



vol 17 no 1-9
January-September 2017

From the desk of ECC

My dear esteemed Members,

January-September issue of e-newsletter for the calendar year 2017 is being issued now after a long gap, with lots of news and views for your consumption. Besides those, regular features, like, up-to-date list of approved conferences under IEEE Delhi Section, Membership Statistics, etc. too find place.

With best regards and wishes,

(Dr. Subrata Mukhopadhyay)
IEEE Delhi Section
October 18, 2017 (*Wednesday*)
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>)

Conferences held in this year are as under (in the last 9 months):

11th INDIACom i.e. INDIACom – 2017; 2017 4th International Conference on Computing for Sustainable Global Development (INDIACom)

(http://www.ieee.org/conferences_events/conferences/conferencedetails/index.html?Conf_ID=40353)

organized by BVICAM, A-4 Paschim Vihar, New Delhi from March 1 to 3, 2017

(<http://bvicam.ac.in/indiacom/>)

2017 International Conference on Computer, Communications and Electronics (Comptelix)

(http://www.ieee.org/conferences_events/conferences/conferencedetails/index.html?Conf_ID=40618)

organized at Manipal University, Jaipur, Rajasthan from July 1 to 2, 2017

(<http://irisworld.org/wp/international-conference/comptelix-2017/>)

Conferences to go in the rest of 2017 & in early 2018:

2017 International Conference on Computing and Communication Technologies for Smart Nation (IC3TSN)

(http://www.ieee.org/conferences_events/conferences/conferencedetails/index.html?Conf_ID=41784)

being organized by Department of Computer Science and Engineering, School of Engineering, GD Goenka University, Sohna Gurgaon, Haryana, India from October 12 to 14, 2017 (www.ic3tsn-conference.org)

2017 3rd International Conference on Condition Assessment Techniques in Electrical Systems (CATCON)

(http://www.ieee.org/conferences_events/conferences/conferencedetails/index.html?Conf_ID=41724)

being organized by Indian Institute of Technology Ropar, Punjab, India from November 16 to 18, 2017

(www.iitrpr.ac.in/CATCON2017/)

2017 Fourth International Conference on Image Information Processing (ICIIP -2017)

(http://www.ieee.org/conferences_events/conferences/conferencedetails/index.html?Conf_ID=41247)

being organized by Jaypee University of Information Technology (JUIT), Solan, Himachal Pradesh, India from December 21 to 23, 2017 (www.juit.ac.in/iciip_2017/)

2018 IEEMA Engineer Infinite Conference (eTechNXT)

(http://www.ieee.org/conferences_events/conferences/conferencedetails/index.html?Conf_ID=42767)

being organized by IEEMA at India Exposition Mart Ltd, Greater Noida, Delhi NCR, India during March 13-14, 2018

(<http://sites.ieee.org/engineer-infinite2018/>)

2018 5th International Conference on Computing for Sustainable Global Development (INDIACom)

(http://www.ieee.org/conferences_events/conferences/conferencedetails/index.html?Conf_ID=42835)

being organized by Bharati Vidyapeeth's Institute of Computer Applications and Management (BVICAM), New Delhi, India from March 14 to 16, 2018

(<http://bvicam.ac.in/indiacom/>)

IEEE Delhi Section has also approved the following Conferences.

3rd International Conference on Recent Advances and Innovations-ICRAIE-2018

(<http://icraie.poornima.org/>)

being organized by Poornima University, Poornima College of Engineering and Malviya National Institute of Technology (MNIT), Jaipur, Rajasthan, India November 22 to 26, 2018

IICPE 2018 (8th in the series)

(<https://sites.google.com/mnit.ac.in/iicpe-2018/home>) being organized by Malviya National Institute of Technology (MNIT), Jaipur, Rajasthan, India from December 19 to 21, 2018

Combined notice seeking nomination for volunteering to serve IEEE Delhi Section Executive Committee, IEEE PES-IAS Delhi Chapter Executive Committee, IEEE PELS-IES Delhi Chapter Executive Committee (all for

2018), and PES Chapter Outstanding Engineer Award (for 2017 and restricted to PES Member only)

No. IEEE/Delhi-2017/049

October 18, 2017 (Wednesday)

Dear IEEE Delhi Section Members as in September 2017 (drawing attention to Higher Grade Members*),

* Graduate Student Members, Members, Life Members, Senior Members, Life Seniors, Fellows, Life Fellows, Honorary Members (*but excluding Student Members, Associate Members, Affiliates to Societies*)

For and on behalf of IEEE Delhi Section Standing Committee on 'Nomination', comprising of Prof. Mini S. Thomas, SMIEEE (EE Dept., JMI *on deputation to* NIT Trichy as Director) as Chair, and Prof. Bhim Singh, FIEEE (Dean-Academics, IIT Delhi), Prof. Subrata Mukhopadhyay, LSIEEE (Dean-Academics, GTBIT, GGSIP University), Prof. Ranjan K. Mallik, FIEEE (EE Dept., IIT Delhi), & Er. Harbans L. Bajaj, LFIEEE (former Member, ATE) as Members, this notice is being issued drawing attention of all Higher Grade Members of IEEE Delhi Section seeking nomination for volunteering to serve 16-Member (core) IEEE Delhi Section Executive Committee for the 14 following posts in 2018.

1. 5 (five) positions of Section Officers other than Chairperson, i.e., Executive Vice Chairperson, Vice Chairperson, Secretary, Joint Secretary, Treasurer, and 9 (nine) Members as per IEEE - DELHI SECTION BYLAWS

(<http://ewh.ieee.org/r10/delhi/bylaw.html>) with reservations for the post for (Immediate) Past Chairperson and Chairperson due to the clause that reads as '*One of the Vice Chairpersons shall be designated as Executive Vice Chairperson, who shall take over from the Chairperson for the next term.*'

-With self-nomination permitted, interested IEEE Member should

submit in about a page his / her contribution to the profession and to the IEEE and its Society(ies) in the last *five years*, in support of his / her candidature by 01-November-2017 (Wednesday) to IEEE Delhi Section <ieeedelhi@ieee.org> only clearly mentioning about the post(s) in order of preference.

- Even for the existing Executive Committee Members *except for the reserved position of (Immediate) Past Chairperson*, i.e., in other words for the 6 (six) positions of Section Officers (Chairperson, Executive Vice Chairperson, Vice Chairperson, Secretary, Joint Secretary, & Treasurer), and 9 (nine) Members submission of expression of interest supported by similar document as above is expected *for continuance in the same position or advancement (as applicable)*.

-It is clarified that no extension of date will be there on any sort of excuse and there is no bar for the remaining existing Executive Members (like, Ex-officio & Co-opted Members) to apply in similar way as above until and unless restricted as per Section Bylaws and / or in accordance with the IEEE Constitution and Bylaws. However, in the process prevalent practice of 'one person one post' should be maintained', e.g., holding the position of Chair of Subsection / Chapter / Affinity Group thus remaining as *Ex-officio Member in the Section Executive Committee*, one should not be vying normally for any position out of the above-mentioned 5

remaining Section Officers or 9 Members. However, if any such volunteer wishes to apply to serve in any of these post in the Section Executive Committee, an undertaking should be submitted by him / her for subsequent relinquishing of charge from the position of Chair of Subsection / Chapter / Affinity Group in case of selection.

-While making the slate due consideration would be given to technical as well as geographical segments of the Section.

-Also, Nomination Standing Committee has the right to pick up any Member, who may not have applied, but considered to be fit for a particular position after obtaining his / her consent.

2. Nomination is also invited for the **IEEE PES-IAS Delhi Chapter Executive Committee, IEEE PELS-IES Delhi Chapter Executive Committee** (all for 2018), from the Members of respective Societies *in similar lines* as above for the posts of Chairperson, Secretary, Treasurer, and Members (going by precedence and / or bylaws with number as mentioned in their respective websites). Deadline for the concerned submissions is 01-November-2017 (Wednesday) to IEEE PES-IAS Delhi Chapter <pesdelhi@ieee.org> only.

3. For the nomination of **PES Outstanding Chapter Engineer Award (OCEA) for 2017, restricted to Power & Energy Society (PES) Higher Grade Members only**, concerned Nomination Committee seeks application with contribution to profession as well as to PES, and IEEE or its other Societies (*if any*) in about a page to be submitted by 01-November-2017 (Wednesday) to IEEE PES-IAS Delhi Chapter <pesdelhi@ieee.org> only.

