### IEEE R10 NEWSLETTER







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# WELCOME MESSAGES Message from IEEE Region 10 Director

Dear IEEE Colleagues,

Hope you and your families are doing well, keeping safe and healthy. It has been over a year since the world has been facing the current global medical and health challenges due to the ongoing pandemic. We continue witnessing very alarming situations in many countries, especially within the Asia Pacific region. I express my sincere concern to members and families who have been affected.



I urge every member to take all precautions and follow the necessary safety protocols on Covid-19 and adhere to the guidelines issued by local authorities.

Despite these challenges, our volunteers continue to amaze us with their brilliant creative, and innovative ideas. Since we have always considered the all-around development of our volunteers and members to be of prime importance, we have done numerous excellent programs to engage members for their professional and technical development and continue to create leadership opportunities and programs.

Collaboration is our focus in Region 10 and we understand the enormous benefits which we can reap while working as a team. Region 10 Industry Relations, WIE, YP, Professional Activities, and Student Activities committees joined hands together and designed a new program - 'R10 Talk Series' on trending topics by leading experts from industry and academia. We have already organized five 'R10Talks' and please stay tuned for future programs.

We continue to educate our volunteers on 'conferences' and we are planning few more training workshops in association with IEEE MCE (Meetings, Conferences & Events). The Region 10 Conference and Technical Seminar and Conference Quality Management committees have received several proposals from sections for organizing the conference organizers workshop and members will receive details soon.

Region 10 flagship conference TENSYMP 2021 shall be held in hybrid mode on 23-25 August 2021 at Grand Hyatt Jeju, Republic of Korea. The theme of the conference is "Good Technologies for Creating Future" and its aim is to bring together researchers and engineers from academia and industry to overcome the present difficulties and create a prosperous future.

Humanitarian Technology has always been the most sought-after activity of Region 10, where members get the opportunity to explore innovative ideas to translate those into working prototypes to be used for the benefit of the underserved communities. This time, we have also collaborated with IEEE HAC (Humanitarian Activities Committee) for a joint call for a proposal focused on 'Addressing local needs during COVID19'. I am glad to share that there was a huge

WELCOME MESSAGES

response and we received several proposals from various parts of Region 10. Members have delivered well with their innovative ideas of technological interventions to deal with the present challenging situation.

Region 10 Educational Activity Committee continues its 'Reaching Local Initiative' and has also announced various projects under STEM activities, capacity building workshops, and innovation challenges. I urge members to definitely use this opportunity.

The Region 10 Membership Development Committee has announced the winners of the 2021 MDC Projects. Nine sections, who have submitted impactful projects, have been selected.

Region 10 Newsletter, 'IEEE Region 10 Connect' is out now with a new look and new name, along with many new features. Hope you enjoyed reading our previous edition. Please feel free to provide your feedback and contributions to make it more member-friendly and valuable for members.

The Region 10 Newsletter Committee has started a new column named as "COVID-19 Heroes" to feature outstanding efforts done by Region 10 members, which has been receiving an overwhelming response.

Region 10 Professional Activities Committee has issued few calls for proposals – 'Future Direction Project' and 'Online Professional Development Courses'. Region 10 Student Activities Committee recently announced 'Region 10 SAC Funding', 'Student Research Paper Contest' and 'Undergraduate Student Project Video Contest'. I again urge all members to please make use of these opportunities.

Region 10 Young Professionals came up with many innovative plans such as 'Student-YP Joint Activities', 'Rejuvenation of Dormant YP Affinity Groups', 'YP REVOL 2021', 'Skill Upgradation Program - UpSkill 2021' and 'Sparklers Summit'. It would be a great opportunity for learning, training, and networking.

Region 10 has also achieved the highest senior member elevations as per the latest report. Let us encourage all our eligible members to apply for the same.

Region 10 Life Member committee is very active and working on the formation of new LMAGs in the Region, and 4 new LMAGs (in Singapore, Taipei, Kolkata, and Sapporo Sections) have already been formed. I am happy to share that the 2021 IEEE Life Members Committee Affinity Group Achievement Award was won by the Tokyo Life Members Affinity Group. I congratulate all associated with this recognition.

We are the largest, fastest-growing, and most diverse region in IEEE. In 2021 we have formed 3 new Subsections (Kuala Lumpur – in Malaysia Section; Guwahati and Silchar – in Kolkata Section), one subsection was elevated to a Section (Madhya Pradesh – in India). We also formed several Student Branches and Society Chapters in Sections and Student Branches across Region 10 within 6 months. We have also added 1 YPAG (in Shanghai Section) and 32 New Student Branch WIE AGs in 2021.

It is inspiring to see what our volunteers and members have achieved in the last few months, in spite of the adversities being faced.

I would like to thank each one of you for your continued interest in IEEE and I request you to explore the possibility of technological interventions to deal with the present challenging situation. But at the same time, please ensure your safety, and the safety of your peers, as your highest priority. I am sure the present crisis will be over soon and there will be a better and brighter tomorrow.

Kind regards,

Deepak Mathur

**IEEE Region Director** 

### Message from IEEE Region 10 Newsletter Chair

Dear Region 10 Members,

It is my pleasure to welcome you to the third edition of the IEEE Region 10 newsletter in 2021. Following our recent change of name to IEEE Region 10 Connect, we ran a logo design competition in May and received close to 100 unique logo designs. We really appreciate the strong support from our members in designing our new logo. It was a very difficult decision in choosing the new logo as we received many beautiful and interesting designs. The plan is to unveil the new logo and announce the contest winner in this issue, nevertheless, due to some minor issues, we have been advised to postpone the



announcement to a later date. We apologize for this and hope to be able to make the announcement soon. We appreciate your patience, especially for the logo designers.

This edition of the IEEE R10 Connect features excellent content for your reading pleasure. We started with an appreciation column to two of our prominent leaders, Prof. Akinori Nishihara, the outgoing IEEE Region 10 Director, and Prof. Toshio Fukuda, the outgoing IEEE President, and CEO. Another technical article is featured in our technical column, this time we are honored to have a contribution from our IEEE Fellow Prof. Ujjwal Maulik on *Computational and Learning Based Approaches for Precision Medicine*. This issue also features another five (5) *Personalities of the Month* and six (6) *Organizational Units of the Month* articles, as well as other COVID-19 heroes in the *COVID-19 Personality of the Month* column. Other articles received from various sections throughout the region rounded out this latest newsletter issue. We again thank all the contributors.

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We are always looking for new ideas for the newsletter, and you can reach us at  $\underline{r10\text{-ecn}@ieee.org}$  if you have any suggestions to share with us. Do drop us a line as well if you are interested to be part of the team, as we continue to expand and diversify our committee. Speaking of the committee, my greatest appreciation to them as usual for producing another excellent newsletter, which would not be possible without their effort and commitment. To all readers, I hope you enjoy the newsletter and stay safe wherever you are.

Thank you and kind regards,

Mohammad Faizal Ahmad Fauzi

Chair, IEEE R10 Newsletter Committee

Committee Member	Portfolio
Mohammad Faizal Ahmad Fauzi	Chair/Chief Editor
Prashant R. Nair	Editor
Redwan Ferdous	Editor
Tridibesh Nag	Editor
Lau Bee Theng	Editor
W. M. W. Sharika Jayalath	Associate Editor
Garima Patel	Associate Editor
M. Naila Mukhtar	Webmaster / Social Media
Nabeel Ahmed Masoodi	Graphic Designer / Social Media

WELCOME MESSAGES

### 1. . SPECIAL TRIBUTES COLUMN

## Tributes to Outgoing IEEE R10 Director Akinori Nishihara

Congratulations and many thanks and appreciation to the wonderful leadership of Prof. Akinori Nishihara, 2019-2020 IEEE Region 10 Director. Your efforts and contributions have enhanced IEEE, both in general and within Region 10. Wishing you all the best in your future endeavors.

Lawrence Wong, Past Vice President, MGA & Past IEEE Region 10 Director

Prof. Akinori was Region 10 Director for 2019-20. I joined ExCom in 2020 as the Chair for Life Member Committee. He was very supportive of all activities being organized by ExCom members. The 2020 ExCom was held in a physical mode in Queenstown, New Zealand. From R10 AGM onwards all events became virtual. LMC organized the SYWL congress during September 2020 and the All India SYWL congress during December 2020. He joined both events online & attended all sessions. He has always been very supportive of Life Member activities.

Rajendra K. Asthana, 2021-2022 Life Member Committee Chair



LM track at R10 SYWL Congress September 2020 (left) and LM track at All India SYWL Congress December 2020 (right)

Prof. Akinori Nishihara, known as Akki-san, is known to me since 2017 when he joined as ExCom of R10 when I was the Conference and Technical Seminar coordinator. I found Prof. Akinori to be a calm, sincere, and simple person. He is an excellent academician. Later he became R10 Director, and I saw him making quick and effective decisions for the growth of R10. He took many new initiatives in R10 which will always be remembered.

Sri Niwas Singh, 2019-2020 Vice Chair of Technical Activities

Dear Akinori, thank you for your strong, sustained commitment as a volunteer leader of IEEE. As Region 10 Director, you helped grow and develop IEEE Region 10 into one of the powerhouse regions within IEEE's global presence, and whose accomplishments advanced—and continue to advance—the technologies of our world. Under your leadership, Region 10 built an open, diverse community across its numerous borders.

I appreciate the energy of your service, the passion you bring to your work, and the dedication you have demonstrated in advancing technology for the benefit of the people of Region 10 and around the globe. Thank you.

### Susan K. Land, 2021 IEEE President & CEO

On behalf of the entire IEEE staff, I would like to extend my deep appreciation for the strong leadership of Region 10 Past Director, Prof. Akinori Nishihara during his term. Professor Nishihara's great commitment to IEEE and to the IEEE membership, both in Region 10 and across the world, was clear in his every action, and his efforts were vital to the progress of IEEE in an unprecedented period. As IEEE's largest region, the work of coordinating the activities of Region 10 is a significant, complex, and important responsibility - and Akinori's work with the R10 leadership has steered the region through a period of growth and expansion of the IEEE mission. As a member of the IEEE Board, Akinori has been a strong voice on matters of technical excellence, ethical conduct, and engagement of our global membership. It has been a great pleasure working with Past Director Nishihara and I wish Akinori the greatest success in the future.

### Stephen Welby, IEEE Executive Director, and Chief Operating Officer

Thank you so much for your warm support in our opening and closing ceremonies of the IEEE Region 10 Humanitarian Technology Conference in December 2020, Prof Akinori! On behalf of the IEEE R10 HTC Organizing committee and IEEE Sarawak Subsection, you have supported us very well since the bid to the closing of the entire conference in 2020. A big thank you!

### Lau Bee Theng, 2020 IEEE R10 HTC General Chair



Dear Aki-san, thank you for your great leadership to make Region 10 as one of the most diverse and vibrant regions. You are a fabulous sensei. Working under your leadership and guidance was an amazing experience. Thank you so much for always being so supportive. I am grateful for your mentorship and thoughtfulness. Domo Arigato Gozaimashita.

**Ewell Tan, Project Manager, IEEE Asia Pacific** 



It has been a very special privilege to know Professor Akinori Nishihara, affectionately called Aki-san, as a fellow R10 EXCOM member and a friend for many years. Aki-san, a very soft-spoken but firm leader, always listens and carefully considers all aspects before making decisions. His meticulous but friendly leadership style has been refreshing, which made it easier for everyone in IEEE R10 EXCOM to tackle the challenges of COVID-19. The R10 SYWL Congress is a much-awaited flagship event for students and young professional members in the Region. It was a big responsibility for my team and me to organize the 2020 R10 SYWL under very uncertain conditions owing to the Coronavirus pandemic. However, Aki-san's guidance was instrumental in planning and holding a very successful virtual congress for the first time.

I am truly grateful to Aki-san for appointing me as the R10 Vice-Chair (Members Activities) for 2019-2020 and extending his encouragement and amazing support throughout this period to make my job stress-free. It was truly a wonderful and learning experience working under the leadership of Aki-san as IEEE Region 10 Director (2019-2020). He continues to remain a great source of strength for my volunteering work.

#### Zia Ahmed, 2021-2022 Vice Chair of Technical Activities

It has been a very special privilege to know Prof. Akinori Nishihara whom I first met at the 2017 R10 Section Meeting in Tokyo when I was the IEEE Malaysia Section Chair and he was the IEEE Region 10 Director-Elect. Since then we have worked closely and met many more times, not only during the R10 Section/ExComm meeting but also at other avenues such as APSIPA 2017 in Kula Lumpur, Sections Congress 2017 in Sydney, R10HTC 2019 in Jakarta, etc. Specifically, it was such an honor to work with and welcome him and the then R10 Director, Prof. Kukjin Chun to the 2018 R10 Section Meeting in Langkawi, Malaysia. I am also very grateful to Aki-san for appointing me as the R10 Newsletter Chair under his directorship, a position that I have held from 2019 until the present. It was truly a wonderful learning experience working under his leadership full of great ideas such as highlighting our COVID19 heroes during this pandemic time and many others. I wish him all the best in his future endeavors.





### Tributes to Outgoing IEEE President Toshio Fukuda

Congratulations and many thanks and appreciation to the wonderful leadership of Prof. Toshio Fukuda, 2020 IEEE President. Your efforts and contributions have enhanced IEEE, both in general and within Region 10. Wishing you all the best in your future endeavors.





Thank you so much, Prof. Toshi, for your dedication and leadership in making IEEE great. Your insightful experience and inspiration are great motivators to all of us, keeping us in high team spirit and being creative. It is a great honor and a delightful journey to work under your leadership. Thank you, Prof. Toshi.

#### **Ewell Tan, Project Manager, IEEE Asia Pacific**

I came to know Prof. Fukuda when I joined R10 ExCom in 2015 when he was immediate Past Director of R10 and later he became the President of IEEE. I was very impressed with his knowledge and jolly nature. His simplicity and quick decision making capability is his strength apart from his high level academic and research. On the personal front, he touches everyone's heart who came in his contact. His contribution to the R10 and IEEE will be always remembered.

### Sri Niwas Singh, 2019-2020 Vice Chair of Technical Activities

Prof. Toshio Fukuda was the first-ever IEEE President from Region 10. He was easily accessible to all members especially Region 10 Councils/Sections/Members. When invited to any event, he tried to attend subject to his availability. From December 13 to 15, 2019 India Council's annual conference (INDICON 2019) was organized at Rajkot. He found time to join the same.

#### Rajendra Asthana, 2021-2022 Life Member Committee Chair

Dear Toshi, thank you for your long-time service and dedication to IEEE. As 2020 President of IEEE, you faced a year of unprecedented challenges with the global COVID-19 pandemic. However, under your leadership, the mission of IEEE did not waver. We remained committed to fostering technological innovation and excellence for the benefit of humanity. We came together in new ways and emerged even stronger.

Congratulations on being the first, but certainly not the last, IEEE President from Region 10. You led IEEE at its highest levels and your work has been integral to our organization's ongoing evolution and

expansion. It has been my pleasure to serve with you as volunteer leaders of IEEE and I appreciate the quidance and a true sense of collaboration you brought to the Board.

### Susan K. Land, 2021 IEEE President & CEO

On behalf of the entire IEEE staff, I would like to extend my deep appreciation for the strong leadership of IEEE Past President, Prof. Toshio Fukuda during his term. As we began the year 2020, neither Toshio nor I could have imagined what lay ahead of us - a year where we would have to rethink all the ways that IEEE engages with our members, our volunteers, and our stakeholders a year where we would have to protect the safety of our IEEE members and staff, and a year where we would need to find novel ways to work together and coordinate our efforts globally virtually and in a distributed manner. Through these challenging times, Past President Fukuda not only provided the effective leadership that IEEE needed, but he also remained deeply and actively engaged (virtually) with the IEEE membership across the world. Past President Fukuda was unwilling to let a global pandemic slow the progress and advancement of IEEE, and he very effectively pursued a strong agenda of new activity - emphasizing IEEEs commitment to diversity and inclusion and growing our educational activities to support our membership. I personally appreciate the strong partnership with Toshio over the years, as we engaged around the clock to support the mission of IEEE. Region 10 and all of IEEE has been greatly served by Prof Fukuda's leadership of IEEE and I wish Toshio the greatest success in the future.

### Stephen Welby, IEEE Executive Director, and Chief Operating Officer

It has been a very special privilege to experience Professor Toshio Fukuda's invigorating leadership and enjoy his wonderful friendship for more than a decade. Every time we meet, it is the same broad genuine smile and warmth with which Toshio-san greets his friends and colleagues.

As the R10 Director, Toshio-san entrusted me with the responsibility of R10 Coordinator for IEEE Sections Congress'2014. The thing that I enjoyed most while working with Toshio-san was that not only he delegates responsibility but also the authority and freedom to his team members to do their job independently. He has an astute sense to swiftly comprehend the key issues and deal with them with an even-handed and direct approach. Similarly, his friendship is also truthful and straight; if you are wrong, he will let you know frankly, and if you need help, he will not hesitate to support you. Indeed, these are the qualities of an absolutely confident leader, which makes Toshio-san a true role model for so many IEEE volunteers across the globe.

