



# IEEE INDIA

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# **Message from Chair IEEE India Council**



Dr. Debabrata Das

Dear Esteemed Members,

Greetings from IEEE India Council!

First of all, I want to convey my sincere gratefulness to Prof. Saifur Rahman, IEEE President, for attending IEEE India Council execom meeting in Bangalore, July 13, 2023. Prof. Rahman suggested to participate in Government policy discussion and possible contributions from IEEE side, like, in the areas of power system, sustainable activities etc. In this regard on 6th August 2023 face to face execom meeting of IC in Mysore during INDISCON, discussed on Sustainable Development Activities (SDA). As sustainable activities have impact on multiple areas due to climate change, policy etc., it needs a focused attention and hence a vice chair position was created.

Big thanks to Dr. John Jose, for all efforts for the MoU between IC and Qualcomm on students training, technical programs, Industry Academia collaboration and IEEE event sponsorship etc. With respect to MoU couple of events have already started by Dr. John and team in above areas.

We want to appreciate Bangalore Section and Mysore Sub-Section leadership for managing INDISCON in August 2023 at Mysore, very successfully. First time a large event of IC and Section/Sub-section was hosted in a woman only Engineering College. This had encouraged many women engineering students and other participants by listening to the accepted papers, keynote addresses in niche areas etc..

In August 2023, the Section Congress was hosted in Ottawa, Canada. It was a mega IEEE event, where all aspects of IEEE activities were discussed and exchanged multiple ideas. From India IC Chair and multiple members of IC execom (Section Chairs and VC in different capacity in Sections) attended.

Thanks to Prof. Lakshminarayana for hosting "Hear the Unheard" series on six different areas from senior volunteers. The rich experience of the volunteers and respective suggestions will be highly useful.

Congratulation to Er. Rajendra Asthana, Mr. Koruthu Varughese and Life member (LM) team to submit the petition to MGA through IC to create LM Affinity Group (LMAG). LMAG group is conducting multiple activities too.

Looking forward to meeting you all during INDICON 2023.

I want to place on record the contributions of all Vice Chairs of IC, close association of all the Sections and Sub-Sections Chairs as well as Volunteers. Thanks to Prof. Gopalan Nair, Editor, Mr Biju Associate Co-Editor and others members of the team for meticulously compiling July to September 2023 edition of IC-Vaani.

Warm Regards,

Dr. Debabrata Das



### **Editorial**

"Focus on fixing the problem, never focus on the blame. Problems are only resolved when solutions are sought."

-Catherine Pulsifer

We are familiar with the word blame, a common phenomenon that we often see even among our professionals in their working arena. Dictionary definition of blame is 'to find fault with or hold responsible. It is similar to the word criticize. But when we are



Prof. (Dr.) K.Gopalan Nair Editor, IC NL.

blamed there is a sense that there is something wrong with who we are, in addition to doing something wrong'. In other words, it means 'to say or think that someone or something did something wrong or is responsible for something bad happening'. Here blaming others involves making someone else responsible for the choices and decisions that are actually our own creation.

Of course, as mentioned, blaming others for one reason or the other is a common pattern of behaviour we could witness and is an important aspect in human relationships. Even within a family we could see the influence of internalized blaming. Children blame parents; parents blame children. In our workplace managers blame their team members and team members blame their colleagues, and so on. A common example we can note is, 'if he had listened to me, the situation would have been better', 'if she hadn't done it, this wouldn't have happened', etc. These are common facets of our culture. Here we are revealing our hidden resentments. Also we are expressing our tendency to let out our fears and frustrations through blaming and criticising others.

Interestingly, we live in a culture of blame. People will blame anyone or anything for their misery sooner than taking the responsibility to own it and make it better. It is pertinent to note that when something goes wrong, it's so easy to blame others. At this instance, the situation we're going through is not enough to do the right things. Blaming others is the opposite of taking responsibility. We may not understand how to take responsibility for things that we don't truly feel responsible for. Instead we would try to make others accountable.

Blame fascinatingly is a natural human blemish. It shapes our lives. It can sometimes be a benign way of positioning ourselves. It happens on the smallest to the largest scale. In addition, blaming can come in two types, the never-ending blaming of others which assumes no responsibility and the never-ending blaming of ourselves. We cannot insist others to take responsibility for their actions. This is possible only when they make a choice which they are ready to accept. Likewise, we should stop thinking negatively about others or blaming them.

Blaming does not solve a problem, it usually makes people defensive. They may feel something aggressive and unkind about it. Because it may arouse a gentle joust or banter among them, it can be poisonous, hurtful or devastating for its victims. It can fracture work relationships or can disable major social programmes. Objectively, this seems to make sense. Bear in mind that criticism is not always a bad thing. It can often help us to strengthen our choices and decisions. But care should be taken in not blaming anybody for our mistakes and failure. Supporting selfish people is a waste of time and energy; they will always find an excuse to blame us for their own mistakes with disastrous results. Remember,

"Human nature is so complicated. Those who have little, want a lot. Those who have a lot, think others have more. Those who lose, blame others for the loss."

"Nothing great will ever be achieved without great men, and men are great only if they are determined to be so.

-Eraldo Banovac

Prof. (Dr.) K.Gopalan Nair Editor. IC NL.





# Visit of IEEE President Prof. Saifur Rehman

Prepared by

Dr. Saurabh Mehta

Bombay Section

A report on Felicitation of Fellow and Life Members with the President

Date: July 12, 2023

Venue: Sai Palace Hotel Chakala M.I.D.C., Near Holy Family Church, Andheri, Mumbai, Maharashtra – 400093

Partial Sponsorship: Life Member Affinity Group

#### Abstract

The felicitation event for IEEE Fellow and Life Members in the esteemed presence of IEEE President Prof. Saifur Rehman was a remarkable and memorable occasion. It celebrated the exemplary contributions and dedication of Fellow and Life Members to IEEE's vision of advancing technology for the betterment of humanity. The event's inspiring talks and warm interactions underscored the sense of purpose and camaraderie shared by the members of the IEEE Bombay and Pune Sections

### Report

Prof. Saifur Rehman, the president of IEEE, is a distinguished electrical engineer and a highly respected academic. He is renowned for his ground-breaking research and significant contributions to energy systems and renewable energy. With a passion for addressing global energy challenges, Prof. Rehman has been a critical advocate for energy transition and sustainability initiatives worldwide. As the President

of IEEE, Prof. Rehman's visionary leadership has driven transformative changes in the organization's mission to advance technology for the betterment of society. He actively fosters collaborations among researchers, policymakers, and industry leaders, promoting knowledge exchange and cooperation on a global scale. Under his guidance, IEEE has embraced emerging technologies, fostering innovation in artificial intelligence, smart grids, and renewable energy integration.

He is admired for his mentorship and dedication to nurturing young engineers, encouraging them to tackle societal challenges through technology. His advocacy for sustainable energy and commitment to environmental stewardship inspire individuals and organizations worldwide to contribute to a more equitable and sustainable future.





### A visit to the IIT Bombay Campus

On July 12, Prof. Saifur Rehman visited IIT B accompanied by dignitaries from the IEEE Bombay section. The visit commenced with an engaging talk on "Energy Transition." His profound insights into the urgency of transitioning to sustainable energy sources and the transformative potential of renewable energy technologies inspired and motivated the audience. The delegation also visited the Electrical Engineering labs, including Power Electronics. NCPRE, and Nanofab, witnessing cutting-edge research and technological advancements. Additionally, they explored the labs of the Energy Science department, encouraging researchers and scholars to contribute to clean and renewable energy solutions actively. The visit catalysed further collaboration between IITB and the IEEE community, impacting the institution's commitment to advancing technology for a sustainable future.

The IEEE Bombay Section and Pune section hosted an esteemed joint event on July 12, 2023, to honour its distinguished Fellow and Life Members' invaluable contributions to the IEEE and the respective Sections. The event took place at Sai Palace Hotel, Mumbai, and was graced by the presence of IEEE President Prof. Saifur Rehman. This evening aimed to recognize and celebrate the unwavering commitment and service of Fellow and Life Members to the IEEE community.

The event commenced at 6:00 PM with the registration process, allowing attendees to network and engage with fellow members. The anticipation grew as everyone awaited the arrival of the esteemed guest, Prof. Saifur Rehman, the president of IEEE, a renowned electrical engineering personality, and a prominent figure in the

IEEE community.

Mr. Anand Gharpure, Chair of the IEEE Bombay Section, warmly welcomed the attendees and expressed gratitude for their presence at the event. He acknowledged the exceptional dedication and achievements of the Fellow and Life Members, highlighting their pivotal role in shaping the success of IEEE's initiatives.

Following the welcome address, the Secretary of the IEEE Bombay Section, Dr. Saurabh Mehta, presented an inspiring report on the section's recent activities and accomplishments. The report showcased the diverse range of projects and events organized by the section, illustrating its commitment to fostering technological advancements and knowledge sharing within the community.

The highlight of the evening was the felicitation ceremony for the esteemed Fellow and Life Members. Prof. Saifur Rehman personally presented each Fellow and Life Member with a special token of appreciation and a memento recognizing their exceptional service







and dedication to the IEEE community. The recipients expressed gratitude and shared anecdotes of their rewarding journey with IEEE.

After the felicitation, Prof. Saifur Rehman took the stage to deliver an enlightening talk on "Energy Transition." During his enlightening talk on "Energy Transition," Prof. Saifur Rehman eloquently presented the urgency of shifting toward sustainable energy sources. Drawing from his vast expertise, he highlighted the environmental challenges posed by traditional energy systems and the imperative to reduce carbon emissions. Through compelling examples and data, Prof. Rehman showcased the transformative potential of renewable energy technologies in mitigating climate change and achieving energy security.

The IEEE President, with Fellow and Life Members

Moreover, Prof. Rehman delved into the latest advancements in renewable energy, shedding light on cutting-edge research and innovative solutions that promise a cleaner and greener future. His insights into the potential of solar, wind, hydro, and other renewable resources invigorated the audience's enthusiasm for sustainable energy adoption. He also emphasized the role of emerging technologies, such as energy storage and smart grids, in maximizing the efficiency and integration of renewable energy sources.

Prof. Rehman's captivating speech underscored the importance of individual and collective efforts and called upon policymakers, industries, and governments to collaborate in creating an enabling environment for sustainable energy initiatives. He urged the audience,

comprising faculty members, students, and industry professionals, to actively participate in research, development, and implementation of sustainable energy solutions that would have a tangible impact on the global energy landscape.

The Fellow and Life Members of the Bombay and Pune sections were felicitated during the event. This event was attended by IEEE Bombay section Exe-com members, volunteers, office bearers, and volunteers from Pune Section, summing up to more than 70 attendees with their families.

The IEEE President with IEEE Bombay and Pune Section's Members

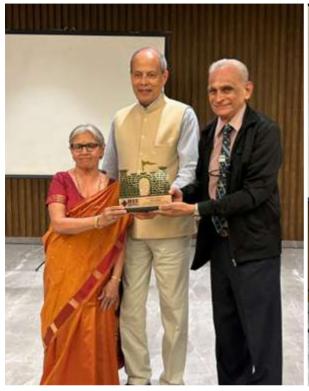
The event concluded with a vote of thanks by the Treasurer of the IEEE Bombay Section, Dr. Kiran Talele, expressing appreciation to all attendees, Prof. Saifur Rehman, and the organizing committee for making the event a resounding success. Following the formal program, attendees enjoyed a delightful networking session and a dinner, fostering camaraderie and collaboration among the IEEE community.

The IEEE Bombay Section sincerely thanks Prof. Saifur Rehman for gracing the event and motivating everyone with his profound knowledge and passion for energy transition. The evening catalysed continued engagement and collaboration among IEEE members in their collective pursuit of technological progress and societal impact.

(Acknowledgment: Ms. Riya Modi, Student Intern, VIT, for her support in preparing the report)



### **Memorable Moments**





Honouring Prof. G S Mani

Honouring R. Muralidhatran

### IFFF Board of Directors & President

The IEEE Board of Directors is the governing body of the IEEE. Directors serving on the Board may have additional specific duties chairing standing committees of the Board, or within the Major Organizational Units. This description applies to every member of the Board and is specific to his or her role as an IEEE Director.

The IEEE President is elected by the voting members of IEEE and shall be the Chief Executive Officer of the IEEE and shall preside at meetings of the IEEE Board of Directors and the IEEE Assembly.

As the Chief Executive Officer, the President works with the IEEE Board of Directors, the Executive Director and staff to guide IEEE in fulfilling its mission and adhering to the IEEE Strategic Plan and to otherwise carry out the duties and responsibilities assigned by the Board of Directors.



Dr. Prerna Gaur Vice Chair

### **Educational Activities**

Date: June, 2023 to August, 2023

Event: Learning League

Venue:

**Event Description:** 

IEEE NSUT recently conducted the highly successful Learning League Program under the IEEE India Council Educational Activities. This program spanned five days and featured esteemed mentors, along with an instructive school visit, making it a truly engaging and interactive experience for the students. Throughout the program, the students were fortunate to embark on an enlightening journey, receiving valuable knowledge and



precise guidance from these distinguished mentors.

On the first day, June 21st, 2023, the Learning League Program featured a session titled "The Significance of Web Development" conducted by the esteemed Sir Kartik Mathur.

On the second day, June 22nd, 2023, the Learning League Program presented a session titled "Cracking Core Exams and Placements" led by the esteemed Sir Sandhiya Saxena.

On the third day, June 23rd, 2023, the Learning League Program presented a session titled "Art of Resume Building," facilitated by the esteemed Ma'am Nidhi Sharma.



On the fourth day, June 24th, 2023, the Learning League Program showcased a session titled "Starting in Tech, Where to Begin?" which was led by the esteemed Sir Arsh Goyal.

On the fifth and final day, June 27th, 2023, the Learning League Program hosted a session entitled "Navigation on Non-Tech Placements," featuring the esteemed Sir Vibhu B. Gupta.

The second Phase of the Learning League was organized on August 18th, 2023, consisting of a school visit session for advising pupils on potential career paths.

#### PHASE 1

### **SESSION 1: The Significance of Web Development**

Learning League 3.0 session 1 featured Kartik Mathur, a distinguished alumnus of NSUT and a visionary leader in the world of coding education. As the Founding Member and Academics Head at Coding Blocks, he has guided and trained over 45,000+ students, empowering them to unlock their full potential in the world of coding. The session was titled "The Significance of Web Development" and aimed to introduce the students to the exciting field of web development.

Kartik explained what web development is, why it is important, and how it can be learned and practiced. He also shared his own journey and experience in web development, as well as some tips and tricks for aspiring web developers. The session was interactive and engaging, as Kartik encouraged the students to ask questions and share their opinions. He answered the questions with clarity and patience, covering topics such as HTML, CSS, JavaScript, Bootstrap, and other frameworks and libraries. He also explained some of the concepts and techniques involved in web development, such as responsive design, user interface, accessibility, security, etc. The students were amazed by the possibilities and creativity of web development and expressed their interest in learning more. The session concluded with a round of applause and appreciation for Kartik. The session was a great success and inspired many students to pursue web development as a hobby or a career.







#### Session 2:

### **Cracking Core Exams & Placements**

Learning League 3.0 session 2 featured Sanidhya Saxena, an experienced industry trailblazer, currently working as a Digital Design Engineer at NXP and also a pioneer in cracking core competitive exams like GATE, ESE, and ISRO. The online session titled "Cracking Core Exams and Placements" provided amazing insights into the core industry.

Sanidhya focused on core placements and competitive exams, providing a comprehensive roadmap and strategies for success. Attendees were equipped with valuable knowledge on effective strategies for cracking core placements, including targeting companies, as well as excelling in competitive exams. They learned to leverage various resources such as study materials, online platforms, and coaching institutes to enhance their preparation. Additionally, the session emphasized the significance of developing well-structured study plans and implementing effective time management techniques to optimize exam readiness. The session concluded with an interactive Q&A session, where attendees had the opportunity to seek clarifications from the speaker which therefore fostered a sense of motivation and encouraged students to take proactive steps towards achieving their career goals.





#### SESSION 3:

### Art of Resume Building

Learning League event organized by IEEE NSUT continued its highly anticipated season with an insightful session on the "Art of Resume Building" conducted by Nidhi Sharma, a distinguished software engineer at Adobe and an expert in DSA (Data Structures and Algorithms) with Java.

Nidhi Sharma, an incredible creator with over 42k followers on LinkedIn, brought her wealth of knowledge and experience to guide participants in crafting compelling resumes. During the interactive session, Nidhi covered essential aspects of resume building, from effective formatting to engaging content. Attendees, including job seekers, career changers, and skill enhancers, had the opportunity to benefit from her expertise and receive personalized guidance on resume improvement.







Questions and doubts were addressed with clarity, ensuring everyone grasped the concepts with confidence. As the session concluded, attendees expressed gratitude for the invaluable advice shared by Nidhi. The event proved to be a resounding success, further solidifying the reputation of the Learning League as an exceptional platform for upskilling and personal growth.

### **SESSION 4:**

### Starting in Tech, Where to begin?

Learning League 3.0 session 4 featured Arsh Goyal, an accomplished figure in technology and education. Having

worked in a dynamic and innovative tech environment including Samsung and ISRO, he sharedhis tech odyssey in his session, "Starting in Tech, Where to Begin".

Being a tech enthusiast, he unfolded his journeyand expertise in the tech realm. The purpose of the session was to provide an opportunity for participants to ask questions and receive answers on various topics. Questions from a wide spectrum, ranging from "best programming language to start with" to "how to crack internship in product-based companies", were asked. The session was aimed to foster engagement, and knowledge sharing, and create a platform for interaction between the students and sir. Being a content creator too, with over 100k subscribers on YouTube, he also provided ventures of content creation. The session was conducted through an online platform, allowing participants to join from their respective locations and have meaningful discussions. Throughout the session, studentsactively engaged by asking questions and gaining valuable insights from the speaker.

Theonline session successfully facilitated knowledge sharing and interaction between participants and the speaker. Overall, the session proved to be informative and beneficial for all the students involved.





Session 5

### **Navigation on Non-tech placements**

Learning League 3.0 concluded with its final event: "Navigation on Non-Tech Placements," presented by Mr. Vibhu B. Gupta. The event provided valuable guidance to attendees regarding non-technical career opportunities. Mr. Gupta provided insights regarding the interview process for non-technical placements. He shared a comprehensive list of resources to enhance one's preparation and gain a competitive edge. Mr. Gupta also highlighted the importance of the inclusion of impactful projects, leadership positions, and valuable experiences in a CV to present oneself as a strong candidate to potential employers. Attendees actively participated by posing questions, seeking clarifications, and sharing their own experiences. Addressingeach guery, he established a collaborative environment and encouraged knowledge exchange.







Overall, the event provided attendees with valuable knowledge and tools to navigate the non-technical job market successfully. The event served as a testament to Mr. Vibhu Gupta's exceptional skills and highlighted the commitment of the Learning League to fostering a rich learning experience for its attendees.

### **PHASE II**

IEEE NSUT in collaboration with ARES Robotics NSUT conducted a school visit to Rajkiya Pratibha Vikas Vidyalaya for the second phase of the Learning League. The event's primary objective was to educate students in grades 10 and 12 about diverse career paths, with a specific emphasis on engineering.

The interactive session included a well-structured presentation highlighting the essence of engineering and the motivations behind pursuing it. The members of ARES robotics presented amazing projects: a robotic arm, an object avoidance bot, a line following bot, and a fully functional drone. Following the demonstration. the moderators highlighted different paths to becoming an engineer, various financial aid alternatives provided by the government, college life, and the plethora ofpostengineering opportunities. The event proved highly engaging, with enthusiastic interactions between the moderators and students. Additionally, an engaging skit was performed which busted stereotypes about pursuing engineering as a career option. The event received positive reactions as the moderators provided students with valuable insights into the world of engineering. The event successfully broadened students' career horizons and fostered enthusiasm for pursuing engineering paths.







Date: Friday; 6th October, 2023

Event: Social Awareness Event on Health and Well Being

and Environment Protection

Venue:Main Campus

**Event Description:** 

IEEE NSUT, in collaboration with Prayas - The Neighbourhood Project, is proud to organize a session for underprivileged students under the IEEE India Council Educational activities. The session will focus on raising awareness about mental health and environmental safety.

During the session, we will delve into various topics related to the environment, including pollution (air, water,

soil, and noise), deforestation and its prevention, as well as global warming and effective mitigation methods. Furthermore, we will also focus on health-related subjects such as personal hygiene, encompassing its different components, and the significance of physical, emotional, and intellectual well-being. Additionally, we will address the crucial topic of understanding the difference between good touch and bad touch.

By addressing health and environmental safety together, our aim is to emphasize the link between the two and underscore their impact on our overall well-being. This initiative is commendable as it seeks to make a positive impact on the lives of these students and contribute to a more sustainable future.





Ms Sadhana Attavar Vice Chair

# Humanitarian Technologies Activities

During 2023 Humanitarian Technology Activates of IEEE India council is primarily focusing on the launch of MOVE Outreach India Program. MOVE (Mobile Outreach Vehicle) Outreach India program a disaster relief and outreach program is an international IEEE program launched in India by IEEE India Council.

July 2023

Development of Solar based portable mobile Charger for MOVE India Truck

Obtained approval for development of 50 nos solar based mobile charger for use in MOVE India truck at a cost of 1500 US\$ in collaboration with IEEE SIGHT Kerala Section and IIT Palaghat. Prototype is ready.



### Call for proposals for MOVE A THON and Evaluation

Call for proposals were rolled out in July 2023 for an ideathon for Technologies for mitigating natural disasters for a sustainable future. The aim and objective of this ideathon is to invite ideas from students and young professionals for providing such immediate relief in the face of natural disasters that

India is particularly prone to - floods, cyclones, droughts, earthquakes and landslides. *<b>PIEEE* IEEE INDIA IEEE MOVE INDIA IEEE INDIA COUNCIL Prizes CYCLONES EARTHQUAKES AND LANDSLIDES INR 10,000 DROUGHTS INR 5,000 Call for registration opens 12th June 2025 Eligibility Criteria Oraș O For registration scan the Last date to register: 15th July 2023 https://move.ieee.org/India/ Infoeleeemove.in August 2023 **Disaster Awareness Training Programme** Disaster Awareness Training programme was conducted in collaboration with Rotary Club

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Bangalore West on 11th August at MES Kishore Kendra Malleswaram. Mr. Sunand Sampath was the resource person.





