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Annual General Meeting , 4th and 5th of March 2023

The 2023 IEEE Region 10 Annual General Meeting was held successfully on the 4th and 5th of March 2023 at Lotte Saigon Hotel, Ho Chi Minh City, Vietnam with the participation of 2023 IEEE President, Prof Saifur Rahman, 2023-2024 IEEE R10 Director, Prof. Lance Fung, 2023 IEEE President-Elect, Tom Coughlin, R10 executive committee members, and R10 Section Chairs.

IEEE R10 Director's Message

First quarter (Q1) of 2023 has come and gone, what have you achieved in the past months? For most of the IEEE Organizational Units (OU), the months of January to March have been a busy time with planning, budgets, meetings, and projects rolled out. Within the same period, the schedules of most volunteers are filled with various either online or in-person meetings, regional AGM's, and may also include a range of sub-committees, working groups and Ad-Hoc Committees. [Page 2](#)

Forum on Energy Interconnection in Asia Pacific

On 3rd March 2023, the Forum on Energy Interconnection in Asia Pacific was organized by IEEE Asia-Pacific Region (R10), sponsored by the Global Energy Interconnection Development and Cooperation Organization (GEIDCO), and held at the Ho Chi Minh City University of Technology, Vietnam. The Forum is timely and serves as an example of practical steps to address the issue of climate change. [Page 3](#)



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CALL FOR 2023 IEEE REGION 10 AWARDS IS NOW OPEN!

The Nomination Due Date is 31 May 2023.

For more details: [Page 8](#)

IEEE R10 DIRECTOR'S MESSAGE

Emeritus Prof Lance Fung

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Amidst their busy schedules, the contributions of the R10 volunteers are greatly appreciated.

A commonly used quote is, "If you fail to plan, you are planning to fail." This is particularly true for all organisations that success can only be achieved through good planning, adequate support, careful execution, such that benefits will be brought to the targeted recipients. Hence, Q1 is the most important time for all IEEE volunteers and leaders.

I am grateful for the participation and support by IEEE leaders and volunteers who take their time to attend the R10 Annual Meeting held on 4th and 5th of March at Ho Chi Minh City, Vietnam. Over 100 delegates attended the two days meeting, plus a pre-meeting workshop held on the 3rd March at the Ho Chi Minh City University of Technology, with the support of the Global Energy Interconnection Development and Cooperation Organization (GEIDCO).

The list of delegates attended the R10 AGM included IEEE President 2023, Professor Saifur Rahman, IEEE President-Elect, Mr Tom Coughlin, IEEE-VP MGA, Jill Gostin, IEEE Executive Director, Sophia Muirhead (online) and Region 2 Director, Andrew Lowery. In the meeting, three R10 Vice Chairs, Preeti Bjj, Zia Ahmed, and Takako Onoye presented the reports and plans from their respective committee chairs, under three main areas – Members Activities, Professional Activities and Technical Activities.

Chairs of the R10 committees also interacted with the delegates through their presentations and during the poster session. In addition, two training sessions were presented by SM Sameer, Michael Ong and Amit Kumar on Technical Program Management, and Section/Chapters Formation and Reporting. In the evening of the first day, a banquet dinner with cultural show and Awards presentation was held.

On the second day, two invited guests, Peter Nagy and Mousmi Ajay Chauarasia, spoke on National Societies Cooperation, and Volunteer Upskills with IEEE CLE, respectively.



Their presentations were followed by organisers of the three R10 Flagship conferences – TenSymp, R10 HTC and TenCon. Reports for 2022 events, and forthcoming 2023 and 2024 events, were presented as reports or updates on the preparation of the conferences. As there was no further business, the 2023 R10 Annual meeting was adjourned by noon and followed by an off-site bonding activity and dinner at the Deck Restaurant.

Success of the two days 2023 IEEE R10 AGM was due to the careful planning and preparation by capable IEEE Staff at the Asia-Pacific Office – Ewell Tan and HC Leo, and dedicated volunteers. Through their good hands, the 2023 R10 annual meet was completed smoothly and to every delegate's satisfaction.

Similarly, it is believed that projects proposed in the R10 Annual Meeting will bring success and benefits to the community, through good planning and execution by the volunteers and leaders in R10!

**Thank you for
everyone's
volunteering
services and
making a
difference for
humanity!**

Lance Fung

IEEE R10 Director 2023-2024

Forum on Energy Interconnection in Asia Pacific

Prof Lance Fung, R10 Director 2023-2024

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Forum on Energy Interconnection in the Asia Pacific, organized by IEEE R10 and sponsored by the Global Energy Interconnection Development and Cooperation Organization (GEIDCO) was held on 3rd March 2023, at the Ho Chi Minh City University of Technology in Vietnam.

The forum brought together distinguished speakers and experts to discuss practical steps to address the issue of climate change. The Chief Technology Officer of GEIDCO, Professor Liang Xuming, opened the meeting, followed by Professor Lance Fung, IEEE R10 Director, who welcomed the guests and delegates.

During the forum, Professor Rahman presented an overview of his focus on climate change and the six steps he proposed to combat it. These steps included energy efficiency, renewable energy, carbon capture and storage, electric vehicles, smart grids, and education and awareness. He emphasized that no single solution would work, and a multi-pronged approach was necessary, of which Global Energy Interconnection (GEI) was one.

The forum also featured addresses from prominent individuals such as Ms. Armida Salsiah Alisjahbana, Executive Secretary, of the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), Mr. Nguyen Tai Anh, Vice President of Vietnam Electricity (EVN), Prof. Nguyen Danh Thao, Vice President of Ho Chi Minh City University of Technology, and Prof. Liu Zehong, Executive Vice Chairman, GEIDCO.

The Research finding, "Opportunities and Outlook on Power Interconnection in the Asia-Pacific Region" was released by GEIDCO and the presentation is available from <https://www.geidco.org.cn/html/qgnyhlw/zt20230303/亚太电力互联互通机遇与展望.pdf>



IEEE President Professor Saifur Rahman addressed the Forum on Energy Interconnection in Asia Pacific



Speakers and representatives from IEEE, GEIDCO and invited organizations

The meeting continued with technical presentations from distinguished speakers and experts. These presentations were chaired by Mr. Xu Ming, Deputy Director General of the Cooperation Bureau of GEIDCO. The eminent speakers and experts who addressed the forum included Mr. Matthew Wittenstein, Chief of Energy Connectivity Section, Energy Division, UNESCAP, Prof. Chai Gaofeng, Deputy General Manager, State Grid Energy Research Institute Co., Ltd, Mr. K.S. Bandyopadhyay, Former Executive Director of National Thermal Power, Prof. Guo Qi, Deputy Director General of Electric Power Research Institute, China Southern Power Grid and Mr. Duan Daxi, Deputy Chief Engineer, China Electric Power Equipment and Technology Co., Ltd.

Mr. Deepak Mathur, IEEE R10 Director (2021-2022), delivered closing remarks summarizing the key points discussed during the forum. He expressed his gratitude to all the distinguished speakers, experts, and participants who contributed to the forum's success.



Presentation of Gift from GEIDCO to Professor Saifur Rahman

In addition, Professor Rahman and leaders of IEEE held a meeting with officers of GEIDCO after the forum to discuss opportunities for future cooperation. This meeting aimed to identify potential collaborations between interested IEEE organizational units and individuals and GEIDCO to work together towards a better tomorrow.

The forum has set the tone for future cooperation between IEEE and GEIDCO, focusing on key issues such as climate change and sustainable energy. It is encouraging to see that the forum has provided a platform for stakeholders to come together and explore practical steps to address these critical issues.

Region Realignment Why Will We Divide Region 10 into Two?

Akinori Nishihara, Region 10 Director 2019-2020

IEEE Regions

IEEE Constitutions Article VI Sec. 2. defines that “The territory of the IEEE shall be divided, at the discretion of the Board of Directors, into geographical areas known as Regions, which shall be specified in the Bylaws”.

The current IEEE Bylaws I.402 defines Region 10 shall consist of North Asia, the Oceania countries, and Asia, excluding the countries west of Pakistan, north and west of Afghanistan, and north of Mongolia and China. The recent revision added Appendix B saying Region 10 shall consist of North Asia, and Region 11 shall consist of South Asia and Pacific (effective 1 January 2028). The merger of Region 1 and Region 2 is also stated in the Appendix.

History of IEEE Region 10

In 1963 IEEE was formed by the merger of AIEE (established in 1884) and IRE (established in 1912). At that time IEEE had 150,000 members (140,000 in the U.S.), and the number of Regions in the U.S. was reduced to 6 and Canada became Region 7. New Region 8 was formed comprising Europe, Middle East, and North Africa. The rest of the world was Region 9 till 1966. Region 9 was limited to South America and the “rest of the world” became Region 10 in 1967. Region 9 was limited to South America and the “rest of the world” became Region 10 in 1967. In 1981 Southern Africa was transferred from Region 10 to Region 8, and Region 10 was described as Asia-Pacific Region.



Figure 1: Membership by Region as of 31 December 2018

The biggest Region in terms of total membership was Region 6 till 2003, but Region 10 became the biggest in 2004. In terms of the voting membership, Region 10 has been the biggest since 2009. When I became Region 10 Director in 2019, Region 10 had 30.9% of total IEEE members. The second largest was Region 8 (18.3%), and the third was Region 6 (12.4%) as shown in Figure 1.

South Asia and Pacific :
Councils: Australia, India, New Zealand
Sections: Australian Capital Territory, Bangalore, Bangladesh, Bombay, Delhi, Gujarat, Hyderabad, Indonesia, Islamabad, Karachi, Kerala, Kharagpur, Kolkata, Lahore, Madhya Pradesh, Madras, Malaysia, New South Wales, New Zealand Central, New Zealand North, New Zealand South, Northern Australia, Pune, Queensland, Republic of Philippines, Singapore, South Australia, Sri Lanka, Thailand, Uttar Pradesh, Victorian, Vietnam, Vizag Bay, Western Australia
Subsections (R10): Afghanistan, Bhutan, Brunei Darussalam, Cambodia, Fiji, Laos, Myanmar, Nepal

North Asia :
Councils: China, Japan, Korea
Sections: Beijing, Busan, Chengdu, Daejeon, Fukuoka, Guangzhou, Gwangju, Harbin, Hiroshima, Hong Kong, Kansai, Macau, Nagoya, Nanjing, Sapporo, Sendai, Seoul, Shanghai, Shikoku, Shin-Etsu, Taegu, Tainan, Taipei, Tokyo, Wuhan, Xian
Subsection (R10) : Mongolia

North Asia
57,267 voting members (2020)
 South Asia and Pacific
40,184 voting members (2020)

Figure 2 Two zones in Region 10

In terms of voting membership, the ratios are 24.7% (Region 10), 18.7% (Region 8), and 14.7% (Region 6), respectively. As of 31 December 2022, Region 10 had 161,371 members, or 37.7% of the world membership, more than 35.9% in the U.S.

Region Realignment to Improve Diversity at Board Level

Each Region elects Region Director every two years to represent the Region members on the Board of Directors. For the fair representation of members, the size of each Region should be 10%. In the above situation, IEEE Board of Directors does not have fair diversity. That is why the discussion of Region Realignment started in Member and Geographic Activities (MGA) Board in 2018.

