

# COLLEGE NEWS LETTER

## GNDEC TIMES

VOLUME 6



**Dr. Sehijpal Singh**

### ***Editors' Message***

*It is a moment of elation for us while we are presenting next issue of our college Newsletter to our readers. Every next issue speaks volumes about commendable achievements of our GNDEC family as well as new landmarks set up by our college. We have put all efforts to provide a complete and well-knit view of this year's journey depicted through the milestones achieved by different departments. Through further issues of GNDEC TIMES, we do expect that we will keep on updating our readers in the similar fashion. Your constructive suggestions are always solicited. We welcome your valuable comments which may be mailed at [colmag@gndec.ac.in](mailto:colmag@gndec.ac.in).*

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**EDITOR**

### ***Principal's Message***

*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 as per CSR -GHRDC rankings. GNDEC has achieved 12th position at national level and 2nd position at state level in the category of Top Engineering college of Eminence. 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 !*

**PRINCIPAL**

## *College news*

- **Guru Nanak Dev Engineering College, Ludhiana achieved following positions in ranking survey conducted by different agencies for year 2017 on the basis of various parameters like Infrastructure, Faculty, Research, Admission, Placement etc.**
  - a) Rankings achieved in survey conducted by CSR-GHRDC:
    1. 12th Position (National level) and 2nd Position (State wise) in category of Top Engineering Colleges of Eminence.
    2. 2nd position in category of Top Engineering College ranked by State.
    3. 25th position in category of Top 25 Engineering College ranked by Placements, USP, Social Responsibility, Networking & Industry Interface.
  - b) In a survey conducted by “The Week” Magazine the college was placed amongst first 100 engineering colleges in category of Top Engineering Colleges (All India) including NITs and IITs.
  
- **The college added another jewel in its crown by bagging the overall winning trophy in the IKG PTU zonal youth festival (Central Zone) held at PIMT Khanna from 25th to 27th October 2017. The team also won the overall trophies in the Music and Literary items.**
  
- **The college conducted its annual convocation on 4<sup>th</sup> March 2017.** The video of the same can be accessed at <https://youtu.be/nRkHrUyI9Qw>

## **Outreach programme**

The 90.8 FM Community Radio Station of Guru Nanak Dev Engineering College Ludhiana is an effort to serve the society by broadcasting programmes pertinent to education, information, entertainment, recreation, public affairs, culture, career guidance sports, etc.

The FM - Community Radio station recorded more than 100 programmes on various topics. Through this radio station platform the college interacted with many renowned personalities as the likes of Mr. Arvind Bali, CEO & Director, Videocon telecom, Dr. Jaswinder Singh Bhalla, Punjabi Artist, Mr. Sukhbir Singh Grewal, Director, Training & Curriculum, Punjab Institute of sports. Their career achievements were discussed which serve as inspiration to the listeners. Many issues related to the education of children were discussed with Dr. Paramjeet Kaur, Principal, BCM Arya Model Sen. Sec. School, Ludhiana (an expert in the field of education).

The radio station was utilized to broadcast information about NGOs 'Khalsa-Aid' and 'HELPS' and also the audience were provided with procedure of getting aid/help from these NGOs. The people were made aware about elections by conducting an interview with Dr. Poonampreet Kaur, Deputy Director, Local Government, Ludhiana in the month of January. Many medical issues were discussed by recording programmes with renowned doctors of Ludhiana. Tips for organic farming were shared with audience by carrying out interviews with practitioners of organic farming . Also the renowned poets like Mr. Gurbhajan Singh Gill were invited to the studio to highlight the importance of literature. Many teachers and students of the college also recorded programmes to share their expertise and experiences with the audience. Some glimpses of the recordings:





## PLACEMENT HIGHLIGHTS

HIGHEST PACKAGE PER ANNUM ----- 6.66 L.P.A

HIGHEST PAYING RECRUITER ----- Jaro  
Institute of Technology

TOTAL PLACEMENTS ----- 449

Major Recruiters : 1.Infosys 2.Hewlett Packard Enterprise  
3.TCS 4.Accenture 5. Thermax 6.Jaro Institute of  
Technology 7.eClorx Services 8.Om Careers 9.Sapient lobal  
Markets 10. JCBL Private Ltd. 11.Marshall Machines Ltd.  
12.Rich Infra Ltd. 13.M &M 14.Jeronone Technologies

# Departmental Milestones

## Department of Business Administration

### ➤ Faculty Publications:

Singh Ravi Inder and Singh, Sukhdev, 2017, "Empirical Study on Determinants of Environmental Disclosure: Approach of Selected Conglomerate", *Managerial Auditing Journal*, ISSN 0268-6902, pp.332-355

Singh, Sukhdev, 2017, "Determinants of Capital structure: An Empirical Study of Manufacturing Firms in India" *International Journal of Law and Management*.

Dhall, Harmohan Singh and Singh, Sukhdev, 2017, "Impact of U.S. Financial Crisis on the Performance of Selected Equity IPOs in India" *International Journal of Trade and Global Business Perspectives*, 6(2), pp. 3603-3611.

Dhall, Harmohan Singh and Singh, Sukhdev, 2017, "Pricing Determinants of selected Fixed Price IPOs issued in India" *IOSR Journal of Business and Management (IOSR-JBM)*, 19(7), pp. 113-121.

Dhall, Harmohan Singh and Singh, Sukhdev, 2017, "Pricing Determinants of selected Bookbuilt IPOs issued in India" *IOSR Journal of Business and Management (IOSR-JBM)*, 19(10), pp. 32-40.

### ➤ Achievements

--Two research scholars under the guidance of Dr Sukhdev Singh (H.O.D., M.B.A) and one research scholar under the guidance of Dr Navdeep Kaur were awarded Ph.D. degrees.

--Harmohan Singh Dhall bagged the best paper award at National Conference titled "Research, Development & Socio-Economic Change" held at RIMT University.

--Another two research scholars under Dr. Sukhdev Singh submitted their Ph.D thesis.



--Dr. Sukhdev Singh had the privilege of conducting academic audit of Chandigarh University.

--Dr. Sukhdev Singh delivered radio talk at All India Radio, Jalandhar on the topic “Impact of GST on rural sector” .

--Dr. Sukhdev Singh chaired a session at National conference on “Research, Development & Socio-Economic Change” held at RIMT University.

### ➤ Students’ Corner

An extension lecture was organized for the students of the department under the aegis of Ludhiana Management Association.

Management games were organized aimed at developing management skills amongst the students.



# Department of Civil Engineering

## Faculty Publications (In Journals)

S. No.	Title	Author(s)	Year	Name of the Journal
1	Characterization and Prediction of Storm water Runoff Quality in Sub-Tropical Rural Catchments	Puneet Pal Singh Cheema, Akepati S. Reddy, and Sukhpreet Kaur	2017	Water Resources, 2017, 44(2), pp. 331-341
1	Non-Destructive Techniques for Corrosion Monitoring in RC Structural Members	Yuvraj Singh, Harvinder Singh	2017	International Journal of Advanced Multidisciplinary Research (IJAMR) 9(1) 2017: January-June, pp. 47-51
2	Stress strain behaviour of sand with disc plate shaped reinforcement	JN Jha, SK Shukla, AK Choudhary, KS Gill, BP Verma	2017	Sustainable Civil Infrastructures (SUCI), Springer International Publishing, GeoMEast 2017 International Congress and Exhibition
3	Economic Design of Reinforced Concrete Columns under Direct load and Uniaxial moments	Sonia Chutani & Jagbir Singh	2016	International Journal of Earth Sciences and Engineering (ISSN 0974-5904), Vol.9, No. 3, June 2016, pp 280-284.
4	Effect of Super Plasticizer on the Mechanical and Durable Properties of High Volume Cementitious Concrete	Prem Gandhi, Harpal Singh	2016	IJSTE - International Journal of Science Technology & Engineering
5	Enhancing performance of concrete slabs using steel fibres	Harvinder Singh	2016	Indian concrete Journal