### **Meeting with MOVE Interational**

A meeting with Mr. Mike Wilson Senior Program Manager MOVE International and MOVE India volunteers and partners was held on August 18 2023 at GIEEE Office Bangalore in hybrid mode to discuss about MOVE India program. It was presided by Prof.Debabrata Das India Gouncil Chair.





### **Evaluation of MOVE A THON proposals**

We received an overwhelming response with over 900 people registering for this. They have formed over a 100 teams and have submitted their ideas. These ideas have been reviewed by a panel of experts and 10 teams have been shortlisted.

### September 2023

As part of Disaster management talk series of IEEE MOVE India Program a talk on Disaster Relief Management using Robotics and Al by Dr. Abhimanyu Raja founder and Director Janyu Technology Pvt Ltd, Mumbai was organized on September 12 2023 at 4.00 pm in hybrid mode at the Seminar Hall of Department of CS and IT Maulana Azad National Urdu University, Hyderabad in collaboration with IEEE STEM Committee Hyderabad Section. The talk was attended by about 100 participants.





**Upcoming Events** 

October 2023

Grand finale MOVE A THON

We have had an overwhelming response with over 900 people registering for this. They have formed over a 100 teams and have submitted their ideas. These ideas have been reviewed by experts and we have shortlisted 10 teams as having the most interesting ideas. The grand finale of MOVE A THON will be held on 7th October 2023 Saturday the 7th of October, Saturday at the CNES auditorium in IISc from 9.30 am till 1:30 pm in hybrid mode.







STEM kits on Climate Change and Sustainability

Action taken to develop/procure STEM kits on climate

change and Sustainability. The kit contains everything you need to conduct plenty of experiments. Create and understand micro climates and weather patterns. Discover Greenhouse Gases, Weather vs Climate, Burning Fossil Fuels, rising Sea Levels and more.

### Portable Mobile chargers for MOVE Truck

Action being taken to develop solar powered portable mobile chargers for use in MOVE Truck. Portable Emergency Solar Mobile Charger (PE-SMC) for IEEE MOVE INDIA is a compact, reliable, and life-saving solution which can be easily deployed in disaster-stricken areas, enabling vital communication. The proposed system will consist of a 10W solar panel, a 5m long cable, indigenously built circuit consisting of a buck converter with robust protection features - which will be encased in a water tight enclosure.

#### Launch of Mini MOVE Truck

Design and Development of Vehicle, Vehicle interiors and other fabrication for vehicle to accommodate various communication and power equipment along with budgetary estimate was submitted IEEE MOVE USA for funding. Waiting for approval of funding.

### **About IEEE R10 HTC (Humanitarian Technology Conference)**

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. The conference will promote discussions and development of Electrical, Communication, Computing, Security and Disaster Relief areas to present results of recent advancements in technology in order to help improve the lives of the impoverished. It will have plenary talks, keynote addresses by reputed academicians, tutorials & workshops by domain experts, research paper presentations, events for Women in Engineering and Young Professionals, session on entrepreneurship and innovation, Industry exhibits and booths.

IEEE R10 HTC 2023, which is organized and hosted by IEEE Gujarat Section, will be held in Marwadi University, Rajkot,

Gujarat, 16-18 October 2023. The theme of the conference, "Artificial Intelligence and Smart Technologies for Humanity" is to draw special attention to the societal expectation on humanitarian technologies' ability to provide practical and lasting solutions.



Reported by
Mr. Ambati Sai Anirudh
Co-Lead
Student Coordination Team

### **Student Activities**

Overview of the activities conducted by the IEEE India Council SAC & STC over the past four months, as well as a glimpse into our current and upcoming activities.

1. Think Tank Weekly Quiz Series (July - Ongoing):

Commencing from July 27th, we initiated the "Think Tank" weekly quiz series on our social media platform, Instagram. Covering a diverse range of topics including AI, Space Research, ISRO, Mental Health, Bitcoin, and other trending tech subjects, this initiative aims to engage and educate our audience on cutting-edge technologies and emerging trends.

- 2. Collaboration with Techstars Startup Weekend Jaipur as the technical community partner.
- 3. IC HACK 2.0- NationWide Hackathon (October):

In our pursuit to promote collaborative innovation, we have planned IC HACK 2.0, a 48 hour hackathon that encompasses all 13 sections of India. This event takes place in two distinct phases:

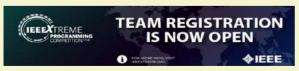
Phase I (October 7th & 8th): This phase entails section-level screening of participating students, conducted in a hybrid mode, to identify top talents.

Phase II (October 21st & 22nd): The second phase involves an offline event hosted at Manipal University Jaipur, IEEE Delhi Section. We are also exploring a co-hosting opportunity with IEEE Kerala Section. Registrations commenced on September 28th, and we aticipate a huge number of participants.

4. IEEE Leadership Connect Webinar Series (October-December):

We are planning to have, "IEEE Leadership Connect", a webinar series designed to provide a platform for our students and GSMs to engage in candid conversations with distinguished leaders from IEEE India Council, Region 10, and MGA. This initiative serves as a conduit for knowledge transfer, interaction, and inspiration, enabling our young minds to gain insights from the very best in the field.

To access the detailed report, please follow this link to the Document: https://docs.google.com/document/d/1-Jd8g23Fn2QxvteealeQ6g\_GWypOll95j9Leo0vTyk/edit?usp=drivesdk



A premier worldwide computer coding competition, exclusively open to IEEE Student and Graduate Student Members. There will be

challenges for all skill levels. The competition is an online 24-hour event taking place on 28 October 2023, starting at UTC 00:00:00. Encourage Members of your IEEE Student Branch to compete.



Dr. Rajashree Jain Vice Chair

# Membership Development Committee (MDC)

The Following report consists of two sections. Section1 as member Statistics and the second section is a report on IEEE Region 10 10 MD sponsored Membership Development Activity.

### I. Membership Statistics as on 30 September 2023.

IEEE India Council is the umbrella organization which coordinates IEEE activities in India. Its primary aim is to assist and coordinate the activities of local "Sections", in order to benefit mutually, and avoid duplication of effort and resources. In India, we have 13 IEEE sections with a membership count was on 30 June 2023, at 64916 and as on 8 October 2023 is 74992.

Table I describes the distribution of the count across sections and also across grades.

Table 1 IEEE India Council Member Count as on 30 June 2023

Section Wise Count			Member -Grade Wise Count		
Bangalore Section	13548		Affiliate	136	
Bombay Section	4485		Associate Member	496	
Delhi Section	6755		Fellow	49	
Gujarat Section	1746		Graduate Student Member	5388	
Hyderabad Section	9341		Honorary Member	1	
Kerala Section	11818		Life Fellow	36	
Kharagpur Section	453		Life Member	42	

Kolkata Section	4447	Life Senior	214
Madhya Pradesh Section	1519	Member	16042
Madras Section	11813	SA Member	12
Pune Section	1909	Senior Member	5885
Uttar Pradesh Section	4701	Student Member	46691
Vizag Bay Section	2457	Grand Total	74992
Grand Total	74992		

Table I I Member Number Count Comparison - Year Wise

Congratulations to all the section India Council for maintaining one of the largest member count of the council among the other Councils under IEEE Region

	January	February	March	April	May	June	July	August	September
2023	78,165	41,912	52,889	58,801	61,732	64,785	67,730	70,209	72,938
2022	65,016	41,583	47,263	50,649	53,221	55,065	56,400	58,841	60,986
2021	50,041	30,916	35,711	38,663	40,893	42,892	44,018	44,886	48,220

### 10 as on 24/09/2023

Australia Council: 6630

• China Council: 33044

• India Council: 72364

Japan Council: 13295

• Korea Council: 5876

New Zealand Council: 906

### II. IEEE Region 10 10 MD sponsored Membership Development Activity - Panel Discussion

Committee(MDC) of IEEE India Council, in association with IEEE Region 10 MDC, Bangalore section and Mysore Subsection, hosted a panel discussion on IEEE Membership Development. The panel aimed at providing awareness of IEEE membership, its value, benefits and how members are engaged worldwide. It also opened a plethora of opportunities IEEE offers to its members through the experience sharing of our esteemed panelists. The structured discussion lead and guided attendees towards member engagement programs and being not just an IEEE member but also as an Active IEEE member cum volunteer.

Panel Topic: From a humble beginning to Ordinary to an Extraordinary Journey of IEEE Members - IEEE member Value, Benefits and Engagement

Panel Date: Saturday, 5 August 2023

Panel Time: 4.45PM to 5.15 PM (IST)

**Our Esteemed Panelists** 

Dr. R.B Jadeja, Chair, IEEE MDC, IEEE Region 10

Dr. Debabrata Das, Chair, IEEE India Council

Dr. Aloknath De. Chair, IEEE Bangalore Section

Dr. Muhammad Kasim, Chair, IEEE Kerala Section

Dr. Rajashree Jain, Vice Chair, MD, IEEE India Council was the moderator for the event.

Dr. Rajashree Jain, opened the panel by introducing the panelists to the audience. The discussion was centered around the theme "From Humble Beginnings to an Extraordinary Journey of IEEE Members." She opened the questions to the members shed some light to gathered audience on IEEE and its membership value, IEEE resources, conferences and on the self-experiences

Dr. Debabrata Das (Chairperson, IEEE India Council): As the chairperson of IEEE India Council, Dr. Das provided a broader perspective on the organization's journey and its impact on the growth of IEEE members in India.

Dr. R. B. Jadeja (Chairperson, IEEE MDC, Region 10 -

Joined online): Dr. Jadeja, representing Region 10, discussed the regional perspective and the collaborative efforts to enhance membership development across countries within the region.

Dr. Aloknath De (Chairperson, IEEE Bangalore Section): Dr. De shared his experiences and initiatives taken by the IEEE Bangalore Section to nurture and develop IEEE members in the region.

Muhammed Kasim S (Chairperson, IEEE Kerala Section): Muhammed Kasim S highlighted the role of IEEE Kerala Section in supporting members and fostering their growth through various activities and programs.

The panel discussion covered a range of topics related to membership development within IEEE in India. Some of the key discussion points included:

- Historical Context: The panelists delved into the history of IEEE in India, discussing its humble beginnings and how it has grown into a prominent organization over the years.
- 2. Membership Engagement: Strategies and initiatives to engage and retain IEEE members were discussed, including the importance of technical events, workshops, and networking opportunities.
- 3. Mentorship and Education: The panelists emphasized the significance of mentorship programs and educational resources in nurturing and supporting young IEEE members.
- Regional Collaboration: Dr. Jadeja provided insights into collaborative efforts at the regional level to share best practices and promote membership development across borders.
- Future Outlook: The panelists shared their vision for the future of IEEE membership in India and highlighted upcoming initiatives to enhance the IEEE experience for members.

### **Audience Engagement:**

The audience actively participated in the discussion, asking questions and seeking advice from the panelists. This interactive session allowed attendees to gain valuable insights into IEEE membership development.

IEEE Membership Brochure and goodies were distributed among the audience.

#### **Conclusion:**

The Panel Discussion on Membership Development at INDISCON-2023 provided a platform for IEEE members and enthusiasts to gain a deeper understanding of the organization's journey in India and its commitment to fostering the growth and development of its members. The insights shared by the panelists, along with the engaging discussion, served as an inspiration for IEEE members to continue their extraordinary journey within the organization.

### **Acknowledgement:**

MDC, IEEE India Council would like to put on record



our gratitude to the support received from IEEE Region 10, IEEE India Council, IEEE Bangalore section, Mysure Subsection. Our thanks are also due to our esteemed speakers who spent their time and shared valuable insights. Behind the screen, whole MDC team put their best efforts in preparing a beautiful brochure. Appreciations

LR: Dr. Rajashree Jain, Dr. Debabrata Das, Dr. Aloknath De, Prof. Muhammad Kasim S and Dr. R B Jadeja on screen.

Panel Discussion "From a humble beginning to Ordinary to an Extraordinary Journey of IEEE Members - IEEE member Value, Benefits and Engagement "Panel Date: Saturday, 5 August 2023 at GSSS College of Engineering, Mysuru

**Event Brochure:** 

tion 10 % IEEE COUNCIL



### **Membership Development Webinar**

Please join us for the monthly review of membership trends and statistics, as well as current topics of interest to the membership development community. Topics of October month will include:

- First look at 2024 membership year activity
- Updates on 2024 Section Membership Development goals
- IEEE Day 2023

IEEE Membership Development Webinar | 13 October 2023

### **Elyn Perez**

Senior Manager, Member Market Development
IEEE Member and Geographic Activities Department
445 Hoes Lane, Piscataway, NJ 08854-4141 USA
Tel: +1 732 562 5392, Email: elvn.perez@ieee.org.ieee.org.



Dr. John Jose Vice Chair

# Industry Academia Collaboration

All activates of Industry Academia Collaboration of IEEE India Council is coordinated by Industry Academia Young Professional Sub Committee (IAYPSC) which has 24 professional members representing all sections of India council.

More details of the team is here: https://ieeeindiacouncil.org/iaypsc/

# MoU Signed between IEEE India Council and Qualcomm India

Qualcomm India and IEEE India Council have inked an MoU towards a strategic collaboration enabling impactful cooperation in research, academia and premier conferences partnership. The synergy between Qualcomm's cutting-edge technology and IEEE Council India's academic prominence is set to bridge industry-academia gaps. Together, this will uplift innovation and will chart a collaborative path into a promising future. The MoU signing ceremony was held on 03.08.2023 at the Qualcomm Office, Whitefield, Bangalore. Prof. Debabrata Das, IEEE IC chair and Mr. Srini Maddali, Senior Vice President of Engineering, Qualcomm India, signed the MoU on behalf of the two parties. Dr. John Jose, Dr. Ruchika Gupta, Mr. Shone Jose and Mr. Srikanth Chandrasekaran represented IEEE IC in the event.

### Career Mentoring Program for Young Women Professionals by IBM

IBM rolled out an 8 weeks long Career Mentoring Program for Young Women Professionals to foster professional growth, provide guidance, and promote networking opportunities for aspiring women professionals. The program was held from July 1 to August 31, 2023. 14 senior engineers from IBM were involved in the program as mentors and 27 women selected from undergraduate, graduate and research scholars of various IEEE sections were the mentees. The goal of the program was to accelerate personal and professional development of mentees by sharing diverse perspectives and best practices from the industry. It also provided the mentees a window to the industry and market dynamics, latest tech trends and define a plan progress in their career path. Dr. Ruchika Gupta, Professor Chandigarh University and Secretary IEEE IC IAYPSC coordinated the program along with Ms. Debanjana Dasgupta, Executive Architect, IBM Automation.

# Professor of Practice through Industry Academic Collaboration

The IAYPSC team of IEEE IC made an open call to senior professionals of various industries to volunteer for the position of Professor of Practice at various Indian Universities. After doing an initial filtering, 9 industry professionals were currently incorporated as Professor of Practice in various institutions. Though this initiative IEEE IC help to take real world practices and experiences into the class rooms and also augment the faculty resources in higher education institutions. This will also enable the higher education institutions to formally associate with persons of eminence and

encourage them to participate in experiential learning, research, training, skilling, entrepreneurship and extension and to play mentoring role.

### **IEEE IC Industry Speakers List**

There are many institutions and students who are not privileged to host lectures and interaction sessions by industry experts either due to location disadvantage or due to lack of proper connections with the industry. To address this IAYPSC reached out to industry professionals to volunteer as a speaker. Based on this special call to industry professionals, 60+ senior professionals from various industry and R&D organizations shown their expression of interest to associate with IAYPSC in this initiative. Through this program they not only contribute to the democratisation of knowledge but also gain invaluable benefits that can enhance their professional journey, networking, self-brand building, and above all great support to our country's technology ecosystem. 35 professionals are shortlisted to be on the panel of IEEE IC industry speakers list and their names are shared with various sections to coordinate program at various institutes.

### Professional Mentoring Program for Young Faculty Members

There are many faculty members in our institutions across the country who are not fortunate enough to get the right professional input and advice in their early career days. At the same time, we have many academicians with excellent teaching and research credentials and are passionately looking forward to avenues in guiding and mentoring young faculty. IEEE IC IAYPSC is organizing a two month long online mentoring program for young faculty members under the age of 40 and less than 10 years of teaching experience. Through this program, we linked the interested young faculty members to the experienced ones based on matching profiles and interests. Dr. Mansi Subhedar of IAYPSC coordinated the program, Based on the open call, 250 senior faculty members from various engineering institutes volunteered to serve as mentor and 80 of them were shortlisted to mentor close 120 selected mentees. Each mentee is assigned to a mentee based on domain of expertise and interest. The stream

wise coordination was done by Dr. Gunjan Varshney (Delhi Section) and Mr. Shone Jose (Kerala Section) for electrical engineering stream, Dr. Ruchika Gupta (Delhi Section) and Dr. Bijoy Jose (Kerala Section) for computer science & engineering stream, and Dr. Mansi Subhedar (Bombay Section) and Mr. Arun M. (Madras Section) electronics & communication engineering. The program is from 01.10.2023 to 30.11.2023. It involves common talks on popular topics of interest for young faculty and weekly one-to-one mentor mentee meeting. The focus topics for discussion between mentor and mentee are.

- Personality Grooming and Career Development
- Professional Volunteering, Outreach and Community Service
- · Guidance in Research Skills
- Professional Networking and Collaboration
- Teaching Pedagogy and Effective Teaching Skills
- Guidance for Project Proposal Writing and Research Grants
- · Work-Life Balance
- Research Paper Writing, Publication, and Scholarly Output
- Intellectual Property Rights
- Enhancement of Domain Knowledge

# IEEE India Council Pan India wide Mega Vega workshop with CDAC

A national workshop on the newly launched indigenous RISC-V based DIR-V VEGA Processors is to be jointly organised by C-DAC, MeitY along with the IEEE India Council. The two-day workshop will be held on Nov 17 and 18 at selected 15 venues in the county. Through this mega workshop close to 1200 participants will be given hands on training by experts from C-DAC, who are part of VEGA Processor development team. The DIR-V VEGA workshop will provide an insight into the VEGA series of processors and ecosystem focusing on both the theoretical and practical aspects including development boards, SDK and on building applications. Target audience

for this workshop is students, faculties, research scholars and industry professionals from various engineering branches. Post the workshop IEEE IC-CDAC Vega labs will be set-up in these venues for continuing the targeted efforts of popularising Make-in-India microprocessors. Mr. Libin T.T. and Dr. Ruchika Gupta from the IAYPSC team is coordinating the event.

### The following are the regional venues.

- Alliance University, Bangalore, Karnataka
- Amrita University Bengaluru Campus, Bangalore, Karnataka
- Indian Institute of Information Technology Bhopal, Madhya Pradesh
- Vellore Institute of Technology (VIT) Chennai, Tamil Nadu
- Cochin University of Science and Technology, Cochin, Kerala

- PSG College of Technology Coimbatore, Tamil Nadu
- KIET Group of Institutions, Ghaziabad, Uttar Pradesh
- Koneru Lakshmaiah University, Guntur, Andhra Pradesh
- Vardhaman College of Engineering, Hyderabad, Telangana
- Birla Institute of Technology and Science-Pilani, Hyderabad, Telangana
- Netaji Subhash Engineering College, Kolkata, West Bengal
- Chandigarh University, Mohali, Punjab
- Thakur College of Engineering and Technology, Mumbai, Maharashtra
- Guru Tegh Bahadur Institute of Technology, Rajouri Garden, Delhi
- Mody University of Science and Technology, Sikar, Rajasthan

### **ICECIE'2023**

# (The International Conference on Electrical, Control, and Instrumentation Engineering)

### 22nd-24th November 2023

### InterContinental Hotel, Kuala Lumpur, Malaysia

The 5th edition of the Region 10 flagship conference of IEEE Industry Application Society (IAS), the International Conference on Electrical, Control, and Instrumentation Engineering (ICECIE'2023) will be held in Kuala Lumpur, Malaysia. This interdisciplinary conference is held annually and is fully-refereed, with a focus on theories, methods, and applications in electronic, control, systems, and other aspects of electrical engineering. The conference is technically sponsored by the IEEE IAS Society USA. ICECIE'2023 provides a platform for presenting and discussing the latest research and developments in the field, and aims to foster collaboration and innovation among participants.

### **KEYNOTE SPEAKERS**

We are honored to invite distinguished professors in the fields of science and industry to our upcoming event.

- 1. Professor Alfredo Sanz, who is a full Professor at Microchip Technology Zaragoza S.L.U, Spain.
- 2. Dr. Hoa Le Minh, Chairman of IEEE Communications Society (ComSoc) UK.
- 3. Prof. JONATHAN BIRD, PSU, Lead Engineer, FluxMagic, Inc (Portland State University, United States).
- 4. Dr. Azura Binti Hamzah, Head of Department, Department of Electronic Systems Engineering, Universiti Teknologi Malaysia (UTM).

Please do not hesitate to contact us if you have any further questions:

Email: <a href="mailto:info2023@icecie.com">info2023@icecie.com</a> Conference URL: <a href="http://2023.icecie.com">http://2023.icecie.com</a>



Er. Koruthu P Varughese LMAG Coordinator

# Life Member Affinity Group

# Formation of IEEE IC LMAG – An incredible milestone in the history of LM activities in India

The day 14th September 2023 has become a memorable day in the history of IEEE Life members in India with an amazing news that IEEE LMAG India Council has approved. This is the 26th R10 LMAG. Invitation was sent to all life members in India through an email informing about this approval and also requested to join the meeting on 2nd October to commemorate the approval. In the meeting Dr. Debabrata Das, Chair India Council addressed the members and admired the formation. He extended all possible help to the newly formed Council. Dr. Rajendra Asthana, Chair R10 Life member committee explained the aims and objectives of forming LMAG IC.