Thank you, Toshio-san, for being such a great coach and a friend I know I can always trust!

**Zia Ahmed, 2021-2022 Vice Chair of Technical Activities** 

Many thanks and appreciation to the wonderful leadership of Prof. Toshio Fukuda, the very first IEEE President/CEO from Region 10 in 2020. Your efforts and contributions have enhanced IEEE in striving for its mission and vision despite the outbreak of the COVID19 pandemic since last year. It has been my pleasure to serve with you at Region 10, and I wish you the best in your future endeavors.

Mohammad Faizal Ahmad Fauzi, 2021-2022 Newsletter Committee Chair

## 2 . R10 PERSONALITIES OF THE MONTH

## R10 Personality of the Month - K.R. Suresh Nair

### **Kerala Section**

Dr. K. R. Suresh Nair has been an IEEE Member for the last 29 years. He is not just an exemplary leader, but also a vibrant volunteer. Suresh Nair was a major influencer in the founding of the Kochi Subsection and raising it to become one of the best subsections in the region, with more than 150 events every year, over the past few years consistently. Due to his true leadership, and his dedication to volunteering for the IEEE community, he continued to be the Chair of Kochi Subsection for a record third term, on the insistence of



the members. While the usual path to being elected the Chair of a Section is via initially serving the supporting roles of either Vice-Chair, Secretary, Treasurer, etc., due to his excelling performance as the Chair for Kochi Subsection, he was unanimously elected the Chair of Kerala Section in 2016-17. He was elected as IEEE India Council Chair-Elect for the years 2019-20, and then as Chair for 2021-22.

Dr. Suresh Nair, an alumnus of the Department of Electrical Engineering, IIT Bombay has spent his initial career at the government R&D lab of the Ministry of Information Technology, Government of India. He then joined a multinational industry, as Global Chief Technology Officer heading the technology strategies. Under his leadership, many novel products in healthcare, communication, industrial, aerospace, and defense domains were designed and many are finding excellent market acceptance globally. Dr. Suresh Nair is presently the Chief Technology Advisor to the Foundation for Innovation and Social Entrepreneurship, an initiative of Tata Trust. He also founded two companies, Design Alpha and Biophoton Technologies. He is focusing only on socially relevant products and projects.

Dr. Suresh has more than 120 publications, 16 US patents and 2 Indian patents, and co-authored three books. Suresh Nair and his team took up the challenge of building the first and only indigenously built E-Scientia project, which required immense foresight, planning, and energy to achieve success. In addition to his regular profession as Global Chief Technology Officer of NeST group, he was leading the E-Scientia installation team every day from 5 pm

until midnight, continuously for over 2 months. Though the project faced many hardships, it was his inspiring leadership that brought together all the volunteers – from students to young professionals to senior members, to work together relentlessly for the grand success of the project. The immense response E-Scientia received from the government and the public, speaks volumes about the impact it has made in the community and helped further IEEE's visibility. His willingness to volunteer down to the ground level sets an unachievable example of his commitment to his fellow volunteers.

Irrespective of his senior position, he is always down to the roots of volunteering, all the while engaging and inspiring the volunteers. Dr. Suresh Nair was the first Section Chair to organize an India Council Execom meeting in Kerala, and his objective of bringing demographic togetherness started from



there. He brought in increased collaboration between sections, a major reason for which is also his warm personality.

During his tenure as the Chair of the Kerala Section, the number of events went beyond imaginable levels (more than 1000 events in 2017) to the extent that even an inquiry was constituted at the IEEE India Office level, to check on the genuineness of this. This was definitely found to be true and confirmed by the officials. This example alone speaks volumes of what the section, its OUs, and members have been able to achieve under his leadership. He initiated and implemented various strategies to increase the memberships, and during his tenure, the Section received appreciation for member retention and growth. He is a man who thinks big. He volunteered to undertake the responsibility of hosting TENCON 2019, which was a great success, and brought surplus funds to Region 10 as well as to the Kerala Section.

A very dedicated volunteer and a hardworking individual, during his tenure Kerala Section came to be considered a role model to all other Sections not just in the country, but globally. His contributions led him to be elected the Chair-Elect of India Council – only the second personfrom the Kerala Section in over 20 years. This is another prime example of acceptance of his leadership by members across the country. He has been conferred with many awards including the IEEE MGA Achievement award (2 times), IEEE Outstanding Researcher award, DST Lockheed Martin award 2014 for the top innovation as Rank No.1 in India, BV Baliga Award, IETE OE Award, to name a few.

He is Chairman of many Government of India committees on R&D, a member of various government Steering committees like MeitY, DSIR, etc. He is also in the Project Management Group of Maker Village, a member in Nidhi Prayas, DST Healthcare Hub, etc. He is a Distinguished Fellow Optical Society of India, Fellow IETE, and Senior Member IEEE. Dr. Suresh is an active promoter of academic-industry associations, and his passion is to mentor youngsters as entrepreneurs. He believes in continuously sharing knowledge with youngsters and has given over 250 invited talks covering over 30,000 students.

## R10 WIE Personality of the Month - Supavadee Aramvith

### **Thailand Section**

Supavadee Aramvith started her IEEE journey as a graduate student member in 1995 when she studied at the University of Washington, Seattle, USA. It is now her 25th year as IEEE senior member. Over a decade, she has successfully spearheaded and delivered highly impactful member engagement global and regional initiatives in various IEEE global boards & committees and has gained strong expertise and experience in managing global and regional IEEE programs. She has served as Region 10 executive committee member for 8 years. She has led Region 10 Educational Activities (2011-2014, 2016), Region 10 WIE (2015), and Region 10 Section and Chapter Committee (2019-2020). She was a candidate for 2021-2022 Region 10 Director-Elect.



At the global level, she has served as IEEE Educational Activities Board (EAB) member (2015, 2018-2021), where she chaired Pre-University Educational Coordination Committee (2018-2019) and currently chairs Section Education Outreach Committee. In technical activities, she serves as a Consumer Technology Society Board of Governors member (2019-2021) and Vice-President (Education) of Product Safety Engineering Society (2021-2023). On the IEEE Board of Directors committee, she serves as Communication Chair, Humanitarian Activities Committee (2019-2021), New Initiatives Committee member (2019-2022), and Nominations & Appointments Committee member (2021-2022). On the Award Board Committee, she serves as a member of the publicity & presentation committee (2020-2021), who oversee IEEE VIC Summit and Honors ceremony and IEEE medal for Environment and Safety Technologies Committee member (2019-2021).

She is an active member of IEEE Thailand Section serving as the membership development chair, Signal Processing Society Thailand Chapter chair, Thailand Section WIE AG chair, and faculty advisor for HKN Mu Theta Chapter. She possesses strong experience in board governance. Through her significant and continuous contributions, she has received the 2019 MGA Leadership award for her outstanding leadership and contributions in delivering joint MGA and EAB educational activities that significantly benefit members in the IEEE Asia Pacific region.

Dr. Supavadee Aramvith is currently an Associate Professor at the Electrical Engineering Department, Chulalongkorn University. She oversees International Affairs and International Collaboration as deputy head of department and leads the Multimedia Analytics and Processing Research Unit. Her research specialization is in video coding and processing, specifically error resilience for wireless video transmission, video analytics for surveillance applications, and embedded computer vision systems. She has successfully advised 11 Ph.D., 27 Master's, and 36 Bachelor's degree graduates. Her research on image super-resolution recently won a gold medal award from Innovation Week Africa (IWA 2020) and a silver medal award from the 48th International Exhibition of Inventions Geneva 2021. She receives Honors recognition from Chulalongkorn University in 2019-2020.



On a personal side, the volunteer journey with IEEE has strong alignment with her passion to serve communities including the under-represented ones, and with IEEE's mission of fostering technological advancement to benefit humanity.

### R10 YP Personality of the Month - Toya Kitagawa

### **Sendai Section**

Toya Kitagawa became an IEEE member in 2018 and established the IEEE Sendai Young Professionals Affinity Group (Sendai YP) on 21st June 2019. Since then, he has been contributing to volunteer activities as the Sendai YP Chair. This group held the IEEE Sendai YP kick-off event, which was able to encourage the active exchange among young engineers by inviting young entrepreneurs as speakers. Since 2020, he has also been the Vice-Chair of the IEEE Transdisciplinary-Oriented Workshop for Emerging Researchers (TOWERS) and organized the 17th IEEE TOWERS, which was held online for the first time. In addition, he played a big part in the success of various events such as a lecturer at the 2nd IEEE Engineer Spotlight and the Meeting to Talk about Careers



in the Doctoral Course; participated in the executive committee, and served as the moderator at the IEEE Japan SYWL Workshop in Hiroshima; a judge for the 12th Career Advancement and Skill Improvement Essay Contest, and so on. He has organized numerous events at Sendai YP, and since 2021, has also served as the IEEE Kansai Young Professionals Affinity Group Vice-Chair. In addition to these activities, he and Sendai YP are also focusing on recruiting members. Sendai YP's activity philosophy is "to let people know about attractive YP activities," and it actively engaged in activities to spread awareness of the benefits of IEEE and YP. In the "Voice of IEEE Members, IEEE Japan" (https://ieeetv.ieee.org/speaker/toya-kitagawa), he speaks passionately about the appeal and value of IEEE membership.

The Tohoku region is one of the largest in Japan, and it is difficult to get everyone together because the research organizations are located far apart. Therefore, when there is an academic conference in the Tohoku region, such as the Tohoku Branch Joint Conference of the Electrical Engineering Society, the Tohoku Chapter Acoustic Society of Japan, and the Tohoku Region Young Researcher Research Presentation, the Sendai YP hosts YP public relations and social gatherings to create a place for young researchers, including students, to interact and to promote IEEE and YP. In addition, the group posted Sendai YP public relations posters at Tohoku University, Yamagata University, and the University of Aizu, and released a short introductory video to let

students know about Sendai YP during university classes. In recognition of these achievements, Sendai YP has received an award from the Yonezawa Industry Association.

Toya Kitagawa has been working in a research and development position at Panasonic Corporation since 2019. As an audio systems developer, his mission is to design a space where users can spend comfortably using sound. In addition,



during the same period, he was also a doctoral student at the Graduate School of Science and Engineering, Yamagata University. For his doctorate, he is developing a stereophonic navigation system for the visually impaired. In 2019, this research received three awards: The Tohoku Area Young Researcher Presentation Award, the Tohoku Chapter Acoustics Society of Japan Excellent Paper Award, and the 16th IEEE TOWERS Socio-Next Sponsor Award. Activities as an IEEE volunteer seem to have had a great influence on the balance between research at universities and companies. University research is more specialized and deepens the technology; corporate research is from the customer's point of view, with social issues in mind, especially the perspective of how to solve problems with the technology that we have. He believes that he can make interesting discoveries because he is doing research from both perspectives. Activities at IEEE enable him to interact with people who have different perspectives and increase the number of peers who can talk about technology, research, and careers. He strongly believes IEEE is the best place to expand your world, and he looks forward to many more young professionals joining and discussing technologies that will lead to the next generation together.

## R10 Student Personality of the Month – Muzamil Mahmood

### **Islamabad Section**

Muzamil Mahmood is an electrical engineer, researcher, academician, and active volunteer of IEEE. Muzamil is a Ph.D. Scholar of Engineering Management at the College of Electrical and Mechanical Engineering, National University of Sciences and Technology (NUST CEME), Pakistan. He is also serving as a faculty member at Riphah International University, Islamabad, Pakistan. He received his Masters degree in Engineering Management from the National University of Sciences and Technology in 2020 and a BS in Electrical Engineering from HITEC University, Pakistan in 2018.



Muzamil has been a member of IEEE for the past seven years. He joined IEEE as a student member in 2015, contributed to different volunteer positions of the Student Branch, and stepped up from Student Branch to Section and from Section to global volunteer positions. Currently, he is serving the IEEE Islamabad Section as Chair of the Student Activities Committee, IEEE Region 10 Student Activities Committee as Supporting Coordinator, and IEEE YESIST 12 Junior Einstein Track as



PILOT Coordinator. He is also the IEEE VoLT graduate of Class 2020.

From 2015 to 2016, Muzamil worked in different volunteer positions in his Student Branch. In 2017, he was selected as a Chairperson of HITEC University SB and organized more than 60 technical and non-technical activities. In 2018, he was appointed as Industrial Relation Coordinator and Associate Section Student Representative (ASSR) in IEEE Islamabad Section, where he organized several activities for the Islamabad Section, especially on membership development and professional growth of students. He was the only student volunteer from IEEE Pakistan to win partial funding from IEEE HAC to attend Region 10 Humanitarian Technology Conference in Sri Lanka. In 2019, he was selected as Section Student Representative (SSR) of IEEE Islamabad Section, where he actively represented his Section by submitting the nominations from Islamabad Section to different initiatives of IEEE R10 and won grants under IEEE R10 SAC Joint Initiative Fund 2019 and IEEE R10 SAC Membership Development & Leadership Development Fund 2019 and 2020.

He also organized IEEE Islamabad Section Leadership Summit, Membership Development and Retention webinars/seminars around Pakistan; designed the operation manual for Student Branch Executive Committee and Section newsletters; executed Teacher-in-Service Program and Student Professional Awareness Activities; arranged meetings with Student Branches and organized the Annual General Meeting of Islamabad Section. In 2020, he was appointed as the Chair for Supporting Committee in IEEE R10 Student Activities Committee and contributed to R10 SYWL Virtual Congress 2020 as Chair of Entertainment Committee and Student Contest Coordinator. In 2021, he was elected as Chair of the Student Activities Committee, IEEE Islamabad Section, and appointed as Supporting Coordinator in IEEE R10 SAC.

As concluding remarks from Muzamil, "IEEE plays a vital role in shaping my life, career, leadership skills, personality development, social circle and professional network around the globe. And I would like to thank my friends and mentors for their support and continuous guidance. For young volunteers, 'Think – beyond the fences of your university, beyond the geographical boundaries of your country (Darrel Chow)'. If you dedicate your time to IEEE, you will not regret it. The experience acquired from this organization is incompatible and it is the best organization that provides enough opportunities to students and professionals to achieve your career goals and to build everlasting relationships for a lifetime".

## R10 Life Member Personality of the Month – VR Singh

### **Delhi Section**

Prof. (Dr) V. R. Singh, Ph.D. (Electrical Engg), IIT-Delhi and Life Fellow, IEEE and LF-IETE, LF-IEI, LF-ASI/USI, and LF-IFUMB/WFUMB, has over 38 years of research-cum-teaching experience in India and abroad (University of Toronto - Canada, KU Leuven - Belgium, Korea University - South Korea, TU Delft - the Netherlands, University of Surrey/ Southampton - UK, PTB - Germany and others). He has been at National Physical Laboratory (NPL), New Delhi, as a Director-grade-Scientist/Head of Instrumentation, Sensors & Biomedical Measurements and Standards, as well as a Distinguished Professor (AICTE/INAE) jointly with Thapar University.



His outstanding intellectual contribution includes over 350 papers, 250 talks, 260 conference papers, 4 books, 14 patents, and 30 consultancies to his credit. Under his guidance, 35 Ph.D. scholars have earned Ph.D. degrees while others are working with him. He is the Advisor to the PDM University.

Dr. Singh has been the Associate Editor of IEEE Sensor Journal (2010-2016); Associate Editor of IEEE Transactions on Instrumentation and Measurements (TIM); Editorial Board Member of Biomedical Engineering Letters (BMEL) and Regional Editor of International Journal of Biomedical Engineering and Technology (IJBET). Apart from this, he is an editorial/reviewer board for many other journals such as Sensors & Actuators (Switzerland), IEEE Transaction on Engineering in Medicine and Biology, Journal of Computers in Electrical Engineering (USA), etc.

He is the recipient of awards by INSA (Indian National Science Academy) 1974, NPL 1973, Thapar Trust 1983, ICMR (Indian Council for Medical Research) 1984, Japan Society of Ultrasonics in Medicine 1985, Asian Federation of Societies of Ultrasound in Medicine & Biology 1987, IE-I (Institution of Engineers - India) 1988/1991, IEEE EMBS 1999 and IEEE 2010/2011/2014, Sir CV Raman Award by Acoustical Society of India 2018 for his outstanding contributions, and Best AE Award 2020 of IEEE TIM. He has served as Distinguished Lecturer for IEEE EMBS (2018-2020), IEEE Nanotechnology Council (2019-2021), IEEE Systems Council (2020-2021), and INSA-YSA (2019-to date). Dr. V.R. Singh has served as the expert on the IET (Institution of Engineering and Technology) A F HARVEY SEARCH AND SELECTION PANEL for Research Award in Medical Engineering and Technology, for the year 2020. This is the most prestigious of academic honors. The IET is hosted at Michael Faraday House, Hertfordshire, UK.