The number of Regions was assumed to remain unchanged at 10, the same as the number of Divisions. Regions 8 and 10 wished to elect two Directors each without splitting the Region, but the Governance Committee denied that. Therefore, the only option left was to split/merge existing Regions. Directors of U.S. Regions said they could reduce the number of Regions by 1, but 2 is difficult. In this way, Regions 8 and 10 began to consider their division methods.

In Region 10, Dr. Zia Ahmed, R10 Vice Chair (Members Activities), and I prepared a discussion paper entitled “Realignment of Regional Boundaries for Better Membership Representation at the IEEE Board of Directors” in August 2019. That included five options; simple splits of Region 10 and making three Regions from the current Regions 8 and 10. We distributed the discussion paper to Region 10 Executive Committee members, and then to all the Section Chairs in Region 10. We received feedback from 43 geo units including 7 new proposals. Region 10 Committee members voted for those twelve options in the 2020 Region 10 Meeting and narrow them down to three. In May 2020, we presented those three options, their voting membership distributions in the last three years, and the advantages and disadvantages of each, and asked the R10 Committee members to vote again to determine the final splitting plan. The resulting plan is shown in Figure 2.

Decisions Made

Discussions continued in 2021 and 2022, The IEEE MGA Board and the IEEE Board of Directors concluded to divide Region 10 into two and merge Region 1 and Region 2, effective 1 January 2028. See the following two articles in IEEE The Institute;

“IEEE Is Working to Reconfigure Its Geographic Regions”, IEEE The Institute, 07th September 2022

“IEEE Is Realigning Its Geographic Regions”, IEEE The Institute, 28th February 2023

In addition, the Board formally approved the concept of zones and zone representatives. A zone is a substructure within a region with a significant number of members. Region 10 thus has two zones as shown in Figure 1. As Lance Fung, current Region 10 Director, resides in South Asia and the Pacific, Section representatives elected Seishi Takamura as the Region 10 North Asia zone representative. His role is to assist in the region and to provide an additional voice for members within the region, as well as represent them on the MGA Board. Region 8 has two zones, too. The current IEEE Bylaws Appendix B states these updates.

Preparations for the Region 10 Division

To smoothly divide Region 10 into two, and merge Regions 1 and 2, MGA established Region Realignment Implementation Ad Hoc Committee. The Committee is creating a roadmap for Region Realignment.

In our Region, Region 10 Nominations and Advisory Committee works for Region-level matters such as:

1. Bylaws
2. Operation Manuals
3. Election schedules
4. Websites
5. Reserve split
6. Region meetings and flagship conferences
7. Region awards
8. etc.

in cooperation with MGA Region Realignment Implementation Ad Hoc Committee.

Region 1 and Region 2 will prepare similar items for their merger.

Future of Our Regions

We have been well managing this huge Region 10 for a long time while enjoying our diversity in geography, culture, and minds. I trust the two new Regions will operate closely through discussion, cooperation, and helping each other for the benefit of humanity.

The recent trend suggests that the two new Regions will grow further in the future, and we may eventually need another realignment. Even if so happens, I am sure we will come up with another excellent solution by then.

The Person Who has been My Mentor and Role Model Dr. Hideko Kunii

*by Takako Hashimoto,
IEEE R10 Director-Elect (2023-24)*

With your generous support, I am fortunate to have been elected to the IEEE R10 Director-Elect 2023-24. Amazingly, an ordinary Japanese woman like me was appointed to such an important position. I want to introduce Dr. Hideko Kunii, who allowed me to develop my career.

I graduated from the Faculty of Science at Ochanomizu University, one of the women's universities in Japan. During my university days, I discovered the fun of coding and decided I wanted to make IT my career. So, I joined the Software Research Center of Ricoh Co. Ltd. Dr. Hideko Kunii was the director of that center. At the Research Center, I was engaged in developing a database system. Having to learn new things such as system design, programming, testing, and user feedback, I had fulfilling and enjoyable days. Then, when I was 26, I got married and had my first child (a son) at 29 and a second child (a daughter) at 33.

Ricoh was a company that provided a perfect environment for working mothers, with systems in place for maternity leave, paternity leave, and shortened working hours. However, Japan is a highly traditional society. Much pressure is put on mothers in Japan: mothers should stay home to raise their children, mothers are to blame if their children get sick, and so on. I was having a hard time because I was also stuck in an old mindset.



I thought about quitting my job on two occasions. Once when my oldest son was hospitalized with pneumonia at the age of one, and once when my daughter was born, it became even more challenging to balance work and childcare.

I talked to my boss, Dr. Hideko Kunii, each time about my difficult situation. At the time, she told me the following -

"Child rearing will come to an end someday. Until then, keep working, even if it is in small steps. The day will surely come when you will be glad to continue your career"

Those words encouraged me to continue working, and I was able to advance my career as an engineer. Ever since then, she has been my mentor and role model. Dr. Hideko Kunii has achieved many accomplishments as a female industrial engineer. Still, at the same time, she is the one who created various supports such as childcare leave, shortened working hours, and telecommuting for many women who followed in her footsteps.

In Japan, and perhaps in the world, few female engineers can claim outstanding achievements. In addition, very few women can dedicate themselves to the work of those who follow in their footsteps. It was my great pleasure to meet such a wonderful woman early in my career development. I hope to be able to support the next generation of women like Dr. Hideko Kunii; this is my motivation for volunteering for IEEE.

R10 Robotics Competition 2023



The second IEEE R10 Robotics Competition 2023 is now open for IEEE Student members, Graduate Student and Young Professionals members in IEEE Region 10.

The theme for 2023 R10 Robotics Competition is "Robots for Managing Climate Change For a Better World"

The 2023 R10 Robotics Competition will be held in three stages:

STAGE 1 - IEEE Sections will organize local robotics competitions to select up to two teams to represent the Section and compete in Stage 2.

In Stage 1 IEEE Sections are also encouraged to organize robotics activities such as technical talks, hands-on workshops, and robotics competitions for school children to inspire young people to STEM. Sections should also attempt to invite local industry leaders and Government officials to these events.

IEEE R10 will fund For R10 funding details and to apply, please download the proposal template available at the competition website (<http://robocomp.ieeer10.org/proposal-template/>).

STAGE 2 – R10 will conduct an online selection process to pick the top ten teams/projects from the teams nominated by the Sections.

STAGE 3 –At Stage 3, teams will be required to demonstrate the full functionality of the robot at the final rounds organized by IEEE Region 10.

Prizes for Winners

First Winner

A cash prize of USD 500 plus a plaque

Second Winner

A cash prize of USD 350 plus a plaque

Third Winner

A cash prize of USD 250 plus a certificate

R10 Funding Deadline- 12 May 2023

Stage 1- Activities period for IEEE Sections
25 March - 30 July 2023

Stage 2 – Online Assessments Sessions
4 September - 16 September 2023



The competition timeline and all important dates are given on the website (<http://robocomp.ieeer10.org/>).

Any inquiries regarding the competition can be directed to R10-ROBOTICS-COM@ieee.org.

Region 10 Webinar Series

The tagline of the R10 webinar series R10Talk "In Pursuit of Excellence" very well describes the purpose of the R10 program to achieve excellence through gaining and sharing 'State-of-the-Art' knowledge. The series invites renowned speakers from academia and industry to enlighten members about the latest technology trends, career development opportunities, in-depth technical discussions, and motivational talks for professional and personal development.

In 2023, R10Talk kicked off with a successful session titled "Changing the Narrative: The Role of Engineering Organizations in Supporting Women in STEM" followed by another two webinars titled "Why Standards Matter" and "Innovation Technologies for Highly Safe and Energy-efficient GaN Devices". For more details, stay updated through IEEE R10's social media channels, including Facebook. All webinars are live-streamed on social media, and recordings are made available on the [R10 Youtube channel](#).



Upcoming R10Talk Webinar

Future directives of Offshore Wind Technology, and emerging P2X and Energy Island Concepts

Speaker: Dr Gayan Abeynayake, Power System Specialist at Ørsted

20th May 2023

Time: 3:00 PM (UTC+08:00) Singapore Standard Time

Registration Link:

<https://ieeemeetings.webex.com/weblink/register/rbe43079dac27f40f3a4fd112f3a9e1cc>



IEEE R10 New Initiatives Program 2023

The IEEE R10 New Initiatives program is designed to support potential new initiatives that are expected to empower members and communities in the future. IEEE R10 Strategic Planning and New Initiatives Committee (SPNIC) are looking for proposals of new types of projects/activities/events that involve multiple IEEE R10 OUs and other communities working together, such as:

- Increasing IEEE R10's connectivity to the industry
- Engaging and recruiting members
- Projects related to IEEE's Response to Climate Change
- Projects related to IEEE's Response to Multimedia-Based Digital Reality Technologies
- Creating innovative projects on the promotion of ethics, and diversity and Inclusion
- Increasing the visibility of IEEE R10 and its relevance to other communities

To impact the local/global communities, you are invited to submit a proposal(s) for projects, programs, and events from your respective Organization Unit (OU).

Eligibility

The program is open to all IEEE members, supported and endorsed in any OU in Region 10. Proposals that bridge multiple OUs and/or from multiple countries are welcome.

Terms and Conditions

1. Proposals shall be no less than US \$1,000, and up to a maximum of US \$10,000, although only a limited number of such projects may be awarded.
2. All awarded funds must be used within a period of 12 months. Any unused funds are not transferrable to other projects or OUs.
3. Proposals are executed as IEEE R10 activities to be implemented by one or more OUs, preferably with other communities in different countries.
4. Co-funding of the proposed project from the sponsoring OU's will be welcome and increase the chances of being approved.
5. If the project is made across multiple OUs, the disbursement will be shared among the participating OUs as per the budget plans submitted and approved. Each OU will be evaluated on its contribution to the program and will request reimbursement accordingly.
6. All disbursement requests shall be made within 12 months from the start of the project. By the end of November of each year during which the project is executed, claims for reimbursements must be made for the expenses incurred in that year. Any unspent budget will be returned as part of the overall R10 budget.
7. There is no restriction on the number of OUs or countries in a single proposal.

Expected Deliverables

- Interim reports are required on the progress and expenses incurred. Continual funding of the project will depend on the satisfactory progress of the report. The due dates of the Interim reports are 31st May 2023 and 30th November 2023.
- At the end of the project duration (12 months), a final impact report and/or video are expected from all funded projects and activities. More details about the deliverables will be communicated to selected proposals, based on the proposed expected outcomes from the project.

Timeline

- **Proposals Deadline – Ongoing until 30th November 2023.**
- **Notification of Acceptance: Within 6 weeks of submission.**
- **Disbursement Requests Deadline: 30th November 2023 for the year.**



Online Form <https://www.ieeer10.org/spinc-cfp/>

Point of Contacts IEEE R10 SPNIC Chair (takako@ieee.org)

IEEE INTERNATIONAL CONFERENCE ON SENSORS & NANOTECHNOLOGY 2023



Putrajaya, Malaysia
26th – 27th September 2023

SENNANO covers a wide range of topics related to sensors and nanotechnology, including nanomaterials and nanofabrication, biosensors and medical devices, environmental sensors, energy harvesting and storage, and wireless sensor networks. The conference includes keynote speeches from leading experts in the field, technical sessions for research paper presentations, and workshops for in-depth discussions and tutorials.