The office bearers for the year 2023 were also unanimously elected in the meeting.

The officials are:

1. Koruthu P Varughese Chair

2. G S Mani Vice Chair

3. R Gunvantray Patel Secretary / Treasurer.

4. Members Dr. Surendra Pal (Bangalore),

R Muralidharan (Bombay), Harbans L. Bajaj (Delhi), K M M Rao (Hyderabad), Prof. V K Damodatan (Kerala), Sundaresh Subramaniam (Madras), Salil Kumar Sanyal (Kolkata). Only seven members as LMAG is formed only under seven Sections out of total thirteen Sections.

Also proposed to conduct a formal inauguration of IEEE India council LMAG along with INDICON 2023.



Koruthu P Varughese Chair



G S Mani Vice Chair



R G Patel Secretary/ Treasure

I am really happy to say that with the active cooperation of the Section Chairs and all life members, we could continue to coordinate multifarious activities especially the monthly webinar series without break.

Requesting continued support from all members,

**Koruthu P Varughese** 



Cecelia Jankowski

Managing Director Member and Geographic Activities Phone + 1 732 562 5504 Fax + 1 732 867 9943 c.jankowski@ieee.org

21 September 2023

Koruthu P. Varughese A 108, The Rainbow by Alive Life Spaces Kavinpuram Pulliarikonam, Kerala 695573 India

Dear Koruthu P. Varughese:

Congratulations! On behalf of the IEEE Member and Geographic Activities Vice President, Jill Gostin, it is a pleasure to inform you that the requirements of the MGA Board Operations Manual have been met, and the IEEE India Council Life Member Affinity Group has been formed. The effective date of this affinity group formation is 14 September 2023.

You have been recorded as Affinity Group Chair. When an election has been held, please report the name and member number of the new Affinity Group Chair to the IEEE using the online Officer reporting tool at https://officers.vtools.ieee.org/. Valuable information regarding IEEE affinity groups can be found at https://mga.ieee.org/resources-operations/geographic-unit/affinity-groups. If we can assist you in any way in the planning of the affinity groups activities, please let us know.

We extend our best wishes for the successful operation of this affinity group.

Sincerely,

### Cecelia Jankowski

Cecelia Jankowski Managing Director Member and Geographic Activities

cc: J. Gostin - Member and Geographic Activities Vice President

L. Fung - Region 10 Director

H. Wolfman - Life Member Committee Chair

R. Asthana - Region 10 Life Member Coordinator

D. Das - India Council Chair

## Congratulations on the achievement!

Cheers to Koruthu P Varughese for a job well done!

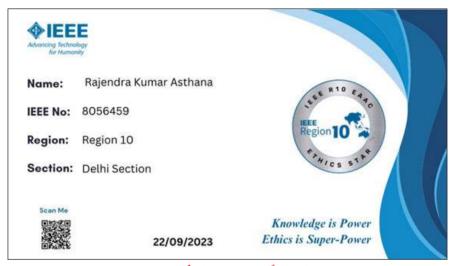
No one can compare to your creativity and passion, and it's no surprise that you've become so successful in volunteerism!!

### Another important achievement to honour in this context is a 'Soft pin issued by Region 10 Ethics Committee' to

### Er. Rajendra K Asthana

(asthana@ieee.org)

(Currently, Chair IEEE Region 10 Life Member Committee, Ombudsman IEEE India Council, Member IEEE Life Member Committee, Advisor IEEE LMAG Delhi, etc...)



Congratulations Er. AsthanaJi!!!

### Report of activities of LMAG in the third quarter:

Details of the webinar series conducted are as follows:

Date	Topic	Name of speaker	Organised jointly by:
27th July 2023	Vision towards	DR. Budhaditya Bhattacharyya	IEEE LMAG India
	beyond 5G	Associate Professor	LMAG Kolkata Section
		School of Electronics Engineering (SENSE),	IEEE Kerala Section
		VIT University, Vellore	
31st August 2023	Roles of Helicopters	Gp. Capt. Dr. KNG Nair, VM(G), (Retd)	IEEE LMAG India
	in Civil Aviation and	Chairman and Managing Director	IEEE Kerala Section
	the Challenges faced	of Thumby Aviation Pvt.Ltd	
28th September 2023	How elders can	Prof G S Mani	IEEE LMAG India
	contribute to AI /ML	IEEE Pune Section	IEEE Pune Section
	<ul> <li>Some thoughts</li> </ul>	(Retired) Director and Dean	IEEE Kerala Section
		Institute of Armament technology (IAT),	
		Pune	

### Details of the webinar series conducted in the quarter:



#### Abstract of the talk

Fifth Generation Communication Networks (5G) promise to usher in a new era of high-speed data service. It is expected to offer a wide range of services, notably HetNet, D2D. Massive MIMO, and SDN networks, in addition to extremely low latency and delays with high throughput. This broad variety of services is anticipated to be effective when augmented with Enhanced Mobile Broadband (eMBB), Massive Machine Type Communications (mMTC), and Ultra-reliable low-latency communications (URLLC). All of these promises, however, can only be fulfilled if several robust and efficient security measures are put in place to protect and secure user data. In addition. researchers would employ particular tactics to provide a trustworthy communication environment to the massive user database. In preparation for this, we will discuss the evolution of security challenges in mobile communication and how the concerns of one generation developed the path for a solution for future generations. Furthermore, a DNN-based MAC protocol for intrusion detection in a 5G network will also be discussed. Finally, we will highlight the vulnerabilities, threats, security solutions, problems, gaps, and outstanding research issues. In order to give attendees hands-on experience with 5G data access, a test to validate the Principles of Path loss in Mobile Radio Propagation via Smartphone and CRFO will also be covered.

### **Speakers Biography:**

BUDHADITYA BHATTACHARYYA was born in Kolkata, India. After completing his B. Tech from WBUT in 2008,

for a brief period, he worked at WIPRO, Kolkata, before pursuing his Ph. D degree in Engineering, from Jadavapur University, Kolkata, India. He has been a member of IEEE since 2010. Author of several peer-reviewed scientific iournals, book chapters, and conference proceedings. and a distinguished reviewer for Wiley and Springer Journals, he has been recognized for voluntary services in IEEE through the organization of seminars, distinguished lecturer programs, and student chapter activities. He is currently working as an Associate Professor at the School of Electronics Engineering (SENSE), VIT University, Vellore. His current research interest includes deep learning-based channel estimation strategies for LTE and intrusion detection analysis for 5G networks. A dedicated professor with outstanding research aptitude has earned him many laurels including published patent work, recipient of the prestigious UGC-Grant for meritorious student-2009, and Raman research awards 2023 to name a few. His current research interests include IoT networks, data science, wireless communications and networks, robotics, network security, cybersecurity, block chain, artificial intelligence, machine learning, and deep learning. A passionate YouTuber with over 2.5k



subscribers, with the sole purpose of knowledge sharing. Brief on the topic:

In India Helicopters are widely used in the civil in the following roles.

- a). Offshore operations in support of Oil Exploration and Production Companies.
- b). Helitaxi operations

Newsletter IEEE COUNCIL

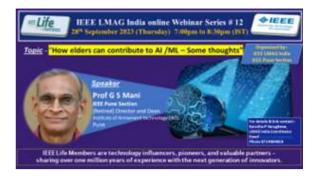
- c). Regional connectivity
- d). Pilgrimage Flights
- e). VVIP/VIP travel
- f). Aerial Survey
- g). HEMS
- h). Relief operations during calamities.
- i). Shifting heavy and bulky equipment by underling.
- j). Policing
- k). News gathering

### Challenges being faced by helicopters

- a). Airports treating helicopters like fixed wing aircraft and delays in operations
- b). Weather conditions in hilly areas.
- c). High altitude flying.
- d). High operational cost.
- e). No basic training facilities in India for helicopters

#### Brief about the speaker.

Gp.Capt.Dr.KNG Nair, VM(G), (Retd) has a basic BSc degree from Kerala University. He was commissioned in the Indian Air Force as a Fighter Pilot in December 1975. In the IAF, he held important appointments such as Flight Commander of operational Squadron, Chief Flying Instructor of Advanced helicopter training establishment. Commanding Officer of Operational Helicopter Squadron, Senior Personnel Staff Officer of Southern Air Command etc. Took premature retirement from IAF in June 1998 and joined Civil Aviation. He was Chief Pilot and Director Operations of AZAL, India Pvt. Ltd., Global Vertra Helocorp Ltd., Heligo Charters Pvt.Ltd. He runs his own Aviation Company engaged in Non Scheduled Air Transport Services across India. He has been awarded PhD in Airline Entrepreneurship by Sorbon University of France, Honorary Doctorate in Airline Entrepreneurship by AIMRI (both in July 2022). He was honoured with Business Excellence Award by Indywood in 2019 and



International Excellence award by CIVITAN. in December 2022. He is also recipient of Vayasena Medal Gallantry by the President of India in 1992

#### About the talk

Artificial intelligence and Machine learning are the buzz words of the day. These are impacting almost all aspects of our lives. Elders being the repository of knowledge, can they add much value to Al creations? The talk proposes to introduce the topic of the basic principles of Al / ML, discuss how these technologies are useful for elders and drive the thoughts towards how elders can contribute to a more mature Al.

### About the Speaker

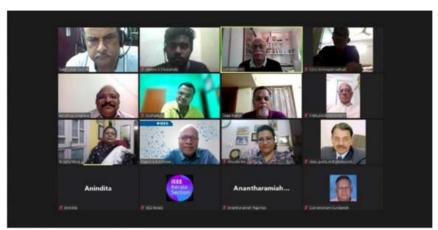
Prof GS Mani had his academic career at University of Mysore, MIT, Chennai, and at IIT, Delhi. He served DRDO for nearly 40 years and retired as Director and Dean of Institute of Armament Technology in 2002.

Later he was an Adviser for a leading academic institution, Principal of an engineering college and an Emeritus Professor at University of Poona.

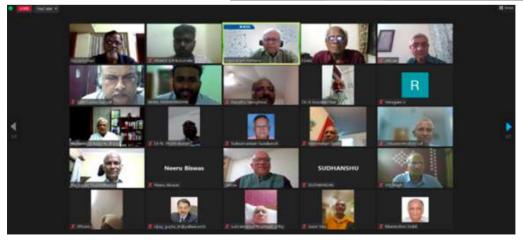
Prof Mani is a recipient of Import Substitution Award from President of India (1971), "Excellence in Education / R&D" Trophy from Governor of Maharashtra (1999), Prof. K. Sreenivasan Award from IETE (2000), Appreciation Award from DEMA (2000), Life Time Achievement award from Society for Data Science (2023).

He is a Senior Life Member of IEEE, Life member of IETE, and a Life member of Society of EMC Engineers (India).

## Snap shots of three talks (Webinar Series)









Er. Shahim Baker Vice Chair

# Young Professionals

'Empowering Young Professionals'

### **Joint Event by IEEE & IEEE Singapore YP Connect**

#### **Event Details:**

- Event Name: INSINYP 2023 (IEEE India Council YP-Singapore YP Connect 2023)
- Date: Saturday, September 16
- Time:
- 2:00 pm 4:00 pm Indian Standard Time
- 4:30 pm 6:30 pm Singapore Time
- Location: Online

Event Objective: The "IEEE India Council YP- Singapore YP Connect 2023" uccessfully accomplished its objective of bringing together IEEE Young Professionals from Singapore, India, and worldwide. The event provided a unique platform for knowledge-sharing, career development, and borderless networking opportunities. It marked a significant milestone as the first online event jointly organized by IEEE India Council Young Professionals and IEEE Singapore Young Professionals, initiating a series of collaborative projects between the two entities.

### **Event Highlights:**

 Welcome Address: The event commenced at 2:00 PM Indian Standard Time with Mr. Shravan Kalyankar from IEEE Singapore serving as the Master of Ceremonies (MC). He warmly welcomed

- the participants and introduced the distinguished quests.
- Importance of Collaboration: The joint welcome note delivered by Mr. Shahim Baker, IEEE India Council Vice Chair (YP), and Mr. Kenneth Cheong, IEEE Singapore YP Chair, emphasized the significance of collaboration between the two IEEE entities. They expressed their excitement about the future possibilities of such partnerships.
- Keynote Address: Dr. Rajesh Elara Mohan, Provost's Chair Professor at Singapore University of Technology and Design (SUTD), delivered the keynote speech on "The Rise of Reconfigurable Robots." Dr. Mohan's engaging presentation showcased how reconfigurable robots are solving everyday household issues, including tasks such as cleaning and assisting senior citizens. He also highlighted his collaborations with startups in India while being based in Singapore. His session captivated the audience, offering practical insights into the transformative potential of reconfigurable robots.
- Panel Discussion: Following the keynote address, a highly interactive panel discussion took place. Esteemed panelists included:
- Mr. Puneet Kumar Mishra, Head of Satellite Antenna

Characterization, Test & Design Centre at U R Rao Satellite Centre, India.

- Mr. Ziyuan (Jacob) ZHAO, Senior Research Engineer at I2R, A\*STAR, Singapore.
- Dr. Arif Hussain, Senior Staff Engineer at Huawei, Singapore.
- The discussion, moderated by Prof. Sabarinath Pillai, Secretary of IEEE India Council, focused on the topic "Career Opportunities and Collaborative Research in India and Singapore." Each panelist shared their experiences in their respective fields and emphasized the importance of upskilling, selflearning, and collaboration in advancing one's career and contributing to technological progress.
- Conclusion and Vote of Thanks: Dr. Nageswara Rao from IEEE Bangalore delivered a concluding note, summarizing the key takeaways from the event.

He also expressed gratitude to all the participants, speakers, and organizers for making the event a success.

Future Plans: The success of INSINYP 2023 serves as a testament to the potential of collaboration between IEEE India Council Young Professionals and IEEE Singapore Young Professionals. It paves the way for future joint projects, fostering stronger connections within the IEEE community and continuing to provide valuable opportunities for young professionals.

#### **Recommendations:**

To build on the success of this event, it is recommended to organize more collaborative initiatives, workshops, and networking opportunities to further strengthen the bonds between IEEE Young Professionals from India and Singapore. These efforts will continue to empower young professionals and drive technological advancements.



#### "Hear from Unheard"

India Council is working for the mission of IEEE with targeted objectives with the collaboration of all the members of thirteen sections. The Council has achieved several laurels, topped as one of the most vibrant councils in R10. The Council initiated an event "Hear from Unheard" and many volunteers opted to speak in this event. Due to time constraints,

The Council initiated an event "Hear from Unheard" and many volunteers opted to speak in this event. Due to time constraints, only few volunteers were requested to speak their views to cover Membership Development, Quality Conferences, Ethics, Networking between Sections and Subsections, Elections, and Disputes resolution.

Schedule of the event details: 30-07-2023:

- 09:30 Inviting all the delegates: Sri Sabarinath Pillai Secretary
- 09:35 Opening Remarks by Prof Debabrata Das Chair IEEE Índia Council
- 09:40 About this event Dr. S. Lakshminarayana Vice Chair, Brand-
- 09:45 Address by Dr Prema Gaur Chair (Elect) India Council
- 09:55 Address by Dr Suresh Nair Immediate Past Chair IEEE IC 10:05 Address by Dr Shivaji Chakravorty Advisor IEEE IC
- 10:15 Address by R.K. Ashtana Advisor IEEE IC
- 10:30 Address by Sri Deepak Mathur Vice-President (Elect) IEEE
- 10:45 Sri Navin Kumar Bangalore
- 11:00 Prof Dilip Pratihar, Professor IIT Kharagpur
- 11:15 Dr. Sreelal S. Pillai ISRO, Trivandrum

- 11:30 Sri M.G.P.L Narayana Hyderabad
- 11:45 Concluding Remarks by Prof Debabrata Das, Chair IEEE India Council
- 11:55 Vote of Thanks by Prof Y. Vijayalatha Treasurer IEEE India Council
- 12:00 National Anthem
- The following link was used for Joining.

https://ieeemeetings.webex.com/ieeemeetings/j.php?MTID=m8bb-9d53a2e0c6b5ced3006a69fcdb140. Meeting number: 2537 280

5391. Meeting password: HUT37

The event was organized by:

#### Dr. Lakshminaravana Sadasivuni

Vice Chair (Branding and Member Benefits)



Dr. Sudeshna Choudury Vice Chair

# **Women in Engineering**

Sudeshna Choudhury, IEEE, India Council Vice Chair (WIE) was invited as a Speaker in IEEE WIE ILS 2023(August 2023) by WIE AG MP Section on

"Climate and Sustainability". She spoke on technology for climate change and sustainability and its role in the betterment of the same.





### **About IEEE WIE**

IEEE Women in Engineering (WIE) is one of the largest international professional organizations dedicated to promoting women engineers and scientists, and inspiring girls around the world to follow their academic interests in a career in engineering. ---->



Its goal is to facilitate the recruitment and retention of women in technical disciplines globally. We envision a vibrant community of IEEE women and men collectively using their diverse talents to innovate for the benefit of humanity.

### IEEE WIE strives to...

- Organize receptions at major technical conferences to enhance networking and to promote membership in WIE
- Advocate women in leadership roles in IEEE governance, and career advancement for women in the profession
- Provide assistance with the formation of new WIE

- Affinity Groups, and support ongoing activities
- Promote IEEE member grade advancement for women to the membership grades of Senior member and Fellow
- Facilitate the development of programs and activities that promote the entry into, and retention of, women in engineering programs
- Administer the IEEE Student-Teacher and Research Engineer/Scientist (STAR) Program to mentor young women in junior and high schools.

In November 1997 IEEE rolled out the Women in Engineering group.



Dr Aloknath De Section Chair

## **Bangalore Section**

IEEE BHARAT 6G SUMMIT - Exploring the Future of Next-Generation Networks

Date: July 22, 2023

Venue: Indian Institute of Science (IISC), Bangalore

The IEEE Bharat 6G Summit, held at the prestigious Indian Institute of Science (IISc) in Bangalore on July 22, 2023, brought together a constellation of experts and thought leaders in the field of telecommunications and network technology. This summit aimed to explore and elucidate the future of 6G networks, showcasing the latest research, innovations, and insights from the brightest minds in the industry. With a diverse range of topics covered, from network architecture and security to the potential of Al and machine learning in 6G, this segment of the report provides an in-depth overview of the event and the key takeaways from sessions.

### Introduction:

The IEEE Bharat 6G Summit was a momentous event that captured the essence of technological innovation and progress in the realm of telecommunications. It served as a meeting point for experts, researchers, and enthusiasts, offering a platform for discussions, knowledge sharing, and networking. The event unfolded a series of engaging sessions, each anchored by renowned speakers who shared their expertise and insights on the path towards 6G technology.



**Event Highlights:** 

Registration and Networking:

The summit kicked off with a registration and networking session, setting the stage for participants to connect, share ideas, and foster collaborations. It was a prelude to the insightful sessions that lay ahead.

### **Inauguration and Context Setting:**

The inaugural session was graced by Mr. Anindya Saha, Chair of the IEEE ComSoc Bangalore Chapter. In his opening address, he highlighted the significance of the summit and its role in shaping the future of 6G technology.

#### **Bharat 6G Vision:**

Dr. Kumar Sivarajan, an IEEE Fellow and CTO of Tejas Networks, delivered a visionary talk on the "Bharat 6G Vision." He painted a compelling picture of what 6G technology could entail, emphasizing its potential to revolutionize connectivity and communication.

### **Keynote Address:**

Prof. Chandra Murthy, an IEEE Fellow and Professor at IISc, delivered the keynote address. His insights delved into the core principles and challenges of 6G, setting the tone for the subsequent sessions.

# Learnings from Open RAN in 5G and Evolution of Open RAN to 6G:

Mr. Sridhar Bhaskaran from Rakuten Symphony India Pvt Ltd elucidated the learnings from Open RAN in the context of 5G and its evolution towards 6G. He highlighted the importance of open and flexible network architectures in the 6G era.

# AI/ML for 6G PHY: Unveiling Our Latest Findings and Charting the Future Course:

Mr. Ashok Kumar Reddy Chavva of Samsung Research Institute, Bangalore, provided a deep dive into the role of Artificial Intelligence and Machine Learning in 6G Physical Layer (PHY). He shared the latest findings and the trajectory for future research in this domain.

# Role of Physical Layer Secrecy in 6G Systems: QoSec and Associated Challenges:

Dr. Parthajit Mohapatra from IIT, Tirupati, shed light on the role of physical layer secrecy in 6G systems. He discussed the concept of Quality of Secrecy (QoSec) and the challenges associated with ensuring secure communication in 6G networks.

# Challenges and Opportunities in Building a Sustainable 6G Network:

Mr. Satish Kanugovi of NOKIA addressed the pressing challenges and opportunities in constructing a sustainable 6G network. He emphasized the need for environmental consciousness in the development of future networks.

# Soft6 - Erasing Digital Divide Leveraging Softwarized 6G:

Mr. Deborsi Basu from IIT, Kharagpur, introduced the concept of "Soft6" and its potential to bridge the digital divide. He discussed how softwarized 6G networks can offer increased flexibility and accessibility.

### **Networking Lunch:**

Participants took a break for networking and discussions over lunch, providing an opportunity to digest the morning's insights and forge new connections.

# Approach and Challenges in Realization of NTN Solutions based on O-RAN Architecture:

Mr. Ravikanth Pasumarthy of Capgemini explored the approach and challenges in realizing Network Transport Network (NTN) solutions based on Open Radio Access Network (O-RAN) architecture. He highlighted the significance of open standards in 6G.

# Al-powered Telco Network Cloud Automation in theme of 'Connected Intelligent Things':

Ms. Gnanapriya Chidambaranathan from Infosys shared insights into the role of Artificial Intelligence in powering Telco Network Cloud Automation. She discussed the journey towards enabling 'Connected Intelligent Things' through Al.

