From the desk of ECC

My dear esteemed Members,

This edition of IEEE Delhi Section e-newsletter brings you the status of Technical and Professional Activities, including Conferences held recently and yet to be held in near future, besides few ones under consideration, Section Member(s) / Volunteer(s) in the limelight, Minutes of Section Annual General Meeting (AGM), an article of interest, growth of Section in terms of IEEE membership. Also, in this regard you are informed that Section along with the IEEE India Council would be organizing the prestigious Annual Conference IEEE INDICON2020 in New Delhi (precisely at Netaji Subhas University of Technology of Govt. of NCT of Delhi in December 2020). Therefore, whole-hearted support of all of you is requested for its success in the form of contribution, participation, etc. Last but not the least you are reminded to send information that are of interest and you wish to share with others, so that same may form a part of the next edition.

With best regards and wishes,

(Dr. Subrata Mukhopadhyay)
IEEE Delhi Section
September 08, 2019 (*Sunday*)
E-mail: ieeedelhi@ieee.org
Web-site: www.ewh.ieee.org/r10/delhi

Schedule of Lecture(s)

Surf IEEE vTools Meeting System (https://meetings.vtools.ieee.org/main), then login with User Name and Password, and View Existing Meetings / View Published Meetings (https://meetings.vtools.ieee.org/meeting_view/list) for the Upcoming Meetings in respect of IEEE Delhi Section and its Society Chapters / Affinity Groups.

List of IEEE Conferences in the geographic area covered by the IEEE Delhi Section
(http://ewh.ieee.org/r10/delhi/event.html)

Already held in 2019

- International Conference on "Machine Learning, Big Data, Cloud and Parallel Computing" shortly called as "COMITCon" (https://conferences.ieee.org/conferences_events/conferences/conferencedetails/45641) for three days from 14th Feb 2019 to 16th Feb 2019 to be organized by the Department of Computer Science & Engineering, Faculty of Engineering & Technology, Manav Rachna International Institute of Research and Studies (MRIIRS), (Formerly Manav Rachna International University, (MRIU)), Delhi Suraj Kund Road, Sector 43, Faridabad, Haryana-121004, India having Conference website: https://comitcon.in/

- 9th Annual Information Technology, Electromechanical Engineering and Microelectronics Conference (IEMECON) (https://conferences.ieee.org/conferences_events/conferences/conferencedetails/45795) during March 13 to 15, 2019 in the University of Engineering & Management, Jaipur, India (having previous edition of the Conference website with URL: http://iemecon.org/)

- 13th edition of INDIACom i.e. INDIACom – 2019; 2019 06th International Conference on "Computing for Sustainable Global Development" (https://conferences.ieee.org/conferences_events/conferences/conferencedetails/46181) scheduled to be held during 13th – 15th March, 2019. This is an annual event and being organized since 2007, as INDIACom-2007. Further details of the same are available at the web-portal http://bvicam.ac.in/indiacom/

- 1st International Conference on Signal Processing, VLSI and Communication Engineering (ICSPVCE-2019) (https://conferences.ieee.org/conferences_events/conferences/conferencedetails/46182) scheduled during 28-30 March 2019 at Delhi Technological University, Bawana Road, Delhi, having Conference Website: http://www.dtu.ac.in/Web/ICSPVCE/index.html

Yet to be held in 2019

- 2nd International Conference on Intelligent Communication and Computational Techniques (ICCT'19) (https://conferences.ieee.org/conferences_events/conferences/conferencedetails/46177) on September 28-29, 2019 at School of Computing and Information Technology, Manipal University, Jaipur – 303007 (Rajasthan, India) https://www.icct.co.in
- 5th International Conference on Signal Processing, Computing and Control (ISPCC 2k19) (https://conferences.ieee.org/conferences_events/conferences/conferencedetails/48220) during 10th -12th October 2019 at Jaypee University of Information Technology, Waknaghat, Solan, H.P., India with Conference website: http://www.juit.ac.in/ispcc_2019/
- Fifth International Conference on Image Information Processing (ICIIP -2019) (https://conferences.ieee.org/conferences_events/conferences/conferencedetails/47207) to be held on November 15-17, 2019 at Jaypee University of Information Technology, Waknaghat, Solan, HP, India with Conference website: http://www.juit.ac.in/iciip_2019/
- International Conference on Power Electronics, Control & Automation (ICPECA-2019) (https://conferences.ieee.org/conferences_events/conferences/conferencedetails/47973) during 16-17 Nov, 2019 at Department of electrical engineering, Jamia Millia Islamia (a Central University), New Delhi, India with Conference website: http://www.icepca2019.com/
- 8th International Conference on Power Systems (ICPS 2019) (https://conferences.ieee.org/conferences_events/conferences/conferencedetails/48983) to be held during December 20-22, 2019 at Malaviya National Institute of Technology (MNIT), Jaipur, Rajasthan, India and having Conference website: https://www.icps2019.in/

To be held in 2020

- 3rd International Conference on "Emerging Technologies in Computer Engineering: Machine learning and Internet of Things (ICETCE-2020)"

(https://conferences.ieee.org/conferences_events/conferences/conferencedetails/48199) during 07/02/2020 (Friday) & 08/02/2020 (Saturday) by the Department of Computer Science & Engineering and Information Technology. Swami Keshvanand Institute of Technology, Management & Gramothan (SKIT), Ramnagaria, Jagatpura, Jaipur-302017, Rajasthan, India and having Conference website: http://www.icetce.in/2020
- Indo – Taiwan 2nd International Conference on Computing, Analytics and Networks (Indo-Taiwan ICAN2020) jointly organized by Chitkara University, India & National Chung Cheng University, Taiwan (https://conferences.ieee.org/conferences_events/conferences/conferencedetails/48429) during February 7-8, 2020 at National Chung Cheng University, Taiwan No. 168, Section 1, Daxue Road, Minxiong Township, Chiayi County, Taiwan 62102 & on February 14-15, 2020 at Chitkara University, Punjab, India Chandigarh-Patiala National Highway (NH-64), Rajpura, Punjab 140401, India and having Conference website: https://www.chitkara.edu.in/cse-can
- 1st International Conference on Emerging Trends in Communication, Control and Computing (ICONC3) (https://conferences.ieee.org/conferences_events/conferences/conferencedetails/45789) re-scheduled during February 21-22, 2020 (Friday – Saturday) at Mody University of Science & Technology (MUST), Lakshmangarh, Rajasthan, India and having Conference Website: http://www.muconference.in/
- 2020 First IEEE international conference on Measurement, Instrumentation, Control and Automation (ICMICA 2020) (https://conferences.ieee.org/conferences_events/conferences/conferencedetails/48462) during April 2 to 4, 2020 at National Institute of Technology Kurukshetra, Kurukshetra and having Conference website: http://www.icmica2020.com/

Under consideration

- 14th edition of INDIACom i.e. INDIACom – 2020; 2020 07th International Conference on "Computing for Sustainable Global Development" scheduled to be held during 12th - 14th March, 2020 at BVICAM, Bharati

Vidyapeeth, New Deli, India and having Conference website:
https://bvicam.ac.in/indiacom/
- 9th IEEE Power India International Conference (PIICON 2019) under the aegis of IEEE PES-IAS Delhi chapter, IEEE PELS-IES Delhi Chapter and IEEE Delhi Section during February 28 to March 01, 2020 by DCRUST Murthal, Haryana, India

Minutes of AGM of IEEE Delhi Section held on March 31, 2019 (Sunday)
Time: 6:00 pm
Venue: Seminar Hall 2 and 3 clubbed, Kamala Devi Complex, India International Center, 40 Max Mueller Marg, New Delhi – 110003.

