# GIVEC TIMES

Vol.5 Issue 1

# Editors Message

A very happy and prosperous new year to all our readers. The editorial team on its part begs for giveness from all the readers for delay in publishing the issue. We assure you that this year we shall be bringing out the issues regularly. The year gone by had lot of action for Genconians: both the students and the faculty. We saw our brand name getting recognized at various national and international fora. We do have a lot in store. A improvised layout of this newsletter coupled with some more content is in the offing. We value your feedback at colmag@gndec.ac.in. Once again, We wish all members of GNDEC a stupendous rollicking New Year 2016.

Editor

# Director's Message

Happy New Year!

It is matter of great satisfaction that new improved issue of GNDEC Times is being published after a gap of sometime. I do hope that the editorial team will now be more regular in bringing out further issues. I have pleasure to report that inspite of the deep recession and dwindling admission intake at various colleges, we have been able to fill all seats in all streams without any problem. This further indicates the faith the society has in our college. It also adds to the burden of expectations the society has from us. The NBA (under Washington Accord) and NAAC (Grade A) accreditations have put a stamp on our quality initiatives.

Director

# **COLLEGE NEWS**

Our college was accredited by National Board of Accreditation (NBA under Washington Accord) for all undergraduate streams of engineering. NAAC accredited our institute with grade 'A'. Both the inspection teams from NBA as well as NAAC were pleased with the infrastructure and other facilities being maintained in the college. The efforts of all faculty, students and staff are to be applauded for their magnificent show during these inspections.

The annual cultural fest of the college was organized in the month of March, 2015. Students showcased their dancing, acting and photographic skills during the two day event.

The annual technical fest ATHARVA'2015 with the theme "Be the Change" was organized in the month of November, 2015. Teams from over 15 colleges participated in various technical events. The two day fest was inaugurated by the Hon'ble Director, GNDEC who exhorted the students to develop the spirit of healthy competition. The student conveners: Mr. Tarandeep Singh, D4 Mechanical & Mr. Shubham Garg, D4 Mechanical alongwith the core team comprising of third and final year students put in their efforts for the success of this event.

Three faculty members received the ISTE section Best Teacher Award,2015 during Minerva held at RIET, Railmajra: Dr. Y.S.Brar, Dr. Rupinder Singh & Er. Arvind Dhingra.

# CIVIL ENGINEERING DEPARTMENT

# **Events Organised by Civil Engineering Department:**

1. Civil Engineering Department conducted one-day workshop on '*Numerical and Physical Modelling*'in association with Indian Geotechnical Society-Ludhiana Chapter on 3rd October, 2015 at Department of Civil Engineering, Guru Nanak Dev Engineering College, Ludhiana.

S	Resource Person	Topic
NO		
1	K Rajagopal, IIT Madras	Finite Element Method For Analysis Of
		Constructions on Soft Clay Soils
2	B K Maheshwari, IIT	Numerical Modeling For Non Linear Seismic
	Roorkee	Soil Structure Interaction and Liquefaction
3.	B M Basha, IIT	Optimum Design Of Gravity Retaining Wall
	Hyderabad	of Narrow Backfill Width
4	Priti Maheshwari, IIT	Lumped Parameter Modeling of
	Roorkee	Geosynthetic Reinforced Earth Beds Under
		Static And Moving Load
5.	B V S Viswanadham, IIT	Centrifuge Based Physical Modeling of
	Bombay, Mumbai	Geotechnical Structures
6	T V Bharat, IIT Guwahati	Designing Landfill Liners for Waste
		Containment Applications





2. Civil Engineering Department hosted a prestigious annual event of the Indian Geotechnical Society, New Delhi——"IGS-Ferroco Terzaghi Oration-2014 in association with Indian Geotechnical Society-Ludhiana Chapter" on 11th October, 2014. It had been delivered by Professor A. Sridharan, Ex- Deputy Director, Indian Institute of Science (IISc) Bangalore at Department of Civil Engineering, Guru Nanak Dev Engineering College, Ludhiana.





3. Civil Engineering Department along with IGS-Ludhiana Chapter of Guru Nanak Dev Engineering College, Ludhiana organized a National Conference on "Geotechnical Engineering Practice and Sustainable Infrastructure Development" from 11th-12th October, 2014.





**4.** Civil Engineering Department along with IGS-Ludhiana Chapter of Guru Nanak Dev Engineering College, Ludhiana organized workshop on "Forensic Geotechnical Engineering" on following themes

- Evidence/data collection,
- Distress characterization,
- Use of diagnostic tests (laboratory and field tests)
- Role of instrumentation and sensor based technologies
- Design review
- Specifications/standards review
- Risk analysis
- Failure hypothesis formulation,
- Back analysis,
- Technical short comings
- Liability assessment etc





# **Publications of department:**

S. No.	Title	Author(s)	Year	Category
1	A review on the application of fibre reinforced polymer in reinforced concrete structures	Inderpreet Kaur, Hardeep Singh Rai and Harvinder	2015	The Indian Concrete Journal, Vol. 89, Issue 4, pp. 14-20
2	Behaviour of Plastic Waste Fibre- Reinforced Industrial Wastes in Pavement Applications	Jha, J.N, Choudhary, A.K., Gill, K.S. and	2014	International Journal of Geotechnical Engineering, 2014, Vol.8, No.3, PP 277-286 (ISSN 1938-6362)
3	Flexural modelling of reinforced- SFRC members	Harvinder Singh	2014	International Journal of ICE- Structures and Buildings Vol 168 (accepted)
4	Flexural modelling of steel fibre- reinforced concrete members: Analytical Investigations	Harvinder Singh	2014	ASCE journal of Structural Design & Construction; DOI 10.1061/(ASCE)SC.1943-
5	Analytical behaviour of Pile raft foundation in layered soil	Garg, P., Jha, J.N. and Singh, H.	2014	Indian Geotechnical Conference, Kakinada, 18-20 Dec., 2014 CD- Rome
6	Effect of fiber content on stress- strain behaviour of reinforced rice husk ash	Jha, J.N., Gill, K.S., Choudhary, A.K. and Shukla, S.K.	2014	Indian Geotechnical Conference, Kakinada, 18-20 Dec., 2014 CD- Rome