# 6G Spectrum: Why, What & How!:

Mr. Vinay Shrivastava from Reliance Jio Infocom Ltd dissected the 6G spectrum, addressing the questions of why, what, and how it will be crucial in the 6G landscape.

Network Architecture for 6G Systems: Some Early Thoughts:

Mr.Pranav Jha from IIT, Bombay, presented early thoughts on network architecture for 6G systems. He highlighted the need for adaptable, self-optimizing, and scalable architectures.

#### AI-Powered RAN:

Mr.Ram Kumar Sharma from Ericsson Global Services delved into the world of Al-powered Radio Access Networks (RAN). He explored the applications and implications of Al in optimizing network performance.

# Envision of Compute Platforms and Cloud Computing for 6G Networks:

Mr. Mahantesh Kothiwale from Samsung Research Institute, Bangalore, provided insights into envisioning compute platforms and cloud computing for 6G networks. He emphasized the role of cloud-native architecture in 6G.

# 6G Network Architecture and Security - Enabling Future Connectivity and Trustworthiness:

Ms. Neha Sharma from Samsung Research India Bangalore discussed the critical topic of 6G network architecture and security. She outlined the measures required to ensure future connectivity's trustworthiness.

#### Al in RAN:

Mr.Vinosh James from Qualcomm Intl. Inc. explored the integration of Artificial Intelligence in Radio Access Networks (RAN). He discussed the potential of AI to enhance network efficiency and user experience.

#### Tea Break:

A short break provided attendees with the opportunity to recharge before the final sessions of the day.

# IEEE 802.15.3 d/e/f: Sub-Terahertz Band Communications Standard toward 6G:

Mr. Anand M. from the Centre for Development of Telematics shared insights into IEEE 802.15.3 d/e/f, a Sub-Terahertz Band Communications Standard that could pave the way for 6G. He discussed the standard's potential and relevance in the 6G context.

# **Towards Green 6G: Energy-Aware Service Delivery:**

Dr. Rashmi Kamran from the Indian Institute of Technology Bombay presented a vision for "Green 6G." He discussed energy-aware service delivery and its importance in sustainable 6G networks.

# Harnessing the Power of Digital Twins Throughout the 6G Lifecycle:

Mr. Balaji Raghothaman from Keysight Technologies introduced the concept of digital twins in the context of 6G. He explained how digital twins could be harnessed throughout the 6G lifecycle to enhance network management and optimization.

### **Closing Keynote:**

The summit concluded with a closing keynote address by Dr. Ashutosh Dutta, an IEEE Fellow, and Founding Co-Chair of IEEE Future Networks Initiative. Dr. Dutta's keynote encompassed a comprehensive overview of the summit's discussions, highlighting key takeaways and future directions in the 6G landscape.

#### Vote of Thanks:

The event was brought to a close with a heartfelt vote of thanks from Mr. Subhas Mondal, Chair-Elect of IEEE ComSoc Bangalore Chapter. He expressed gratitude to all participants, speakers, and organizers for their contributions in making the IEEE Bharat 6G Summit a resounding success.

#### Conclusion:

The IEEE Bharat 6G Summit at IISc Bangalore on July 22, 2023, was a resounding success, achieving its objective of exploring the future of 6G technology. The event featured a rich tapestry of topics, ranging from network architecture and security to the integration of AI and machine learning in 6G. The insights shared by the distinguished speakers, coupled with the networking opportunities, made the summit an invaluable experience for all participants. It underscored the transformative potential of 6G technology in reshaping the landscape of telecommunications and connectivity.

### **IEEE R10-Bangalore Section Student Summit**

The IEEE R10-Bangalore Section Student Summit, copresented by the IEEE Bangalore Section Student Activities Committee and the IEEE R10 Student Activities Committee, was a resounding success. It drew an impressive turnout of more than 350 enthusiastic in-person participants. The summit saw active participation from 37 student

branch students, enhancing the sense of community and collaboration that defines the IEEE network. This gathering of aspiring engineers and technologists not only enriched the discussions and knowledge sharing but also strengthened the bonds within the IEEE family, highlighting the organization's commitment to fostering innovation and professional growth among its members. The summit served as a remarkable platform for learning, networking, and celebrating the spirit of technology and engineering.

### Inauguration: Lighting the Path to Innovation

The inauguration ceremony was graced by esteemed luminaries who lit the ceremonial lamp, symbolizing the illumination of knowledge and innovation. Dr. Jayanna, Dean Academics at SIT College, Dr. Aloknath De, Chair of IEEE Bangalore Section, Dr. K. Viswanath, Branch Counselor of IEEE SIT SB, Dr. Chengappa, Secretary of IEEE Bangalore Section, Dr. Abhishek Appaji of IEEE Bangalore Section, Major Shirishgouda Patil, Ex-Indian Army officer and Senior Information Security Engineer at Wells Fargo, and Dr. Parameshachari, SAC Chair of IEEE Bangalore Section, were present to inaugurate the event. Their collective presence marked the auspicious beginning of a day filled with insight, inspiration, and innovation. Dr Alok, in his chair address, emphasized on the opportunities that IEEE open for engineers, how we can grow towards excellence through student-driven activities. Students exploring engineering should take IEEE not just as a community but as portal of possibilities, was reverberating in the section summits theme.

# Keynote Address: Major Shirishgouda Patil's Inspiring Journey

Major Shirishgouda Patil's keynote address was a testament to the summit's theme of transformation and empowerment. As an ex-Indian Army officer and a seasoned information security engineer, Major Patil shared his remarkable journey, blending experiences from the military and the corporate world. His keynote revolved around the power of making the right decisions at the right time, a skill he honed during his tenure in the army. With vivid illustrations from his life, he elucidated the importance of aligning one's decisions with their inner

compass, emphasizing the role of personal conviction in shaping one's path to success.

# Al for Medical Science: Pioneering Healthcare Innovation

The summit also delved into the realm of healthcare and artificial intelligence (AI) with a session titled "AI for Medical Science" led by Ms. Rizma from Atom360.ai. In an era of rapid technological advancements, AI is poised to revolutionize the medical field. Ms. Rizma explored the potential of AI in transforming healthcare, shedding light on how machine learning and data analytics can enhance diagnostics, treatment, and patient care.



Cybersecurity Unplugged: Safeguarding the Digital World

In a world, increasingly reliant on digital technology, cybersecurity has become paramount. Mr. Vatsal Vaishy, an expert in cybersecurity services, presented "Cybersecurity Unplugged: The Power to Protect and Prevail." His session offered a candid exploration of cybersecurity challenges and solutions. Attendees gained insights into the evolving threat landscape and the strategies needed to safeguard digital assets.

# Panels and Special Addresses: Insights from Industry Experts

The summit also featured panel discussions and special addresses from industry experts. The panel on "Transforming Potential into Power: Your Epic Journey from Academia to Industry" included panellists Dr. Karunakara Rai B, Ms. Ritu Sharma, Mr. Punith Raj KN, and Mr. Sourabh Mathur, who shared their insights on transitioning from academia to industry. The session was moderated by Dr. Abhisek Appaji, throughout session many ideas from startup to academia progression discussed and inQ&A session, students were eager to point out the possibilities and took many insights from the experts.

Ms. Priyanka Mishra from ISRO delivered a captivating talk on "Chandrayaan 3: Redefining India's Footprint on the Moon," shedding light on India's ambitious lunar missions.

Mr. Ramasheshan S from Atom360.ai explored the world of open source with his session titled "The FOSS Exchange," emphasizing the significance of open-source software and its role in collaborative development.

### Officer Training Workshop: Nurturing Leadership Skills

The Student Activities Committee organized an Officer Training Workshop, providing a platform for student leaders to enhance their leadership skills. This workshop aimed to equip participants with the knowledge and tools necessary to drive impactful initiatives within their IEEE student branches. The session was taken by Dr Chengappa MR and Subramanya Navada KR.

#### 0 to 1 Cloud Masterclass: Journey into the Cloud

In the "0 to 1 Cloud Masterclass," Mr. Yeshwanth L M, an Associate Solutions Engineer at Databricks, took attendees on a comprehensive journey into the world of cloud computing. This session provided a live walkthrough of various opportunities available in AWS and cloud platforms, offering practical insights into cloud technologies and their applications.

# "Ingenuity and Phronesis": Engineering for the Future

One of the standout sessions featured Mr. A.H. Sagar,

an international educationalist, FDP expert, and accomplished national sports person. His session, titled "Ingenuity and Phronesis: Essential Ingredients for Engineers of the Future," was exceptional. Mr. Sagar explored the intricacies of personal development, focusing on overcoming shyness through fun activities. He used charming examples and memes to illustrate how small actions and fine-tuning one's life can lead to significant impacts. Mr. Sagar also recommended great books and references to inspire attendees on their engineering journeys.

# Valedictory and IEEE Day Celebration: Reflecting on a Transformative Day

The summit concluded with a valedictory session, where participants reflected on the enriching experiences and knowledge gained throughout the day. The IEEE Day celebration marked a moment of unity and celebration within the IEEE community, showcasing the organization's commitment to advancing technology for the benefit of humanity.

# Conclusion: A Day of Learning, Innovation, and Inspiration

The IEEE R10-Bangalore Section Student summit proved to be a transformative event, where attendees were immersed in a world of learning, innovation, and inspiration. This physical event was preceded by a hybrid event at three colleges where R10 Plenary Talk was held on 16th September as a curtain-raiser event. That event was also attended by 250~people. Overall, from exploring emerging technologies to nurturing leadership skills, the summit offered a diverse array of sessions that catered to a wide range of interests and professional growth opportunities.

# IEEE Bangalore Section: Promoting Ethical Awareness Introduction:

The IEEE Bangalore Section has been at the forefront of promoting ethical awareness and adherence to the IEEE Code of Ethics within the region. This report outlines the remarkable achievements of the section in raising ethical awareness among its members and the broader community.

#### 1. IEEE Code of Ethics Awareness Assessment:

The IEEE Bangalore Section played a pivotal role in encouraging members to take the IEEE Code of Ethics



awareness assessment organized by the IEEE Region 10 Ethics Awareness and Advancement Committee (EAAC). This assessment aimed to evaluate knowledge and awareness of ethical principles within the IEEE community.

#### 2. Promotion in Student Groups:

The section actively engaged with student groups affiliated with IEEE to promote ethical awareness. This initiative targeted the future generation of engineers and technologists, instilling in them the importance of ethical conduct in their professional lives.

### 3. Integration into Section Events:

Ethical awareness was seamlessly integrated into various section events, ensuring that it was a core theme in discussions, presentations, and workshops. This approach allowed members to understand the practical application of ethical principles in their own fields.

# 4. Dedicated Promotion Stalls:

The IEEE Bangalore Section went above and beyond by

setting up dedicated stalls at events and conferences to promote ethical awareness. These stalls provided resources, materials, and experts who could guide members on ethical dilemmas and best practices.

### 5. Education and Training for Students:

Students were actively educated about the IEEE Code of Ethics through seminars, workshops, and guest lectures. These events aimed to not only inform but also to stimulate discussions about the ethical challenges faced by engineers and technologists.

### Achievements:

As a result of these concerted efforts, the IEEE Bangalore Section achieved remarkable success in promoting ethical awareness:

- 1. Global Recognition: The section's dedication and commitment to spreading ethical literacy led to global recognition. The IEEE Bangalore Section secured the 3rd position globally for its outstanding efforts in promoting the IEEE Code of Ethics.
- 2. Increased Ethical Awareness: The section succeeded in significantly increasing awareness of ethical principles and guidelines within its membership and the larger IEEE community in Region 10.

#### Conclusion:

The IEEE Bangalore Section's achievements in promoting ethical awareness and adherence to the IEEE Code of Ethics are commendable. By actively engaging with students, integrating ethics into section events, and providing resources and training, the section has made a significant impact on the ethical consciousness of its members. The global recognition received is a testament to the section's dedication to promoting ethical conduct in the field of technology and engineering. Moving forward, it is essential to continue these efforts, fostering a culture of ethics and integrity among IEEE members in Region 10, and inspiring others to follow suit.

### Acknowledgments:

I extend my heartfelt thanks to all the speakers, attendees, and organizers who contributed to the success of these events. I also thank Dr. Chengappa M R, Secretary IEEE Bangalore Section and Mr Subramanya Nevada KR, SSR IEEE Bangalore section for consolidating the materials for this report.

Reported by Saurabh Mehta Bombay Section

# **Bombay Section**

A brief report on India Council Day Celebration by the Bombay Section

(Reported by: B. Satyanarayana, IEEE Bombay Section)

The first India Council Day was celebrated by the Bombay Section on April 29th, 2023 at D.J. Sanghvi College of Engineering, Mumbai. The theme of the celebration was "Role of Branding for a Professional Society".

The event took-off with a presentation by B. Satyanarayana (Immediate Past Chair) on 140 years of rich history of IEEE and importance of its futureproofing for the next 60 years within rapidly changing world scenario. This was followed by an interactive session by Mandar Kanvinde (Brand Capita) on building their member experiences. What followed were two contrasting talks. First was by one of the senior most Section volunteers, Juzer Vasi (IEEE Fellow and Past Chair) on how IEEE helped him grow professionally, connect with some of the brightest minds in the field. and enabled his institute and the country to foster fruitful collaborations. The second was delivered by one of the youngest Volunteers, Apekshya Pawar (SSR and Host of this event), who passionately spoke about her aspirations and what would be IEEE's role in her future

The event then turned into a platform for profound deliberations on ethics and moral responsibilities for IEEE volunteers. Members of the panel discussion -

Anjali Deshpande (Awards Chair), Anand Gharpure (Chair), S.V. Kulkarni (IEEE Fellow and Past EAC Chair), Saurabh Mehta (Secretary and Moderator) and Abhay Phansikar (AESS Chair), enriched the audience by reflecting on their long experience and leadership in IEEE. The event finally ended on an informative and enjoyable note in the form of a fun quiz on 'How much do I know about IEEE?' using excellent mobile application. The quiz masters were Pratik Mhatre (YP Chair) and Saurabh Soni (SIGHT Chair). Mayur Parulekar (Industry Relations Chair) must be thanked for being such a great host along with Dattatray Sawant (SAC Chair).

Glimpses of the Event

Brief Report of Felicitation of Fellow and Life Members with IEEE President Prof. Saifur Rehman

(Reported by: Saurabh Mehta)

(This part of the Report is given separately as Special Report in page 4)

Two days Hands on Workshop on "Cyber Security, Digital Forensics & VAPT Workshop"

(Reported by: Vijaya Ahire)

Date: September 1st and 2nd, 2023

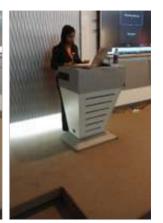
Location: University Department of Information and Communication Technology's IEEE Student Branch UDICT MGM University, Chh.Sambhaji Nagar, Maharashtra















Resource persons : Mr Nikhil Mahadeshwar ,Founder , Cyber Secured India.

Participants: 150+ Students, Faculties and cybersecurity enthusiasts (Across Marathwada Region)

Day 1: The workshop began with an introduction to Digital Forensics, Data Analysis Techniques, and enlightening Case Studies. Practical exercises involved using digital forensics to solve traditional crimes like Murder, missing persons, and kidnappings.

Day 2: Attendees delved into Web Application Security, covering Reconnaissance, Vulnerability Assessment, Penetration Testing, and Web Application Hacking & Security.

Key Takeaways: Participants left with a deeper understanding of Digital Forensics and Web Security, honed Data Analysis skills, and hands-on experience in digitally solving real-world crimes. They are now better prepared to combat cyber threats.

The "Cyber Security, Digital Forensics & VAPT Workshop" was a resounding success, empowering 150+ attendees with crucial cybersecurity expertise. We anticipate

hosting more such impactful events in the future.

Our plan is to provide a platform to engineering minds (i.e. undergrads & professionals) to share their thoughts of their analysing climate change and humanitarian challenges. It is also an opportunity for student members to compete & learn from IEEE graduate members and demonstrate their capabilities. There were total five tracks which focuses on mainly Climate Change, Impacts of climate change on global economy, Technologies for harnessing renewable energy, Engineering solutions for management of natural resources, Role of technology in climate mitigation.

There were around 30 papers were received from that we have short listed 25 Paper (Ideas). All ideas were unique and different. Ideas are presented in IEEE format. Plagiarism is also checked for the same to main authenticity.

A technical Magazine is to assist or deal with natural disaster, mitigate climate change threats, eliminate/reduce human sufferings or improve life or living for common persons will be considered suitable for the Women in Sustainability Ideathon



Climate Change and Strategies for a Sustainable Future, 2023 organised by WIE AG IEEE Bombay Section (Reported by: Komal Thanvi)

### **Objective of the Event:**

- To increase awareness and understanding of the urgency and severity of climate change and its impact on the planet, ecosystems, economies, and communities.
- To encourage participants to brainstorm and develop innovative ideas, concepts, and strategies that can mitigate the effects of climate change and promote sustainability.
- To provide opportunities for participants to learn about the latest research, technologies, and best practices related to climate change mitigation and sustainable development.
- To create a platform for showcasing and presenting innovative projects, prototypes, and solutions related to climate change and sustainability.
- To assess the feasibility and scalability of proposed ideas and solutions, considering technical, economic, and social aspects.

#### Outcome of Event:

- Ideathons often produce a range of innovative ideas and solutions addressing various aspects of climate change and sustainability.
- Participants may develop prototypes or proof-ofconcept projects that demonstrate the feasibility of their ideas.
- Ideathons bring together participants from diverse backgrounds, fostering collaboration and networking among researchers, entrepreneurs, policymakers, and activities.
- Ideathons can result in data collection and research initiatives, helping to better understand climate change trends and the effectiveness of proposed strategies.
- Ideathons can lead to continued engagement and commitment from participants and organizations to work towards climate resilience and sustainability beyond the event itself.

# TECHNOXIAN World Robotics Championship 2023 Recap - Outstanding Achievements

### (Reported by: Yash Surve)

We are thrilled to share our experience, achievements and accomplishments at the TECHNOXIAN World Robotics Championship 2023. This prestigious event brought together some of the brightest minds in robotics and innovation from around the world. Our team proudly participated in six exciting and challenging competitions and excelled in each one, showcasing and demonstrating our skills, determination, passion, commitment to excellence in robotics and innovation.

# **Competitions Participated:**

- TX Drone Racing Challenge: Our team soared to new heights in this thrilling drone racing competition. Although we did not secure a top position, the experience was invaluable in pushing the boundaries of our drone technology. Our team displayed exceptional skills and precision in the TX Drone Racing Challenge, securing a spot among the top 5 teams out of 71 teams. This achievement reflects our dedication to mastering drone technology and racing.
- Robo Race Challenge: Racing against the clock and fellow competitors, we demonstrated our precision and agility in the Robo Race Challenge. Competing in the senior category of the Robo Race Challenge, our team showcased outstanding talent by ranking in the top 20 out of 90 teams. This demonstrates our ability to compete at a high level and compete with experienced competitors.
- 3. Maze Solver Challenge: Navigating complex mazes and solving intricate puzzles, our team displayed exceptional problem-solving skills, earning a commendable position in the competition. We achieved an impressive top 3 position out of 71 teams in the Maze Solver Challenge. This accomplishment underscores our problem-solving capabilities and innovative approach to navigating complex mazes.
- 4. Water Rocket Challenge: We are incredibly proud to announce that we clinched the 2nd runner-up position in the Water Rocket Challenge. Our innovative approach and teamwork were rewarded with a prize of Rs.15000, affirming our commitment to excellence. Our team's remarkable performance in

the Water Rocket Challenge earned us this position among 49 teams. This achievement is a testament to our creativity and engineering skills, and we were awarded a well-deserved prize for our efforts.

- 5. RC Plane Challenge: While we may not have secured a top spot in this competition, our participation was a testament to our dedication to mastering a diverse range of robotic applications. Participating in the RC Plane Challenge, our team secured a position in the top 10 among 52 teams. This competition allowed us to demonstrate our competence in designing and piloting remote-controlled aircraft.
- 6. Fastest Line Follower Challenge: In this test of speed and precision, our team demonstrated our ability to create robots that can navigate complex paths with efficiency. In the Fastest Line Follower Challenge, we made it to the finals and ranked among the top 10 out of an impressive 132 teams. This competition highlighted our robot's speed and precision in following complex paths.

We are elated with our performance at TECHNOXIAN World Robotics Championship 2023. Our achievements reflect not only our technical expertise but also our spirit of innovation and teamwork. We are grateful for the support of our mentors, sponsors, and fellow participants who made this journey possible.

As we look to the future, we are excited to continue pushing the boundaries of robotics and technology, inspired by our experiences at this prestigious competition. We remain committed to innovation and excellence in the world of robotics, and we eagerly anticipate future opportunities to showcase our talents and skills on a global stage.

Team Name: Metal Busters

Water Rocket team receiving the 2nd Runner up Prize.

**Awards** 

Mrs. Komal Vyas(Thanvi), who is working as newsletter committee Lead, currently, was awarded with "WIE Volunteer of the Year" award for her commendable performance and admirable volunteering.





Gobinda Acharya Hyderabad Section

# **Hyderabad Section**

# IEEE Hyderabad Section Special Annual General Meeting-2023

25th June, 2023

The IEEE Hyderabad Section Special Annual General Meeting (AGM) 2023 commenced on Sunday, 25th June 2023 with a warm welcome from M.A. Jabbar, the Secretary of IEEE Hyderabad Section. He introduced the purpose of the SAGM and outlined the agenda for the day.

Prof. Atul, the Interim Chairman, expressed gratitude to all IEEE members for their presence. He acknowledged the support of SLATE members in his journey and extended his thanks. Prof. Atul highlighted the Section's focus on industry events and presented a summary of accomplished events. He presented the amended and approved Section bylaws to the attendees, which were unanimously adopted.