1. **Welcome by the Section Chair Prof. K. Subramanian:** Prof. K. Subramanian, Chair-IEEE Delhi Section welcomed the members and the guests present and declared the meeting open. He informed the achievements of the Section to the members like sponsoring conferences, outreach meetings, DL lectures at various institutes etc. The Section took the initiatives to revive the Chandigarh Subsection and this year the fifth exec com meeting was held at Chitkara University in Chandigarh subsection. He also informed the members that this time the record number of activities, nearly 278 in numbers were held, out of which Section conducted 16 technical, administrative and professional activities including many IEEE conferences. The increase in chapters, award nominations from the Section and registration of IEEE Delhi Section as Society was highlighted.

2. **Confirmation of minutes of previous AGM:** The Minutes of the last AGM held on 4th Feb., 2018 were presented and approved (proposed by Prof. M. N. Hoda and seconded by Mr. V. K. Gupta).

3. **Presentation of Secretary's Report:** Prof. Rachana Garg, Secretary of the Section read the Secretary's report, which was approved by AGM (proposed by Prof. Prerna Gaur and seconded by Mr.P. V. Ekande). The report is attached as Annexure-I.

4. **Report by the Treasurer:** The Treasurer of the Section, Dr. Jasdeep Dhanoa, presented the financial report for the year 2018. The following was discussed and approved:

* Post Facto Approval for External CA: R P R P & Associates **|** D-38, LGF(Front),South Extn- II **|** New Delhi– 49 Email
: info@rprpca.in **|** Website: www.rprpca.in
* Professional Payment: Rs 35,000/- per Financial Year for Financial Years, 2012-13, 2013-14, 2014-2015, 2015-16, 2016-17, 2017-18. (Balance sheets are ready, but conciliation w.r.t. 26AS to be considered, then it has to be signed by Chair, IEEE and by CA.)
* Professional Payment: Rs 25,000/- for filling of IT returns for 2018-19

Informed AGM:
* The Address of Pan Card changed to IEEE Society Registration Address at BVICAM, Paschim Vihar.
* Completed Tax Returns re-conciliation for five Financial Years, i.e 2012-13, 2013-14, 2014-2015, 2015-16, 2016-17
* Tax returns filed for FY 2017-18 on March 30, 2019.

Other Financial jobs to be taken:
* Income tax Notice dated 30/1/19 received for non-filling of Income Tax for AY 2012-13, to be followed up.
* The present PAN card is for Firm, it has to be converted in the name of Trust/Society.
* Apply for TAN no., required for any professional payment above 30, 000/- .
* File Returns for FY 2018-19 by July 2019.
* AGM was upraised about the details of 26AS received with respect to Delhi Section PAN no. The amounts have directly been credited in Chapters/Conference accounts using this PAN no., without updating / informing the Section. IEEE Delhi Section 26AS update since 2012 shared with AGM. Re-conciliation of 26AS to be taken on priority.
* IEEE Internal Audit Department, has asked for the audit process of the IEEE financial reporting activities and results for the year 2018. (through certified CA), Fees for this

purpose to be borne by Section, as advised by Geo-unit.

* Confirm receipt of net amount (after TDS) from Corporate / Chapters / Conference organizers.

* Utilization Certificate for the amount mentioning about the *bona fide* expenses.

* The Internal Audit Team, as follows, is proposed to support during Audit by HQ and IT office.

S. No.	Name & Affiliation	Position
1.	Prof. Prerna Gaur (NSUT)	Chairperson
2.	Prof. Abdul Q. Ansari (JMI)	Exec Vice Chairman
3.	Prof. Rachana Garg (DTU)	Vice Chairperson
4.	Dr. Manoj Saxena, (DU)	Secretary
5.	Dr. Shabana Urooj (GBU, Gr. Noida)	Joint Secretary
6.	Dr. Jasdeep Kaur Dhanoa (IGDTUW, Delhi)	Treasurer
7.	Prof. K. Subramanian (ex-NIC)	Past Chairman
8.	Prof. Subrata Mukhopadhyay	Electronic Communications Coordinator of IEEE Delhi Section

The financial report was approved by the AGM (proposed by Mr. R. K. Asthana and seconded by Prof. Subrata Mukhopadhyay).

4. In appreciation to the services rendered, the exec com members of 2017 and 2018 were felicitated.

5. Prof. G. Bhuvneswari (recipient of IEEE 2018 Wanda Reder Pioneer in Power Award from PES Women in Power Group), Dr. Bharat Singh Rajpurohit (recipient of IEEE IAS Outstanding Chapter Chair Award 2018), Dr. Shabana Urooj (recipient of 2018 R10 Education Activities Outstanding Volunteer Award), and Dr. Ashu Verma (recipient of Outstanding Chapter Engineer Award, PES Delhi Chapter) have been felicitated.

6. **Declaration of 2019 Delhi Section Executive Committee and Introduction of Members:** Prof. Subrata Mukhopadhyay, Member, Nomination Standing Committee announced the slate for Section Executive Committee for the year 2019 as follows:

S. No.	Name & Affiliation	Position
1.	Prof. Prerna Gaur (NSUT)	Chairperson
2.	Prof. Abdul Q. Ansari (JMI)	Exec Vice Chairman
3.	Prof. Rachana Garg (DTU)	Vice Chairperson
4.	Dr. Manoj Saxena, (DU)	Secretary
5.	Dr. Shabana Urooj (GBU, Gr. Noida)	Joint Secretary
6.	Dr. Jasdeep Kaur Dhanoa (IGDTUW, Delhi)	Treasurer
7.	Prof. K. Subramanian (ex-NIC)	Past Chairman
8.	Prof. M. N. Hoda (BVICAM)	Member
9.	Mr. Ajay Goel (Aricent)	Member
10.	Dr. Bharat Singh Rajpurohit (IIT Mandi)	Member
11.	Ms. Tarini Baswal (Railways, New Delhi)	Member
12.	Prof. Mahesh M. Bundele (Poornima University, Jaipur)	Member
13.	Prof. Shyam Sunder Tyagi (Manav Rachna, Faridabad)	Member
14.	Dr. Rajnish Sharma	Member

	(Chitkara University, Chandigarh)	
15.	Dr. Geeta Sikka (NIT, Jalandhar)	Member
16.	Dr. Saakshi Dhanekar (IIT Delhi)	Member

7. The new exec com took over the responsibilities. The incoming Chairperson, Prof. Prerna Gaur thanked the earlier exec com and welcomed all the members.

8. **Appointment of Auditor for 2019:** Mr. Vijay K. Gupta was appreciated for his performance as internal auditor in 2018 and is appointed as the internal auditor for the IEEE Delhi Section for 2019 also.

9. **Appointment of Nomination Committee for 2019:** The nomination committee for the year 2019 2020 is as follows:
Prof. K. Subramanian (ex-NIC) Chair
Prof. Bhim Singh (IIT-Delhi) Member
Prof. Ranjan K. Malik, (IIT-Delhi Member
Prof. Subrata Mukhopadhyay (NSUT) Member
Mr. H.L. Bajaj
Member

In all 85 (Members: 71, Student Members: 08 and Special Invitees: 06) persons attended the AGM.

10. Any other point with the permission of Chair:
   - It was discussed that search may be on for finding a person who can be conferred with 'Honorary Membership'. An Honorary member should be a person of eminence and should have never been an IEEE member.

11. The Executive Vice Chair, Prof. A.Q.Ansari, proposed a 'vote of thanks'

and the meeting ended with thanks to the Chair.

12. It is followed Special lecture by Mr. Anil Gupta, Chief General Manager (operations), BBNL on 'Executing BharatNet Project to connect all the 250000 Gram Panchayats in the country with optical fiber'. The same was well appreciated by all.

