

# IEEE REGION 10 NEWSLETTER



**March 2017 Issue**

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## Region 10 – Director's Message

*Prof. Kukjin Chun  
IEEE Region 10 Director*

Dear IEEE Region 10 Members,

Greetings!! It is my great honor and privilege to serve Region 10 in 2017-2018 with remarkable members to make a better IEEE Region10.



I also take this opportunity to appreciate and extend my wishes to all volunteers who will work for Region 10 and IEEE this year.

Region 10 is the only Region in IEEE to show steady growth in membership which reaches to 125,000 by the end of 2016 in 20 countries in Asia and Oceania. 57 Sections and 6 Councils are striving for great activities in our Region along with 26 Subsections, 39 YP Affinity Groups, 37 WIE Affinity Groups, 1384 Student Branches and 606 Chapters. Region 10 is proud of these geographical units which enables many awards from IEEE and MGA. There are also 5 IEEE offices in Singapore, Beijing, Bangalore, Tokyo and Shenzhen for assisting IEEE members in this Region.

Region 10 Executive Committee Meeting was held in Hong Kong on January 21st with 30 members for planning 2017 Region activities as well as budget including project funding to all units in Sections and Councils. Ramakrishna Kappagantu and outgoing EXCOM members were also recognized for their great contribution to Region 10. A great deal of awards and grants are waiting for the proposals where the call for proposal from each Region 10 coordinator will be

sent out by March. Strong participation is encouraged.

More than 130 delegates attended Region 10 Annual General Meeting in Chiba near to Tokyo, Japan from March 4-5 with enthusiasm and strong commitment for information sharing and networking. It was our delight to have IEEE leadership including President Karen Bartleson, President-elect James Jefferies, MGA VP Mary Randall, TAB VP Marina Ruggieri and Region 8 Director Margaretha Eriksson and Region 4 Director Bernard Sander.

I also appreciate Executive Director James Prendergast, MGA Managing Director Cecelia Jankowski and Vincenzo Piuri and Jacek Zurada who are 2018 IEEE President-elect Candidates. In this year, Region 10 invited Subsection Chairs who represents country with partial travel support.

We celebrated Japan Sections' 60th Anniversary on March 3 and Region 10 Golden Jubilee on March 4 with great pleasure and prestige. The celebration was awesome due to excellent preparation. On behalf of Region 10, I sincerely thank Toshitaka Tsuda, Tomonori Aoyama and Toshihiko Sugie and many other volunteers of Japan as well as Ewell Tan of Singapore office. The Region 10 Golden Jubilee celebration will continue to Sections Congress 2017 in Sydney this August and throughout the year. The Sections Congress will be held in Region 10 for the first time with over 1,000 attendees and hope for big success.

Region 10 is quite diverse in its geographical territories and cultures which make Region 10 very strong in terms of memberships and activities. We see a good opportunity for membership growth and recruitment throughout Asia and Oceania including Myanmar, Bhutan, Cambodia, Laos, Papua New Guinea and

Mongolia. Young Professionals and Student members are the future of IEEE which needs good care. Industry is very important to IEEE in terms of standard, SmarTech activities and membership. The IEEE Milestones and Medals are quite small in Region 10 and we need to boost this recognition along with Fellows and seats in the IEEE/MGA committee.

Unfortunately, we still experience student retention and conference paper quality issues and Region 10 will do its best to alleviate these problems.

I look forward for your continued support and hope for a wonderful and flourishing 2017.

## Region 10 – Newsletter Editor's Message

*Ravikiran Annaswamy  
IEEE R10 Newsletter Coordinator*

It's my pleasure to curate this edition of the IEEE R10 newsletter "R10 Today". We are a new team and hence it took us more time than expected to make this release. We were also overwhelmed by the wonderful response we got from all of you through your submissions. We had more than 60 articles to edit and choose from.

The newsletter team is formed with interested members across Region 10. This is a forming stage and everyone is excited. If you wish to become a part of the team do let me know.

Newsletter team is also planning to streamline the future editions. There will be an online form in which one can submit the articles/submissions/reports etc. We want to introduce a structure to all submissions and have uniformity in publishing. Hence there will be a 150 word limit to your submissions and we will

accept few selected photographs.

The plan is also to introduce the web version of the newsletter by June 2017 and there we can accommodate more reports and content.

Thanks again for all your support and cooperation and looking forward to another interesting edition of newsletter. I wish to place a special thanks to the R10 newsletter team for the efforts which went behind this edition. Your feedback is of great help to us, do send us your comments to r10-ecn@ieee.org

## Region 10 Meetings in 2017

### Region 10 Executive Committee Meeting, 21 January 2017, Hong Kong

*Byung-Gook Park  
IEEE Region 10 Secretary (2017-2018)*

The R10 Executive Committee (ExCom) met on 21 January, 2017 in Hong Kong to plan its activities for 2017. R10 Director



Kukjin Chun welcomed the ExCom members and presented his vision for 2017. He emphasized that the areas of focus should be the establishment of new IEEE geographical units, students retention and their continuation to young professionals, improvement of conference paper quality, industry membership promotion, and support to entrepreneurship. Prof. Kukjin Chun informed that the 50 year celebration would continue in 2017 with the

publication of commemorative book and celebrations in various meetings (ExCom, Annual General Meeting (AGM) and Sections' Congress 2017) and conferences. Past Director Ramakrishna Kappagantu summarized the last year's work and presented the certificates of appreciation to 2015-2016 ExCom members.

As part of R10 Golden Jubilee celebration, certificates of appreciation were presented to 1995-1996 R10 Director Paul Cheung and long-time ExCom Member Y. W. Liu.

R10 Vice-Chairs Takao Onoye (Technical Activities), Deepak Mathur (Membership Activities), and Borhanuddin Mohd Ali (Professional Activities) gave overviews of the R10 activities. They were followed by individual coordinators presenting their 2017 goals and activity plans. The preliminary budget estimates for R10 activities were also discussed and prepared for presentation at the R10 AGM in Chiba, on 4-5 March, 2017.

2015 IEEE President Howard Michel presented a talk on UBTEch Education in China. He showed UBTEch's mission, vision, values, and milestones. He also explained IEEE UBTECH-Education Robotics Design Challenge in China, and hosted a dinner at Spice Restaurant, which was thoroughly enjoyed by all. Hong Kong Section provided logistic support for the EXCOM meeting.

## Region 10 Annual General Meeting 2017 January 4-5, 2017, Chiba, Japan

Byung-Gook Park

IEEE Region 10 Secretary (2017-2018)

The Region 10 Annual General Meeting (AGM) was held on January 4-5, 2017 in Chiba, Japan with over 130 delegates from R10 ExCom and across sections participating in the event. Region 10

Director Kukjin Chun presented his welcome address and outlined his vision and strategy for 2017-2018. IEEE President Karen Bartleson, IEEE MGA Vice-President Mary Ellen Randall, and IEEE TAB Vice-President Marina Ruggieri presented their addresses to the audience and urged everyone to contribute and be leaders for IEEE.

During the 2-hour breakout session, there were eight training workshops on Section Management, Sections Congress, Educational Activities, Member Recruitment and Retention, Students, Young Professionals, Special Interest Group on Humanitarian Technology, and Conference.

The presentations of ExCom members proceeded in two steps - brief introductions followed by a poster session for detailed discussions. Many section delegates expressed their satisfaction with this format of presentation.



During the R10 Golden Jubilee celebration dinner, certificates of appreciation were presented to three former R10 Directors (Takuo Sugano (1999-2000), Jung UckSeo (2003-2004), and Seiichi Takeuchi (2005-2006)) and a long-time ExCom Member Takatoshi Minami.

The second day started with the addresses of Region 8 Director (Margaretha Eriksson) and Region 4 Director (Bernard Sander). Three knowledge sharing sessions by

Hyderabad, Islamabad, and Bangladesh Sections followed. After the reports on three R10 flagship conferences (TENCON, TENSYMP, HTC), plans on 2017-2018 conferences were presented.

Tokyo Section and Japan Council provided logistic support for AGM and team bonding activities after the meeting.

## Student Activities

### IEEE R10 Student Activities Team: Overview

*Dr. Rajesh Ingle, IEEE R10 SAC Coordinator*

The year for the Student Activities commenced by the formation of the Student Activities Committee. With this the first meeting of the SAC Team was held on 18th January, 2017 where, all the new members were welcomed and introduced to each other. The roles and responsibilities of each member was explained in detail to them and the agenda for the upcoming year was discussed.



The main objectives of the SAC Team for the coming two years are: improve student member retention rate in R10, engaging young members in IEEE activities and programs, re-activating Student Branches, enhance counselors and Industry participation. Another meeting

was held on the 12th of February, 2017. In this meeting the projects which are to be conducted in the coming year were discussed at a stretch.

For the coming years our main projects will include: R10 SAC Leadership Summit, Technology Awareness Programme (TAP), IEEE R10 SAC Awards/recognition activities. The R10 SAC Leadership Summit (<http://bit.ly/LeadershipSummits>) aims to combine the Student's meet and the Counselor's meet, which prior to this were held separately, under the same roof. Leaders at the sectional/council level are an important part of IEEE Student Activities. Sharing knowledge and their best practices at the event will eventually result in the retention of members. This project will also help Student branch leaders, SAC Chairs, SSRs & Counselors update themselves and serve section and student branch effectively.