He has served as the Guest Editor of Special Issues of JASI on Physical Acoustics and Ultrasonics (2016-17) and Medical Acoustics (2017-18) as well as on the IETE Technical Review journal on Transducers (2002). Dr. Singh is the Chair of IEEE EMBS/IMS Delhi Chapter, Immediate Past President of Acoustical Society of India, and current Vice-President of Ultrasonic Society of India and has been the Vice-President of Instrumentation Society of India, Vice-President of IFSUMB, Secretary of IEEE India Council, and the Chairman of IEEE-Delhi Section. Dr. Singh is a Member of IEEE Standards Association. He was also a Council Member of WFUMB (Australia) Ultrasound Safety and Standards. He has served as the Chair or a Member of the BIS Committee on Electro-Medical Committee in the past and present, he is the Chairman of the BIS-MHD-15 Committee. Dr. Singh has also been the session chair, plenary/keynote/invited speaker, and on advisory boards of world congresses and national/international conferences the world over. He has been the Conference Organizer of WESPAC-2018 in New Delhi, as well as other mega-events. He is the Vice-Chair of LMAG Delhi and EC Member of R10 LM Committee, etc.

His main areas of interest are nano-electronic devices, sensors and transducers, biomedical instrumentation, biomedical standards, computer modeling and simulation, biomedical ultrasonics/medical acoustics, POCT devices, neuro-sensors/implants, nano-cancer-technology, cancer hyperthermia, tissue characterization, lithotripsy, IoT, WSN and u-health care engineering.

# 3 . R10 ORGANIZATIONAL UNITS OF THE

# R10 Large Section of the Month - Bombay Section

### Satyanarayana Bheesette, Chair for IEEE Bombay Section

IEEE Bombay Section was formed on 13th July 1976 from the erstwhile India Section, with Mr. T.V. Balan as its first Chairperson. The initial territory of the Section included the states of Maharashtra, Goa, and Gujarat. While Gujarat and Pune city (in Maharashtra) became separate Sections in 1990 and 2010 respectively, the states of Madhya Pradesh (MP) and Chhattisgarh, as well as the union territory of Diu and Daman, were subsequently added to the Bombay Section's footprint. Nagpur in Maharashtra and MP are the two subsections under the Bombay Section.

IEEE Bombay Section conducted the first-ever workshop on Microprocessors and their applications way back in 1977 at a time when hardly anyone in India had heard of the word Microprocessors. The International Conference on Systems, Man, and Cybernetics of the SMC Society was held in Bombay in 1984. This was the first IEEE Conference held in India. Bombay Section hosted TENCON, the premier annual international technical conference of Region 10 in 1989. India Council's INDICON in 2013 and MTTS's IMaRC in 2019 are the other notable major conferences it has hosted. Bombay Section's Signature Symposia/Conference (IBSS/IBSSC) has been regularly held since 2015.

India Council and Nagpur Subsection's joint event INDISCON and IBSSC-2021 is planned to be held in 2021. Bombay Section will be the host for R10's flagship Symposium TENSYMP in 2022. The technical and professional activity calendar of the Section is rich with the student, WIE, YP, SIGHT, and LMAG congresses and events throughout the year. Its technical and academic training programs and workshops, such as the Skill and Knowledge Enhancement Programme (SKEP) received MGA's recognition. Besides, dozens of technical conferences are organized throughout the year by the academic institutes with IEEE SBs and the Section's technical sponsorship.

The Bombay Section over the past 45 years has set an excellent example for ethical practices and an equal opportunity unit. It laid special emphasis on student member benefits and mentoring of young professional leaders for the future. The Section's major activities are led by its standing committees and affinity groups, while the technical events are actively taken care of by its 14 chapters and societies. WIE and SIGHT groups of the Section work tirelessly in pushing their high-impact activities The Section enjoys a strong and agile

network of Student Branches, many of which formed their student technical chapters. Various teams of the Section compete strongly with other Sections and regularly win prestigious awards for their best volunteering services as well as attractive grants from R10 for their innovative proposals. One of the major thrust areas of the Section in the immediate future is membership development, which was hit due to the ongoing pandemic.



## R10 Medium Section of the Month - Thailand Section

### **Boonsit Yimwadsana, Secretary for IEEE Thailand Section**

IEEE Thailand Section was officially established in 1981 with Mr. Kamthon Sindhvananda elected as the Chairman. Since its establishment, IEEE Thailand Section has been nurtured by engineers from three major electric power government subsidiaries including the Electricity Generating Authority of Thailand (EGAT), the Metropolitan Electricity Authority (MEA), and the Metropolitan Electricity Authority (PEA). The professional knowledge and expertise of IEEE professionals in the Thailand Section have been leveraged to help bring lights and power to every home in Thailand, promote innovation and lead to rapid economic growth in the last few decades for the country.

2021 marks the 40th anniversary of the IEEE Thailand Section. Throughout the 40 years of the section's history, top companies, professionals, university professors, and students have joined IEEE Thailand Section. The Section currently has 668 members sharing knowledge ranging from power and energy to other more advanced fields such as communications, signal processing, photonics, circuits and systems, magnetics, robotics, medical technology, computational intelligence, control, and even education. Several research projects have been conducted with support from IEEE Thailand Section as well as various events such as training, talks, seminars, and conferences. In the last few years, over 100 professional and academic events such as talks, seminars, and conferences were conducted and supported by IEEE, IEEE R10, and IEEE Thailand Section with participants from local and foreign experts and students. In addition, several members of the IEEE Thailand Section have also participated in national management boards

enhancing and driving Inaliand's economy and innovation.

In the upcoming years, IEEE Thailand Section strives to continue to attract new members and contribute to the society with the same goal as IEEE which is to bring together experts from both industry and academia to advance technology for humanity through highly-cited publications, conferences, technology standards, and professional and educational activities. In addition, IEEE Thailand Section values the importance of diversity and will increase participation from female and minority members in its events in order to strengthen the entire community.

## R10 Small Section of the Month - Hiroshima Section

### K. Uehara, Chair for IEEE Hiroshima Section

IEEE Hiroshima Section was established in 1999 under the Japan Council. Currently, the Section has 480 members. Hiroshima Section is located in the Chugoku region which is the southwestern part of Honshu.

The Hiroshima Section started the "Hiroshima Section Student Symposium (HISS)" in 2000. HISS is a technical symposium exclusively for student's presentations in interactive sessions. Moreover, student committee members take care of the planning and management of the symposium. The 22nd HISS had a keynote lecture by Ms. Linda Somerville, Corporate Vice President of Micron Technology; technical presentations; laboratory and company exhibitions. The 22nd HISS was held online in 2020 with 200 participants and 89 speakers in technical presentations. The HISS executive committee provided HISS Research Award, HISS Presentation Award, and HISS English Presentation Award for excellent paper presentations.



"Metro Area Workshop (MAW) 2020 in Hiroshima" was held at Hiroshima Garden Palace hotel in Hiroshima City. The event saw 7 speakers giving special talks regarding advanced information and communication technology that supports social infrastructure in the mobile era under the theme of "IoT created by Mobile, Mobility accelerated by IoT". MAW 2020 was a grand success with impactful presentations on the latest communication technologies in high-speed mobile objects such as cars and railways, and the development issues of various communication systems surrounding IoT. The event saw 174 participants (56 physical & 118 online) from many companies, local governments, and universities.



Hiroshima Section has won several awards so far including the 2018 Outstanding Section Membership Recruitment and Retention Performance, the 2015 Outstanding Section Membership Recruitment and Retention Performance, and the 2011 R10 Outstanding Small Section Award.

## R10 Subsection of the Month - Kuala Lumpur Subsection

### Norliza Mohd Noor and Sathiabama T. Thirugnana, Kuala Lumpur Subsection

The objective of the establishment of IEEE Malaysia Kuala Lumpur Subsection (IEEE KL Subsection) is to promote IEEE activities in Kuala Lumpur, Malaysia for technology advancement for humanity and environmental sustainability as well as addressing and sharing the common mission and vision of IEEE. Academic staff cum researchers of Razak Faculty of Technology and Informatics and Universiti Teknologi Malaysia, Kuala Lumpur Campus have initiated and established IEEE KL Subsection under the leadership of Prof. Dr. Ts. Norliza Mohd Noor. The Subsection is focused on solving socio-economic issues for the well-being of people and the planet. Nevertheless, the Subsection also adheres to tackle all the 17 Sustainable Development Goals (SDGs) in their own capacity and local manner.

The initial idea of the IEEE KL Subsection was discussed and brainstormed by a group of like-minded people in 2020. Some of their planned activities for this year include STEM educational activities for the urban poor; tea-talks with Science, Technology, Innovation and Economics (STIE) policymakers; robotic competitions, and many more. The IEEE KL Subsection was established on 20th February 2021 with these objectives in mind. During the first ExComm Meeting on 19th March 2021, the Chair mentioned the vision and mission of the IEEE KL Subsection with a long-term goal to always keep activities attractive and relevant for the members.



To date, there are about 96, 151, and 118 senior members, members, and student members, respectively. IEEE KL Subsection is supported by public and private universities and major industries in the vicinity since the establishment of the IEEE KL Subsection. The subsection welcomes collaboration with other subsections and sections. To reach the section, send an email to ieeemykl@gmail.com and visit the website: http://kl.ieeemy.org

# R10 Student Branch of the Month - Central University of Karnataka

### Varun Posimsetty, Chair for IEEE Central University of Karnataka Student Branch

IEEE Student Branch of the Central University of Karnataka was established on 30th August 2018 with a vision to provide students of the university with a platform for global outreach. Since its

very inception, it stood as a forum for students to learn, lead, and network. The branch started with 17 members and now has a current tally of 79 members with 5 professional members and a senior member.

The Student Branch has a very high membership retention status. In the year 2020, it stood at 70.1%. The Student Branch also has the Power Energy Society Chapter and Women in Engineering affinity groups with a very active EXECOM to overlook the activities. The Student Branch EXECOM also has a very good representation of women as it has been a priority to give more women greater representation in leading roles.

The branch has actively conducted events with a mission to transfer knowledge and equip members with skills in new innovative methods. By the end of 2020, the branch has conducted around 50 events which include technical and non-technical events. Since the onset of the pandemic, all the events had to be restricted to the virtual model and thereby the volunteers have come up with ideas to erase the digital boundary. The branch organizes the "Techno – Nirman" event on the 26th January and 15th August every year, which provides a platform for students to showcase their projects.

The SB's prime area of focus has skill development been amona members and in realizing the full membership potential. lecture series, workshops and handson sessions have been organized. IFFF Xtreme has been one such event wherein all the members have realized the level-playing field that IEEE creates. Many mock coding challenges have been conducted with



the help from the Bangalore Section and India Council. The Student Branch has been awarded the "Most Promising Student Branch" award for three consecutive years and the "IEEE Regional Exemplary Student Branch" award.

Student Branch volunteers have received the "IEEE Bangalore Section humanitarian student innovation project fund 2020". The branch organizes industrial visits and sessions with industry professionals to keep them on track with the developments in various domains. The Branch has recently started bringing a quarterly newsletter that keeps all members informed of various awards, funding, & scholarships that are opening in that quarter. For better outreach of events,



the SB has a Facebook, Instagram, LinkedIn, and a website backed by an active social media and outreach team. Volunteers of the Student Branch currently serve in various capacities in the Bangalore Section, India Council, and Region 10 level. Volunteering at different levels also helps in outreach programs for strengthening the external linkages with both academia and industry. Volunteers at various levels include Ms. Sneha Chandran (Chair SCT IEEE India Council), Mr. Adwaith S (PR Lead of IEEEXtreme 15.0 and SB Networking Team Lead for India Council SCT, 2021), Ms. Rashi Shrivatsava (MSR for IEEE Bangalore Section SCT, 2021 & Social Media team SCT IC -2021), Mr. Varun Posimsetty (Editorial Coordinator IEEE India Council Newsletter team), and Ms. Dikshita A (Design Team, SCT IEEE Bangalore Section).

# R10 Student Branch of the Month - North South University (NSU)

### Mayesha Tafannum, Chair for IEEE North South University Student Branch

Established in 2013, IEEE North South University (NSU) Student Branch has been providing a bridge for its members to communicate with the aspired tracks in their field of interests and facilitating a pathway directed towards a successful engineering career.

Behind the establishment of such an active and successful Student Branch, are a group of enthusiastic, committed, and dedicated young minds. Members are regularly engaging themselves in national and global platforms and actively participating as well as winning different contests and awards, grants, and eventually representing NSU in both the national and global stages. For two consecutive years, in 2018 and 2019, IEEE NSU Student Branch has been awarded as the "Regional Exemplary Student Branch" in Region 10 and also in 2019, embraced the honor of being "The Best Student Branch" in the IEEE Bangladesh Section. Other accomplishments include securing the First Position in the IEEE Day 2017 Long Video Contest, achieving the First Position



in the IEEE R10 Web Contest in 2018, and in 2019, achieving the Second Position in the Photo Contest (Technical Category).

IEEE NSU SB has organized and collaborated in several workshops, seminars, contests, field trips, and Flagship Events including IEEE Student Professional Awareness Conference (SPAC) in 2018 & 2019 and IEEE Student Transition and Elevation Partnership (STEP) in 2019 & 2020. The Student Branch makes efforts in promoting the benefits of IEEE by organizing three Membership Drives each year. In each Membership Drive, the Student Branch makes sure to deliver the goals and visions of IEEE and convince tech - enthusiasts in joining the world's largest community of

Engineers. The members also actively participate in organizing month-long celebrations of Global IEEE Day and IEEE PES Day and take part in the Global Contests and enthusiastically take up roles in the global platforms of IEEE Xtreme, IEEE Day, IEEE PES Day, IEEE MadC, and many more as Leads and Ambassadors.

In order to expedite the members towards a more diverse pathway to pursue their knowledge in their field of interests, IEEE NSU SB has three societies and one Affinity Group Student Branch. These are IEEE Power and Energy Society (PES), IEEE Robotics and Automation Society (RAS), IEEE Industry Applications Society (IAS), and IEEE Women in Engineering Affinity Group (WIE).

During the global pandemic, the IEEE NSU Student Branch members faced several challenges in keeping up with their usual pace of organizing activities and keeping the members engaged. Nevertheless, the combined efforts of its members had driven their challenges to opportunities, and the Student Branch and its affiliated chapters had successfully organized over 60 different events and activities online, including three membership drives.

The SB's main goal is to serve, inspire, and get inspired to change our community, cultivate fellow engineers in their related engineering fields through interactive learning, and help the members better understand the professional environment and technological progress.

## COVID-19 Personality of the Month - Gerobok Rezeki

### Norhana Arsad, Malaysia Section

Since its first detection in Wuhan, China, the Covid-19 pandemic has been widely spread and has threatened human health all over the globe. There have been a total of 182 Million positive cases and about 3.95 million deaths worldwide. This, in turn, causes nations such as Malaysia to implement Movement Control Order (MCO) in order to curb the spread of this devastating pandemic. Of course, every action has its pros and cons. Although introducing the MCO will help in reducing and preventing the transmission of the Covid-19 virus, closing up the business sector and reducing the movement of the citizen will lead to economic decline. Limiting the number of employees leads to a decrease in business productivity and thus many companies choose to lay off their employees. Not to mention all the small business owners which are not allowed to operate (except for businesses that sell foods and daily necessities) had to close their operation until the MCO is over. These in turn cause many of our citizens to lose their source of income. Due to this reason, even the rich are affected and there are cases where M40 individuals become B40 due to



loss of income, and the poor become poorer. Although the government provides financial assistance, it is still nowhere near enough. Thus, NGOs and mosque committees provide reliefs to help ease the burden of the people and one of the reliefs is by introducing 'Gerobok Rezeki'. 'Gerobok' is usually referred to as a chest for storing clothes, a locker, or a cupboard for keeping food. This 'Gerobok Rezeki' (GR) is a buying while contributing program organized by Pusat Kepimpinan Wanita Tun Fatimah Hashim, UKM, and IEEE Photonics Society, Malaysia. This program is realized in order to help the underprivileged family and those who are affected by the Covid-19 pandemic. 'Gerobok Rezeki' 1.0 program has been carried out from 3rd June 2021 until 29th June 2021 where the donations were distributed to 6 selected locations. All the donations collected were used to buy daily necessities to be distributed to the area around Southville, Bangi, Sg. Besi, Bandar Tasik Selatan, Sentul and Seri Kembangan. Among the daily necessities donated are rice, flour, soy sauce, tea/coffee, eggs, vermicelli noodle, canned sardine, biscuits, condensed milk, cooking oil, sugar, chili/tomato sauces, and others. The donated daily necessities are placed on cupboards or tables (hence the name 'Gerobok') in selected locations and free to be taken by those who are less fortunate. A million thanks to the people who are involved in this noble program.

