Guru Nanak Dev Engineering College, Ludhiana

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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 IET(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

550th Parkash Purab Celebrations at GNDEC

“Sab Da Ik Onkaar Nanak”

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
commemorate the 550\textsuperscript{th} 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\textsuperscript{rd} 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\textsuperscript{th} birth anniversary celebrations of Guru Nanak Dev. Dr. Sehjpal 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\textsuperscript{th} 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\textsuperscript{th} Prakash Parv of Shri Guru Nanak Dev Ji, 332\textsuperscript{nd} 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. Sehjpal Singh, Principal GNDEC mentioned that Bhai Ghaniya Ji Mission Seva Society has always come forward with such initiatives and thanked the
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\textsuperscript{th} 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\textsuperscript{rd} Foundation Day of GNDEC**

GNDEC celebrated its 63\textsuperscript{rd} 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\textsuperscript{th} April, 1956. The celebration of 63\textsuperscript{rd} Foundation Day of GNDEC started with a religious event in college Gurdawara sahib. Bhai Sukhjinder Singh, the Hajuri
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 550th 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-bandī etc. were organized by the students.

Students exhorted to preserve the fading culture on 63rd 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
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 11th 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.
Annual convocation of GNDEC, Ludhiana on 11th March, 2019

**Major Project Exhibition**

A massive project exhibition was held on 24th 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.

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. Sehjpal Singh, Principal, and Faculty appreciated the enthusiasm shown by the students and congratulated them for their participation in the event. "The winners were
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 9th to 11th September 2019.

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,
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
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 10th to June 15th, 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.
UKIERI Concrete Congress “Concrete: The Global Builder”, was organized from 5th to 8th 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 19th to 23rd 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.
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 30th Dec 2019 to 3rd 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 9th – 11th 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
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 27th May – 1st 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 24th - 29th 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 31st December 2018 to 4th 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 Guptha, SVCE College, Hyderabad.
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 11th to 24th December 2019.
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 &
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 2nd 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. Gurpurneet Kaur, Department of Electronics has successfully completed SWAYAM NPTEL course for July-Nov 2019 duration.
### MOOCS completed by students

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<th>Sr. No.</th>
<th>Name of Student</th>
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Royal Charter Day Celebration

13th 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.

Expert talks delivered

Dr. Harvinder Singh, Civil Engineering Department has delivered expert talk on “Concrete: Improving performance using small tricks” during Tiscon Discovery PRO on 6th 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
"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.


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

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


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.
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.
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.

13. Dr. Inderjit Singh Dhanoa attended STTP on “Collaborative Data Processing & Resource Optimization in IoT(CRIoT 2019)” organized at SVNIT, Surat(Gujarat).


17. Dr. Inderjit Singh Dhanoa attended FDP on “InfyTQ Based Foundation Program” organized by Infosys Limited.

18. Dr. Sumeet Kaur Sehra, Kuljit Kaur, Mandep 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 18th 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.
Sushil Banergee on February 16, 2019

- got 2nd 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 ongoing 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
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**


GURU NANAK DEV ENGINEERING COLLEGE, LUDHIANA


**Student’s Participation in STCs/STTPs/Workshops/Conferences**

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Name of Student</th>
<th>Name of Workshop/Conference/FDP/STC/STTP</th>
<th>Name of Organizing Department/Institute</th>
<th>Month/Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Krishna Murari and Mavjot Kaur</td>
<td>International Conference on &quot;Sustainable Innovations in Civil and Mechanical Engineering&quot;</td>
<td>SKN Sinhgad College of Engineering, Korti, Panharour, Maharashtra</td>
<td>January 03-04, 2020</td>
</tr>
<tr>
<td>2</td>
<td>Tejas Singh Walia, Dikin Mittal</td>
<td>Workshop on &quot;Zero Energy Building&quot;</td>
<td>IIT Bombay</td>
<td>January 02-05, 2020</td>
</tr>
<tr>
<td>3</td>
<td>Krishna Murari</td>
<td>Advanced course on &quot;Wind loads and effects on Structures&quot;</td>
<td>CSIR-SERC, Chennai</td>
<td>December 18-20, 2020</td>
</tr>
</tbody>
</table>
Abhishek Nandan, Amir Hussain Bhat, Basit Mushtaq
STC on "Advances in Structural Engineering"  
NIT Kurukshetra 09-14, December 2019

Krishna Murari, Rohan Mehta
International Seminar on "Performance based design of buildings and bridges for enhanced resilience"  
Indian Association of Structural Engineers, New Delhi 08-09, November 2019

Ankit Kumar
Indian Geotechnical Conference – 2019 (IGC 2019 GeoINDUS)  
IGS, Surat Chapter and Sardar Vallabhbhai NIT, Surat 19-21, December 2019