13. Thereafter, various Chapters and Affinity Groups held their AGMs before Dinner.

Annexure 1

IEEE DELHI SECTION-SECRETARY REPORT 2018

Delhi Section is under large section category and is among the fastest growing sections in IEEE. IEEE Delhi Section has as per latest statistics **(December 2018) 4423 active Members** (excluding Society Affiliates), consisting of **0 Honorary Member, 5 Life Fellow, 8 Fellow, 33 Life Senior, 320 Senior Member, 7 Life Member, 1413 Member, 49 Associate Member, 616 Graduate Student Member, 1972 Student Member.**

We have 2 subsections, 16 technical society/ council chapters and 4 Affinity groups. There are 90+ student branches and branch chapters in Delhi Section. In 2018 one new joint chapter, Radio Frequency Identification (RFID)council-Antennas and Propagation Society (APS) has been formed. Also, a new student branch at Guru Nanak Dev Engineering College-Ludhiana and many SB chapters have been formed.

IEEE's core purpose is to foster technological innovation and excellence for the benefit of humanity, hence, Section is committed towards education, professional development and societal development. Several events were organized this year in different areas of technology.

This year 278 activities were organized by the Section, Society Chapters and Affinity groups. The activities as reported on V-tools are: Section–13, CAS/CS-06, CS-15, CIS-00, COM-04, EDS-17, MTTS- 00, PE/IAS-62, PELS/IES-51, SSCS-00, TEM-02, IMS/ EMBS-49, GRSS-00, SP-00, E-07, Nano/Mag-01, Rajasthan subsection-09, Chandigarh subsection-04, Consulting Networks-07, WIE-13, YP-05, LM-

13. **Total 278**

These activities include Technical lectures by several society Chapters, distinguished lectures, the events especially designed for Graduate Student Members, Women Engineers, Young Professionals and Conferences. IEEE Day has been organized at various institutes with great enthusiasm. Also keeping up with the past tradition and to motivate subsections, this year also the fifth exec com meeting was organized at Chitkara University (Chandigarh Subsection) on 16th November 2018 during WECON 2018. Also, two special exec com meeting were organized, on 30th July 2018 to have an interaction with IEEE-Executive Director and Chief Operating Officer Mr. Steve Welby and on 25th Oct 2018 to have an interaction with IEEE President 2018 Mr. Jim Jefferies. Also, registration of Delhi Section as Society has been approved. The process of filing Income Tax Returns for the past years is in process due to keen interest taken by Treasurer.

PES-IAS Delhi Chapter remains one of the most vibrant chapter of the section and conducted 62 activities. Thomas Alva Edison Memorial Lecture (22nd in the series) was organized by PES-IAS Delhi Chapter jointly with PELS-IES. The lecture was delivered by Prof. Ned Mohan, Oscar A. Schott Professor of Power Electronics at the University of Minnesota on "PE Transformers" and "DAB for EV Battery Charging" at IIT Delhi on 16th Nov.2018. A distinguished lecture on, "Power Electronics Technologies for Utility Scale Battery Energy Storage" has been delivered by Dr. Vassilios G. Agelidis , Professor, Centre for Electrical Power and Energy, Department of Electrical Engineering, Technical University of Denmark, Denmark, on 30th October 2018 at IIT Delhi, under the aegis of IEEE PELS-IES and PES-IAS Delhi Chapters. PES Chapter has won PES High Performing Chapter Award 2017. Chapter also won IAS Continued Outstanding Performance Large Chapter Award 2018 for activities carried out in year 2017. The Chapter has conferred Outstanding Chapter Engineer Award to Dr. Ashu Verma, IIT Delhi.

IEEE-EDS Delhi Chapter organized DL talk on "Electronics for All" by Prof. Muhammad Mustafa Hussain (KAUST, Thuwal, Saudi Arabia) on 8th Jan. 2018 at IIT, Delhi. The talk emphasized on attributes of the future generation of physical electronics. IEEE EDS Delhi Chapter, in collaboration with Department of Electronics Science, UDSC and CoreEL Technologies, has organized technical demonstration of FPGA Implementation on Xilinx Hardware Boards on 2nd February 2018. A talk on "Incubation and Entrepreneurship in ESDM (Electronic System Design and Manufacturing)" on 6th February 2018 was also organized.

IMS/ EMBS Joint Chapter also has organised many activities including technical talks, Interactive/Industry Meetings and a National Seminar. Two days' workshop on "Internet of Things" for creating smart homes and cities was also organized.

5th R. K. Vir Memorial Lecture entitled "Creating Visionary Management Along with Professionalism" has been held on 4th January 2018 at Engineers Bhawan, Bahadurshah Zafar Marg, New Delhi. The Lecture was delivered by Mr. Prakash Naraian, Former Chairman, Railway Board in the august presence of Shri Piyush Goyal Hon'ble Minister of Railways & Coal, Government of India as the Chief Guest. This technical event which is held annually on 4th January in the memory of Late Er R K Vir, Past Chair IEEE Section, was supported by three other leading technical societies - Institution of Engineering and Technology (IET), Institution of Engineers (India) (IEI) and Institution of Railway Electrical Engineers.

Many talks and workshops were organized under Communication, Computer, Computational Intelligence, TEMS, MTT and CAS-CS Chapters.

This year 11 conferences have been organized under Delhi Section. These conferences were widely announced, well attended and quality papers were presented. For the year 2019, 09 conferences have already been approved and many are in pipeline.

In line with IEEE vision of penetration of technology across humanity, Delhi Section SIGHT has organized a visit to Girdharpur Village, Hapur, UP on 8th Sept.2018 for installing 2 micro off-grid solar power units of 100 W and 5 W each. An interactive session was also held with villagers about their lives

and daily routine. To motivate them, token gifts and goodies were distributed.

IEEE Delhi SAC organized various activities. Annual Award ceremony was organized on 28th April, 2017 at MAIT. Section Student Congress was organized on at DTU and was attended by 300 delegates from more than 30 student branches of Delhi section. Out of approximately 90+ student branches in IEEE Delhi Section, there are now almost 45 student branches which are actively participating and are conducting activities and events under IEEE. This year many awards have been won by Delhi section student members. Ms. Shubhi Sareen has won Upsilon Pi Epsilon Scholarship, Niharika Mittal, Akshita Mahajan, Garima Bandhan have won Richard E Merwin Scholarship.

IEEE Delhi Section and Women in Engineering Affinity Group jointly organized a talk on 'Women in Engineering and IEEE Membership Development' by Dr. Takako Hashimoto on 4th Sept 2018 at Jamia Milia University. She also gave a technical talk on 'Data Mining'. The international women's day is celebrated with much fanfare every year on the 8th March. The main motive of the event was to honour the contributions of women in the field of STEM and to encourage girls to explore knowledge avenues in the said areas. This year the STAR Program was organized at the Govt. Sarvodaya School Gautampuri. A new WIE student branch affinity group was formed at Manipal University. Young Professionals have organized "Student Transition and Elevation Program" on 27th Sept. The chief guest for the day was Dr. Vincenzo Puiri. Life Members and Consulting Networks affinity groups have also organized talks and workshops this year including half-day workshop on Intellectual Property Right (IPR) with the theme of "Patent Publishing in India - A Paradigm-shift for Innovation in Academics". The subsections were also quite active and organized many membership development programs. Chandigarh sub-section organized distinguished lecture series in Tricity on various emerging topics related to Electronics and Communication Engineering. IEEE Membership Development Seminar was organized by IEEE Rajasthan Subsection at Udaipur. This seminar aims to motivate students and faculty from Engineering background to become IEEE

member, opening or revamping IEEE student branches and/or Society chapters.