M.A. Jabbar, the Secretary, provided an overview of the diverse range of Section activities and achievements. V. Jaya Prakasan, the Treasurer, presented a concise overview of the Section's financial status. N. Venkatesh, Nominations Committee Chair, explained the election process and introduced the new Executive Committee members. The newly elected Chair Y. Vijayalata welcomed all the IEEE members and expressed her gratitude to the members of IEEE Hyderabad section for electing them and showing confidence on them to lead the IEEE Hyderabad section. A heartfelt Vote of Thanks was jointly presented by Mousmi Ajay Chaurasia and

M.A. Jabbar, expressing gratitude to all members, volunteers, and individuals involved in the Section's activities.



Image: SAGM Meet- IEEE Hyderabad Section

# INAUGURATION OF IEEE STUDENT BRANCH SOCIETIES

1st July, 2023

The IEEE Student Branch Societies inauguration at GPCET began with an inspiring dance performance, followed by lamp lighting and a prayer song. The event emphasized networking and announced the approval of 15 societies. Dr. Y Pandu Rangaiah highlighted this, while Dr. C Srinivasa Rao emphasized societies' impact. Dr. Tara Sai Kumar inaugurated multiple societies, commending student involvement. Dr. Y V Siva Reddy shared insights and inaugurated several societies. Dr. C Harinatha Reddy encouraged research and inaugurated Power, Energy, and Electronics Societies. Dr. Sandeep Kumar Chaturvedi inaugurated Microwave Society. Dr. S. Harivardhagini supported future activities, inaugurating Women in Engineering

Society. Dr. Prasant Kumar Mishra discussed global IEEE conferences and inaugurated Antennas & Propagation Society. Dr. J Sudharshan shared IEEE experiences, inaugurating Robotics and Automation Society.



# **Roof-top Solar PV Systems**

Internship (6 weeks): 1st July- 16th August, 2023

PES Joint Chapter of IEEE Hyderabad Section and PES R10 West Chapters. IEEE India, has initiated a 6Weeks internship program with an objective to help UG engineering students to provide them practical and necessary skills using the vast expertise of its (IEEE) professional base in the country and abroad. As a pilot, a program on "Roof-top Solar PV Systems" has been initiated to UG students to understand the fundamentals of Solar PV Systems, various aspects of designing of small PV systems for Residential applications with hands-on experience on simulation software. The program started on 1st July 2023 in four different institutions - two from the State of Andhra Pradesh and two from the State of Telangana in India. The sessions are coordinated by faculty members acting as an interface between the students and the experts from Industry and Academia to make it more interactive.



### Student Branch Counselors Meet of Hyderabad

9th July, 2023

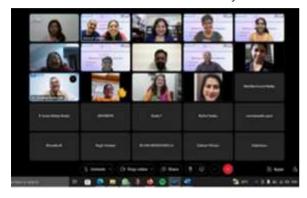
The SAC IEEE Hyderabad Section organized Student Branch Counselors Meet on 9th July 2023 at Hotel The Plaza, Begumepet, Hyderabad with a participation of 40 IEEE members. The Meet was held with all Hyderabad and Warangal Zonal SB counselors and trained them about Utilization of VTools and Filling L31 report, Annual reporting by Saikumar Tara, and SAC Team.



**IEEE WIE DAY CELEBRATIONS** 

30th July, 2023

The event "IEEE WIE DAY CELEBRATIONS" commenced on a positive note, with Dr. Prashant Kumar Mishra. the chair of the MTT/AP-S/EMC Joint Chapter, extending a warm welcome to the panelists and participants. Each panelist brought their expertise to the table. Dr. Celia Shahnaz, shared her valuable insights on how the impacts of climate change were felt right from the severity of heat to unpredictable rainfalls. Dr. Bijuna, mentioned the role of green energy in defense and the importance of using hybrid power. Ms. Usha Verma, explained the importance of proper disposal of e wastes and the collaborations available internationally & Dr. Meenakshi Rawat, further enriched the discussions with the new techniques used in her labs and how every house in their university campus is provided with a solar panel. The panel engaged in a thoughtful exchange on various questions concerning climate change and green energy. As the webinar progressed, an expert talk on "Electronic Countermeasures for Long-Range Missile Systems" was delivered by Ms. Usha P. Verma. She shed light on the significance of electronic countermeasures in safeguarding long-range missile systems from interception and jamming by enemy electronic warfare systems. Next, Dr. Meenakshi Rawar provided her expertise on "Transmitter Efficiency Enhancement: A Green Communication Perspective." The focus was on the critical role of improving transmitter efficiency to reduce energy consumption, greenhouse gas emissions, and resource utilization in communication systems.



#### **WOMEN EMPOWERMENT**

9th August, 2023

IEEE SRITW SB has conducted Essay writing, Quiz, drawing competitions, and given the prizes to the winners and runners of KGBV school. Under the guidance of branch counselor and principal of SRITW Dr. I. Rajasri Reddy garu, in the presence of branch advisor Mr. M. Ramu & NSS coordinator Koteshwar delivered a talk to spread Awareness of Women EMPOWERMENT to the



students and distributed books and pens for the students. All the volunteers actively participated in the program and gave some motivational inputs to the KGBV school students on women empowerment and conducted some competitions to encourage the talent inside the student.

# Learning with Limited Labels: Unsupervised and Semi-Supervised Learning in IoT Applications

11th August, 2023

Ms. Soma Bandyopadhyay's talk highlighted IoT's rapid growth, generating vast data with transformative potential across industries. Labeling IoT data for supervised learning posed challenges due to volume and complexity. This led to unsupervised and semi-supervised methods utilizing limited labeled and unlabeled data.

The talk covered IoT's emergence, traditional supervised learning's limitations, and the role of unsupervised techniques like clustering and anomaly detection in understanding device behavior and identifying irregularities. Semi-supervised learning, with a mix of labeled and unlabeled data, enhanced model performance, particularly in predictive maintenance. Challenges encompassed dynamic environments, data variety, and privacy. Innovating in machine learning for IoT, especially using limited labels, offered a powerful approach for insights. Integrating domain knowledge with advanced ML methods is vital for fully capitalizing on IoT's potential as it continues to expand and diversify.



Shaping the Future: Advocating for Women in Engineering

16th August, 2023

IEEE RCEW Student Branch has organized an event

"Shaping the Future: Advocating for Women in Engineering" on 16th August 2023. The following agenda points are discussed during the event:

- Member benefits, membership in women in power, awareness about IEEE SIGHT, awards & recognition for WIF.
- WIE provides various scholarships, conducts different kinds of competitions based upon students skills.



Emerging Trends in AI/ML for Healthcare Applications

17th August, 2023

IEEE CBIT SB WIE AG in association with IEEE WIE AG Hyderabad Section invited a talk on Emerging Trends in AI/ML for Healthcare Applications.

The seminar delved into the transformative impact of machine learning within the biomedical sector, specifically focusing on its applications in fields like cardiology, neurology, and pulmonology. The session emphasized a systematic approach, highlighting crucial stages in the process. Beginning with data preprocessing for accuracy, participants were encouraged to possess a multidisciplinary knowledge base encompassing statistics, biomedical sciences, and related fields. The significance of adeptly selecting and extracting features was underscored, as these lay the foundation for the model. The seminar also spotlighted pivotal phases like model training, rigorous validation, and meticulous testing to ensure robustness. Throughout, the discussion centered on the practical utilization of these techniques. particularly in domains such as text, speech, and facial recognition, culminating in their profound contributions to refined medical diagnostics and treatment strategies.



# Nurturing Strength Within: A Talk to Empower Women and Girl Students

19th August, 2023

IEEE Women in Engineering (WIE) Hyderabad Section in association with IEEE WIE AG RGMCET organized a talk on Nurturing Strength Within: A Talk to Empower Women and Girl Students. Dr. Vishnu Priya's presentation revolved around the theme of self-love and self-nurturing. focusing on techniques to foster a healthy self-image and positive self-esteem. Her discussion extended to the contemporary challenges posed by excessive mobile usage and digital addiction. She addressed the concept of "Digital Detox," offering practical advice on striking a balance between technology and personal well-being. Her engaging presentation prompted participants to reflect on their own habits and consider ways to unplug and reconnect with themselves. Following the enlightening session, the floor was opened for a question-andanswer session. Attendees actively participated, seeking clarifications, sharing their thoughts, and engaging in meaningful conversations. The event fostered a sense of camaraderie among attendees, leaving them inspired



and motivated to apply the knowledge gained to their own lives

### **Excom and Student Branch Chapter Advisors Meet**

20th August, 2023

A meet of MTT-S/AP-S/EMC-S Joint Chapter ExCom and SBC Faculty Advisors was conducted on 20th August, 2023 in physical mode. Chapter chair welcomed all attendees and introduced Excom members. Detailed discussions were held among all attendees for better coordination and collaboration among all SBCs to organize events. Chapter Chair discussed the following points with SBC faculty advisors.

- · Activities Plan for 2023.
- Members engagement and growth plan.
- Finding Opportunities to SBCs.
- Call for Volunteers for Chapter.
- Inauguration of New SBCs.
- SYRES 2023 with Pune Section
- Awards & Nomination Criteria.
- Establishing COE of Microwave.
- AP-S COPE Workshops.

# One Week Professional development Program on Recent Advances in Signal Processing (RASP- 2023)

21-25 August, 2023

Signal processing is a crucial issue in the majority of new technological inventions and challenges in a wide range of applications in science and engineering. Classical signal processing techniques have primarily used linear, local, stationary, and Gaussian mathematical models. They've always preferred closed-form tractability over real-world precision. The lack of powerful computing tools enforced these limits. Signal processing theories, advancements, and applications have grown fast over the previous few decades, and today encompass tools from many areas of mathematics, computer science, physics, and engineering.

The One Week Professional Development Program on Recent Advances in Signal Processing provided an enriching platform for participants to stay updated on the latest developments, exchange ideas, and foster







collaborations in the dynamic field of signal processing. The event's success was attributed to the engaging presentations. The Speakers are from both International and National level.

#### **u-TECH**

24th - 26th August, 2023

The QIS College of engineering and technology MTT-S SBC organized an insightful three-day event focusing on Antenna Technology and Printed Electronics. The event commenced with interactive fabrication sessions on antenna design and printed electronics, fostering practical understanding.

Event is concluded on August 26th featured renowned scientists, Dr. M. Prashant Kumar, Mr. K. Sambasiva Rao, and Mr. M. Veerandra from RCI/DRDO, along with Dr. B. V. Subbarao, DPR Director at QISCET, delivering diverse seminars. Their talks spanned antenna technology, printed electronics, and emerging trends, offering fresh insights. The event successfully encouraged everyone in the aspect of knowledge exchange, collaboration, and innovation, accentuating academia-industry cooperation. The meticulously curated agenda, encompassing handson sessions and enlightening seminars, left a lasting impact on attendees, fueling intellectual curiosity and

a passion for pioneering advancements in antenna technology and printed electronics.

# **Special Awards and Achievements**

- Certification of Recognition for Achieving Membership Drive Goal from IEEE, MGA
- 2. IEEE R10 Ethics Champion awards to 9 members of IEEE Hyderabad Section.
- 3. Certification of Recognition to 2 members from IEEE member recruitment and recovery committee.
- 4. Student Ambassadors-13 student members
- 5. Certificate of Participation to Srilaxmi Ravali M. from IEEE WIE International Leadership Summit
- 6. Certificate of Appreciation to Dr. Tripura Pidikiti- 2023 WIE Day Ambassador

# **Prominent Upcoming Events of IEEE Hyderabad Section**

- 20th IEEE INDICON, 14-17 December 2023, NIT Warangal
- 2. 19th IEEE Asia Pacific Conference of Circuits and Systems (APCCAS, 19-22November, 2023, Hyderabad
- 3. Ananthapur Zonal Congress- UMANG-2K23





Er. Biju G R, Associate Editor IKS NL

# **Kerala Section**

### 1. Sub Section Activities

Malabar Sub Section

Distinguished Lecture Series

IEEE Malabar Subsection organized a Distinguished Lecture Program on August 18, 2023, at GEC Kozhikode in collaboration with IEEE Student Branch and IEEE SPS Kerala Chapter. Prof. V John Mathews from Oregon State University discussed "Intuitive Control of Bionic Limbs for Amputees and People with Spinal Cord Injuries".





Webinar on "Model-Based Real-Time System Design and Testing for Control Applications"

The IEEE Malabar Subsection, in collaboration with OPAL-RT Technologies India Pvt. Ltd, hosted a webinar on "Model-Based Real-Time System Design and Testing for Control Applications" on October 4, 2023.

### 2. Affinity Group Activities

Life Member Affinity Group (LMAG)

Life Member AG Kerala and Society Interactions: Kerala LMAG with its member strength of 26 has by the end of third quarter in 2023 reached an R10 record of 46 activities, closely followed by a dynamic Delhi LMAG having reached 43. Maximum amount of activity funds is also obtained from both R10 LMC (US\$ 300 + extra US\$ 400) and Global MGA LMC (US\$ 2,000). More than the count of activities, recently LMAG Kerala has been venturing into a number of community interaction projects, translating 'Advancing Technology for Humanity' in different hues and moods.





Yet, another project is under preparation for Training Wiremen for the new Millennium, teaching them relevant Acts and Rules as well as Codes of Practice, Electrical and Work Place Safety

# Women in Engineering (WiE)

Procreate - Product Design Contest

IEEE WIE Kerala Section and Venus Campaign organized a Product Design Contest, Procreate, from 14th July to 28th July 2023, in the online mode.

Startup 101: How to get started with a Start-Up?

IEEE WIE Kerala Section and Venus Campaign organised a talk session on how to get started with a Start-Up, Start-Up 101, on 3rd August 2023. The talk featured Gokul C M (CEO, GADS LLP).

An Alumnus Odyssey in Space and Leadership

An Alumna's Odyssey in Space & Leadership was one of the events conducted by IEEE WIE Kerala Section in the WIE track of the IEEE All Kerala Student Congress (AKSC) '23, conducted at TKMCE on 17th September 2023.



Aerobic Session: Where Fitness meets fun!

On September 17, 2023, as part of the AKSC'23, IEEE WIE Kerala Section conducted an energetic Aerobic Session -Where Fitness Meets Fun! at TKMCE, Kollam.







# Young Professionals (YP)

- ENHANCE: ENHANCE was hosted by IEEE Kerala Section 19th August, 2023 in collaboration with IEEE Kerala Young Professionals and IEEE Kochi Subsection at KSUM, Kalamassery.
- Discussion: IEEE Journey After Graduation: A recent panel discussion on 17th September, 2023 hosted by IEEE Kerala Young Professionals (YP) as a part of AKSC 23 shed light on the inspiring journey of a young professional within the IEEE community and their post-graduation experiences at TKM College of Engineering, Kollam.
- STEP 2.0: On September 23rd, 2023, the IEEE Student Branch at College of Engineering Chengannur (CEC) in collaboration with the IEEE Kerala Young

- Professionals Affinity Group, organized STEP 2.0 Student Transition and Elevation Partnership.
- 4. Group Discussion: IEEE Kerala Young Professionals Affinity Group, in partnership with IEEE Women in Engineering at College of Engineering Chengannur, organized an enlightening Group Discussion (GD) session as part of the Daksha 2.0 event held on October 7th and 8th, 2023.

# 3. Society Chapters

# **Circuits and Systems Society**

Program #1: Emerging technologies: Future Discussion Series held at CDAC Hall, Technopark, Trivandrum on 31 July 2023

Father of pentium chip Dr. Vinod Dham talked about semiconductor policies and opportunities. Dr. C Mohan, retired IBM Fellow and advisor to Kerala blockchain academy discussed Artificial Intelligence and its trends and directions.

Program #2: Introduction to Spice Software held at NLHC 301, NIT Calicut on 22 August 2023

Program #3: Lecture on VLSI Design: Processes, Devices and Circuits held at Madanapalle Institute of Technology and Science (MITS) on 09 September 2023











Program #4: Open Source IC Design Workshop at Digital University Kerala on 23 September 2023 .

University Kerala on 23 September 2023 .

Program #5: All About Embedded Systems at Online

Platform on 30 September 2023.

IEEE CASS Kerala Chapter conducted an online workshop on Embedded Systems. Mr. Divine A. Mathew, Design





Engineer at Digital Core Technologies discussed embedded systems and related concepts to the participants.

### **Communications Society**

1. Winner - Internet for All Call for Proposals

The project "Connect the Lives" submitted as part of the IEEE ComSoc & IEEE HTB Internet for All Call for proposals by IEEE ComSoc SBC MACE in association with IEEE ComSoc Kerala Chapter was selected and secured an amount of \$ 4794.63 for implementation.









#### 2. PROCOMM 2023

PROCOMM is the communications project competition organized by IEEE ComSoc Kerala Chapter.

# 3. Workshop on Industrial Trends in Data Science

A one-day workshop on Industrial trends in data science was organized on 19th August 2023. Dr. Anjana P Das, Technical Specialist. Tata Elxsi was the resource person.

#### **Educational Activities**



A career guidance session in Biomedical Engineering was organized by Educational Activities, IEEE Kerala Section jointly with IEEE Student Branch, KMCT College of Engineering for Women, Kozhikode on 6/09/2023. The session was handled by Ms. Sarada Jayakrishnan, General Manager, Terumo Penpol Pvt Limited, Thiruvananthapuram. Ms. Sarada delivered a talk in online mode on the topic "Exploring Frontiers: Unveiling Opportunities in Biomedical Engineering". There were around 55 members as participants for the event. She discussed various job opportunities in this field and explained the flow in which one can identify the areas in which one can seek job.

### **EDUCATIONAL SOCIETY ACTIVITIES (EdSoc)**

- 1. HerQuest Ep. 4: Evolution of Education: A Teacher's Journey Across Generations: In the fourth episode of the HerQuest talk series by IEEE Education Society Kerala Chapter, held on 29 July, 2023, the focus was on the evolution of education, featuring Dr. Bijuna Kunju K, an educator with 31 years of experience.
- 2. RebootEd Gateway to Technology: Held on 19&20 August, 2023 at College of Engineering, Vadakara. The ReboEd Gateway to Technology initiative, approved by the IEEE R10 EAC Call for Proposals 2023, embarked on a transformative journey to empower individuals who had temporarily suspended their educational pursuits.



# Section Activities Report

Day 1 Forenoon Sessions: Fostering Digital Competence

Day 1 Afternoon Session: Empowering Digital Interaction

Day 2 Forenoon Session: Demystifying Everyday Technology

Day 2 Afternoon Session: Pathways to Educational Resurgence

# 3. UDAAN - Sparking Future Engineers!

Held on 20 August, 2023 at Model Engineering College, Thrikkakkara





The primary goal of the event approved by the IEEE R10 EAC Call for Proposals 2023 was to equip pre-university students with a strong foundational understanding of engineering, including practical skills, soft skills, and an overall orientation to the field.

# 4. National Symposium on Emerging Technologies for Green Energy

The National Symp- osium on Emerging Technologies for Green Energy, held on September 8th and 9th, 2023, at the Grand Hotel in Kochi, witnessed a grand inauguration. The symposium featured engaging panel discussions and expert sessions on various aspects of green energy:

In Session 1, moderated by S S Mani, experts explored topics such as green hydrogen's challenges and opportunities, fuel cell solutions for maritime applications, and the roadmap for green hydrogen in Kerala.

Session 2, moderated by Dr. Bijuna Kunju K, delved into energy storage and grid stability, discussing utility-level battery energy storage systems, grid-forming inverters for microgrids, and improving grid stability using solar-powered inverters.



Session 3, moderated by Er. Harikumar K P, addressed challenges in renewable energy adoption, covering topics like renewable energy challenges in Kerala, energy transition, and renewable energy technologies, and their application challenges.

Session 4, moderated by Job Chunkath, focused on blockchain and Al adoption in green energy, featuring discussions on data analytics in solar PV power plants, net-zero energy transition, and applications of blockchain in the power sector.

The symposium concluded with a remarkable valedictory session. Dr. Kevasamy, Advisor of IEEE EdSoc Kerala Chapter, initiated the session by welcoming the attendees





and expressing gratitude to the speakers, delegates, and volunteers. Dr. M.V. Rajesh, Chair IEEE Kochi Subsection, emphasized the global significance of the symposium in addressing critical energy challenges. Prof. V K Damodaran, Chair of LMAG, IEEE Kerala

Section, highlighted Kerala's contributions to green technology and its alignment with the state's traditions.

# **Intersociety Activities Committee**

SL. No	Date	Topic	Speaker	Atten- dance
25	05-07-2023	Good Laboratory Practices in Medical Device Manufacturing	Er Venugopal S., FIE, General Manager (QA), HLL Life Care Trivandrum	27

26	12-07-2023	Applications	Dr Krishnadasan C	29
		of Composite	K, Deputy Director,	
		Products in Engi-	Structures Entity,	
		neering	VSSC Trivandrum	
			(Retd.)	
27	19-07-2023	Wealth Creation	Mr T V Padmanabhan,	30
		Through Stock	Senior Manager,	
		Markets	Equity Research,	
			Capstocks & Secu-	
			rities (India) Private	
	00 07 0000		Limited.	
28	26-07-2023	Light Weight Foamed Con-	Dr Sajan K Jose, Associate Professor	36
		crete Using	& Head of the Dept	
		Industrial Waste	Civil Engineering, LBS	
		Materials	Institute of Technol-	
		Widtorialo	ogy for Women Poo-	
			jappura, Trivandrum	
29	02-08-2023	Scientific Vastu	Mr Sandil Kumar E K,	31
			Assistant Section Of-	
			ficer, Finance Depart-	
			ment, Government of	
			Kerala	
30	09-08-2023	Rights of	Er J Sudhakaran Nair	31
		Electricity Con-	FIEDeputy Chief Engi-	
		sumers	neer, KSEB	
31	16-08-2023	Design Secret	Prof.Dr V Rajendra	30
		of the Universe	Babu, Dean (PG Stud-	
		Using Hidden	ies) College of Engi-	
		Mathematics as	neering Trivandrum	
		Numbers and Proportions	(Retd.)	
		FTOPOLUOUS		

	23-08-2023	NA	NA	
	30-08-2023	NA	NA	
	06-09-2023	NA	NA	
	13-09-2023	NA	NA	
32	20-09-2023	Universal Human Values & Ethics: Part 3	Dr S Ushakumari, Professor and Dean Corporate Relations, Mar Baselios College of Engineering, Thiru- vananthapuram	16
33	27-09-2023	Removal of Iron from Contami- nated Water	Er Kurian George, Executive Engineer (Retd.), KSEBL	29

It is also reported that, a panel discussion on "Wireless Communications: Recent Trends & Techniques" was conducted at TKM College of Engineering Kollam on 17 September 2023, Sunday, 11:30 AM-12:45PM as part of the All Kerala Students' Congress 2023 (AKSC'23). Er M Narayanan Namboodiripad, Retired Associate Director ISRO & Prof Sathish Dhavan Scientist VSSC, ISRO; Dr T J Apen, President SFO Technologies Technopark; and Dr B S Manoj Professor IIST Trivandrum & Chairman IEEE R10 RFID Council Kerala Chapter were the panelists. Dr K C Raveendranathan, Retired Principal College of Engineering Trivandrum was the moderator. The discussion was well received by the student volunteers of AKSC'23.