7	Settlement Behaviour of Piled- Raft Foundation in Clayey Soil	Kanwarpreet Singh, K S Gill, Prashant	2014	Proceedings of GEPSID-2014-national conference, October 11-12,
		Garg		2014, Ludhiana PP 96
8	Strength Evaluation of Subgrade Soil osing In-Situ Tests	Daljeet Singh, J N Jha, K S Gill	2014	Proceedings of GEPSID-2014- national conference, October 11-12, 2014, Ludhiana PP 128
9	Effect of Cement on Unconfined Compressive Strength of Clayey Soil	Ishfaq Ahmed Dar, Prashant Garg, K S Gill	2014	Proceedings of GEPSID-2014- national conference, October 11-12, 2014, Ludhiana PP 134
10	Model Study of Vertical & Batter Piles and Groups Subject to Lateral Load in Sands of Varying	Gurdeepak Singh, B S Walia, Pavitter Singh	2014	Proceedings of GEPSID-2014- national conference, October 11-12, 2014, Ludhiana PP 162
11	Influence of Cement and Fly Ash on Compaction and Strength Properties of Clayey Soil	Manish Bhutani, B S Walia	2014	Proceedings of GEPSID-2014- national conference, October 11-12, 2014, Ludhiana PP 170
12	Triaxial Tests on Fiber Reinforced Rice Husk Ash	V Srivastava, Charnjeet Singh, K S Gill, J N Jha	2014	Proceedings of GEPSID-2014- national conference, October 11-12, 2014, Ludhiana PP 182
13	Strength Behaviour of Clayey Soil Reinforced with Human Hair as a Natural Fibre	Wajid Ali, B A Mir, J N Jha	2014	Proceedings of GEPSID-2014- national conference, October 11-12, 2014, Ludhiana PP 220
14	Effect of baggasse ash stabilization of some properties of fine granular soils	Karan Gupta, J N Jha, B A Mir	2014	Proceedings of GEPSID-2014- national conference, October 11-12, 2014, Ludhiana PP 252
15	Discrete Optimisation of T-beam using Genetic Algorithm	Hatindera Singh, Hardeep Singh Rai, Jagbir Singh	2014	Proceedings of GEPSID-2014- national conference, October 11-12, 2014, Ludhiana PP 316
16	Experimental Study of Shear Strength of High Strength Reinforced Concrete Beams	Balwinder Kaur, Harpal Singh	2014	Proceedings of GEPSID-2014- national conference, October 11-12, 2014, Ludhiana PP 333
17	Utilisation of Hypo Sludge in M40 grade High Performance Concrete	Gurjit Singh Sidhu, Abhinandan Singh Gill	2014	Proceedings of GEPSID-2014- national conference, October 11-12, 2014, Ludhiana PP 341
18	Shear Capacity of Self Compacting Concrete Beams: Experimental Study	Sukhwinder Singh, K S Bedi, Rajesh Kumar	2014	Proceedings of GEPSID-2014- national conference, October 11-12, 2014, Ludhiana PP 347
19	A Comparative Study of Shear Wall Location/Configuration in a Framed System of Multi- Storey	Avnish Kumar, H S Rai, Harpal Singh	2014	Proceedings of GEPSID-2014- national conference, October 11-12, 2014, Ludhiana PP 400
20	Experimental Study of Non- Destructive Test on Steel Fibre Reinforced Concrete	Mandeep Singh, Inderpreet Kaur	2014	Proceedings of GEPSID-2014- national conference, October 11-12, 2014, Ludhiana PP 410
21	Behaviour of Glass Fiber on Flexural Strength of Beam by Wet Bonding	Majid Jabbar, Inderpreet Kaur	2014	Proceedings of GEPSID-2014- national conference, October 11-12, 2014, Ludhiana PP 414
22	Striving for High performance in commercial buildings: An overview of Energy Conservation	Jatinder Kaur, Ripu Daman Singh, J.N.Jha, Sanjeev K.	2014	Proceedings of GEPSID-2014- national conference, October 11-12, 2014, Ludhiana PP 443
23	Numerical Analysis of Slab with Opening	Pritpal Kaur, Harpal Singh, Harvinder Singh	2014	Proceedings of GEPSID-2014- national conference, October 11-12, 2014, Ludhiana PP 451

24	Characteristics of Pile-Raft	Abhishek, Prashant	2014	Proceedings of GEPSID-2014-
	Foundation in Sand: An	Garg, Gurpuneet		national conference, October 11-12,
	Experimental Investigation	Singh		2014, Ludhiana PP 462
25	Increase in CBR Value of Clayey	Kamaljit Singh	2014	Proceedings of GEPSID-2014-
	Soil by addition of Cement &	Wazir, B.S.Walia,		national conference, October 11-12,
	Rubber Tyre Waste	Gurdeepak Singh		2014, Ludhiana PP 491
26	Discrete Optimisation of RCC	Bikramjit Singh,	2014	Proceedings of GEPSID-2014-
	Beam and Cost Comparison	Hardeep Singh Rai,		national conference, October 11-12,
	between Ductile Detailing and	Jagbir Singh		2014, Ludhiana PP 499
27	Behavior of Piled-Raft Foundation	Jatinder Pal Singh,	2014	Proceedings of GEPSID-2014-
	in Layered Soil of Sand and Clay	Prashant Garg		national conference, October 11-12,
				2014, Ludhiana PP 526
28	Evaluation of Behavior of	Lakhvir Kaur,	2014	Proceedings of GEPSID-2014-
	Polypropylene Fiber Reinforced	Harvinder Singh		national conference, October 11-12,
	Concrete Members			2014, Ludhiana PP 535
29	Effect of Pine Needle Stabilization	Sarfraz Ahmed	2014	Proceedings of GEPSID-2014-
	on Strength Behavior of Clayey	Chowdhary, B. A.		national conference, October 11-12,
20	Soil	Mir, J. N. Jha	2011	2014, Ludhiana PP 543
30	UASBR: Performance Evaluation	Rupinder Singh	2014	Proceedings of GEPSID-2014-
	for an Agro Industry Effluent	Litt, S. K. Sharma,		national conference, October 11-12,
2.1	Treatment	Sharwan Kumar	2014	2014, Ludhiana PP 549
31	Fibre Reinforced Polymer in	Inderpreet Kaur,	2014	Proceedings of GEPSID-2014-
	Reinforced Concrete Structures:	Hardeep Singh Rai,		national conference, October 11-12,
- 22	Past, Present and The Future	Harvinder Singh	2014	2014, Ludhiana PP 556
32	Solid Waste Management through	Preetinder Kaur,	2014	Proceedings of GEPSID-2014-
	Composting: A Review	Amanpreet Kaur Sodhi, Prateek		national conference, October 11-12, 2014, Ludhiana PP 564
22	An Experimental Investigation of	Heena Malhotra,	2014	Proceedings of GEPSID-2014-
33	Raft Foundation with Friction	Prashant Garg,	2014	national conference, October 11-12,
	Piles	Harvinder Singh		2014, Ludhiana PP 577
34	An Overview Study of Water	Akshat Mahajan,	2014	Proceedings of GEPSID-2014-
34	Cement Ratio, Admixtures and	Gaurav Nadda,	2011	national conference, October 11-12,
	Curing on Carbonation of	Santokh Sra, K. S.		2014, Ludhiana PP 586
35	Stabilization of Kaolinite Soil	Gurdeepak Singh	2014	Proceedings of GEPSID-2014-
	using Cement Kiln Dust	Kler, B.S.Walia,		national conference, October 11-12,
		Sachin Chopra		2014, Ludhiana PP 594
36	Mechanical and Durability	Humaira Gulshan,	2014	Proceedings of GEPSID-2014-
	Properties of Fly Ash Concrete	K. S Bedi		national conference, October 11-12,
	Subjected to Elevated			2014, Ludhiana PP 602
37	Behaviour of Single Pile in	Prashant Garg,	2014	Proceedings of GEPSID-2014-
-	Layered Soil	Ishfaq Ahmed Dar		national conference, October 11-12,
		•		2014, Ludhiana PP 612
38	Effect of Moisture Content in	Harshdeep Singh,	2014	Proceedings of GEPSID-2014-
	Carbonation of Silica Fume	Nahida Nisar, K. S		national conference, October 11-12,
<u> </u>	Concrete: Experimental	Bedi	<u> </u>	2014, Ludhiana PP 618
39	Development of Intensity-	Sukhpreet Bhatia,	2014	Proceedings of GEPSID-2014-
	Duration-Frequency Curves for	Puneet Pal Singh		national conference, October 11-12,
	the Rural Watersheds of Punjab	Cheema, Akipeti S.		2014, Ludhiana PP 627
40	Mechanical Properties of Fibre	K. S. Bedi,	2014	Proceedings of GEPSID-2014-
	Reinforced Fly Ash Concrete	Jashandeep Kaur,		national conference, October 11-12,
		Tanu, Manu Nagpal		2014, Ludhiana PP 638