Thanks & regards / best wishes to all for the ensuing festive season.
Subrata

Prof. (Dr.) Subrata Mukhopadhyay, SrPE, *valued IEEE Member for 48 years*
Professor & Dean (Academics)
GTBIT, GGS Indraprastha University, New Delhi
Vice Chair, International Practices Subcommittee, & Chair, IPSC Asian and Australasian Infrastructure WG of IEEE PES
Member, IEEE IAS Council
(*Founder Vice Chancellor, Lingaya's University, Faridabad, Delhi NCR*)
(*Former R10 Representative & Member of IEEE PES Governing Board*)
(*Former Member-at-Large, IEEE IAS Executive Board*)
Chair, Tech & Prof Act STDCOM, & Chair, History STDCOM
Chair, Consultants Network Affinity Group, & ECC of IEEE Delhi Section
B-802 Appu Enclave CGHS Ltd
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New Delhi - 110 075, INDIA
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Tel: +91-11-43098372, 28035802 (H)

Congratulations Prof. Rachana Garg of DTU, Delhi

As communicated on Behalf of R10 Award and Recognition Committee Chair, Prof. Elmer Dadios SAC Volunteer Award was given to **Prof. Rachana Garg** in recognition of leadership and contributions to R10 SAC programs.

HARDWARE HACKATHON REPORT

(*As reported by Prof. Prerna Gaur on April 19, 2017*)

IEEE NSIT organised a hardware hackathon on April 1-2, 2017, under the week long event Tech Week 2k17. The event was held in association with EVOLVE- The Software Development Society of NSIT and was aimed at accumulating the harmonious technical enthusiasts on single platform to compete with each other.

This event aimed to solve the rural sector issues by centralising the theme on Internet Of Things(IOT). The real life applications of

the widespread technology - Internet Of things is increasing at an enormous pace. It was also a chance to further explore the concept of smart classrooms and come up with new ideas for innovation in education.

The event was an harbinger of broad opinions and a sincere effort towards contributing for the social cause using hardware models and mobile app development. The team of IEEE NSIT planned the event to be such, that it would sensitise people of the rural sector to give them smart solutions to their recurrent household and employment issues.

The '**Hardware Hackathon**' was an overnight hackathon which stretched for 18 hours at the NSIT campus. There were 25 teams in all, with the event witnessing a participation of over 100 participants. The event kept everyone engaged in search of out of the world ideas & keep sleep on a back gear. The event saw teams consisting of ace coders and electronics enthusiasts from colleges all over delhi & NCR. The teams had previously been shortlisted on the basis of their project proposal, and electronic components were provided by IEEE NSIT based on their project needs.



The event kicked off at around 6PM as soon as everyone munched of the evening snacks. The first part of the event was the

brainstorming session wherein each member of team was engaged in search of idea for their hardware model.. Then the team were then provided with the electronic tools from which they have to select the ones so as to give life to their hardware model and also build a mobile app to run the hardware model. The teams were asked to prepare a 10 minute presentation on their model to the respective judges and also explain how their hardware system would help solve the issues of rural sector. The teams were given regular meals throughout the event, and had free unlimited internet access to help them implement their ideas.



The esteemed judges for the event were Associate Prof Sujay Deb (IIIT-D), Assistant Prof Kunwar Singh (NSIT) and Mr Shivam Setia from NSIT IIF (Entrepreneur). The judges boosted the morale of the participants. Professor Sujay Deb also encouraged the participants , highlighting the qualities of successful entrepreneurs, while giving examples of entrepreneurs who have made a mark in today's world and told them the significance of practical minds who can implement their ideas to help real world problems.

Teams were given time to brainstorm, carry out systematic analysis and based on that, they had to give a presentation, which included the SWOT Analysis and business insights too.



The Model presentation session was a highly interesting one , with the judges and other competing teams helping the presenting team by pointing out the weakness in their solution and provide them the ideas on how to tackle those issues and pinpointing why some technologies will which will solve the problem but would be an economical issue when implemented.

After rigorous evaluation and examining the model performance and project representation of various teams, the following teams bagged the top 3 positions of this overnight Hardware Hackathon under Tech Week 2017 present by IEEE NSIT.

The top three teams and their respective hardware models are as follows

1. TEAM Aprajita(Satyarth Rai, Vaibhav Choudhary, Vikas Yadav)
 - Built a smart irrigation system using Machine Learning algorithms.



2. TEAM Monris (Monika Kumari, Rishabh Shukla)

- Built a smart classroom including a smart projector



3. TEAM Blitzkrieg (Sidharth Kella, Lalit Arora, Nitin Shrivastava, Karan Bhandari)

- Built Gesture Controlled Projector which is smart room with automatic fan and lightning facility whose switch works according to a human sensor.



All in all, the event was a very fruitful one, which spread the message for the need to have a passion for the technology and give them the required boost to pursue their technological fervour, and working towards a feasible solution is aimed towards the same.

IEEE-Teacher In Service Program(TISP)at Poornima University, Jaipur Rajasthan Subsection



The Teacher in service program (TISP) provides a forum for IEEE volunteers to demonstrate the application of engineering, science and mathematical concepts by sharing their world experiences with local pre-university educators. Dr. Shabana Urooj, Chair Educational Activities Board, IEEE Delhi Section conducted this first TISP of Rajasthan Subsection on 29 July, 2017. Total five sessions; including 2 hands-on, one demonstration and two interactive talks were executed successfully. Two student volunteers Sanjay Singh & Urvashi Sharma also interacted with the audience. Several School teachers including DPS Jaipur enthusiastically participated in the workshop.



(As reported by Dr. Shabana Urooj on August 01, 2017)

With Prof. Mahesh Bundeale, Co-opted Member, IEEE Delhi Section reporting from Jaipur

Inauguration of Poornima University IEEE Robotics & Automation Society Student Branch Chapter (SBC1014B)

& A Joint Technical Seminar on Security Challenges & Opportunity in SDN/NFV and 5G

March 23, 2017

Organized by

IEEE Student Branch Poornima University, Jaipur

IEEE Student Branch MNIT, Jaipur

IEEE Student Branch Manipal University, Jaipur

IEEE Student Branch LNMIIT, Jaipur

Venue: Poornima University, Jaipur

Brief Report

This activity was divided into two parts.

1. Inauguration of SBC1014B: Poornima University IEEE Student Branch Robotics and Automation Society Chapter was inaugurated on 23rd March 2017 during 9.30 am - 10.30 am at the hands of **Chief guest** Dr. Ashutosh Dutta Director of Technology at AT & T Labs CSO, Middletown, New Jersey & **Guests of Honor** Dr. Kumkum Garg, Pro-President, Manipal University, Jaipur, Dr. Rajesh Kumar, Professor, MNIT, Jaipur, Dr. Soumitra Debnath, LNMIIT, Jaipur, Dr. Manoj Gupta, Provost & Dean, SET, PU & Prof. Mahesh Bundeale, Dean (R&D), Poornima University along with Office bearers of Poornima University IEEE STB and RAS Student Chapter.

More than 150 participants from Poornima University, Poornima College of Engineering, Poornima Institute of Engineering & technology, MNIT, Manipal University and LNMIIT Jaipur participated along with Deans, Heads and faculty members of Poornima University.

On this Occasion Poornima University IEEE Student Branch (STB1014) Activity Report "REFLECTIONS" containing detail report of 11 activities conducted during July 2016 to February 2017 of 220 pages was also released by the dignitaries.



Dignitaries releasing report

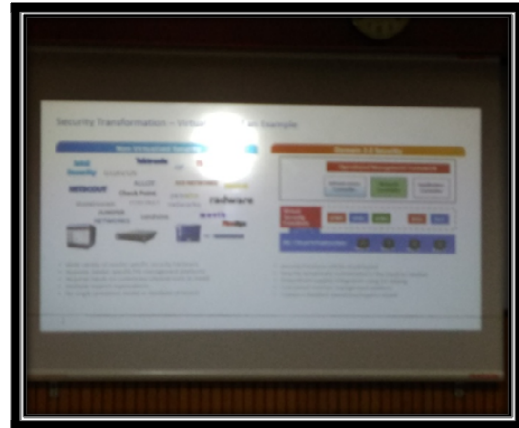
2. A Joint Technical Seminar on **Security Challenges &**

Opportunity in SDN/NFV and 5G

was organized by IEEE Student Branches of Poornima University, MNIT, Manipal University and LNMIIT, Jaipur hosted by Poornima University, Jaipur

The seminar was delivered by Distinguished Lecture Speaker **Dr. Ashutosh Dutta** Director of Technology at AT & T Labs CSO, Middletown, New Jersey and Technical Lead member of 5G Initiatives of IEEE ComSoc on this topic. More than 150 participants, faculty from academic and industry has attended the talk from 10.45 AM to 12.45 PM on the same day.