### **Power Engineering Society**

 On 05th August 2023 a lecture on topic: Grid Forming invertors and its role in future Power Grids was organized.

IEEE PES Kerala chapter organized an international lecture on the topic: Grid-forming inverters and its role in future electrical grids and it was scheduled on 5th July 2023, 8 PM IST. Dr. Ajith Gopi, Chair of the IEEE PES Kerala chapter, extended a warm welcome to the speaker. Dr. Rahul Satheesh and Mr. Blesson Tomy coordinated the whole session.

2. On 20th July 2023 a lecture on the topic ' Protection Fault Analysis Methods using Symmetrical Components' was held.

IEEE PES Kerala chapter and IEEE PES YP global team jointly initiated a monthly webinar series with the title "Enlighten" which is exclusively an interaction with various industry professionals across the globe.

- 3 On 3rd August 2023 the event Topic was International Colloquium 2023 on the topic "Global Opportunities for Interdisciplinary Research for Sustainable Development
- 4. IEEE PES Kerala Chapter held a Lecture on



"Fundamentals of Power System Protection". Its primary objective is to safeguard equipment, minimize damage, and maintain power supply continuity to consumers.

 On 17th August2023 the event: Inauguration of PES SBC at Carmel College of Engineering and Technology at Punnapara

# **Photonics Society**

Photonics Society Kerala Chapter organizes activities

covering all aspects of photonics, provide our members with professional growth opportunities and support the student activities.

- Hands-On Training on Optical Design Software 'Zemax'
- · Distinguished Lecture Program

IEEE Photonics Society Chapter joined with IEEE Photonics Society CUSAT SB for an enlightening talk on Semiconductor Packaging-Advancements and Potential by Dr.Jayakrishnan Chandrappan, Head of packaging,







CSA Catapult. The event was held on 16th August 2023 at International School of Photonics. CUSAT.

Photonics Society Chapter sponsored four students from the Student Leadership Team to experience AKSC'23 at TKM College of Engineering on September 17.





# **Promotion of Innovation & Entrepreneurship**

V Fiesta 2.0 Triumphs: A Celebration of Innovation and Inspiration

V Fiesta 2.0, spanning September 30th and October 1st, 2023, was a resounding success. The prestigious flagship event of IEEE PIE Kerala Section was inaugurated by Mr. Balagopal Chandrashekhar, the former chairman of The Federal Bank LTD in the presence of Prof. Muhammed Kasim S, Chair IEEE Kerala Section and Prof. Imthias Ahamed T P. Chair IEEE PIE Kerala Section.

# **Signal Processing Society**

- 1. Execom Meeting #5
- 2. i5 First Meeting
- 3. i5 Second Meeting





- 4. IEEE SPS Kerala Chapter Independence Day and Onam Celebration
- 5. Execom Meeting #6
- 6. Execom Meeting #7
- 7. i5 Third Meeting
- 8. i5 Fourth Meeting
- Two videos from IEEE SPS Kerala was selected as finalists for the prestigious 5 Minute Video Clip Contest and a team of 11 members will be travelling to Malaysia for attending ICIP 2023
- a. EPILEPT Epilepsy Personal Intelligent Life-saving Efficacious Technology
- b. Visualizing MRI & CT Scans Using Mixed Reality

# Society for Social Implications of Technology

Webinar: Sustainable Water: A Relevant Perspective for the Future

IEEE SSIT Kerala Chapter organized a webinar on Sustainable Water:





Webinar: Fostering Equitable Access to Higher Education Abroad

IEEE SSIT Kerala Chapter organized a webinar on Fostering Equitable Access to Higher Education Abroad on the 5th of September 2023 at 08:00 PM IST by Dr. Jisha P. Abhraham (Professor Mar Athanasius College of Engineering).

IMPACTION: Ideathon Competition: The IEEE SSIT Kerala Chapter organized an ideathon contest, "Impacthon" as part of AKSC 2023.

#### 4. Student Activities

### All Kerala Student Congress (AKSC)

The All-Kerala Student Congress (AKSC) 2023 took place on September 17th at TKM Engineering College in Kollam with 1500+ participants and 300+ organizers became the largest section student congress in the history of IEEE. As IEEE LINK's annual flagship event, it drew participants from all corners of the state with registrations from 78 SBs and 6 other colleges without SBs. AKSC, a technomanagerial extravaganza, aimed to enhance the technical knowledge of undergraduate participants, providing a pivotal platform for students to meet and collaborate with peers. What set AKSC apart was its blend of advanced workshops and the convergence of student enthusiasm with industry expertise.





The congress was inaugurated by Shri. S Somanath, Chairman ISRO. The events collectively enriched the knowledge and skills of participants while fostering networking, innovation, and career development, exemplifying the dynamic and collaborative spirit of IEEE.







# **LINK Execom Training**

The Student Branch Execom Training conducted by IEEE Kerala Section and IEEE LINK hand in hand for major SBs









namely IEEE SB AISAT on 5th Sept, 2023, IEEE SB VISAT, IEEE SB SNGCE, IEEE SB CUSAT, IEEE SB MBITS, IEEE SB MCC and IEEE SB PEC on 6th Sept, 2023, IEEE SB SNIT, IEEE SB CECTL on 7th Sept, 2023 and IEEE SB GECBH on 11th Sept, 2023.

### **HUB Events:**

Travancore Hub Connect



The Travancore Hub Connect was an event held by IEEE Travancore Hub to es.

### **Travancore Hub Chairs Meet**

The Chair's Meet event held by IEEE Travancore Hub on the 26th of August 2023.

Kochi Hub Connect





IEEE Kochi Hub was privileged to organize Kochi Hub Connect with the aim of establishing collaborations with the Student Branches of Kochi Hub.

**ORE** 

The IEEE Kochi Hub's "Outreach for Resources in



Engineering" (ORE) was an educational initiative aimed at enhancing the skills of IEEE student members in specific engineering domains. This online training program took place from September 1st to September 14th, 2023.

### **Kochi Hub Chairs Meet**

The IEEE Kochi Hub Chairs Meet 2023 took place on the 30th of August 2023, at 07:30 PM in online mode using the Google Meet platform.

#### Malabar Hub Connect

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CONNECT
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MALABAR
ARTHURAN STREET
30 JUNE 2023



connecting individuals and promoting collaboration.

# **Malabar Hub Cluster Meeting**

The Malabar Hub cluster gathering scheduled by IEEE Malabar Hub from 31st August to 23rd September 2023 focused on discussing the various aspects of the AKSC'23. The meeting was conducted through Google Meet which witnessed the participation of the student branches under the IEEE Malabar Hub.

#### **IEEE LINK MD Sessions**

IEEE orientation sessions by IEEE LINK were held at KMCT College of Engineering Kozhikode, KMCT College of Engineering for Women Kozhikode, and Ahalia School of Engineering and Technology, Palakkad.



IEEE LINK team has started a new initiative to communicate IEEE events & programs to all college students in Kerala.



You can follow the channel in the given link to be a part of it. It's open for all.

h t t p s : / / w h a t s a p p . c o m / channel/0029Va5yW8ECxoAxuglfLyOn

### **SOLID STATE CIRCUITS SOCIETY**

#### **YP TALKS**

Webinar on Integrated Circuits: From Concept to Product on 6th August 2023

#### THEJUS32 SoC: A CASE STUDY

The IEEE Kerala Section organized an enthusiastic and fascinating session on the occasion of AKSC'23, which took place on September 17, 2023. The discussion topic for the session was "Physical Implementation of the VEGA Processor-based THEJAS32 SoC: A Case Study," and it was expertly led by Gopakumar G, the Scientist E and Joint Director of the Centre for Development of Advanced Computing in Thiruvananthapuram.

#### IA/IE/PELS

AKSC'23 - Hands-on Workshop on Simulink/MATLAB

Eventure: Electrify the Future

Date: 19 Aug 2023, 20 Aug 2023 Location: Amal Jyothi College of Engineering

SolarXcelerate

The IEEE IA/IE/PELS Jt. Chapter Kerala conducted





FOR ENERGY GENERATION" by Dr. Ajith Gopi, Chair-IEEE PES Kerala Chapter and Joint Chief Technical Manager, ANERT. The event was conducted through online on 23 September 2023 at 10.00 AM IST.

#### **EMBS**

Distinguished Lecture on 'Brain Computer Interfaces for Neurore' habilitation'

Speaker : Dr. Sujeesh Sreedharan, Engineer 'G', SCTIMST, Kerala

IEEE EMBSWIBE Activities: Awareness on Cognitive Skills Testing and Exercising for Improvements

IEEE EMBS KERALA CHAPTER Student Activities

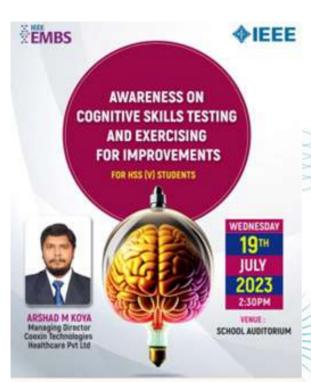
1.1. PULSE TALKs 6, 7, 8





the SolarXcelerate Bootcamp on solar technology. A Comprehensive Learning Program on Solar Power Technology was arranged on SOLAR PV SOLUTIONS









# PULSE TALKS Talk 6

Biomedical Materials: Learn to heal themselve





24th August, 2023 | 07:30 PM - 08:00 PM Google Meet Link: meet.google.com/fpb-kgbu-kdx







Reported by
Dr. Mrinal Mandal
Section Chair

# **Kharagpur Section**

### **Event 1**

Section name:	IEEE Kharagpur Section
Event name:	IEEE R10 Young Professionals
	UpSkill 2023 - Kharagpur
	Event theme "RoBoNeeRs"
OU name:	IEEE Young Professionals Affinity
	Group Kharagpur Section
Reporter name:	Aditya Kameswara Rao Nandula
Designation in	Chair
OU:	

**Event Details:** 

The IEEE Young Professionals Affinity Group Kharagpur Section in collaboration with IEEE Kharagpur Section. IEEE EMBS SBC IIT Kharagpur, organized an event "IEEE R10 Young Professionals UpSkill 2023 – Kharagpur" on 15 - 16 July 2023. This event is supported by IEEE Region 10 Young Professionals and IEEE UPP. The event theme is "RoBoNeeRs" and its main focus is to give an overview of robotics to the participants who want to step into the robotics field. This event is packed with the keynote talks from industry and academia on Al, Industry 4.0, Swarm robotics, hands-on sessions with software and electronic hardware. This event reached other region members through social media. On special request we waived the sign-up fee for the student members of IEEE Uganda Institute of Information and Communications Technology, Student Branch, Uganda, Region 8.

Date of the event: 15-16 July 2023

Time: 8:00 am to 6:00 pm (each day)

Event mode: Hybrid

- 1. Virtual (through MS teams)
- 2. Offline: IEEE Office, NA-203, Nalanda Classroom Complex, IIT Kharagpur campus, Kharagpur West Bengal 721302.

Key Takeaways:

- The scope for research and opportunities in the robotics field
- Lecture sessions from the eminent speakers from Industry and academia.
- Hands-on sessions on hardware and simulation.
- Certificates are provided to offline and online participants

Participants: 64 (event days together)







#### Event 2

Section name : IEEE Kharagpur Section

Event name : "IEEE YP-WiE talk series" Talk 1

OU name : IEEE Young Professionals Affinity

Group Kharagpur Section

Reporter name : Aditya Kameswara Rao Nandula

Designation in OU: Chair

**Event Details:** 

We are pleased to have "Dr. Celia Shahnaz" as our

inauguration guest and our first speaker in the "IEEE YP-WiE talk series" organized by IEEE Young Professionals Affinity Group in collaboration with IEEE Women in Engineering Affinity Group of IEEE Kharagpur Section. In this talk the guest shared her motivation, suggestions for upcoming young women engineers into their career, professional, and IEEE journey.

Date of the event: 30 July 2023

Time: 3:00 pm to 4:00 pm

Event mode: Virtual (through MS teams)











# IEEE YP - WiE Talk Series

We are pleased to let you all know "Dr. Celia Shahnaz" as our inauguration guest and our first speaker in the "IEEE YP-WiE talk series" organised by IEEE Young Professionals Affinity Group in collaboration with IEEE Women in Engineering Affinity Group of IEEE Kharagpur Section.

In this talk we are about to hear motivation, suggestions for upcoming young women engineers in to their career, professional, and IEEE journey.



Dr. Celia Shahnaz, Professor, Dept. of EEE, BUET 2023-24 Chair, IEEE Women in Engineering (WIE) Committee



Date: 30-07-2023

Time: 3:00 PM to 4:00 pm (IST)

Registration link

https://forms.gle/ekLpChhWdk7PMVDx8

https://r10.ieee.org/kharagpur-yp/



Section name : IEEE Kharagpur Section

Event name : "IEEE YP AG Leaders Conclave"

OU name : IEEE Young Professionals Affinity

Group Kharagpur Section

Reporter name : Aditya Kameswara Rao Nandula

Designation in OU : Chair

#### **Event Details:**

The "IEEE YP AG Leaders Conclave" is organized by IEEE Young Professionals Affinity Group Kharagpur Section in collaboration with IEEE India Council and IEEE Kharagpur Section. This event is supported by IEEE Young Professionals. The event is structured with the talks from YP Leaders from Academia, and Industry. There are special sessions for all the IEEE YP Affinity Group Leaders across IEEE India council to pitch about their YP AG best practices, network with others, and to have collaboration for cross sectional events

We are fortunate to have Mr. Hasala Dharmawardena. Chair, IEEE Young Professionals, Ms. Takako Hashimato. Director Elect, IEEE Region 10, Dr. Suman Chakraborty, Professor, Department of Mechanical Engineering, IIT Kharagpur, and Dr. D K Pratikhar, Industry Relations Chair, IEEE Kharagpur Section, as keynote speakers. We have multiple speakers to share the vision and activities of IEEE Region 10 YP by Ms. Mayesha Taffnum, Vice-Chair, IEEE Region 10 Young Professionals, IEEE India Council YP activities by Mr. Shahim Baker, Vice-Chair YP Activities, IEEE India Council. In this event we have two special session to foster the proper IEEE brand usage and promoted the use of IEEE collabratec for networking among the YP leaders and the members by Mr. Aditva Kameswara Rao Nandula, IEEE Brand Ambassador Expert and Chair, IEEE YP AG Kharagpur Section.

The IEEE YP Affinity Group's across the IEEE India Council participated in this event and shred their YP AG best practices shared by YP leaders namely,

Mr. Aditya Kameswara Rao Nandula from IEEE YP AG Kharagpur Section,

Ms. Shatakshi Singh from IEEE YP AG Delhi Section,

Dr. Anjali Diwan, IEEE YP AG Gujarat Section,

Dr, Kishore K S and Ms. Neha Kumari, IEEE YP AG

Bangalore Section,

Mr. Sreekanth R, IEEE YP AG Madras Section,

Mr. Deeraj C from IEEE YP AG Pune Section,

Mr. Pratik M, IEEE YP AG Bombay Section.

We had a panel discussion on Industry-Academia collaborations and YP members' role in it. In this discussion the panel members are Ms. Celia Shahnaz, Chair, IEEE WiE, Mr. Shahim Baker, Vice-Chair YP Activities, IEEE India Council, and Dr. Subhamoy Mandal, Students Activity Chair, IEEE Kharagpur Section. This panel discussion was moderated by Aditya, The panel members share their views about the possibilities and the expected outcomes with collaborations and YP's have a vital role in mentoring and fostering the collaborations among affinity groups.

Out of 13 sections under IEEE India Council there are 13 YP AGs. We finally achieved to have 8 YP AG chairs come forward to represent their AG activities and shown interest for collaboration in future such events with IEEE YP AG Kharagpur Section. This event is a great success and This event is going to be conducted every year across all the YP AGs under IEEE India Council. This event setup a platform to all the YP AGs members to come together, network, and collaborate to have a good set of activities, which lead to the betterment of YP members under IEEE YP. IEEE India Council. and their respective OUs.

Dates of the event: 5-6 August 2023 and 4 September 2023

Time: 8:00 am to 6:00 pm

Event mode: Hybrid

Offline Venue: New Meeting Room, N-204, Department of Electrical Engineering, IIT Kharagpur, Kharagpur, West Bengal 721302.

Virtual: Through MS teams

Participants: 151 (event days together)





















https://www.ieee.org/

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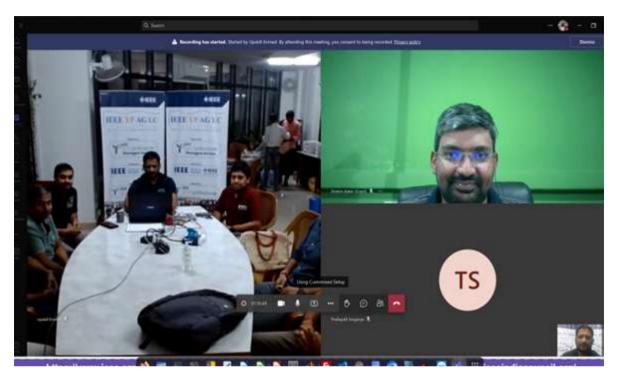
https://r10.ieee.org/kharagpur-yp/

https://ieeeindiacouncil.org/









Section name : IEEE Kharagpur Section

Event name : Invited lecture on "A Game and Control

Framework for Modeling and Mitigating Advanced Persistent Cyber

Threats"

OU name : IEEE Women in Engineering Affinity

Group and IEEE Control Systems

Society Chapter

Reporter name : Atreyee Kundu

Designation in OU: Chair, IEEE WiE affinity group and

Secretary, IEEE CSS Chapter

# **Event details:**

The IEEE Kharagpur Section Women In Engineering affinity group, in collaboration with IEEE Control Systems Society Chapter, organized an invited talk on "A Game and Control Framework for Modeling and Mitigating Advanced Persistent Cyber Threats" by Dr.

Shana Moothedath, Assistant Professor, Electrical and Computer Engineering, Iowa State University, USA. The talk was conducted on 22-08-2023 during 7pm-8pm IST in online mode. The speaker described her works on a game-theoretic approach to characterize the trade-off between effectiveness for detecting Advanced Persistent Threats (APTs) and resource efficiency. The presented approach to modeling APTs is based on the insight that the persistent nature of APTs introduces information flows in the system that can be monitored.

Event date: 22-08-2023

Time: 7pm-8pm IST

Venue: Online < Google meet: fze-rzca-xnm>

Participants: 18

Key takeaway:

A multi-stage game framework for modeling the interaction between an APT and a Dynamic Information Flow Tracking (DIFT), as well as designing an efficient DIFT-based defense.





Section name : IEEE Kharagpur Section

Event name : Invited lecture on "Curvature bounded

trajectories of desired lengths for a

Dubins vehicle"

OU name : IEEE Women in Engineering Affinity

Group and IEEE Control Systems

Society Chapter

Reporter name : Atreyee Kundu

Designation in OU:Chair, IEEE WiE affinity group and

Secretary, IEEE CSS Chapter

#### **Event details:**

The IEEE Kharagpur Section Women In Engineering affinity group, in collaboration with IEEE Control Systems Society Chapter, organized an invited talk on "Curvature bounded trajectories of desired lengths for a Dubins vehicle" by Dr. Twinkle Tripathy, Assistant Professor,

Electrical Engineering, Indian Institute of Technology Kanpur, India. The talk was conducted on 23-08-2023 during 6pm-7pm IST in online mode. It focussed on the generation of trajectories for a Dubin's vehicle that serves as a realistic point mass representation of a complex realworld vehicle with limited turn rate capabilities like a car, submarine, fixed-wing aircraft, etc.

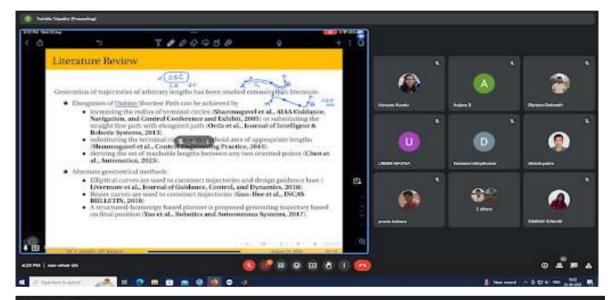
Event date: 23-08-2023 Time: 6pm-7pm IST Venue: Online < Google meet: xao-ohxd-zin>

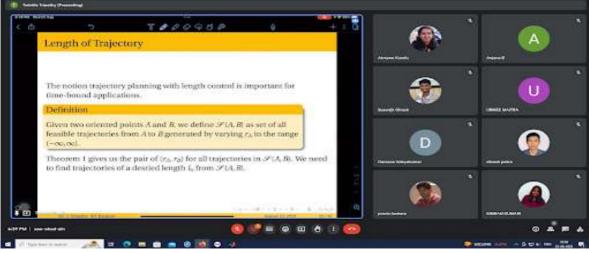
Participants: 11

Key takeaway:

Algorithms for genera

Algorithms for generating trajectories of desired lengths between two oriented points. They are useful in applications wherein a single or multiple autonomous vehicle(s) is/are to maneuver between any two points in a time bound manner.