# 4 . R10 TECHNICAL ARTICLES

# Computational and Learning Based Approaches for Precision Medicine

Ujjwal Maulik, FIEEE, Professor, Department of Computer Sc. and Engineering, Jadavpur University, Kolkata, India

The use of computational algorithms in the healthcare domain aims for advancement in therapeutic as well as early diagnosis of pathogenic conditions. Bioinformatics deals with the development and applications of algorithms and statistical methods to biological datasets deoxyribonucleic acid (DNA), Ribonucleic acid (RNA) or protein sequences. Earlier, research in bioinformatics focused primarily in the analysis of microarray data, sequence analysis, structure predictions, in silico 3molecule design etc. Advancement in machine learning and other computational methods along with the availability of high throughput data has now made it possible to address many issues in precision medicine. Similarly, biomedical image analysis is also one of the important areas where significant research has been executed successfully. In recent times, automate the diagnosis of malignancies from the histopathology images is one of the well-known applications along with disease prognosis using advanced sequencing e.g., NiCE-Seq [1], ATAC-Seq [2], RNA-Seq [3], etc. These sequencing methods help to include genomic, epigenomic, and proteomic data. Significant applications of single-cell techniques and advanced machine learning algorithms increase the possibility of dedicated patient-specific therapeutic as well as diagnostic protocols. The term "Precision Medicine" [4] [5] [6] has been coined as a genespecific therapeutic protocol for patients that has two main objectives-

- a. Personalized Therapeutic patients for diseases like oncology, and
- b. Gaining prior knowledge for multiple other pathogenic conditions.

Instead of using the same therapies for all the patients having similar diseases, a specific therapy usage based on the biological conditions is the key to precision medicine. In this regard, molecular diagnostics and imaging along with advanced analytics are extremely important. Precision medicine can improve the diagnosis and treatment and thus help in better management of Personalized Healthcare.

In 2001, genome sequencing was performed for the first time. In the last two decades, plenty of research advancement has successfully improved the

sequencing methods. Almost \$3 million was spent for generating the first human genome sequence in the Human Genome Project (HGP) [7] where the total cost involved was \$2.7 billion in 2003. In recent times, \$1000 is enough to perform a whole genome for a person in a few hours. This type of advancement increases the possibility of precision medicine. Personalized therapeutic needs to include three pieces of information from the recent developments viz., 1. Large scales of data (viz., human genome sequences), 2. The patient-specific method for specialized characterization (genomic, proteomic, and metabolomics data), and 3. Sophisticated computational pipelines to analyze the data. All this information is now within our reach due to the advancement of basic research, including molecular biology, genomics, proteomics, and bioinformatics. Oncology is one of the prior targets due to its course of lethality. Also, the therapeutic solutions, known for such pathogenic conditions might leave adverse effects.

Genomic markers are one of the key factors in this regard. This proposes the importance of immunotherapy in malignancies based on the list of biomarkers that are usually utilized for early diagnosis or prognosis. Also, the identification of comorbidity conditions can be another key regulator. More elaborately, each patient might have a distinct list of parallel pathogenic conditions. These diseases can attenuate the effect of therapeutic protocols. For example, type 2 diabetes and hypertension are identified as fatal comorbidities for SARS-COV-2 infections in the current pandemic time. Likewise, the patient with severe type 2 diabetes has a high risk of Alzheimer's disease. These observations suggest the importance of tissue specificity, cell specificity for each sample. Besides, precision psychiatry is another important area of research. Very few works have been done so far to unveil the mystery of precision psychiatry. Also, implementations of immunotherapy are equally important for neuropsychiatric neurodegenerative diseases. However, many of these scientific endeavors are still under research. In terms of computational tools, advanced machine learning such as convolutional networks (CNN) [8], graph neural networks (GNN) [9], continuous learning [10], etc., along with explainable Artificial Intelligence techniques [11] are extremely useful.

**Convolutional Neural Networks**: In recent times, CNN has been used very successfully for unsupervised feature extraction from structured data. They are particularly useful in computer vision tasks such as scene classification, object detection, and segmentation. CNNs have extensive application in the domain of medical imaging. They can be used to automatically segment the tumors from radiographic images, or segment veins from retinal images. CNNs have been combined with Recurrent Neural Networks (RNNs), Long Short-Term Memory (LSTM) models for tasks such as action recognition in videos, or image captioning.

**Graph Neural Network (GNN)**: GNNs have recently gained popularity with the advent of Graph Convolution Networks (GCNs). GNNs and GCNs can be used for link prediction as well as node and link property prediction in graphs. While GNNs still have numerous unaddressed challenges, they are extensively used for unstructured datasets. Many biological datasets, available in the form of graphs containing interaction between genes, drugs, diseases etc., can be analysed using GNNs.

**Continual Learning**: Continual Learning (CL) allows a model to adaptively learn about the external world while incrementally developing itself. CL is sparsely present in current deep learning literature and is restricted to narrow, closed-task domains. While CL is not ready for prime-time, significant strides have been made that address some of the key issues of adaptability of a model [12] [13].

**Explainable Artificial Intelligence Techniques**: Explainable artificial intelligence (XAI) enables the human-comprehensibility of machine learning algorithms. A key issue of modern machine learning algorithms and deep learning, in particular, is their lack of explainability. Even when they provide the right result, the reason behind that result is inconceivable to humans. As Artificial Intelligence applications expand in their capabilities, the need for humans to trust in their reasoning becomes paramount. This is where XAI comes into the picture. XAI can allow us to see why a method may infer a certain disease from a set of symptoms or why a histopathological image is marked as malignant by a method. Thus, XAI will be very useful to design an effective expert system in healthcare.

Currently, doctors rely on precision medicine to treat a wide range of cancer patients, those who are in an advanced stage. These include- lung, breast, skin, colon, and pancreatic cancer. Some other successful application domains are HIV, childhood illnesses, cystic fibrosis. Precision medicine is expected to be used for other diseases like Alzheimer, multiple sclerosis, rheumatoid arthritis, type-2 diabetics, etc., in the future. Very recently, we have tried to explore the comorbidities, possible therapeutic protocols based on multi-omic data applying network analysis and machine learning techniques. In the pandemic era, medical professionals have identified comorbidities and post-Covid effects as one of the prime reasons behind severity. In [14] it has shown how the structural multiplicity of the viral proteins can trigger the host cell protein partners and the association with post covid severity. Likewise, we have explained the cell-specific molecular mechanism for the vital organs during the SARS-CoV-2 intrusion. The pipeline utilizes multiple organ-specific single-cell RNAseq data that helps to identify the cells having a higher infection affinity. Subsequently, the cell-specific molecular mechanisms have been shown based on influential markers of the corresponding cell.

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Dr. Ujjwal Maulik is a Professor in the Department of Computer Science and Engineering, Jadavpur University since 2004. He was also the former Head of the same Department. He held the position of the Principal in charge and the Head of the Department of Computer Science and Engineering. Dr. Maulik worked in many universities and research laboratories around the world as visiting Professor/ Scientist including Los Alamos National Lab., USA, Univ. of New South Wales, Australia, Univ. of Texas at Arlington, USA, Univ. of Maryland at Baltimore County, USA, Fraunhofer Institute for Autonomous



Intelligent Systems, St. Augustin, Germany, Tsinghua Univ., China, Sapienza Univ., Rome, Italy, Univ. of Heidelberg, Germany, German Cancer Research Center (DKFZ), Germany, Grenoble INP, France, University of Warsaw, University of Padova, Italy, Corvinus University, Budapest, Hungary, University of Ljubljana, Slovenia, International Center for Theoretical Physics (ICTP), Trieste, Italy. He is the recipient of BOYSCAST Fellowship, Government of India in 2001, Alexander von Humboldt Fellowship during 2010, 2011, and 2012, and Senior Associate of ICTP, Italy during 2012-2018. He is the Fellow of The Institute of Electrical and Electronics Engineers (IEEE), USA, Indian National Academy of Engineers (INAE), India, International Association for Pattern Recognition (IAPR), USA, West Bengal Academy of Science and Technology (WAST), India, Institution of Engineers (IE), India, Institution for Electronics and Telecommunication Engineers (IETE), India, 2001. He is also an ACM Distinguished Speaker. His research interests include Machine Learning, Pattern Analysis, Data Science, Bioinformatics, Multi-objective Optimization, Social Networking, IoT, and Autonomous Car. In these areas he has published ten books, more than three hundred fifty papers filed several patents, and already guided twenty doctoral students. He has mentored start-ups in the area of AI and Healthcare. His other interests include outdoor Sports, Music, and traveling extensively around the world.

### 5 . R10 UPDATES

### Video Interviews with IEEE R10 Leaders

Dr. Lau Bee Theng, the Editor for IEEE Region 10 Connect interviewed three R10 leaders, Prof. Akinori Nishihara, Prof. Toshio Fukuda, and Prof. Kukjin Chun. The highlights and links to the video interviews are given below.

#### Interview with Prof. Akinori Nishihara

This video features the interview with Professor Akinori Nishihara, the immediate past Director of IEEE Region 10. He shared how he began his journey as an IEEE member and his volunteering experience with IEEE. He and his former student created the IEEE Japan Council WIE Affinity Group in 2005. He has been helping WIE Japan and WIE Tokyo/Shin-Etsu since then, and he also shared some advice for promoting gender equality in IEEE around the globe. https://youtu.be/u6hOHFUIfmU

#### Interview with Prof. Toshio Fukuda

This video features the interview with Professor Toshio Fukuda, the immediate past President of IEEE. Professor Toshio started his journey with IEEE since he was a university student. He shared how his passion has developed after being exposed to high-quality international conferences during his early years in university. He shared the motivation factors of his great zealousness in serving IEEE for years in many portfolios, and he has gratefully given some advice to the young IEEE volunteers.

https://www.youtube.com/watch?v=3F4MfeSP3WI

#### Interview with Prof. Kukjin Chun

The video features the interview with Professor Kukjin Chun, immediate Past Chair of IEEE MGA Board. He shared his past portfolios and rich volunteering experience in Korea, Region 10, and the US. He has also shared about IEEE Young Professional and how IEEE members can tap on this excellent networking body to improve their international collaboration and enrich their experience in IEEE.

https://youtu.be/6Ep\_1k6oM9E

### R10 Section/Chapter Committee

### **Chapter Support Webinar Report**

Amit Kumar, Chair for IEEE Region 10 Section/Chapter Committee

IEEE R10 Section/Chapter Committee in collaboration with IEEE MGA TA Ad-hoc Committee has organized a webinar on "IEEE Chapter Support cum Experience Sharing" on 5th July 2021 Virtually through WebEx at 7:30 PM (IST). The webinar was organized under the leadership of Dr. Amit Kumar – Chair IEEE

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R10 Section Chapter Committee. Mr. Deepak Mathur – Director IEEE R10, Dr. Maike Luken – Vice President MGA, Dr. Costas Stasopoulos – Chair MGA GUOS Committee, and Dr. Bob Rassa – MGA TA Adhoc Committee on Chapter Support Co-Chair graced the webinar.

Dr. Supavadee Aramvith - Member, of IEEE MGA TA Ad-hoc Committee gave the opening remarks by introducing the eminent speakers in the panel. Mr. Deepak Mathur appreciated the Organizing Committee for being committed and supportive of the development of its Section and Chapter initiatives. He further added that R10 is more predominant in providing volunteering opportunities for the members of its Chapters and Sections, which results in the development of membership retention and sustainability.

Dr. Maike Luken briefed about the MGA vision and how it supports Chapters & Sections. Dr. Costas Stasopoulos shared his insights on how the chapters can be enhanced and made technically strong. He also enlightened the attendees on the importance of Chapters/Sections. In continuation, Dr. Bob Rassa explained the importance of the committee and its efforts to strengthen the Chapters and Section development.

The following are the takeaways from Dr. Bob's presentation:

Appointment of Section Chapter Coordinators for smooth and effective functioning,

Recommend inclusion of adequate chapter support by Societies/Councils in 2022 budget planning,

Updating vTools showing chapter activities (planned meetings, meetings held, number of attendees, etc.),

Felicitate members from Regions and Societies/Councils for hosting regular Chapter webinars in order to engage members,

Participation in AdHoc on Member Engagement etc.

Following this, there was an Experience Sharing Session from vibrant Section and Chapter representatives.

Dr. DVSS Siva Sarma – Chair, Chapter Subsection Coordination Committee (CSSC) IEEE Hyderabad Section has articulated the activities that Hyderabad Section is engaging for the development of its Chapters and Subsections. He also briefed about the Future Development Committee (FDC) initiated by Hyderabad Section with its Past Chairs and Senior Members for sharing their expertise for sustaining the Chapters and Subsections.

Prof. Chia-Chi Chu – Director, IEEE Taipei Section briefed the Section's statistics, and also gave his insights on "what is a Successful Section?" and shared the wide range of activities organized by Taipei Section, especially for membership engagement and retention. Dr. Subhash Chandra Mukhopadhyay – Founding Chair, IEEE SC NSW Chapter gave a brief introduction about Sensors Council of IEEE NSW Chapter, and shared his insights on best practices for making a successful chapter.

Some of the key takeaways from his presentation were:

Making programs free of cost and open to all, Involving distinguish lecturers as much as possible, Utilize the funding support of Council/Society/Section etc.

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Dr. Lalitha Vadlamani – Past Chair, IEEE ComSoc/SPS Joint Chapter Hyderabad Section, presented the best practices which made the chapter to be one the most promising & vibrant chapters and a recipient of the Outstanding Chapter Award.

The Major points covered include:

Active involvement of Execom,
Organizing variety of activities like flagship events, distinguished lectures etc.,
Engaging variety of audience from Industry, Academia, Scientists etc.,
Collaborating with Subsections and other Section Chapters etc.

Dr. Hazile Mokhlis – IEEE PES Malaysia Chapter listed the wide range of activities organized by their chapter, followed by the best practices of the chapter which have resulted in active engagement and sustainability.

Some of the best practices listed were:

Activities based on different categories, Strategic meeting to plan one-year program (annual calendar), Consistent engagement with members etc.

The panel ended with a positive note followed by an interactive Q&A session. The main outcome of the event was to give an overview about Section and Chapter management. More than 70 attendees from various sections and chapters have been actively engaged and benefited by this webinar. The event eventually concluded with the Vote of Thanks by Dr. Amit Kumar.

### **R10 Life Members Committee**

### Rajendra K. Asthana, Chair for IEEE Region 10 Life Members Committee

The continuance of the Covid-19 pandemic has compelled Life Members AG to continue with activities in virtual mode. During the period ending on 30th April 2021, Region 10 LMAGs have reported 44 activities.

For the year 2020, 5 LMAGs in R10 (Delhi, Kerala, Hyderabad, South Australia, and Tokyo) had conducted 6 or more activities during the pandemic period against the 2 stipulated by MGA. Efforts of these 5 LMAG Chairs had been appreciated by Life Member Committee and the following Chairs had been awarded Life Member Shirt by the Life Member Committee:

- P V Ekande Delhi
- K M M Rao Hyderabad
- Madhu Mangal Kerala
- Don Sinnott South Australia
- Tadashi Takano Tokyo









During the first quarter, 3 new Life Member Affinity Groups had been formed at Singapore, Taipei, and Kolkata Sections. During this year 4 LMC Meetings have been conducted in virtual mode and the 5th meeting is scheduled for 4th June 2021. In order to cater to Life Members of those Sections which do not have LMAGs, and also to encourage these Sections to form LMAGs, Councils

& Sections were requested to nominate Life Member Coordinators from such Councils and Sections to take care of their Life Members. 2 virtual meetings have been organized for these Council/Section Coordinators and the modus operandi discussed in detail. Taipei LMAG was formed immediately after the 1st meeting of these LM Coordinators, followed by Kolkata LMAG.

2 virtual meetings have been conducted by the Region 10 LM Committee. After deliberations, nomination calls were issued for the 2021 Region 10 Awards & Competition. Call for R10 Outstanding Life Member Award was issued on 10th March 2021 with the closing date on 30th May 2021. The awardee will be handed over a "Plaque" and Runner up a "Certificate" during the 2022 R10 AGM.

The call for R10 Life Member Photography Competition was issued on 8th April 2021 with the closing date being 15th June 2021. The first awardee will get a certificate and cash prize of USD200 and the second awardee will get a certificate and cash prize of USD100. Prizes will be awarded by December 2021. All Life Members in Region 10 are eligible to participate. Awardees of both awards will be notified by the end of September 2021.

Region 10 Operation Manual (2019) for life Members was revised during April 2021 and the revised manual is available on the Region 10 website. Region 10 Life Members currently do not have a website, but it is under development. The draft is ready and under review and is likely to be uploaded by June 2021.

# R10 Young Professionals Affinity Group Officer Training Modules

## Mayesha Tafannum, IEEE R10 Young Professionals Social Media Coordinator & Ashwini Appaji, IEEE R10 Young Professionals Affinity Group Coordinator

IEEE Region 10 Young Professionals Committee is committed to bringing together existing and prospective Young Professionals across Region 10 under a single platform by rendering the required volunteer leadership skills in order to run affinity group activities in their local sections successfully. With respect to that goal, the team has designed a series of Affinity Group Training modules and successfully executed the first two events of the series.

On 28th February 2021, the IEEE Region 10 Young Professionals conducted the webinar entitled "IEEE R10 Young Professionals Affinity Group Officer Training Module 1: Events & Best Practices." This event aimed to help the audience organize the whole year event plan in their Sections or Young Professionals Affinity Group with higher quality and manage the local IEEE Young Professionals activities in a better way.