Dr. Ashutosh Dutta started the session with introduction to Software Defined Network and Network Function Virtualization (NFV). He addressed various security challenges and opportunities introduced by network virtualization, network slicing, and software defined networking. He discussed virtualized Evolved Packet Core (EPC), virtualized IP Multimedia Services (IMS), Virtualized Residential Gateway, and Virtualized Next Generation Firewalls. He also highlighted some of the ongoing activities within the standards communities and illustrated a few deployment use case scenarios. He ended the talk with an overview of recent IEEE 5G Initiative (5g.ieee.org) and how it is going to help with the evolution of 5G eco system. Dr. Ashutosh Dutta then answered many questions put up by the audience. He also discussed the students about their projects and offered new ideas.



A typical display



Dr. Ashutosh Dutta delivering the talk

After the talk on this occasion, a session of interaction of four IEEE student branches was also arranged wherein office bearers of all the student branches introduced themselves and Chairs presented details of activities they have organized in past and planned for future.

At last certificates were issued to all the participants at the hands of STB chairs. All financial support including high tea and lunch was extended by Poornima University management.



Group photograph on the occasion

**Inauguration of Poornima University
IEEE PES Student Branch Chapter
(Chapter Code: SBC1014)**

&

**A Technical Seminar on Overview of
Micro-grids: Concepts, Issues and
Challenges**

April 01, 2017

Organized by

**Poornima University IEEE Student
Branch, Jaipur**

Brief Report

This activity was divided into two parts.

1. **IEEE Power and Energy Society Chapter of Poornima University** was inaugurated on 1st April 2017 at the hands of **Chief Guest** Dr. Rachna Garg Secretary, IEEE Delhi Section, Immediate past Chair PES Chapter, Delhi Section, Student Activities Chair (Delhi, NCR) Delhi Section, Dr. K.K.S. Bhatia, President, Poornima University, Dr. Manoj Gupta, Provost, Poornima University, Prof. Mahesh Bunde, Dean (R&D), Dr. ADD Dwivedi, Branch Counselor, Mr. Devendra Somanvanshi, Chair, Student Branch, Mr. Ashish Raj Sinha Chair, PES Student Chapter, Mr. Devendra Doda, Faculty Advisor, PES Chapter, Office bearers of Student Branch and the Chapter.

More than 100 participants from Poornima University, Poornima College of Engineering, Poornima Institute of Engineering & technology, SKIT, JECRC, JNU, Jaipur participated along with

Deans, Heads and faculty members of Poornima University.



Prof. Rachana Garg being felicitated

2. A Technical Seminar on **Overview of Micro-grids: Concepts, Issues and Challenges** was delivered by **Dr. Rachana Garg**

Dr. Rachna Garg started the session with the overview of Micro-grid including motivation, need of micro-grid, basic concepts, definitions, types and examples of Micro-grid. She also discussed about objectives, classification, types and terminologies of distribution generation. She explained some technical issues of micro grid like Integration with the existing utility network, Role of power electronics, Impact on power quality, Impact on reliability, Impact on environment and DR modeling for improved stability of operation. She also discussed the Role of Energy Storage in Micro-Grids and its technologies. She told that micro grids are termed as loads by conventional grids. Micro grid can draw power from main grid or feed when having excess power generation. When it feeds the power it is considered as negative load and when it draws, it is positive load. Also talked about the presence of generation in the distribution system, protection schemes designed for unidirectional power flow may become ineffective. It may results in false tripping, undesirable network islanding, prevention of automatic and asynchronous re-closing. She discussed about islanding of micro grids and issues

considered related to islanding. Finally, she concluded the session that the Micro-grids is the need of the day and can be very useful in making use of renewable resources for electricity generation also they can provide electricity at reasonable cost to remote, isolated communities. Written feedback of participants was collected and analyzed.



Prof. Rachana Garg delivering her talk



Group photograph on the occasion

**Inauguration of Poornima University
IEEE Electron Device Society Student
Branch Chapter
(Chapter Code: SBC1014A)**

**&
A Technical Seminar
on
Evolution of VLSI & VLSI Design
April 22, 2017
Organized by
IEEE Student Branch Poornima
University, Jaipur
Brief Report**

This activity was divided into two parts.

- 1. IEEE Electron Device Society Chapter of Poornima University Student Branch was inaugurated** with the lightning of

the lamp by the dignitaries- Chief Guest Dr. R. S. Gupta, Chair, EDS Chapter, Delhi section, Dr. Manoj Gupta, Provost, Poornima University, Prof. Mahesh Bunde, Dean (R&D) & Head ASRC, Dr. ADD Dwivedi, Branch Counselor, IEEE Student Branch, PU, Mr. Devendra Somanvanshi, Chair, Student Branch, PU, & Mr. Aditya Pundir, Chair, SBC EDS, and Mr. Purushottam Kumawat, Advisor SBC EDS and unveiling the welcome letter on 22nd April 2017. More than 100 participants from Poornima University, Poornima College of Engineering, Poornima Institute of Engineering & technology, Poornima group of Institutions and others participated along with Deans, Heads and faculty members of Poornima University.



Prof. R. S. Gupta being felicitated

- 2. A Technical Seminar on Evolution of VLSI and VLSI Design was delivered by Prof. R. S. Gupta**



Prof. R. S. Gupta delivering talk

Prof. R.S. Gupta started the session on Evolution of Electronics in which he discussed

about Thermionic/Vacuum Tubes and Diode to Triode to Pentode. He also discussed that the First Junction Transistor was invented by W.B. Shockley in 1951. He gave an insight about some major milestones of semiconductor devices and total of 178 devices are invented so far. He also explained the Evolution of VLSI. He also explained that the designers of modern integrated circuitry have continuously attempted to provide more computational speed, with less dissipated electrical power, with less circuit board area, while maintaining a low failure rate, and an aggressive cost. He discussed the Comparison of Semiconductor Properties. He gave some glimpse on Integrated Circuit (IC) types of IC i.e. Monolithic IC and Hybrid IC. He told some of the important effects that should be included in MOSFET modeling are: Mobility reduction due to vertical field, Carrier Velocity Saturation, Drain Induced Barrier Lowering, Source/Drain Charge Sharing and Non-uniform Channel Doping. He talked about the Various Engineered Device Structures i.e. Lateral Channel Engineered Structures, Work-Function Engineered Structures and Gate-Oxide Engineered Structures. He also talked about Graded Channel Cylindrical/Surrounding Gate and Concave Dual Material Gate. He concluded the session saying that DMG ISE MOSFET provides better reduction of SCEs as a result of work function difference between two metal gates and thus improves Carrier Transport Efficiency and Lower intrinsic delay pertained by DMG architecture strengthens the idea of using it for switching applications.

Written feedback of participants was collected and analyzed. Participants appreciated the talk and expressed their willingness to attend such programs in future.



Group photograph on the occasion

**Distinguished Lecture Talk organized
by PU IEEE EDS Student Branch
Chapter- 24, June 2107 Report
(Chapter Code: SBC1014)**

Distinguished Lecture Talk

Session was started at 1:00 PM in ground floor seminar hall, Poornima College of Engineering. Distinguished lecturer Dr. Manoj Saxena graced the occasion and shared words of wisdom. Dr. Manoj Saxena is currently Associate Professor in Department of Electronics, Deen Dayal Upadhyaya College, University of Delhi, New Delhi, India. He is Regional Editor for South Asia, IEEE EDS Newsletter; IEEE Electron Device Society-Region 10 SRC Vice Chair and EDS Distinguished Lecturer and Fellow-IETE, India. For his voluntary contribution, he has received the outstanding EDS Volunteer recognition from EDS Chapters in the region in 2012.