6	Flexural modelling of steel-fibre-reinforced concrete member with conventional tensile rebars	Harvinder Singh	2016	PROCEEDINGS OF THE INSTITUTION OF CIVIL ENGINEERS - STRUCTURES AND BUILDINGS
7	Performance evaluation of nature-inspired algorithms for the design of bored pile foundation by artificial neural networks	Singh Gurdeepak, Walia B.S.	2016	Neural Computing and Applications, Springer Journal, Online first, 27(4), ISSN 0941-0643, DOI: 10.1007/s00521-016-2345-1, Thomson Reuter Impact Factor 1.492
8	Physical & Analytical Investigation of Concrete with Replacement of Cement with Egg Shell Powder & Coal Powder Ash	Varinder Singh, Harpal Singh	2016	IJSTE - International Journal of Science Technology & Engineering
9	Steel Fibers as the Only Reinforcement in Concrete Slabs: Flexural Response and Design Chart	Harvinder Singh	2016	Structural Engineering International
10	Strength and performance of steel fibre-reinforced concrete stiffened plates	Harvinder Singh	2016	Magazine of concrete Research
11	Strength behaviour of Clayey Soil Reinforced with Human Hair as Natural Fiber	Butt, W.A., Mir, B.A. and Jha, J.N.	2016	International Journal of Geotechnical and Geological Engineering,
12	Strength behaviour of Clayey Soil Stabilized with Saw Dust Ash	Butt, W.A., Karan Gupta and Jha, J.N	2016	Journal of geo Engineering
13	Strength Evaluation of Soil Subgrade Using In-situ Tests	Daljeet Singh, JN Jha, KS Gill	2016	Civil Engineering and Architecture 4(6): 201-202, 2016

## Faculty Publications (In Conferences)

S. No.	Title	Author(s)	Year	Name of the Conference / Proceedings
1	Numerical Investigation of Strengthened Reinforced Concrete (RC) Beam using Finite Element Modelling	Yuvraj Singh	2017	International Conference on Sustainable Civil Engineering Practice - 2017
2	3-D Printing in Construction Technology - An Overview	Yuvraj Singh, Amandeep Singh Gill, CS Singla	2016	National Conference on Advances in Science & Technology (NCAST - 2016)
3	Artificial neural networks for shear strength prediction of RCC beams without web reinforcement	Hardev Singh, Bedi KS, Dhaliwal BS	2016	Proceedings of International Conference on Sciences, Engineering & Technical Innovations, June 2016
4	Comparative Study of RC Strengthened Beams using ANSYS	Yuvraj Singh, Amritpal Kaur, Inderpreet Kaur	2016	International Conference on Sciences, Engineering and Technical Innovation
5	Finite Element Analysis of RC Slab with or without opening strengthened with FRP wraps	Tanu Garg , Yuvraj Singh, , Inderpreet Kaur	2016	Advancements in Engineering and Technology (ICAET-2016)
6	Finite Element Modelling of RC beam strengthened with wire-mesh epoxy composites	Yuvraj Singh, Amritpal Kaur, Inderpreet Kaur	2016	National Conference on Advances in Science & Technology (NCAST - 2016)
7	Improvement in unconfined compressive strength of clayey soil with addition of cement and stone dust	Singh Gurdeepak, Walia BS	2016	3rd DAV National Conference on Science, Technology, Engineering, Humanities and Management
8	Strengthening of Reinforced Concrete Structures with different hybrid composite materials - An Overview	Yuvraj Singh, Amritpal Kaur, Inderpreet Kaur	2016	3rd DAV National Congress on Science, Technology, Engineering, Humanities & Management (STEHM-2016)

9	Some studies on the behaviour of sugarcane bagasse ash admixed with cement stabilized soil	BA Mir, Karan Gupta, JN Jha	2016	International Conference on Soil and Environment, ICSE 2016, Bangalore
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## Faculty participation in Short Term Courses/ Workshops/STTPs/FDPs

Sr.No	Name of Faculty	Name of Workshop/Conference/STC/FDP/STTP	Name of organising Department/Institute	Month/Year
1	Amandeep Singh and Yuvraj Singh	STC on "Finite Element Method for Engineering Applications"	Department of Mechanical Engineering, GNDEC, Ludhiana	Dec 04-08, 2017
2	Yuvraj Singh	STC on "Recent advances in fracture and fatigue"	Department of Civil Engineering, IIT Roorkee	July 10 to 14, 2017
3	Amandeep Singh Gill and Yuvraj Singh	STC on "Advances in Structural Engineering"	Department of Civil Engineering, IIT Roorkee	Feb 20 to 24, 2017
4	Yuvraj Singh	International Conference on Sustainable Civil Engineering Practices 2017	PEC University of Technology and NITTTR, Chandigarh	March 2 to 3, 2017
5	Bhupinder Singh Walia	STTP on "Precast and fabricated buildings"	Department of civil engineering Malaviya National Institute of Technology, Jaipur	Dec 26 to 30, 2016
6	Avinash Bhardwaj	"Innovation in Science for suite for inspired search intrapreneurship winter camp 2016"	Sri Sai College of Pharmacy	December 19 to 23 -2016

7	Puneet Pal Singh Cheema	STTP on “Waste Management”	NITTTR, Kolkata	November, 28 – December, 09, 2016
6	Gurdeepak Singh, Inderpreet Kaur, Garpuneet Singh, Kulwinder Singh, Amandeep Singh, Charanjeet Singh, Amandeep Singh Gill, Yuvraj Singh, Rupinder Singh Litt, Bhupinder Singh, Prabhjot Singh, Mandeep Kaur, Kashish Jain	FDP on "Solid waste management in Indian cities issues and concerns"	Department of Civil Engineering, GNDEC, Ludhiana	Aug 23 to 28, 2016

## Achievements

- Dr. Harvinder Singh, Professor authored a book titled “Steel Fibre Reinforced Concrete – Behavior, Modelling and Design” (2017), published by Springer in Springer Transactions in Civil and Environmental Engineering.
- Puneet Pal Singh Cheema , Assistant Professor was awarded doctorate degree on 3<sup>rd</sup> November, 2017 by Thapar University, Patiala
- Gurdeepak Singh, Associate Professor was awarded doctorate degree in May, 2017 by Punjab Technical University, Jalandhar
- Dr. Puneet Pal Singh Cheema was nominated as an expert member of District Level Environment Impact Assessment Authority (DEIAA) in July, 2016.
- Dr. Puneet Pal Singh Cheema, became a member of “The Institution of Engineers on 13<sup>th</sup> October, 2017.

## Events organised

- An expert talk was delivered by Professor Fernando Fraternali, PhD, from the Civil Engineering Department, University of Salerno, Italy on 20<sup>th</sup> December, 2017.



- One day International seminar on “Energy and Environmental Issues: Trends and Thoughts” was organised on 21<sup>st</sup> November, 2016 by Department of Civil Engineering in collaboration with Department of Mechanical Engineering.
- One week TEQIP-II sponsored Faculty Development Program on “Solid Waste Management in Indian Cities: Issues and Concerns” was organised by the department from 23<sup>rd</sup> August – 27<sup>th</sup> August, 2016 in association with Indian Geotechnical Society, Ludhiana Chapter.



## Expert Talks Delivered

- Dr. Hardeep Singh Rai, Professor delivered an expert talk on the topic “How to Search and the Importance of Open Source Computing Tools in Research” during TEQIP-II sponsored Faculty Development program (FDP) on “Computing Tools to Facilitate Multidisciplinary Research” organised by Department of CSE and IT, GNDEC.
- Dr. Puneet Pal Singh Cheema delivered an expert talk on the topic “Connecting People to Nature” at The Institution of Engineers on 8<sup>th</sup> June, 2017, on the occasion of Environment Day.
- A motivational lecture on “Green Diwali” was delivered by an expert from Punjab Pollution Control Board on 25<sup>th</sup> October, 2016.