Charanjit Singh
72th Session of CHEMCON - 2019  
IIT Delhi 16-19, December 2019

Sadam Hussain Shah, Kaisir
International Conference on contemporary issues in Engineering, Agriculture, Applied Sciences and Humanities  
NIT Srinagar 22-23, June 2019

Ankit Kumar
International Conference in Science, Engineering and Management ICTSEM - 2019  
Gulzar Group of Institutes 14-15, June 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
opportunity to showcase their listening and vocabulary skills. Winners were awarded with certificates. Winners of the event are

Priya Kumari (D3 ECE)
Bhavan Singh (D3 ECE)
Dinesh (D3 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](Image)

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

GNDEC NEWSLETTER - 2020
Various positions of GNDEC sports teams achieved in PTU Inter-college tournaments are

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

INTERNATIONAL & NATIONAL STARS OF GNDEC

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name, Class &amp; Roll No.</th>
<th>Game</th>
<th>Achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Harshveer Singh D4CSE-1606693</td>
<td>Cycling &amp; Roller Skating</td>
<td>2\textsuperscript{nd} in Track Asia Cup, New Delhi &amp; 3\textsuperscript{rd} in All India Inter-varsity Cycling Competition</td>
</tr>
<tr>
<td>2.</td>
<td>Punarpratap Singh Sidhu DICSE-1905032</td>
<td>Shooting (SKEET)</td>
<td>2\textsuperscript{nd} in North Zone Shooting Championship</td>
</tr>
</tbody>
</table>
IKGPTU STARS OF GNDEC

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name, Class &amp; Roll No.</th>
<th>Game</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Harshveer Singh</td>
<td>Cycling</td>
<td>BEST CYCLIST</td>
</tr>
<tr>
<td></td>
<td>D4CSE-1606693</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Jaismeen Sandhu</td>
<td>Cycling</td>
<td>BEST CYCLIST</td>
</tr>
<tr>
<td></td>
<td>D1.B.Arch.-1917583</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Paramveer Singh</td>
<td>Athletics</td>
<td>BEST ATHLETE</td>
</tr>
<tr>
<td></td>
<td>D3ECE-1706756</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Faculty Publications


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


56. Vinod Kumar Yadav, Kanwardeep Singh and Shubham Gupta, “Market-Oriented Transmission Expansion Planning Using Non-Linear Programming and Multi-Criteria Data Envelopment Analysis”, Sustainable Energy, Grids and Network, (Science Citation Index Expanded, ISSN: 2352-4677, impact factor 2018: 3.182, Accepted for publication, July 2019.


58. Dr Navneet Singh Bhangu, Er Sonia Grover, “Risk Assessment of Gear Box of Wind Turbines using fine approach”, International Journal of Mechanical and Production Engineering Research and Development (IJMPERD) ISSN(2249-8001; ISSN(PRINT);2249-6890), link [http://www.scopus.com](http://www.scopus.com)
59. Navneet Singh Bhangu, Sonia Grover, Application of Fault tree Analysis for Evaluating Reliability; A Case Study of Gear Box of Wind Turbines”, International Journal of Mechanical and Production Engineering Research and Development (IJMPERD) ISSN (ONLINE); 2249-8001; ISSN(PRINT); 2249-6890, link http://www.scopus.com


**Expert Lectures Delivered**

1. **Dr. Kanwardeep Singh** - Delivered an Expert Talk titled “Use of Optimization Tools in Context to Deregulated Power System Environment” on 3rd 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 IEFF” 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 8th to 12th July, 2019.
   
   b) Contributed as Session Chair in Electrical Engineering and Allied Branches during 22nd Punjab Science Congress held at DAV Institute of Engineering and Technology from 7th - 9th Feb, 2019.
   
   c) One day Expert lecture on "Green Buildings" at NITTTR Chandigarh on 2nd January, 2019
   
   d) Expert Lecture on "Biomass"- as an Alternate source of energy at NITTTR Chandigarh on 18th March 2019.
GURU NANAK DEV ENGINEERING COLLEGE, LUDHIANA

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


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
**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’ was 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 sustainable burning problem in this part of north India. He also emphasised the multidisciplinary role of engineers to find a viable solution for the utilisation of various types of waste. Dr Suhail Singh, Principal, GNDEC, said that the research aiming sustainableness is the need of an hour. He congratulated Civil Engineering Department, GNDEC, for bringing in 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.I.S. Bhat, 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, Dr M I S Saini, Founder, India Consulting Pvt Ltd, Dr G.I.S. Bhat, President, Indian Geotechnical Society, Dr J N Jha, Principal, MIT Kusmam, Dr Kausik Kundu, IIT Delhi.