IEEERegion10  
Student Activities Committee

CALL FOR PROPOSALS

Technology Awareness Programme

Submission Deadline  
31st March 2017

www.sac.ieeer10.org      www.facebook.com/r10sac

Under the Technology Awareness Programme

(<http://sac.ieeer10.org/port.../technology-awareness-programme/>) the younger demographic will be made aware about the recent on goings in the field of technology, and the role of IEEE in them. Student members, industry professionals and young professionals will spread awareness of technology. This project will engage student members, young professionals and will help student member retention. And lastly, IEEE Region

10 SAC awards and other activities, such as paper and website contests will be held as they have been in the previous years. All of these activities are still under process and details about these will be disclosed soon.

### **Outreach Committee Programs**

The team consists of 2 Program Outreach Coordinators. It also has 4 Zonal Representatives (ZRs) covering the entire Region 10 under Australia-New Zealand Region, South-East Asia, India-Sri Lanka and North –West Asia. Under these Zonal Representatives are the Sub-Zonal Representatives (SZRs) who are coordinating about 3 cities each. The responsibilities and roles of each of the team members is put across. Further the team has decided upon hosting the following 3 things:

- The contact details of the SAC Chairs, SSR's and office bearers are collected and Toolkit which includes the year calendar and annual projects is to be circulated to them.
- Webinars for the months from March to December are planned and finalised. The webinar for March is on "Introduction to IEEE Tools".
- The Program Outreach Committee has decided to collaborate with SPAx of IEEE. Under these are the SPAC and SPAVe programmes. 5 regions from over R10 will be selected and the retention and revamping shall be majorly focused at these places with the support of SPAx events.

### **Petitions Statistics**

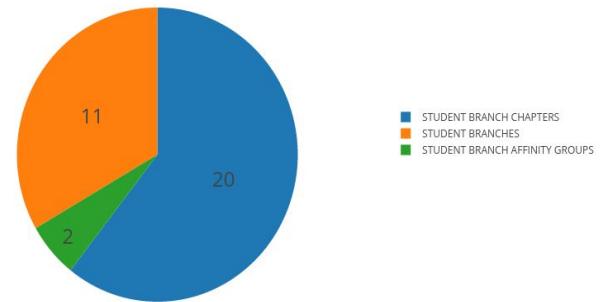
In the two months of Jan. and Feb., total 35 petitions were approved. Out of 35 formations, there were 20 Student Branch Chapters, 11 Student Branches and 2

Student Branch Affinity Groups.

### **Student branches**

The 11 Student Branch Formations were

JANUARY FEBRUARY 2017

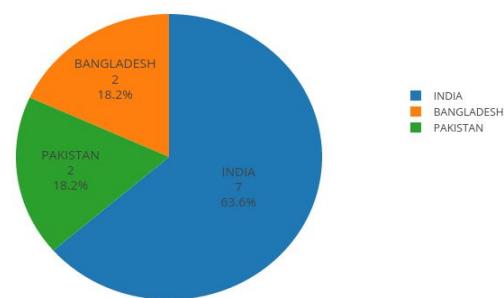


from three different countries, India had the highest number with 7 formations and Pakistan and Bangladesh had 2 formations each.

### **Student branch chapters**

The 15 Student Branch Chapter formations in India, 2 in Japan and 1 in Hong Kong , Bangladesh and New Zealand Each add to make a total of 20 Student Branch Chapter formations in the month

STUDENT BRANCHES



of January and February 2017.

## Cross Country Visit, IEEE USM SB, Malaysia

*Rosmiwati Mohd-Mokhtar  
IEEE USM SB*

The IEEE Universiti Sains Malaysia (USM) Student Branch visited two universities in Bangkok, Thailand, namely the Chulalongkorn University and the King Mongkut University of Technology,



Thonburi (KMUTT) during 4-9 February 2017. The students engaged themselves with series of technical sharing talks and laboratory visit.

## University App Challenge (UAC)

*Valarie John, Tan Kwang Shean, and Nurfarah Diana, IEEE USM SB*

The IEEE University Sains Malaysia (USM) Student Branch had organized the University APP Challenge (UAC) on 18-19



Jan 2017 in collaboration with the Malaysian Global Innovation & Creativity Centre (MaGIC) and Cyberview Sdn. Bhd. under the organization of StartupMalaysia.org and the initiative of Ministry of Science, Technology & Innovation (MOSTI). The event gathered a

total of 115 participants from 7 universities. Designing an app from scratch within 48 hours involves hard work and perseverance.

## 2<sup>nd</sup> Bangladesh Olympiad IEEE Dhaka University SB

*Tamara Faranaz Ena  
Newsletter Editor, IEEE DU SB*

2nd Bangladesh Olympiad was held on 27th Jan. 2017 at Curzon Hall, DU with 100+ participants and 25+ projects from different universities. Co-organizers of the event were Bangladesh Electronics Society, Techvalley Solutions Limited, and Dept. of EEE, DU. The event was inaugurated by Prof. Dr. A.A.M.S. Arefin Siddique, Honorable VC, DU while the closing ceremony was addressed by Prof. Dr. Md. Akhtaruzzaman, Honorable Pro-VC, DU.



*Winners and guests at the closing ceremony.*

## Seminar on Electrical Industry Process Safety IEEE Isra Student Branch

On 07 October 2016, IEEE Isra Student Branch, Pakistan organized a seminar titled “Electrical Industry Process Safety”. The seminar was held at the faculty of



EST, Isra University, with participation of the students and faculty members. Guest speaker was Engr. Umer Akhtar Memon, Corporate Engineering Manager HSQ, K-Electric, Karachi, who spoke on necessary steps required for safety and hazards. The Pro-VC Isra University, Prof. Dr. Hameedullah shedded importance of safety at work place. The event was coordinated by IEEE Isra SB Counselor, Saad Khan Baloch, Asst. Professor of the same faculty. The GS of IEEE Isra SB, Abdul Hai gave the branch address. Later Dr. Kazi gave away certificates and shields.

### IEEE HITEC University SB

IEEE HITEC University SB organized a seminar on Deceptive Innovation and Future Curriculum of Electrical Engineers in Pakistan. Engr. Arslan Haider, VP of PTCL, was invited and he discussed on various thrilling topics like robotics, IOT, 5G and Smart Grids. Two workshops on Android Applications were also organized. The first one conducted by Dr. Erum Abdullah from HITEC U. and the other one was conducted by Engr. Shahid Latif.



IEEE student and faculty with Engr. Arslan Haider



Android Development Workshop

### IEEE SB of University of Peradeniya

Lashani Wickramanayake

Reporting Committee – IEEE SB UoP



Introduction to IEEE by Dr. Ruwan Ranaweera

“Orientation program for Newbies” of IEEE SB of University of Peradeniya was held on 25 Jan. 2017 with nearly 200 undergraduates. A Workshop on EEE was organized by the SB in collaboration with WIE AG at Maliyadeva Girls School, Kurunegala on 14 Feb. 2017. Around 150 students from various schools were present. Workshop on Introduction to Azure and IoT was organized by the SB in collaboration with Microsoft Sri Lanka and Azure IoT Squad. The event catered for over 50 professionals and undergraduates from all around the country. The resource personnel were Mr. Shameera Prajapriya, Solutions Architect of LAUGFS Holding Ltd.



*Workshop on Introduction to Azure and IoT*

## Industrial Visit to a Power Plant by UIU SB, Bangladesh

On February 25th 2017 IEEE UIU SB visited United Ashuganj Power Plant. A team of 35 exuberant was led by Dr. Tishna Sabrina, Khairul Mottakin and Prof. Dr. Fayyaz Khan. Power Plant officials capacity, thermal efficiency, and exhaust mechanism.

## Igniting Hope, 'Umang!'

*Sanna Nazir, Chair, IEEE USICT SB*

Umang i.e. hope (Hindi) is a program that is dedicated to generating hope and curiosity towards science within young minds. The program was initiated by IEEE USICT SB, Delhi Section to target primary school kids who will soon be stepping into higher levels of education. The activity was a collective initiative of the Branch Mentor, Shubham Jain, the Chair, Sanna



Nazir and the Vice-Chair (Ext.), Varun Panthri. It was aimed to provide a

volunteering platform to all the IEEE members of USICT and to put in their combined efforts into a relevant social cause, such as educational and gender inequality.

The activity was carried out over three consecutive days in three different government/municipality schools of Dwarka, New Delhi. Keeping in mind the gender imbalance experienced in the scientific fields, they targeted 67% of girl students to provide better stimulus to them. Their volunteer team also had a healthy ratio of female grad students who

could embody real time examples for the young girls. The interaction sessions were based on various scientific as well as social

discussions wherein they questioned the kids about their hopes and dreams and how being an engineer, or for that matter, getting into any STEM field, could be one of them. The hands-on activities were started with the simple use of breadboard, resistors and an LED and the final activity was building the touch circuit.

## Orientation and Recruitment Drive

*Ahsan Qamer Sheikh, Chair, IEEE IAS NEDUET SB.*

THE orientation session held on 23rd February 2017 spotlighted the benefits of being affiliated with the IEEE and was made much edifying by the valuable personal experiences shared by the Chairperson. The session revealed year plan and in addition, session briefed about IAS publications, webinars, funding resources, awards and contest.



*ExCom Members actively participating to address the queries.*

**Assisting students to explore the wide horizon of opportunities that IEEE IAS offers.**

hence accentuating the ambiguity of IEEE IAS. The IAS team was pleased to receive an overwhelming response from the new applicants for recruitment.

The attendees were not only from the DepT. of EEE, but also from Telecommunication and Computer Information System

and the phenomenal Pakistan Student/ YP/WIE Conference (PSYWC) 2016. The PSYWC was hosted by FAST–NUCES during Sept. 30 to Oct. 01. Beside the vast educational addresses, there were a city tour, a Star Gazing night event, gala dinner, concerts and a jubilant celebration of the IEEE Day. Moreover, The PSYWC '16 also marked the inauguration of PES in our Student Branch.