This year Delhi section and its members have won many awards/laurels, as listed below:
- Section has been selected for 2018 retention goal and earned a silver medal of recognition.
- Section is the recipient for this year MD incentive grants of USD 250 for Senior Member Elevation.
- Delhi Section received the 2017 Outstanding Section Membership Retention Performance award. Certificate of Recognition was given to Prof A. Q. Ansari and Prof. Prerna Gaur for Outstanding achievement in member retention for the Delhi Section during the 2017 membership year by the IEEE Member Recruitment and Recovery Committee.
- IEEE Delhi Section Member Dr. Subrata Mukhopadhyay has been nominated as Member of the Long Range Planning Committee of IEEE PES Governing Board with effect from 1st January, 2018. He has also been nominated as Corresponding Member (PES), IEEE TAB Strategic Planning Committee with effect from 1st January 2019.
- Prof. G. Bhuvneshwari has received IEEE 2018 Wanda Reder Pioneer in Power Award from PES Women in Power Group.
- Dr. Shabana Urooj has received 2018 R10 Education Activities Outstanding Volunteer Award.
- Dr. Bharat Singh Rajpurohit has received IEEE IAS Outstanding Chapter Chair Award 2018.

This is in brief about the activities organized in the section. My sincere and heartfelt congratulations to all the sub section chairs, chapter chairs, affinity group chairs, members, student branches and branch chapters and their respective branch counselors. I look forward for another year of dynamic growth and achievements in the Section. I hope that with the enthusiasm and energy of all members and volunteers the section would scale new heights in terms of activities and membership count. My sincere best wishes to the new exec com for 2019.

Prof. Rachana Garg, Secretary, IEEE Delhi Section.
Annexure 2 IEEE Delhi Section Financial Report 2018 (as appearing at the end of this edition of e-newsletter, *following* the statistics on growth of membership in Section as presented by

the Secretary)

World's first Diesel Loco to Electric Loco conversion- a feat by Indian Engineers

V K Dutt Ex Additional Member Railway Board

Railway Sector is one of the most energy efficient sectors in Transportation. The Energy Consumed is about one sixth – one tenth of corresponding Energy in Road sector. The consumption in Railways is about 2% of National Electric Energy consumption. With decision of 100 % Electrification on Railways which will get sourced mostly from Renewal Energy as share of Renewal energy like Solar and Wind in National Energy Consumption is set to grow to almost 30% and more.

As per white paper on Railways while Road Network in India grew from 4 Lakh KM in 1950 to 58 Lakh KM in 2017-18 (1450%) the railway network grew by only 26% (From 59000 KM to 66000 KM) in the corresponding period. With various technological measures on this network the Passenger traffic was increased by 1600 % and Freight Traffic by 1400 %. But the demand was even higher and as a result the share of Railways in Passenger segment reduced to 10% from 80 % and in Freight segment from 80% to 30% in the corresponding period. Apart from saving in Oil Import the increase in Railway share has the potential of freeing precious land space also as on Railways the same traffic can be carried in less than one third of land area as compared to Road. This various reports of Govt have stressed the need to increase the railway share in Transport by Network Expansion of Railways.

Under the leadership of Prime Minister Hon Shri Narendra Modi ji Hon Railway Minister Shri Piyush Goel has taken bold steps in National Interest aimed at meeting India's commitment in COP of reducing emissions as well as providing the countrymen with ecofriendly Energy Efficient Pollution Free Rail Transport at economical cost. The decision of 100 % Electrification on Railways being the first ever in the world is perhaps one of the most innovative. The team of Engineers under the able leadership of Mr. Ghan Shyam Singh Member Traction has undertaken to complete this mammoth task in next 3-4 years which is also one of the fastest. The decision evoked a lot of criticism from some sceptics. One of the major factors cited was that this country has got more than 5000 Diesel Locomotives and not using these will be a national waste.

The team of Railway Engineers mostly Electrical and Some Mechanical under technical and Administrative guidance of Mr. Ghan Shyam Singh Member Traction took upon the decision of converting the existing 5000 Diesel Locomotives into Electric Locomotives. This task has never been tried before in the world and even in advanced countries like Europe and USA even after electrification of many routes substantial routes are still on diesel traction there by creating avoidable Polluting gases emission by burning of Diesel oil and opportunity to make Transportation by railways by renewal energy is lost.

This feat is achieved in a short period and Flagging off of First Electric Locomotive converted from Diesel by Prime Minster Hon Shri Narendra Modi ji in presence of Hon Railway Minster Shri Piyush Goel from Diesel Locomotive Works Varanasi on 19th February 2019 is a great event show casing ability of Indian Engineers in not only creating Know How but Know why also which can be used by other countries of the world. The objective of this article is to high Light some of the challenges in this path breaking work.

Indian Railways created history by converting 02 Diesel Locos to Electric Loco of 10,000 HP at DLW. At the same time, huge increase of 92% in traction HP (From 2x2612 HP to 2x5000 HP) was achieved. Conversion was achieved in 69 days from Design to roll out of 1st prototype unit. A brief comparison of the converted locomotive with the parent diesel

Description	2 X WDG3A	WAGC3 (Converted Electric Loco)
Formation	Two separate units	Twin Co-Co (Vestibuled)
Weight	2 X 123 Tons	246 Tons

Traction Power	2 X 2612 = 5224 HP	10,000 HP **(92% increase)**
Engine BHP / Transformer Capacity	2 X 3100 HP	2 X 5400 KVA
Max. Speed	105 KMPH	80 KMPH (To be increased from next unit)
Maximum Tractive Effort	2 X 43 Tons	86 Tons

The project started with Railway Board decision on 22 Dec 2017. Equipment layout finalized jointly with CLW & RDSO, 3D Model & Weight Balancing of conversion loco prepared at DLW, Para solid model sent to RDSO for FEA & Validation and design confirmation was received from RDSO on 18 January 2018. Thereafter the manufacturing of conversion started in DLW Varanasi from 19 January 2018. By March 2018 both the units of Converted locomotive were turned out from the DLW. Rigorous testing of all aspects was done between March and September 2018. Based on RDSO report and actual trial the approval of The Chief Commissioner of Railway Safety was received on 14 Nov 2018 and on this basis Railway Board approved running of this locomotive on Indian Railways on 27 November 2018. 3rd December 2018 was the historic day when 1st run of 10000 HP WAGC3 loco with 59 BOXN/HL GVKK load (5141 Ton) took place meeting all technical requirements.

Though it is not possible to enumerate the full spectrum of work involved it will not be out of place to mention some important highlights.

Design of Equipment layout. Since it was first project of its kind in the World no template was available. Balancing of weight of different equipment, design of cabling etc. were the challenges.

Cab Modification including Provision for fitment of AC-2 Panel
End Wall Fabrication with the provision of Vestibule Approx. 10.5 ton plates were added, thus making it very strong,
Pockets for the Transformer and smoothing reactors created.
Modification work carried out in the

Underframe to accommodate Underslung transformer and Monocoque shell design.
Total Length of Power Cables – 2173 meters.
Total Length of Control Cables – 6361 meters.
Constraints of modification in AC2 Panel
Obsolete Design (1983) without any drawing.
Space & Material constraints like Program Switches (HPAR, HSIV), Relays etc.
Made suitable for Multi operation
Structural modifications to accommodate 17 No. Couplers, FDCS Control Unit, Signal Conditioning Unit, Blocking diodes, Relays, Terminal Board.
WAGC3 Pneumatics IRAB-1 Brake panel of WDG3A retained.
72 V magnet valves replaced with 110 V magnet valves. Provision of IP Valve and SWC.
Piping for Aux. units like Tap Changer, BA1,2 & 3, Panto, Baby Compressor etc., as there is no provision for Auxiliaries in IRAB-1 Brake Panel.
WAGC3 Resizing / Modification of Side Wall, Crew Voice & Video Recording System (CVVRS)
After success of first prototype another version named WAG10 has been created. It has got Higher speed, Better visibility (Full front view), Improved Crew Comfort, Equipment layout similar to WAG7 (The existing popular design of Indigenous Electric Locomotives.).
Another giant leap achieved is Conversion of WDG-4 to WAG-11. WDG4 is state of the art Diesel locomotive with computer controlled Three phase design imported from abroad. The achievements in converted locomotive which is better than imported design are

Attribute	2X WDG4	WAG11
Formation	Two separate units	Twin Co-Co (Vestibuled)
Weight	2 X 126 Tons	252 Tons
Axle Load	21 Tons	21 Tons
Gear Ratio	17:90	17:90
Traction Power	2 X 3350 = 6700 HP	**12,000 HP (79% increase)**

Max. Speed	105 Kmph	105 Kmph (Test speed 115 Kmph)
Engine BHP / Transformer capacity	2 X 4000 HP	2 X 6531 KVA
Maximum Tractive Effort	54 T x 2 = 108T	108 T

Current Status: - Undergoing oscillation and performance trials by RDSO.