Felicitations of Chief Guest

Session by Chief Guest and Distinguished Speaker:

Dr. Manoj Saxena started his lecture by showing his gratitude towards Dr. Mahesh Bunde to arrange his session in summer breaks also. Dr. Saxena introduced current research topic **"Fundamental Insights into Channel and Gate Engineered Double Gate Junction-Less Transistor for Low-Voltage Low-Power Analog and Digital Circuits."** He delivered that, in recent times, as the device length has substantially decreased, novel doping techniques are required for developing concentration gradient at the junctions. The primary advantage of Junction-Less device is the simplicity in fabrication process. The main difference between a Junction-Less (JL) transistor and a classical MOSFET is the absence of junctions i.e. uniform doping for the entire length of the device. The device is heavily doped and the doping is of the order of 10^{18} to 10^{19} cm⁻³. In JL transistor, bulk conduction takes place in contrast with the surface channel conduction in classical MOSFET. In sub-threshold region, JL transistor is fully depleted. As the gate voltage approaches threshold voltage, it becomes partially depleted and when it reaches flat-band voltage, it is fully on. In sub-threshold region, due to depletion, electric field in JL transistor is very high and above threshold, electric field reduces. This is in contrast to Inversion-Mode (IM) MOSFET where electric field is low in sub-threshold region and high after threshold voltage. As the current flow is mainly concentrated at the centre of film, surface scattering is very less which increases mobility and hence current drive in JL transistor. Single Material Double Gate (SMDG) has several advantages as mentioned above but there are some drawbacks due to high doping concentration. It reduces mobility of the carrier which in turn affects drive current and trans-conductance. The above problems can be avoided by using Dual Material Double Gate (DMDG) JL transistor. DMDG has two metals in two gates having different work functions. Due to different gate materials, potential step profile is created

which screens the effect of drain potential variation. Due to this, several advantages like high on-state current, improved trans-conductance and reduced DIBL are observed. These effects have been investigated by developing efficient drain current model for DMDG JL transistor using conformal mapping technique. Later on he also made audience familiar with IEEE, benefits of IEEE memberships and shared his experience of encouraging students to take IEEE memberships and requested faculty member present there to take initiatives for encouraging students.



Dr. Manoj Saxena delivering the talk



Group Photograph with Dr. Manoj Saxena

**Inauguration of WIE Student Branch
Affinity Group & Technical Seminar on
Cellular Communication System
Evolution: 1G-5G, Organized by
Poornima University Student Branch
Chapter Wednesday, September 13,
2017 Report (Branch Code: STB1014)**

IEEE Student Branch at Poornima University, Jaipur

The IEEE Student Branch has been opened under Advanced Studies & Research Center (ASRC) of the Poornima University vide welcome letter dated 22 June 2016 having **Student Branch code STB1014** and **School Code is 60108724**. The basic objective of opening this branch under ASRC has been to further open different Society Chapters in various departments of the University thereby involving all Bachelor, Master and Doctoral students and faculty in IEEE activities and awareness through conduction of Technical Seminars, Workshops, Conferences and other technical & cultural activities leading to promotion of IEEE and advancement of technology in right perspective. At present there are more than 90 IEEE Student Members and more than 15 Professional members under the branch.

Inauguration Session-11:00 A.M to 12:00 Noon

• Session was started at 11:00 AM in ground floor seminar hall, Poornima University by anchors Ms. Indu Chhipa and Ms. Charu Dubey with welcome of dignitaries Dr. K. K. S. Bhatia, President, PU (**Presiding Over**), Dr. Mridula Gupta (**Chief Guest**), Dr. Manoj Gupta, Provost & Dean SOM, PU, Dr. B.K. Sharma, Dean, SET, PU, Prof. Mahesh Bundeale, Dean(R&D), PU, Dr. ADD Dwivedi, Branch Counselor, IEEE Student Branch, PU Mr. Devendra Somwanshi, IEEE student branch, PU, Chair Jaipur, Dr. Nidhi Mishra, Advisor WIE, PU, Ms. Mahima Asthana Chair, WIE Affinity Group, PU, Ms. Bhawna Sharma, Vice Chair, WIE, PU, Ms. Divya Sharma, Secretary, WIE, PU, Ms. Indu Chhipa, Treasurer, WIE, PU and member of Executive body IEEE STB Poornima University.



Anchors



Group Photograph on the occasion of starting of IEEE WIE Affinity Group

Extracts from IEEE MGA SCOOP - January 2017 (as received on Feb 1, 2017)

From: **IEEE MGA News** <scoop@ieee.org>
Date: Wed, Feb 1, 2017 at 12:01 AM
Subject: IEEE MGA SCOOP - January 2017
To: MGA Scoop <scoop@ieee.org>

- * Announcing the latest innovations for vTools.Events and eNotice
- * Welcome new members in your Section and invite them to attend an orientation webinar
- * Give the gift of IEEE membership
- * Volunteers Needed for IEEE Awards Board

- Visit MGA News at
<http://www.ieee.org/societies_comm

unities/geo_activities/mga_news.html?WT.mc_id=mganews2017.01 >

- E-mail MGA staff
<<mailto:scoop@ieee.org>> to submit feedback,

**Extracts from
IEEE MGA SCOOP - February 2017**
(as received on Feb 27, 2017)

From: **IEEE MGA News** <scoop@ieee.org>
Date: Mon, Feb 27, 2017 at 10:11 PM
Subject: IEEE MGA SCOOP - February 2017
To: MGA Scoop <scoop@ieee.org>

- * Access IEEE Collabratec™ on the go with new mobile app
- * Call for nominations: IEEE Corporate, EAB, PSPB, and TAB volunteer positions
- * Registration now open for new IEEE Vision, Innovation, and Challenges Summit & Honors Ceremony Gala
- * IEEE Humanitarian Activities Committee announces 2017 funding opportunities

**Extracts from
IEEE TA Spotlight - March 2017**
(as received on March 2, 2017)



**Message from the
2017 Technical
Activities VP**

Marina Ruggieri outlines her vision for IEEE Technical Activities in 2017,

and discusses the opportunity to address new and emerging challenges facing the technology community.



Did You Know?

Are you in the loop?
In this section, we highlight upcoming technical activities and hot topics

including the work of the 2016 Technical Activities Ad Hoc on East Africa and Ad Hoc on Education.



**At Cornell EWH,
Students Develop
Low-Cost
Healthcare. Cool.**

While technology has advanced healthcare, many of these new

tools and treatments cannot be implemented in developing countries due to issues of sustainability, scale, and cost. Students at Cornell University use engineering and entrepreneurial concepts to address these issues by making innovative and low-cost medical devices.



**Smart Healthcare:
Teaching Tech to
Be More Caring**

Though healthcare is becoming increasingly more technology-savvy, it

doesn't have to be impersonal. Nancy Laplante, associate professor of nursing at Widener University, and Phillip A. Laplante, professor of software engineering at Pennsylvania State University discuss how healthcare practitioners can maintain true caring while implementing smart systems.



**Closing the
Workforce Gap:
The IEEE Power
and Energy
Society
Scholarship Plus
Initiative**

The IEEE Power and Energy Society (PES) realized that the number of incoming power and energy engineers would not meet the industry's workforce needs. To encourage

more students to study power and energy, the Society created a scholarship program that offered financial support and engaging career-focused activities.

**Extracts from
IEEE TA Spotlight - 2nd Qtr 2017**
(as received on May 4, 2017)

Message from the 2017 Technical Activities VP

Marina Ruggieri discusses how her vision for Technical Activities in 2017 has progressed, and gives an update on her travels to various IEEE Region meetings and IEEE events throughout Q2.

Did You Know?

Are you in the loop? In this section, we highlight upcoming technical activities and hot topics, including the new TAB Committee on Diversity and Inclusion and upcoming IEEE Women in Engineering International Leadership Conference



In My Opinion: Hit the Brakes - We're Not Ready for Autonomous Vehicles

As more companies are testing

autonomous vehicles on public roads, many people are anxiously wondering when this technology will be available on the market. But is society ready for wide-scale adoption of fully automated vehicles? More importantly, is our complex transportation infrastructure ready?



Public Visibility: IEEE Tech Experts in the Media

IEEE Members Tom Coughlin, William Webb, Valorie King,

Paul Kostek, Kevin Du, Sven Dietrich, Kevin Curran, and Rich Baraniuk recently shared their expertise in news articles as IEEE Technical Experts - IEEE members whose commentary raises the visibility of IEEE as a global thought leader on technology advancements and issues.



Re-engineering Technology for Lesser Served Communities in SIGHT

Water delivery, electric power,

mobile communications, and internet connectivity. These services, empowered by technology, have become common aspects of our daily life. However, not everyone has access to these technology benefits. IEEE members are using their expertise to re-engineer technology solutions to meet the unique needs of lesser served communities and improve global implementation. The IEEE Special Interest Group on Humanitarian Technology (SIGHT) program helps IEEE members deploy technology to developing areas around the globe.