41	Review on Suitability of Ground Improvement Techniques for Various Soils	Gurdeepak Singh, Manu Nagpal, Jashandeep Kaur	2014	Proceedings of GEPSID-2014- national conference, October 11-12, 2014, Ludhiana PP 648
42	Shear Capacity Evaluation of Longitudinally Reinforced Self Compacting Concrete Beams: Non	Er. Umer Farooq, K.S. Bedi	2014	Proceedings of GEPSID-2014- national conference, October 11-12, 2014, Ludhiana PP 663
43	Effect of Soil Density on Bearing Capacity of Piled- Raft Foundation: An Experimental	Sukhminder Singh Toor, Abhishek, Prashant Garg	2014	Proceedings of GEPSID-2014- national conference, October 11-12, 2014, Ludhiana PP 671
44	Analytical Behaviour of Pile raft foundation in layered soil	Harvinder Singh	2014	IGC-2014, Kakinada

# **New faculty members:**

Following faculty members joined the civil engineering department:

- 1 Amandeep Singh Gill
- 2 Chander Sheikhar Singla
- 3 Sukhpreet Kaur
- 4 Mandeep Kaur
- 5 Yuvraj Singh
- 6 Tanu
- 7 Bikramjit Singh
- 8 Prabhjot Singh
- 9 Jashandeep Kaur

# COMPUTER SCIENCE & ENGINEERING

# Conferences attended by faculty members

- 1. Sumeet Kaur Sehra, "Effect of Decomposition of Classes on Software Architecture Stability", International Conference on Recent Trends in Information, Telecommunication and Computing, Chennai, India, on 28 March, 2015.
- 2. Sukhjit Singh Sehra, "The quality Assessment of OpenStreetMap", FOSS4G 2015 Second National Conference: Open Source Geospatial Tools in Climate Change Research and Natural Resources Management, Indian Institute of Remote Sensing, Dehradun, India, from 08-07-2015 to 10-07-2015.
- 3. Parminder Singh, "English to Punjabi Transliteration using Orthographic and Phonetic Information", International Conference on Natural Language Processing, Punjabi University, Patiala, India, from 18-09-2015 to 19-09-2015.

# STTPs/FDPs Attended by faculty members

The Faculty of the department attended the following STTPs/FDPs:

1. One week TEQIP-II sponsored Faculty development program on Latest Trends in Information and Communication Technologies at GNDEC, Ludhiana on October 4<sup>th</sup> -8<sup>th</sup>,

- 2014 was attended by Dr. Parminder Singh, Er. Sumeet Kaur Sehra, Er. Sukhjit Singh Sehra, Er. Blossom, Er. Kamaldeep Kaur.
- 2. One day workshop on Statistical Machine Translation with Open Source Software at GOA University on December 18<sup>th</sup>, 2014 was attended by Dr. Parminder Singh.
- 3. One day workshop on Reimaging Networks and Quality Assurance sponsored by Tata Consultancy Services at GNDEC, Ludhiana on January 10<sup>th</sup>, 2014 was attended by Er. Gurjit Kaur, Er. Jappreet Kaur, Er. Blossom, Er. Dipti Kunra, Er. Rajveer Kaur.
- 4. Two days TEQIP-II sponsored Faculty Development Program on Medical Imaging: Techniques & Clinical Applications at IIT, Delhi on 3<sup>rd</sup>-4<sup>th</sup> May, 2015 was attended by Er. Jappreet Kaur, Er. Poonamdeep Kaur.
- 5. One day workshop on Becoming QGIS Power user sponsored by OS Geo- India at Indian Institute of Remote Sensing, Dehradun on 8<sup>th</sup> June,2015 was attended by Er. Sukhjit Singh Sehra.
- 6. One week TEQIP-II sponsored Short Term Course on Recent Trends in Software Engineering and Knowledge Mining at Dr. B R Ambedkar National Institute of Technology, Jalandhar on 1<sup>st</sup>-5<sup>th</sup> June,2015 was attended by Er. Gagandeep Kaur Grewal.
- 7. One week Faculty development Program on Image Processing and its Applications organized by Punjab Institute of Technical Teachers Training and Research(PITTR) at Lala Lajpat Rai Institute of Engineering & Technology, Moga on 8<sup>th</sup>-12<sup>th</sup> June, 2015 was attended by Er. Jappreet Kaur, Er. Poonamdeep Kaur.
- 8. One day workshop on Agile Software Development Practices sponsored by TEQIP-II at Guru Nanak Dev Engineering College Ludhiana on 10<sup>th</sup> September, 2015 was attended by Er.Gagandeep Kaur Grewal.
- 9. One day workshop on Advanced Semiconductor Packaging Workshop at Indian Institute of Technology, Ropar on 7<sup>th</sup> November, 2015 was attended by Er. Vivek Thapar.
- 10. One week short term course on Advanced Data Analysis for Management sponsored by TEQIP-II at Indian Institute of Technology, Delhi on 14<sup>th</sup> -18<sup>th</sup> December,2015 was attended by Er. Vivek Thapar, Er. Gurjit Kaur, Er. Blossom and Er. Gagandeep Kaur Sachdeva.
- 11. Two week Faculty Development Program on Waste Management & Optimization Techniques sponsored by TEQIP-II at Guru Nanak Dev Engineering College Ludhiana on 27<sup>th</sup> Dec,2015 5<sup>th</sup> Jan, 2016 was attended by Dr. Parminder Singh, Er. Sumeet Kaur, Er. Vivek Thapar, Er. Sukhjit Singh Sehra, Er. Gurjit Kaur, Er. Blossom, Er. Gagandeep Kaur Sachdeva, Er. Amandeep Kaur Sidhu, Er. Geetika, Er. Kapil Sharma.
- 12. One week short term course on Open source Technologies sponsored by NITTR, Chandigarh at NITTR, Chandigarh on 4<sup>th</sup> -8<sup>th</sup> January, 2016 was attended by Er. Shailja and Er. Jasmine Kaur.

# **Expert Talks Delivered:**

1. Expert talk was delivered by Dr. Parminder Singh on "Text-to-Speech Synthesis with Practical Demonstration", during PTU sponsored FDP "Advancement in Science,

- Engineering & Technology for Emerging Digital Society" (6<sup>th</sup>-10<sup>th</sup> April, 2015) on 9.4.2015 at Bhutta College of Engineering & Technology, Bhutta, Ludhiana.
- 2. Expert talk was delivered by Dr. Parminder Singh on "Text to Speech Synthesis", on 17.03.2015 at Rayat and Bahra College of Engineering and Bio-Technology, Hoshiarpur.
- 3. Expert talk was delivered by Dr. Parminder Singh on "Text-to-Speech Synthesis Systems" in the Post Graduate Department of G.H.G.Khalsa College, Gurusar Sadhar, Distt. Ludhiana on 9th Feb., 2015.
- 4. Expert talk was delivered by Dr. Parminder Singh on "Text-to-Speech: What & How?" on 11.9.2014, Dept. of Computer Sc. & Engg., Chandigarh University.
- 5. Expert talk was delivered by Dr. Parminder Singh on "Text-to-Speech Synthesis Systems" in Faculty Development Programme (4<sup>th</sup> 8<sup>th</sup> October, 2014) on 8<sup>th</sup> October, 2014 organised by Dept. of IT, Guru Nanak Dev Engineering College, Ludhiana.

# **New Faculty members:**

Department welcomed the following faculty members to the department:

- 1. Ms. Gagandeep Kaur Grewal
- 2. Ms. Jasmine Kaur
- 3. Ms. Amandeep Kaur Sidhu
- 4. Ms. Geetika
- 5. Ms. Gagandeep Kaur Gill
- 6. Mr. Kapil Sharma

#### **Faculty Achievement:**

Ms. Amandeep Kaur from the department cleared UGC NET Examination in June 2015.