## Students’ Corner

- 26 students of Civil Engineering students have qualified Graduate Aptitude Test in Engineering (GATE) and one student qualified the CAT examination. The details of the students along with their ranks are listed below:

### Gate Qualified students (Batch 2013-17)

S.No.	Name	C.R.No.	U.R.No.	All India Rank
1	Akashdeep Singh	130303	1310827	132
2	Vishal	130124	1311006	278
3	Shubham Sharma	130108	1310983	792
4	Sukhman Sandhu	130114	1310990	826
5	Nitish Kumar Singh	130080	1310946	1136
6	Arvind Kumar	130126	1310847	1445
7	Jatin Chandna	130062	1310913	3632
8	Guddu Kumar	130033	1310870	4333
9	Jarmanjit Singh	130056	1310905	4958
10	Gurpreet Singh	130044	1310885	5561
11	Gurtej Singh	130045	1310888	5706



12	Pawan Kumar	130085	1310952	9144
13	Rattan Singh	130132	1311123	9907
14	Rakesh Kumar	130095	1310966	11812
15	Inderdeep Singh	130051	1310899	12028
16	Uday Sharma	130122	1311003	12139
17	Akash Singh	130003	1310825	13287
18	Saurabh Kumar	130107	1310981	13374
19	Rajat Garg	130133	1311115	14553
20	Chanpreet Singh	130316	1310857	14945
21	Jatin Singla	130334	1310914	15315
22	Sukhwinder Singh	130017	1310994	16045
23	Akash Singla	130131	1310826	17073
24	Komalpreet Singh	130063	1310918	17131
25	Jaspreet Kaur	130058	1310909	17167
26	Pardeep Singh	130082	1310949	17998

### **CAT Qualified student (Batch 2013-17)**

S.No.	Name	C.R.No.	U.R.No.	Percentile
1	Surbhi Anand	130119	1310997	96.66

- *Students of ACES organised an Oral Presentation Contest in a technical event on 11<sup>th</sup> April, 2017*
- *Students of ACES organised Group discussion Contest in a technical event on 18<sup>th</sup> April, 2017*
- *Students of ACES organised several technical events like Villa, Ground Zero, Bridge Modelling etc during Aug-16 to Nov-17.*
- *Below mentioned students of batch 2013-2017 got work visa (under Washington accord) in Australia.*

Sr. no.	Class Roll No.	Univ.Roll No.	Name of Student
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1	130311	1310843	Arashpreet Singh Dhaliwal
2	130014	1310844	Arshdeep Singh
3	130015	1310845	Arshdeep Singh
4	130326	1310887	Gurtaranjit Singh
5	130339	1310932	Manwinder Singh

➤ *Below mentioned students of batch 2013-2017 got admission in leading International Universities that includes University of ALBERTA, Lambton College, Concordia University, University of Ottawa, The University of British Columbia, University of Manitoba, University of Windsor, University of Buffalo, University of Western Ontario etc.*

**List of students pursuing higher studies in foreign Universities/Colleges**

<b>Sr. no.</b>	<b>Class Roll No.</b>	<b>Univ.Roll No.</b>	<b>Name of Student</b>	<b>Name of the University/College</b>
1	130381	1410775	Jagseer Singh	University of Alberta, Canada
2	130089	1310956	Prabhjot Singh	Concordia University, Canada
3	130307	1310833	Amrik Singh	Lambton College, Canada
4	130053	1310901	Iqbal Singh Kang	Lambton College, Canada
5	130063	1310918	Komalpreet Kaur	Lambton College, Canada
6	130094	1310965	Rajwinder Singh Cheema	Lambton College, Canada
7	130029	1310863	Dilpreet Singh	University of Manitoba, Canada
8	130045	1310888	Gurtej Singh	University of Manitoba, Canada
9	130059	1310910	Jaspreet Singh	University of Manitoba, Canada
10	130340	1310933	Manwinder Singh	University of Manitoba, Canada
11	130055	1310903	Ishnoor Kaur	University of Buffalo, Canada

12	130370	1310871	Gurbir Singh	The University of British Columbia, Canada
13	130013	1310840	Anmoldeep Singh Kang	University of Western Ontario, Canada
14	130046	1310890	Gurwinder Singh Grewal	University of Ottawa, Canada
15	130079	1310940	Navdeep Marken	University of Ottawa, Canada
16	130016	1310846	Arshveer Singh	University of Ottawa, Canada
17	130052	1310900	Iqbal Singh	University of Windsor, Canada

# Department of Computer Science and Engineering

## Faculty Publications

Dr. Parminder Singh and Prof. Kamaldeep Kaur published paper on “Punjabi Dialects Conversion System for Majhi, Malwai and Doabi Dialects” in 8th International Conference on Computer Modeling and Simulation at Australia in January 2017.

Prof. Daljeet Singh published paper on “Measuring software design metrics of UML Structural and Behavioral diagrams” in 3rd International Conference on Research Trends in Engineering, Applied Science & Management at Pune in May 2017.

Prof. Geetika published paper on “A Hybrid Artificial Bee Colony & Support Vector Machine Classifier for Spam Mail Detection” in International Conference on Recent Innovation in Computer Science & Information Technology at Shimla in May 2017.

Prof. Sumeet Kaur Sehra published paper on “Applying Fuzzy-AHP for software effort estimation in data scarcity” in International Journal of Engineering Trends and Technology in March 2017.

Prof. Sumeet Kaur Sehra published paper on “Optimization of COCOMO Parameters using TLBO Algorithm” in International Journal of Computational Intelligence Research in April 2017.

Prof. Sumeet Kaur Sehra published paper on “Evolutionary Computing Techniques for Software Effort Estimation” in International Journal of Computer Science & Information Technology in April 2017.

Prof. Sumeet Kaur Sehra published paper on “Research Patterns and Trends in Software Effort Estimation” in International Journal of Information and Software Technology in June 2017.

Prof. Daljeet Singh published paper on “Requirements for Software Development, Case Study: Software Metrics for Various UML Structural and behavioural Diagrams” in International Journal of Innovations & Advancement in Computer Science in May 2017.

## Events organized

Event type	Event name	Date of the event	Name of Resource person
Expert Talk	Information Security	12 June 2017	Dr. Vishal Devgon
Expert Talk	An Introduction to Data Science	2 May 2017	Dr. Sarabjot Singh
Expert Talk	Latest trends in Computer Vision	1 May 2017	Dr. Kuldeep Singh

## **Expert Talks Delivered**

Prof. Gagandeep Kaur Grewal delivered an expert talk on “Data Mining using WEKA tool” on 15<sup>th</sup> June 2017 at GNDEC, Ludhiana.

## **Students’ Corner**

Garima Sharma and Shagun Sareen, students of CSE were placed in Hewlett Packard Enterprise for a package of 5.0 LPA and 4.1 LPA.

Students of CSE organized events like Andriod Seminar, Web Technology & IOT, IONIC framework and GEEK4GEEK under Computer Society of India (CSI).

Nikant Chaudhary, Student of CSE is selected as a Lead of Developer Student Club, which is a Google Developers program for University students.

# Department of Electrical Engineering

## Faculty Publications

1. Dhingra Arvind, Kumar Dr. Ashwani, 'Reliability evaluation of a furnace', International Conference, Hyderabad, October 21-23,2016
2. Dhingra Arvind, Singh Ranjit, 'Use of energy efficient electric motors in rice mill industry: a case study', 5 th International Conference on Emerging Trends in Engineering & Technology , Geeta Institute of Management & Technology, Kanipala, Kurukshetra, November 5,2016
3. Dhingra Arvind, Kumar Amit, Profit earned by GENCOs through unscheduled interchange, 7 th IEEE India International conference on Power Electronics, Thapar University, Patiala,November 17,2016
4. Dhingra Arvind, Kumar Ashwani, Comparison and validation of a real time Simulink model of induction furnace, International conference on latest concepts in science, technology and management (ICLCSTM-2017), NITTTR, Chandigarh, February 5,2017
5. Dhingra Arvind, Kumar Ashwani, Pulse width Modulation Approach to Current harmonic mitigation in an induction furnace, International Interdisciplinary conference on Science, Technology Engineering Management Pharmacy and Humanities, NTU, Singapore, April 22-23,2017 ISSN(Print):2320-3765, (Online):2278-8875
6. Dhingra Arvind, Kumar Ashwani, 'Reliability evaluation of Induction furnace using FTA Approach', Elsevier, December, 2016
7. Dhingra Arvind, Singh Ranjit, 'Use of Energy Efficient Motors in Rice mill industry: a case Study', Grenze International Journal of Engineering and Technology, Vol.3, no.1, January, 2017

## Events Organised

The department held a one day national seminar on 'Smart Grids and Alternative Sources of Energy', SGASE'16, November 4, 2016.