With this feat Vision of Prime Minster of make in India, Design in India is fulfilled in letter and spirit making our country the first in the world to make this conversion possible in our quest for becoming first railway system in the world to be totally electrified (on Broad Gauge) by 2021 with totally indigenous efforts with a very low cost compared to cost of these locomotives.

Converted twin Co-Co Electric Loco WAGC3

Upgraded version with full front Cab view and enhanced speed potential

Dr. Ram Gopal Gupta, former Chair, IEEE Delhi Section and IEEE India Council, in the news

• Gyan Bharati is one of the leading schools to promote 3D printing technology among students

COMPUTER BODY HONOURS GYAN BHARATI

The Institution of Electronic Data Processing (IEDP), one of the oldest computer societies in India, honoured Gyan Bharati School, Saket, for being one of the leading schools to promote the 3D printing technology among students. The award was received by the Gyan Bharati School students who participated in 3D printing demonstration after getting basic training during a summer vacation training programme conducted by the Socio-Economic Welfare Society under its Technical Education Encouragement Programme. The function was held at India International Centre as part of the 50th anniversary celebrations of IEDP

Gyan Bharati School, Saket

The Institution of Electric Data Processing (IEDP) awarded the school for being one of the leading schools to promote the upcoming 3D Printing technology amongst students. The award was received by the students who participated in 3D printing demonstration after getting basic training on during a summer vacation training programme conducted by the Socio-Economic Welfare Society under its Technical Education Encouragement Programme.

IEEE DELHI SECTION MEMBERSHIP STATISTICS AT A GLANCE

IEEE Delhi Section has as per **latest (August 2019)** statistics **3858 active Members** (including **19 Society Affiliates**), consisting of **0 Honorary Member, 7 Life Fellow, 7 Fellow, 32 Life Senior, 335 Senior Member, 7 Life Member, 1274 Member, 51 Associate Member, 591 Graduate Student Member, 1534 Student Member, 1 SA.**

Statistics on growth of membership in IEEE Delhi Section (as presented by the Secretary in the Section AGM at IIC New Delhi on 31 March 2019)

Grades	Dec-11	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18
Affiliate	26	37	24	23	24	21	25	21
Associate members	61	77	61	70	73	37	52	49
Fellow	7	7	7	7	5	7	8	8
GSM	351	470	499	646	621	696	689	616
Honorary Member	3	3	2	2	2	0	0	0
Life Fellow	3	4	5	6	6	7	6	5
Life Member	5	5	6	5	5	5	5	7
Life Senior	15	17	21	21	21	33	35	33
Member	1109	1168	1134	1177	1205	1245	1367	1413
Senior Member	175	169	192	193	205	253	277	320
Student Member	2894	3200	3222	2991	3220	2529	2125	1972
Total	4649	5128	5173	5141	5388	4833	4589	4444

Section Financial Report for the Year 2018 (as presented by the Treasurer in the IEEE Delhi Section AGM at IIC New Delhi on 31 March 2019)

IEEE Delhi Section Financial Report for the year 2018

SN	Item/ Head (Receipts)	2018	2017	2016	SN	Item/ Head (Disbursements)	2018	2017	2016
1					1	Execom Meetings	1,13,853.00	1,14,467.00	93,215.00
2	Opening balance - SBI IIT Delhi	42,499.18	43,36,078.49	49,49,360.00	2	AGM	1,71,359 (Refund Rs 26,977 at S.N. 22)	1,27,529.00	1,12,959.00
3	Cash in hand	3,395.00	6,025.00	3,260.00	3	PR			20,000.00
4	Sweep Account	45,52,000.00			4	Conference/2018 SENSORS	94,82,908.00		10,53,927.00
5	Bank Interst	7,818.00	1,92,175.00	1,49,198.00	5	Special Excom/Finance Committee	41,501 (Refund Rs 36,311 at S.N. 28)	35,488.00	29,336.00
6	Interest received from Sweep Accounts	2,39,149.00			6	Conference- Seed Money	1,00,000.00		1,50,000.00
7	Delhi Section Operating Funds	13,11,807.00	5,86,490 (bal. Refund of 2014)	14,55,793.00	7	Technical Activities	1,00,285.00		88,916.00
8	IITC/Smart Village/EPICS Project/AIYEHUM/STEP Event	7,452.00	-	7,06,369.00	8	Advance for Outstation Meetings & Travel support	1,30,000 (Refund at S.N. 22)	2,20,000.00	
9	PES-IAS/PELS-IES/PES Women in Power	1,49,431.00	4,03,127.00	7,75,380.00	9	Industry Relations/Public Relation & Publicity	30,416.00	30,990.00	15,000.00
10	Seed Money conf/summer internship/ 2018 SENSORS	94,82,907.60	10,12,740.00	8,75,546.00	10	Intrsocty Relatn/Global Entrepreneurship Summit	9,980.00	63,985.00	61,050.00
11	MTT-S	3,09,363.00	2,00,100.00	6,58,028.00	11	R 10/HQ Student YP, Student, WIE Conference	7,80,446.00	1,71,286.00	1,64,413.00
12	SPAC			20,496.00	12	Travel Excom Member Outstation	1,34,276 (Refund 14,635 at S.N. 22)	49,833.64	40,610.00
13	Other Incentive Awards (MGM/SYWL)	69,075.00		93,075.00	13	Special Projects (Village Event/Initiative)		25,996.00	
14	WIE (SBAG)	64,566.00	42,062.00	92,582.00	14	SAC/IM09	18,400.00		6,66,177.00
15	Education Society/Computer Society Start (NIEC)	10,278.00		1,66,692.00	15	Membership Dev/Fellow Nomination	43,312.66	37,300.92	35,764.00
16	AES/SSCS/RA				16	PES-IAS/PELS-IES/HQ funds	1,99,393.00	10,43,231.00	5,97,796.00
17	Students Branches HQ Support	4,75,485.00	1,33,693.00	4,15,334.00	17	Consultants Network Affinity Group	16,040.00		
18	R10 incentive for Golden Jubilee Commemoration book/support fund for Global Entrepreneurship Summit	19,576.00			18	Rajasthan Subsection	1,00,000.00	1,00,000.00	50,000.00
					19	SSCS/R10 Student Congress BALI	2,22,023.00		
					20	CAS-Control/CTS/CS/Support		75,370.00	31,100.00
21	EDS	96,789.00	1,59,007.00	50,828.00	21	WIE	38,974.00	83,778.00	1,00,244.00
22	Other Refunds from Chapters/Members	1,71,612.00		1,270.00	22	IITC,EPICS/AIYEHUM/SIGHT	50,000.00	55,385.00	23,31,783.00
23	YP/CAS		25,464 (CAS)	91,182.00 (YP)	23	MTT-S	3,22,745.00	2,00,100.00	6,24,388.00
25	INDICON Seed Money			2,00,000.00	24	Education Society/Activities		35,771.00	17,500.00
26	PES High Performng (MSIT)/STEP fund (LNMIT)		51,346.00		25	EDS	1,18,954.00		75,828.00
27	Education Award (Thapar)/PES-IAS award (DTU)		97,067.00		26	IM-EBMS/IMS/RA	13,380.00	-	47,235.00
					27	IMC/TEM14	40,000.00		14,000.00
28	Received from IEEE for Dinner Meet	36,311.00			28	Student Activities	3,21,000.00	3,10,940.00	
					29	Professional Charges	57,700.00	9,000.00	9,000.00
29	R10 Support/Reimbursement for Events/Workshops		2,03,465.00		30	Office Expenses, Social/ Electronic Communication		17,656.00	49,162.00
					31	YP	45,095.00	34,458.00	1,03,444.00
30	Received from Google/HDFC	15,000.00	25,000.00		32	Other Incentive Awards		-	92,477.00
31	Advance Received Back	2,20,000.00	3,38,916.00		33	contingency & Misc	10,775.00	4,522.00	
					34	Bank Charges	796.50	1,532.75	1,567.00
					35	Total Spent	12713612.16 (Refund 180946), Total Expenses: Rs. 1,25,32,666.16	28,48,619.31	66,76,891.00
32	Total Inflow in 2018	1,26,86,619.60	34,70,652.00	55,11,393.00	35	Closing Balance SBI IIT Delhi	23,318.02	42,499.18	43,36,078.00
					37	Sweep Ac 37368725233	38,27,183.00	45,52,000.00	
					38	Sweep Ac 37760148722	5,15,000.00		
					39	Sweep Ac 3133476103	2,03,000.00		
					40	Cash in hand	2,400.60	3,395.00	6,025.00
33	Total	1,72,84,513.78	78,12,755.49	1,04,64,013.00	41	Total	1,72,84,513.78	78,12,755.49	1,07,04,393.00
34	Cheques Issued but not encashed	1,85,146.00	1,59,791.00	4,07,003.00	42	Stale Cheque	49,808.00	49,808.00	49,808.00
35	Sweep Interest receivable upto 31.12.2018	26,675.00			43	Cheques Issued but not encashed	1,85,146.00	1,59,791.00	4,07,003.00
36	Stale Cheques	49,808.00	49,808.00	49,808.00	44	Cheques Issued in previous, paid in followg YEAR	1,31,243.00	3,66,242.00	1,42,210.00