### MAT-UINO Workshop

*Ahsan Qamer Sheikh, Chair, IEEE IAS NEDUET SB.*

A workshop on Interfacing Arduino with Matlab was held on March 22, 2017. A total of 80 participants, equally divided into two batches, attended the workshop. It was conducted by Ghulam Mustafa Abro, a gold medallist from Hamdard University, Pakistan. Apart from fundamentals of Matlab and Arduino, some applications were demonstrated, automatic number plate recognition and facial expression recognition. Certificates were awarded to the participants.

### A synopsis of the events of IEEE – NUCES SB

*Sultan Bilal Ahmed*

*IEEE National University of Computer & Emerging Science*

IEEE NUCES SB organized the Green Energy Project Showcase, Alumni Series

### Guest Lectures and Industrial Visit

*Dr. K. Porkumaran SMIEEE*

*Branch Counsellor, Dr. N. G. P. Institute of Technology Coimbatore SB*

The IEEE SB and Dept. of EEE of Dr. N. G. P. Institute of Technology organized a Guest Lecture program on Energy optimization systems on 11 January, 2017. About 100 students participated in the event. The Chief Guest, Mr. Gunther Braus, President/CEO dibalog GmbH, Germany, addressed the participants. The



Chairman, Dr. Nalla G. Palaniswami, Secretary Dr. Thavamani D. Palaniswami, Principal, Dr. K. Porkumaran and Head of

the Dept. Dr. S. Jaganathan were present.

Later on 10th February another guest lecture on “Modeling and Control of Real Time Systems” was organized.. The lecture was delivered by Mr. Ramakrishna Pasumarthy, Assistant Professor, IIT, Madras. The SB also organized an industrial visit to Kalaptti Substation on March 3, 2017 with the 2nd year EEE students. In the substation respective engineers provided necessary demonstration on working principle, equipments, control operation, and protection schemes.



## Workshop on Research and LaTeX

*IEEE SB, PES University, Bangalore.*

The IEEE PES SB organized a full day workshop on “Tenets of Ethics in Research” and “Technical Writing using LaTeX” on 11th March 2017. The first session was delivered by Dr. Krishnamurthy, Registrar of PES University. He spoke on the points to be considered while conducting research. The second session was conducted by Dr. G S Javed, ExeCom Member, IEEE Bangalore Section and SMTS, Terminus Circuits Pvt. Ltd., an alumnus of IISc, Bangalore. He emphasized on the importance of knowing how to write a technical article and the ease at which one can access various articles for research. He introduced LaTeX and conducted an interactive session.

## Snapshots of Activities

*IEEE BUET Student Branch*

To create an opportunity for the students to gather knowledge about high quality typesetting we arranged workshop on “LATEX and IEEE Standard Paper Writing”. We were privileged to have Mr. Shuvro Chowdhury, Assistant Professor, Dept. of EEE, BUET us as the Instructor. Following month we also arranged a talk on “Complex Engineering Design” in collaboration with IEEE Bangladesh Section. We were proud to have Dr. Rashid, Professor, Dept. of EE, Florida Polytechnic University, USA as well as thankful for enlightening us with his instructive speech. On the month of September we organized a workshop on “PCB Designing and Prototyping”.



*Participants and Instructor in Workshop on LATEX*

We also arranged Outreach Program for pre-university students held at Government Laboratory High School. In this workshop, the students were introduced with Arduino and its magical power to do various projects.

To enlighten the participants with innovator skill development we were honoured to have Dr. Sudeendra Koushik, evangelist of MIT emerging technologies conference and Dr. Pragya Dixit, who had PhD on Entrepreneurship. On the month of April, 2016 we arranged a two-day long workshop, on Arduino and Line Follower

Robot, named Robo TutorV2.0.



*Workshop on Robo TutorV2.0: After the successful run of their line follower robot.*

Last year we made three notable visits to famous industries of our country namely Transtec, Chaina Bangla Filament, Energypac.

### Peradeniya Go Ahead with IEEE MTT-S Student Chapter

*M.K. Thusharani Wijegunarathna  
Editor, IEEE MTT-S SB Chapter University of Peradeniya.*

IEEE MTT-S, Microwave Theory & Techniques Society is one of the main technical societies in IEEE. The first IEEE MTT-S Student Branch Chapter in Sri Lanka was launched in Faculty of Engineering, University of Peradeniya. It was initiated in the year 2016 with a full-fledged Microwave Laboratory



together with senior lecturers specialized in that area. The latest contribution of the society was introducing an RF microphone design competition to the event

'INNOVATORS 2017', which was organized by our INNOVATORS' CLUB focusing the newbies of the faculty.

The Society has given an opportunity for members to work on the ongoing projects

It's our newly begun Amateur  
journey as the University of Radio,  
Peradeniya to explore the Radio  
Microwave World Astronomy,  
Coffee Can

Radar & RF-ID Tag Design. Workshops on AWR, Heterodyne Receivers & Amateur Radio System Design were successfully organized by the society.

### Techloop+ - A New Learning Model by IEEE-VIT SB

*Krishit Arora, Vice-Chair, IEEE SB, VIT University, Vellore*

Every year about 50-100 new members join IEEE-VIT SB. Until last year, we organized various events, with initiatives like Enigma (first of its kind was an online cryptic hunt with 800+ participants lasting for over 100 hours), Makeathon (A hackathon where we partner with NGOs to build for a change), Techloop



(Workshops for externals), SPAx etc. However, we realised there was a lack of opportunities for members to grow technically. Which is where Techloop+ comes into the picture. Techloop+ is our initiative to build communities at VIT University for different technical domains. These workshops are divided as per technical skills they impart like: A+ for

Android, C+ for Coding, D+ for Design, E+ A+ for Android, C+ for Electronics and for Coding, D+ for ML+ for Machine Design, E+ for Learning. Next in Electronics and ML+ for Machine Learning.

(Surprise+) for the weekend. S+ could be a session on anything ranging from Game Development to DJing to a Pizza Party, giving us a chance to bring our member base together.

Senior Technical Members from the SB core committee host these sessions every night, throughout the week. One day for each type of session, from 9PM till midnight. Sessions are scheduled at night so as to make them seep into everyone's schedules, without clashes with University commitments. By the end of the year, we hope to have a very legitimate and skilled team. We believe this is a sustainable model for continuous learning and skill development.

### **IEEE BDS News : Effective teaching methods for VLSI circuit design courses**

*Md Shihab Uddin*

*Newsletter Editor, IEEE Bangladesh Section*

IEEE AIUB Student Branch hosted a seminar on "Effective Teaching Methods



for VLSI Circuit Design Courses" organized by IEEE Bangladesh Section Educational Activity and Young Professional

Bangladesh Affinity Group on 16 January, 2017. The seminar was conducted by esteemed speaker Dr. Mahfuzul Aziz, Professor, School of Engineering, University of South Australia.

Prof. Dr. A.B.M. Siddique Hossain, Dean, Faculty of Engineering, AIUB & Advisor of the SB commenced the event.

Prof. Dr. Mahfuzul Aziz discussed the changes that have been made over the years in the integration of industries and in the teaching methods.

### **Young Professional Activities**

#### **IEEE Region 10 Young Professionals Plan, 2017**

*Nivas Ravichandran, IEEE R10 YP Coordinator*

This year's IEEE Region 10 Young Professionals calendar activities span through multiple avenues varying from, membership development, encourage innovation and provide early career development to facilitate a smooth transition from a student to a young professional.

While considering the Region 10, there are around 57 IEEE sections all over the Asia Pacific regions and among them 68% of the sections are equipped with YP Affinity Groups. With this initiative it is aimed to increase that number to 80% by the end of 2017.

**Region 10 YP Support Funds :** will be available for activities oriented towards technical advancement, leadership development and IEEE YP and Industrial collaborations

**Region 10 YP Signature Programs:** TENSYMP in May, IEEE HardTech Summit in November and HTC in December are

the flagship events in this year's calendar.

**Focus Area of North Asia & ANZ:** This year at IEEE R-10 Young Professionals plan to focus on Young Professional activities in the North Asia Zone and Australia & New Zealand zone

### "TrailBlazers" from IEEE Young Professionals Sri Lanka

*Peshan Sampath*

*Secretary, IEEE Young Professionals Sri Lanka*

THE Project "TrailBlazers" was successfully conducted by IEEE Young Professionals Sri Lanka (YP SL) Affinity Group under the theme of "1000 steps towards sustainability: Water, Energy and Solid Waste", held on 19th February 2017 in the western coastal areas spread across 5 kilometres from Wellawatta to Mount Lavinia. This project was carried out as a beach cleaning activity, to improve the public awareness on sustainable living by promoting cleanliness in coastal area that eventually created a platform for a Young Professionals meetup in Sri Lanka.

Today the coastal region in Sri Lanka has been increasingly subject to pollution during the last few decades. The underlying drivers for pollution in the coastal region are a population concentrated on the coast and increased development activities such as tourism and industries. Hence, all together 40 members including IEEE student members those who will join with IEEE YP SL during the next quarter joined hands with IEEE YP SL members in successful completion of the event.

Participants were divided into two groups and groups initiated the project simultaneously from two ends of the coastal area and proceeded towards the centre with the intentions of meeting at the completion of the event. Both groups

were able to collect several bags of solid wastes including polythene while facing interruptions from rain and arrangements were set to handover collected wastes to Local Urban Councils for their recycling processes.



The leadership of the project "TrailBlazers" was taken by the next generation of IEEE YP SL members and participants marked the conclusion of the event with a friendly meetup that followed by a refreshment session where they shared their experience with other groups of participants.