Three expert lectures were held in the seminar. The lectures were delivered by Dr. Ashwani Kumar Sharma, Professor, EED, NIT, Kurukshetra, Pf. Yadendra Pal Verma, UIET, Chandigarh & Pf. Parag Nijhawan, TU, Patiala. Over 70 participants attended the event.

## Expert Lectures arranged

- Technologies of Future, Er. Jasleen Kaur, Feb 7, 2017
- Illumination Design and Engineering, Er. Kunwar Pal Singh, March 10, 2017
- Solar Plant Commissioning, Er. Avinash Kumar Mishra, March 15, 2017.



## **Expert Lectures delivered**

1. To surveyors and Loss Assessors at Indian Society of Insurance and Loss Assessors, Ludhiana unit- Punjab Chapter on Transformer and its defects, 20 th August,2016.
2. To participants of FDP program on ‘pedagogy of Teaching’, organized by Dept of ECE, GNDEC, Ludhiana, March 5, 2017.

# Department of Electronics and Communication

## Engineering

### Faculty Publications (Journals)

S No.	Faculty Name/s	Title of Paper	Name of the Journal	Volume No. / Issue No./ Page numbers/ ISSN	Month, Year of Publication
1	Sandeep Singh Gill	Analysis of secured Optical Orthogonal Frequency Division Multiplexed System	International Journal of Optical Communications	pp. 1-5, ISSN (Online) 2191-6322, ISSN (Print) 0173-4911	August, 2016
2	Sandeep Singh Gill , Navneet Kaur	Performance Analysis of 20 nm Pentagonal and Trapezoidal NanoWire Transistor with Si and Ge Channel	International Journal of Circuits and Electronics	Vol. 1, pp. 174-184, ISSN: 2367-8879	October, 2016
3	Navneet Kaur, Sandeep Singh Gill and Munish Rattan	Performance Analysis of Dual Material Gate (DMG) Symmetric Dual-k Spacer (SDkS) Tri-Gate FinFET	The Institution of Engineers (India), Electronics and Telecommunication Engineering Division Board, Annual Technical Volume	pp.98-102, ISBN : 978-81-932567-1-8	24-Oct-16
4	Gurpurneet Kaur Sandeep Singh Gill Munish Rattan	Design and Electrical Analysis of 3-fin SOI FinFET for Si, SiGe, GaAs and InGaAs Channel Materials	The Institution of Engineers (India), Electronics and Telecommunication Engineering Division Board, Annual Technical Volume	pp.98-102, ISBN : 978-81-932567-1-8	24-Oct-16

5	Sandeep Singh Gill, Navneet Kaur	Comparative Simulation Analysis of Process Parameters variations in 20nm Triangular FinFET	Active and Passive Electronic Components	pp.1-8, Vol 2017	2017
6	Jasmeet Kaur, Sandeep Singh Gill, Navneet Kaur	Optimization of CMOS Repeater Driven Interconnect RC line using Genetic Algorithm	Journal of Shanghai Jiaotong University (Science) - Springer	Vol. 22, Issue 2, pp. 167-172, ISSN: 2367-8879	March 2017
7	Gurpurneet Kaur	Design and Performance Analysis of different shapes of Trigate FinFET at 20nm	International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering	Vol. 4, Issue 10, pp. 72-77, ISSN (Online) 2321 – 2004, ISSN (Print) 2321 – 5527	October, 2016
8	Sapanjot Kaur	Implementation of all optical full-addition module based on SOA non linearity	Journal of Optics	Vol. 46, No. 1, pp. 43 – 50	March, 2017

### Faculty Publications (Conferences)

S. No.	Faculty name/s	Title of Paper	Name of Conference	Date of Conference	National / International
1	Sandeep Singh Gill and Navneet Kaur	Performance Analysis of 20 nm Pentagonal and Trapezoidal NanoWire Transistor with Si and Ge Channel	7th International Conference on NANOTECHNOLOGY (NANOTECHNOLOGY '16)	Oct 21-23, 2016	International
2	Balwinder Singh Dhaliwal	Handwritten Character Recognition using PSONN	International Conference on Advancements in	Nov, 2016	International

	and Sandeep Singh Gill		Engineering & Technology (ICAET-2016)		
3	Balwinder Singh Dhaliwal and Sandeep Singh Gill	Offline Handwritten Gurmukhi Character Recognition using Particle Swarm Optimized Neural Network	Fourth International Conference on Recent Trends in Communication and Computer Networks, (ComNet 2016)	Nov, 2016	International
4	Sandeep Singh Gill	Design and Evaluation Of Charge Pump	IEEE PIICON 2016 7th Power India International Conference	Nov 25-27, 2016	International
5	Navneet Kaur, Sandeep Singh Gill and Munish Rattan	Electrical Characteristics of 14nm SiC-3C Channel SOI FinFET with Dual-k Spacer	IEEE PIICON 2016 7th Power India International Conference	Nov 25-27, 2016	International
12	Gurpurneet Kaur, Sandeep Singh Gill and Munish Rattan	Design and Performance Analysis of 20nm 5-Fin SOI FinFET for different channel materials	IEEE International Conference on Computing, Communication and Automation (ICCCA-2017)	May 5-6, 2017	International
13	Ameeta Seehra	Traffic Splitting in Hybrid Virtual-MIMO System in Wireless Sensor Networks	IEEE 4th International Conference on Computing for Sustainable Global Development (INDIACom-2017)	Mar 1-3, 2017	International

30	Baljeet Kaur and Kuldeepak Singh	Next Generation Optical Access Networks: A Review	Proceedings of 4th International Conference on Advancements in Engineering & Technology (ICAET-2016) ISBN No. 978-81-924893-1-5	Dec, 2016	International
33	Harinder Kaur and Jaspreet Kaur	HOP optimization in Massively Dense Wireless Sensor Network	IEEE First International Conference on Power Electronics, Intelligent Control and Energy	Jul 4-6, 2016	International
45	Gurpurneet Kaur and Jasmeet Kaur	Design and Performance Analysis of Junction less Nano wire Transistors based Inverters Using Si and SiGe as Channel Material	IEEE 4th International Conference on Computing for Sustainable Global Development (INDIACom-2017)	Mar 1-3, 2017	International
60	Jasmeet Kaur,	D-EPAR: Distance-Efficient Power Aware Routing Protocol for MANETs	2nd International Conference on Next Generation Computing Technologies (NGCT-2016)	Oct 14-16, 2016	International

Additionally a good number of about 55 research papers were contributed / presented by faculty members of the department in the TEQIP sponsored conference titled “International Conference on Soft Computing Applications in Wireless Communication (SCAWC-2017)” held in the department in March ,2017.

## Faculty Participation in Workshop/STTP/FDP/STC

S.No.	Name of Faculty members	Name of Workshop/ STTP/ FDP/ STC	Organising Institute
1	Sandeep Singh Gill, Ameeta Seehra, Balwinder Singh Dhaliwal, Narwant Singh, Munish Rattan, Harminder Kaur, Gurjot Kaur, Navneet Kaur, Gurpurneet Kaur, Chahat Jain, Kuldeepak Singh, Jasmeet Kaur, Daljit Singh, Simranjit Kaur, Jaspreet Kaur and Naazia Makkar	National Seminar on "Make In India: Challenges in Manufacturing and Engineering Industry"	GNDEC, Ludhiana
2	Sandeep Singh Gill, Narwant Singh, Munish Rattan, Harminder Kaur, Gurjot Kaur, Navneet Kaur, Gurpurneet Kaur, Chahat Jain, Kuldeepak Singh, Jasmeet Kaur, Daljit Singh, Simranjit Kaur, Jaspreet Kaur and Naazia Makkar	Workshop on "Effective Teaching Pedagogy and Research Methodolgy"	GNDEC, Ludhiana
3	Gurjot Kaur, Navneet Kaur and Chahat Jain	QIP STC on "Research Skills and Methods in Computational Sciences with Engineering Applications"	IIT Roorkee, Uttarakhand
4	Navneet Kaur and Gurpurneet Kaur	STC on "Nanotechnology for Electronic and Photonic Devices (NanoDev-2016) "	PEC University of Technology, Chandigarh
5	Chahat Jain	STC on " Efficient antennas and guided systems"	IIT, Kharagpur



## Events organised

1. International Conference named “Soft Computing Applications in Wireless Communication (SCAWC-17)” sponsored by TEQIP-II; DRDO, New Delhi; CSIR, New Delhi; Testing & Consultancy Cell, GNDEC, Ludhiana; Neotel Sales & Services, Chandigarh; Gigabyte Networks Pvt. Ltd., Ludhiana; Silicom Electronics Pvt. Ltd., New Delhi and Connect Broadband was organized by the department.