Mr Vijay Gupta (Auditor)   Prof K.Subramanian (Chair)   Dr Jasdeep Kaur Dhanoa (Treasurer)

From the desk of ECC

My dear esteemed Members,

This edition of IEEE Delhi Section e-newsletter brings you the status of Technical and Professional Activities, including Conferences to be held in 2020, besides few ones under consideration, IEEE Delhi Section Executive Committee for 2020, event reports, Section Member(s) / Volunteer(s) in the limelight, growth of Section in terms of IEEE membership. Also, in this regard you are informed that Section along with the IEEE India Council would be organizing the prestigious Annual Conference IEEE INDICON2020 at Netaji Subhas University of Technology of Govt. of NCT of Delhi from December 11 to 13, 2020. Therefore, whole-hearted support of all of you is requested for its success in the form of contribution, participation, etc. Last but not the least you are reminded to send information that are of interest and you wish to share with others, so that same may form a part of the next edition.

With best regards and wishes,

(Dr. Subrata Mukhopadhyay)
IEEE Delhi Section
January 25, 2019 (*Saturday*)
E-mail: ieeedelhi@ieee.org
Web-site: www.ewh.ieee.org/r10/delhi

Schedule of Lecture(s)

Surf IEEE vTools Meeting System (https://meetings.vtools.ieee.org/main), then login with User Name and Password, and View Existing Meetings / View Published Meetings (https://meetings.vtools.ieee.org/meeting_view/list) for the Upcoming Meetings in respect of IEEE Delhi Section and its Society Chapters

/ Affinity Groups.

List of IEEE Conferences in the geographic area covered by the IEEE Delhi Section
(http://ewh.ieee.org/r10/delhi/event.html)

To be held in 2020

- 3rd International Conference on Emerging Technologies in Computer Engineering: Machine learning and Internet of Things (ICETCE-2020) (https://conferences.ieee.org/conferences_events/conferences/conferencedetails/46199) scheduled during February 7-8, 2020 (Friday-Saturday) by the Department of Computer Science & Engineering and Information Technology. Swami Keshvanand Institute of Technology, Management & Gramothan (SKIT), Ramnagaria, Jagatpura, Jaipur-302017, Rajasthan, India (having Conference website: http://www.icetce.in/2020)

- Indo – Taiwan 2nd International Conference on Computing, Analytics and Networks (Indo-Taiwan ICAN2020) (https://conferences.ieee.org/conferences_events/conferences/conferencedetails/48429) jointly organized by Chitkara University, India & National Chung Cheng University, Taiwan during February 7-8, 2020 at National Chung Cheng University, Taiwan No. 168, Section 1, Daxue Road, Minxiong Township, Chiayi County, Taiwan 62102 & on February 14-15, 2020 at Chitkara University, Punjab, India Chandigarh-Patiala National Highway (NH-64), Rajpura, Punjab 140401, India (having Conference website: https://www.chitkara.edu.in/cse-can)

-1st International Conference on Emerging Trends in Communication, Control and Computing (ICONC3) (https://conferences.ieee.org/conferences_events/conferences/conferencedetails/45789) scheduled during February 21-22, 2020 (Friday – Saturday), as re-scheduled, at Mody University of Science & Technology (MUST), Lakshmangarh, Rajasthan, India (having Conference Website: http://www.muconference.in/}

- 9th IEEE Power India International Conference (PIICON2020) (https://conferences.ieee.org/conferences_events/conferences/conferencedetails/49524) during February 28 - March 01, 2020 in the Department of Electrical Engineering,

Deenbandhu Chhotu Ram University of Science & Technology (DCRUST), Murthal, National Capital Region, Haryana, India (having Conference website: http://PIICON2019.in)

-14th edition of INDIACom i.e. INDIACom – 2020; 2020 07th International Conference on Computing for Sustainable Global Development (https://conferences.ieee.org/conferences_events/conferences/conferencedetails/49435) scheduled to be held during March 12-14, 2020 at BVICAM, Bharati Vidyapeeth, New Deli, India (having Conference website: http://www.bvicam.ac.in/indiacom/)

- 2020 First IEEE international conference on Measurement, Instrumentation, Control and Automation (ICMICA 2020) (https://conferences.ieee.org/conferences_events/conferences/conferencedetails/48462) during April 2 to 4, 2020 at National Institute of Technology Kurukshetra, Kurukshetra (having Conference website: http://www.icmica2020.com/)

- 2020 Sixth International Conference on Parallel, Distributed and Grid Computing (PDGC-2020) (https://conferences.ieee.org/conferences_events/conferences/conferencedetails/50313) during November 6-8, 2020 at Jaypee University of Information Technology, Waknaghat, near Solan, HP, India (having Conference website: http://www.juit.ac.in/pdgc-2020/index1.php)

- 2020 IEEE Seventeenth India International Conference (INDICON 2020) (https://conferences.ieee.org/conferences_events/conferences/conferencedetails/49873) during December 11-13, 2020 at Netaji Subhas University of Technology, Sector-3, Dwarka, New Delhi-110078, India (having Conference website: http://www.indicon2020.in/)

Under consideration

- 15th IEEE International Conference on Industrial & Information Systems (IEEE – ICIIS) - 2020 during December 10 to 12, 2020 at Indian Institute of Technology Ropar, Punjab – 140001, India (having Conference website: http://www.iitrpr.ac.in/iciis2020/)
- 4th International Conference and

Workshops on Recent Advances and Innovations in Engineering (ICRAIE 2020) during December 17-20, 2020 at Poornima College of Engineering, ISI 6, RIICO Institutional Area, Goner Road Sitapura, Jaipur, Rajasthan 302022, India and Indian Institute of Technology, NH 65, Surpura Bypass Road, Karwar, Jodhpur, Rajasthan 342037, India (having Conference website: http://www.icraie.poornima.org/index.html)