#### **Student Achievements:**

- 1. Gurjot Singh, Gurwinder Singh and Shiana Sabarwal got selected in Google Summer of Code(GSoC) in April 2015.
- 2. Gurvir Singh of 4<sup>th</sup> year won Gold Medal in Inter-year Footlball League in IKJPTU-Athletic Meet.
- 3. Karamveer Kaur of 3<sup>rd</sup> year won Gold Medal in PTU Lawn Tennis Tournament.
- 4. Gursehajbir Singh of 3<sup>rd</sup> year got selected for IKJPTU basketball team that participated in zonal Inter-varsity tournament held in Rohilkand, Uttar Pradesh.
- 5. Girls Team of Computer Science and Engineering Department won Overall Trophy in College Athletic meet held in March 2015.

# ELECTRICAL ENGINEERING DEPARTMENT

The faculty of Electrical Engineering published/presented following technical papers:

- 1. Brar Yadwinder, Nagpal Tapsi, Expert System based fault detection of transformer, Computational & Theoratic nano science, American Scientific Press, Vol.12, issue2, July,2015.
- 2. Brar Yadwinder, Kumar Sheo, Comparative study of Harr Wavelet with Numerical methods for Partial Differential equations, International Journal of Pure and Applied Mathematics, Vol.101, Issue 4, August, 2015.
- 3. Singh Rupinderjit, Singh Sarabjit Singh, ARIMA based Short Term Load Forecasting for Punjab Region, International Journal of Science and Research, Vol.4, Issue 6, June, 2015
- 4. Singh Rupinderjit, Singh Parminder, Technical Analysis of Micro Hydel Plant in Punjab, International Journal of Science and Research, vo.4., Issue 7, July, 2015
- 5. Singh Manjeet, Singh Rupinderjit, Gill Gagandeep Kaur, Estimating the Corellation between the Calorific Value and Elemental Components of Biomass using Regression Analysis, Internation Journal of Industrial Electronics and Electrical Engineering, Vol.3, Issue 9, September, 2015.
- 6. Kaur Ravinder, GSM based Automatic Meter Reading, International Journal of Recent Research in Electrical & Electronics Engineering, Vol.2, Issue2, May, 2015.
- 7. Gill Gurpreet Kaur, Singh Parminder, Approach to Optimum Power Flow Problems using FACT devices, International Journal of Enhanced Research in Science, Technology and Engineering, Vol.7, Issue 4, July, 2015.
- 8. Gill Gurpreet Kaur, Solution to Economic Load Dispatch Problem using Cuckoo Search Algorithim, International Journal of Electrical and Electronics Research, Vol.3, Issue 2, June, 2015
- 9. Gill Tarandeep Kaur, Kaur Harjinder, Contribution of Renewable to energy supply security in the electricity sectors, International Journal of Enhanced research in science Technology and Engineering, Vol.4, Issue 7, July, 2015.
- 10. Singh Jaswinder, Singh Baljeet, Enhancement of Operationa Efficiency of Existing Power System with the help of PMUS Technology Based on GPS clock, National Conference on Advances in Electrical and Electronics Communication Engineering, BBSBEC, Fatehgarh sahib, Febraury, 2015.
- 11. Arora Shivani, Energy Auditing and Its Benefits, International conference on Enhanced Research in Science, Technology and Engineering, BCET, Bhutta, July, 2015.

# Expert talks delivered

The faculty of the department delivered the following expert talks:

- Brar Yadwinder Singh, Power System Analysis, to students of SBSSTC, Ferozpur, October, 2015
- Sodhi Gagandeep Singh & Kaushal Neha, PLC and its applications, to students at IET, Bhaddal, September, 2015
- Dhingra Arvind, Latest Trends in Measuring Instruments for Electronics, Students at GGI, Khanna, September, 2015
- Dhingra Arvind, Energy Auditing: Key to future, 73rd Foundation day celebrations of CSIR, CSIR-CEMRI, Ludhiana, September, 2015

- Singh Kanwardeep, Computational Tools for Power System Optimization, CT group of colleges, Shahpur, Jalandhar, July, 2015
- Brar Yadwinder Singh, Power System optimization, CT group of colleges, Shahpur, Jalandhar, June, 2015
- Dhingra Arvind, Power System Protection & Switchgear, Full Bright guest lecture, GZSCET, Bhatinda, March, 2015
- Dhingra Arvind, Energy efficiency, GZSCET, Bhatinda, March, 2015.
- Brar Yadwinder Singh, Biomass Gasification, National conference on Advances in Electrical & Electronics engineering, BBSBEC, Fatehgarh Sahib, February, 2015.
- Singh Kanwardeep, Computational Tools for Power System Optimization, GGI, Khanna, Febraury, 2015.

# **ELECTRONICS & COMMUNICATIONS ENGINEERING DEPARTMENT**

IETE Students' Forum (ISF), Department of Electronics and Communication Engineering organized **e-vision'14** on 25<sup>th</sup>Nov'14. It was an interdepartmental technical event which included events like Paper Presentation, Project Exhibition, Electronics Collage and collage making. Any undergraduate/postgraduate student of ECE discipline was eligible to participate. Both B.tech and M.tech students participated in various events. This symposium was a tribute to Prof. Kanwaljit Singh, Associate Professor, Dept. of ECE. Event was organized under the guidance of Prof. S.S.Gill, HOD (ECE). Dr. M.S.Saini appreciated the efforts of staff and the students. Dr. S.S. Gill and Dr. Munish Rattan were the Convenors of this event. Prof. Chahat Jain and Prof. Jasmeet Kaur were the organizing secretary.





e-vision'14

Guru Nanak Dev Engineering College, Ludhiana has entered into a **Memorandum of Understanding with the Semiconductor Laboratory, Department of Space, Govt. of India**, SAS Nagar, for joint collaboration on research and development, faculty and student exchange. This MoU will promote the exchange of staff and students regarding academics and research for the mutual benefit of both institutions. It will also encourage the provision of cooperation in project proposals and research activities of mutual interest.

The MoU was signed by Dr. M. S. Saini (Director, GNDEC) on behalf of GNDEC, Ludhiana and Mr. Surinder Singh (Director, SCL) on behalf of SCL, SAS Nagar in presence of Mr. H. S.

Jatana (Divisional Head VLSI, SCL/ISRO) and Dr. S. S. Gill (HOD ECE Deptt., GNDEC). The guests were welcomed by Dr. S. S. Gill, HOD, ECE Deptt., GNDEC. Also a presentation was given by him about the college and the ECE Department.

Dr. M. S. Saini highlighted in his speech that this MoU will help in filling the gap between institute and industry and give an industry focussed shape to classroom teaching. Mr. Surinder Singh and Mr. H. S. Jatana both, talked about the mutual benefits expected to be derived from this collaboration.



Signing of Memorandum of Understanding with the Semiconductor Laboratory

IETE Student forum, Department of Electronics and Communication Engineering has organised a two day **workshop on VLSI Design** on 14<sup>th</sup> and 15<sup>th</sup> September.. The prime intent behind this event was to incite passion amongst participants to take career in most exciting field of Engineering – Space Technology and Microelectronics. Also, it proffered a brief framework about Integrated Circuit Design.

Scientists from SCL, Department of Space, Govt. of India, Sh. H. S. Jatana and Sh. Munish Malik were invited to present their expertise on Integrated circuit Design. This workshop was conducted under the recently signed MoU between the two organisations for enhancing R&D activities in the field of VLSI among students and the teaching fraternity.





# Workshop on VLSI Design

Sh. H. S. Jatana discussed that SCL is the only facility of its kind in India and this workshop will galvanize VLSI research and knowledge among the faculty and students. Also, it will help in filling the gap between institute and industry by providing an industry focussed shape to classroom sessions. The workshop covered various topics like CMOS Analog Design and analog simulations. Expert Sh. H.S. Jatana also gave an overview of VLSI Industry and also discussed with the students about role of VLSI in space and avionics.