**Paper Submission Deadline:
15 August 2023**



<https://sensors-nano.ieeemy.org/conference/>

2023 IEEE Region 10 Awards 2023

The nomination due date is **31st May 2023**.

For more details on the 2023 IEEE Region 10 Awards Nomination and Guidelines, please refer to:

<https://www.ieeer10.org/awards-recognition-committee/>

- **R10 Outstanding Volunteer Award:**
- Download the nomination form at: <http://www.ieeer10.org/awards-recognition-committee/>
- **R10 Humanitarian Technology Activities Outstanding Volunteer Award**
- Nomination Link: <https://hac.ieeer10.org/get-involved/awards/>
- **R10 Humanitarian Technology Activities Outstanding Section Award**
- Nomination Link: <https://hac.ieeer10.org/get-involved/awards/>
- **R10 WIE Outstanding Professional Volunteer Award**
- Nomination Link: <https://iee.secure-platform.com/a/solicitations/836/home>
- **R10 WIE Outstanding Student Volunteer Award**
- Nomination Link: <https://iee.secure-platform.com/a/solicitations/836/home>
- **R10 WIE Outstanding Section Affinity Group Award**
- Nomination Link: <https://iee.secure-platform.com/a/solicitations/836/home>
- **R10 WIE Outstanding Student Branch Affinity Group Award**
- Nomination Link: <https://iee.secure-platform.com/a/solicitations/836/home>
- **R10 Young Professionals Outstanding Volunteer Award - Academician**
- Nomination Link: <https://yp.ieeer10.org/region-10-young-professionals-outstanding-volunteer-award/>
- **R10 Young Professionals Outstanding Volunteer Award – Industry Practitioner**
- Nomination Link: <https://yp.ieeer10.org/region-10-young-professionals-outstanding-volunteer-award/>
- **R10 Young Professionals Outstanding Section Affinity Group Award**
- Nomination Link: <https://yp.ieeer10.org/region-10-young-professionals-outstanding-section-affinity-group-award/>
- **R10 SAC Outstanding Volunteer Award**
- Nomination Link: <https://iee.secure-platform.com/a/solicitations/846/home>
- **R10 SAC Outstanding Student Branch Award**
- Nomination Link: <https://iee.secure-platform.com/a/solicitations/845/home>
- **R10 Educational Activities Outstanding Group Award:**
- Nomination Link: <https://forms.gle/N8nAXQJLxnvhvmxcA>
- **R10 Educational Activities Outstanding Volunteer Award**
- Nomination Link: <https://forms.gle/N8nAXQJLxnvhvmxcA>
- **R10 Life Member Outstanding Volunteer Award**
- Download the nomination form at: <http://www.ieeer10.org/awards-recognition-committee/>

R10 History And Individual Member Benefits Committee

Committee Chair - Harry Mcdonald

A summary of pending R10 Milestone applications is presented in the below table to serve as some examples to encourage other R10 sections to submit milestone applications. There are many other R10 milestones achieved in the past and selected ones may be presented in more detail in future editions of the R10 Newsletter. The IEEE Milestone process is a multi-stage process that concludes with a dedication and plaque. As you can observe Japan is and has been, a dominant contributor to the IEEE Milestones program.

Milestone Proposal (in progress)	R10 Section
Vertical Cavity Surface Emitting Laser (1977)	Tokyo section
Development Of Optical Image Stabiliser	Kansai section
Electronic Lavatory Washlet (1980)	Fukuoka section
Deep Space Station 43 (1977)	ACT section
Commercialisation of CDMA Cellular	Seoul section
Commonwealth Solar Observatory (1924)	ACT section
Toyota Prius –The First Mass Produced Hybrid	Nagoya section
MARS-1 Railroad Reservation System (1959)	Tokyo section
First Pulse Oximeter (1972)	Tokyo section
Perpendicular Magnetic Recording	Sendai section
Commercialisation Of The Fishfinder (1948)	Kansai section
Commercialisation Of Rice Cookers (1923)	Tokyo section
Okumura Curve Commercial Cellular Telephone System (1968)	Tokyo section
Commercialisation Of Multi Layer Capacitors with Nicked Electrode (1982)	Kansai section
Variational Reaction Theory For Finite Element Formulation (1979-1991)	Taipei section
Portable Satellite Communication Terminal (1989)	Taipei section
TRON Real Time Operating System Family (1984)	Tokyo section

The Engineering and Technology History Wiki (ETHW) serves as a central historical repository of all the achievements, ideas, and first-hand knowledge of engineering association members, societies, councils, and technical communities. It is one of the world's premier sites for documentation, analysis, and explanation of the history of technology; the scientists, engineers, and business people who made these technologies happen; and the history of the organizations to which these men and women belonged. R10 History And Individual Member Benefits Committee encourage and support all of our IEEE volunteer officers to record the historical information of their own organizational unit (OU), highlighting the important contributions achieved by local volunteers and members via ETWH. This site will serve as a living electronic memory of important milestones and achievements. All R10 sections are invited to identify significant achievements within the local area and submit proposals for IEEE milestones.

For further information please refer to https://ethw.org/Milestones:IEEE_Milestones_Program

IEEE R10 Membership Activities Meet up at Thailand Bangkok

Prof Rajendrasinh Jadeja

IEEE R10 Committee Chairs and leaders recently conducted a meeting with members and leaders of the IEEE Thailand Section. The meeting aimed to increase awareness of the activities, vision, and services of IEEE R10 students, young professionals, women in engineering, and life members. It was also aimed to discuss potential partnerships in the future, allowing regional representatives and local section leaders to exchange ideas and network.

The meeting was held at the College of Management, University of Phayao Thailand on 6th January 2023, with over 60 participants, including IEEE members (young professionals, students, women in engineering, and life members) and some special guests from the Thailand section executive committee. The participants were welcomed by Pongsakorn Yuthagovit, the Assistant Governor at The Provincial Electricity Authority, Thailand, as the chair of the IEEE Thailand Section.

IEEE R10 Vice-Chair of Membership Activities, Prof. Preeti Bajai, updated on the past membership projects and presented a summary of the present activities. The following seven committees shared their plans for the year 2023.

Membership Development Committee: Prof Rajendrasinh Jadeja as the Committee Chair presented the committee plans to focus on enhancing communication and collaboration with R10 Sections and Chapters, increasing membership and retention rate with valued service and activities and encouraging the Sections to provide local benefits for highlighting IEEE membership.

Member Engagement Committee: Plans of IEEE R10 committee for Member engagement were presented focusing on initiating activities to achieve personal aspirations, career development, and global networking at an Individual level. The committee objectives were highlighted as enhancing and improving membership recruitment, membership retention, and reinstatement aiming at the long-term plan to nurture future leaders and loyal members with succession and membership elevation.

Student Activities Committee: Warunika Hippola as the R10 Student Representative presented Student Activities Committee work plans including how to improve student engagement in IEEE R10 student activities and student member retention rate in R10.

Young Professionals Committee: Dr. Saaveethya Sivakumar as the R10 Young Professionals (YP) Committee Chair stated that the R10 YP committee will focus on activities to encourage students transiting to YP, and professional and career development for YPs.

Women In Engineering Committee: Plans to support Women in Engineering (WIE) engagement amongst IEEE Regions, IEEE OUs, IEEE technical societies, and sections were presented by Dr. Khanita Duangchaemkarn as R10 WIE Committee Chair.



Participants at the meeting at University of Phayao Thailand

The plans explained included supporting workshops and sessions at R10 flagship technical conferences to enhance engagement, form new IEEE R10 WIE affinity groups, and revive inactive WIE affinity groups.

Life Members Committee: Rajendra Asthana, IEEE R10 Life Members (LM)s Committee Chair shared his plan to facilitate the formation of new LM affinity groups and to encourage them to engage LMs in activities. He also mentioned the committee will organize periodic LM / LM affinity group meetings and support the R10 LM competition and awards. It is stated that the R10 LM committee will continue to organize the LM track in R10 flagship conferences such as TENSYPMP, TENCON, and HTC.

Sections and Chapter Committee: R10 Sections and Chapter Committee Chair, Dr. Amit Kumar presented the 2023 plan for forming new Sections and Subsections, elevating subsections with adequate members, and organizing special sessions on Section and Chapter activities in R10 Flagship conferences.

IEEE R10 Ethics Awareness and Advancement Committee Invites you to Try the Quiz!

Further inquires, feedbacks can be email to Committee Chair - Dr Sudeendra Koushik sudeendra.koushik@ieee.org

IEEE R10 Life Member Committee

Committee Chair - Rajendra Asthana



First IEEE R10 Life Members Committee meeting

The first IEEE R10 Life Members Committee meeting was held on 25th February 2023 and was attended by all 7 Members.

IEEE Region 10's Life Member Affinity Groups (LMAGs) have been busy celebrating important milestones, sharing best practices, and announcing new awards. Here's a quick roundup of some of the latest news from LMAGs across the region.

LMAG Kansai Celebrates 10th Anniversary with Hybrid Ceremony- LMAG Kansai marked its 10th anniversary with a special ceremony held in hybrid mode at the Chuo-Denki Club in Osaka city on 12th November 2022.

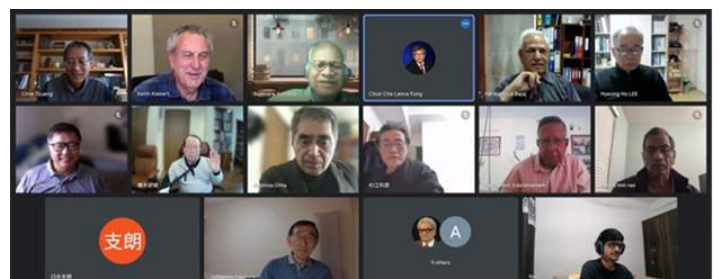
LMAG Delhi Celebrates 5th Anniversary, Presents Awards- LMAG Delhi celebrated its 5th anniversary on 14th September 2022 with a special ceremony that included the presentation of awards to R10, MGA, and section award winners of the Delhi section.

R10 LMAGs Meet Online to Share Ideas

The first R10 LMAG online meeting was held on 26th February 2023, with 20 participants, including R10 Director Prof. Lance. The meeting was an opportunity to discuss the IEEE Foundation and highlight the 36,000+ life members and 130+ LMAGs across ten IEEE regions.

Keith Kikkert, Chair of LMAG South Australia, shared his ideas on how to effectively run LMAGs even with a small number of active members. He suggested joining hands with other local professional bodies and sharing facilities to make the most of limited resources.

Clive Tzuang, Chair of LMAG Taipei, announced that the Taipei Section is organizing the Asia Pacific Microwave Conference (APMC), the world's third-largest conference in microwaves in 2023. The conference will include a parallel Life Member track.



