. On 18th November, Hackathon of duration as long as 6 hours was held, in which 5 teams were selected who presented their project on 19th November. The 1st round included an online MCQ test based on technologies like Edge Computing, Extended Reality & Blockchain. In the second round were the video submissions in which the teams had to explain the used cases (Team SciFiDevs used Edge computing in this). In this, they had to develop the project first and then make a video explaining it. In the third and last round, which happened to be the grand finale as well, 10 teams were called to the TCS Butterfly Campus, Siruseri, Chennai, Tamil Naidu (a fully

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sponsored trip for the shortlisted teams, including accommodation, air tickets etc). In this the Team SciFiDevs developed a bank application that authorizes users based on facial recognition; which made them bag the second position overall on national level. The Team SciFiDevs also got the privilege to have a luncheon with the TCS Vice President and other global leaders. Principal Dr. Sehijpal Singh was very glad to hear about this achievement of the Team SciFiDevs and congratulated them and also paid regards and best wishes to the team for representing the college on a national level. He also encouraged them to represent their skills on a global level by participating in the upcoming international contests as well, for which, he assured, the college is ready to give full support.

### **GNDEC wins overall trophy at IKGPTU Zonal Youth Fest**

Leaving behind a trail of memories, the I.K.G Punjab Technical University Zonal Youth Festival (Central Zone), reached its culmination at GTBIMT Dakha where the participants from GNDEC, Ludhiana secured the following positions: Indian Group Song (first), Light Vocal Indian (first), Vaar Singing (Second), Folk Singing Solo (first), Indian Classical Vocal (second), Instrumental Non-Percussion (first), Instrumental Percussion (second). In the theater category, the team secured second position in One Act Play and first position in Skit, whereas the college Bhangra team won the first position for the third time in a row and Giddha team, Western singing secured the winning position as well. In literary events, students secured first positions in Quiz and Poem Recitation. In the Fine Arts category, students secured third position in the on-spot painting as well as collage making. Thus, GNDEC wins the overall zonal trophy for the fourth time in a row. Dr.

Sehijpal Singh, Principal, GNDEC and Dr. Jabir Singh, Cultural Coordinator, congratulated the students for their achievements and expressed happiness and commented that the students of GNDEC excelled not only in studies but in cultural activities as well.





# College Glimpse

# NEWSLETTER 2020



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