Slate for 2020 IEEE Delhi Section Executive Committee
(*declared elected*)

Sl. No.	Name & Affiliation	Position
1.	Prof. Prerna Gaur (NSUT)	CHP.
2.	Prof. Rachana Garg (DTU)	EXEC. V.C.
3.	Prof. Abdul Q. Ansari (JMI)	V.C.
4.	Mr. Ravindra Joshi (ex-TPDDL)	SEC.
5.	Dr. Shabana Urooj (GBU, Greater Noida)	J.S. (*to represent UP Segment*)
6.	Dr. Sneha Kabra (DU)	TRS.
7.	Prof. K. Subramanian (ex-NIC)	P.C.
8.	Prof. M. N. Hoda (BVICAM, New Delhi)	MEM.
9.	Mr. Ajay Goel (Altran, Gurugram)	MEM.
10.	Prof. Mahesh M Bundele (Poornima University, Jaipur)	MEM.
11.	Dr. Rajnish Sharma (Chitkara University, Rajpura)	MEM.
12.	Mr. Vijay K. Dutt (ex-Railways)	MEM.
13.	Dr. Shruti Jain	MEM. (*to*

	(Jaypee University, Waknaghat)	represent HP - J&K)
14.	Dr. Rashmi Agarwal (YMCA, Faridabad)	MEM. (*to represent Haryana*)
15.	Prof. Meenu Khurana (Chitkara University, Rajpura)	MEM. (*to represent Punjab*)
16.	Ms. Jyoti Jain (MSIT, New Delhi)	MEM. (*to represent NCR of Delhi*)

Notes: Highlighted Members are new entrants, with those (5) in yellow color are for the first time, while green ones (2) have served earlier too. In the absence of Dr. Shabana Urooj, J. S., Dr. Rajnish Sharma, MEM., will look after the post of J.S.

CHN.: Chairperson	EXEC. V.C.: Executive Vice Chairperson	V.C.: Vice Chairperson
SEC.: Secretary	J.S.: Joint Secretary	TRS.: Treasurer
P.C.: Past Chairperson	MEM.: Member	

Report on Mini Colloquium on "Trends and Challenges in Microelectronics and VLSI Design"

The student branch of IEEE IGDTUW along with IEEE-Electron Device Society and IEEE Delhi Chapter jointly hosted the Mini Colloquium on "Trends and Challenges in Microelectronics and VLSI Design" on 6th September'19 at the Seminar Hall, Admin Block, IGDTUW. The goal of the colloquium was to expose the interested students about the challenges and the scope of work in the field and give them insights beyond their existing academic knowledge. The event recorded around 300+ registrations from all across colleges in Delhi NCR and a footfall of 150+ at the event. The demographics was diverse with both post-graduates and graduates from wide-ranging courses being the active audience of the day.

The event was inaugurated and further addressal of our Hon'ble Vice Chancellor Dr. Amita Dev fostering inspiration and telling the students to make the most out of the available opportunity to network with eminent speakers. The colloquium was meticulously segmented into - Expert Lecture and Panel Discussion interleaved with the project display by the successful Members of Incubator of the Anveshan Foundation, SMDP C2SD and students.

1. Expert Lectures:
It was a great privilege to attend the Expert Talks by:
· Speaker 1 – Distinguished Lecturer-EDS, Prof Brajesh Kumar Kaushik, Dept of ECE, IIT-Roorkee.
· Speaker 2 – IEEE Early Career Awardee (2015) Prof Mayank Shrivastava, IISc-Bangalore
· Speaker 3 - Distinguished Lecturer-EDS, Dr Manoj Saxena, DU.

2. Project Display:
The Incubation Centre of IGDTUW - Anveshan Foundation and the Dept. of ECE, organized a project display session in the VLSI and Embedded lab during the lunch hour. Around hundreds of attendees, proceeded to these labs to spectate the work of the incubates, students of Dept of ECE and the SMDP C2SD projects. It was a great experience at both ends to laude the raw ideas of the past materializing into successful realities today.

3. Panel Discussion:
After a series of comprehensive lectures on core areas, the stretch was diluted with a dynamic panel discussion. The discussion encompassed opportunities students have in academia Vs industry and avenues that IEEE, in general provides. We invited five eminent speakers from diverse realms to talk about their areas of work and what piece of advice they would lend to the student audience, soon going to enter their professional life.
Our esteemed panel comprised of :

1. Prof. M. N. Hoda
Director, Bharati Vidyapeeth's Institute of Computer Applications & Management.
Prof. M.N. Hoda enlightened the students about the opportunities that accelerating growth in AI and automation produce in the IT industry. He also spoke on how the university students can build skills in tech-stacks that is relevant to the industry today.

2. Mr. Prashant Chugh

Chair, IEEE Communication Society Delhi Chapter and Group Leader, C-Dot.

With more than 20 years of experience in Telecom R&D in C-DoT, Mr. Prashant Chugh gave insights on the technologies that are trending in the telecom sector. He also tried to break the stereotype that the skill-set of a CSE student does not find a spot in a Telecom Org. like C-DoT. He emphasized on the convergence of technologies and the need to be interdisciplinary in today's world.

3. Prof. Poonam Bansal

Deputy Director and Prof-CSE at MSIT.

Her rich experience in the field of academia enlightened the students on academics as a profession. She spoke about her journey in the field and about her switch from a core-industry job. Her talk gave deep insights on the demarcations on the work and challenges as an academician when compared to an industry personnel.

4. Dr. Sneha Kabra

Asst. Prof. Shaheed Rajguru College, DU and Secretary, IEEE EDS Delhi Chapter, spoke about the avenues EDS provides to the interested students and ways to get associated with the same. The most striking aspect of her talk was fostering inspiration in the audience and telling them to make the

most of the plethora of opportunities that forums like IEEE provides.

5. Dr. V.K. Arora

CEO, Anveshan Foundation, IGDTUW, spoke for the section of students in the audience who wished to curate their ideas in the field of electronics through a startup. He spoke about Anveshan and other incubation centers at great length and emphasized on their importance in the journey of a budding entrepreneur. He concluded citing the present scenario of start-ups in the Electronics field in India and the trending success of IOT-based start-ups.

The panel discussion was well-moderated by Ishani Pandey and Atima Syal, final year students at the department of CSE and currently placed at Microsoft IDC. They ensured that the panelists covered the scope of career opportunities in all the areas that our audience for the day had a magnetic appeal for.

The event was flawlessly organized by the Student Chapter of IEEE IGDTUW. Ms Sunidhi , Ms Nazish, Ms Aditi, Ms Tarushi, Ms Saumya, Ms Shalini, Ms Pragya and many more students who have worked tirelessly behind the stage to make this a grand success. We received positive feedback from the experts, panelists as well as the audience at the colloquium.

IEEE IGDTUW has associated with noteworthy guests to always organize insightful sessions for students. The great appreciation and take-aways at each event is the constant source of motivation for the student chapter to do even better.

We are grateful to all students & staff of IGDTUW, who contributed to the success of this event

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Dr. Jasdeep Kaur Dhanoa
Associate Professor-ECE
IGDTUW, Kashmere Gate, DELHI-110006
Senior Member & Treasurer, IEEE Delhi Section, Training and Placement Officer for CSE, IT, ECE at IGDTUW
email:jasdeepkaur@yahoo.com, jasdeep@igdtuw.ac.in
Sep 08, 2019

A REPORT ON ATTENDING IEEE WIE INTERNATIONAL LEADERSHIP SUMMIT 2019

IEEE WIE International Leadership Summit 2019 was organized by IEEE Bangalore Section on 30-31 August 2019 2018 at "Hotel Sterlings MAC", Bangalore. On behalf of IEEE WIE ILS, an invitation was received by IEEE WIE DELHI SECTION to attend the summit Prof. Rachana Garg, Dr. Manpreet Kaur and Dr. Rashmi Agarwal attended the event on behalf of Delhi Section. The event hosted keynote speeches on five tracks: Leadership, Entrepreneurship, Innovation, Women in technology, and Humanitarian and other activities like panel discussions and networking sessions. It was a great platform to meet inspirational women leaders and entrepreneurs who inspired lot of young women by sharing their experiences and achievements in spite of lot of struggle and challenges faced in their lives.