2. The department organized a TEQIP sponsored workshop on “Effective Teaching Pedagogy and Research Methodology” from March 17, 2017 to March 18, 2017. The program was interdisciplinary in nature and was specifically designed for all Engineering Sciences & Management PG students and faculty. It was aimed at imparting skills for effective teaching pedagogy and research methodology.



## Students' Corner

IETE Student forum organised a one day Technical Symposium **e-vision'16** on 4<sup>th</sup> Nov, 2016 sponsored by TEQIP-II. The Theme of this symposium was “**Role of electronics in making smart city project a success**”, catering the different aspects related to improvement in existing systems, innovation and development.

Glimpses of e-Vision'16

**Dignitaries Releasing Proceedings of eVision'16**



Students from various department of GNDEC participated actively in events like Paper presentation, Project display, Collage making, Quiz etc. Nearly 300 students participated in various events showcasing their talent and knowledge in domains like technical writing, circuit making etc. Also prizes were given to all the winners and participation certificate to all the participants.

Tours to Doordarshan Kendra (Kasauli), All India Radio Station( Kasauli) and All India Radio Station, (Dharamshala) were organised for 2nd year, 3<sup>rd</sup> year and Final year B.Tech students. Also an industrial visit to SCL, Mohali was organised for M.Tech (ECE) students on 16<sup>th</sup> March, 2017.

# Department of Information Technology

## Faculty Publications

Dr. Amit Kamra Published paper on novel segmentation of overlapped character in hand Gurumukhi script in May, 2016.

Dr. Amit Kamra Published a paper on a novel approach for enhancement for images using multi scale morphology in international conference June, 2016.

Dr. Amit Kamra submitted a paper on Theratical Analysis of Hidden Markov Models: A Systematic Review and has been accepted in SCOPUS INDEX JOURNAL titled International Journal of Control Theory and Applications Vol.10 April'2017.

Prof. Manpreet Kaur published paper on “Region Growing and Region Merging Segmentation for Medical Ultrasound Images”, in International Conference on Soft Computing Applications in Wireless Communication - SCAWC 2017.

Prof. Harbhag Singh Published a Paper on Prediction of heart diseases using associative classification on 5th international IEEE conference on WECON Chitkara University, 2016.

Prof. Jagdeep Singh Published a Paper on Prediction of heart diseases using associative classification on 5th international IEEE conference on WECON Chitkara University, 2016.

Prof. Lovepreet Kaur published paper on “Region Growing and Region Merging Segmentation for Medical Ultrasound Images”, in International Conference on Soft Computing Applications in Wireless Communication - SCAWC 2017.

Prof. Sachin Bagga Published a paper in RMI Approach to Cluster Based Image Decomposition for Filtering Techniques in International Conference on Computer, Communication and Computational Science with proceedings in Springer in AISC.

Prof. Harjot Kaur published paper on “Region Growing and Region Merging Segmentation for Medical Ultrasound Images”, in International Conference on Soft Computing Applications in Wireless Communication - SCAWC 2017.

## Conference Presentations

Dr K.S. Mann presented paper on Segmentation of Retinal Blood Vessels using Artificial Neural Networks for Early Detection of Diabetic Retinopathy at International Conference on Applied

Mathematics and Computer Science (ICAMCS' 2017) at Rome, Italy on 27<sup>th</sup> – 29<sup>th</sup> January, 2017.S

## **Faculty Participation in Workshop/STTP/FDP/STC**

- ❖ Dr K.S. Mann, Dr. Akshay Girdhar, Dr. Manpreet Singh, Dr. Kiran Jyoti, Dr. Amit Kamra, Prof. Pankaj Bhambri, Prof Kamaljit Kaur Dhillon, Prof. Parminder Kaur Wadhwa, Prof. Jagdeep Singh, Prof. Harbhag Singh, Prof. Inderjeet Singh, Prof. Lovepreet Kaur, Prof. Manpreet Kaur, Prof. Mohanjit Kaur, Prof. Rupinder Kaur, Prof. Sidharath Jain. Prof. Sachin Bagga and Prof. Harjot Kaur attended two week faculty development programme on “Computing tools to facilitate multidisciplinary research” (Under TEQIP-II) at Guru Nanak Dev Engineering College, Ludhiana held from 16 May 2016 to 27 May 2016.
- ❖ Dr. Akshay Girdhar attended one day Outcome Based Education and Accreditation on 21st january, 2017 at NITTTR, Chandigarh.
- ❖ Dr. Akshay Girdhar attended one day Outcome Based Education and Accreditation for NBA Program Evaluators on September 17th ,2016 at NITTTR, Chandigarh.
- ❖ Dr. Kiran Jyoti, Prof Pankaj Bhambri, Prof. Sandeep Kumar Singla, Prof. Manpreet Kaur, Prof. Lovepreet Kaur, Prof. Harjot Kaur, Prof. Mohanjit Kaur and Prof. Rupinder Kaur attended 01 Week STC on PHP and MySQL through ICT from 23.01.2017 to 27.01.2017 at Guru Nanak Dev Engineering College, Ludhiana.
- ❖ Dr. Amit Kamra attended workshop on designing Implant in May 2016.
- ❖ Prof. Parminder Kaur Wadhwa attended Short Term Course on “Aircraft Performance, Stability and Automatic Flight Control” organized by the Aerospace Engineering Department (grant under TEQIP-II provided by GNDEC, Ludhiana) in June, 2016.
- ❖ Prof. Sandeep Kumar Singla and Prof. Ranjodh Kaur attended FDP on “Technology and Management for Electronic Product Design” organized by Guru Nanak Dev Engineering College from May 02, 2016 to May 13, 2016.
- ❖ Prof. Sandeep Kumar Singla and Prof. Sachin Bagga Attended 01 Week Course on "Tools for Engineering Research from 30.01.2017 to 03.02.2017 at Guru Nanak Dev Engineering College, Ludhiana

- ❖ Prof. Harbhag Singh attended two week TEQIP-II sponsored FDP on “*Waste Management and Optimization Techniques*” organized by Guru Nanak Dev Engineering College from 27<sup>th</sup> Dec, 2015 to 5<sup>th</sup> January, 2016.
- ❖ Prof. Ranjodh Kaur attended FDP on Cloud Computing July, 2016 at BBSBEC, Fatehgarh sahib.
- ❖ Prof. Ranjodh Kaur attended 05 Days Workshop on “Personality Development Camp” from 19.10.2016 to 23.10.2016 at Rishikesh.
- ❖ Prof. Ranjodh Kaur attended 02 Days Workshop on “Smart India Hackathon” from 01.04.2017 to 02.04.2017 at Hyderabad.
- ❖ Prof. Lovepreet Kaur attended 3 days course in Universal human values development in students through curriculum management
- ❖ Prof. Rupinder Kaur attended FDP on Fiber Optics in May 2016.
- ❖ Prof. Sidharth Jain attended Exhibition on “Machine Tools” opposite sector 32, Chandigarh Road.
- ❖ Prof. Sidharath Jain attended 1 week FDP on "Web Front End Technologies" PEC University of Technology, Chd.
- ❖ Prof. Sidharath Jain attended 1 week Short term Course on "Advances in OFC Technology" at Guru Nanak Dev Engineering College, Ludhiana.
- ❖ Prof. Sidharath Jain, Prof. Jagdeep Singh and Prof. Ranjodh Kaur attended 1 day Workshop on "Emerging Technologies in Data Analytics" at Guru Nanak Dev Engineering College, Ludhiana .
- ❖ Prof. Sidharath Jain attended 1 week Short term Course on "Open Source Technologies through ICT at Guru Nanak Dev Engineering College, Ludhiana.
- ❖ Prof. Sachin Bagga attended “Faculty Enablement Program on “Foundation Program 5.0” at Infosys Limited, Chandigarh from 14th – 16th December 2016

## Expert Talks delivered

- ❖ Dr. Akshay Girdhar delivered Expert talk in GNDEC on Handling Plagiarism issues in Research in May 2016 in Guru Nanak Dev Engineering College, Ludhiana
- ❖ Dr. K. S. Mann delivered a lecture on ‘Interview Skills’ to the faculty members at Guljar Group of Institute of Technology.
- ❖ Dr. Manpreet Singh Delivered an Expert Lecture on “Computational Biology and Related Tools” during TEQIP-II sponsored FDP on Computing Tools to Facilitate Multidisciplinary Research held at Guru Nanak Dev Engineering college on May 19, 2016.
- ❖ Dr Kiran jyoti delivered an expert talk on social computing tools and their applications at GNDEC, Ludhiana.
- ❖ Dr. Amit Kamra delivered expert talk on bio-metric reorganization system in GNDEC, Ludhiana.