**Extracts from
IEEE TA Spotlight – 3rd Qtr 2017**
(as received on Sep 7, 2017)

Message from the 2017 Technical Activities VP

Marina Ruggieri discusses how her vision for Technical Activities in 2017 has progressed, and gives an update on her travels to various IEEE Region meetings and IEEE events throughout Q3.

Did You Know?

Are you in the loop? In this section, we highlight upcoming technical activities and hot topics, including new IEEE Humanitarian and Philanthropic Opportunities and IEEE

Generation Artificial Intelligence (AI) timeline.



Diversity, Adversity, and Innovation

While many people face challenges in their lives, engineering allows to people to develop solutions. *Spotlight* spoke with Rabab Ward, IEEE Signal Processing Society (SPS) President, about personal obstacles she has overcome in her life, how adversity can drive technological advancement, and what can be done to increase diversity in engineering.



Cyborg Rats and Monkey Mind Control

Cyborg intelligence is an emerging direction in the field of intelligent systems. Gang Pan and his colleagues are continuing to advance this area with research including hierarchical and conceptual framework and the development of rat cyborgs.



Anastasia Georgouli: What Entrepreneurs Want

As the world's largest technical professional association, IEEE must provide resources to emerging segments, such as entrepreneurs, with global implications in mind. Anastasia Georgouli, an entrepreneur and active member of IEEE Young Professionals, discusses.

Extracts from SC-WEB-MGMT-NEWSLETTER] IEEE WEB MANAGEMENT NEWSLETTER February 2017 (as received on February 27, 2017)

Recent Website Launches

The [Digital & Creative Innovations Team](#) works closely with website owners to provide guidance on user experience, use of IEEE templates and CMS options, creative design, accessibility, information architecture, and content. The team can also partner you with creative design agencies and independent contractors with project management oversight.

If you have a project or website that would benefit from our in-house expertise, you can [submit this form](#) or email the team at digital-innovations@ieee.org.

IEEE Meetings, Conferences, and Events (IEEE MCE)

URL: <http://ieeemce.org>

Launch Date: November 2016

The IEEE MCE site has an improved look-and-feel and new user experience features such as requesting a quote online for services. Part of Technical Activities' Global Meetings, Conferences & Events Management group, IEEE MCE is a dedicated partner made up of event industry experts driven to shape innovative and high-quality events. It specializes in event management, including registration, audience development, program design, sponsorship, publications, and financial management for events worldwide.

Contact: [Sherry Russ](#) and [Caroline Johnson](#)

Beyond Standards

URL: <http://beyondstandards.ieee.org/>

Launch Date: December 2016

Hosted by the IEEE Standards Association (IEEE-SA), Beyond Standards is dedicated to promoting technology and celebrating

the contributions of individuals and organizations globally who drive technology development. The primary focus was to provide a digital experience that represents the brand. The new design allows for a clean and modern layout, clear navigation, and a responsive layout for all platforms. The objectives of the redesign were to:

- Rebrand blog name, look and feel
- Migrate all content to a modern and secure Wordpress theme
- Define new content types, editorial calendar
- Add value to IEEE-SA members (guest posts)
- Create additional revenue opportunities (sponsored posts)
- Publish relevant blog posts related to emerging standards and technology

Contact: [Jeff Pane](#)

How the Digital & Creative Digital Innovations Team can help you

The Digital & Creative Innovations (DCI) team works with IEEE stakeholders to provide both digital and print-based solutions for IEEE-branded projects.

Site Reviews

DCI has an easy, free, regular process for reviewing both new-build and re-designed IEEE websites to ensure that the creative design, brand implementation, accessibility, information architecture, functionality, and content are of “unmistakably IEEE quality”. We work with site managers and content owners and, when appropriate, agencies and contractors to help you achieve the goals of your site.

DCI’s Interaction Design Project Manager can be engaged to coordinate reviews of site wireframes (generally takes 2-3 days), initial designs (2-3 days) and prior-to-launch

beta sites (5-7 days).

[Review the IEEE site review template to get an idea of what to expect](#)

Review(s) are based on the guidelines below:

- [IEEE Digital Presence Style Guide](#): lists the best practices and IEEE branding requirements for IEEE websites
- [IEEE Visual Identity guidelines \(PDF 3 MB\)](#): lists the IEEE look-and-feel elements (IEEE Master Brand standards, Color, Typography, Imagery, and Wedge Design)

All of the sites featured in the Recent Website Launches in this and the previous newsletter went through the DCI site review process.

IEEE branded and sub-branded collateral

The Digital & Creative Innovations team provides IEEE branded and editable sub-branded templates for various collateral needs:

- PowerPoint presentation templates
- print and digital ads
- table covers
- trifold brochures
- hanging banners
- flyers
- pull up banners (free standing 33x80” and table top 11.75x21”)

These editable digital and print-ready templates are available in the [IEEE.org Templates, Tools, & Resources](#) section.

How do I use the IEEE templates, tools and resources?

There are several ways to utilize the IEEE

templates, tools, and resources:

- IEEE Creative:
Contact, creative@ieee.org, and we can connect you with one of our approved agencies or contractors to assist with changes you might need for your project.
- Self-service: Download and edit the files to work with your own creative contractor and/or production vendor.
- Connect directly with the IEEE production vendor Consumer Graphics: Browse all collateral, select your desired pieces, and/or customize, print and purchase through an online ordering portal.

Use of internet survey findings

The Digital & Creative Innovations Team partners semi-annually with the Strategic Research Team in Corporate Activities to conduct the Use of Internet Survey with IEEE members and non-members with potential interest in IEEE content.

The goal of the survey is to understand technology professionals' general use of the internet, social media, and mobile applications, as well as their connectedness to IEEE on the Internet. The 2016 survey focused on young professionals and those in the private industry. Key findings are as follows:

- Six in ten IEEE members (63%) say they are "constantly connected" to the Internet and 29% say they are "connected several times a day." Young professionals were connected even more with 75% saying they are "constantly connected."
- YouTube and Wikipedia are the most used sites followed by Facebook and LinkedIn. Young professionals are on Facebook the most and those in

private industry tend to be on LinkedIn more.

- Respondents were more likely to consume content online (reading technical content, watching videos, and so on) and they were less likely to contribute content (posting blogs, writing wikis, sharing content).
- The most visited IEEE sites in the past 24 months were: IEEE.org the most visited (72%), followed by IEEEExplore (54%), and myIEEE (52%). Others include IEEE Standards Association (15%) and IEEE Collabratec (12%). Young professionals and those in private industry visited IEEE sites less often. Satisfaction with the sites ranged from 70% satisfied (for IEEE Xplore) to 49% satisfied (for Chapter sites).
- About a third (34%) are interested in accessing IEEE's content on a mobile device. Young professionals and those in academia are slightly more interested.

Celebrate World IA Day

February 18 was celebrated as World IA Day. This is a one-day annual celebration focused on telling stories of information being architected by everyone from teachers to business owners; technologists to artists; designers to product managers. Visit the [World IA Day](#) site for links to world-wide activities and events, both online and "real world."

Reminder to update IEEE copyright year in website footer

The Digital & Creative Innovations team would like to remind IEEE webmasters to update the copyright year in website footers from 2016 to 2017.

[Visit the IEEE Global Page Element and Branding Requirements section for further footer requirements](#)

Spread the word

Do you know of other IEEE Web management associates who might benefit from this newsletter? Have them send an email to web-publishers-feedback@ieee.org asking to be added to our mailing list.

**Extracts from
SC-WEB-MGMT-NEWSLETTER] IEEE
WEB MANAGEMENT NEWSLETTER
APRIL 2017**
(as received on April 10, 2017)

The 3-click rule: myth or fact?

What is the 3-click rule? In a nutshell, it says that if users can't find what they're looking for after three clicks, they're likely to become frustrated and leave the site. This common misconception is affecting how we design websites with a good user experience. Getting to relevant content with as few clicks as possible is not only misleading as a general web rule but also impossible to apply to all websites.

In fact, recent testing shows no correlation between the number of user clicks and their success in finding the content they sought. In general web usage, users interact differently on various sites (e.g., an e-commerce site like Amazon.com, a search engine like Google or a content/news site like an IEEE website). Hence, measuring the ease of use on these sites cannot be determined just by the number of clicks but how effectively they can get to content on each of these sites. If users are able to get to where they want and are satisfied (satisfaction being the key measure here), we do not need to worry about how many clicks got them there.