First LMAG Meet of R10 LMAGs

All retirees over 65 years who are members of IEEE, The Institute of Electronics Information and Communication Engineers, and the European Microwave Association are eligible for registration fees at US\$100, and the LM track will feature 5 to 8 speakers. The benefits of this initiative are mentioned as giving the opportunity for LMs to attend important conferences to share experiences and improve their physical and spiritual health.

For any further inquiries on LMC please refer to the R10 LM website <https://lm.ieeeer10.org/> or contact Chair, R10 LMC at asthana@ieee.org

2023 IEEE R10 EAC and IEEE CIS Education Portal Activities in Taiwan, Japan, Hong Kong, and Indonesia

A Sandbox for Teaching and Learning in CI for Pre-University and Undergraduate Students

by Chang-Shing Lee, Mei-Hui Wang, Chi-Un Lei, and Chun Che Lance Fung

Computational Intelligence (CI) is a crucial branch of Artificial Intelligence (AI). CI includes fuzzy logic (FL), neural networks (NN), and evolutionary computation (EC). To encourage young students to experience and learn CI, a workshop and competition are being created during IEEE CEC 2023 and FUZZ-IEEE 2023 conferences. In this workshop, young students will receive learning materials and guidance from tutors, as well as experience with CI-related topics and apply their learning to simple real-world applications.

On 25th March 2023, a pre-training event called the 2023 IEEE R10 EAC and IEEE CIS Education Portal Activities, was co-organized in Taiwan, Japan, Hong Kong, and Indonesia in collaboration with IEEE R10 Education Activities Committee (EAC) and IEEE Computational Intelligence Society (CIS) Education Portal. a in person.

The event aimed to provide young students with an understanding of the basic concept of CI and hands-on experience using the ClandAI-FML tools. Additionally, it aimed to encourage them to attend two upcoming events IEEE Congress on Evolutionary Computation (CEC) 2023 in the USA and IEEE International Conference on Fuzzy Systems (FUZZ-IEEE) 2023 in Korea.

Participants using the ZAI-FML platform to control the AI-FML Kebbi Air and Moon Car to experience the theoretical and practical knowledge of Fuzzy Logic



The in-person classes for the “2023 IEEE R10 EAC and IEEE CIS Education Portal Activities: A Sandbox for Teaching and Learning in CI for Pre-University and Undergraduate Students” were held at Tsoying Senior High School in Taiwan, while online classes were available through GoogleMeet’s cloud classroom. The goals of the activity were: 1) to experience and learn more about machine learning and how it shapes our world, 2) to teach a robot to recognize objects and make recommendations to plan your next journey, and 3) to engage in a fun competition that tests the skills learned during the workshop. A total of 57 participants took part in this event including 30 senior high-school students from Taiwan, 13 students from Japan and Hong Kong, and 14 students and staff from the National University of Tainan (NUTN), Taiwan.



Participants using Google Teachable Machine and AI-FML Robot to experience the theoretical and practical knowledge of Neural Networks

The participants were divided into five groups, and each group is assigned an online tutor from Tokyo Metropolitan University (TMU), Japan, and an in-person tutor from Taiwan.



Participants attending the opening ceremony together with Chun Che Lance Fung, Naoyuki Kubota, and Nia Kurnianingsih

The program consisted of an opening ceremony, concept-based learning, practice-based learning, expression-based learning, and a closing ceremony. The program aims to provide basic practical knowledge about CI and its real-world applications, enabling participants to apply what they have learned in real-world scenarios.

Prof Chun Che Lance Fung (IEEE R10 director), Naoyuki Kubota (TMU, Japan), Chang-Shing Lee (IEEE CIS Education Portal Chair), Chi-Un Lei (IEEE R10 EAC chair), and Ling-Chuan Chang Chien (Principal of Tsoying Senior High School) gave short opening remarks.

Concept-based learning sessions provided a solid understanding of key topics, including online sessions on Neural Network introduction by Naoyuki Kubota (Japan), Fuzzy Logic using a video from FUZZ-IEEE 2021 by Keeley Crockett (UK), STEM Education by Ray Cheung (HK), and Evolutionary Computation by Yusuke Nojima (Japan).

Practice-based learning-based hands-on and engaging sessions allowed participants to apply concepts learned in the concept-based learning segment. This segment included practical sessions on three topics: 1) Neural Networks using Google Teachable Machine and AI-FML Robot, 2) Fuzzy Logic using ZAI-FML Platform and ZAI-FML Learning Tools for Travel Recommendation, and 3) Evolutionary Computation using ZAI-FML Platform and ZAI-FML Learning Tools to experience particle swarm optimization (PSO) Learning for Travel Recommendation

Expression-based learning segment provided an opportunity for participants to apply newfound knowledge and collaborate with their team members and AI Tools such as OpenAI ChatGPT and Midjourney. They used these tools to translate their stories about travel recommendations into English and create pictures, respectively. Furthermore, participants were invited to take part in a CI competition and share their learning experiences on Google Meet. Jim Keller (IEEE CIS President) and Pau-Choo (Julia) Chung (IEEE CIS Vice-President for Education) gave short closing remarks.

During the pre-training event, the participants had the opportunity to learn both basic concepts and practical knowledge about CI and its applications. The event employed a six-step process during the data preparation and collection stage to practice and study the basic concepts of CI for young students. The six-step process integrates a human and machine co-learning model to analyze the participants' learning state. (To learn more about the process go to https://youtu.be/B_Vglo5TfpM).

The feedback from the participants was positive, with many expressing their gratitude for learning new tools and concepts such as Open AI ChatGPT, the Midjourney, the basic concept of neural networks and evolutionary computations, and using the teachable machine to recognize objects. The event was focused to provide an opportunity for the participants to meet people from different countries and engage in teamwork.

The event concluded positively with participants gaining valuable insights into the latest AI trends and techniques. They appreciated the opportunity to interact with experts in the field and network with peers from different disciplines. Many participants expressed their interest in attending similar events in the future.

More details about this pre-training event are available on the website [here](#). The organizers look forward to seeing the participants again at IEEE CEC 2023 held in Chicago, USA on 2-5 July 2023, and FUZZ-IEEE 2023 in Songdo, Korea on 13-17 August 2023.

IEEE LMs Dance to Folk Tune at Local Museum at India SYWL Congress

by T G S Mani

As part of IEEE All India SYWL Congress held in Pune, India in October 2022, a visit was arranged for LMs attending the conference to a local museum called Raja Dinkar Kelkar Museum, Pune, India.

The visit was coordinated by Prof GS Mani, LM from Pune section, who explained how IEEE Pune section has taken the museum as its cultural partner and is working on STEM to STEAM activities. Delegates were guided around the museum and the visit ended with the delegates being entertained by a traditional folk dance called Lavani. The dancers invited the audience to participate in the dance, and soon a host of LMs and their wives were swaying to the rhythmic tunes.



The Oldies trying to compete with the vigor of the professional dancer

Discussions on museum as cultural partner for IEEE Pune Section

The delegates included Dr Harbans L Bajaj, R-10 Director (1997-98) and his wife, Dr Koruthu Varghese, Former Chair, Kerala Section, and his wife, Dr RK Asthana, 2022 Life Committee Member, Mrs Mathur, wife of Mr Deepak Mathur, Director R-10, Dr Rajashree Jain, Secretary India Council, Prof GS Mani, Chair, JCAME and his wife among many others. Participants expressed their enjoyment of the visit and their desire to participate in similar programs in the future. This visit not only allowed the LMs to explore Pune's rich cultural heritage but also provided a platform for building strong connections between the IEEE and the local community.



Participants at the Visit to Raja Dinkar Kelkar Museum

WIE MAS International Women's Day Celebration

By Arun M

The IEEE Women in Engineering (WIE) Madras Section (MAS) recently organized two events to promote and celebrate women in science and engineering. On 14th February 2023, in honor of the International Day of Women and Girls in Science, WIE MAS and Sri Jayachamarajendra College of Engineering WIE held a panel discussion called SHEIgnite, with the theme of "Bringing Everyone Forward." The panel featured esteemed speakers namely Dr. S. Radha, Vice Principal of SSN College of Engineering, Dr. R. Ramaprabha, and Dr. T. Sree Sharmila, Chair of IEEE WIE MAS.



Participants at the outreach event at Government Higher Secondary School (GHSS), Anjur

In addition, WIE MAS, in association with IEEE WIE SEC, organized an IoT BOT workshop on 20th February 2023 to celebrate National Engineers Day. The workshop was conducted by Authithiye Barathwaj, Co-Founder and Chief Technology Officer, Genik Technologies, and Haariharan N C, Co-Founder and Director of Projects, Genik Technologies.

WIE MAS, in association with the IEEE WIE student branch of SRM Institute of Science and Technology and the Department of Electronics and Communication, organized an outreach event introducing girls to engineering at Government Higher Secondary School (GHSS), Anjur, India. Dr. M. Malathi, Guest Faculty, of IIT Madras, and Dr. E. Povammal, Professor, SRM University gave a motivational talk to students, sharing their life and career experiences.

LMAG-Tokyo Technical Tour 2022

By Toshihiko Sugie

Tokyo-LMAG held four technical tours in 2022, co-sponsored by Tokyo Section TPC. A tour of JAXA's Institute of Space and Astronautical Science (Sagamihara-Campus) was held on 29th September 2022, with 29 participants. An explanation of the history from "Pencil-Rocket", a rocket for the first Japanese experiments, to cutting-edge achievements was given by Dr. Tadashi Takano, past LMAG-Tokyo Chair (Professor Emeritus at ISAS), and Professor Tatsuaki Okada of ISAS presented the latest research of samples brought back from "Ryugu" by "Hayabusa2".

On 26th October 2022, a technical tour was held at the ANA hangar (Haneda Airport) to observe the latest aircraft maintenance with 35 participants. After visiting the maintenance floor, participants received a detailed explanation of the actual aircraft. Moreover, technical tours were held on 24th August 2022, at KDDI Yamata Transmitting Station (Radio-Japan) in Koga-city, and the Railway Museum and the Research and Development Center of JR East Group at Omiya, on 14th December 2022.



Participants at the visit to ANA maintenance factory



Participants at the visit to JAXA's Institute of Space and Astronautical Science

LMAG Kansai 10th Anniversary Event

by Masaaki Kobayash

Life Members Affinity Group (LMAG) Kansai held its 10th-anniversary ceremony on 12th November 2022 at "Chuo-Denki Club" in Osaka city. The ceremony was attended by 33 people who joined online and in person. Dr. Masaaki Kobayashi, the LMAG Kansai chair, welcomed the participants of the ceremony, and Professor Toshio Fukuda, the past IEEE president, gave a congratulatory address from Brazil, despite the time gap. Dr. Tadashi Takano, Professor Emeritus of the Japan Aerospace Exploration Agency, Dr. Hajime Imai, Professor Emeritus of Japan Women's University, and Professor Yutaka Hata, the Chair of IEEE Kansai Section, gave congratulatory addresses in the ceremony's opening session.