Organizers would like to convey their heartiest gratitude to Local Urban Councils and ACL Cables PLC for the support given towards the success of the event.

### Women in Engineering Activities

#### Series of Workshop by IEEE WIE Affinity Group UET Taxila

*Abdurrahman Iqbal*

*IEEE WIE AG UET Taxila*

IEEE WIE AG UET Taxila got an opportunity to arrange a "Series of Workshop on Emerging Technologies". The main objective of this project was to keep a



pace with latest and modern technology going around the world. IEEE WIE AG UET Taxila arranged workshops on the following events:

- Robotics and Artificial Intelligence
- 3D Printing
- Virtual Reality

### Career Planning towards Success for Female Engineering

*Fei Liu, University of Chinese Academy of Sciences-Beijing SB WIE AG*

The IEEE University of Chinese Academy of Sciences-Beijing SB WIE AG organized a forum on "Career Planning towards Success for Female Engineering " on March 8, 2017 at the Centre for Research on Intelligent Perception and Computing, CASIA, Beijing. Ms. Lan Wang from IEEE China Office gave a talk and Dr. Seyed Rashid Fallah Shamsi delivered a great talk titled "Science & Technology Parks, and Business Start-ups!". Attendees got opportunity for brainstorming and they also shared their experiences on various aspects like conducting research, resume writing, and job selection.



### IEEE WIE International Leadership Summit 2017, Sri Lanka

*Rumesha Shalini Pathirana*

*Secretarial Team - IEEE WIE Leadership Summit 2017, Sri Lanka*

IEEE WIE International Leadership Summit 2017, Sri Lanka is being organized for the first time to be held on 07th and 8th of October at Hotel Berjaya, Mount Lavinia, Sri Lanka. This will be the largest gathering of both local and international WIE members happening in Sri Lanka, where STEM leaders from around the world will be brought together to focus on developing and improving leadership skills of the participants.



The summit will entertain networking, skill enhancement, technology breakthroughs, economic and social aspects of WIE along with a career fair and speeches by renowned personalities discussing innovation, entrepreneurship, empowerment, leadership and inspiration. It will also bring about once in a lifetime encounters for female technology enthusiasts the details of which will be disclosed in due course of events. The summit will also make time for IEEE

IEEE WIE International Leadership Summit 2017, Sri Lanka will be marked as a prominent event in the calendar of IEEE Sri Lanka Section.

societies, IEEE WIE Student Branch activities, IEEE SIGHT and humanitarian activities, speech crafting and tips for a healthy life. Another part that cannot be overlooked is the entertainment night

where the aesthetic sense of the technology enthusiasts will be staged. The participants will also be able to enjoy the hospitality and soothing nature and add another unforgettable experience to list.

## Individual Benefits & Services (IBS) Committee

*Chris Gwo Giun Lee*

*IEEE IBS Region 10 Coordinator*

The IBS Committee aims at promoting Member Benefits and related Services to include medical/life insurance, business insurance (e.g. professional liability, Small Employer Group), discounts, etc. Current available benefits include:

- Insurance Services
- Group medical insurance for India
- Clements Worldwide Insurance
- Member Discount on Dell Products
- DELL employee and member purchase program (EPP) in Australia, China, India, Japan, Malaysia, New Zealand, and Singapore
- Risk management course

Ms. Emi Yano (emi@ieee.org) will take the lead in coordinating these benefits.

Through the exchange and sharing of information and experiences, Professional Networking Platform in the form of a SMART Biomedical Special Interest Group (SIG) in areas including agriculture and medicine will be established to further perform surveys on benefit requirements within R10. Joint Creation Camps (JCC) in the form of forums will be organized to address the pain spots of industries in triggering brainstorming of academia, research, young professional and student members for possible solutions. In collaboration with IR, PA, SP, YP and Conference Committees, plans for JCC organizations are as follows:

JCCs	Location	Leadership	Milestones (Complete by)
PMA	Taiwan	Yung-Hsing Peng (pengyh@iii.org.tw)	Q2 or Q4
PMA	India	Suyog Vyawahare (suyog@ieee.org)	Q3 or Q4
IoT eHealth	Vietnam (attendees from Singapore, Malaysia & Japan)	Huynh Thi Thanh Binh (binhht@soict.hust.edu.vn)	Q4

PMA = Precision Medicine & Agriculture

We sincerely look forward to networking with your sections/councils for these activities!

[r10-ibs@ieee.org](mailto:r10-ibs@ieee.org)

<https://www.facebook.com/R10IBS/>

## Humanitarian Activities

### IEEE SIGHT Communities of Practice Incubation Meeting in Bangladesh

IEEE SIGHT Communities of Practice (CoP) Incubation Meeting in Bangladesh was



held at GDLN Center of BRAC University on 19-20 December 2016. Dr. Azad, presented their various ongoing and completed activities, for example the Solar

Rickshaw/Ambulance/Human-Hauler, Solar Wheelchair, Solar Refrigerator, and Solar cooker. Delegates had first-hand experience with multiple models of solar rickshaws.

## Illuminating Hearts: and Electrification Project

Edamulakkal is a small village at the southern part of India. Hundreds of people live here in houses with thatched roofs and broken walls with no toilets and just moon light and candles to survive the dark

The houses here have remained without electricity since 1980's. IEEE SB TKMCE took an initiative to bring in light to the lives of people here. The SB's SIGHT affinity group joined hands with the



Kerala State Electricity board to electrify around 30 houses in the locality under the name "Sampoorna Vyidhutha Valkarna Yetnam". A group of 50 students along with the faculty and the KSEB officials took up the job. The students were divided into groups of five and each group was accompanied by a wireman and a lineman. All the required components including distribution boards, Isolators, plastic pipe fittings, switch board, screws and saddles were provided by KSEB

As the work was completed the feeling of content and happiness was mutual. At the end of the day we were left with a bunch of polite words and a content heart while

they had a reliable source of energy.

## Professional and Chapter Activities

### EDS-ETC Events Conducted by IEEE EDS Malaysia

*P. S. Menon, S. Noorjannah Ibrahim, and A.B. Rosminazuin IEEE EDS Chapter, Malaysia Section*

IEEE Electron Devices Society (EDS) has created the Engineers Demonstrating Science: an Engineer Teacher Connection or EDS-ETC program to enable EDS chapter members to host events designed to engage young students in the field of electrical engineering. By utilizing the easy-to-use Elenco Snap Circuits® kits, students learn about electronic circuits using a "hands-on" approach to experience the exciting and creative field of electronics. Two events were conducted at the Kuliyyah of Engineering, International Islamic University Malaysia (IIUM) on 16th February and 11th March 2017 where a total of 28 and 22



undergraduate students participated, respectively.

In the program, the students were trained by Excom members of IEEE EDS Malaysia Chapter.

## IEEE EMBS, BDS Awareness Session on Biomedical Research

On 11 March, 2017, IEEE Engineering in Medicine and Biology Society (EMBS), Bangladesh Chapter and IEEE Bangladesh Section SAC organized an "Awareness Session on Biomedical Research" in collaboration with IEEE Stamford University Student Branch. About 35



students participated in this session.

In the beginning of the session, Md. Nurunnabi Mollah, Industrial Activity Coordinator, IEEE Bangladesh Section gave an inspirational speech to the participants.

Sayeed Shafayet Chowdhury, News and Communication Executive, IEEE EMBS, Bangladesh Chapter and Asir Intisar Khan, Treasurer, IEEE EMBS, Bangladesh Chapter addressed fundamental concepts on Biomedical Research to the participants.



## Membership Development Activities

### Call for Section MD Plans for the 2017 R10 Membership Development Grants

*Dr Michael Ong. IEEE R10 Membership Development Coordinator*

Dear Section Chairs and MD Officers,

The IEEE R10 Membership Development committee would like to solicit activity plans from the Sections for the 2017 R10 MD prizes. We need enthusiastic and motivated MD Officers to achieve the best results both in the retention and recruitment exercises. Incentives will be provided to the Sections with the best strategies and plans with a view to surpassing the MD goals for retention and recruitment. These goals for the Sections can be found in my monthly MD report.

The objective of the R10 MD committee is to work coherently with the Section Chairs and MD Officers to improve member recruitment and retention with positive actions and proactive measures in Sections and Chapters. Examples of MD plans are:

- Personal outreach to non-renewing members to support retention
- Promote retention of students with the benefits of professional experience at Regional and Section levels
- Encourage use of IEEE resources, benefits and programs for member recruitment
- Encourage Sections and engage Chapters to promote membership opportunities at meetings and networking events
- Implement new initiatives to improve memberships

- Promote elevation to Senior Members to foster closer relationships and commitment from the members
- Encourage promotion of Student Members to Young Professionals reminding them of IEEE benefits in their professional careers

Section Chair must appoint an MD officer who is ready to work hard on recruitment and recovery, and to carry out the Section MD activities.

#### Conditions of Plan

Sections may submit ONE activity plan each for the following matters:

- Increase memberships
- Retain memberships
- Elevation to Senior Members
- Promotion of Student Members to Young Professionals

Membership Development activity plans should include calendar of events. The plans should meet the objectives of the Membership Development committee and exceed the MD goals. Three incentive grants are given to the Sections for the best strategies and plans for each of the aforementioned topics:

- 1<sup>st</sup> prize – US\$250
- 2<sup>nd</sup> prize – US\$200
- 3<sup>rd</sup> prize – US\$150

In addition to the Membership Development plan, Sections are required to submit the SWOT analysis in collaboration with their Student and Young Professionals Volunteers. This will enable the respective Section leaders to know their Section and understand their members better. SWOT analysis is a useful technique for understanding your Section strengths and weaknesses, and identifying both the opportunities open to you and the threats you face.