## Students’ Corner

Expert talks were held for the students of the department on various aspects as under:

Topic name	Date of the Event	Resource person
“Taking up Higher Studies”	05/04/2017	Vinod Sachdeva from “T.I.M.E Pvt, Ltd.”
“QEEE”	16/03/2017	Prof. Chester
“Cyber Security”	15/03/2017	Officials from the company “Sera Technologies”
“Career Guidance After the completion of Degree”	28/02/2017	Officials from “Gate Networks”
“Cryptography”	27/02/2017	Er. Prabhdeep Kaur from “Network Hub”

Students of the department participated in workshops with details as under:

Workshop title	Date	Conducted at
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Spark Event	08/04/2017	Infosys Campus Chandigarh IT. Park
Smart India Hackathon	01/04/2017 to 02/04/2017	Hyderabad

# Department of Mechanical Engineering

## Faculty Publications

Goel R, **Sehijpal Singh**, Kansal H, "Performance evaluation of cryogenically assisted electric discharge machining (CEDM) process", *Materials and Manufacturing Processes*, 2017 ( DOI: 10.1080/10426914.2017.1317789 -Taylor and Francis)

Kumar H, **Sehijpal Singh**, Srivastava A "Parametric Investigations into Internal Surface Modification of Brass Tubes with Alternating Magnetic Field" *Procedia Manufacturing* (Elsevier) Volume XXX, July 2016, pp. 1–15 (SME NAMRC 44, USA)

Goel B, **Sehijpal Singh**, RamaGopal S V "Precision Deterministic Machining of Polymethyl Methacrylate by Single Point Diamond Turning. *Materials and Manufacturing Processes*, 2016. (DOI: 10.1080/10426914.2016.1140186-Taylor and Francis)

**Harnam Singh Farwaha, Sehijpal Singh** "Design & performance of magnetic abrasive finishing set up for finishing of extended surfaces" *Asian Review of Mechanical Engineering* (International Journal) Volume 5 Number 1, pp. 1-4, January-June 2016 pp. 2249-6289

Mohan V, **Sehijpal Singh** "Some investigations on low back pain amongst workers involved in lifting tasks *Int. J. Procurement Management* Vol. 9, No. 6, 2016. (DOI: 10.1504/ijpm.2016.079979- Inderscience

**Amrinder Singh Pannu, Sehijpal Singh**, Dhawan V, Singh J (2017), " Development of Natural Fiber reinforced fully biodegradable composite rod", *IJMSE*, Vol. 8, ISSN: 2315-4527, DOI: 10.17706/ijmse.

Kumar R, **P S Bilga, Sehijpal Singh**, "Optimization of Energy Consumption Response Parameters for Turning Operation using Taguchi Method", *Journal of Cleaner Production*, Volume 137, 2016. (DOI: 10.1016/j.jclepro-Elsevier)

**P S Bilga**, "Development of UML-based Safety Program Model for Handling Human Factors under Emergency Conditions *International Journal of Engineering Technology, Management and Applied Sciences*, Volume 4, Issue 4, 2016. 2349-4476

Singh J, **Harwinder Singh** Singh, A. and Singh, G. , "Impact of Six Sigma approach on SMEs of Northern India-An Empirical Investigation", *International Journal of Business Continuity and Risk Management*, Vol. 7, No.1,2017, pp.60-77

Jain A, Bhatti RS and **Harwinder Singh** "An ISM approach to identify key success factors behind the TPM implementation in Indian SMEs", *International Journal of Productivity and Quality Management*, Vol. 22, No. 1, 2017, pp.42-59.



Singh R, Singh J, **Harwinder Singh** (2017), " Experimental Investigation for Shore Hardness of ABS Replicas Fabricated by Fused Deposition Modelling and Vapor Smoothing Process", International Journal of Advanced Mechatronics and Robotics (In press 2017), DOI: 10.1108/RPJ-04-2014-0052.

Singh R, Singh J, **Harwinder Singh** (2017), " Experimental investigations for dimensional accuracy and surface finish of polyurethane prototypes fabricated by indirect rapid tooling: A case study", Progress in Additive Manufacturing (In press 2017), DOI: 10.1007/s40964/017/0024/0.

Singh, K., Singh, R. and **Harwinder Singh**, "Process optimization of single screw extruder for development of Nylon6-Al-Al<sub>2</sub>O<sub>3</sub> alternative FDM Filament", Rapid Prototyping Journal, Vol. 22, No. 4, 2016, pp.766-776.

Sharma, S.D. and **Harwinder Singh**, "Energy saving using DMAIC approach in milk plant - A case study", International Research Journal of Engineering and Technology, Vol. 3, No.2, 2016, pp.659-666.

Singh, K., Singh, R. and **Harwinder Singh**, "Modeling and optimization of extrusion process parameters for the development of Nylon6–Al–Al<sub>2</sub>O<sub>3</sub> alternative FDM filament", Progress in Additive Manufacturing, Vol.1, No.1, 2016, pp.115-128.

Singh, J., Singh, R. and **Harwinder Singh**, "Repeatability of linear and radial dimension of ABS replicas fabricated by fused deposition modelling and chemical vapor smoothing process: A case study", Measurement, Vol. 94, No.1, 2016, pp.5-11.

Singh, J. and **Harwinder Singh**, "Evaluation of Kaizen technique across manufacturing unit -A case study", Productivity, Vol. 57, No.1, 2016, pp.102-111.

Singh, J., Gandhi, S. K. and **Harwinder Singh**, "Investigation of role of human factors in performing maintenance activities", Udyog Pragati Journal, Vol.40, No.2, April-June 2016, pp. 30-37.

Singh, K., Ahuja, I.P.S. and **Jatinder Kapoor** (2017) "Mathematical modeling for material removal and optimization of ultrasonic drilling of polycarbonate and acrylic glass for surface roughness through grey relational approach", International Journal of Mechanical engineering And Applications-Science Publication Group-USA, 5(3): 136-154. doi: 10.11648/j.ijmea.20170503.12.

Singh, K.J., Ahuja, I.P.S. and **Jatinder Kapoor** (2017), "Chemical assisted ultrasonic machining of Polycarbonate glass and optimization of process parameters by Taguchi and Grey Relational Analysis", *Advances in Materials and Processing Technologies*, Taylor & Francis. pp. 1-23. DOI. dx.doi.org/10.1080/2734068X.2017.1350022. Accepted 29-06-2017, Published 10-07-2017.

Singh, K., Ahuja, I.P.S. and **Jatinder Kapoor** (2017) “Multi-response analysis of chemical assisted ultrasonic machining of UL-752 and BS-476 Glass by GRA approach”, International journal of Materials Engineering- Scientific & Academic Publication-USA, 7(2): 33-43. DOI:10.5923/j.ijme.20170702.03

Singh K, Ahuja IPS, **Jatinder Kapoor** and Kapoor. D. (2017) “A study on the tool geometry and stresses induced in tool in ultrasonic machining process applied for the tough and brittle material”, International Journal of Engineering and Advanced Technology, ICNASSET, Feb 24-25, 2017, Issue-NASET17, Published by: Blue Eyes Intelligence Engineering & Science Publication Pvt. Ltd. 6: 143-147.