Attendees at LMAG Kansai's 10th-anniversary ceremony in Osaka City

During the second session of the ceremony, the attendees enjoyed an excellent video program titled "The History of LMAG Kansai," followed by a speech by Dr. Masaki Koyama, the first chairman of LMAG Kansai, who talked about the details of LMAG Kansai. Then, Professor Isao Shirakawa, Professor Emeritus Osaka University and the Chair of the IEEE History Committee, and Professor Masasugu Kidode delivered commemorative lectures titled "Milestone of Japan and Kansai" and "Computer Image Processing and Technologies of Robotics Vision: The Past Ten Years and the Next Ten Years, respectively.

Professor Yukihiro Nakamura, the former Chair of LMAG Kansai, gave the closing remark. After the ceremony, a dinner party was held. The event was an opportunity to celebrate the tenth anniversary of LMAG Kansai and reflect on the past achievements and progress made.



Dr. Kushiki, the next Chair, LMAG Kansai, addressing the meeting

Australian Capital Territory Children's Week and Signing Partnership Agreement

By Ambarish Natu

In 2022, the IEEE Australian Capital Territory (ACT) Section and The ACT Children's Week entered into a partnership to promote STEM in the region. As a result of a year long work of organizing grants application process and reviewing several nominations for awards, the inaugural Outstanding STEM Volunteer and Grants were given out to a number of deserving candidates and institutions. The IEEE ACT Section contributed \$1000 from its own section funds to support this cause with a significant contribution coming from the local ACT government. As a result of this partnership, STEM has attracted state-level attention and promotion.

The ACT Section was for years, unable to promote STEM activities in the region due to a lack of resources and a champion to drive this initiative. ACT Children's Week is a friend organization that has helped the IEEE ACT section promote STEM in the community at its grassroots level. This is a significant step for the section in creating outreach among pre-university students and volunteers.

IEEE Silchar Subsection Conference - IEEE SILCON 2022

By Asha Rani

IEEE Silchar Subsection organized the IEEE SILCON, the first flagship Annual International Conference from 4-6 November 2022 in hybrid mode. IEEE SILCON-2022 was lauded with applause from the research community of academicians, professionals, industry delegates, and students in this region. It was successful in offering a platform for research collaboration, networking, and knowledge dissemination through presentations of recent research findings in the fields of Computer Science, Electrical Engineering, and Electronics and Communication Engineering with ten different tracks and seven technical sessions. IEEE SILCON-2022 included several keynote addresses, tutorials, and plenary sessions by reputed academicians, in addition to high-quality research demonstrations from eminent researchers across the globe. SILCON-2022 attracted 358 submissions with 108 accepted, of which 97 registered for the conference and presented their research findings.

Eureka: Technical Paper Presentation Competition

By Prajakta Sathe

The Eureka event was organized on 21st January 2023, as a collaborative event between the IEEE Student Branch Kharagpur Section and the Kshitij Techno Management Fest 2023 at the Indian Institute of Technology (IIT), Kharagpur.

The event aimed to provide a platform for young innovators to showcase their research ideas and solutions related to digital technology and innovation. The judges selected 42 teams from across the nation, who had to prepare their papers in the IEEE format with specific components such as abstracts, objectives, background, statements of the problem, the extent of research, and novelty of the paper. The top ideas presented at the event included multi-functional electronic devices and battery management systems using microcontrollers. The winning team received a cash prize, and the event successfully increased awareness of IEEE papers and journals, allowing participants to learn about the latest technology trends and network with others who share similar interests.



Participants at the Eureka event



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One-day Bootcamp on Entrepreneurship

By Aditya Kameswara Rao

The IEEE Kharagpur Section, IEEE Young Professionals Affinity Group, IEEE Student Branch IIT Kharagpur, and AI4ICPS IIT Kharagpur organized a one-day bootcamp on entrepreneurship, aimed at inspiring and developing the skills of participants in designing business models on 3rd December 2022. Aditya Kameswara Rao Nandula, Chair of IEEE Young Professionals Affinity Group Kharagpur Section, welcomed all participants and dignitaries, providing an overview of IEEE, IEEE Kharagpur Section, and its organizational unit activities. Mr. Bhattacharyulu Dittakavi, CEO of AI4ICPS IIT Kharagpur, delivered a lecture on "A Primer on Entrepreneurial Mindset," followed by an interactive lecture on "Idea Validation" by Dr. P K Dan, Professor, Rajendra Mishra School of Engineering and Entrepreneurship, IIT Kharagpur. Dr. Debdoot Sheet, Professor, Electrical Engineering Department, IIT Kharagpur, conducted a hands-on session on preparing a "Business Model Canvas (BMC)." The event motivated the participants to explore entrepreneurship and take advantage of their skills in designing business models.



Participants at the one day bootcamp with speakers

IEEE Tokyo/Shin-etsu Joint Section Women in Engineering AG - WIE 2022 Symposium and Red Carpet Event

By Pauline Kawamoto

After two years of online activities, IEEE Tokyo/Shin-etsu Joint Section WIE conducted its 2022 annual symposium on 11th December with 77 participants. The event was held at the "Miraikan" museum in Tokyo as the first hybrid event of the affinity group. The keynote speaker Prof. Michiko Ohkura (Shibaura Institute of Technology) shared "My personal journey with "kawaii" (cute in Japanese)" and explained how she continued to make progress in a time when doing research as a woman in Japan was tough. Ms. Kazue Yasuoka (JR East) delivered the technical talk "Overseas railway projects and my career vision," where attendees learned about her project of rebuilding and completing the rail system in Myanmar.



Participants at the IEEE Tokyo/Shin-etsu Joint Section WIE Symposium

IEEE Tokyo/Shin-etsu Joint WIE AG closed out the 2022 year with a special red carpet event at "Tango – Place of Tokyo" on 10th December 2022 with 25 participants to celebrate the newly elevated senior members and all member achievements with family and friends.



Participants at the red carpet event of IEEE Tokyo/Shin-etsu Joint WIE AG

Two-Day Symposium on Application of Artificial Intelligence in Control, Measurement, and Instrumentation

By Nirmal Murmu

IEEE Joint Control Systems Society and Instrumentation & Measurement Society Chapter (CSS-IMS) Kolkata chapter, in collaboration with the Department of Applied Physics, University of Calcutta, organized a "Two-Day Symposium on Application of Artificial Intelligence in Control, Measurement and Instrumentation" on 23-24 September 2022. The program was sponsored by IEEE Instrumentation and Measurement Society, USA, and IET (UK) Kolkata Local Network. The program was arranged with an inaugural session, six technical lectures, and a valedictory session. The speakers and topics were, Prof Amlan Chakrabarti, on "Medical Diagnosis using Artificial Intelligence: Techniques, Algorithms and Applications", Prof Amit Konar on "Brain-Computer Interfaces for Neuro-motor Rehabilitative Applications", Dr. Hena Ray on "Robotics in Agriculture", Prof. Aurobinda Routray on "Human in Loop in Cyber-Physical Systems: the monitoring of human subjects and stimuli to enhance the onboard performance", Prof Shubhendu Bhasin on "Control of Uncertain Constrained Systems: An Adaptive Control Perspective", and Prof Ananda Shankar Chowdhury on "Artificial Intelligence for Pattern Analysis". This event was in-person, and 108 participants joined in this two-day-long event.



Participants at the Symposium on Application of Artificial Intelligence in Control, Measurement and Instrumentation

Student Chapter at JCU Townsville Competes in Robot-X

By Ethan Waters

The IEEE Student Chapter of James Cook University (JCU), Townsville, recently participated in the 2022 RobotX Challenge in Sydney. This international competition challenged teams to design and build autonomous surface vehicles (ASVs) capable of navigating a maritime environment. The team made up of students from various engineering and science disciplines, developed a custom ASV equipped with GPS, lidar, and other sensors to navigate autonomously and perform various tasks. The team's efforts were rewarded with two awards for their cost-effective design: "Value Can Do" and the "Blue Robotics Cost Effective Design" awards. This is a testament to their cost-effective, innovative, and efficient approach to robotics design. The team was mentored by IEEE member Dr Shou-Han Zhou and supported by the Northern Australia IEEE section. The competition encouraged and actuated significant student collaboration and learning in robotics over 18 months.



IEEE JCU SB Team participated in the 2022 RobotX Challenge and the robot



IEEE Kolkata Section Events

By Chandni Pani

Social Meet 2023

The IEEE Kolkata Section organized a post-pandemic Social Meet 2023 under the leadership of Prof. Iti Saha Misra on 26th February 2023. Attendees enjoyed physical activities and had the chance to unwind and relax. The main attractions of the event were networking, chatting, singing, and dancing, along with delicious food. The IEEE Kolkata Section plans to continue to prioritize creating such events that provide an opportunity for members to interact and build a strong sense of community.

Distinguished Lecture on 75th Anniversary of Invention of Transistors Celebration

The IEEE Electron Devices Heritage Institute of Technology (HIT) Student Branch Chapter jointly with the IEEE Electron Devices Society Centre of Excellence and Department of Electronics and Communication Engineering at HIT organized a distinguished lecture by Prof. Durga Mishra, Professor, and Chair of the Electronics and Communication Engineering, Department of New Jersey Institute of Technology, Newark, USA on 15th February 2023. The lecture was on "75th Year of Transistors: Dielectrics Responsible for the Transistor's Scaling". Prof. Mishra gave an insight into his work and observations over the years in the field of transistors and dielectrics. He talked about the use of different gate dielectrics and their reliability, discussing the evolution of dielectric science in nanoelectronics that enabled the effective scaling of transistors. The audience included professionals, students, and professors from different institutes.

Distinguished IEEE Fellow Lecture at JCU Cairns

By Kevin Huang

The IEEE Northern Australia Section and James Cook University recently hosted a seminar featuring Professor Levent Sevgi, an esteemed IEEE fellow member and Antennas and Propagation Society (APS) expert. The event, which took place on 23rd September 2022, featured two lectures with Dr. Tao (Kevin) Huang, the Vice-Chair of IEEE Northern Australia MTT/CoMM Joint Chapter.

The IEEE Northern Australia Section and James Cook University jointly supported the seminar which was attended by engineering students specializing in the Internet of Things, Electrical, and Electronics, in-person at the Cairns campus and online at the Townsville Campus. During the lectures, Professor Sevgi covered "From Engineering Electromagnetics to Electromagnetics Engineering: Teaching / Training Next Generations" and "Electromagnetic Diffraction Modeling and Simulation."

Overall, the seminar provided an opportunity for students to learn from an expert in the field and gain insights into the latest advancements in electromagnetic theory and practice. The organizers expressed their gratitude to Professor Sevgi for his contribution to the event and looked forward to more opportunities to host such events in the future.



Participants at the event with the speakers



IEEE Pakistan Students, Young Professionals, Women in Engineering, SIGHT Congress (PSYWSC) 2022

By Muhammad Faisal Khan

The 15th IEEE Pakistan Students, Young Professionals, Women in Engineering, SIGHT Congress (PSYWSC) 2022 was jointly organized by Hamdard University(HU) and IEEE Karachi Section. The congress was held on 28-29 December 2022 at Hamdard University's main campus in Karachi, and attracted over 600 participants, including around 200 IEEE members from all over Pakistan.