Section name : IEEE Kharagpur Section

Event name : Invited lecture on "Design and

development of Shape Memory Alloy wires as sensors and

actuators for control applications"

OU name : IEEE Women in Engineering

Affinity Group

Reporter name : Atreyee Kundu

Designation in OU : Chair

#### Event details:

The IEEE Kharagpur Section Women In Engineering affinity group organized an invited talk on "Design and development of Shape Memory Alloy wires as sensors and actuators for control applications" by Dr. Josephine Selvarani Ruth D, DST INSPIRE Faculty Fellow, Robert Bosch Centre for Cyber-Physical Systems, Indian Institute of Science Bangalore, India. The talk was conducted on 29-08-2023 during 4pm-5pm IST in online mode. The

speaker described her work with Shape memory alloy (SMA) which is a very powerful actuator due to its high power-to-weight ratio and capability of flexible mechanical design, and has a great potential to be used as a sensor by utilising the actuator's electrical resistance.

Event date: 29-08-2023

Time: 4pm-5pm IST

Venue: Online < Google meet: awn-pvzu-xig>

Participants: 7

Key takeaway:

Concept of shared sensing and actuation with SMA, and its application to 1 degree of freedom manipulator system for tracking control, undersensing an underactuated (2 degree of freedom ball balancing beam) system for stabilization and position control, SMA based haptic master – slave system to control 2 degree of freedom slave and, generating forces (haptics) to the driver's foot by an active accelerator pedal in a Smart Driver Assistance System.



# **IEEE Kharagpur Section events**

#### **Event 1**

Section name : IEEE Kharagpur Section

Event name : Teaching and Learning Pedagogy

with Reference to New Education

Policy of India

OU name : Educational Activities, IEEE

Kharagpur Section

Reporter name : Dr. Prasun Mishra

Designation in OU : Educational Activities Chair

Date & Time : 29/09/2023 & 3.15 pm to

4.30 pm (Through Google Meet)

#### **Event Details:**

Educational Activities Unit of IEEE Kharagpur Section organized an online event on 29th September, 2023 from 3.15 pm to 4.30 pm on 'Teaching and Learning Pedagogy with Reference to New Education Policy of India' at Takapura Adarsha Vidyapith, a higher secondary school of Purba Midnapore district of West Bengal, India. The event was conducted through google meet. The event was started with welcome address by Dr. Prasun Mishra. He talked about the role of IEEE in school education.

teaching, learning and also introduced the speaker. The speaker was Dr. Shyamal Kumar Das Mandal, an associate professor of IIT Kharagpur. He talked about the upcoming changes in Indian school education system through New Education Policy. He distinguished the teaching methodologies for the school students below and above class VII with multiple examples and case studies. He also stressed on development of skillsets, scientific mindset, and logical thinking capability through outcome-based education; behavior, mental health, and motivation; virtual classroom and related technologies; methodologies of assessment and evaluation of students and examination question patterns etc. The online event was quite interactive and interesting. The event was fully organized and coordinated by Prasun Mishra.

Online Event date: 29-09-2023

Participants: 25 Key Takeaways:

- Overview of New Education Policy of India and Suggested Changes in School Education System
- Teaching and Learning Pedagogy for School Students (Below and Above Class VIII)
- Outcome based Teaching and Learning, Skill Development



 Assessment and Evaluation of the Performance of the teachers and students

### **Event schedule link:**

IEEE Talk on Teaching and Learning Pedagogy with Reference to New Education Policy of India

Friday, 29 September, 15:15 - 16:30

Time zone: Asia/Kolkata Google Meet joining info

Video call link: https://meet.google.com/bof-kydz-jth

# IEEE EMBS SBC, IIT Kharagpur

Section name : IEEE Kharagpur Section

Event: Technical Talks, Roboneers 2023,

UpSkill EnMed 2023

OU name : IEEE Engineering and Medicine in

Biology Student Branch Chapter

**IIT Kharagpur Section** 

Reporter name : Eashita Chowdhury

Designation in OU : Vice Chair

Talk1: LEARNING BASED METHODS FOR BRAIN STRUCTURE-FUNCTION MAPPING AND DISORDER CLASSIFICATION which deep learning framework for classification of tinnitus disease, which is an auditory phantom perceptual disorder; Dr. Sanjay Ghosh, Post Doctoral Fellowship Researcher at Department of Radiology and Biomedical Imaging, University of California San Francisco (UCSF), USA

Date: 13 July 2023 Venue: SMST Seminar Room,

Participants: IEEE Members: 9, Guests: 12

Talk2: MULTI-VIEW LEARNING METHODOLOGIES TO IMPROVE CANCER OUTCOMES THROUGH INTEGRATIVE GENOMICS AND MEDICAL NATURAL LANGUAGE PROCESSING which will underscore the significance of harnessing multi-view learning methodologies to drive advancements in cancer research and ultimately improve patient care and outcomes.; Dr. Aparajita Khan, Postdoctoral Scholar, Stanford University, affiliated to the Departments of Neurosurgery and Medicine.

Date: 26 July, 2023 Venue: Virtual

Participants: IEEE Members: 9, Guests: 9

Talk3: TFT Sensor Array for Real-Time Cellular Characterization, Stimulation, Impedance Measurement, and Optical Imaging of In-Vitro Neural Cell which highlights the experience on Sensor and Actuator, Pairing Cells of Different Sizes in a Microfluidic Device for Immunological Synapse Monitoring, Silicon-Compatible Process to Integrate Impedance Cytometry with Mechanical Characterization; Dr., Faruk Azam SHAIK Postdoctoral Scholar, Laboratory for Integrated Micro Mechatronics Systems (LIMMS), affiliated with the Centre national de la recherche scientifique (CNRS) in Lille, France

Date: 4 September 2023 Venue: SMST Seminar Room,

Participants: IEEE Members:16, Guests:8

Event 1: UpSkill EnMed 2023 was organized in hybrid mode to bring together medical practitioners and technology and industralists. The theme for this event is Enabling Technologies for computer aided intervention and its main focus is to give an overview of computer aided intervention technologies to assist healthcare professionals in planning, performing, and evaluating various medical interventions, surgeries, and treatments; Multiple speakers present : Dr. Neelam Sinha(Associate Professor, IISC Bangalore) Dr Sai Pradeep(Toshiba), Dr. Ananda Chaudhury(Professor, Jadavpur University), Dr. Jayanta Mukhopadhyay(Professor, IIT kharagpur), Mathworks India Pvt Ltd, Siemens Healthcare, Dr Sanjit Kumar Agrawal (Tata medical centre), Dr. Kamlesh Kumar Yadav (Associate Professor, Texas A&M University, USA), Mr. Shaurya Misra, (Founder of Articulus Surgical), Dr Subhamoy Mandal (Assistant Professor, IIT Kharagpur)

Date: 25 Aug-26 Aug 2023 Venue: Maitrayee Auditorium,

Participants: IEEE Members: 36, Guests: 40















# **IEEE AP-MTTS SBC IIT Kharagpur**

Event 1

Section name : IEEE Kharagpur Section

Event name : Invited Talk by Prof. K P. Ray,

DIAT, Pune.

OU name : IEEE AP-MTTS SBC IIT Kharagpur

Reporter name : Govinda Behera

Designation in OU: Secretary

#### **Event Details:**

IEEE AP-MTTS Student Branch chapter, IIT Kharagpur, under the umbrella of the Kharagpur section, organized an invited talk on 12 th July 2023 on the topic "Indian MST Radar: A Mile Stone in the Development of Radar Technology". The talk was delivered by Prof. K. P. Ray, School of Radar Technology, Head, EE Department, Defense Institute of Advanced Technology (DIAT), Pune, India.

Prof. Ray discussed that unlike the design of Strategic Radars, which detects point targets, the design of Atmospheric Radars is very complex. These Radars deal with distributed targets with minimal back scattering (RCS). He shared his experience on a VHF Mesosphere

Stratosphere Troposphere (MST) Radar, having very high power aperture product (Figure of Merit) they designed, developed, installed and commissioned indigenously for ISRO/DOS, which is being operated over last 30 years.

Event date: 12-07-2023

Participants: 40 Key Takeaways:

- Despite the invited talk being organized in offline mode, specifically in the NKN Room within the E&ECE Department, we were pleased to observe a substantial turnout with attendees not only from E&ECE but also from GSSST and various other departments.
- Several esteemed professors, including Prof. Mrinal Kanti Mandal, Prof. Bratin Ghosh, and Prof. Amitabha Bhattacharya, from the E&ECE department, graced the invited talk with their presence.
- The invited talk proved to be highly enlightening, offering attendees a captivating glimpse into the

fascinating history surrounding the development of India's first MST Radar

Event 2

Section name: IEEE Kharagpur Section

Event name: Invited Talk by Prof. Ananian Basu. IIT

Delhi.

OU name: IEEE AP-MTTS SBC IIT Kharagpur

Reporter name: Govinda Behera

Designation in OU: Secretary

**Event Details:** 

On 13th July 2023, the IEEE AP-MTTS Student Branch chapter at IIT Kharagpur, under the Kharagpur section, successfully organized an online Invited Talk. The talk focused on the intriguing topic of "Advances in Mm-wave and THz Imaging." Prof. Ananjan Basu, Center for Applied Research in Electronics, IIT Delhi was the invited speaker for this event.







During the talk, Dr. Anjanjan Basu initiated the discussion by presenting a classification of frequency bands. For instance, he explained that the high frequency band encompasses the THz band, while the low frequency band includes the Microwave band. He emphasized that as we move towards higher frequency bands, the resolution increases but wave penetration decreases. whereas the opposite occurs for lower frequencies. Dr. Basu stressed the importance of selecting a lower frequency band for medical applications in order to achieve better penetration into our body's cells and generate more useful diagnostic results. Furthermore, he delved into the concepts of the reactive near field, near field, and far field regions of an antenna. He mentioned that the far field region, which is taken at a distance of one wavelength, can transition between the near field and far field regions but not into the reactive near field region. He emphasized that measurements of imaging systems



cannot be conducted in the reactive near field region. One of the highlights of the talk was the demonstration of the ability to visualize objects hidden behind various opaque materials such as wood, paper, concrete, and fog. This technique finds applications in security screening, medical imaging, through-the-wall imaging for surveillance, non-destructive testing, and more. The talk provided valuable insights, and the audience actively participated, making it a successful event.

Event date: 13-07-2023

Participants: 38 Key Takeaways:

- On July 13, 2023, IEEE AP-MTTS SBC IIT Kharagpur hosted a successful invited talk in offline mode on "Advances in Mm-wave and THz Imaging" by Prof. Ananjan Basu from IIT Delhi. He highlighted the trade-offs between high and low-frequency bands in imaging applications.
- The talk demonstrated the ability to visualize objects hidden behind opaque materials (wood, paper, concrete, fog), with applications in security screening, medical imaging, surveillance, and non-destructive testing.
- Dr. Basu explained the reactive near field, near field, and far field regions of an antenna, emphasizing that measurements in the reactive near field region are not feasible for imaging systems.



Section name : IEEE Kharagpur Section

Event name : RF Tools for 5th Generation

Wireless Communications

OU name : IEEE AP-MTTS SBC IIT Kharagpur

Reporter name : Govinda Behera

Designation in OU : Secretary

**Event Details:** 

IEEE AP-MTTS Student Branch chapter, IIT Kharagpur, under the umbrella of the Kharagpur section, organized an event on 25th July 2023 on "RF Tools for 5th-Generation Wireless Communications". A team led by Mr. Arindam Goswami from Vishal Vyapar Vikash displayed and demonstrated range of products of various electronic test & measuring equipment from RIGOL. The list of tools and equipment are as follows:

Event date: 25-07-2023

Participants: 30

S. No.	Product Specifications	Model No.	Manufactured by
1	5GHz, 4 Channel, Digital Storage Oscilloscope	DS70504	RIGOL
2	1GHz, 4 Channel, Digital Storage Oscilloscope	MS08104	RIGOL
3	6.5GHz Real-time Spectrum Analyzer with built-in Vector Network Analyzer	RSA5065N	RIGOL
4	9kHz to 13.6GHz RF Signal Generator	DSG3136B	RIGOL
5	350MHz Dual Channel Arbitrary Function Generator	DG5352	RIGOL
6	Multi-Channel Data Acquisition Systems	M302	RIGOL

# **Key Takeaways:**

 The demonstration was designed to offer a comprehensive understanding of the latest 5G RF tools utilized in wireless communications.  Participants in the demonstration included lab technicians from various labs within the E&ECE and GSSST departments.









# IEEE SB, Haldia Institute of Technology

#### **Event 1**

Section name : IEEE Kharagpur Section

Event name : MATLAB

OU name : IEEE HIT SB

Reporter name : Abhinav Kashyap

Designation in OU : Chair

**Event Details:** 

The IEEE Haldia Institute of Technology Student Branch announced a four-days offline workshop on MATLAB. In this workshop, the participants learned to install and use MATLAB software. This workshop proved to be a great platform to learn about the practical implementation and more on MATLAB. The workshop focused upon in-depth exploration of Simulink, a powerful graphic simulator. Throughout the workshop, participants gained valuable insights and experience of programming in MATLAB, modelling using Simulink and more riveting facts and information.

The 4-days workshop was a huge success, leaving participants equipped with new skills and an increased enthusiasm for MATLAB's versatility in problem solving and innovation.

Date of the event: 31st July 2023 - 3rd August 2023



Event mode: Offline

Duration of the event: 04:30 PM to 07:00 PM

Participants: 42 Key Takeaways:

 Participants learned about MATLAB's environment, uses, applications, features, tools which include its workspace, script, and command window.

2) in-depth exploration of Simulink, a powerful graphical simulation and model-based design tool.

#### **Event 2**

Section name: IEEE Kharagpur Section

Event name: PSPICE

OU name: IEEE HIT SB

Reporter name: Abhinav Kashyap

Designation in OU: Chair

#### **Event Details:**

The IEEE Haldia Institute of Technology Student Branch is pleased to announce a four-day workshop on PSPICE. In this workshop Prof. Dr. Palash Pal and Mr. Avijit Routh who were the instructors for today's session who lighted up our minds about a software called PSPICE.

The event included interactive sessions and concluded clearing all the doubts and confusions of the students proficiently. The event concluded efficiently in sighting students much about the knowledge of PSPICE.

As a rewarding finale, participants were presented with certificates of achievement, acknowledging their dedication and successful completion of the PSPICE 4 Day Workshop.

Date of the event: 7th August 2023 - 10th August 202

Event mode: Offline

Duration of the event: 04:30 PM to 07:00 PM



Participants: 68

Key Takeaways:

1) Participants learned about a software called PSpice. PSpice calculates complex node voltages and branch currents at each frequency across your design, allowing you to place probes and generate waveform plots for further analysis.

2)This Advanced technological workshop taught the students how to perform advanced analysis on circuits simulations, including sensitivity analysis, Monté Carlo analysis, optimization and parametric plotting.

# **Event 3**

Section name : IEEE Kharagpur Section

Event name : CodeQuest 30

OU name : IEEE HIT SB

Reporter name : Abhinay Kashyap

Designation in OU : Chair

#### **Event Details**:

Team IEEE HIT SB organized an exciting coding competition named "CodeQuest30". The contest was intended to allow students to develop their programming and problem-solving skills. CodeQuest30 offered participants a chance to test their coding skills, problem solving abilities and strategic thinking. It's a unique opportunity to interact with fellow coding enthusiastic candidates. A high efficiency in coding increases the scope of logical thinking, structural thinking, persistence and resilience and algorithmic thinking.

IEEE HIT SB had come up with an exciting contest designed to motivate and reward students by maintaining a daily streak of test taking for 30 consecutive days, in collaboration with coding ninjas. The participants had to take a test consisting of questions related to coding without any failure continuously for 30 days. After the successful completion, the candidates were adorned with compliments, certificates, and prizes for the top performers.









Codequest

Date of event: 20th July to 20th August.2023

Time: 6:00pm to 11:00pm

Event mode: Online Participants: 174 Key Takeaways:

1) The guest strays to strategic goals and practicality.

2) Understanding to develop a habit as 21 days are enough to develop a healthy habit.

3) Grasping a good coding skill through 30 days consecutive practice.

# **IEEE CSS Chapter**

#### **Event 1**

Section name : IEEE Kharagpur Section

Event name : Invited lecture on "A Game and

Control Framework for Modeling and Mitigating Advanced Persistent

Cyber Threats"

OU name : IEEE Women in Engineering Affinity

Group and IEEE Control Systems

Society Chapter

Reporter name : Atrevee Kundu

Designation in OU: Chair, IEEE WiE affinity group and

Secretary, IEEE CSS Chapter

#### **Event details:**

The IEEE Kharagpur Section Women In Engineering affinity group, in collaboration with IEEE Control Systems Society Chapter, organized an invited talk on "A Game and Control Framework for Modeling and Mitigating Advanced Persistent Cyber Threats" by Dr. Shana Moothedath, Assistant Professor, Electrical and Computer Engineering, Iowa State University, USA. The talk was conducted on 22-08-2023 during 7pm-8pm IST in online mode. The speaker described her works on a game-theoretic approach to characterize the trade-off between effectiveness for detecting Advanced Persistent Threats (APTs) and resource efficiency. The presented approach to modeling APTs is based on the insight that the persistent nature of APTs introduces information flows in the system that can be monitored.

Event date: 22-08-2023

Time: 7pm-8pm IST

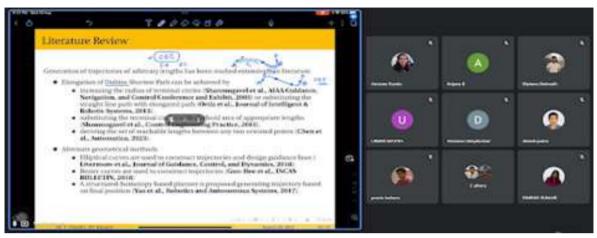
Venue: Online < Google meet: fze-rzca-xnm>

Participants: 18 Key takeaway:

A multi-stage game framework for modeling the interaction between an APT and a Dynamic Information Flow Tracking (DIFT), as well as designing an efficient

DIFT-based defense.





Section name : IEEE Kharagpur Section

Event name : Invited lecture on "Curvature bounded

trajectories of desired lengths for a

Dubins vehicle"

OU name : IEEE Women in Engineering Affinity

Group and IEEE Control Systems

Society Chapter

Reporter name : Atrevee Kundu

Designation in OU: Chair, IEEE WiE affinity group and

Secretary, IEEE CSS Chapter

#### **Event details:**

The IEEE Kharagpur Section Women In Engineering affinity group, in collaboration with IEEE Control Systems Society Chapter, organized an invited talk on "Curvature bounded trajectories of desired lengths for a Dubins vehicle" by Dr. Twinkle Tripathy, Assistant Professor, Electrical Engineering, Indian Institute of Technology Kanpur, India. The talk was conducted on 23-08-2023 during 6pm-7pm IST in online mode. It focussed on the generation of trajectories for a Dubin's vehicle that serves as a realistic point mass representation of a complex real-world vehicle with limited turn rate capabilities like a car, submarine, fixed-wing aircraft, etc.

Event date: 23-08-2023

Time: 6pm-7pm IST

Venue: Online < Google meet: xao-ohxd-zin>

Participants: 11

Key takeaway:

Algorithms for generating trajectories of desired lengths between two oriented points. They are useful in applications wherein a single or multiple autonomous vehicle(s) is/are to maneuver between any two points in a time bound manner.

#### **Future events**

Section name : IEEE Kharagpur Section

Event name : IEEE DAY

OU name : IEEE HIT SB

Reporter name : Abhinav Kashyap

Designation in OU : Chair

Event Details :

Team IEEE HIT SB will organize an exhibition demonstrating several models such as semi-autonomous car, fully autonomous car, light activated LED, fire alarm, and many such models made by the members of IEEE HIT SB over the years.

Event date 3rd October 2023

Event mode : Offline

#### **Key Takeaways:**

1) To show how IEEE members collaborate together to make better technology for tomorrow.

2) Explaining the history of IEEE, how it was formed and its working to the participants.

Section name : IEEE Kharagpur Section

Event name : The International Day of the Girl

Child

OU name : IEEE HIT SB

Reporter name : Abhinav Kashyap

Designation in OU : Chair

#### **Event Details:**

IEEE HIT SB aims to highlight The International Day of the Girl Child, observed on 11th of October for raising awareness about the importance of gender equality, empowering girls, and ensuring their access to education. healthcare, and opportunities.

An awareness campaign will be organised to remind the need to take action to protect and promote the rights and well-being of girls, followed by cultural programs and small quizzes to commemorate the day.

Event date : 11th October 2023

Event mode : Offline

# **Key Takeaways:**

- Understanding the existence and impact of gender inequality.
- Highlight the role of families, communities, and societies in creating a supportive environment for girls
- 3) Challenges girls encounter, such as child marriage, gender-based violence, discrimination and healthcare.
- 4) Understanding the significance of empowering girls and giving them the tools, resources, and opportunities they need to reach their full potential.



Explore our journey from the past to the future! Get to know about all the events and workshops we conduct and indulge yourself in the world of technology.





Dr. K. Porkumaran Section Chair

# **Madras Section**

leee Women In Engineering, Madras Section

# CONNECTING THE DOTS 2.0

The IEEE Women in Engineering Madras Section organized "Connecting the Dots 2.0" to celebrate Women in Engineering Day 2023 at the College of Engineering Guindy, Anna University, Chennai, on July 1, 2023. The event was sponsored by IEEE Women in Engineering Global, IEEE Photonics Society Madras Chapter, IEEE Young Professionals Madras Chapter and IEEE Signal Processing Society Madras Chapter. The inauguration commenced with Dr. T. Sree Sharmila, Chair, IEEE WIE AG,

Madras Section, expressed her gratitude to the attendees and highlighted the significance of the event in bridging the gap between women studying engineering and those pursuing actual engineering careers. She emphasized the importance of empowering women in engineering to create a more sustainable future and urged the audience to make the most of the networking and learning opportunities provided by the event; Dr. Soma Prathibha, Vice Chair addressed the gathering, providing an overview of the event. Additionally, the event was graced by the presence of esteemed guest speakers, Dr. S. Radha, Treasurer, IEEE Madras Section, and Ms. Deepa Vijayaraghavan, Director of PMO at PayPal.