The submissions will be reviewed by the R10 2017 MD committee. The winners will be invited to write a short article related to their MD activities and experiences in the R10 Newsletter. The 2017 R10 MD committee comprises of Prof Arokiaswami Alphones (Singapore), Prof Elmer Dadios (Philippines), Dr Jing Dong (China), Mr Eddie Fong (Australia), Mr Anthony Lobo (India), Dr Ruwan Ranaweera (Sri Lanka) and Prof Qun Wu (China).

#### Important Timelines

- Activity plans submission deadline – 30 May, 2017
- All proposed MD activities must be completed by 31 July, 2017
- Notification of incentive grant awards will be announced by 30 September, 2017

#### MD Activity Plans to be Submitted to:

Dr Michael Ong

IEEE R10 Membership Development Coordinator

[ongmichael@i2r.a-star.edu.sg](mailto:ongmichael@i2r.a-star.edu.sg)

## Awards

### 2016 Hiroshima Section Contribution Award

*Isao Nakanishi, Hiroshima Section Chair*

2016 Hiroshima Section Contribution Award to Prof. Yoshiaki Kakuta

Hiroshima Section constitutes the “Section Contribution Award,” which is presented to the contributors for the section. In 2016, Prof. Yoshiaki Kakuta of Hiroshima City University was awarded for his considerable contribution to Hiroshima Section. The presentation ceremony was held at Hiroshima Garden



Palace on January 27, 2017. The diploma of merit and the prize medal were given to him by Prof. Nobuo Funabaki of Okayama University who was the chair of Hiroshima Section in 2016.

### Awards for activities at the Kansai Section

*Y. Takeda, IEEE Kansai Section Secretary*

A ceremony for the award winners of the Kansai Section was held during the annual meeting of the IEEE Kansai section on 22nd February 2017 in Osaka. Young Professional Award was given to student members and young members of universities/industries who contributed to section activities. In order to encourage young students' research, Student Research Award was offered to students who presented excellent research papers written in English. These awards were judged by the Award Committee of the Kansai Section and are aimed at



revitalizing young members who will be responsible for the next generation. This year, one YP Award and 11 Student

Research Awards were elected. In addition, for the new senior members, the Kansai section created a special medal at the Japanese Mint and presented it as a memorial. These awards and medals were awarded to the winners from the Section Chair at the ceremony of the annual meeting of the Kansai section.

### Announcements

#### 11<sup>th</sup> International Conference on Sensing Technology (ICST-2017), Sydney, Australia

Macquarie University, Australia is going to organize the 11<sup>th</sup> ICST conference on December 4 to 6, 2017 in Sydney, Australia. ICST 2017 is intended to provide a common forum for researchers, scientists, engineers and practitioners throughout the world to present their latest research findings, concepts and applications in the area of sensing technology. ICST 2017 will include keynote addresses by eminent scientists as well as special, regular and poster sessions. All papers will be peer reviewed on the basis of a full length manuscript and acceptance will be based on quality and competent relevance.

#### IEEE International Symposium on Biomedical Imaging (ISBI), Melbourne, Australia

The IEEE International Symposium on Biomedical Imaging (ISBI) is a premier peer-reviewed scientific conference dedicated to mathematical, algorithmic, and computational aspects of biomedical imaging emphasizing on innovative imaging modalities on humans and small animals. In 2017, this conference is going to be held in Melbourne, Australia on 18-21 April and it will be co-chaired by Olivier Salvado (CSIRO) and Gary Egan.

## Student and Young Professionals Congress ANZCON 2017

# ANZSCON|2017

IEEE New South Wales Section Young Professionals invite all IEEE members with an interest in Student Branches, Young Professionals and Women in Engineering groups to ANZSCON 2017 Student and Young Professionals Congress on 10-11th August 2017 at University of Technology, Sydney(UTS), New South Wales, Australia.

For more information, visit <http://sites.ieee.org/anzscon-2017/>

## Section and Council News

### IEEE Sri Lanka Section SYW Congress 2016

*Rumesha Shalini Pathirana*

*Secretarial Team IEEE Sri Lanka Section SYWC2016*

The largest gathering of Students, Young Professionals and Women in Engineering of IEEE Sri Lanka Section, the IEEE Sri Lanka Section Student / Young



*Delegation at the Cultural Night*

Professionals / Women in Engineering Congress was held on 25th, 26th and 27th November 2016 for the fifth consecutive year at the premises of the Wayamba University of Sri Lanka with opportunities

to share achievements, experiences and knowledge to inspire each other and receive public endorsement.

Mr. Peter D'Almeida; Founder of N\*able, Mr. Dilantha Malagamuwa; well renowned Racing Driver, Mr. Lalith Kahatapitiya; a Chartered Engineer and Mr. Damitha Kumarasinghe; Director General of the Public Utilities Commission of Sri Lanka (PUCSL) participated in the congress as speakers and shared their insights with the delegates. The panel discussion on



*Delegation enjoying the outbound activities.*

“Stepping Outside the Comfort Zone” was an inspiration for the budding engineering entrepreneurs to take a step forward. Adding the excitement to entertainment evening, the best Student Branch performance was chosen.

The Awards Night organized by the IEEE Sri Lanka Section was held at the congress for the first time with the objective of giving recognition to the most outstanding initiatives taken by Student Branches and Affinity Groups.

### IEEE Bangladesh Section miniPOCO Forum 2017

*M. M. Rahman and M. Z. Haider  
Volunteer, IEEE Bangladesh Section*

On 18 th February, 2017, IEEE Bangladesh Section organized the 2017 IEEE mini

POCO Bangladesh Forum at ECE Building, BUET, Dhaka. The event was technically co-sponsored by IEEE R10. Last year the section organized two miniPOCOs. Envisioning alongside POCO (Panel of Conference Organizers), the event targeted to provide a world class learning experience and discussion, from which participants could gather sufficient



knowledge regarding the entire process of organizing a successful conference

The Keynote was addressed by Dr. Sri Niwas Singh, Fellow of IEEE, Professor, Department of EEE, IIT Kanpur, India and IEEE R10 CTS Coordinator. The event was inaugurated by Dr. Quazi Deen Mohd Khosru, Section Chair and Head of the Department of EEE, BUET.

A session focused on 'Ethical Issues in Publishing Proceedings in IEEE Xplore' was led by Prof. Dr. Shaikh Fattah, Past Section Chair and a member of R10 CTS Committee. Following this, a session on 'Demand Expectation: Beyond the regular paper presentation and various technical



events that can enhance the quality of a conference' took place and was led by Dr.

Celia Shahnaz and Mr. Chowdhury Akram Hossain. Finally a session on organizational issues including finance, sponsorship, and industry collaboration was conducted by Dr. Md. Shorif Uddin, Dr. Md. Abdul Goffar Khan and Dr. Md. Nurunnabi Mollah and Mr. Yeasir Arafat.

### **IEEE Bombay Section Symposium (IBSS-2016)**

*B. Satyanarayana (TPAC), Anand Gharpure (Joint Treasurer), Anthony Lobo (Chair), IEEE Bombay Section*

The IEEE Bombay Section Symposium (IBSS-2016) was held during 20–22 December, 2016 as one of the special events celebrating "40 years of Bombay Section"

The theme was "Frontiers of Technologies: Fuelling Prosperity of the Planet and People". Besides the lectures,



keynote and the summary talks were delivered by highly distinguished speakers and the Symposium featured 13 high quality review talks and one contributory talk. Day-long pre-symposium tutorials with hands on training were organized by industry experts

### **Recent topics of Shikoku section**

*Shinichi Yoshida, secretary, IEEE Shikoku section*

SHIKOKU section covers the Shikoku, the fourth largest island located in the south-western part of Japan. Shikoku

consists of four areas—Ehime, Kagawa, Tokushima, and Kochi. “Shikoku” means four lands in Japanese. The new office of Shikoku section has opened in January 2017 in Kochi University of Technology.



ICT—information and communication technology is expected to assist continuation of industries. For example IoT agriculture, which uses temperature and humidity sensors and transmit information to agricultural company, is studied. Recently, in February the cyber security symposium Dogo was held in cooperated with National Institute of Informatics, Information Processing Society of Japan, National Institute of Information and Communications Technology, Ministry of Internal Affairs and Communications, and several Universities. Dogo is the most famous in Japan as a traditional hot spring (Onsen) resort opened in several hundred years ago in Matsuyama city.

Shikoku-section Joint Convention of the Institutes of Electrical and related Engineers (SJCIEE) is also organized in September every year by IEEE Shikoku section with seven Shikoku sections of other domestic institutes/societies. Over three hundreds of papers are submitted from the universities and colleges in Shikoku. This is the largest convention in the electrical engineering, information and communication technology fields. In 2017, the convention is scheduled to be held in Ehime University on 23 September in Matsuyama. Paper submission is not

limited from Shikoku area and you can join the convention from other area.

## The 1st IEEE-HKN Chapter in Australia

*Wu, William, Media Officer of IEEE-Mu Kappa*

The first Chapter of IEEE-Eta Kappa Nu (IEEE-HKN) in Australia and 247th in the world was officially inducted at The University of Queensland on the 1st of March 2017. The chapter is known as Mu Kappa Chapter and operates with the support from the university. The University of Queensland is recognised worldwide for its excellence in teaching, learning and research; it consistently ranks within the top 50 universities in the world. The University of Queensland also has 60+ years of rich history in electrical and computer engineering and has produced many outstanding graduates and researchers. These make The University of Queensland the ideal home for the IEEE Mu Kappa Chapter. Professor Tapan Saha, acting as the faculty advisor from the School of Information Technology and Electrical Engineering (ITEE) has worked hard over the past year with 14 members to successfully install the first chapter in Australia. The charter members with their professionalism, enthusiasm and skills will be chaired by Mr. Kianoosh Soltani Naveh, a PhD student with excellent leadership skills.