IETE Student Forum (ISF) also regularly organises various technical and non-technical events in which all students participated with great enthusiasm.

Prof. Gurjot Walia attended a one week short term course on "Image processing using VLSI Architectures" at IIT, Roorkee from 6<sup>th</sup> July, 2015 to 10<sup>th</sup>, July 2015. In that various image processing techniques and their implementations were discussed by various reputed speakers.

Prof. Narwant Singh presented a paper on "A linear antenna Array Failure detection using Bat Algorithm" in Eighth International Conference on Contemporary Computing, Jaypee Institute of Information Technology Noida (U.P) on August 20-22, 2015.

# INFORMATION TECHNOLOGY DEPARTMENT

A glimpse of technical pursuits undertaken by the department:

# **International Conference:**

- 1. Dr. K.S Mann published paper on "An optimal control for E Health monitoring System" in International Conference on innovative research in engg. Science, information and Communication Tech, JULY 2015; ISSN 978-2-642-24819-5.
- 2. Dr. K.S Mann published paper on "Radiology Information System's Mechanisms HL7-MHS and HL7/DICOM Translation" in International Conference on computational intelligence in data mining Vol 1 SPRINGER, DEC 2014; ISSN 2190-3018.
- 3. Dr. K.S Mann published paper on "Cloud Deployable health data mining using secured framework for clinical decision support systems", July 2015, IEEE- IEMCON 2015,978-1-4799-6908-1.
- 4. Dr. K.S Mann published paper on "Designing Medical CBIR System with Edge Density Criterion", 2015, 4th International Conference on Network and Computer Science Portsmouth UK, April 2015,2382-6185.
- 5. Dr. K.S Mann published paper on "Mitochondrial DNA for Bimolecular Archaeology of Mummies", 2015 IEEE International conference on Electrical, Computer and Communication Technologies March 2015; 978-1-4799-6084-2.
- 6. Dr. Kiran Jyoti published paper on "Design and Analysis of Recommender System for Business Data" in International Journal of Computer Techniques ISSN :2394-2231 Volume 1 Issue 4, July -Aug 2015 pp 40-46.
- 7. Dr. Kiran Jyoti published paper on "Performance analysis of object based accountability framework in cloud computing" in International Journal of Applied Engineering Research, ISSN 0973-4562, Vol. 10 No.55 (2015) pp 2913-2920.
- 8. Dr. Kiran Jyoti Published paper on "A Study on Resource Provisioning of Multi-tier Web applications in Cloud Computing" in 9<sup>th</sup> INDIACom; 2015; IEEE Conference ID: 350712<sup>nd</sup> 2015 International Conference on "Computing for Sustainable Global Development", 11th–13<sup>th</sup> March, 2015 at Bharati Vidyapeeth's Institute of Computer Applications and Management (BVICAM), New Delhi (INDIA).
- 9. Dr. Manpreet Singh published paper on "Classification and prediction based data mining algorithms to predict slow learners in education sector" Elsevier 3rd International Conference on Recent Trends in Computing 2015 (ICRTC-2015) organized by the SRM

- University, Delhi-NCR Campus, Ghaziabad, India during 12th 13th March, 2015. pp. 500-508. doi: 10.1016/j.procs.2015.07.372.
- 10. Dr. Ajay Shiv Sharma published paper on "A Review of Classification Technique For Breast Cancer Oriented Health Care" pp. 247-253; International Conference RLEDS-2015; ISBN 978-93-85446-02-3.
- 11. Ajay Shiv Sharma, Manpreet Singh published paper on "An application using Android Capstone Project" 2nd IEEE International Conference on MOOCs, Innovation and Technology in Education held at Thapar University on 19-20 December, 2014
- 12. Dr. Amit Kamra Published a paper on" Characterization of Architectural Distortion in Mammograms Based on Texture Analysis Using Support Vector Machine Classifier with Clinical Evaluation"; Journal of Digital Imaging (SCI-Impact Factor: 1.2). 07/2015; DOI:10.1007/s10278-015-9807-3.
- 13. Dr. Akshay Girdhar published paper on '*Region Based Adaptive Contrast Enhancement of Medical Ultrasound Images*' in IEEE International Conference on Computational Intelligence & Communication Technology held at Ghaziabad on 13-14 February 2015 pp.750-753, IEEE conference Record Number: 34505.
- 14. Dr. Akshay Girdhar published paper on 'Vehicle Number Plate Detection System for Indian Vehicles' in IEEE International Conference on Computational Intelligence & Communication Technology held at Ghaziabad on 13-14 February 2015 pp. 8-12, IEEE conference Record Number: 34505.
- 15. Akshay Girdhar published paper on "Automatic Region Growing Segmentation for Medical Ultrasound Images" in the Proceedings of IEEE International Conference on Medical Imaging, m-Health and Emerging Communication Systems (MEDCOM-2014, Conference record number #33940), held at G.L. Bajaj Institute of Technology & Management, Noida (India) held on November 7-8, 2014
- 16. Akshay Girdhar published paper on "An Improved Steganographic Approach to Diminish Data Modification for Enhancing Image Quality" in the Proceedings of IEEE International Conference on Medical Imaging, m-Health and Emerging Communication Systems (MEDCOM-2014, Conference record number #33940), held at G.L. Bajaj Institute of Technology & Management, Noida (India) held on November 7-8, 2014

# **Publications in International Journals:**

- 1. Dr. Akshay Girdhar published paper on 'Weighted variance based scale adaptive threshold for despeckling of medical ultrasound images using curvelets' in Journal of Medical Imaging and Health Informatics(SCIE Indexed with Impact Factor of 0.642), pp. 272-281, April 2015.
- 2. Dr. Akshay Girdhar published paper on 'Non-Homomorphic Technique for Despeckling of Medical Ultrasound Images using Curvelet Thresholding' in Advanced Science Letters (Scopus Indexed Journal with Impact Factor 1.253), pp. 107-111, January 2015.
- 3. Dr. K.S Mann published paper on "Suggested Solutions to obstacles perceived in implementation of Health information Systems" in Dec 2014 in IJARCSSE; 2277128-x.
- 4. Dr. K.S Mann published paper on "Supervised multilayered perception network based decision tree algorithm for cancer classification" in June 2015 in IJERSTE; 2319-7463.
- 5. Dr. K.S Mann published paper on "Remote patient monitoring using telemedicine health care systems" in IJECT; 2230-7109.
- 6. A review on content based image retrieval system and its emerging trends for medical