The event was inaugurated with the opening remarks from the IEEE R10 Director, Mr. Deepak Mathur. The event had different segments, including Introduction to Global Young Professionals Activities by Emre Ayranci, Young Professionals Committee Chair 2021, and Introduction to Region 10 Young Professionals Activities by Dr. Saaveethya Sivakumar, R10 Young Professionals Committee Chair 2021. Additionally, there were Sharing Sessions: Young Professionals Affinity Group Best Practices by Dr. Ashwini Appaji, Bangalore Section Young Professionals Affinity Group

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Chair 2020, and Prof. Rentao Gu, Beijing Section Young Professionals Affinity Group Chair 2020. A total of 67 participants attended the session via Cisco Webex, and the event was broadcasted live.



After completing the YP Training Module 1 successfully, on 5th June 2021, the IEEE Region 10 Young Professionals conducted the webinar entitled "IEEE R10 Young Professionals Affinity Group Officer Training Module 2: Event Management & Funding", which aimed to provide a detailed overview of how IEEE events have to be planned and managed in the best way.

The event was graced by the IEEE R10 Director, Mr. Deepak Mathur, who began the session with his opening remarks. It was successfully implemented with informative segments like Event Planning & Building Your Team by José Pinto, IEEE Young Professionals Events Committee Chair; Global YP: Event Funding Process & Application Tips by Takuo Suzuki, IEEE Young Professionals Vice Chair Products and Services; R10 YP: Event Funding Process & Application Tips by Purva Ekatpure, IEEE R10 Young Professionals Information Management and Communications Coordinator; Best Practices for IEEE YP Affinity Groups by Dr. Haroon Rashid, IEEE YP AG Chair Malaysia, and Dr. Sajid Muhaimin Choudhury, IEEE YP AG Chair Bangladesh. At the end of the sessions, there was a Q&A session where the speakers addressed the queries asked by the attendees. The event ended with the closing remarks from Dr. Saaveethya Sivakumar, Chair for IEEE Region 10 Young Professionals Committee. The event had active participation from 171 attendees and was moderated by Mayesha Tafannum, IEEE R10 Young Professionals Social Media Coordinator.

For inquiries please contact: r10yp@ieee.org

For updates regarding all the IEEE Region 10 YP Activities, please follow us on our social media handles: <u>Facebook</u>, <u>Instagram & Linkedin</u>

# Region 10 Webinar Series – R10Talk

## **R10Talk Committee**

One of the new initiatives of IEEE Region 10 for this year is a Webinar series named "R10Talk". The tagline of R10Talk "In Pursuit of Excellence" very well describes the purpose of this initiative so as to achieve excellence through gaining and sharing knowledge. R10Talk is a joint effort by



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R10 Industry Relations Committee, R10 Professional Activities Committee, R10 Young Professionals Committee, R10 Women in Engineering Committee, and R10 Student Activities Committee. Right from the first session, the R10Talk has been a big hit with a large number of IEEE members registering for the webinars. All talks are delivered by eminent speakers via WebEx and are live-streamed on social media. The talks are also recorded and made available on the R10 YouTube channel (https://www.youtube.com/user/IEEERegion10).

The R10Talk initiative was launched by R10 Director Mr. Deepak Mathur and the inaugural Webinar entitled "Innovation and Funding" was delivered on Saturday, 3rd April 2021 by Mr. Murali Bukkapatnam, Founder and Chairperson of Volksy Technologies, a venture development firm and a builder startup studio credited for nurturing and mentoring many subsidiaries like Prowidor, Houzkare, and Gdhworkforce. 250 attendees attended this thought-provoking talk. A Group photo was taken at the webinar "Innovation and Funding" delivered by Mr. Murali Bukkapatnam.



In April 2021, R10Talk joined hands with the IEEE Power & Energy Society to celebrate PES Day and organized a special Webinar under the theme "Opportunities and Challenges of Integration of Renewable Energy in Grids". Two talks were delivered; the first by Professor Cornelis (Keith) Kikkert, Adjunct A/Prof at the University of Adelaide and James Cook University, Australia, and the second by Engr. Tahir Saleem Shaikh, CEO, United Engineering Services, Karachi, Pakistan. Both talks were hailed with very positive feedback from a good number of the attendees.



A group photo was taken at the webinar "Opportunities and Challenges of Integration of Renewable Energy in Grids" delivered by Prof. Cornelis (Keith) Kikkert and Engr. Tahir Saleem Shaikh.

On 22nd May 2021, R10Talk arranged a webinar on "Risks and Opportunities" delivered by Prof. Chandima Gomes, Professor of High Voltage Engineering, Chair for ESKOM Power Plant Engineering Institute-HVAC, and Director of Centre of Excellence on High Voltage Engineering, University of the Witwatersrand, South Africa.

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Group photo taken at the webinar "Risks and Opportunities" delivered by Prof. Chandima Gomes.

In June 2021, two Webinars are scheduled. The first one is on "Quantum encryption - Overview, use cases, and adoption" by Ms. Saritha N. Auti, Cyber Security Practitioners on 12th June 2021. And the second one is on "Professional Ethics and Getting Ahead" by Mr. Terence Tan, Program Coordinator for Computing programs at Curtin University, Malaysia, on Saturday, 26th June 2021. Many other distinguished speakers have been invited for talks for the rest of 2021. Please check the R10 website (https://www.ieeer10.org) for the upcoming webinars.

A strong team of following volunteers is striving hard to bring good quality webinars for members:

- Prof. Takao Onoye, R10 Conferences & Seminars Committee Chair
- Mr. Sanjay Kar Chowdhury, R10 Industry Relations Committee Chair
- Prof. Parkash Lohana, R10 Professional Activities Committee Chair
- Ms. Emi-Yano, R10 Women-in-Engineering Committee Chair
- Dr. Saaveethya Sivakumar, R10 Young Professionals Committee Chair
- Prof. Jennifer Dela Cruz, R10 Student Activities Chair
- Dr. Akila Wijethunge, R10Talk Coordinator
- Dr. Khanita Duangchaemakarn, R10Talk Tech leader & Content Editor
- Mr. Sai Prashanth, R10Talk Technical Arrangements
- Mr. Ashvanth B., R10Talk Graphics Design
- Mr. Hisham Neyaz, R10Talk Graphics Design
- Ms. Renu Guntur, R10Talk Content writer
- Dr. Zia Ahmed, R10Talk Advisor

Potential speakers are welcome to contact Prof Takao Onoye (onoye@ist.osaka-u.ac.jp) if they wish to give a talk in IEEE R10Talk webinar series.

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# 6 . SECTION/ SUBSECTION/ COUNCIL ACTIVITIES

# **IEEE Bahawalpur Subsection**

# **IEEE Membership Development Drive**

# Khan Bahadar Khattak, General Secretary for IEEE Bahawalpur Section

During the first Annual General Meeting of IEEE Bahawalpur Subsection on 24th December 2020, a membership development drive was announced with a 75% discount on the IEEE membership fee. Engr. Dr. Muhammad Ali Qureshi announced this incentive as the Chairperson of IEEE Bahawalpur Subsection in collaboration with IEEE UCET IUB Students Branch. Members from all the students' branches under Bahawalpur Subsection were capable to hold this incentive, including UCET IUB Students Branch, UCET BZU Students Branch, KFUEIT Students Branch, MNS UET Multan & NFC Multan Students Branch.

Chapter advisors and the executive committee of the student branches got a 100% discount on membership and all new members got a 75% discount on IEEE membership. Engr. Muhammad Usman Zafar, Chair for Membership Development committee IEEE Bahawalpur Subsection was made a focal person for this membership drive. During this drive, we achieved the IEEE membership count of 80 members. These members are upgraded with the following distribution.

IEEE Professional Members: 5
IEEE Graduate Student Members: 50

IEEE Students Member: 25

Moreover, most of the new members are students of MS and Ph.D. Engineering programs. This IEEE membership will help them in their studies and career as well. With the increased number of these IEEE student volunteers and professionals, IEEE Bahawalpur Subsection is committed to contributing more effectively toward the goals of IEEE.



# IEEE Hyderabad Section

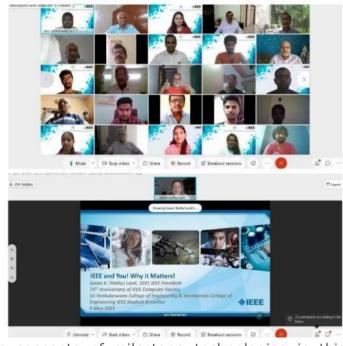
# **IEEE Hyderabad Section Activities**

# Sree Laskhmi Gundebommu, Newsletter Editor for IEEE Hyderabad Section

# IEEE Hyderabad Section SAC Adhithyam 2021: IEEE Hyderabad Section is the best hub for inspiration, association, and information in technical and executive features. Considering the COVID19 pandemic situations, IEEE Hyderabad Section Student Activities Committee has taken an initiation of Zonal Congresses. The first Zonal Congress was Warangal Congress. It is named Adithyam'21 and was held on 1st May 2021. The congress was planned with technical and non-technical events. It comprises of the speaker, keynote sessions, cultural, competitions, as well as

The main motto of this first virtual Zonal Congress is to ignite students and delegates

networking sessions for the young generation.



with knowledgeable sessions which inbuilt the concepts of milestone technologies in this pandemic situation. This congress was like an inventive conceptual event with lots of information and entertainment which helps every student to bring out their introvert ideology to the extrovert businesses or startups. The congress was attended by 200 participants.

**IEEE Computer Society SAMEEKSHA 2021**: The first edition of SAMEEKSHA 2021 was organized by IEEE Computer Society under IEEE Vardhman College of Engineering Student Branch and IEEE Sri Venkateshwara College of Engineering Student Branch, in collaborative support with IEEE Hyderabad Section SAC and CS Hyderabad Chapters, as part of the 75th Computer Society Anniversary Celebration on 8th and 9th May 2021. The mission of IEEE Computer Society is to promote the usage of technology to influence the quality of life in society. This event brought the researchers, academicians, and industries from various technical domains such as computer science, electrical engineering, life sciences, electronics, communication engineering, biomedical engineering, and technology management together to promote high quality and novel research findings. Altogether 150 attendees participated in the event.

# **IEEE Islamabad Section**

# **First Virtual Branch Chair Meeting**

# Moiz Ahmad, Section Student Representative for IEEE Islamabad Section

The first branch chair meeting was successfully organized in order to make the newly appointed Student Branch Chairs familiar with the day-to-day activities of IEEE. The first branch chair meeting was organized virtually due to Covid-19 on Thursday, 20th May 2021 at 5:30 pm (GMT+5). The event started with the welcome note and a brief introduction about the activities

conducted in the past year by the SSR. After that, a detailed introduction about the Student Activities Committee was given in order for the attendees to get familiarize with the SAC Team. Since it was a virtual meetup, the Student Branch Chairs along with their Affinity Group Chairs, Student Branch Chapter Chairs as well as their executive body were invited to the meeting. Next, the Membership Development Coordinators of the SAC Team proposed their plan on how they are looking forward to increasing the IEEE membership followed by the revamping of the dormant Student Branches. Afterward, Mr. Usman, ASSR of IEEE Islamabad Section gave a short overview of the Peshawar Subsection, followed by a Question and Answer session. After that Student Activities Committee Chair, Mr. Muzamil Mahmod presided over the meeting. He gave an overview on how it is important to report the officers of the Student Branches on vTools followed by the procedure to report the officers on vTools. Also, Mr. Muzamil gave a detailed introduction about event reporting and the steps to report the event on vTools. Finally, a detailed Question and Answer session was held in which all the queries of the Chairs were entertained. The meeting ended with the ending note of the SAC Chair and the SSR followed by a virtual group photo in the end. Almost 45 participants of different Student Branches attended the meeting.



# IEEE Japan Council

# Happy 1st Anniversary of IEEE Engineer Spotlight

# Mayumi Suzuki, EA Coordinator for IEEE Japan Council

In Japan, newly began the EA initiatives from 2020 in 9 Sections within the Japan Council. Japanese Live Webinar "IEEE Engineer Spotlight" started in May 2020 and was held every month conducted by Japan Council. It aims to provide online educational content in the local language (Japanese) and provide added values to IEEE members and contribute to societies. Almost all webinars are available to the public on-demand afterward.







- IEEE会長秘話-



IEEE Past President (2021) 名城大学大学院理工学研究科 早稲田大学特命教授 福田敏男



Prof. Toshio Fukuda, 2021 IEEE Past President, gave the 1st anniversary talk (13th in the series) entitled "Robots, the World, and Me - the Secret Stories of the IEEE President" on 17th April 2021. All 311 participants learned about his unique personality, as well as the importance and initiative of the community. The moderator was Prof. Akinori Nishihara, 2021 R10 Past Director. This will be continued to deliver exciting lectures and panels on cutting-edge technology and career development.

# **IEEE Karachi Section**

Webinar on "Writing A Successful Funding Proposal to bring Academia, Industry, and Government Closer"

**& M. Rafay Shaikh, Section Student Representative for IEEE Karachi Section** 

IEEE Karachi Section has started talk series on "Indigenous Research Outcome to Impact Industry and Society". Under this initiative, a collaborative event was jointly organized on 9th April 2021 by IEEE Karachi Section, HEC, Lahore College Women University, Sindh Agriculture University Tando Jam, and IOBM Karachi. In the opening remarks, Prof. Dr. Bushra Mirza, Vice-Chancellor of LCWU appreciated the efforts of IEEE in arranging this seminar. She said such knowledge of experienced speakers will help young researchers to write good research proposals for funding and research grants. Such events will be very productive and fruitful in the long run to develop collaborative research. Prof. BS Chowdhry, Chair of IEEE Karachi Section introduced the main speaker of the event Dr. Iftikhar Ali, Associate Professor in the Mehran University of Engineering and Technology Jamshoro having JCR impact factor of more than 200 and 40 peer-reviewed international publications and books, who talked about "writing successful funding project".

His talk highlighted the importance of getting funding in the current scenario for the faculty and students, the general contents of the research proposal for funding, and various ways of improving the proposal to increase the chances of success. He emphasized planning the proposal with the consultation of the industry and society, leading to bringing acute challenges faced by our industry and society. He also talked about how to improve the proposal objectives and align it with the expertise of the investigators and by making them measurable and attainable in the proposed time. Dr. Iftikhar also mentioned the importance of writing participation of the project team members including the investigators, students, and academic and industrial collaborators to strengthen the commitment made by the team to resolve the issue, as well as highlighting the skills of the team. The use of different software while analyzing the results was also discussed during the talk.



Dr. Iftikhar also stressed the role of universities in order to support their faculty and staff for bridging the gap between the industry and researchers through various dissemination activities and to support their faculty by improving the systematic approach for conducting the research on campus and facilitating them for the purchase of equipment and utilization of funds to attain the proposed objectives in time. Prof Dr. Fateh Mohammad Mari, Vice Chancellor SAU, Tandojam gave a message that faculty must avail opportunities of getting research funding and must solve national problems the country is facing. Dr. Tariq Rahim Soomro, Rector of IOBM, and Vice-Chair of IEEE Karachi Section thanked all the speakers, organizers, and researchers from more than 20 universities of the country (total attendees 150) for taking such a keen interest in the event.

# **IEEE Kerala Section**

# **IEEE PES Kerala Chapter Activities**

# Alina Thomas Thanangadan, Global Publicity Outreach Coordinator for IEEE Kerala Section

IEEE PES Kerala Chapter organized an offline meet-up at Ashtamudi Lake, Kollam, to celebrate and thank the Student Leadership Team 2020 for their service and contributions towards the Chapter on 11th April 2021, in the presence of IEEE PES Kerala Chapter ExeCom members, IEEE PES YP Kerala Core Team, and IEEE PES Student Leadership Team 2021. The meet-up was attended by 40 members. In order to give students an industrial experience, IEEE PES YP Kerala organized a virtual industrial visit to Innoses on 16th April 2021. There were 66 participants in the event. The WiP Community organized Women of Wisdom, WOW 2.0, a tech talk series. Ms. Chaitali Naik, Chair for PES Day 2021, and Ms. Latha Chambrakalam, Vice-President, Robert Bosch Engineering and



Business Solutions Ltd. handled the sessions organized on 24th April 2021 and 16th May 2021 respectively. There were 120 and 75 participants respectively for the two sessions. IEEE PES Kerala Chapter Student Team and our WiP community also organized Orion 2.0, a 6-day virtual technical extravaganza, exclusively for IEEE & IEEE PES Student members of Kerala from 27th May to 1st June 2021, with 1300 registrations from across the state.

# **IEEE Kolkata Section**

#### **Recent Activities of Kolkata Section**

# **Tridibesh Nag, Newsletter Committee Chair for IEEE Kolkata Section**

**Webinar on Second Edition of the Talk Series "Dare to Dream"**: On 3rd April 2021, at 5:00 pm (IST) IEEE Kolkata Section and WIE AG Kolkata Section jointly organized the second edition of Talk Series "Dare to Dream" on Indian Women who have ventured into STEM careers more than 50 years back, attended by 95 participants.

Esteemed speaker: Dr. Suprakash C. Roy. He was Professor and Chairman, Department of Physics at Bose Institute, Kolkata.

The topic of the lecture was: "Life and Work of Dr. Bibha Chowdhuri".