*Chapter Members, alongside faculty staff and distinguished guests*

The day of the installation ceremony was attended by distinguished guests: Prof. Liz Burd, Prof. Michael Bruenig, Associate Prof. Peter Sutton and a number of IEEE Shikoku faces problems of population decreasing and ageing population, manpower shortage is serious. ICT is expected to solve these problems.

QLD Section dignitaries. Prof. Liz Burd, the Pro Vice-Chancellor of Teaching and Learning and the University of Newcastle

and a key member of international bodies including IEEE, installed the IEEE-Mu Kappa chapter on behalf of IEEE-HKN. Prof. Michael Bruenig, Head of the School of ITEE and Associate Prof. Peter Sutton, the representative of the Faculty of Engineering Architecture and Information Technology, attended to endorse the installation and induction ceremony.

### **IEEE Sendai Section- Learning from the experience**

*Taiichi Otsuji, Secretary, IEEE Sendai Section*

Sendai Section was established in 1998. We have been organizing a series of the lecture meetings on “technologies covered by IEEE can contribute to disaster recovery, prevention, and safety measures” since 2011. In addition, IEEE R10 Humanitarian Technology Conference 2013 (R10-HTC2013) was held at Tohoku University, Sendai City, hosted by Sendai as well as all Japan Sections and Japan Council. Many participants from all over the world stimulated discussions and exchanged opinions in this conference. We are convinced that it is our mission to continue to learn from this experience.

The first IEEE Milestone in Region 10 was awarded on Directive Short-Wave Antenna, namely Yagi-Uda antenna at Tokyo Section in 1995. This technology

was invented in Sendai.

We also organize special activities for students. Student Sessions making scientific presentation/discussion and technical writing all in English, having been held in annual academic meetings since 2002, are very active events for students. We have awarded Student Awards to the excellent papers in these sessions.



*Executive Committee Members of Sendai Section*

A recent hot topic is that WIE affinity group will be formed in Sendai Section. This is the fourth establishment after Japan Council, Kansai Section, and Sapporo Section in Japan. We expect that female engineers will increase further along with this activity.

Finally, we would like to welcome you to visit Tohoku Region in future opportunities.

### **IEEE Kochi Subsection : Excellentia v1.0 and Job fair 2017**

Excellentia 1.0 was conducted on 29th January 2017 at Albertian Institute of Science and Technology, Kalamassery. The program was organized for the student members of IEEE, intending to improve a candidate's performance and to give an



insight on how to prepare and present oneself for a placement drive. The event was formally inaugurated by Dr. Suresh Nair, Chair, IEEE Kerala Section who was the guest of honor of the event.

The first session titled “The art of Resume Making, Group Discussions and Interview Tips” by Mr. Vijay S Paul, Electronic Communications Coordinator, IEEE Kerala Section was a perfect beginning of the workshop.

The next in line was the session on “How to sell yourself and win an Engineering Gig” handled by Mr. Rahul Ramesh, CTO, Entri.me.



The concluding session by Mr. Shahim Baker, Chair, IEEE Kerala Young Professionals took the participants to the nuances of technical knowledge that will bag them the confidence to clear a technical interview round.

IEEE Job Fair is also an opportunity for the attendees to evaluate different organizations and whether the

opportunity they've applied for aligns with their professional interests, skills, values, and goals. The event had participation from 51 student branches across the IEEE Kerala Section and was held on 18th, 25th and 26th of February 2017.

With 350+ IEEE volunteers support in various stages of the event, Job Fair laid the foundation for an array of career paths. The entire squad of volunteers were well appreciated for all determination and well coordination of the event.

## IEEE Malaysia Section Activities in First Quarter of 2017

*Rosmiwati Mohd Mokhtar  
IEEE Malaysia Section Excom*

THE 27th AGM of IEEE Malaysia Section was held on 14 th Jan. 2017 at the Grand Bluewave Hotel, Shah Alam Selangor. More than half of the 24 technical chapters also conducted their AGM on that day. After the AGM IEEE members casted their votes and the 2017 Executive Committee were nominated as follows:

Chair: Mohammad Faizal Ahmad Fauzi,  
Vice Chair: Fawnizu Azmadi, Past Chair: Zuhaina Zakaria, Secretary: Haidawati



Mohamad Nasir, Treasurer: Zuriati Janin and Excom: Lee Yoot Khuan, Noor Ain Kamsani, Nordin Ramli, and Rosmiwati Mohd Mokhtar.

The event ended with exclusive dinner where several awards were delivered.



A Leadership Camp was held on 25th February 2017 where the Section Execom met with all higher level committees of Technical Chapters and Affinity Groups to get ideas about their progress and planning. Here, information regarding financing management, supports/funds, activity reporting etc. is delivered

The IEEE Student Branch Leadership Camp was held on the 11th March 2017 at Universiti Putra Malaysia. 20 student branches available in Malaysia had attended the meeting.

### **IEEE Islamabad Section Congress**

The first ever installment of the IEEE Islamabad Section Congress was held at Pakistan Institute of Engineering and Applied Sciences on 20 November, 2016. The theme for the inaugural congress was to keep embarking on progress in advancements in technology along with being engaging into humanity.

The IEEE Islamabad Section Congress hosted an amalgamation of talks and activities; discussions on ‘Global Navigation Satellite System’ and ‘Reinvent Your Potential’. Additionally, this congress hosted a workshop on Game Development conducted by “We R Play”. The most awaited part of this event was the coveted ‘Seminar on Emerging Technologies’ which provided a platform for three notable researchers from the STEM fields to impart their knowledge

among aspiring researchers.

Mr. Shoaib Qamar, member of the Board of Governors IEEE Technology and Engineering Management Society and Dr Yasar Ayyaz, HOD Robotics at National University of Science and Technology are just some of the most prominent speakers.

For more information, please visit the website: <http://www.isc.ieeepieas.com>

### **IEEE Japan Sections' 60th Anniversary Celebration**

*Dr Toshihiko Sugie, IEEE Japan Council Secretary*

Organized by IEEE Japan Council in the series of IEEE R10 Fifty Years Celebration-

IEEE Japan Sections' 60th Anniversary Celebration was held on 3 March, 2017 at the Chiba Institute of Technology in Chiba, Japan. 230 people participated in this ceremony and reception, including the IEEE President, R10 Director, Executives, R10 section Chairs and Delegates.

The celebration ceremony began with opening and greeting speeches given by JC Chair Prof. Toshitaka Tsuda and R10 Director Prof. Kukjin Chun. These were followed by congratulatory addresses by distinguished guests, 2017 IEEE President & CEO Karen Bartleson, MIC Japan Director General Yasuhiko Taniwaki, Past R10 Director Prof. Takuo Sugano, and JC-SAC Chair Prof. Yasuhiro Ohgoe. The Japan sections' activities over the 60 years since establishment and Japan 9 section chairs greeting were provided by video. The 2016 supporting friend award was presented to 8 companies in the Tokyo section for their long support of IEEE Japan sections.



The reception started with "Kagami-biraki" (Japanese traditional sake barrel breaking ceremony). Also we held a local sake party and "Hinamatsuri" (March 3rd is the date of the doll festival in Japan) so the decorations included Kimonos, Cherry blossom, several beautiful Japanese patterns, etc. On this occasion, we deepened our friendship with the attendees from other countries, generations, positions and cultures.

IEEE sections in Japan started as the IRE Tokyo section with only 50 members in 1955. Tokyo Section first covered all IEEE members in Japan and Japan Council was established in 1999. Now we have 9



sections and approximately 14,000 members.

We will continue to make strong efforts to ensure that IEEE Japan sections' activities are more enthusiastic and enjoyable. This will achieve our vision of contributing to

humanity with science and technology.

Details are available at:

<http://ieee-jp.org/60th-anniversary/>

### Japan SYWL Workshop : "Next Generation of IEEE – Invent the Future -"

*Dr Kojiro Nishimiya*

*IEEE Japan Council YP Coordinator*

Japan SYWL (Students/Young Professionals/Women in Engineering/Life Member) workshop was held on March 3rd just before the Japan Sections' 60th Anniversary Celebration. 91 delegates attended from each Affinity group, Student Branch, various Industries and Section. The main purposes of this workshop were 1. Promote future activities 2. Propose the solutions to our common issues and 3. Discuss the role of IEEE for a better future and share ideas.

The participants were separated into 9 groups and discussed the following topics,

- Collaboration and Catalysis of IEEE Activities
- Career Development and IEEE
- For further evolution of IEEE

The student members mainly lead the presentation and the discussion results were presented to the guests from R10 and IEEE Board of Directors. After the presentation, we discussed the information with them and various significant opinions and proposals were shared by all attendees.

This SYWL workshop was started on Tokyo MAW 2015. It has encouraged the spread of cross-generation and cross-technical fields' communications throughout Japan IEEE members. Today's workshop has clearly provided us with further improvement capability.

## Conferences

### iCATccT 2016

*Thinagaran Perumal*  
Chair, IEEE Consumer Electronics Malaysia Chapter

The IEEE International conference on Applied and Theoretical Computing and Communication Technology (iCATccT 2016) was held at the SJB Institute of Technology, BGS Health and Education City, Kengeri Bangalore from 21 to 23 July, 2016. IEEE Consumer Electronics Malaysia Chapter was invited to be part of the conference.