The event featured plenary and keynote talks, panel discussions, technical workshops, motivational talks, IEEE awareness sessions, and an IEEE membership drive. The opening ceremony Prof. Dr. Bhawani Shankar Chowdhry, Chair of IEEE Karachi Section, delivered introductory remarks, while Prof. Dr. Syed Shabib-ul-Hasan, Vice Chancellor of HU, delivered the welcome address. The conference was inaugurated by Prof. Dr. Mukhtar Ahmed, Chairman of the Higher Education Commission, Pakistan who also gave a plenary talk as the chief guest.

The event had high-profile personalities participating in workshops and discussions, sharing their knowledge and valuable thoughts with the audience. The second day included a meet-up of IEEE Section officers of all three sections in Pakistan along with an IEEE membership drive. During the closing ceremony, Engr. Muhammad Najeeb Haroon, Chairman of the Pakistan Engineering Council, was the Chief Guest and appreciated the efforts and contributions of IEEE for the betterment of society. Concluding remarks were given by Prof. Dr. Tariq Rahim, Vice Chair of IEEE Karachi Section, while Prof. Dr. Aamer Salim, Dean of the Faculty of Engineering Science and Technology at HU, proposed the vote of thanks. The event was jointly sponsored by IEEE Karachi Section, GFS Builders and Developers, and Hamdard Laboratories.



Presenting the token of appreciation for the chief guest at PSYWSC 2022

IEEE India Treasurer-Secretary Conclave 2023

By Saurabh Mehta



Participants at the India Treasurer-Secretary Conclave 2023

The IEEE Bombay Section organized the first-ever IEEE India Treasurer-Secretary Conclave 2023 from 10-12 February 2023, at Dukes Retreat, Lonavala. The primary aim of this conclave was to share good practices and receive advice on pressing issues raised by the IEEE audit team and the local statutory audit by the chartered accountants. Eight section representatives, along with IEEE office representative Sri Chandra, attended the conclave.

On Day 1, the participants gained an understanding of the IEEE agreement, finance compliances for IEEE and the Government of India, IEEE audit reporting, and clarifications needed on the IEEE agreement. The day concluded with a networking dinner.

On Day 2, the participants discussed ideal Section Bylaws, repository and record-keeping, section reporting, interaction with the IEEE representative on the issues faced by the sections, best accounting practices by section officers, and best secretarial practices by section officers. The day ended with a networking dinner.

On Day 3 of the IEEE India Treasurer-Secretary Conclave 2023, the participants had the opportunity to interact with the IEEE officer regarding clarifications on the discussions held on Day 1, general expectations from Region 10 and IEEE HQ, and planning and publicity for 2023. The participants included the R10 Representative, IC Representative, and Section Representatives.

Overall, the conclave served as a platform for section representatives to share best practices, seek guidance on pressing issues, and network with other section representatives. The proposed India Council (IC) Executive Committee would provide an excellent opportunity for office bearers of all the sections to meet and network, fostering better collaboration and cooperation among them.

The outcomes of the conclave include sharing of best practices among all the sections for treasurer and secretary practices, bringing synergy between IEEE and various sections, planning of collaborative events and programs with different sections for the upcoming duration, training on various aspects of NGO, Society, trust farming, and financial practices, and networking with other sections.

Global Leadership Connect 2023 and IEEE HTB Global Workshop

By Arun M

The IEEE Madras Section (MAS) hosted the IEEE Humanitarian Technologies Board (HTB) Global Workshop and Global Leadership Connect 2023 on 2nd February 2023. Mr. Sampathkumar Veeraraghavan, the 2023 World President of IEEE Eta Kappa Nu (HKN) and 2023 Global Chair IEEE HTB Partnership delivered the keynote speech. The welcoming address was given by Dr. K. Porkumaran, Chairman of IEEE MAS, highlighting the section's successes. Mr. Sampathkumar emphasized the significance of involving students and technologists in charitable endeavors and environmentally friendly innovations. He discussed the IEEE HTB strategic areas of concentration, which included creating a sustainable development community, raising awareness, offering training, and supporting humanitarian technology and sustainable development initiatives. He also discussed the importance of SIGHT - the Special Interest Group on Humanitarian Technology - and offered advice on how to approach project contexts and compose bids. Further, he talked about the overall strategic plans and how HTB fits into them. IEEE India Council prize winners and MAS Richard E. Merwin Scholarship scholars were recognized after the workshop. The IEEE MAS Secretary, Dr. R. Hariprakash, concluded the event with the vote of thanks.



Participants at the HTB workshop

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IEEE China Council events

by Debiao Lu

IEEE WIE Beijing Leadership Summit 2022 (IEEE WIE BLS 2022)

IEEE China Council co-sponsored the 4th IEEE WIE Beijing Leadership Summit (IEEE WIE BLS) which was held on 23-24 September 2022. under the theme "Diversity, Inclusion, Breaking Boundaries",

More than 20 women academicians/ entrepreneurs/ engineers shared research findings on robotics, artificial intelligence, cloud computing, smart medical care, and blockchain with 9 keynote presentations, 6 forums, and a youth technology dream forum.

Prof. Yinghong Wen, Chair of IEEE China Council welcomed the participants at the opening session. 2022 IEEE President, K.J. Ray Liu, 2022 IEEE Region 10 2022 Director, Deepak Mathur, 2022 IEEE WIE Committee Chair-Elect, Prof.Celia Shahnaz, CSIG (China Society of Image and Graphics) Vice-Chair Prof. Yanning Zhang, Senior Director of IEEE Asia Operations Mr. Ning Hua addressed speeches on the opening ceremony, The summit promoted and encouraged female engineers and scientists in China to pursue careers in scientific research and engineering.

International Symposium on Microwave, Antenna, Propagation and EMC Technologies for Wireless Communications (MAPE 2022)

International Symposium on Microwave, Antenna, Propagation and EMC Technologies for Wireless Communications (MAPE) was initiated to celebrate the 20th anniversary of the foundation of the IEEE Beijing Section in 2005, after several years, it has become the flagship wireless event of the IEEE Beijing Section geared toward wireless communication industry professionals interested in the latest research and design.

2022 MAPE was held on 26-29 August 2023 virtually due to COVID-19 pandemic. The symposium included six main topics, where the Antennas track was the main category of the accepted papers, followed by the EMC Technologies track. The China Council members were involved in the organizing committee and the technical committee of the conference.

More Activities: IEEE China Council supported holding the 2022 IEEE Reliability Society Chapter Congress. Prof Yinghong Wen represented the IEEE China Council to give a keynote speech at the congress.

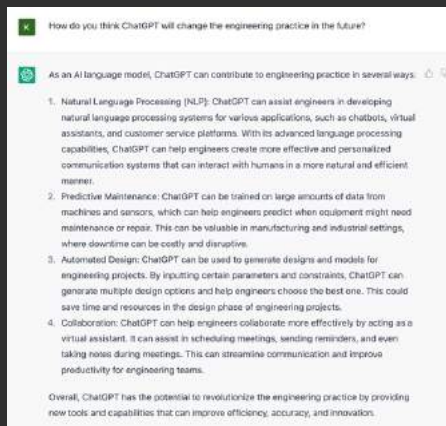
ChatGPT

ChatGPT is a large language model developed by OpenAI that uses advanced natural language processing techniques to understand human language and generate contextually relevant responses. The potential applications of ChatGPT in engineering and education are vast, including facilitating engineering design, problem-solving, and innovation, and enhancing the learning experience for students pursuing tertiary education in engineering.

However, there are potential risks associated with using ChatGPT in engineering practice and education, such as the accuracy and reliability of ChatGPT-generated solutions and the risk of students becoming overly reliant on the technology.

To prepare for the future of engineering work, engineers and educators should be aware of these potential risks and take steps to ensure that students do not become overly reliant on ChatGPT. Students should also focus on developing technical and soft skills, including critical thinking, creativity, communication, collaboration, and adaptability, to work effectively alongside AI models to solve complex problems.

As AI technology evolves and becomes more sophisticated, engineers will likely be working alongside AI models to develop and implement solutions. In that case, the engineers' work will likely shift towards more strategic and creative problem-solving while AI takes on more routine and repetitive tasks. This will require engineers to understand AI technologies and how to use them effectively to achieve their goals. AI models like ChatGPT can facilitate this collaboration by providing instant feedback and guidance to engineers, enabling them to make more informed decisions and design better solutions. See below figure on how current ChatGPT response on how it will change the engineering practice in the future.



In conclusion, while ChatGPT has the potential to revolutionize the practices of engineering and tertiary education in engineering, it is essential to approach its use with caution and awareness of the potential risks. With the right skills and knowledge, engineers can work alongside AI models to tackle complex engineering problems and drive innovation.

by Tao (Kevin) Huang

How current ChatGPT response on how it will change the engineering practice in the future

Here are a few questions to think about:

- 1. What do you think are the biggest benefits of using AI models like ChatGPT in engineering practice?**
- 2. How do you think the role of engineers will change as AI technology continues to evolve?**
- 3. What skills do you think are most important for engineers to develop in order to work effectively alongside AI models?**
- 4. Do you think there are any potential risks associated with the use of AI in engineering? If so, what are they?**
- 5. Can you think of any specific examples where AI models like ChatGPT could be used to improve the efficiency or effectiveness of engineering projects?**

**and the Future of Engineering:
Preparing for a Collaborative and Creative
Era**

SPECIAL CALL FOR ARTICLES

CLIMATE CHANGE

A Global Crisis that Requires Immediate Response*Md. Moniruzzaman Sojol*

Climate change is a global crisis that is already impacting our planet. The scientific evidence is clear. It is mainly caused by human activities such as burning fossil fuels and deforestation. The consequences of inaction are grave and can have dire consequences for the planet and humanity.

We must act urgently to mitigate the impacts of climate change. This will require concerted action by governments, businesses, and individuals around the world. Governments should develop policies to invest in renewable energy, implement carbon pricing mechanisms, and support climate-friendly infrastructure. Companies can reduce their carbon footprint by adopting sustainable practices and using renewable energy. Individuals can also make changes in their daily lives, such as the use of public transportation and reduced energy consumption.

In summary, climate change is a global crisis that requires urgent action. Failure to act now will have grave consequences for the planet and future generations.

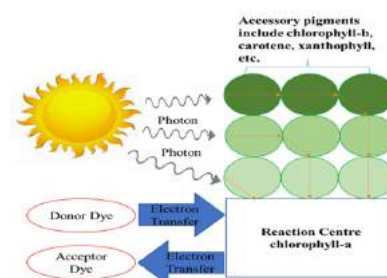
Assigning Sustainable Development Goals to Educational Resources in IEEE*Leon Lei*

Actions for Climate Change are closely related to Sustainable Development Goals 7 (Affordable and clean energy), 11 (Sustainable cities and communities), and 13 (Climate action). Meanwhile, SDG Target 4.7 states, "By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development". Besides providing support on organizing educational activities related to SDGs 7/11/13, Region 10 Educational Activities Committee believes existing resources from Educational Activity Board (EAB) (including TryEngineering for K12 and Learning Network for continuous education) can help the community and the public achieve SDGs 7/11/13 and take actions against climate change. However, most existing EAB resources have not been labeled according to SDGs yet. This indicates the need for SDG classification of EAB resources, such that more resources can be identified to scale education on climate change. In the proposed project, we wish to explore automatic SDG classification of EAB resources through machine learning algorithms.