Singh K, Ahuja, IPS and **Jatinder Kapoor** (2017), “Optimization of process parameters for surface roughness in ultrasonic machining of polycarbonate bullet proof glass and acrylic heat resistant glass by Taguchi and Grey Relational Analysis Approach” , Advanced Engineering Forum- Scientific. Net Trans Tech Publication, Switzerland, Vol. 23, pp 21-44. doi:10.4028/www.scientific.net/AEF.23.21

Singh K, Ahuja, IPS and **Jatinder Kapoor** (2016) “Comparative study between conventional machining, chemical ultrasonic machining (CUSM) and ultrasonic machining (USM) of plain glass, polycarbonate, acrylic, bullet proof and heat resistant glass”, International Conference on Latest Development in Material, Manufacturing and Quality Control (MMQC-2016), 12<sup>th</sup> -13<sup>th</sup> Feb, 2016, Giani Zail Singh Campus College of Engineering and Technology Bathinda, Punjab, India, 320-329, ISBN 978-93-5196-055-3.

Singh K, Ahuja, IPS and **Jatinder Kapoor** (2016) “Study the effect of abrasive ( $Al_2O_3$ &SiC) Ultrasonic machining of plain Glass”, National Conference on Production Engineering, (COPE-2016), 7<sup>th</sup> -8<sup>th</sup> Oct 2016, Guru Nanak Dev Engineering College, Ludhiana, Punjab, India.

**Harmeet Singh**, Friction Stir Welding of Magnesium Alloys: A Review Asian Review of Mechanical Engineering, Vol. No. 1, Jan-June 2016, 2249-6289

**Prem Singh**, Application of Value Engineering on Chassis Component for HCV-A Case Study International Journal of Knowledge Engineering Vol. 2, No. 1, March 2016 (10.18178/ijke.2016.2.1.050)

**Gurmeet Kaur**, Analysis of micro Vickers hardness of friction stir Welding of dissimilar aluminum alloys (AA6061-T6 and AA6082-T6) Indian Journal of science and technology, Vol. No. 9(36), Sept 2016, 0974-6846

## FDP/Short Term Courses/ Workshops Attended by Faculty:

S. No.	Name of Faculty	Topic	Venue	Date	Organized By	Type
1	Dr. Sehijpal Singh	Design and Development	University of Mysore, Mysore	26-31 Dec 2016	University of Mysore, Mysore	GIAN
2	Er. Deepinder Singh	Operational and Supply Chain Management	NIT Jalandhar	5-9 Sept. 2016	Dept. of Production Engineering NIT	FDP
3	Dr. Gurinder Singh Brar	Friction Stir Welding and Processing	IIT Madras	5-10 Sept. 2016	MHRD	STTC
4	Er. Davinder Singh Bhogal	Fundamentals and Applications of Finite Element Methods	NIT Jalandhar	13-17 June 2016	Dept. of Production Engineering NIT	FDP
5	Er. Aprinder S. Sandhu	Design of machine elements using NASTRAN Software	GNDEC Ldh.	16-17 Sept. 2016	Mechanical Engineering Department GNDEC	STTP
6	Er. Aprinder S. Sandhu	Fundamentals and Applications of Finite Element Methods	NIT Jalandhar	13-17 June 2016	Dept. of Production Engineering NIT	FDP
7	Er. Amrinder Singh Pannu	Fundamentals and Applications of Finite Element Methods	NIT Jalandhar	13-17 June 2016	Dept. of Production Engineering NIT	FDP
8	Er. Amrinder Singh Pannu	Design of machine elements using NASTRAN Software	GNDEC Ldh.	16-17 Sept. 2016	Mechanical Engineering Department GNDEC	STTP
9	Er. Pushpinder Singh	Design of machine elements using NASTRAN Software	GNDEC Ldh.	16-17 Sept. 2016	Mechanical Engineering Department GNDEC	STTP
10	Er. Ardamanbir Singh	Copy right, plagiarism and research productivity	PTU Kapurthala	30-Aug-2016	PTU Kapurthala	Workshop
11	Er. Lakhveer Singh Khana	Advanced techniques in	IIT, Rorkee	25 May-02 June,	QIP	STC

		microstructural characterization		2017		
12	Er. Lakhveer Singh Khana	Design of machine elemnts using NASTRAN Software	GNDEC Ldh.	16-17 Sept. 2016	Mechanical Engineering Department GNDEC	STTP
13	Er. Lakhveer Singh Khana	Corrosive failure remedies for high Temprature Components	CU Chd.	29-Jun-16	Society of Materials and Mechanical Engineers	Symposium 13

### **Expert talks/paper presentation by faculty:**

S. No.	Topic	Date	Venue	Name of Faculty
1	Good Books and Success	22/02/2017	Punjab University, Chandigarh	Prof. Sukhjeet Singh
2	Moral Duties & Youth	23/02/2017	Punjab University, Chandigarh	Prof. Sukhjeet Singh
3	Application of MAF for cutting tool inserts	17/12/2016	College of Engg Pune (International conference)	Dr. Sehijpal Singh
4	Advancements in Mechanical Engineering	29/08/2016	GJUS&T, Hisar	Dr. Harwinder Singh
5	Optimization Techniques	03/12/2016	Venus International Foundation	Dr. Harwinder Singh
6	Effect of Silica Based Yttrium Cerium Hybrid Sol-gel Coating on Hot Corrosion of Boiler Steel (MS 210)	24/02/2017.	Madhav University Pindwara, Sirohi Rajasthan, (International conference)	Dr. Jatinder Kapoor

### **Events/ Expert talks organized by Department:**

#### **Events:**

1. International seminar on Energy & Environmental Issues- Trends and Thoughts, 21<sup>st</sup> Nov 2016
2. Seminar on "Recent Trends in Integrated Automation" 30th Sept., 2016
3. Workshop on "Design of Machine Elements using Nastran Software" 16-17 Sept., 2016

4. Seminar on “Innovation management”, 18<sup>th</sup> July 2017

**Expert talks:**

S. No.	Topic	Date of Talk	Venue	Name of Speaker/ Speakers
1	Teaching: A Blessing.	05-09-2016	Mechanical Department, GNDEC	Dr. Sarabjeet Singh, PAU Ludhiana
2	How to mentor the students	25/10/2016	Mechanical Department, GNDEC	Dr. Jasneet Kaur (MIT Cambridge, USA)
3	Reframing Power of Mind	25/10/2016	Mechanical Department, GNDEC	Dr. Jasneet Kaur (MIT Cambridge, USA)
4	How to be a great leader?	06/07/2017	Mechanical Department, GNDEC	Dr. Sarabjeet Singh, PAU Ludhiana
5	Beyond the cliché.	18/07/2017	Mechanical Department, GNDEC	Mr. Karanvir Singh (World Economic Forum)



Er. K.S Dhodi (Executive Director ISUZU-SML being honored during industrial orientation program (14-24<sup>th</sup> June 2017)

List of experts who interacted with students during INDUSTRY ORIENTATION PROGRAM:

1. Mr. Gursharan Singh, **MD True Success Academy**, Chandigarh
2. Mr. Ranjodh Singh, **MD G S Group of Companies**, Ludhiana
3. Mr. Lalit Sharma, **MD Progressive Bikes Pvt. Ltd.**, Ludhiana
4. Dr. S B Singh, **Ex-Principal**, GNDEC
5. Mr. K S Dhodi, **Executive Director**, SML – Isuzu Limited,
6. Mr. Ankur Pathak, **Deputy Director**, MSME, Ludhiana
7. Mr. J.S.Grewal, **MD, East Tech Global Services**, Ludhiana
8. Mr. H.S.Cheema, **MD, Cheema Boilers Limited**, Chandigarh
9. Prof. Ardamanbir Singh Sidhu , **Faculty GNDEC**
10. Prof Lakhvir Singh, **Faculty GNDEC**
11. Mr. S S Grewal, **Faculty CT University**
12. Mr. Rajesh Jain ,**G.M, National Small Industry Corporation**, Govt of India
13. Mr. Rahul Ahuja, **MD, Rajnish Industries**, Ludhiana
14. Prof. (Dr.) R K Garg, **Dean Academics**, NIT, Jalandhar,
15. Mr. Khuspreet Singh, **Consultant**, Siemens India Ltd,
16. Mr. S K Luthra, **GM (Machines) Rockman Industries Pvt. Ltd.**, Ludhiana

## **Achievements**

1. MOU signed with below stated organisations

- i) Jyoti Cermics Ltd. Nashik,
- ii) CSIR-CEMERI-CoE (F.M.), Ludhiana

2. SAE team SILENT MESHES participated in SAE Baja competition at Indore in Feb 2017 and got overall 5<sup>th</sup> position in North India.
3. SAE team GENSONIC participated in event SUPRA SAE at Noida in July 2017. The teams for this event participated from all over India. GENSONIC got 1<sup>st</sup> rank in north India in this event. A student participant Ms. Davenderjit Kaur got best woman participant from the same.