The Chief Guest in the Inaugural Function was Dr. Keshava Nayak, DG and Distinguished Scientist, DRDO, New Delhi. The other guests of honour were Dr. V Krishna Prasad, VP, TCS, Bangalore and Dr. Thinagaran Perumal, UPM, Malaysia. A total of 198 papers were accepted for presentation at the conference, from a total of 698 submissions. There were seven invited talks



Inaugural session of iCATccT 2016

### SPIN 2017

The 4<sup>th</sup> International Conference on Signal Processing and Integrated Networks (SPIN 2017) was held on 2-3 February 2017 in the Amity University Campus, Noida Delhi NCR, India. This conference was technically co-sponsored by IEEE UP

Section .The conference had a very high quality technical program consisting of 18 invited talks and 122 contributory papers. The invited talks were delivered by renowned researchers throughout the world from countries like UK, USA, Japan, Canada, Korea, New Zealand, Finland, Taiwan, Hong Kong, Spain and other European Countries. SPIN-2017 attracted contributions from several countries and many premier academic institutions and organizations of India. The student participation was a marked feature in this conference.



Invited speakers of SPIN-2017 with Conference Chair – Prof. M.K. Dutta and Founder President of Amity University Dr. Ashok K Chauhan.

### 7th CONFLUENCE-2017

Department of CSE of Amity School of Engineering and Technology (ASET) organized 7th international conference CONFLUENCE-2017 with the theme “Cloud Computing , data science and engineering” on 12-13 January 2017 at Amity Campus.CONFLUENCE 2017 welcomed 40 international guests from 20+ countries including USA, UK, Australia, Canada, South Africa, Netherlands, and Scotland. Out of 539 submissions only 149 manuscripts from 16+ countries were accepted. During the Conference, Amity University signed 12 MoU's with different foreign universities. First alumni meet “ASET CSE alumni connect 2017” was successfully hosted with 75 alumni's and some

academic awards were given. Moreover, Honorary Professorship was conferred upon to some renowned professors from

abroad. A tour to the Taj Mahal, Agra was also arranged.

## Interesting Reading

### IT in January - March 2017

#### Highlights in general

*Prof.S. Sadagopan, Director IIIT Bangalore*

- US President Donald Trump takes charge on Jan 20, 2017.
- ISRO makes India proud by launching 104 satellites in one go on February 15, 2017.
- Union Budget presented with two innovations - February 1 instead of February 28; Railway Budget & Main budget merged.
- A terrorist shoot in London on March 22, 2017 kills 5 and leaves the world shocked Products
- Iconic Apple iPhone completes 10 years in January 2017
- HMD Global (the new owner of Nokia brand) announced Nokia 6 Android phone initially for the Chinese market on January 8, 2016 in CES (Consumer Electronic Show) in Las Vegas; launches Nokia 3, 5, 6 and the nostalgic Nokia 3310 (that sold more than 125 million units, the largest for any individual handset) in MWC (Mobile World Congress) in Barcelona on February 26, 2017
- Bharat QR launched on February 20, 2017
- PVR(along with HP) launches VR Lounge on March 26, 2017 in Delhi – interesting development to watch Markets
- Dow Jones broke the 21,000 mark the first time on March 1, 2017 after President Trump delivers his “Address to the Nation”

- Stock market indices BSE index Sensex and NSE index NIFTY reach record levels (29,500 and 9,100 respectively) on March 15, 2017 post State Election results.
- Apple market capitalization reaches \$ 700 billion on February 13, 2017; Apple at No 1 and Google at No 2 are the most valued companies today
- Cisco acquires AppDynamics (founded by India-born IIT Delhi Alumni Jyoti Bansal)for \$ 3.6 Billion on January 24, 2017
- Voice recognition leader Nuance communications acquires Delhi-based mCarbon on February 8, 2017 for estimated \$ 36 million
- Snapchat IPO creates history; more than \$ 24 Billion value on March 2, 2017, but loses steam in the next two weeks!
- HP acquires flash-based storage company Nimble Storage(India-born Varun Mehta and Umesh Maheshwar) for \$ 1 Billion on March 7, 2017.
- Airtel acquires Tikona's 4G business for Rs 1,600 crores on Mar 23, 2017.

#### MNC's in India

- Ness Technologies to add 800 coders in 2017 .
- Storage technology leader NetApp announces Rs 1,000 Cr investment in Bangalore in February 2017.
- TCS sets a new record - \$ 1 Billion quarterly profit in September - December 2016 quarter; TCS CEO

N Chandrasekaran takes charge as Chairman of Tata Sons (the largest private enterprise in India with more than \$ 100 Billion annual turnover and globally respected) on February 21, 2017

- Cognizant announces large-scale (6,000 to 10,000) job-cuts (unheard of Indian IT services industry in the past two decades) in March 2017 sending alarm signals among engineering college students in India
- Intel buys Israeli-based computer vision company focused on autonomous vehicle (driver-less car) Mobileye for \$ 15 Billion on Mar 13, 2017
- Tech Mahindra acquires company CJS (U-based healthcare IT Services company) for \$ 110 million on March 6, 2017
- Boeing R&D Center in Bangalore to get further investment
- HP acquires Naira-founded by India-born Sriram Ramachandran and Prasad Palkar, who were earlier part of Aruba, now a HP company – that uses behaviour-based machine learning for cyber security analytics - on February 1, 2017
- Truecaller starts India Development Centre in Bangalore on February 21, 2017
- Mercedes Benz launches the first "Made in India" car on February 28, 2017 by launching its E Class Sedan
- Singapore-based GrabTaxi cab-hailing App company starts R&D center in Bangalore in March 2017
- Cisco starts selling " Made in India" routers on March 23, 2017
- Education & Research
- Infosys Science Prize award ceremony was held on January 7,

2017

- Five new IIT's (Dharwad, Palakkad, Tirupati, Bhilai, Goa) get their Directors (Professors P Seshu, PB Sunil Kumar, K N Satyanarayana, Rajat Moona, BK Mishra respectively) in January – February 2017
- Indian Institute of Science, Bangalore is the 8th among the Top 10 global small universities (Best Small Universities in the World for 2017, Times Higher Education Ranking)

### People

- TCS CEO Chandrasekaran takes charge as Chairman of India's largest business house Tata Sons on February 21, 2017 creates maximum buzz
- Google CEO Sundar Pichai visits India in January 2017
- Microsoft CEO Satya Nadella visits Bangalore and announces exclusive deal on Azure for the Indian e-commerce major FlipKart on February 20, 2017
- IBM India MD Vineetha Narayanan is elevated as Chairman; Karen Bajwa (ex Microsoft India MD) is the new MD effective January 2017
- Justice Kher takes charge on January 4, 2017 as the 44<sup>th</sup> Chief Justice of India
- Anant Maheshwari is the new Microsoft India Chairman effective January 2017
- Rajesh Gopinathan is the new CEO and NG Subramanian is the new COO of TCS effective February 21, 2017
- India-born Ajit Pai is the new head of FCC(Federal Communications Commission) in USA Telecom in India

- Airtel removes national roaming charges on February 27, 2017 and appeals to international community to drop international roaming charges and Airtel Payments Bank starts All India operations on Jan 12, 2017.
- Tata and DoCoMo decide to settle the long pending issue with \$ 1.2 Billion out of court settlement on February 28, 2017
- Idea and Vodafone India merge on Mar 19, 2017 to create the largest telecom operator in India with 400 million customers.

### Startup scene

- India Russia to set up \$ 1 Billion fund to fund startups
- PayTM(mobile wallet company with Payment Bank license) crosses 200 million wallets and more than half a million users a day in February 2017
- BankBazaar targets 100 million customers by 2017 end
- ClearTax to increase headcount to 400 in March 2017
- Snapdeal announces massive job cuts on February 23, 2017.
- Stayzilla shuts shop on February 23, 2017.

### Interesting numbers

- PayTM had Rs 5,000 Crores worth transactions and 200 million transactions in January 2017; with 192 million customers it is just 10 million short of SBI!
- Delhi Airport handles more than 50 million passengers during January - December 2016 with 15 million of them being International; together with Mumbai, the two airports carry 2/3rd of Indian Air traffic!
- BHIM App (mobile payment App

launched by Prime Minister in end December 2016, that transfers money directly between bank accounts easily, securely and without sharing bank account details) sees 18 Million downloads within 60 days Professor Sowmyanarayanan SADAGOPAN is the Director of IIIT-Bangalore. These are his personal views. He has been writing about IT in India for more than decades, with monthly columns in Times of India (1999 – 2003), Financial Express (2004 - 2007), IT Magazine (2008 - 2011) and IEEE India Newsletter (2012 - 2015). He can be reached at ss@iiitb.ac.in

### When India's Craze for Centuries Goes Beyond Cricket..

Ankita KS, Secretary, IEEE Young Professionals Bangalore Section, Lead of Editorials, IEEE R10 Newsletter team

On 15th February 2017 at 9:28 hours IST India scripted a new chapter in the History of Space exploration by launching Indian Space Research Organisation's (ISRO'S) workhorse Polar Satellite Launch Vehicle



(PSLV), which carried a record 104 satellites in a single mission. This PSLV-C37/Cartosat-2 Series Satellite Mission took place at Satish Dhawan Space Centre SHAR Sriharikota in Andhra Pradesh, India. This 39th consecutively

successful flight of PSLV launched 714 kg Cartosat-2 Series Satellite along with 103 co-passenger satellites. The total weight of all the 104 satellites carried on-board PSLV-C37 was 1378 kg.