**Webinar on How to Write an Effective Research Paper**: On 16th April 2021, at 11:00 am (IST) IEEE Student Branch of Dr. B. C. Roy Engineering College, Durgapur in association with the IEEE Kolkata Section organized a talk attended by 98 participants.

Esteemed Speaker: Prof. N Sundararajan Life Fellow of IEEE Professor (Retd.) School of Electrical and Electronic Engineering, NanyangTechnological University (NTU), Singapore.

Webinar on Flexible Hybrid Electronics 2.0: On 17th April 2021, Saturday, 7.30 pm (IST) ED Heritage Institute of Technology SBC and IEEE EDS Center of Excellence in association with IEEE Kolkata Section organized a DL Program, attended by 96 participants.

Esteemed Speaker: Professor Subramanian S. Iyer, Distinguished Professor who holds the Charles P. Reames Endowed Chair in the Electrical Engineering Department and a joint appointment in the Materials Science and Engineering Department at the University of California at Los Angeles.



Webinar on Re-Thinking Computing with Neuro-inspired Learning: Devices, Circuits, and systems: On 1st May 2021, Saturday, 7.30 pm (IST) ED Heritage Institute of Technology SBC and IEEE EDS Center of Excellence in association with IEEE Kolkata Section organized a DL Program, attended by 95 participants.

Esteemed Speaker: Prof. Kaushik Roy, Purdue University.

**Webinar on 3D Integration - Above and Beyond Moore's Law**: On 8th May 2021, Saturday, at 7 p.m. IST IEEE EDS Center of Excellence, Heritage Institute of Technology in association with the IEEE EDS Kolkata Chapter and IEEE EDS HITK SBC organized a 'Distinguished Lecture', attended by 88 participants.

**Esteemed Speaker: Prof.** Jesus A. delAlamo, Professor of Electrical Engineering in the Department of Electrical Engineering and Computer Science at Massachusetts Institute of Technology, and Director of the Microsystems Technology Laboratories.

**Webinar on Understanding Black Holes**: On 22nd May 2021, Saturday, 6 pm (IST), IEEE Kolkata Section organized a Lecture Program which was attended by 103 participants.

Esteemed Speaker: Dr. Somak Ray Chaudhury, Director, Inter-University Centre for Astronomy and Astrophysics (IUCAA), Pune.

**Webinar on Computing** with p-Bits: Between a Bit and a q-Bit: On 29th May 2021, Saturday, 7.30 pm (IST) ED Heritage Institute of Technology SBC and IEEE EDS Center of Excellence in association with IEEE Kolkata Section organized a DL Program, attended by 179 participants.

Esteemed Speaker: Professor Supriyo Datta, Purdue University

# **IEEE Madras Section**

# **IEEE Madras Section Annual Meet 2021 Kumarappan N, Chair for IEEE Madras Section**

#### **IEEE Madras Section Annual Meet 2021**

IEEE Madras Section organized the Annual Meet on 20th February 2021 at Hotel Savera, where several esteemed personalities and young talents of the committee were appreciated for their outstanding efforts. The IEEE Madras Section is one of the vibrant sections in India, which is evident from the membership growth and the various activities conducted. The program started with a welcome address given by Dr. N.Kumarappan, IEEE Madras Section Chairman who shared his thoughts and gave a motivational speech. The various awards include 'Best Student Branch', 'Best Student Volunteer', 'Best Branch Counsellor', 'Best Researcher Award', and 'Best WIE Volunteer' award. Around 100 participants attended the event.

Also, the Life-Time Achievement Award was given to Prof. Dr. S. Salivahanan - Vice-Chancellor of Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology, Prof. Dr. T. Thyagarajan - Dean of MIT campus, Anna University, and Dr. M. Ponnavaikko - Former Vice-Chancellor of Bharathiar University. Dr. D. Devaraj, IEEE Madras Section secretary gave out the vote of thanks virtually marking the closure of the IEEE Madras Annual General Meeting celebration.

# Webinar on "Challenges in an Industry - Innovations through Low-Cost Automation"

IEEE Madras Section Students Activity Committee and Thiagarajar College of Engineering, Madurai organized a Webinar on 'Challenges in an Industry - Innovations through Low-Cost Automation' on 21st April 2021. About 289 participants from various engineering colleges in Tamilnadu including IITs as well as from industries attended. The Webinar was felicitated by Dr. N. Kumarappan, Chairman for IEEE Madras Section. In his felicitation address, he highlighted the challenges in providing industrial automation. He also highlighted the various financial support and details of awards given by the IEEE Madras Section. Dr. R. Ramarathinam, Vice-Chair, Industrial Relations, IEEE Madras Section also felicitated the Webinar. The session was handled by Mr. Rajesh Rajakumar, General Manager, Department of Vehicle Process Engineering, Renault Nissan Automotive India Private Limited, Chennai. He delivered the lecture on "Challenges in an Industry - Innovations through Low-Cost Automation".





#### **Student Project Funding (SPF) 2020 - 2021**

There were about 546 projects submitted and 63 projects have been extended funding support over a period of 11 years. This year 48 projects were received, out of which 21 projects were short-listed. A pre-final selection demo was conducted online on 5th December 2020 by the Jury. Student teams submitted their project report by 18th March 2021 which was approved by their Guide. This report was studied by Jury members before the final assessment of IEEE Madras Section SPF 2020-21. The final validation program was conducted on 17th April 2021 through virtual mode. Seventeen projects were presented for the live demo. Finally, six projects were found suitable for certification and a cash award of Rs.15,000, Rs.10,000 and Rs.5,000 for first, second, and third places respectively. The Jury members who supported the selection process were Dr. V. Kamaraj - Prof. Dept. of EEE. SSN College of Engineering, Dr. D. Vydeki - Associate Prof./SENSE, VIT Chennai, Dr. Sangeetha R. G. - Associate Prof. Senior, VIT, Chennai, A. Malarkodi - NIOT, Ministry of Earth Sciences, Chennai, and Dr. Satish R. - AROBOT, Chennai.

# **IEEE Malabar Subsection**

Malabar Subsection Activities during Lockdown Sabiq P V, Chair for IEEE Malabar Subsection



IEEE Malabar Subsection in association with IEEE Malabar Hub is organizing a Weekly Webinar Series every Thursday at 5.30 PM. The event started from 4th June 2020 onwards and still continuing. A total of 51 webinars were organized by the Subsection to date in which resource persons from different parts of the country as well as from outside the country delivered talks. The speaker for the webinars that was conducted from January 2021 onwards are listed below. On average 60 to 70 participants used to attend the webinar.

An online FDP on Recent Trends in Medical Cybernetics was conducted by the Department of Electrical Engineering, NIT Calicut jointly sponsored by IEEE Malabar Subsection during 22nd to 26th February 2021. The resource persons for the FDP are Dr. Paul K Joseph - Professor, NITC, Dr. Sudhish N. George - Assistant Professor, NITC, Dr. S. Ramakrishnan - Professor, IITM, Dr. Pournami PN - Assistant Professor, NITC, Dr. Varadhan S K M - Assistant Professor, IITM, Dr. Deepak Mishra - Associate Professor and Head, IIST, TVM, Dr.Retheep Raj - Assistant Professor, NSSCE Palakkad and Dr. Subha D.P - Associate Professor, NITC. A total of 32 faculties from various academic institutes have attended the FDP.

The ShEra event was conducted on 10th March 2021 in the auditorium of NIT Calicut jointly conducted by NIT Calicut and IEEE Malabar Subsection and WIE to honor and encourage the women community in the college. The event was inaugurated by Dr. PS Sathidevi, Director in charge, NIT Calicut. The meeting was attended by around 90 participants.

MyEMBS Webina

# **IEEE Malaysia Section**

# MyEMBS Webinar: Distinguished Lecturer Program and Professional Talk Siti Anom Ahmad, Chair for IEEE Malaysia Section EMBS Chapter & Ezreen Farina Shair, Secretary for IEEE Malaysia Section EMBS Chapter

The IEEE-EMBS Malaysia Chapter has successfully organized an online distinguished lecturer program and professional talk on 28th April 2021. The program invited the distinguished lecturer of EMBS, Prof. Dr. Almir Badnjevic from the University of Sarajevo, Bosnia to talk on "Legal Metrology Framework for Medical Devices". The introduction of the metrology concepts into medical devices was aimed to protect the patients, increases the accuracy and reliability of the

diagnosis and treatments, and reduces maintenance costs in

healthcare institutions.

The program also invited Ms. Gayathri Thanabalan who is the Associate Director of ECRI Asia Pacific Regional Office to give a talk on "Improving Medical Device Design: Discoveries from ECRI's International Laboratory Testing Experiences". This talk shared how ECRI evaluation work has led to some manufacturers improving their medical equipment design to enhance patients' safety. The program was attended by about 60 participants (members and non-IEEE members). The recorded session can be viewed at https://www.facebook.com/myembs

# members). The recorded session can be viewed at https://www.facebook.com/myembs Role of Robotics and Automation during Covid-19 Pandemic Mohamed Khan Aftab Khan, Chair for IEEE Malaysia Section RAS Chapter

COVID-19 provided a strong push to roll out the usage of robots and research on robotics and automation. COVID-19 has demonstrated the importance of the robotics and automation role, which allows the economy and life to continue as usual – as much as possible – during pandemics. Building the necessary infrastructure to support a technology-driven world and stay current in the latest technology will be essential for any country to remain competitive in a pre-pandemic and post-pandemic world, as well as take a human-centered and inclusive approach to technology governance. In this webinar on 'Role of Robotics and Automation during Covid-19



Pandemic', the moderator was Dr. Mohammad Nazrin, UNIMAP and the speakers are Dr. Mohamed Khan, UCSI University, and Dr. Syed Saad, UTP. The event was conducted on 1st April 2021 from 2 pm to 4 pm. A total of 200 participants attended this event online via the Google Meet platform.

# **IEEE SPS Malaysia Section Activities**

# **Usman Ullah Sheikh, Committee Member for IEEE Malaysia Section SPS Chapter**

The IEEE SPS Malaysia Chapter organized the 2021 IEEE Symposium on Acoustic, Speech, and Signal Processing on 27th March 2021 attended by 62 participants. The society also co-organized

several webinars such as Sensor Placement Based on Risk Maps with Universiti Teknologi Petronas on 10th March 2021. The speaker was Assoc. Prof. Dr. Vijanth Sagayan and was attended by 15 attendees. Assoc. Prof. Kok Sheik Wong conducted a webinar on Data Hiding attended by 30 attendees on 14th April 2021. Dr. Siti Armiza from Universiti Teknologi Malaysia was the speaker for the Electroencephalogram Stress Level Classification webinar attended by 25 participants on 19th May 2021. Prof. Dr. R. Logeswaran gave an international webinar on Research Perspectives in Data Science on 12th April 2021 and was attended by 76 participants. A 1-day Python Programming competition was organized with the APU Student Branch that was participated by 103 participants on 1st May 2021.

# **IEEE Pune Section**

# **IEEE Pune Section Activities**

# Meghna Das, Newsletter Team Lead for IEEE Pune Section

IEEE Education Society Pune Section had organized a webinar on "Making learning interesting through Educational Games". Dr. Sandeep Athavale was the guest speaker and it was attended by 80 participants. Dr. Sandeep holds a Ph.D. in Educational Game Design from IIT Bombay. He is a



visiting faculty at NID, IDC IIT Bombay, an advisor to PMI, and conducts FDPs under the Atal program of GOI. The event was held on 13th March 2021 where the speaker explained how the games can be made interesting and discussed the aspects which make them worth playing and worth learning. This type of experiential, addictive learning improves decision-making skills and increases the processing speed and spatial skills of the brain.

IEEE Pune Section's Special Interest Group on Healthcare, in association with IEEE Computer Society, had organized "Expert Talk Sessions" on 31st March 2021 via WebEx. The event was hosted by Mr. Dinanath Kholkar, Chair, Industry Relations, and

Membership Development, IEEE Pune Section. The session was organized by Dr. Amar Buchade, Chair of SIG Healthcare and Treasurer, IEEE Pune Section, and Dr. Neha Sharma, Secretary, IEEE Pune Section. In the first talk session, Mr. Vinay Kulkarni, Distinguished Chief Scientist at TCS Research, Pune spoke about the "Digital Twins for evidence-based decision making in the face of uncertainty". The second talk was by Dr. Shirish Darak, Senior Research Fellow at Prayas who spoke on "Health beyond Healthcare". Following this, there was a panel discussion which was moderated by Dr. Rajesh Ingle, Chair of Computer Society at IEEE Pune Section. The event attendance was 90.

IEEE Pune Section had organized a Blog Writing Competition, "Blogathon 1.0" on 5th April 2021. This competition was broadly divided into two parts i.e. technical and non-technical. For each part four topics were given. The Student Activities Committee had received 100 entries and the results were announced later. A total of six blogs, three each from technical and non-technical were selected for publication in the IEEE Pune Section Newsletter. As rightly said by Edward Bulwer-Lytton "The pen is mightier than the sword". It was indeed a fun event where the tech

geeks and other young writers penned down their thoughts and expressed their colorful and vibrant imaginations.

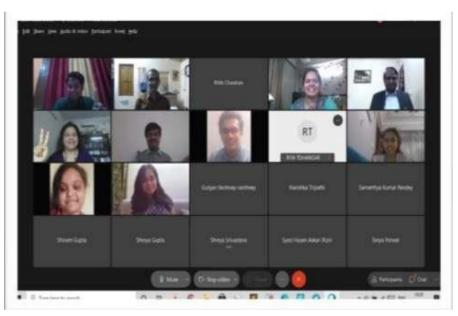
IEEE Education Society Pune Section had organized a webinar session on 'Nuances of Scientific Publishing' on 8th April 2021. Mr. Aninda Bose was the speaker at this event which was attended by 100 participants. He is a senior publishing editor, global team lead for the scientific content. The event included what publishing is, why it is used and how, the ethical issues involved during publishing, the types of books used for publishing, author services, and publishing tools involved in this process. The speaker stated the importance of the title, self-plagiarism checking, permission asking for reprints, discussion, and mentioned references. The session later concluded with a Q&A session with the attendees.

# **IEEE Uttar Pradesh Section**

**Recent Activities of Uttar Pradesh Section** 

**Dilip Kumar Sharma, Publication and Section History Committee Chair for IEEE Uttar Pradesh Section** 

IEEE JSSATEN Student Branch has conducted the "INAUGURATION CEREMONY OF IEEE JSSATEN WIE" in collaboration with IEEE Uttar Pradesh Section on 23rd May 2021. This event is hosted by Dr. Gunjan Varshney (Branch Counsellor, IEEE JSSATEN Student Branch) on an online platform Cisco WebEx. The theme selected for this virtual event was "Research and Innovation for Women Empowerment". The Chief Guest of this event was Dr. Celia Shahnaz (Professor, BUET,



Dhaka, Bangladesh, and presently Founder & Chair, IEEE SPS and IAS Bangladesh Chapters) and the Guest of Honour was Dr. H.R. Mahadevaswamy (Joint Director, TED, JSSMVP, Mysuru, India). The mentor of the IEEE JSSATEN Student Branch, Dr. Gurulingappa M Patil, Principal at JSSATE, Noida, India, was also present.

The event started with the introduction of our chief guest, guest of honor, and mentor of the society followed by the lighting of the lamp and Saraswati Vandana. After that Dr. Varshney talked about the achievements of projects accomplished by the Student Branch. After the welcome note, the principal Dr. Gurulingappa M Patil welcomed the guests and appreciated the participants taking out their precious time to celebrate this event. He also congratulated IEEE Student Branch for their achievements, and encouraged other students to achieve excellence in the future. After that, the host invited the Guest of Honor to share his valuable views, and he acknowledged the efforts & appreciated the members of the IEEE JSSATEN Student Branch for how they conducted the online conference. He talked about the gap between urban and rural women, technology,

education, financial condition, their growth, and how to create chances for them in organizational chapters, how the involvement of women will boost the GDP of India, and many more. Later, the chief guest was invited to share her views on the topic "Research and Innovation in Empowerment of Women" and her experience of being part of the IEEE Section& IEEE WIE Chapter. Then, she talked about recent advancements in the field of signal processing, technologies and how can one help COVID19 patients in this hard time. After that, Dr. Sanjeev Kumar Sharma, Professor & Head of Electrical Engineering Department, presented a vote of thanks to all the honorable guests, mentors, hosts, members, and all participants for making this day more valuable. IEEE JSSATEN Student Branch will continue working under the constant and relentless guidance from the IEEE Uttar Pradesh Section.

# IEEE Western Australia Section

IEEE Western Australia IES Chapter 2021 Annual Event
Muhammad Hayat, Newsletter Editor for IEEE Western Australia Section



IEEE Western Australia Industrial Electronics Society (IES) Chapter organized their Annual Technical Seminar, Networking, and Award Event on 31st March 2021. The event was organized at the Pan Pacific Hotel, Perth, Australia, and was well attended by IEEE members with 40 registrations. One of the guest speakers of the event was Prof. Peter Klinken (Chief Scientist of Western Australia) who gave an interesting presentation on major challenges and opportunities for Western Australia in the rapidly evolving 3rd and 4th industrial revolutions. The other guest speakers were Dr. Martina Calais (Murdoch University) and David Edwards (Horizon Power) who gave a joint presentation on a collaborative research project between Murdoch University and Horizon Power on the integration of distributed energy resources in a remote town of Western Australia, and more specifically the hosting capacity of rooftop photovoltaic systems in the network of this town.