4. SAE team REVENTON participated in Efficycle-2017 at Lovely Professional University and got 2<sup>nd</sup> prize in Maneuverability (Rs. 10000 Cash prize)



Team SILENT MESHERS



Team GENSONIC



Team REVENTON

## Students' Corner

### Industrial Tours Organized:

S. No.	B.Tech Year/Section	Venue
1.	Second Year (Batch 2015-2019)	Guru Hargobind Thermal Power Plant, Lehra Mohabbat
2	Third Year (Batch 2014-2018), Section-A	Daya Industries , Nalagarh
3	Third Year (Batch 2014-2018), Section-B	Asian Pressure Vessels, Nalagarh
4	Third Year (Batch 2014-2018), Section-C	Winsome Textiles Ltd. Baddi
5	Fourth Year (Batch 2013-2017)	Guru Gobind Singh Super Thermal Power Plant, Ropar



# Department of Computer Applications

## Seminars organized

1. “Android and Mobile Application Development” on 15/03/2017

Resource Persons: Er.Anshu Aneja, ANSH Infotech Ludhiana  
Er.Ashish, ANSH Infotech Ludhiana

Chief Coordinator  
Prof. Jasbir Singh Saini

Organizers  
Faculty members of MCA Department

Glimpses



2. “Advanced Technologies of Computer Networking” on **26/10/2016**

Resource Person: Mr. Deepak Kumar (CCIE Certification), Network Hub Technologies Pvt. Ltd, Ludhiana

Chief Coordinator: Prof. Jasbir Singh Saini

Organizers : Faculty members of MCA Department

Glimpses

# **Department of Applied Sciences**

## **Faculty Publications**

Sodhi, Amanpreet Kaur, 2017, "Biodiesel production using waste cooking oil: a waste to energy conversion strategy" , International journal of Clean Technologies and Environmental Policy (Springer -Verlag Berlin Heidelberg 2017) .

## **FDP/Short Term Courses/ Workshops Attended by Faculty:**

Ms Pragya and Ms Rajbir Kaur attended two weeks TEQIP-II sponsored faculty development programme titled 'Technology and Management for Electronic product Design" held at G.N.D.E.C., Ludhiana.

## **Achievements**

Dr. Amanpreet Kaur Sodhi bagged the best paper award for presenting paper in '20th punjab science congress' on 7-9 feb 2017 at IET Bhattal technical campus , Ropar.

## **Expert Talks Delivered**

Dr. Amanpreet Kaur Sodhi Delivered expert talk during STTP on "Solid Waste Management in Indian Cities-Issues and Concerns" held at gndec from 23-27 aug 2016 in association with Indian Geotechnical Society, Ludhiana Chapter.



### Achievement in PTU Inter-College Tournaments

#### Boys

#### Girls

Football	First	Athletics	First
Hockey	First	Lawn tennis	First
Athletics	First	Basketball	Second
Swimming	First	Handball	Second
Basketball	First	Cross country	Second
Lawn tennis	First	Volleyball	Second
Cycling	Second	Chess	Third
Table tennis	Third		
Badminton	Third		
<b>ACHIEVEMENT IN KHALSA SPORTS FESTIVAL(March.2016)</b>			
Chess	Third	Handball	Third
Basketball	Second		
Handball	Second		
Table tennis	Second		

#### INTER-UNIVERSITY PARTICIPATION:

The following students represented PTU, Jalandhar in North Zone/All India Inter-varsity Tournaments:

**1. Cross-country:-**

- |                    |               |
|--------------------|---------------|
| 1. Kirti Malik     | D3-142041     |
| 2. Harsharan Singh | D4-130151     |
| 3. Pallav Digra    | D3-CE-140089  |
| 4. Jaswinder Singh | D2-ECE-153137 |
| 5. Mandeep Kaur    | D3-CSE-145110 |

**2. Athletics:-**

- |                    |               |
|--------------------|---------------|
| 1. Sahibjeet Singh | D2-150106     |
| 2. Harjot Singh    | D4-PE-134012  |
| 3. Jaswinder Singh | D2-ECE-153137 |

**3. Shooting:-**

- |                    |               |
|--------------------|---------------|
| 1. Harsumeet Singh | D4-ME-131044  |
| 2. Arshdeep Singh  | D4-CE-130014  |
| 3. Gurwinder Singh | D1-ME-1630034 |

**4. Handball:-**

- |                    |                                      |
|--------------------|--------------------------------------|
| 1. Sahil Choudhary | M.Tech.Str-1 <sup>st</sup> yr-164521 |
| 2. Jarmanjit Singh | D4-CE-130056                         |
| 3. Amritpal Kaur   | D4-ECE-1311259 (Captain)             |
| 4. Kirti Malik     | D3-142041                            |

**5. Swimming:-**

- |                      |               |
|----------------------|---------------|
| 1. Prabhdeepak Singh | D3-ME-1411473 |
|----------------------|---------------|

**6. Basketball:-**

- |                    |                |
|--------------------|----------------|
| 1. Amanpreet Singh | D4-ME-141006   |
| 2. Taranpreet Kaur | D2-ECE-153090  |
| 3. Dhanuka Priya   | D1-IT-1621017  |
| 4. Gurmeet Kaur    | D1-ECE-1617028 |
| 5. Shiva Chawla    | D1-ME-1630356  |

**7. Badminton:-**

- |                    |              |
|--------------------|--------------|
| 1. Harpuneet Singh | D2-CE-150042 |
|--------------------|--------------|

**8. Cycling:-**

- |                 |               |
|-----------------|---------------|
| 1. Pargat Singh | D1-ECE-153062 |
|-----------------|---------------|

- |                     |  |
|---------------------|--|
| 2. Arshdeep Singh   | D4-ME-131130                           |
| 3. Simranjeet Singh | M.Tech- ENV-2 <sup>nd</sup> yr-1508535 |

**9.Cricket:-**

- |                      |                                   |
|----------------------|-----------------------------------|
| 1. Navdeep Marken    | D4-CE-130079                      |
| 2. Dinesh            | D2-CSE-155374                     |
| 3. Supinderjit Singh | M.Tech-2 <sup>nd</sup> yr-1526521 |

**10. Football:-**

- |                      |                |                |
|----------------------|----------------|----------------|
| 1. Simran Singh      | D4-ME-1311693  | <b>Captain</b> |
| 2. Hamraj Singh      | D4-PE-1311721  |                |
| 3. Baltej Singh      | D2-CE-1507377  |                |
| 4. Sahil Baba Tiwari | D2-ECE-1607068 |                |
| 5. Karanveer Singh   | D3-ME-1411442  |                |

**PTU Best Swimmer (2016-17)**  
**Prabhdeepak Singh**      **D3-ME-1411473**

**PTU Cyclist**

**Pargat Singh**      **D1-ECE-153062**

**EXTRA\_MURAL ACTIVITY: TOURNAMENT ORGANISED:**

1. PTU Inter-college Zonal Football Tournament in Oct. 2016
2. PTU Inter-college Basketball Tournament in Sept.2016
3. PTU Inter-college Cricket Zonal & Inter zonal Tournament in Feb. & March2016.
4. PTU Football & Cricket Trials, Camp and Inter-university participation

**INTRA\_MURAL ACTIVITY: TOURNAMENT ORGANISED**

1. B.Tech. 1<sup>st</sup> yr Cross country meet held in Sept.2016.
2. Inter-year League matches in Volleyball, Football, Cricket and Basketball held in Sept.- October 2016.
3. College Annual Athletic meet was held on 2<sup>nd</sup> & 3<sup>rd</sup> March 2017.