While website designers/vendors are often directed to keep the number of clicks to a certain minimum, providing them with the following criteria can ensure that the usability of the website is not compromised:

- Create a task path that is progressive and intuitive (so users feel they are getting closer to the content they are seeking)
- Use well labeled links and buttons, error messages, or copy telling users where they are (instead of them having to guess what they might encounter upon clicking or reading further)
- Optimize site search tools to return relevant and accurate results (if site search is provided as a tool to find information on the site)headed
- Optimize website performance for various devices (i.e. desktop, laptop, mobile, or tablet) based on context of use (includes speed of loading as well as rendering layouts based on user's screen size)

Read more from user experience industry experts on this topic:

- [Testing the three click rule](#)
- [Getting confidence from Lincoln](#)
- [10 Usability tips based on research studies](#)

Resource: The IEEE Corporate PowerPoint Presentation Template

Based on feedback from across the organization on the current corporate PowerPoint presentation template, the Digital & Creative Innovations team has revised the template in the hopes of better serving organizational presentation needs.



The goals of the new template are to:

- Offer a more attractive design aesthetic that better represents the IEEE brand
- Improve usability and flexibility in working with the template
- Better accommodate content and visual elements as needed
- Accommodate a wider aspect ratio

A number of testers from each IEEE organizational unit were asked to provide feedback on the new template, which has either been incorporated into the final version or into future release planning.

Please begin using this template for your 2017 presentations.

- [Download the new PowerPoint template](#)
- [Download new and existing branded and Sub-branded templates, including pull-up banners, print and web ad suites, flyers, handouts, and business cards](#)

Please contact creative@ieee.org if you have any questions regarding the template or other branded resources.

**Extracts from
Web Management Newsletter
June 2017**
(as received on June 6, 2017)

New Webmaster Newsletter delivery tool
We are testing a new delivery tool for the Webmaster Newsletter. It's using the MailPoet Wordpress plugin. MailPoet allows Wordpress posts to be aggregated into a scheduled newsletter for easy delivery to multiple subscribers.

There are a few limitations on formatting at this time, so you may notice some changes from past newsletters. And, we may update the layout as new features become available.

Also, the Newsletter archives will gradually be converted to the new format. This will allow better findability, search, and

categorization of posts into custom newsletters. We'll also be able to re-use content across multiple newsletters and stand-alone pages. In the meantime, the Newsletter archives can still be found on the old platform.

Thanks for your patience and continued interest.

Recent website launches - IEEE Author Center

IEEE Author Center

URL: ieeeauthorcenter.ieee.org

Launch date: 6 June 2017

Site purpose: The IEEE Author Center offers a one-stop shop for authors to learn about publishing with IEEE. This comprehensive source of up-to-date content is written from the author's perspective in simple, engaging language and is easily viewed in mobile.

Contact: Marilyn Catis, Tiffany McKerahan

Recent website launches - IEEE TechEthics

Recent website launches - Proceedings of the IEEE

Proceedings of the IEEE

URL: <http://proceedingsoftheieee.ieee.org/>

Launch date: 28 March 2017

Site purpose: Development of a contemporary look and feel and responsive website while maintaining the publication's legacy of more than 100 years. Additional goals of the site include surfacing the prestige of the most highly-cited general interest journal in electrical engineering and computer science; increase readership, subscriptions, and visibility; surface historical and current Proceedings content; and to leverage WordPress capabilities to host content.

Contact: Vaishali Damle, Jo Sun

**IEEE DELHI SECTION MEMBERSHIP
STATISTICS AT A GLANCE**

IEEE Delhi Section has as per **latest (September 2017)** statistics **3811 active Members** (*excluding Society Affiliates*), consisting of **0 Honorary Member, 6 Life Fellow, 8 Fellow, 33 Life Senior, 271 Senior Member, 5 Life Member, 1278 Member, 54 Associate Member, 524 Graduate Student Member, 1632 Student Member.**



vol 17 no 10-12
October-December 2017

From the desk of ECC

My dear esteemed Members,

October-December or the last issue of e-newsletter for the calendar year 2017 is being issued now, with news and views for your consumption. Besides these, regular features, like, up-to-date list of approved conferences under IEEE Delhi Section as held in 2017 and to be held in 2018, Membership Statistics, etc. too find place. At the same time opportunity with the late edition goes reminding you of the Section Annual General Meeting (AGM) on next Sunday, February 04, 2018 at India International Center (Annexe), Max Mueller Marg, New Delhi with starting to assemble at 9:30 am.

With best regards and wishes,

(Dr. Subrata Mukhopadhyay)
IEEE Delhi Section
January 31, 2018 (*Wednesday*)
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>)

Conferences held in the year 2017 are as under:

11th INDIACom i.e. INDIACom – 2017; 2017 4th International Conference on Computing for Sustainable Global Development (INDIACom)

(http://www.ieee.org/conferences_events/conferences/conferencedetails/index.html?Conf_ID=40353)

organized by BVICAM, A-4 Paschim Vihar, New Delhi from March 1 to 3, 2017

(<http://bvicam.ac.in/indiacom/>)

2017 International Conference on Computer, Communications and Electronics (Comptelix)

(http://www.ieee.org/conferences_events/conferences/conferencedetails/index.html?Conf_ID=40618)

organized at Manipal University, Jaipur, Rajasthan from July 1 to 2, 2017

(<http://irisworld.org/wp/international-conference/comptelix-2017/>)

4th International Conference on Signal Processing, Computing and Control (ISPCC 2017)

(http://www.ieee.org/conferences_events/conferences/conferencedetails/index.html?Conf_ID=40546)

organized at Jaypee University of Information Technology, Wanknaghat, Solan, H.P., India from September 21 to 23, 2017

(http://www.juit.ac.in/ispcc_2017/)

2017 International Conference on Computing and Communication Technologies for Smart Nation (IC3TSN)

(http://www.ieee.org/conferences_events/conferences/conferencedetails/index.html?Conf_ID=41784)

organized by Department of Computer Science and Engineering, School of Engineering, GD Goenka University, Sohna Gurgaon, Haryana, India from October 12 to 14, 2017 (www.ic3tsn-conference.org)

2017 3rd International Conference on Condition Assessment Techniques in Electrical Systems (CATCON)

(http://www.ieee.org/conferences_events/conferences/conferencedetails/index.html?Conf_ID=41724)

organized by Indian Institute of Technology Ropar, Punjab, India from November 16 to 18, 2017

(www.iitrpr.ac.in/CATCON2017/)

2017 Fourth International Conference on Image Information Processing (ICIIP -2017)

(http://www.ieee.org/conferences_events/conferences/conferencedetails/index.html?Conf_ID=41247)

organized by Jaypee University of Information Technology (JUIT), Solan, Himachal Pradesh, India from December 21 to 23, 2017 (www.juit.ac.in/iciip_2017/)

Conferences to go in 2018:

2018 IEEMA Engineer Infinite Conference (eTechNxT)

(http://www.ieee.org/conferences_events/conferences/conferencedetails/index.html?Conf_ID=42767)

being organized by IEEMA at India Exposition Mart Ltd, Greater Noida, Delhi NCR, India during March 13-14, 2018 (<http://sites.ieee.org/engineer-infinite2018/>)

2018 5th International Conference on Computing for Sustainable Global Development (INDIACom)

(http://www.ieee.org/conferences_events/conferences/conferencedetails/index.html?Conf_ID=42835)

being organized by Bharati Vidyapeeth's Institute of Computer Applications and Management (BVICAM), New Delhi, India from March 14 to 16, 2018

(<http://bviam.ac.in/indiacom/>)

First International Conference on Secure Cyber Computing and Communications (ICSCCC)

(https://www.ieee.org/conferences_events/conferences/conferencedetails/index.html?Conf_ID=44003)

being organized by the Department of

CSE, Dr B R Ambedkar National Institute of Technology, Jalandhar, Pb, India from October 11 to 13, 2018

(<http://www.nitj.ac.in/icsccc2018/>)

6th edition of international conference on Wireless Networks & Embedded Systems (WECON 2018)

(https://www.ieee.org/conferences_events/conferences/conferencedetails/index.html?Conf_ID=44297)

being organized by Chitkara University Campus (25 Km from Chandigarh), India during November 16-17, 2018

(www.chitkara.edu.in/wecon)

3rd International Conference on Recent Advances and Innovations-ICRAIE-2018

(https://www.ieee.org/conferences_events/conferences/conferencedetails/index.html?Conf_ID=43534)

being organized by Poornima University, Poornima College of Engineering and Malviya National Institute of Technology (MNIT), Jaipur, Rajasthan, India November 22 to 25, 2018

(<http://icraie.poornima.org/>)

IICPE 2018 (8th in the series)

(https://www.ieee.org/conferences_events/conferences/conferencedetails/index.html?Conf_ID=43552)

being organized by Malviya National Institute of Technology (MNIT), Jaipur, Rajasthan, India from December 13 to 15, 2018

(<https://sites.google.com/mnit.ac.in/iicpe-2018/home>)

Fifth International Conference on Parallel Distributed and Grid Computing (PDGC-2018)

(https://www.ieee.org/conferences_events/conferences/conferencedetails/index.html?Conf_ID=44302)

being organized by the Department of CSE & IT, Jaypee University of IT, Waknaghat, Solan, H.P., India from December 20 to 22, 2018

(<http://www.juit.ac.in/pdgc-2018/index1.php>)

IEEE Delhi Section has also approved the following Conferences which are still to be in the IEEE Conference-site due to lack of application and / or processing thereof.