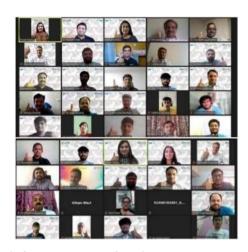
Before these talks, two IES leaders, Prof. Yousef Ibrahim (IES Vice-President for Membership), and Prof. Roberto Oboe (IES Vice-President for Technical Activities) joined the event online from Melbourne and Italy and gave impressive presentations on the activities of IES. The Western Australia Chapter also presented their 2020 awards to Stuart Ashley Bird (Best Undergraduate Award), Dr. Hasanain Al-Hilfi (Outstanding Young Researcher Award), and A/Prof. Farhad Shahnia (Outstanding Engineer Award). This annual event was a great success, with the guest speakers' interesting presentations, recognition of members' achievements through awards, and continued by a networking opportunity and a social dinner.

# 7. AFFINITY GROUP ACTIVITIES

# IEEE YP Gujarat

Campus to Corporate Young Professionals Mentor - Mentee Camp Foram Rajdev, Chair for IEEE YP Gujarat

IEEE Young Professionals Gujarat Section and Marwadi University Rajkot have been delighted to host the "Campus to Corporate Mentor-Mentee Camp" virtually on 1st May 2021 in two sessions of five hours. The event had more than 450 registrations. The event was exclusively planned for Engineering students and Young Professionals. Speakers from diverse fields were invited to share



their knowledge on different domains: ML/AI, BigData, Cloud Computing and DevOps, Software Development, Mobile Application Development, and Security. These knowledge-sharing sessions were followed by breakout roomsmentoring. The purpose of the event was to inspire young minds by providing them with an opportunity to network one-on-one with the domain experts and share insights on what skill sets are required to be industry-ready in this competitive world of professionals.

# IEEE YP Malaysia

Webinar on "How to write a technical paper in IEEE format " and Photonics Lecture Series: Current Trends in Surface Plasmon Resonance Optical Sensors

Yasmin Mumtaz Ahmad, ExComm Strategic Communication for IEEE YP Malaysia



The Library of Malaysian-German Institute together with the Department of Communication Engineering, Faculty of Electrical Engineering UTM JB, and IEEE YP Malaysia has organized a Webinar entitled how to write a technical paper according to IEEE format. The Webinar was delivered by an Electrical Engineering Senior Lecturer, Dr. Osman Ayop which was held on 8th January 2021. A total of 08 teachers participated in 02 hours sharing sessions. Dr. Alia Sheh Omar presented current trends in 'Surface Plasmon Resonance Optical Sensors' for the Photonics Lecture Series 02/2021 which was held on 19th May 2021. A total of 18 participants participated in this webinar.

# IEEE YP Sri Lanka

# **StudPro - Step To Your Career**

# Nuwini Chamindi, Vice-Chair for IEEE YP Sri Lanka

StudPro by IEEE YP SL is an event for graduates/ undergraduates throughout Sri Lanka to expose their talents to the corporate world after their degree. For the 5th year, the StudPro workshop series completed its two workshops for the year, "Creating A Competitive Resume" and "Groom Yourself to Nail Your Dream Job" on the 8th and 14th May 2021 virtually. This program is supported by IEEE R10 and IEEE R10 YP. Dilina Gunathilake - Global Head of Talent Acquisition at Fortude, Sasini Withana - Senior Executive HR at Fortude and Lasitha



Liyanaarachchi - Senior Category Manager SCM at Dialog Axiata, graced the "Creating A Competitive Resume" session as the speakers, focusing on "how undergraduates should curate their CV". "Groom Yourself to Nail Your Dream Job" session was conducted to spread interview skills awareness, which was conducted by Kumara Galhenage, DGM – Group Talent Management at Brandix. These sessions attracted more than 130 participants.

# IEEE WIE Sendai

# The 4th Anniversary Event of IEEE WIE Sendai "Polish Your Own Color Rough! Shining My Career"

# Miho Shidahara, Secretary for IEEE WIE Sendai

The 4th anniversary event of IEEE Sendai Section WIE Affinity Group entitled "Polish your own color rough! Shining my career" was held through the virtual platform of zoom Webinar on 29th May 2021. The event consisted of two parts.

In the first part, the following two special talks were presented:



- "Career of Accelerator Engineer" (Mrs. Misako Miwa, Tohoku University)



In the second part, a beauty seminar by Kao Corporation, a Japanese cosmetic company was provided. They taught not only skincare and makeup tips but also points that meet current needs such as online meetings and when wearing masks. A total of 30 attendees were encouraged by the career talk and were happy to learn to polish their own beauty via a make-up seminar.

# IEEE LMAG Kansai

# Introduction to the Study of Shinise Masaaki Kobayashi, Chair for IEEE LMAG Kansai

IEEE LMAG Kansai held a lecture (LMAG Salon) online on 20th April 2021 with 13 participants. A lecture titled "Introduction to the study of Shinise" was given by Mr. Yoichiro Maekawa, who is a Visiting Professor at the Kochi University of Technology and a former member of the Board of Directors at Panasonic.



The Japanese word Shinise means a firm or company with a long history, some of which have continued to exist for more than a thousand years in Japan. Their concept and management style are a focus point in Japan's business world.

After a lively discussion from very diverse viewpoints, most participants shared the idea that the examples of "Shinise" are very helpful for Life Members to emphasize and support young engineers toward developing fruitful careers.

LMAG Kansai plans to continue a series of this kind of online lecture, under the severe control measures introduced by the Government due to the COVI D-19 pandemic.

# IEEE LMAG Sendai

# Sendai Section LMAG Meetings Koji Mizuno, Chair for IEEE LMAG Sendai

IEEE Sendai Section LMAG held the online General Assembly on 15th May 2021. Then, the following Special Lecture Meeting was held to study the future important technology of "Quantum Computing", attended by 89 participants.

- "Optical Integrated Circuit Devices for Quantum Computing" (Dr. Nobuyuki Matsuda, Tohoku University)



The method using photons in a quantum computer is attracting attention because it enables large-scale computation with a relatively small resource of several tens of photons. The perspective of the device technology for photon computing along with its applications was done.

- "Future of Information Science Changed by Quantum Annealing" (Dr. Masayuki Ohzeki, Tohoku University).

Quantum annealing is attracting attention as a solution to the combinatorial optimization problem that has devoted enormous resources to derive optimal selection from an infinite number of possible candidates. From now on, a user can get optimal selection immediately if the information on a problem is given to the quantum annealing machine.

# IEEE LMAG Tokyo

Commemorative Lecture Meeting on IEEE Milestone "Physical Contact Push-Pull Technology for Fiber Optic Connectors"

Naohisa Ohta, Vice-Chair for IEEE LMAG Tokyo



Dr. Sugita giving a lecture on Subscriber Connector.

Dr. Nagasawa giving a remote lecture on Multiple Fiber Push-On/Pull-Off (MPO) Connector.

A commemorative lecture meeting on the IEEE Milestone was held from 11:00am to 12:00pm on 5th March 2021, sponsored by IEEE Tokyo Section TPC and IEEE LMAG Tokyo, following the dedication ceremony. The technology for fiber optic connectors developed by NTT Corp. was certificated as the 38th IEEE Milestone in Japan. The event was held in a hybrid style (on-site meeting with online participation) at Palace Hotel, Tokyo with 271 attendees. Two lectures were given on the standardized technology that advanced the performance and reliability of fiber optic connectors. Dr. Etsuji Sugita, a former Research Director of Boundary Region Research Laboratory, NTT, gave a talk on "Development and Promotion Activities of Subscriber Connector (SC)". Dr. Shinji Nagasawa, a former Senior Researcher of Access Network Service Systems Laboratory, NTT, gave a speech entitled "Development & Promotion Activities of multiple Fiber Push-On/Pull-Off (MPO) Connector". A detailed report is available in LMAG Tokyo Newsletter No. 31.

# 8. STUDENT BRANCH ACTIVITIES

# IEEE AIUB Student Branch [Bangladesh Section]

Webinar session on "CyberCrime"

# Farhan Tasnim, Publication Volunteer for IEEE AIUB Student Branch

On 11th February 2021, the IEEE AIUB Student Branch successfully organized a webinar session titled "Cyber Crime" in collaboration with Dhaka Round Table, Dhaka Metro Round Table, and supported by the Criminal Investigation Department (CID) of Bangladesh Police through the Zoom Meetings platform. The event mainly focused on the young juveniles to be aware of the possible harassment through cybercrime. The informative session was conducted by Mahmudul Islam Talukdar, Additional Superintendent of Police, Cyber Police Centre, CID, Bangladesh Police who described the concept of cybercrime along with the most common approaches of cyber-related crime and threats and encouraged everyone to stay for the betterment of their families. Afterward, Md. Rezaul Masud, Special Superintendent of Police, Cyber Police Centre, CID, Bangladesh Police initiated the session with the impacts of the cybercrimes in Bangladesh. In the end, an interactive Q/A session took place with the 63 participants present in the session.



# IEEE HIET Student Branch [Karachi Section]

# **Muhammad Faizan Usman, Branch Counselor for IEEE HIET Student Branch**

# Impact of 3D Printing and its Utilization from Transforming Projects into Products

Hamdard University Pakistan's IEEE HIET Student Branch (SB) always encourages activities through which students can get ideas and think about innovation. continuation of this approach, the SB organized a seminar titled "Impact of 3D Printing and Utilization from Transforming Projects into Products" on 13th April 2021 at Hamdard University's main campus in Karachi. The main objective of this seminar was to share in-depth technical knowledge related to 3D Printing Technology and also to build an entrepreneurial mindset. The seminar began with the welcome speech by Prof. Dr. Anwar Manzar (Dean FEST, Hamdard University). Later on, the quest speaker Mr. Ovais H. Qureshi (CEO Viscous.co & CEO Bioniks) explained the fundamentals of 3D Printing. He also shared the applications of 3D Printing in various domains. A 3D design was also printed during the event and was thoroughly explained. The seminar ended with a vote of thanks by Dr. Faisal Khan.



Hamdard University Pakistan's IEEE HIET Student Branch (SB) always shares opportunities for students to groom them for future challenges. The branch has a legacy to help the students in the preparation of such options and



for this purpose, the SB adopts a proactive approach in enhancing student's exposure. In continuation of this tradition, IEEE HIET SB organized a productive webinar titled "Guidance for UGRAD Exchange Program 2022" on 9th April 2021. This event was related to a semester exchange scholarship at any university in the USA. The webinar started with a recitation of few verses of the Holy Quran. Engr. Mohammad Faizan (IEEE HIET SB Counselor) hosted this webinar and also served as the speaker. He thoroughly guided the participants about this opportunity which is being offered by the Bureau of Educational and Cultural Affairs (ECA) of the United States Department of State every year. He also provided step-by-step guidance regarding the submission of the application form.

#### Techniques of writing an Effective Resume using the Star Method

Job Interviews can be a stressful experience for fresh graduates, especially when faced with open-ended questions related to behavior. So IEEE PAF-KIET Student Branch & IEEE HIET Student Branch organized an exciting webinar collaboratively on the topic "Techniques of Writing an Effective Resume using the STAR Method" on 27th May 2021 by highly distinguished speaker Sajjad Hussain who is serving as an Assistant Professor at PAF-KIET. He has practical work experience of over 15 years with several organizations in different positions and also provides consultation services to students. In this Webinar, he provided in-depth knowledge & indicates

basic mistakes which students normally do when writing their resume. He further guided students about the STAR method which means Situation, Task, Action and Result. For each experience other than education, the STAR method helps to explain that experience. In the Muhammad Faizan (Branch Counselor IEEE HIET SB) gave the vote of thanks.

# IEEE IIT Kharagpur Student Branch [Kharagpur Section]

Distinguished Lectures on Distributed ML and Full-Duplex Communications for Wireless Networks

Deborsi Basu, Secretary for IEEE IIT Kharagpur CS Student Chapter

IEEE Computer Society Student Branch Chapter of the IEEE Kharagpur Section has successfully organized two significant Distinguished Lectures (DL) on next-generation wireless communications. The first lecture on "New System Design Challenges in Implementing Full-Duplex Communications in Next Generation Wireless Networks" was delivered by Prof. Neelesh B.



Maheta, Fellow IEEE & Professor at ECE Department, IISc Bangalore, India on 27th February 2021, which was attended by 20 IEEE and 32 guest members.

The second lecture was given by Prof. Walid Saad, Fellow IEEE & Professor at Department of Electrical and Computer Engineering at Virginia Tech, U.S.A on "Distributed Machine Learning in Wireless Networks: Challenges and Opportunities" on 24th March 2021, which was attended by 21 IEEE and 24 guest members.

Both of the distinguished lectures primarily focused on implications of artificial intelligence, machine learning, and federated learning techniques in future wireless communication technologies, e.g. SG and beyond networks.

# IEEE SLIIT Student Branch [Sri Lanka Section]

# CyberShield 2021

## Thimira Chandrasekara, Chair for IEEE SLIIT Student Branch

The IEEE Computer Society of Sri Lanka Institute of Information Technology organized "CyberShield", a two-day cybersecurity workshop on the 15th and 16th May 2021. The main objective of this event was to present fundamental knowledge on cybersecurity for the participants and to teach about the various security risks, hacking techniques, red teaming, and cybercrimes happening today. Participants were given a basic overview of major cybersecurity topics including information on career opportunities, hacking tools, qualifying pathways, and certain practical knowledge on hacking through demonstrations. The sessions were conducted on



two days by Mr. Kavinga Abeywardena and Mr. Jude Myuran respectively, each explaining practical and theoretical concepts of cybersecurity, followed by an active Q&A session. The participants who were actively present on both days were given valuable certificates upon completion and the event concluded with over 600 participants on both days and with a lot of positive feedback from participants.

# IEEE University of Moratuwa Student Branch [Sri Lanka Section]

# RiseUp Mora 2021

# Awishka Thuduwage, Secretary for IEEE University of Moratuwa Student Branch

RISEUP MORA 2021, which was held from 6th to 21st March 2021 created a worthwhile opportunity for the undergraduate community towards stepping into their dream career. The phase 1 Webinar on "How to make a job-winning resume" was held on 6th March 2021 where Eng. Zahra Marzook was the guest speaker. Over 250 undergraduates from Sri Lanka participated in the session and they were guided on the art of writing a top-notch resume. Phase 2 Webinar on "How to excel in an interview" was held on 13th March 2021 with more than 200 attendees. The guest speaker was Ms. Rovina Vandersay and tips of creating a lasting



impression upon the employer was remarked. The last phase of RiseUp Mora took place on 20th March 2021. 26 leading companies allied with almost every discipline of engineering in the country collaborated, and over 250 mock interviews were held.

# 9. OTHER ARTICLES

# Quarter Tech Talk Table 3.0

Ramneek Kalra, IEEE Impact Creator & YP, and Shailesh Prabhu, IEEE YP



A group of IEEE Young Professionals & Impact Creators gathered on 15th May 2021 (07:00 PM - 08:30 PM IST) to create awareness on technology and form a collaborative environment by initiating "Quarter Tech Talk Table 3.0 (QT3)" in the form of a Panel Discussion on the topic "Role of Technology in STEM Education". This was conducted in collaboration with "Universal Access to Technology" (Technical Committee) of IEEE SSIT.

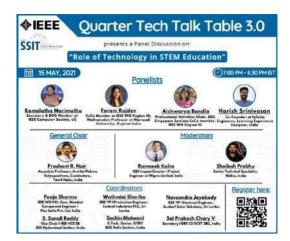
**Motivation**: To create a broad collaborative group of Young Professionals and Impact Creators to share some insights on cutting-edge technologies to all technology enthusiasts by having a panel discussion. The primary motivation of QT3 comes from the IEEE Strategic Plan 2020-2025 which inspires us to conduct this event with no boundaries. This provides opportunities to volunteers who collaborated to make this event a grand success.

**Objectives**: The objectives of QT3 are as stated below:

- Creating a broad collaboration for sharing knowledge of Industrial Technologies.
- Creating a bridge to connect IEEE Young Professionals through this activity for career and professional development.
- Sharing opportunities for elevating ideas using research-based-oriented learning.
- Creating an open forum for discussion on recent technological advancements and challenges.

**Event Details**: In continuation with the successful completion of the previous editions of QT3 back in November 2020 and February 2021, the prominent IEEE Young Professionals and Impact Creators across the globe once again came together for a panel discussion in the third edition of QT3 held on 15th May 2021.

OTHER ARTICLES 60



#### **Discussed Points:**

Some of the key takeaways from this 3rd edition of QT3 are listed below:

- STEM education has resulted in a better understanding of society and the action plans that are to be implemented to solve the same can be achieved.
- Students and faculties acquire the chance to learn from each other by means of STEM and developing technology.
- The education system involving STEM from the initial stages can produce potent individuals in the future.