# **Short Term Course/ Workshops/ FDPs Attended:**

- 1. All the staff members of IT Department attended Short Term Course on "Latest Trends in Information and Communication Technologies" organized by Information Technology Department at Guru Nanak Dev Engineering College, Ludhiana from 4th 8th October, 2014.
- 2. Dr. K.S Mann attended Seminar on "Aspects of software engineering" organized by Sri Sai Engg. And Tech, Sept 2014.
- 3. Dr. K.S Mann attended Seminar on "Tools of Data Management organized by Sri Sai Engg. And Tech" in June 2015.
- 4. Dr. K.S Mann attended Seminar on "Research Methodologies organized by Sri Sai Engg. And Tech" in March2015.
- 5. Dr. K.S Mann attended Seminar on "Web Enabled Services organized by Sri Sai Engg. And Tech" in Feb2015.
- 6. Dr. K.S Mann attended Seminar on "Research Methodologies" organized by Lobourgh University, UK/March 2015.
- 7. Dr. K.S Mann attended Seminar on "Software Engineering" organized by RIMT, Mandigobindgarh in Feb 2015.
- 8. Dr. K.S Mann attended Seminar on "Code Cloning Detection" organized by RIMT Mandigobindgarh in May 2015.
- 9. Dr. K.S Mann attended Seminar on "Need of ERP Implementation" organized by RIMT Mandigobindgarh in July 2015.
- 10. Dr. K.S Mann attended Seminar on "Digital Image Processing" organized by RIMT Mandigobindgarh in Feb 2015.
- 11. Dr. K.S Mann attended Seminar on "Recent Trends in Computing" organized by BKDCT, Bhutta in Dec 2014.
- 12. Dr. Ajay Shiv Sharma attended Short Term Course on "*Research Techniques*" Two Weeks, from May 25th-5th June, 2015 held at SBSSTC, Ferozepur.
- 13. Dr. Akshay Girdhar attended two day short term course on '*Medical Imaging: Techniques* and Clinical Applications' at IIT, New Delhi held from 3<sup>rd</sup> 4<sup>th</sup> April, 2015.
- 14. Dr. Akshay Girdhar attended two day workshop on 'Designing Medical Implants & Fixtures' at IIT, New Delhi held from 9<sup>th</sup> -10<sup>th</sup> May, 2015.
- 15. Dr. Akshay Girdhar attended two week faculty development programme on '*Research Techniques*' at Shaheed Bhagat Singh State Technical Campus, Ferozepur held from 25<sup>th</sup> May 5<sup>th</sup> June, 2015.

# <u>Conducted Workshop/ Mock Inspection/ Technical Committee Member/Technical Services:</u>

- 1. Akshay Girdhar conducted One Day Workshop on "NBA Accreditation Process" at GZS PTU Campus, Bathinda on 28<sup>th</sup> November, 2014.
- 2. Pankaj Bhambri and Raninder Kaur concluded the Short Term Course (STC) on title "Latest Trends in Information and Communication Technologies" sponsored by TEQIP-II from from 4th 8th October, 2014 at GNDEC, Ludhiana.

- 3. Dr. Akshay Girdhar conducted in One day workshop on "Outcome Based Process of Accreditation (in compliance with NBA)" at Lala Lajpat Rai Institute of Engineering & Technology, Moga on 05/09/15.
- 4. Dr. Akshay Girdhar conducted mock activity of NBA as expert evaluator on 28/08/15 at Beant College of Engineering & Technology (Established and Promoted by Govt. of Punjab), Gurdaspur.
- 5. Dr. Akshay Girdhar was technical program committee member for IEEE International conference on Computational Intelligence and Communication Technology (CICT2015) held at Ghaziabad on 13-14 February 2015.
- 6. Dr. Akshay Girdhar provided technical services related to centralized online counselling for admissions 2015 to I.K. Gujral Punjab Technical University, Jalandhar.

# **Expert Lectures:**

- 1. Akshay Girdhar delivered expert talk on "NBA Accreditation (Outcome Based)" at Lala Lajpat Rai Institute of Engineering and Technology, Moga on 2<sup>nd</sup>October, 2014.
- 2. Dr. Amit Kamra presented an expert talk at BCET Bhutta on MATLAB and its applications in image Processing on 9th April 2015.
- 3. Dr. Amit Kamra Presented an Expert talk at LLRIET Moga on 12 June 2015 in Research areas in Biomedical Imaging.
- 4. Dr. Ajay Shiv Sharma delivered expert talk on "Biological Database" in FDP Advancement in Science, Engineering & Technology for Emerging Digital Society held at BCET, Ludhiana.
- 5. Dr. Ajay Shiv Sharma delivered expert talk on "Literature Review & its Management" STC in Research Techniques held at SBSSTC, Ferozepur.
- 6. Dr. Ajay Shiv Sharma delivered expert talk on "Queries Forum on Research Challenges for New Researchers" in STC Research Techniques held at SBSSTC, Ferozepur.
- 7. Dr. Ajay Shiv Sharma delivered expert talk on "Making India a developed country through use of Open Source" in FDP MAKE IN INDIA "Role of IT Services" held at CT Institute of Technology.
- 8. Dr. Akshay Girdhar chaired 'Technical Session-XII' on 28/03/15 in National Conference on Role of Information Technology in Management & Engineering: Issues and Prospects at Malout Institute of Management & Information Technology (Established and Promoted by Govt. of Punjab), Malout.
- 9. Dr. Akshay Girdhar delivered expert talk on 'Assessment Tools for Outcome Based Accreditation ' on 14/05/15 in STTP on "Institutional Accreditation (NBA Guidelines) and Quality Management" at Malout Institute of Management & Information Technology (Established and Promoted by Govt. of Punjab), Malout.
- 10. Dr. Akshay Girdhar delivered expert talk on 'Role of Outcome Based Model in Education ' on 14/05/15 in Faculty Development Activity at Baba Farid Group of Institutions, Bathinda.
- 11. Dr. Akshay Girdhar delivered expert talk on 'Adaptive-Neighborhood Visual Enhancement Technique for Medical Ultrasound Images ' on 11/06/15 in Faculty Development Programme on "Image Processing and Its Applications" at Lala Lajpat Rai Institute of Engineering & Technology, Moga.
- 12. Dr. Akshay Girdhar delivered expert talk on 'Region-based Adaptive Contrast Enhancement Technique for Medical Ultrasound Images ' on 11/06/15 in Faculty

- Development Programme on "Image Processing and Its Applications" at Lala Lajpat Rai Institute of Engineering & Technology, Moga.
- 13. Dr. Akshay Girdhar delivered expert talk on 'NBA Accreditation An Introduction ' on 14/07/15 in Faculty Development Activity at Malout Institute of Management & Information Technology (Established and Promoted by Govt. of Punjab), Malout.
- 14. Dr. Akshay Girdhar delivered expert talk on 'Criteria for Outcome Based Accreditation ' on 14/07/15 in Faculty Development Activity at Malout Institute of Management & Information Technology (Established and Promoted by Govt. of Punjab), Malout.
- 15. Dr. Akshay Girdhar delivered expert talk on 'Relevance of Co-curricular and Extracurricular Activities in the Programme Accreditation ' on 14/07/15 in Faculty Development Activity at Malout Institute of Management & Information Technology (Established and Promoted by Govt. of Punjab), Malout.
- 16. Dr. Akshay Girdhar delivered expert talk on 'Implementation of Assessment Tools for Outcome Based Education ' on 14/07/15 in Faculty Development Activity at Malout Institute of Management & Information Technology (Established and Promoted by Govt. of Punjab), Malout.
- 17. Dr. Akshay Girdhar delivered expert talk on 'Plagiarism: How to Detect & Avoid it ' on 03/09/15 in Faculty Development Activity at Baba Farid Group of Institutions, Bathinda.
- 18. Dr. Akshay Girdhar delivered expert talk on 'NBA Accreditation-An Overview ' on 05/09/15 in One day workshop on "Outcome Based Process of Accreditation (in compliance with NBA)" at Lala Lajpat Rai Institute of Engineering & Technology, Moga.
- 19. Dr. Akshay Girdhar delivered expert talk on 'Role of Stakeholders in Defining Vision, Mission and Programme Education Objectives ' on 05/09/15 in One day workshop on "Outcome Based Process of Accreditation (in compliance with NBA)" at Lala Lajpat Rai Institute of Engineering & Technology, Moga.
- 20. Dr. Akshay Girdhar delivered expert talk on 'Process of Defining Programme Outcomes and Course Outcomes ' on 05/09/15 in One day workshop on "Outcome Based Process of Accreditation (in compliance with NBA)" at Lala Lajpat Rai Institute of Engineering & Technology, Moga.
- 21. Dr. Akshay Girdhar delivered expert talk on 'Role of Assesment Tools in Outcome Based Education ' on 05/09/15 in One day workshop on "Outcome Based Process of Accreditation (in compliance with NBA)" at Lala Lajpat Rai Institute of Engineering & Technology, Moga.