According to the ISRO team, after a flight of 16 minutes 48 seconds, the satellites achieved a polar Sun Synchronous Orbit of 506 km inclined at an angle of 97.46 degrees to the equator (very close to the intended orbit) and in the succeeding 12 minutes, all the 104 satellites successfully separated from the PSLV fourth stage in a predetermined sequence beginning with Cartosat-2 series satellite, followed by INS-1 and INS-2.

The two solar arrays of Cartosat-2 series satellite were deployed automatically after the separation. ISRO's Telemetry, Tracking and Command Network (ISTRAC) at Bangalore took control of the satellite and can bring the satellite to its final operational configuration following which it will begin to provide remote sensing services using its panchromatic (black and white) and multispectral (colour) cameras. Of the 103 co-passenger satellites carried by PSLV-C37, two – ISRO Nano Satellite-1 (INS-1) weighing 8.4 kg and INS-2 weighing 9.7 kg – are technology demonstration satellites from India. The remaining 101 co-passenger satellites carried were international customer satellites, which were 96 from the USA, one each from Israel, Kazakhstan, the Netherlands, Switzerland, United Arab Emirates (UAE).

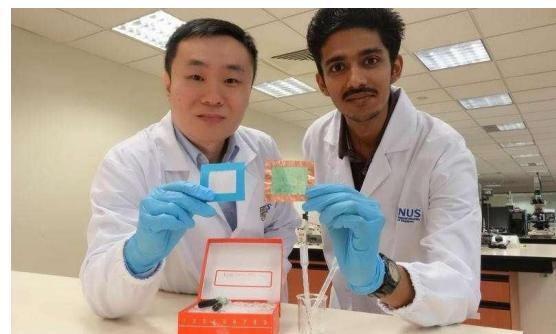
### **PLSV-C37 Launch from Sriharikota**

With this successful launch, the total number of Indian satellites and customer satellites from abroad launched by India's workhorse launch vehicle PSLV sums up to 46 and 180 respectively.

### **Engineering Team Develops Nanofiber Solution for Clean, Fresh Air**

Source: <http://insights.globalspec.com/>

A research team from the National University of Singapore (NUS) has successfully concocted a novel nanofiber solution that creates thin, see-through air filters that can remove up to 90 percent of PM2.5 particles and achieve high air flow of 2.5 times better than conventional air filters. As an added bonus, this eco-friendly air filter improves natural lighting and visibility while blocking harmful ultraviolet (UV) rays.



Assistant Professor Tan Swee Ching (left), Mr. Sai Kishore Ravi (right) and their team from the National University of Singapore's Faculty of Engineering has developed a novel nanofiber solution that creates thin, see-through air filters (held by Mr. Sai) that can remove up to 90 percent of PM2.5 particles and achieve 2.5 times better airflow than conventional air filters. Source: insights.globalspec.com

Overall, air filters developed using the nanofiber solution are two times better in quality than commercial ones, and are suitable for applications on windows and doors to improve indoor air quality. This air filter also has promising applications in respirators.

The NUS team's air filter is also eco-friendly and easy to produce — simply by

applying the novel

nanofiber solution onto a non-woven mesh, and leaving it to dry naturally. Using phthalocyanine, a chemical compound commonly used in dyeing, the NUS team engineered organic molecules that could self-organize, similar to the stacking of building blocks, to form nanoparticles and subsequently, nanofibers.

[Read the complete article.](#)

## Liquid Breathing Moves a Step Closer, Thanks to Measurement Study

Source: [www.ioppublishing.org](http://www.ioppublishing.org)

Liquid ventilation, breathing a liquid instead of air, has long been the stuff of science fiction, and despite experimental clinical use, its potential for treating severe pulmonary or cardiac trauma, and use in deep diving and space travel, it is still not widely used or understood.

However, thanks to the work of German researchers from TU Bergakademie Freiberg, that may be about to change. The researchers, Thomas Janke and Dr Katrin Bauer, published their work this week in the journal *Measurement Science and Technology*.

Lead author Mr Janke said: "In clinical liquid ventilation, the lung is filled with liquid, rather than air. The liquid perfluorocarbon (PFC), which is used for liquid ventilation, has proven perfectly suitable as a breathing medium, as it not only dissolves high amounts of oxygen but also acts as an anti-inflammatory for human tissue. Liquid ventilation has potential for use in deep diving, among other applications."

"However, very little is known about the

long-term outcome of liquid ventilation; the right ventilation frequency; and the volume that is breathed in and out. The challenge is in the measurement of dissolved oxygen concentrations during liquid ventilation, which is limited to averaged concentrations of the liquid entering or leaving the body. Our aim was to extend the available measurement techniques in the research of liquid ventilation." [Read the complete article](#)



Liquid ventilation has potential for use in deep diving, among other application (Source: ioppublishing.org)

## LTE - Continue to evolve towards 5G

Source: [www.electronicsforu.com](http://www.electronicsforu.com)

When we talk about network evolution it is by no means all about 5G. Despite all the resources being poured into developing the technology for the next generation of mobile communications users, there are still new features that are being introduced to LTE-A which will continue to push performance boundaries up until and even beyond the launch of 5G services. Staying true to its full name (Long Term Evolution), the LTE/LTE-Advanced technology standards are still growing and evolving. New networks are still being rolled out, and leading-edge features are being added to 4G to satisfy the market need for

ever-increasing data rates.

One of the major challenges for wireless network validation is to keep up with the increasingly and rapid introduction of new features in the roadmap of 3GPP LTE-A as we move through specifications that are already starting to look remarkably like some of the 5G targets. At its inception, LTE used just a single 20 MHz carrier, and its performance only started to meet the IMT targets for 4G in real world scenarios when LTE- Advanced (LTE-A) features were progressively added to it. The first enhancement was carrier aggregation, which combines blocks of spectrum known as component carriers (CC), enabling the use of fragmented spectrum to increase data rates – initially combining two carriers (2CC) but now being introduced for up to 5CC, and also combining time division duplexing (TDD) and frequency-division duplexing (FDD) spectrum.



Other features introduced were: Higher Order MIMO, which allows increased spectral efficiency to be achieved; Relays – which extend coverage in areas where wired backhaul is uneconomical; and Self-Organizing/Self-Optimizing Networks (SON), which enable the efficient use of heterogeneous networks (HetNets) that improve the coverage and capacity provided by traditional macro base stations. [Read the complete article.](#)

## Kinetic Energy Harvesting Lighting the Way for Urban Planning

*Source:*

<http://ieeexplore-spotlight.ieee.org/>

Not only can wearable devices use vibration energy to charge their own batteries, but they could one day have a big impact on our communities.

That's the conclusion reached by a group of international researchers experimenting with kinetic energy harvesting. The group – comprised of researchers from the University of New South Wales and the University of Queensland – sees potential to use the method as a valuable tool for things like urban planning and development by detecting people's modes of transportation.

"Transportation mode detection is important to our communities," says Sara Khalifa, researcher from Data61|CSIRO, Australia.

"It allows researchers to consistently and reliably collect information on individuals' traveling behavior to inform urban design, real-time journey planning, human activity monitoring, CO<sub>2</sub> emissions, targeted advertising and more."

And that's a great deal more than just reducing battery drain, as this system can benefit our communities by monitoring for potential hazards such as the spread of disease, providing emergency responders with information for the fastest route to a serious accident and much more. [Read the complete article.](#)

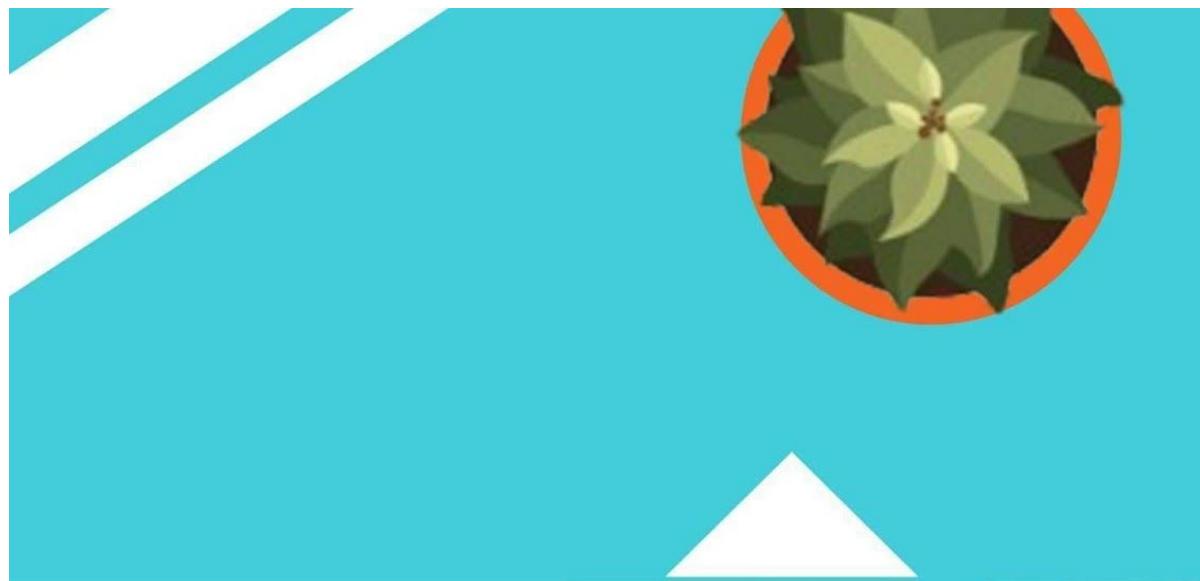
# IEEE R10 TODAY



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You can reach us at : [r10-ecn@ieee.org](mailto:r10-ecn@ieee.org)



# Thank you