#### Round 1 (Open Mic: Discussion on the Role of Technology in STEM Education)

- The panel discussion was initialized with the panelists' perspectives about STEM and the method of education that is being followed these days. Commencing the discussion, one of the panelists shared their views about the interdependency of STEM and the educational revolution.
- In addition to the opinion put forth by the previous panelist, another panelist spoke about the importance of STEM as an enabler and a helping hand for scientists and technologists. The person highlighted the fact that "STEAM" is much preferred to "STEM".
- The essential inter-relation between STEM and current technology was highlighted by a panelist. Ensuring the understanding of STEM education, various technological tools such as simulation, machine learning, data analytics, and interpretation were incorporated. Therefore proving that technology plays an essential role in updating STEM education.
- The next panelist pointed out the accessibility of technology and connectivity it brings out irrespective of the geographic location people live in. The person too stressed the point that "STEM" is induced to form "STEAM", meaning that the areas of art, architecture, and management were also involved in the enhancement of education.

#### Round 2 (Closed Floor: Panel QA Discussion)

- The discussion started with a question to the panelists "Can technology bring ease of explanation of your own domain subjects for the students to understand?" One of the panelists initiated with her views stating that the use of technological tools like Tinkercad, Matlab, Fusion-360, and image processing has made it easy for the students to efficiently recognize the concepts in their own domain.
- Another panelist opened up that new updates on technology had turned to learn in such a way that both the teachers as well as the learners were benefited by exchanging the concepts of current technology that is used to display the theories acquired through academics.

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- Adding to the previous panelist's point, one of the panelists established that the involvement
  of technology has been taken as an opportunity for the teachers to learn about the trendsetters. Various actions taken in order to bring multiple ways to solve a particular problem
  were put forward. The panelist also added that while implementing the same, the students
  will develop the ability to solve a problem, take risks, and initiate an idea in the future.
- Owing to the expertise the person achieved in IEEE, explanations about the aspects to increase STEM education in women pursuing their school and college were made. The essential aspects include technical skills, professional skills, social skills (networking), and volunteering.
- One of the panelists focused on the interdependence of research areas and STEM education.
  The panelist also elaborated on the ways that researchers take to solve a particular problem.
  The additional points by the person include the levels of professionals such as T shaped or Pi shaped ones and the expectations of recruiters from the professionals to arrive at the solutions through new means.

#### Round 3 (Open Floor: Ask the Panelist)

Under this last section, the "Quarter Tech Talk Table 3.0 (QT3)" in the form of a Panel Discussion on the topic "Role of Technology in STEM Education" was open to the virtual delegates for the Q&A session. They were informative and worth seeking inputs from everyone. If you missed attending the 3.0 Edition, feel free to explore on IEEE TV Platform at: https://ieeetv.ieee.org/video/ieee-guarter-tech-talk-table-30-ieee-gt3-initiative

With the ending of this QT3 3.0, the General Chair put together the thank remarks and shared the tentative next QT3 4.0 Schedule: 7th and 8th August 2021. We welcome all the readers to register for QT3 4.0 Edition at: <a href="https://forms.gle/x2ost6UqqBGiqtx36">https://forms.gle/x2ost6UqqBGiqtx36</a>

# Tribute to Dr. Ram Gopal Gupta, Past Chair IEEE Delhi Section, and Past Chair India Council

Rajendra K. Asthana, Chair for IEEE R10 Life Member Committee



Dr. Ram Gopal Gupta was a Doctorate from the Indian Institute of Technology (IIT), Delhi. Popularly known as RGG, he retired as Senior Director (i.e., SAG / Joint Secretary Rank of Government of India - GOI) from the then Department of Information Technology/Electronics. In this department, among other activities, he was known for organizing an exhibition of electronics annually at an all-India level.

Dr. Gupta was a Senior Member of IEEE & Fellow and Life Member of the TEB for the technical publications of the Largest

Professional Body in India, the Institution of Electrical and Telecommunication Engineers (IETE). He was a member of the nomination committee for an international award for technoentrepreneurship development instituted by the TAKADA FOUNDATION, Japan, and initiated Electronics and IT Expositions (ELITEXs) etc. He made numerous reports to enhance the vision on

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the "Role of United Nations and Specialized Agencies for Developing IT". Dr. Gupta, an IEEE volunteer became Chair of the Joint Chapter IEEE AES COM LEO Society of the India Council.

In 2007, he was appointed as a Member of the Board of Governors for IEEE Technology Management Board and Editorial Board Member of the Open Aerospace Engineering Journal published by Bentham Science Publishers. He also served on the Board of Governors of IEEE AES Society and the Board of Governors of IEEE Photonics Society.

He popularized IEEE in the Government. These innovative efforts led to the sharp increase in IEEE Student Branches in India and the overall membership growth. After taking over as retrieved the IEEE AES COM LEO Society of India from IEEE Disqualified Chapters and the Best Chapter Award from IEEE ComSoc for more than five years. His major contributions and initiatives included a series of International Conferences on Personal Wireless Communications (IEEE ICPWC) as Conference Chair in India since 1996 with participants from 22 to 25 countries. In the early stage of the development of the concerned technology, Dr. Gupta supported Prof. Vijay K Bhargava (of UBC, Vancouver, CC, Canada / University of Victoria). He was also a member of TPC of the world's largest IEEE Communication Conference: GLOBECOM and ICC. Other activities undertaken by him were:

Popularizing IEEE technical activities for students, academia, and industry; Initiating two major IEEE Conferences in Communications and ATM; A major push in new Students Branches in engineering

After being at the helm of affairs of IEEE Computer Society, Delhi Chapter for a couple of years, in 2007 he was appointed IEEE Delhi Section Chair for the two one-year terms in 2007 and 2008. As Chair for IEEE Delhi Section, he continued his earlier initiatives.

At a time when the IEEE India Council was struggling for its survival for over 2 years due to a lack of initiatives & activities, Dr. Ram Gopal Gupta was elected as the Chair of IEEE India Council in May 2011. The challenge that he faced was to revive the Council's survival and its lost glory earned during earlier years. Immediately on taking over, he took the following bold decisions and corrective actions to rebuild the lost image/glory of the dormant India Council.

- Modified the Council Bylaws framed in 1976, which were outdated. New Bylaws duly vetted by MGA were approved in a special GBM held on 17th December 2011 and were adopted with immediate effect.
- The new Bylaws stipulated the minimum eligibility qualifications for electing a Council Chair.
- The most important inclusion was that the Chair-Elect will automatically take over as "Incoming Chair" from the next (coming) 1st January even if full ExCom is not finalized. Under no Circumstances the present Chair will continue beyond 31st December of the current year.
- The officers and various committees were clearly spelled out.
- Under no circumstances the elections will be held for the Chair (no petition permitted) unless the Chair-Elect refuses to take up the post of Council Chair. This was a bold amendment to the Council Bylaws.
- Strict time frames for nominating slate & elections were redefined.

Many other important decisions were taken during these 2 years and the Council regained some

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of its lost glory. He continued his previous initiatives to popularize IEEE technical activities for students, academia, and industry and gave a push to new Students Branches in engineering, India Council Conference (INDICON), etc. Based on the solid foundation laid by Dr. Gupta, subsequent Council Chairs contributed tremendously to take India Council to newer heights, which were visible year after year.

As a dynamic IEEE Volunteer, Dr. Gupta was honored by the following IEEE awards:

Outstanding IEEE ComSoc/AESS Chapter Award in 2002, 2003, 2005, and 2006.

Outstanding IEEE AESS Chapter Award in 2005.

Best Region IEEE Communications Society Chapter Achievement Awards in 2005.

Region 10 Outstanding Volunteer Award in 1999.

IEEE MGA Leadership Award in 2011 for IEEE AES with the citation "distinguished leadership and outstanding contributions as a volunteer, at the Section and Regional levels, serving the IEEE for the benefit of its members and the engineering profession by popularizing IEEE in local industry and common engineering students".

Region 10 Academia-Industry Partnership Award in 2012 for "outstanding contribution in dissemination of information about indigenous R&D and promotes interaction & commercialization among users, industry and R&D institutions".

Dr. Ram Gopal Gupta passed away on 24th April 2021. We all in IEEE pray to God to grant salvation to the departed soul and give strength to the family members to bear the irreparable losses. Om Shanti!!

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# 10. AWARDS & FUNDING

# Life Members Affinity Group Achievement Award

Heartiest Congratulations to Tokyo Section for being awarded the 2021 Life Members Affinity Group Achievement Award. Each year only one out of more than 100 Life Members Affinity Groups in IEEE is selected to receive this recognition. The award is given for activities carried out in the previous year between 1st January & 31st December. In the last 4 years, twice the award has gone to Region 10, once to Region 5 and one year no award was given.

The award consists of a Certificate of Recognition (plaque), a grant of USD2000 for future Affinity Group activities, plus a stipend of up to USD2000 for a representative to travel to an appropriate IEEE event to receive the award.

Recent past recipients of the award are:

- 2021: IEEE Tokyo Life Members Affinity Group (Region 10)
- 2020: No Award given
- 2019: IEEE Central Texas, San Antonio Life Members Affinity Group (Region 5)
- 2018: IEEE Kerala Life Members Affinity Group (Region 10)
- 2017: IEEE South-eastern Michigan Life Members Affinity Group (Region 4)
- 2016: IEEE Israel Life Members Affinity Group (Region 8)
- 2015: IEEE Boston Life Members Affinity Group (Region 1)

# IEEE Region 10 YP UP SKILL 2021



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# Call for Proposals – IEEE HAC/SIGHT Projects



https://hac.ieee.org/funding-opportunities/covid-19-projects/

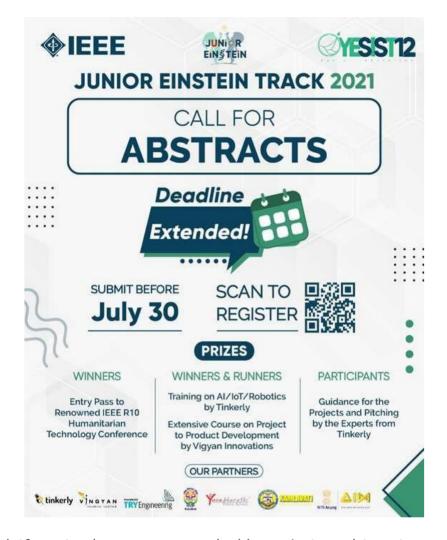
# Call for Proposals – IEEE EDS and IEEE HAC Projects



https://hac.ieee.org/funding-opportunities/eds-and-ieee-hac/

AWARDS & FUNDING 66

# Call for Abstracts – YESIST12 Junior Einstein Track



Here arrives the platform to showcase your valuable projects and to get recognized in a global community of international events IEEE YESIST'12 Junior Einstein Track

**Who can participate**? Students between the ages between 12 and 17 can take part in the event.

Submit your abstracts at: http://bit.ly/CFAJE2021

#### Contact us:

- Mr. Navaneethakrishnan | navaneethakrishnan@ieee.org Co-Chair- IEEE YESIST12 Junior Einstein 2021
- Ms. Pooja Sharma | poojasharma@ieee.org Co-Chair- IEEE YESIST12 Junior Einstein 2021

For more information and convenience, explore our android app: <a href="https://play.google.com/store/apps/details?id=com.ieee.ieee">https://play.google.com/store/apps/details?id=com.ieee.ieee</a> yesist

YESIST12 Brand Experience Portal: <a href="https://ieeeyesist12.org/yesist12-brand/">https://ieeeyesist12.org/yesist12-brand/</a>

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# 11. CALL FOR PAPERS

# 2021 IEEE TENCON



# Call for Paper Submissions & Special Session proposals



# IEEE Future Directions Guiding Smarter, Cleaner, Secure, & Resilient Living

TENCON is a premier IEEE international technical conference which has been conducted in region 10, to bring exciting discoveries, knowledge & understanding together. TENCON 2021 has been themed inspired by the IEEE Future Directions platforms both graduated & ongoing. This year's TENCON is organized by IEEE NZ North Section, designed to be a blended event from Auckland, New Zealand. The conference will be held from 7-10 December 2021 in Auckland, New Zealand for the venue based physical attendees. The others will be joining virtually to hear & engage with the exciting & innovative programs that is being planned.

Some key highlights of this annual conference includes:

- Tutorial Sessions
- Keynote presentations from practice leaders in the field
- Presentation & poster sessions for idea sharing & discussion
   Studente Yourge Professionals, Networking Forum
- Students/Young Professionals Networking Forum
- Trade booths & themed panel sessions

#### Themes planned for TENCON 2021:

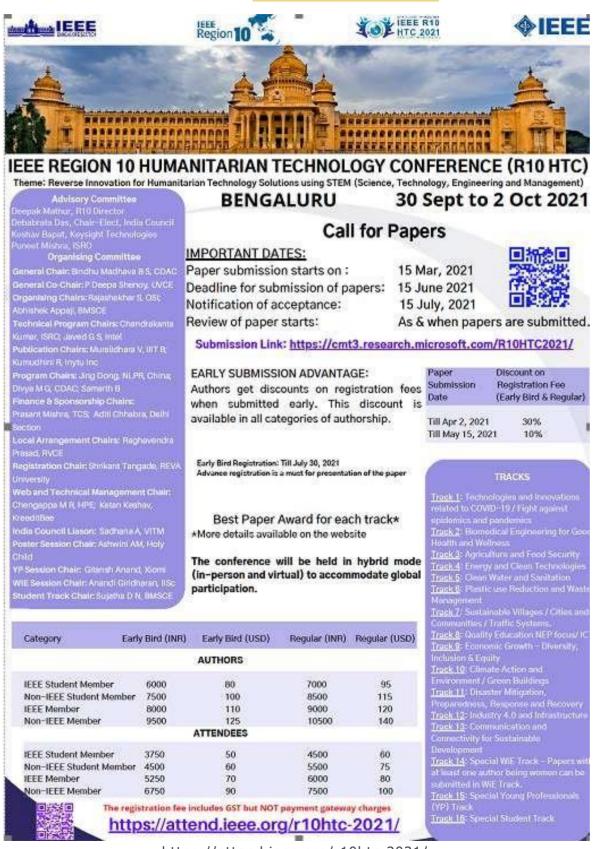
Hosting TENCON 2021 in Audkland (Virtual an inperson mode) with a focus on IEEE Future Directions will provide IEEE members and non-members access to the best knowledge, resources and opportunities in emerging technologies. It also attempts to address public fear and challenges faced by humanity across the world as innovative technology is introduced and rolled out. The theme of TENCON 20201 has been selected to give a strong international exposure along with local flavor. The technical tracks will align with the strong traditional technical themes of IEEE like signal processing, robotics, biomedical, communications, computers, power & energy, power electronics, software etc. along with new emergent and exciting IEEE Future Directions platforms.





https://tencon2021.com/

# IEEE Region 10 Humanitarian Technology Conference (R10HTC) 2021



https://attend.ieee.org/r10htc-2021/

# 2021 IEEE International Conference on Distributed Computing, VLSI, Electrical Circuits and Robotics (DISCOVER)

#### November 19-20, 2021

by IEEE Mangalore Sub-Section at Nitte Mahalinga Adyanthaya Memorial Institute of Technology,
Nitte, Karkala, Udupi (Karnataka), India
in association with IEEE Bangalore Section

Submission deadline: Thursday, July 15, 2021

#### **CALL FOR PAPERS**

The Nitte Mahalinga Adyanthaya Memorial Institute of Technology (NMAMIT), Nitte (Karnataka) is hosting the fifth IEEE International Conference on Distributed Computing, VLSI, Electrical Circuits, and Robotics (DISCOVER-2021). IEEE Conference Record Number # 52564. DISCOVER is a flagship conference of IEEE Mangalore Sub-Section and financially sponsored by IEEE Bangalore Section. DISCOVER aims to provide an international platform to the students, professionals, practitioners, and researchers from Industry and Academia working in Distributed Computing, VLSI Verification, Communication Engineering, Electrical Circuits, Robotics, and Healthcare. A series of plenary talks, followed by oral presentations and other events, has been planned to facilitate networking among the delegates. The accepted and presented papers of the DISCOVER-2021 will be submitted to IEEE for possible publication in the IEEE Xplore Digital Library.

2021 IEEE DISCOVER will be held in Nitte Mahalinga Adyanthaya Memorial Institute of Technology, Nitte, Karkala, Udupi, Karnataka, India-574110. IEEE DISCOVER previous edition papers are published in IEEE Xplore Digital Library and are indexed by Scopus.

The conference details are available at <a href="https://www.ieee-discover.org/">https://www.ieee-discover.org/</a>

The paper submission is managed through Microsoft CMT (https://cmt3.research.microsoft.com/IEEEDISCOVER2021)

The last date for paper submission is Thursday, July 15, 2021

We invite you to submit your research papers to this conference. Please share this information with your friends & peers. For any further information, kindly e-mail your queries to discover2021@nitte.edu.in

Note - Each full registration fee from the same author can cover the presentation of up to two papers. For registration fee details, please visit the conference website https://www.ieee-discover.org/

CALL FOR PAPERS 7.0

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