2nd International Conference on Computer, Communications and Electronics (Comptelix 2018) being organized at Malaviya National Institute of Technology Jaipur, Rajasthan, India during August 18-19, 2018
(<http://irisworld.org/wp/international-conference/comptelix-2018/>)

2018 2nd IEEE International Conference on Power Electronics, Intelligent Control and Energy Systems (ICPEICES-2018) being organized at Delhi Technological University (DTU), Delhi, India from October 22 to 24, 2018
(<https://www.icpeices2018.com/>)

Congratulations 2017 EDS Region 10 Chapter of the Year Award

November 13, 2017

Professor Sneha Kabra
IEEE ED Delhi Chapter

Prof. Kabra:

I am pleased to inform you that the IEEE ED Delhi Chapter has been selected as the 2017 recipient of the IEEE Electron Devices Society Region 10 Chapter of the Year Award. This award is intended to recognize the quality and quantity of the activities and programs implemented by the Region 10 chapters during the prior July 1st – June 30th period.

As a token of our appreciation, a plaque and check for \$500 will be presented during the EDS Governance meeting at the Awards Dinner or chapter meeting of your choice. Please note that the EDS Governance meeting series will be held in conjunction with the IEDM in San Francisco, CA on December 3rd. If you would like your award recognized at this event, we will be having the EDS Awards Ceremony at 7:00 p.m. on Sunday, December 3rd, at the Hilton San Francisco Union Square in San Francisco, CA. I hope you or a representative from

your chapter will be able to attend and accept the award in person.

Please note that EDS will not be providing travel funding to attend the award presentation. If the chapter does not have the funds for travel to the IEDM, we ask that the presentation take place within your Region at a chapter or other EDS sponsored event. We will be happy to have an EDS officer present the award via Web-ex or Skype if one cannot attend in person. Please inform Laura Riello of the EDS Executive Office at your earliest convenience whether or not you would prefer to have your award presented at the EDS Awards Ceremony or another EDS chapter meeting/sponsored event.

Sincerely,

Samar Saha
IEEE EDS President

World Environment Day celebrated at Select City Walk 5th JUNE 2017

World Environment Day is celebrated on 5th June every year and is the United Nation's principle vehicle for encouraging worldwide awareness and action for the protection of our environment.



Recently an event was conducted by IEEE Delhi Section SIGHT and HTC regarding the same in Select City Walk Mall, New Delhi.



This celebration was done in an unparalleled way like the Tulsi (Basil) plants were distributed to the visitors. A type of awareness was tried to spread among people for the sake of protecting our own environment. Plantation of trees was also done in the garden of mall and the children were very excited while joining their hands for such a great cause.



All the visitors and the management team of the event were overwhelmed to experience a new thing and, learning from this event, they took a pledge to stop polluting our environment and save our Mother Earth. In

addition to this, they learnt that any harm to the environment will be an injustice for their own future generations.

Mr. Ravindra Joshi, Chair, IEEE Delhi Section SIGHT & HTC was himself found volunteering full day along with other IEEE volunteers to spread awareness about tree plantation by one and all.

These kind of events and efforts are a soul touching experience and it is the need of the hour to get united for protecting the environment.





IEEE Delhi SIGHT Village Event-Solar Skill Development Cum Awareness Event

Visit To Girdharpur and Bhatiyana Villages on Wednesday, 4th October 2017

Organized by IEEE Delhi SIGHT and HTC in Collaboration with UNIC

In line with IEEE vision of penetration of technology across humanity, it was decided by IEEE Delhi Section Executive Committee that Delhi Section SIGHT organize a visit to Village which is deprived of technological progress available to urban areas. The visit was organized in collaboration with UNIC. Team of 10 young Volunteers lead by Mr. Ravindra Joshi, Chair, IEEE Delhi Section SIGHT & HTC visited 2 villages Girdharpur and Bhatiyana near Hapur district, NCT, Uttar Pradesh with a goal of understanding challenges faced by rural communities of India. And with no doubt, team could get a clear insight into the real-daily life problems faced by the rural community. Under the sole guidance of Mr. Vijay Singh Rawat (Close relative of the village Sarpanch) team

could explore and understand the life of the people living in both villages. According to the on-ground research, team could highlight certain basic problems such as



- Energy supply
- Resources available to the farmers
- Health and sanitation
- Women education

To give a brief view on above stated problems, below are a few scenarios that were observed during the visit



Scenario 1:
Irregular energy supplies with poor

maintenance services hamper the overall growth of the community. Villagers steal electricity from main lines which is extremely risky and increases the load on transformers making the devices trip and thus creating unnecessary power outages.



Scenario 2:

Lack of awareness and unorganized brokers in market make the lives of farmers miserable by making it hard for farmers to sell the crops at good prices which they deserve. Also, due to lack of cold storages or very expensive cold storages the access to such resources becomes limited and thus lot of wastage and no control in the market over prices.



Scenario 3:

Women carry out all the household work in the village from very young age of 12-14

years and thus are restricted from going to schools or colleges even though there are government educational institutions set up in the district.

After a great interactive session with villagers about their lives and daily routines, the team conducted a quick quiz with all the children in the village with the perspective of making them aware of the green and sustainable energy future. There were 50 odd kids who won the goodies and gifts. Hand operated torches were also distributed to children, elders and all others who were present.

A great insightful session gave better understanding of challenges faced by villagers and thus enabling us to come up with solutions that really caters their current needs.

Some Other Notable Observations were:

1. Earlier electricity available for 5 to 6 hrs which has now improved to about 18 hrs a day.
2. Earlier and even now electricity is charged at fixed rate, but now meter installation has started.
3. A family said electricity is important for TV and not for anything else.
4. Few Solar street lights were installed in village.
5. Some senior school children said it is now very convenient to study since electricity is available for more hours.
6. Some women said they are feeling safer with more hours of availability of electricity and installation of street lights at few places.

In the end it was a very fruitful day for all volunteers with lot of learnings and it was decided to repeat this again.

Delhi Pollution-We need Some Quick Innovative Action

The event held on Tuesday, 12 Dec 2017 at UN Conference Hall

The level of pollution is increasing day by day in India and other countries. The situation is more awful in Delhi/NCR. Recently pollution levels went up so high

that Delhi life almost came to a stop. We cannot sit and watch, we have to come out with something innovative to make a change. UN also has been making efforts in this direction IEEE has a punch line itself saying "Advancing Technology for Humanity". To have a small contribution as to what can be done to deal with this problem, IEEE Delhi Section SIGHT & HTC organized this event in collaboration with UN. The following problems and solutions were the theme of debate cum brainstorming style event:



- What are the key pollution contributors?
- Who is responsible for key polluters?
- Who should pay for the costs of pollution and impact on health of children?
- How often should nations check and reassess their emission reductions?
- Who should make sure Delhi meet their pollutant source reduction goals?

The event was organized to have deliberations in small teams formed out of volunteers from IEEE, students and members from sponsoring organization etc. The volunteers were from different age groups and were a good gender mix. The take away of event is a document highlighting what should be the Action Plan to partly mitigate the pollution issue.

The event started at 9:30am with the registrations of the participants and was concluded by 6:00 pm.