# **Software development:**

Dr. Akshay Girdhar, Er. Harbhag Singh, Er. Jagdeep Singh and Er. Inderjeet Singh successfully designed and implemented following software's for Admissions 2015 of the Institute:

- 1. Work flow based software for Admissions in B.Tech. and M.Tech. Programmes.
- 2. Online admission forms (at admission.gndec.ac.in) for B.Tech. and B.Tech. (Lateral Entry).
- **3.** Merit generation software for B.Tech. and B.Tech. (Lateral Entry).

# **Articles/Chapters published in books:**

1. Dr. K.S Mann published book on Digital Literacy "Study of Classification Techniques for cancer datasets"; Twenty first Century Publication ISBN-978-93-85446-01-6.

# **Department Achievemnets:**

- 1. Amit Kamra completed his PhD on "Computer Aided Diagnosis of Breast Cancer: Towards the detection of Subtle signs", in June 2015.
- 2. Akshay Girdhar successfully defended his Ph.D viva-voce on the topic titled "Investigations of Pre-Processing Techniques for Medical Ultrasound Images" on 19<sup>th</sup> June, 2015.

The editorial team congratulates the new doctorates.

# MECHANICAL ENGINEERING DEPARTMENT

1) Expert Lecture Delivered by faculty in FDP/STTP:

Dr.Se	Dr.Sehijpal Singh				
S.No	Topic	Event	Dates	Organizing agency/institute	
1	Standardization of Indian Engineering Education	World Standards Day	14 <sup>th</sup> October 2014	Bureau of Indian Standards Northern region, Chandigarh	
2	Peening Of Surfaces With Cold Drawn Steel Pins	3 <sup>rd</sup> International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering	16 <sup>th</sup> October 2014	Punjab Technical University Jallandhar	
Dr. P.	Dr. P.S Bilga				
3	Uncertainty estimation in measurement	National conference	8 <sup>th</sup> Nov 2014	PU SSGRC Hoshiarpur	

# 2) Paper Published by faculty

a) Jagjit Kaur, Harmeet Singh, Prem Singh "Earth Air Tunnel Heat Exchanger System Review" in proceeding of National Conference on Latest Developments in Materials,

- Manufacturing and Quality Control, GZSPTU Campus, Bathinda, Feburary 19-20, ISBN No. 2015978-93-5196-055-3
- b) Aggarwal V., Singh Sehijpal, Garg R.K., Modeling and optimization of machining parameters of WEDM of Inconel 718 using Response Surface Methodology, International Journal of Advanced Manufacturing Technology (Springer), Vol. 79 pp. 31-47, 2015
- c) Goel B., Singh Sehijpal, Ramgopal S.V., Machining of mono-crystalline germanium with single point diamond turning, Materials and Manufacturing Processes (Wiley), Vol. 30, pp.1018-1025, 2014
- d) Parminderjeet Singh, Sehijpal Singh, Lakhvir Singh, "Application of magnetically assisted gel abrasives for fine finishing." inproceeding of 23<sup>rd</sup>International conference on Processing and Fabrication of Advanced Materials, organized by Department of Mechanical and Industrial Engineering, Indian Institute of Technology, Roorkee from 5-12-2014 to 7-12-2014.
- e) Dr. Sehijpal Singh presented a paper at 5<sup>th</sup> International, 26<sup>th</sup> "AIMTDR Conference" IIT Guwahati , Dec 2014
- f) Dr. G.S. Brar presented a paper at Indian Science Congress-2015 Jan 3-7, 2015, Mumbai University Mumbai
- g) Dr. GS Brar presented a paper at International Conference on computing in mechanical engineering (ICCME-2015) during 10-13 August, 2015 held Kochi.

#### 3) Grant Received:

- a) Prof. Prem Singh received travel grant from UGC, New Delhi to attend International Conference on Mechanical Design and Manufacturing (ICMDM - 2014) held at Hong Kong.
- b) Dr. Sehijpal Singh received travel grant from DST for attending ASME-2015 International conference on manufacturing science and Engineering, University of North Carilona, Charlotte, USA June 2015
- c) Dr. Harwinder Singh received UGC Research award 2015

# 4) Programs organised:

- a. TEQIP sponsored Motivational Workshop on "Ignite your profession to excel in your profession", March 2015
- b. Faculty Training Program on "Fundamentals of Strength of materials and Design of machine elements" by Dr. Yogeshawr Hari, Ex- Prof. University of North Carilona, USA (Through Skype), Aug 2015

# 5) Workshop/FDP/STC attended:

- a) Dr. Harmeet Singh and Prof. Prem Singh attended one week FDP on the title "New and Renewable Energy Technologies" at Beant College of Engineering and Technology, Gurdaspur from 06/07/2015 to 10/07/2015 organized by Punjab Institute of Technical Teachers Training & Research (PITTTR), Jalandhar.
- b) Prof. Perminderjit Singh and Prof. Harnam Singh attended Short Term Course on "Advanced Aerospace Materials: Processing Characterization and Applications" from 1<sup>st</sup>June, 2015 to 5<sup>th</sup> June, 2015 at IIT, Roorkee.
- c) Dr. Harmeet Singh attended two day International Workshop on "Energy and Resources Development" from 16-05-2015 to17-05-2015 at IIT (BHU) sponsored by Varanasi Centre for Energy and Resources Development.

- d) Dr. Harmeet Singh attended one week TEQIP sponsored STP on "Water and Waste Water Treatment" from 21-07-2015 to 25-07-2015 at IIT Roorkee.
- e) Dr. Jatinder Kapoor attended "management capacity enhancement program", IIM Indore, 8-14<sup>th</sup> June 2015
- f) Prof BS Dhillon and Prof Jaspreet Singh attended a TEQIP sponsored FDP on "Integrated Automation" at IIT Delhi, 1-6<sup>th</sup> June 2015
- g) Prof Shehbaz Singh and Chamkaur Jindal attended FDP on "Emerging trends on corrosion control and surface engineering", Ferozpur College of Engg and technology, Ferozpur
- h) Dr. Harwinder Singh attended a STC on "Advanced Data analysis in management" at IIT Delhi on 26-28<sup>th</sup> June 2015
- i) Dr. GS Brar attended a STC on "Advanced manufacturing Technology" at GB Pant University, Garhwal 8-12<sup>th</sup> June 2015
- j) Prof. Deepak Dhand, Prof. Rupinder Kaur and Prof. Gurpreet Singh attended a STC on "Advanced computation heat transfer" at IIT Delhi on 21-23<sup>rd</sup> June 2015
- k) Prof Deepinder Singh attended a STC on "sustainable operations management" at IIT Delhi on 4-6<sup>th</sup> June 2015.
- 1) Dr. Harwinder Singh attended a FDP on Research methodology at PTU Jallandahr on 21-22 Feb 2015

# M. Tech. Completed:

- (a) Harnam Singh Farwaha, Asstt Professor has completed M. Tech. in Production Engineering from GNDEC, Ludhiana
- (b) Davinder Singh Bhogal, Asstt Professor has completed M. Tech. in Thermal Engineering from NIT, Jalandhar
- (c) Deepak Dhand, Asstt Professor has completed M. Tech. in Production Engineering from GNDEC, Ludhiana
- (d) Jageet Kaur, Asstt Professor has completed M. Tech. in Energy Engineering from GNDEC, Ludhiana

# **SAE Chapter Activities:**

a) **SUPRA SAE INDIA 2015**: Team GENSONIC participated in the SAE SUPRA 2015, which is a national level event held this time at Madras Motor Sports Race Track, Chennai from 15-19 July 2015. The Team acquired 10thAll India Rank in the Overall Ranking. A total of 167 teams came for the final round.