Organic Dye Nanoparticles as an Alternative to Carbon Emission-Based Energy*Kapil Dev Mahato*

International scientific consensus holds that, in order to avoid calamitous climate impacts, global net human-caused carbon dioxide (CO₂) emissions must fall by about 45 percent from 2010 levels by 2030, eventually reaching net zero around 2050 if the Paris

Agreement is followed. Since 2022, the research team of K.D.Mahato and U.Kumar at National Institute of Technology, Jamshedpur, India have worked on a strong action plan on climate change using biodegradable organic dyes as an alternative to carbon emission-based energy. They explored the light-harvesting properties of donor and acceptor dyes via FRET (fluorescent resonance energy transfer). It is a unidirectional energy transfer from the antenna reaction center to the chemical energy storage center. This research helps take one step forward toward the goal of net-zero carbon. Furthermore, this research is moving forward in the nanoscale domain. Homo-FRET donor dye nanoparticles can enhance light-harvesting properties by increasing the donor-acceptor ratio.

**Climate Change is a Result of Human Activity***Harshvardhan Tripathi*

When greenhouse gasses (GHGs), including carbon dioxide (CO₂), methane (CH₄), and nitrous oxide, are released into the atmosphere, it results in climate change which is a serious worldwide problem. The following sectors can be used to broadly classify human activities, the main causes of climate change.

Fossil fuel combustion for electricity production, transportation, and heating contributes significantly to GHG emissions. Energy Production and Consumption. Carbon dioxide, methane, and other greenhouse gasses (GHGs) are released into the atmosphere when coal, oil, and natural gas are used as energy sources. Animal husbandry, deforestation, and other agricultural practices all contribute significantly to the agricultural sector's emissions of greenhouse gasses. The use of fossil fuels for electricity generation, transportation, and heating significantly contributes to GHG emissions. The agricultural sector contributes significantly to GHG emissions.

Way Forward to Mitigate Climate Change

Pushpendra Singh

Smart meters with net metering options and vehicle-to-grid (V2G) integration are two innovative technologies that can help reduce carbon emissions and promote sustainability.



Smart meters allow users to monitor their energy consumption in real-time and track their renewable energy generation. With net metering, individuals can offset their energy consumption with renewable energy generation, thereby reducing their reliance on fossil fuels and minimizing their carbon footprint. V2G integration allows electric vehicles to receive power from the grid and return power back to the grid, acting as a storage device for renewable energy generated by smart homes.

By combining these two technologies, individuals can maximize their use of renewable energy while minimizing their carbon footprint. Homeowners can generate their own renewable energy, charge their electric vehicles with that energy, and then use their vehicles to return excess energy back to the grid during peak demand hours.

Moderating the Brisk Climate Change

Chaitanya Yogi

Climate change transpires to be a long term threat over the entire global community, and to address a concerning danger like increase in global average temperature, a three-dimensional approach seems desperately required. On a technological front, methods like carbon capture and storage (CCS) and carbon sequestration could minimize the emissions. This can be further aided with concepts like grid decarbonization, and wide area temperature monitoring using spaceborne sensors to quickly respond to warmer areas. In terms of economic measures, administrative policies must be directed towards adopting a circular and green model of economy which shall focus on the concept of promoting non-polluting sources of energy and lesser waste generation. Introducing a market for carbon trading for manufacturers coupled with incentives could be highly instrumental for the same. Socially, an effective thrust has to be made for minimizing consumption, which arguably is the 'only' effective measure for eradicating the discussed threat.

Environmental Resilience Workshop

Mishel Perera

An Environmental Resilience Workshop is currently organized by IEEE Young Professionals Sri Lanka in association with the 'Thuru' and 'Zero Trash' organizations with the goal of enhancing IEEE members' capacity to comprehend and address environmental challenges such as waste management and climate change.

The workshop will be at the 'ZeroTrash Collection Centre' in Boralesgamuwa during the third week of April 2023. Two experienced trainers and around thirty IEEE volunteers are invited to the workshop. Participants are required to bring at least 2 kg of recyclables in a reusable bag for the training.

Agenda items of the workshop include the following items.

- Basic climate change science: Global warming, greenhouse gasses, and consequences
- Thuru introduction and home gardening hands-on exercise
- Zerotrash introduction and hands-on exercise on waste segregation

Importance of Electric Vehicles (EVs) in Climate Change

Karam Bharat Singh

Electric vehicles (EVs) are becoming more popular as a way to reduce greenhouse gas emissions and climate change. EVs have the potential to drastically reduce the carbon footprint of the transportation industry. However, transportation considerably adds to greenhouse gas emissions. The EPA says that in 2019, 29% of all greenhouse gas emissions in the United States came from transportation. Carbon dioxide, nitrogen oxides, and other dangerous pollutants come out of the tailpipes of gasoline and diesel vehicles. EVs are propelled by battery power and may be charged with sustainable energy. Greenhouse gas emissions could decrease if more people drove electric cars, especially ones that ran on clean energy. Even though EVs reduce greenhouse gas emissions and improve air quality, their long-term viability depends on how they get their power. Electric cars are good for the environment, but we must promote clean energy sources to get the most out of them.

Climate Crisis

Syed Fasih Uddin

Long gone are the days when we used to discuss what the effects of climate change might be. Climate Change has started showing its ugly head. Region 10 of IEEE has already started witnessing extreme weather calamities. 2022, we saw the hottest March in the region since 1901.

Several cities across India and Pakistan faced temperatures over 42.8°C (109.0°F). Nawabshah, a city in Pakistan, recorded temperatures up to 49.5°C (121.1°F). Extensive monsoon rains resulting in floods caused \$14.9 billion of damage and \$15.2 billion of economic losses in Pakistan. It pushed as many as 9.1 million people below the poverty line. IEEE is doing commendable work in this regard. However, more efforts need to be made. Awareness events on Environment Day and Earth Day should be held in all regions. A free interactive course on it should be conducted. Every event organizer must complete the course with an assessment prior to the event.

Technologies Towards Decarbonized World

Rachna Verma

COP26 is one of the landmarks of our decarbonization journey. Energy sector continues to lead as the largest sector (~70%) to contribute to greenhouse gas emissions. Below are a few of the new technologies which can help us to meet our targets faster.

1. Low voltage Direct current (LVDC). Conversion (DC - AC) simply means losses (>5%). LVDC is a technology through which the electricity produced by renewable sources is consumed in the same form as it is produced.
2. Reliability of Electronics: As we continue to migrate from electromechanical to electronic equipment, it's very imperative to have focus towards the reliability of such products. The standardization body continues to work in this regard.
3. Edge Vs cloud Computing: Edge computing is 10^6 more power efficient as compared to cloud computing. With the recent advancements in electronic technology, various analytics can be tackled at Edge.

Ideas on Actions to address the Climate Change in Your Region

Ankita Patel

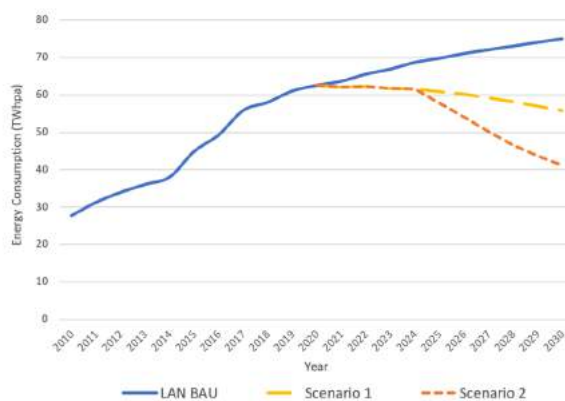
Climate change has disrupted life in unimaginable ways, affecting every aspect of human existence. Its devastating consequences have left no one untouched, highlighting the urgent need for action to mitigate and adapt to its impact. IEEE WIE JSSATEN Affinity Group (AG) organized an article writing competition on the topic "Ideas on actions to address the climate change in your region" from 27 February to 1st March 2023.

The event's objective was to bring out the creativity and innovation of students and make them aware of the various negative consequences of climate change that are occurring in our surroundings and what efforts we need to take on a regional level to address such concerns.

The event was held online. Initially, posters were created and distributed among students. Students were made aware of the event's occurrence through social media and announcements. Their responses were obtained using Google Forms. On the basis of the articles submitted by the participants, winners were announced and awarded IEEE goodies and prizes. All of the student participants received certificates.

Importance of ICT Solutions for Climate Change

Terence J Smith



Energy consumption of Ethernet and Wi-Fi LANs projected out to 2030. The Business as Usual (BAU) represents current LAN energy efficiency performance. Scenario 1 is the estimated improvement from a gradual adoption, from 2020, of the EEE option for LANs. Scenario 2 represents the potential further energy savings, commencing in 2024, resulting from improved energy efficiency of Wi-Fi APs.

A key element to overcoming climate change by reducing CO₂ emissions is reducing building energy use, which represents around 35% of total emissions. In the European Union and the USA, building energy use is receiving considerable attention. The aim is to limit building energy use to a level sufficient to sustainably meet the energy demands of utilities, such as HVAC. Because it is used to manage its utilities, a building's network is a critical component in reducing building energy use.

Globally, commercial building ICT networks are estimated to consume 2% of the total energy. This figure can only increase. Improving network energy efficiency will lower building energy use. The need for networks to be as energy efficient as possible is only going to be greater. By 2030 more efficient Ethernet and Wi-Fi networks, are estimated to save annually.

Global Climate Changes

Dr.Kannadhasan Suriyan

Climate change is a major global issue that causes unprecedented stress on society and the environment. Its effects are seen worldwide, with unique occurrences never experienced before.

Fossils have taught us much about Earth's pre-human era, and science has provided us with precise knowledge about the planet and the universe's age. Educators must ensure that students have the best available information to navigate a constantly changing world. Greenhouse gases, responsible for climate change, pose a significant challenge, causing temperature rises, extreme weather, and biodiversity loss. Addressing climate change requires reducing greenhouse gas emissions, promoting renewable energy, and advocating for sustainable practices.

Canberra has '100 percent Renewable' Electricity since 2020

Ambarish Natu

South Australia's Hornsdale is one of the many wind farms which is more than 1,000 kilometers away but will provide electricity to Canberra so that Canberra can consume 100% power produced by renewables.

Only about five percent of Canberra's electricity is generated within its borders, by a few solar farms and rooftop panels on homes. The rest comes from the national electricity market – the grid that powers the eastern Australian seaboard – and four-fifths of the grid's power comes from non-renewable sources.

The Australian Capital Territory (ACT) funds five different wind farms around Australia to feed energy into the national grid to make up for what Canberra consumes. Those investments, together with Canberra's own solar, put a stop to about 40 percent of the ACT's carbon emissions, compared to what it would emit if it just bought traditional power from the grid. The ACT-contracted solar and wind farms cover 77 percent of the capital's electricity consumption. This way the Canberrans could trust that all their power was paid for in renewable energy.

Considering the importance of IEEE initiatives on climate change, IEEE R10 Director Prof. Lance Fung has formed an Ad Hoc Committee on Climate Change chaired by Dr. Shaikh Fattah with Dr. Nirmal Nair and Engr Parkash Lohana.