Highlights of the Event

1. The program saw participation of 12 IEEE members, including 4 female and 8 School students from different schools. All the participants were divided in a team of 2-3 members each which made a total of 7 teams.

2. Beginning with the event, Mr. Ravindra Joshi, Chairperson IEEE Delhi SIGHT of IEEE Delhi Section, along with Mr. Rajiv Chandran, National Information Officer, UNIC, briefed about the pollution crossing all limits in Delhi recently.

3. Mr. Ravindra Joshi focused on current levels of PM2.5 concentrations of 153 micro grams and PM10 concentrations of 286 micro grams which is way above permissible levels. He said tackling environmental pollution, such as the haze that has enveloped Delhi, calls for an holistic approach such as we get into root causes of

pollution and then look for suitable action plan to mitigate the same.



4. Mr. Rajeev Chandran said we all have to be disciplined and contribute by small small actions. He motivated youth to generate out of box ideas.

All volunteers were divided in teams. For 4 hours each team was brainstorming on different ideas and options.



Following were the noteworthy ideas generated by teams:

1. Farmers (stubble burning) and plant emissions to be streamlined such that farmers alone should not be blamed for that.
2. Reducing the volume of cars in the streets
3. Improve the quality of cars, whether they have catalytic converters. Catalytic converters work by chemically converting

emissions to less harmful substances.

4. The construction debris management to be proper

In the end all youngsters were urged to play a greater role as "Environment Ambassadors" by encouraging all their fellows whether in schools or colleges or offices to be individually responsible for their actions. We all have to spread good practices.



The jury panel included of following judged the ideas and recommended the winner:

Mr. Ravindra Joshi, Chairperson IEEE Delhi SIGHT, Treasurer IEEE Delhi Section Executive Committee.

Ms. Divya Rajput, Advisor, IIM Lucknow Incubator and Technology Development Board

The prize distribution ceremony was held after an evening Tea break and the best presentation was rewarded with prizes from UNIC and certificates. Certificate of participation was provided to all the participants.

The event resulted in motivating and enlightening 25 future leaders on the topic of "Pollution" which would finally lead to creating awareness for many more as a multiplier effect.

**Extracts from
SC-WEB-MGMT-NEWSLETTER] IEEE
WEB MANAGEMENT NEWSLETTER
October 2017
(as received on Oct 26, 2017)**



Putting our best brand forward

Each day, people across the globe attend IEEE conferences, read IEEE publications, and interact with IEEE to bring about technological innovation and excellence. Employees and volunteers play an important role as brand ambassadors, presenting the IEEE brand in a strong, consistent, and unified way. This is done through with every point of interaction a person has with IEEE. All of these touch points – be they large or small – should be an authentic reflection of who we are and what we value. To help employees, volunteers, and vendors in this endeavor, the recently launched [IEEE Brand Experience website](#) offers many tools and resources. As a part of this, the [IEEE Brand Identity Guidelines](#), have also been updated to include the following:

- Understanding the brand family
- For the first time ever, sub-brand guidance on everything from IEEE products and services, to affinity groups, conferences, Standards groups, Societies, Councils,

Regions, Sections, Student Branches, and Chapters

- Better visual representations of intended brand usage and what to avoid
- New expanded color palette
- Broader font options

Guidance on how to represent the brand in non-traditional formats, including social and multimedia

The identity guidelines have been streamlined and consolidated and are now presented in an [interactive PDF](#) that allows users to get the information they need more quickly with tabs and sections that are easy to find and navigate.

- [View a tour of the interactive PDF version of the IEEE Brand Guidelines.](#)
- [Use the IEEE Brand Inquiries Form for any questions about the IEEE Brand.](#)

Is your website mobile-friendly? Take the free Google test and win a consultation with the Digital & Creative Innovations Team!

Google offers great tools for webmasters and their [Mobile-Friendly Test](#) is just one of their many effective site maintenance tools. This tool is dedicated to pinpointing issues within your site on mobile. Once the test runs you will either pass or fail as a mobile-friendly site. Google offers tips and tools for page elements that could use improvement. It is not a comprehensive resource for

responsive site testing but since Google ranks content in search results based on mobile-friendliness, this is one way to keep your site in check!

[Test your site for free, now!](#)

Win a consultation with the Digital & Creative Innovations Team! The first 3 site managers or webmasters to complete the Google mobile-friendly test and [submit their results via this online form](#), will get a full IEEE site review, a SEO review, and an accessibility review.

[Are you cloning apps? Apple says, "Don't do that!"](#)

Recent articles from TechCrunch and Associations Now outline that Apple has long prevented the creation of cloned apps that simply bank on revenue and publicity of new legitimate apps. The articles go into details on Apple's stance on duplicate and spam apps and its recent cleanup of the App Store to remove the outliers.

- [Read the full article from Associations Now.](#)
- [Read the full article from TechCrunch.](#)
- [View recent IEEE mobile app releases](#)

[Recent website launches - IEEE-Eta Kappa Nu \(IEEE-HKN\)](#)



IEEE Eta Kappa Nu

Site: IEEE-Eta Kappa Nu (IEEE-HKN)

URL: <https://hkn.ieee.org>

Launch date: 19 October 2017

Site purpose: The new IEEE-HKN website includes updated and intuitive features including blogs, forums and Chapter-micro pages enabling Chapters to communicate, show their efforts and achievements and grow as a community. New graphics bring the IEEE-HKN experience into the 21st century, and a wiki allows Chapters and volunteers to submit and maintain best practices and other core documents.
Contact: [Aaron Novelle](#)

Spread the word

Do you know of other IEEE Web management associates who might benefit from this newsletter? Have them send an email to web-publishers-feedback@ieee.org asking to be added to our mailing list.

**Extracts from
IEEE TA Spotlight - 4th Qtr 2017
(as received on Dec 8, 2017)**

A MESSAGE
FROM THE 2017
TECHNICAL
ACTIVITIES
VICE PRESIDENT

[Message from the 2017 Technical Activities VP](#)

Marina Ruggieri discusses how her vision for Technical Activities has progressed throughout her term as Vice President, and reflects on the

accomplishments of Technical Activities in 2017.

[Read more](#) and [tell us what you think!](#)



Did You Know?

Are you in the loop? In this section, we highlight upcoming technical activities, resources, and hot topics.

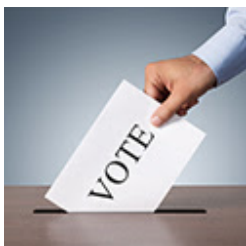
[Read more](#) and [tell us what you think!](#)



Signal Processing Rockstars Imagine the Future

The 2017 Signal Processing Cup champions built their own band member, a robotic drum kit that uses signal processing. The group, Beats on the Barbie, won the competition by implementing a real-time beat tracker on an embedded platform and demonstrating it with a creative output. We spoke with band members Jeremy Bell, Angus Keatinge, and James Wagner about the technology behind their drum kit and what it's like to be a rockstar.

[Read more](#) and [tell us what you think!](#)



Engineering Verifiable Elections

In light of recent election count controversy, how can we ensure that our voting systems are accurate? Ronald L. Rivest and Philip B. Stark discuss the need for verifiable elections, which require voter-verifiable paper ballots that can be manually inspected.

[Read more](#) and [tell us what you think!](#)



IEEE MOVEs Technology into Action for Disaster Relief

IEEE Members use their skills to aid recovery efforts through the IEEE MOVE Community Outreach. This mobile emergency relief program assists victims of natural disasters with short-term power, communications, and computer solutions.

[Read more](#) and [tell us what you think!](#)

FREE Magazine Articles

- "Robotics in Power Systems"
IEEE Industrial Electronics
- "Object Detection and Recognition for Assistive Robots"
IEEE Robotics & Automation
- "Robird: A Robotic Bird of Prey"
IEEE Robotics & Automation
- "Roach Biobots: Toward Reliability and Optimization of Control"
IEEE Pulse

These magazine articles on new applications of robotics provided courtesy of

- IEEE Engineering in Medicine and Biology Society
- IEEE Industrial Electronics Society
- IEEE Robotics and Automation Society

IEEE DELHI SECTION MEMBERSHIP STATISTICS AT A GLANCE

IEEE Delhi Section has as per **latest (December 2017)** statistics **4373 active Members** (*excluding Society Affiliates*), consisting of **0 Honorary Member, 6 Life Fellow, 8 Fellow, 33 Life Senior, 278 Senior Member, 5 Life Member, 1340 Member, 52 Associate Member, 639 Graduate Student Member, 2012 Student Member.**