**SUPRA SAE INDIA TEAM 2015** 

b) Another SAE team i.e. SILENT MESHERS participated in the final event at Pithampur (MP) in February 2015 and got second position in the state. The 25 member team had to face a crucial vehicle breakdown during the event, but still managed to get a better rank this time. The team has already cleared the virtual round for the 2016 event and are now in the manufacturing phase.



The team SILENT MESHERS in the race track at Pithampur (Indore)

c) A team of students ASSERTIVE CREW from the department participated in the first E-Bike competition held at LPU Jalandhar organized by Imperial Society of Innovative Engineers. They bagged the cash prize and brought laurels to the college. They are now working on a Hybrid Vehicle and have cleared the Virtual round.



E-Bike Team (ASSERTIVE CREW)

# MCA DEPARTMENT

A seminar on 'Big Data Analytics" was organized on 06/10/2015 in MCA Seminar Hall. The resource persons were from Solitaire Pvt. Ltd (Software Development Company)



A workshop on Android Application development was organized with Mr. Anshu Aneja & Mr. Ashish of M/s. Ansh infotech being the resource person.



A "Seminar on Cyber Security" was organized on 13/10/2015 in MCA Department LAB. The Resource Person for this event was Mr. Harpreet Khatter, Harksh Technologies ,Secugenius Security Software, Ludhiana

# PRODUCTION ENGINEERING DEPARTMENT

The zist of activities of production department is as under:

# **Short-Term Courses/Workshops/Seminars Organized:**

- Two week faculty development programme on, "Waste management and optimization techniques" at Guru Nanak Dev Engg College, Ludhiana, (sponsored by TEQIP-II) from Dec.27, 2015-Jan.05, 2016.
- Three days workshop on, "Quality Initiatives in Technical Educational Institutions" at Guru Nanak Dev Engg College, Ludhiana, (sponsored by TEQIP-II) from Dec. 24-26, 2015.

#### **Short-Term Courses/ Workshops Attended:**

- Dr. Rupinder Singh attended Two day workshop on designing medical implants and fixtures organized by Biomedical Engg. Dept, sponsored by TEQIP-II, at IIT, Delhi, May 9-10, 2015.
- Prof. Jagdeep Singh attended the following:
  - One week (Dec 14-18,2015)TEQIP-II sponsored FDP on Advanced Data Analysis for management
  - Two days (30-31<sup>st</sup> October,2015)MHRD workshop on Solar Air heaters
  - One week (June 8-12, 2015) TEQIP-II sponsored Advanced Manufacturing Technology.

#### Awards/Prizes/Citations:

The following awards/prizes/citations have been won by Dr. Rupinder Singh:

- UGC Research Award for year 2016-2018 for the research project, 'Weldability of dissimilar plastic based material by using hybrid filament of fused deposition modelling with friction stir welding' under Mechanical Engineering. The award consists of salary grant for 02 Years.
- Maharashtra State National Award for Outstanding Research Work in Engineering & Technology for the year 2015 at 45<sup>th</sup> Annual Convention of ISTE on 10<sup>th</sup> Jan, 2016 at HVPM's College of Engineering and Technology, Amravati (Maharashtra). The award consists of cash prize, a medallion and a citation.
- **ISTE Section Best Teacher Award for year 2015** at Rayat Institute of Engineering and Information Technology, Railmajra, Shaheed Bhagat Singh Nagar, Punjab. The award consists of a medallion and citation.
- **Best paper award** during 5<sup>th</sup> International conference and exhibition on additive manufacturing technologies-AM2015, Global additive manufacturing summit, Sep. 7-8, 2015, Bangalore, India for paper, "Mathematical modeling for surface hardness in FDM assisted vacuum moulding of Al-SiC metal matrix composite".
- Research Grant of Rs 85.24 Lacs only for the year 2015-18, for the project, "Polymer waste as fused deposition modelling feedstock filament for industrial applications" by Department of Science and Technology under Technology system development programme.
- **Research Grant** of Rs 21.03 Lacs only for the year 2015-18, for the project, "Development of in-house/indigenous composite wire based feed stock filaments of fused deposition modelling for biomedical applications" by SERB, Department of Science and Technology, Government of India.
- **Research Grant** of Rs 0.60 Lacs only for the year 2015-16, under Student Project scheme (Student Name: Narinder Singh and Piyush Bedi) for the project, "Investigations for mechanical properties of Nylon6-SiC-Al<sub>2</sub>O<sub>3</sub> based feed stock filament for fused deposition modelling (FDM)" by Institution of Engineers (India).

#### **New Appointments**

Prof. Gauravdeep Singh Rehal & Prof. Paramjeet Singh joined the department.

#### SPORTS DEPARTMENT

The sports department excelled and brought laurels to the college. The following were the achievements:

#### ACHIEVEMENT IN PTU INTER-COLLEGE TOURNAMENTS

**Boys** Girls

Cycling	First	Lawn tennis	First
Football	First	Handball	Third
Best Physique	First		
Lawn-tennis	Second		

Handball	Third		
ACHII	EVEMENT IN KHALSA	SPORTS FESTIVAL(0	Oct.2014)
Chess	First		
Gatka	First		
Basketball	Second		
Handball	Second		

# PTU BEST CYCLIST

1. Mandeep Singh Thind D4-ME-111067

# INTER-UNIVERSITY PARTICIPATION:

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

# **HANDBALL:-**

1.	Gurvinder Singh	M.Tech-1 <sup>st</sup> yrPower-1305
2.	Simarjeet Singh	M.Tech2 <sup>nd</sup> yr-ENV-1313
3.	Amandeep Sharma	D3CE-120003
4.	Jobanpreet Singh Mann	D3ME-121057
5.	Simarjeet Kaur	D3.I.T-116025
6.	Kirti Malik	D1EE-142041
7.	Mandeep Kaur	D2I.T-126050
8.	Amritpal Kaur	D1ECE-133008

# LAWN-TENNIS

1. Rahulpreet Singh D2ME-1311664

#### **CHESS**

1. Vikas Kumar D4ME-1144936

# **BADMINTON**

1. Gurinder Singh D4PE-1284060

# **CRICKET**

1.	Kuljinder Singh	D3I.T-126114
2.	Ajayveer Singh Sidhu	D4CE-110022
3.	Ankit	D3E.E-122008

# **CYCLING**

1	Mandeep Singh Thind	D4ME-111067
2	Sahil Palta	D4ME-1144905

# **FOOTBALL**

- 1. Ravinder Singh D4 ME-111370
- 2. Bhagat Singh D4 ECE-113061
- 3. Kuldeep Singh D4 CE-110010
- 4. Bhavjeet Singh D3 CE-120152
- 5. Hamraj Singh D2 PE-134019
- 6. Simran Singh D2 ME-131108

# INDIVIDUAL POSITIONS IN KHALSA SPORTS FESTIVAL (Oct.2014)

# **ATHLETICS**

1. Mandeep Singh D2CE -130067 (Bronze medalist in 200m)

# WT. LIFTING

- 1. Sukhwinderpal Singh M.Tech.-1<sup>st</sup> yr-1415 (**Gold medalist in** upto 94Wt. category)
- 2. Gurwinder Singh Bains D4CSE-1144364 (Gold medalist in upto 77Wt.category)
- 3. Simranjit Singh D4CE-110093 (Gold medalist in upto 69 Wt. category)





The Lawn tennis team with their coach and trophy.

The winners of PTU best physique.





The football team with their trophy.

The cycling team with their prize.

# FOOD FOR THOUGHT