IEEE Women in Engineering International Leadership Summits (WIE ILS) provide regional opportunities to foster networking, mentorship, and collaboration

Following were the key highlights of the event:

Day 1: Inauguration ceremony was followed by the Inaugural Address by Nigar Shaji, Project Director, Aditya-L1 Mission on "ISRO Science missions". It was followed by energetic talk by Kathy Susan Land, Program Manager, US Department of Defense on "When Computer Programming was Women's Work". Then there was an inspiring speech by Takako Hashimoto, Global WIE Chair, Japan on "RE 100 initiatives to achieve SDGs". It also included leadership tips by Emi Yano, R10 WIE Chair on "Change the World! - To Be a Change-maker . The day ended with a beautiful cultural evening. The summit was a global initiative that provided opportunities for networking, mentorship, and collaboration.

Day 2: The day started by the lecture by Pallavi Srinivasa, Director, Product Management, Cisco on" Entrepreneurship and its applications". Then a fitness period rejuvenated all which was led by Kavitha Sooda, Ashtanga Yoga, Freelance Teacher for Rashtrotana Yoga and Fitness Centre, Sadashivanagar.

A inspiring lecture was delivered by Sudheendra Koushik, Chief Innovator and Cofounder, PRASU on "Innovation for

Advancing Humanity". Lastly there was a Panel discussion on "Capability Vs. Copability - Striking the right balance. The team of panelist debated and discussed their trusted insights from their experiences. It benefitted the audience to listen, learn & engage to these insights from the leaders. It has been a great take away that Capability (Building talent, skills, knowledge, tools) and Copability (handling transformation, being agile, stress and conflict management, anticipation, emotional IQ) go hand in hand for successful leaders.

Manpreet Kaur,
Chair, IEEE WIE AG, Delhi Section

Associate Professor.
IEEE Branch Counsellor,
SWAYAM-NPTEL Coordinator
Department of Computer Science and Technology,
Manav Rachna University, Haryana
Sep 19, 2019

IEEE DAY-2019 CELEBRATIONS REPORT CARD OF IEEE DELHI SECTION

Having received the information about my selection as the IEEE day 2019 Ambassador for Delhi Section, I initiated a pro-active approach to propagate the message of celebrations throughout the Section which comprises six states of India including the National Capital Region of Delhi. I visited two state capitals, Jaipur and Chandigarh (Headquarters of the Jaipur Sub-section and Chandigarh Sub-section respectively) and several institutions in Delhi to motivate them for celebrating the IEEE day 2019 with great enthusiasm and fervor. I sent them the information regarding the type of activities to be conducted, which were broadly classified into three categories of Small, Medium, and Large Events. In every meeting with the volunteers of various institutions/ states, I elaborated the idea of **TEN STEP TO SUCCESS** as suggested in the **IEEE Day-in-a-Box Event Kit**. I motivated the Students' Chapters, Subsection Chairs, and others Institution Heads for holding awareness and fundraising events to benefit the IEEE programs supported through the **Realize the Full Potential of IEEE Campaign!** I also helped them to adopt the **Get Social and Support IEEE Smart Village through the Bring the Light Crowd-funding Campaign** as suggested in the said kit.

Though many of the events have gone unreported one can find 13 events reported from Delhi Section on the IEEE Day 2019 portal and 11 such events have been directly reported on the IEEE vTools by the following Institutions (as on 29 Oct. 2019)

1. PGDM College of Engineering, Bahadurgarh, Haryana
2. Lovely Professional University, Phagwara, Punjab
3. GTBIT, New Delhi
4. AcSIR-CSIO-SB, Chandigarh
5. AcSIR-CSIO-WIE, Chandigarh
6. YMCA University of Science and Technology, Faridabad, Haryana
7. Modi University of Science and Technology, Laxmangarh, Rajasthan
8. Engineering College, Ajmer, Rajasthan
9. IGTDUW-SB, Delhi
10. IGDTUW-WIE, Delhi
11. Jaypee University of Information Technology, Solan, Himachal Pradesh.

Prof. ABDUL QUAIYUM ANSARI
IEEE Day 2019 Ambassador of Delhi Section
Executive Vice Chair and MD Chair
IEEE Delhi Section
Oct 30, 2019

A Report on Mini-Workshop on Intellectual Property Right (IPR)

On 24 October 2019 from 03:00 to 05:00 pm the Workshop was held in the Committee Room, First Floor (near SCADA Lab), Faculty of Engineering and Technology, Jamia Millia Islamia, New Delhi as Sponsored by IEEE Delhi Section Young Professionals Affinity Group, IEEE Delhi Section, Electrical Engineering Department (Jamia Millia Islamia) with the support of Satya and Associates, and having Advocate (Mr.) Siddi Jai Prakash, and Advocate (Ms.) Rajul Jain as speakers respectively on the topics, 'Patentability, contents in a patent, its filing procedure and commerce', and 'Relevance of Copyright and Trademark law for Engineers'

as attended by 5 IEEE Members and 29 Guests.

Speakers at Jamia Millia Islamia

On the occasion of 5th R K Vir Memorial Lecture on January 04, 2018 at Engineers' Bhawan, IE(I) Delhi State Center, New Delhi
(as reported late)

Under the aegis of Institution of Railway Electrical Engineers, The Institution of Engineering and Technology, Institute of Electrical and Electronics Engineers, The Institution of Engineers (India) (Delhi State Center), the 5th R. K. VIR MEMORIAL LECTURE entitled "Creating Visionary Management Along with Professionalism" was held on Thursday, January 4, 2018 at 1900 hrs. at Engineers Bhawan, 2, Bahadurshah Zafar Marg, New Delhi-110002.

With the topic being of general nature, cutting across disciplines, as Engineer all were welcome to attend the Lecture delivered by Mr. Prakash Naraian, former Chairman, Railway Board. in the august presence of Mr. Piyush Goyal Hon'ble Minister of Railways & Coal, Government of India as the Chief Guest. Photographs taken on that occasion follows.

IEEE Delhi Section Members / Volunteers in the limelight

❖ 2019 IEEE India Council Outstanding Volunteer Award (age greater than 35) was given to Prof. Prerna Gaur (NSUT), IEEE Delhi Section Chair.

❖ Er. Rajendra K Asthana (*formerly of* BHEL) was given IEEE India Council Chair Lifetime Achievement Award 2019.

❖ Prof. K. Subramanian (*formerly of* NIC) has been appointed as IEEE Ambassador as well as India Area coordinator for IEEE Computer Society.

❖ Mr. Daman Dev Sood (Continuity and Resilience) has been appointed as R10 – India- Students Activities Chair of the IEEE Computer Society.

❖ Prof. Subrata Mukhopadhyay (NSUT) has been inducted as Member of IEEE PES Nomination & Appointment Committee for the two-year term (2020-21) to represent Asia-Pacific Region.

IEEE DELHI SECTION MEMBERSHIP STATISTICS AT A GLANCE

IEEE Delhi Section has as per **latest (December 2019)** statistics **4781 active Members** (*including* **21 Society Affiliates**), consisting of **0 Honorary Member, 7 Life Fellow, 7 Fellow, 33 Life Senior, 357 Senior Member, 7 Life**

Member, 1335 Member, 48 Associate Member, 2172 Student Member, 1 SA. Member, 793 Graduate Student