Organizing Secretary, Dr Jagdeep Singh, welcomed all delegates stating 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 project infrastructure and the environment. Dr H.S. Rai, Dean consultancy, proposed the vote of thanks.

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**Five-day course on ‘Green buildings’ starts at GNDEC**

HT Correspondent

LUDHIANA: A five-day course on ‘Green buildings and technologies’ is being organised at Guru Nanak Dev Engineering College (GNDEC), Ludhiana. The course, which began on November 19, will be conducted by Department of Civil Engineering, GNDEC, and will run till November 23. The course is being conducted in association with the Indian Geotechnical Society (IGS) and Indian Concrete Institute (ICI). The course aims to provide training to students on the latest technologies and practices in the field of green buildings.

Research (NITTR), Chandigarh. K. Gill, head, civil engineering department, GNDEC, highlighted the relevance of the course, saying that the current environmental issues are challenging and students need to be aware of the latest technologies and practices in the field of green buildings. He said that the course will enable students to learn new technologies and practices and become industry-ready.

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HINDUSTAN TIMES, JALANDHAR
Tuesday, December 18, 2018

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GURU NANAK DEV ENGINEERING COLLEGE, LUDHIANA
GNDEC NEWSLETTER - 2020

GNDEC develops Smart Blind Stick

LUKHNA, OCTOBER 19
Technology is booming in its own direction. With the vision in mind, final-year electrical engineering students at Guru Nanak Dev Engineering College (GNDEC) have developed ‘Smart Blind Stick’ for blind people.

Gurpreet Singh and Hardeep Singh, final-year electrical engineering students, are two inventors of the project. They mentioned that the intelligent stick was capable of detecting the distance from the patient by use of ultrasound sensors and Arduino technology. Even at night, the LDR sensor would enable the detection of the object from a distance.

The proximity sensors were used for detecting the object within a distance of three handshakes. She mentioned that the stick was built at half the cost and advanced features as compared to the already available sticks in the market.

KD Singh, head, Department of Electrical Engineering, said, “I was proud of the efforts put in by the students and thanked them for creating such a user-friendly gadget which will help thousands of blind people.”

Sehgal Singh, principal, GNDEC, expressed happiness and commented that innovation always added value to the products and the students of GNDEC were doing very well in product development.

The cost of smart stick is less than Rs. 2,000. The inclination of the smart blind stick is sure to revolutionize the medical market, Sehgal added. “We are looking forward to the feedback of the stick commercially,” said the inventor.

GNDEC students build ₹14,000 Smart Hut

LUKHNA, APRIL 11
Students of third year of civil engineering, Guru Nanak Dev Engineering College, have come up with a Smart Hut.

A group of seven students, comprising Sidharth Puppal, Bhindrerjeet Singh, Rohin Singh, Harjot Singh, Satinderpal Singh, Vipkan Kumar and Sidhehale Singh, won first prize in the ‘Tech Inven’ fest held at Chandigarh University.

The hut can be easily assembled and disassembled. It takes 25 minutes to assemble and five minutes to disassemble the hut. The total cost of the smart hut is around Rs 14,000,” said Sidharth Puppal.

“The hut is the best solution when one wants to go for camping and can also prove helpful during natural calamities such as earthquakes,” said Rohin Singh.

After winning second prize in innovation project at Kapurthala Science City on March 10, our guide Charanjit Singh saw the potential and helped us with another project. He guided us thoroughly during the project to be held at Chandigarh University,” the team noted.

Made of fiber sheets, the hut has a capacity to hold four or five people and has the facility of a light and a fan. It can prove to be the perfect solution for those who love adventure and will come in handy as temporary housing in case of natural disaster,” said the students.

The principal, Dr. Sehgal Singh Gill, and head of department Kuldeep Singh Gill praised the team and said their students faced a tough competition as teams from across India participated in the fest.
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 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 Shijpal Singh read the progress report of the college at the event, highlighting developments including publications, collaborations and collaborative research, awards, student achievements and placements, among others.

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

Maheshinder Singh Grewal, former Cabinet Minister and member of the Nankat 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 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.

Possam 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 Nitesh Bhati appreciated the cadets of the relevance of the pan-India cycle rally.

Shijpal Singh, principal, GNDEC, welcomed the guests. A midnight natak was also staged by the NCC cadets of GNDEC. —TNS
GNDEC Alumni Celebrates their 40th Year of Graduation

The alumni of 1975-1979 Batch of GNDEC, Ludhiana celebrated their 40th 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 enthral.

This elevated the alumni meet as a dedicated day to 550th 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.
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
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.
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 Sukchakia, 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.

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
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
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 39th 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 36th North Zone Shooting Championship held at New Delhi.
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.
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
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