IEEE Resources on Climate Change: <https://climate-change.ieee.org/news/>

IEEE Xplore:

<https://ieeexplore.ieee.org/search/searchresult.jsp?topic=climateChange>

IEEE SA: <https://standards.ieee.org/beyond-standards/cop26-ieee/>



The logo for 'Climate Change' features the word 'Climate' in a light green font and 'Change' in a darker blue font, both in a sans-serif typeface. A horizontal line is positioned below the text.

IEEE: Enabling Innovation and Technology Solutions

The role of AI for Climate Change

Suthikshn Kumar



AI for Climate Change: ChatGPT for creating change agents at Grass roots!

Artificial Intelligence (AI) has a big role to play in climate change. There are many data sets that are available for Climate change researchers through various portals such as Kaggle and dataport etc. The researchers can utilize these data sets and run machine learning / deep learning algorithms for gaining insights. Such insights are going to be valuable as the saying goes, "One small step for a man, One giant leap for Mankind."

The openAI project ChatGPT can be useful for understanding the topic of climate change. General public awareness can drive the situation for improvement. The students in primary and middle schools and colleges should be taught the topic of climate change as they will be the change agents. The chatGPT-based assignments on Climate change can be created for students for better understanding and appreciation of climate change topics. The awareness drive will have a positive impact.

IEEE R10 Newsletter Call for Articles

<https://newsletter.ieeer10.org/submission/>



Deadline: 20 May 2023

CONTACT US

For any query, feel free to mail the R10 Newsletter team at r10-ecn@ieee.org

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NOMINATE THE NEXT LEADERS OF THE IEEE

by Susan Kathy Land, Chair, 2023 IEEE Nominations and Appointments Committee

Volunteers are needed to serve as corporate officers, committee chairs, and members.

IEEE depends on volunteer members for many things, including editing IEEE publications, organizing conferences, coordinating regional and local activities, authoring standards publications, leading educational activities, and identifying individuals for IEEE recognitions and awards.

The Nominations and Appointments (NandA) Committee is responsible for developing recommendations to the Board of Directors and the IEEE Assembly on staffing many volunteer positions, including candidates for president-elect and corporate officers. Accordingly, the NandA Committee is seeking nominees for the following positions:

2025 IEEE President-Elect (who will serve as President in 2026)

2024 IEEE Corporate Officers

Secretary
Treasurer
Vice President, Educational Activities
Vice President, Publication Services and Products

DEADLINES

Nominate a Colleague

March 15 – Vice President and Chair positions

June 15 – All other positions

Submit Biographies/Self Nominations

March 30 – Vice President and Chair positions

June 30 – All other positions

2024 IEEE Committees (chairs and members)

Audit	Governance
Awards Board	History
Diversity and Inclusion	Humanitarian Technologies Board
Election Oversight	Industry Engagement
Employee Benefits and Compensation	New Initiatives
Ethics and Member Conduct	Nominations and Appointments
European Public Policy	Public Visibility
Fellow	Strategy and Alignment
Global Public Policy	Tellers

WHO CAN NOMINATE?

Anyone may submit a nomination; nominators need not be IEEE members but must meet specific qualifications. Self-nominations are encouraged. An IEEE organizational unit may submit recommendations endorsed by its governing body or the body's designee.

A person may be nominated for more than one position. Nominators need not contact their nominees before submitting the form. The IEEE Nominations and Appointments Committee will only contact eligible nominees for their interest and willingness to serve.

HOW TO NOMINATE

For more details about position eligibility and the time commitment of the positions, check the Guidelines for Nominating Candidates. To nominate a person for a position, complete the form.

NOMINATING TIPS

Check the eligibility requirements at the NandA Committee website before submitting a nomination.

Volunteers with relevant prior experience in lower-level IEEE committees and units are recommended by the committee more often than volunteers without such experience.

Individuals recommended for president-elect, and corporate officer positions are more likely to be recommended if they possess a strong track record of leadership and relevant accomplishments within and outside IEEE.

Recommended candidates often have significant prior experience as members of IEEE boards and standing committees.

More information about the duties associated with the different positions, qualifications, and eligibility requisites (such as prior service in certain positions or IEEE grade) can be found in the Guidelines for Nominating Candidates.

UPCOMING IEEE R10 CONFERENCES



Call for Papers and Proposals

TENSYMP 2023

6-8 September 2023 | Canberra, Australia

2023 IEEE Region 10
Symposium

tensymp2023.org



IEEE Australian Capital Territory Section



The IEEE Region 10 Symposium (TENSYMP) is the flagship annual symposium organised by the IEEE Region 10 (Asia Pacific). The theme for 2023 is 'Technology for an Autonomous World'. An autonomous world is transforming industries ranging from automotive, aerospace, insurance to healthcare. The technological innovations in self-driving cars, environment-aware robots and intelligent buildings are becoming a reality and changing our world. Autonomous technology must operate at a high level of performance and reliability, across sensors, processing units at the edge and the cloud, data management and connectivity solutions.

TENSYMP 2023 will be held in Canberra, Australia from September 6-8, 2023. TENSYMP brings together research scientists, engineers and practitioners from across the region and the world to share their latest ideas. The symposium will showcase high quality oral and poster presentations, as well as Workshops sponsored by IEEE societies. Exceptional papers and contributors will be recognized with prestigious awards.

Topics of interest include but not limited to

- Aerospace Technology
- Antenna, Microwave and RF Engineering
- Image and Video Processing
- Smart Technologies
- Blockchain/Distributed Ledger Technologies
- Artificial Intelligence
- Cloud Computing, Security and Privacy
- Humanitarian and Social Impacts of Technologies
- Low power VLSI devices, Circuits and Systems
- Telecommunications / 5G and Beyond
- Power Electronics and Systems
- Renewable Energy Technologies
- Control Systems and Engineering
- Systems, Man, and Cybernetics
- Computational Intelligence
- Geoscience and Remote Sensing
- Data Science and Engineering

Important Dates

Special Session / Workshop
Proposals
15 April 2023

Paper Submissions
20 May 2023

Camera Ready Submission
25 June 2023

Registration Opens
30 May 2023

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UPCOMING IEEE R10 CONFERENCES



IEEE R10 HTC 2023

Humanitarian Technology Conference

IMPORTANT DATES

Paper Submission Deadline
May 15, 2023

Paper Acceptance
July 15, 2023

Camera Ready Paper Submission
July 30, 2023

Tutorial/Workshop/Special Session Proposals
May 15, 2023

Conference
Oct 16-18, 2023

IEEE R10 HTC is a premier annual cross disciplinary conference that will bring together technologists, engineers, scientists, investors, representatives from NGOs, governments, academia, and industry throughout the world to present latest research, findings, ideas and application in the area of humanitarian technologies. IEEE R10 HTC 2023, which is organized and hosted by IEEE Gujarat Section, will be held at Marwadi University - Rajkot, during 16th - 18th October 2023. HTC 2023 will be a three-day event with one day of Industry Conclave and two days of technical sessions.

CONFERENCE TRACKS

We invite researchers, educators, industrialists, innovators and scholars to submit original work which may be conceptual, theoretical, or empirical under the conference theme,

- Track I - Smart Technologies & IOT for Humanity
- Track II - Smart City & Smart Village
- Track III - Power and Energy
- Track IV - Environment and Sustainability
- Track V - Earthquake Engineering & Disaster Management
- Track VI - Agriculture
- Track VII - Data Science and Engineering
- Track VIII - Applied Areas of Industry 4.0
- Track IX - 5G Technology for Humanity
- Track X - Machine Learning for Humanity
- Track XI - Technologies and Innovations in Healthcare
- Track XII - AR (Augmented Reality) & VR (Virtual Reality) for Humanity
- Track XIII - Entertainment & Computer Gaming for Humanity
- Track XIV - Education
- Track XV - Security and Surveillance for Humanity
- Track XVI - Innovation and Entrepreneurship Track
- Track XVII - Clinical Genomics
- Track XVIII - Green and Smart Materials and Composites for sustainable habitats
- Track XIX - Gut Microbiome using Bioinformatics

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PUBLICATION OF PAPERS

All the accepted and presented papers will be eligible for submission to IEEE HQ for publication in the form of e-proceedings in IEEE Xplore, which is indexed to the world's leading Abstracting & Indexing (A&I) databases, including ISI / SCOPUS/ DBLP/ EI-Compindex / Google Scholar.

INDUSTRY CONCLAVE

IEEE Region 10 Special Industry Conclave is conceptualized to offer a platform of collaboration and networking for Industry Leaders, Research and Academic Professionals, Young Professionals, Practitioners and Women in Engineering. This initiative is aimed to foster skill development required for industries, sessions and internship on disruptive technologies and Industry - Academia collaborations.

STUDENT RESEARCH FORUM

We invite advanced stage PhD work and completed thesis (not older than 6 months), M Tech / M S thesis and undergrad high-level research projects to present and get inputs from experts. This will give these aspiring students a platform to network, improve their work besides exploring post - doctoral opportunities and/or job offers.



Website
www.r10htc2023.org



Email
info.htc2023@gmail.com



Linkedin

VENUE
MARWADI UNIVERSITY,
RAJKOT, GUJARAT (360 003)

UPCOMING IEEE R10 CONFERENCES



IEEE Thailand Section

IEEE Region 10



IEEE Region 10 Technical Conference 2023

31 October to 3 November 2023, Chiang Mai, Thailand

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IEEE Thailand Section, an organizer of the flagship IEEE Region 10 Technical Conference (TENCON) 2023, solicits technical papers for oral and poster presentations. The conference theme is “Engineering Tomorrow: The Sustainability-driven Innovation for Post Outbreak Era,” featuring outstanding keynote speakers, high-quality peer-reviewed research papers reporting original contributions, special sessions highlighting state-of-the-art research and technologies, and pre-conference workshops.

The topics of interest for IEEE TENCON 2023 include the ten technical tracks:

1. Artificial Intelligence and Machine learning
2. Communications and Networking
3. Power, Energy, and Power Electronics
4. Biomedical Engineering and Healthcare Technologies
5. Robotics, Control, Instrumentation, and Automation
6. Multimedia Signal Processing and Analytics
7. Devices, Circuits, and Materials
8. RF Circuits, Systems, and Antennas
9. Data Science and Computing Technologies
10. Education in Engineering and Technology

IMPORTANT DATES

Special Session Proposal Deadline: **February 28, 2023**

Special Session Announcement: **March 16, 2023**

Special Session/Regular Paper Submission Deadline: **May 31, 2023**

Notification of Paper Acceptance: **July 10, 2023**

Camera Ready and Author Registration Deadline: **July 31, 2023**

SPECIAL SESSION PROPOSAL AND PAPER SUBMISSION

Prospective authors can submit their special session proposal and paper by following the guidelines on the conference webpage

(<http://www.tencon2023.org>).

Accepted papers will be submitted for inclusion into IEEE Xplore subject to meeting IEEE Xplore's scope and quality requirements.

For further information please visit <https://www.tencon2023.org>

Contact e-mail: tencon2023@gmail.com

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