Their participation added value to the event and provided unique insights from their respective areas of expertise. Dr. Radha shared her thoughts on the importance of women's participation in engineering and the role of professional organizations in supporting their growth. She highlighted the various initiatives undertaken by the Madras Section to encourage and empower women in the field of engineering.

Ms. Deepa Vijavaraghavan, Director of PMO at PavPal and Founder of "Shevolve" addressed the gathering about setting a career for oneself. Her knowledge and insights on career development in the engineering industry made her a valuable resource for the attendees. The session on "Career Readiness" focused on key elements crucial for career success and growth. Ms. Deepa emphasized key elements such as self-reflection. branding, communication, networking, and confidence. After her talk, the following student branch chapters demonstrated their dedication and commitment to the betterment of the Women in Engineering Affinity Group through their diverse projects, initiatives, and events: St. Joseph's College of Engineering, Sri Sivasubramaniya Nadar College of Engineering, Sri Sairam Engineering College, Panimalar Institute of Technology, Jeppiar Engineering College, Sri Sairam Institute of Technology, and St. Joseph's Institute of Technology. Their collective efforts showcased the positive impact that student branches can have in empowering women in engineering and inspiring future generations to pursue engineering careers.

As part of CTD 2.0, we conducted "WIE Talk". Six student speakers and a young professional were selected for WIE Talk. The following are the speakers and their titles: Ms. Abhinaya Sri T - Journey and opportunities for IEEE WIE, Ms. Supraja Vaidhyanathan - Women in R&D, Ms. Mrithula KL - Women in

Technology, Mr. Abhijay Gopal S - Opportunities for women in Volunteering & Leadership, Ms. Keerthana S - Women in Literature. Mr. Manish - Opportunities for Women in Entrepreneurship, and Dharini V - Journey in WIE. This WIE Talk was a highly anticipated event where we gained a unique opportunity to have a lasting impact. Then, Dr. N. Bhalaji, Coordinator, SSN iFound, SSN College of Engineering, shared interesting points about startups. He briefly discussed starting a startup and the involvement of individuals with considerations. Finally, a networking event was conducted to expand the professional network, explore new opportunities, and interact and enjoy within the gathering. This session was led by the volunteers Harry and Sathyapriya and consisted of guizzes, tongue twisters, songs, and connections. Furthermore, the closing ceremony began with the announcement of the winners of the student branch presentation. followed by presenting appreciation certificates to all the student speakers and young professionals. Finally, the vote of thanks was presented by Mr. Niranjan Kumar S, WIE Student Exe-com member, thanking everyone for making this a memorable day. A total of 52 participants and 12 volunteers benefited from this event.

#### **IEEE WIE MAS Leadership Conclave 2023**

The IEEE WIE MAS Leadership Conclave 2023 was a highly successful event organized by the IEEE Madras Section Women in Engineering Affinity Group. It took place on 19th August, 2023 at Sri Sairam Engineering College Chennai. The event was sponsored by IEEE Region 10 Educational Activities, IEEE Madras Section, IEEE Young Professionals Madras Chapter. The conclave aimed to bring students together for a day of knowledge sharing and networking.

The event featured distinguished guests Ms. Padmini Janaki,



Founder & CEO, Mind&Mom, Ms. Smitha Ganesh, Consultant, Teach for All & CEGIS. Guest of Honour, Dr. K. Porkumaran, Chairman, IEEE Madras Section, Dr. Sree Sharmila T, Chairman, IEEE WIE Madras Section AG, Dr. Soma Prathibha, Vice Chairman, WIE MAS AG, Mr. Arun M, Chairman, IEEE Young Professionals Madras Chapter, Mr. Sreekanth, Execom member, IEEE Young Professionals Madras Chapter, Dr. Brindha Saminathan, Chair SAC, IEEE Madras Section, and Dr. B. Meenakshi, Faculty Advisor, Sri Sairam Engineering College WIE AG. Their presence added prestige to the event and inspired attendees with their leadership and expertise. The session aimed to guide students in leveraging their volunteer experiences.

The first event of the meetup was a talk by Ms. Padmini Janaki, who took the stage to deliver a talk titled "Women and Technology Empowerment". She made the session very interesting by sharing informative news. She shared her own experience and she described the way she faced struggles, and how she overcame them. She also covered the Women leadership. Next session was by Ms. Smitha Ganesh, who delivered an enlightening talk on the topic "Leadership within you". She increased interaction in the meeting. She imparted to us four key leadership tenets. She also taught us several clapping techniques and asked the students some questions to get them more engaged. Followed by this there is an event named Her Story Makers: Women Leaders Unveiled (A Case-Study based Competition) where participants are required to provide a 5-minute motivational speech outlining the experiences of outstanding female leaders. They were eager to take part in this presentation, and they skillfully displayed their talents. After the above mentioned session, 3 breakout sessions happened simultaneously in 3 different locations. The one by Mr. Mithresh GP explained a lot about digital marketing and PR. It covered crucial subjects like selecting target markets, creating interesting content, maximizing social media engagement, using data analytics for measurement, putting paid advertising into practice, and mastering SEO tactics. Another session led by Mr. Jagadeeswaran K. were given an introduction to the field of creative design. The significance of user-centered design, the role of creativity in problem-solving, and the use of emerging technologies in design processes were among the major takeaways. The other session taught by Mr. Niranjan Kumar S learned important tips for writing an effective IEEE proposal. Participants gained knowledge on how to successfully structure a proposal, show a workable approach, and emphasize the

expected contributions of the research.

The IEEE WIE MAS Leadership Conclave, organized by the IEEE Madras Section Women in Engineering Affinity Group, proved to be an inspiring and empowering event. The conclave brought together accomplished women in engineering from diverse fields, fostering a platform for valuable discussions, networking, and skill-building. The event witnessed a diverse 65 participants in total from corners of Madras Section, and successfully addressed crucial topics related to leadership, career advancement, and



overcoming challenges in the tech industry. Attendees gained insights from insightful keynote speakers, interactive panel discussions, and practical workshops.



IEEE MADRAS YOUNG PROFESSIONALS 'UPSKILL MADRAS - 2023

On 22nd July 2023, the IEEE Madras Section Young Professionals hosted a prestigious event titled 'UPSKILL MADRAS - 2023' at the esteemed St Joseph's College of Engineering, located in OMR, Chennai. The event spanned from 9 am to 4:30 pm, encompassing a day filled with insightful sessions and networking opportunities. The primary objective of this event, organized by the IEEE YP Region 10 UpSkill team, was to foster opportunities for professional growth and facilitate a seamless transition from student life to becoming accomplished young professionals.

The event was graced by the presence of notable dignitaries

who added their wisdom and expertise to the occasion. Among the esteemed guests were Dr. K. Porkumaran, the Chairman of IEEE Madras Section, and a highly respected Principal/Senior Professor at Sri Sairam Engineering College. Dr. Vaddi Seshagiri Rao, the Principal of St Joseph's College of Engineering, also shared his valuable insights during the inaugural ceremony. Dr. Jayarama Pradeep, a prominent figure as Professor and Head of Staff Affairs, IEEE SBC Advisor at St Joseph's College of Engineering, and an IEEE WIE Execom member from Madras Section, addressed the session and felicitated Dr. Porkumaran for his remarkable contributions to the field of engineering and technology. Another distinguished guest, Mr. R. Sreekanth, an Assistant Professor & IEEE SB Counselor - SJCE, Execom Member - IEEE MAS YP: Treasurer - IEEE MAS VTS. Mr. M.



Arun, Chairman of IEEE Madras Young Professionals, Assistant professor at Panimalar Engineering college; DR. S. Joseph Gladwin, Vice-Chairman (Industry), IEEE Madras Section, Associate General Manager, BigCat Wireless Pvt., enthusiastically engaged with the crowd, further enhancing the event's success.

The first keynote talk titled 'Learn Conflict Management System' was delivered by the esteemed Ms. Koushalya R, the General Manager & Head - Talent Partnering. Her expertise in conflict management offered valuable strategies to handle conflicts effectively in professional settings, enabling participants to navigate challenging situations with confidence.

The second keynote talk, 'The Art of Networking' was delivered by Ms. Rechal John, a Technical Support Representative at Tremble Inc. His presentation enlightened the audience about the significance of building meaningful professional connections, highlighting the art and science of networking as a crucial skill for career advancement.

During the event, Mr. Princely Samuel, the Director of Training & Placement, Loyola College led an engaging networking session

titled "How to Win People". The activity was filled with fun and insightful discussions on effective communication and interpersonal skills.

Next, the audience was captivated by the third keynote talk, 'Reimagining Innovation' which was presented by Mr. Prabhu Shankar, the Dean-Placement, and Industry Interface at Loyola ICAM College of Engineering and Technology. Mr. Shankar's insights provided a fresh perspective on negotiation techniques, empowering young professionals to enhance their negotiation skills and succeed in various professional scenarios.

Following the keynote talks, a dedicated networking session offered participants an opportunity to interact with fellow attendees, as well as the speakers and industry experts present at the event. Networking played a pivotal role in forging meaningful connections and fostering collaboration among the participants.

Following this, Mr. Elanchezhiyan Ragavan, the Founder and CEO of SocialZog, conducted an interactive workshop on "Design Thinking Hands-on Activity". The session focused on problemsolving techniques and innovative startup ideas, providing participants with valuable knowledge and practical tools.



These sessions were well-received by the attendees and contributed significantly to their personal and professional development. The event provided an excellent platform for learning and networking, leaving participants inspired and motivated to apply the newfound knowledge in their respective fields.

The day continued with a stimulating panel discussion, titled "How do you rally the team to take on a Big Goal". The esteemed panelists, including Abdul Halik MI, Mithresh GP, and Arangan Rishikesh T, shared their valuable experiences and insights into motivating teams to achieve ambitious objectives. Ms. Akshaya

S moderated the event in well clear manner. Their wisdom inspired the young professionals, guiding them on effective team management and leadership.

As the day progressed, the participants had the chance to engage in further networking during the mid-day networking event. This informal setting allowed for more meaningful interactions and the exchange of ideas among the attendees.

In conclusion, 'UPSKILL MADRAS - 2023' proved to be an exceptional event, empowering young professionals with the necessary tools and knowledge to thrive in their careers. The impactful keynote talks, insightful panel discussion, and networking opportunities provided an enriching experience for

all attendees. The event successfully achieved its objectives of fostering professional growth and facilitating a seamless transition into the world of young professionals, while also creating a strong sense of community within the IEEE Madras Section Young Professionals. The participants left the event with newfound inspiration and motivation to excel in their professional journeys, armed with valuable connections and insights gained from the day's proceedings.

There were a total of 71 attendees at the event, consisting of 40 student members and 12 professional members. The event featured 8 speakers who shared their expertise and insights. Additionally, 22 volunteers actively contributed to the smooth





running of the event. Furthermore, 9 organizations took part in supporting and sponsoring the gathering, while 5 co-organizers collaborated to make the event a success. The diverse participation and engagement of all these individuals and entities made the event memorable and impactful.

#### IEEE MADRAS YP MEETUP

The IEEE MADRAS YP MEETUP was organized by the IEEE Madras Section Young Professional on 29th July 2023 at the Klase Hotel in Guindy, Chennai, from 12:00 PM to 4:00 PM (IST).

The event featured distinguished guests as the Guest of Honour, including Dr. K. Porkumaran, Chairman of IEEE Madras Section and Principal and Senior Professor at Sri Sairam Engineering College; The 1st event of the meetup was a talk by Mr. Arun M, Chairman of IEEE Madras Section Young Professionals, who took the stage to deliver an inspiring talk titled "IEEE Young Professionals: A Big Picture." As a graduate student member, Mr. Arun shared his own journey within IEEE Young Professionals and highlighted the numerous opportunities available to young engineers for personal and professional growth. He encouraged the participants to dream big and actively participate in IEEE activities to unlock the vast potential of being part of this global community.

Next session was by Mr. Heyram, a Graduate Student Member of IEEE MAS YP, who delivered an enlightening talk on the topic "How to Elevate Your Skills from Volunteer to Career." Mr. Heyram shared his personal journey and experiences as a young professional within the IEEE Young Professionals community. He delved into the significance of volunteering and how it can be a stepping stone towards building a successful engineering career. He emphasized the importance of taking on leadership roles within IEEE and other engineering organizations as a means to grow both personally and professionally.

The next session was on the theme "How to Become an Impactful Leader." The session was led by the remarkable speaker, Mr. Ashvanth B, Vice Chair of IEEE MAS YP, who shared valuable insights and experiences on effective leadership in the engineering community. Participants were inspired to develop essential leadership skills, embrace challenges, and make a positive impact on their engineering careers. The meetup proved to be a significant milestone in fostering leadership excellence among young professionals within the IEEE Madras Section.



The meetup witnessed an impressive turnout of 75 participants from diverse backgrounds and interests. The attendees actively engaged in discussions, seeking advice from the panelists and speaker, and building meaningful connections with fellow young professionals and industry experts.



Overall, the IEEE MADRAS YP MEETUP was a resounding success, empowering young professionals with valuable knowledge and networking opportunities. The event's impact on the participants' understanding of career development and networking was evident, leaving attendees motivated to pursue excellence in their engineering journeys. The organizing committee extended its appreciation to all participants for their active involvement, making the meetup a memorable and enriching experience.

13 (Individual, Internet and Industry) Safety Summit

The I3 Safety Summit was organized by the IEEE Madras Section Young Professional on 29th July 2023 at the Klase Hotel in Guindy, Chennai. Madras Section Life Members Affinity Group, Madras Section Industrial Committee, and Madras Section Student Activity Committee Co-Sponsored the event.

The inaugural ceremony began with a warm welcome note



delivered by Mr. Arun, Chairman of IEEE Madras Section Young Professionals AG. He expressed gratitude to all participants, sponsors, and esteemed guests for their presence at the I3 Safety Summit. Mr. Arun emphasized the importance of safety in engineering and its significance in the digital era. He encouraged all attendees to make the most of the enlightening sessions and networking opportunities throughout the summit.

Dr. Porkumaran, the esteemed Chairman of IEEE Madras Section began by expressing his heartfelt gratitude to all the participants, organizers, and sponsors for their presence and support at the I3 Safety Summit. Dr. Porkumaran, Chairman IEEE Madras Section, Inaugurated the event and emphasized the importance of such events in fostering knowledge exchange and collaboration among engineers and aspiring professionals. He also highlighted the new initiatives taken by Him in the Madras Section.

Mr. S. V. Varadharajan. Life Member IEEE, as the Chief Guest for the inaugural ceremony.

Next, Dr. Brindha, IEEE MAS SAC Chairman shared the importance of Safety and appreciated the efforts taken by the team for hosting the summit.

Mr. Sriram, the Director at TG Cyberlabs Pvt. Ltd and a distinguished Google Top Security Researcher, delivered an enlightening session on internet safety. He unraveled the numerous safety challenges that surround us in the digital realm and shed light on the vast scope of opportunities in cybersecurity



careers. His insights empowered the audience to contribute to securing the online world effectively.

Dr. Soma Prathibha, an esteemed Associate Professor from the Department of Information Technology at Sri SaiRam Engineering College and Vice-Chair of IEEE WIE Madras Section AG, captivated the audience with her expertise in individual safety and academic excellence. Her passion for empowering women in engineering and creating a secure digital environment inspired all attendees.

Prof. Rushali Thakkar, a distinguished Electronics Engineering Student Branch Counsellor, IEEE BS, and member of WIE IEEE BS, delivered an enlightening session on cyber awareness. As an Assistant Professor at M.H.S. Saboo Siddik College



of Engineering, Prof. Thakkar shared her wealth of experience in cybersecurity education, equipping the audience with the knowledge and tools to stay safe on the e-platform.

Mr. S. V. Varadharajan and Dr. S. Sundaresh, both distinguished speakers, shared their insights and experiences during the fourth session. Mr. Varadharajan delved into the world of electrical engineering and project management, while Dr. Sundaresh explored the realm of complex systems development and defense research. Their profound knowledge left the audience inspired during the I3 Summit.



The I3 Safety Summit concluded on a high note with a lively Networking Fun Session, providing an opportunity for attendees to interact, connect, and build valuable professional relationships. The engaging session fostered a sense of camaraderie among participants, strengthening the engineering community's bond.

The I3 Safety Summit witnessed an overwhelming response, with a total of 75 participants joining from various backgrounds and interests. The attendees actively engaged with the sessions, participating in Q&A discussions and networking opportunities.

#### **IEEE MAS SIGHT**

Webinar on "WHAT AND WHY IEEE HTB/SIGHT" - IEEE Madras SIGHT AG

Webinar on "WHAT AND WHY IEEE HTB/SIGHT" by Dhiraj Mani Chaurasia, Head Vehicle Integration, R&D Tork Motors, Chair YP AG, IEEE Pune Section, IEEE R10 HTA Committee Member, an enlightening event organized by IEEE Madras Special Interest Group on Humanitarian Technology on 28.08.2023.



IEEE SIGNAL PROCESSING SOCIETY, MADRAS CHAPTER

"Workshop on Easy and Solid Logics for Research Paper Writing in High Impact Journals"

A two-day workshop on "Easy and Solid Logics for Research Paper Writing in High Impact Journals" sponsored by IEEE Signal Processing Society was organized on 14th & 15th September 2023, by Prof N. Venkateswaran and Dr. J. Vijay, BME Department. Dr. Akihiko (Ken) Sugiyama, the featured speaker for the short course, is currently associated with Yahoo! JAPAN Research. The workshop provided valuable insights and practical guidance on the art of crafting research papers and made a significant impact in the academic community. There were 39 participants in attendance, representing a diverse group of individuals, including research scholars and undergraduate/ graduate students from different colleges. Later, Dr. Sugiyama came together for a delightful social gathering held at the Gokulam Park Sabari, OMR providing a wonderful opportunity for IEEE Signal processing society members to connect, engage, and exchange insights in to signal processing.

# "DL Talk"

IEEE Signal Processing Society (SPS), Madras Chapter Organizes IEEE SPS Distinguished Lecturer's Talk on "Personal information devices: Portable to wearable, Stand-alone to connected,



Players to Sensors" on 15 th Sep 2023. The distinguished resource person Dr. (Akihko) Ken Sugiyama, Signal Processing Research Engineer Yahoo Japan Corporation, Japan. shared his experiences and expertise, providing participants with practical insights wearable sensors and devices.

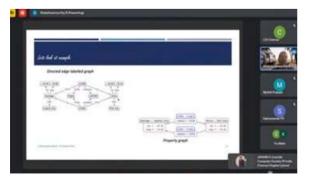
IEEE SPS student branch inauguration at Karunya Institute of Technology and Sciences, Coimbatore.

IEEE Madras Computer Society Chapter

IEEE CS madras Chapter organized the following webinars

IEEE CS Madras, CSI Chennai & ACM Chennai Organized a webinar on Knowledge Graph and Industrial Application by Mr. R. Dhakshinamoorthy, Managing Partner, Technology Advisory, IoT DE, TCS on 23rd Sep 2023 at 6 pm IST.

IEEE CS Madras, CSI Chennai & ACM Chennai Organized a Webinar on Access Explosion on SaaS & Cloud by Mr. Manish Mradul, Director of Engineering, Palo Alto Networks on 2nd Sep 2023 at 6.30 pm IST.



IEEE CS Madras, CSI Chennai & ACM Chennai Organized a Webinar on Striving for Simplicity in Software Development by Mr. Kiran Vijayakumar, Head of Project Engineering, Matrimony. com on 25th Aug 2023 at 6 pm IST.



IEEE OES Madras, IEEE CS Madras, ACM Chennai and CSI Chennai organized a Webinar on Role of Al and Edge Computing in Sustainable Ocean Health by Dr. Tien Anh Tran, Principal Investigator / Assistant Professor, Vietnam Maritime University, Vietnam & Research Fellow @ Seoul National University, South Korea on 28th Aug 2023 at 4.30 pm IST.





IEEE CS Madras, CSI Chennai & ACM Chennai Organized a Webinar on Security – Vulnerability Handling and Patch

Management. By Ms. T.T. Mini, Cybersecurity Technologist, Dell Technologies Bangalore on 12th Aug 2023 at 6 pm IST.



CSI Chennai, IEEE CS Madras , ACM Chennai & Hindustan Chamber of Commerce (HCC) organized a Webinar on Generative AI and its Impact by Mr. Rajeswaran Viswanathan, Head, AI Centre of Excellence, Senior Director, Capgemini India 22nd July 2023 at 6 pm IST. CSI Chennai, ACM Chennai & IEEE CS Madras organized a Webinar on XR, Games, Metaverse - Next Gen Immersive Experiencing Solutions by Mr. Kathirvel Perumal, Head of XR, Games, Metaverse Tech Practice at TCS Interactive on 8th July 2023 at 6 pm IST.





# **Presentation & Felicitation Event**

IEEE Computer Society, Madras along with CSI Chennai & ACM Chennai, organized an in-person Presentation & Felicitation Event on 26th Aug 2023 from 6 pm IST onwards at the Mini Auditorium, 2nd Floor, ECE Dept., Anna University, Chennai – 600025.

Dr. Sakthivel, Chair, IEEE CS Madras welcomed the gathering and introduced the guest of honor -- Dr. Krishna Moorthy Sivalingam, IEEE Fellow, ACM Distinguished Scientist, INAE Fellow, Gopalakrishnan Institute Chair Professor, DAWNLab, Dept of CSE, IIT Madras; the speaker of the day -- Dr. N. Bhalaji, Chief Coordinator, SSN Incubation Foundation, Associate Prof., IT & School of Advance Career Education, SSN College of Engineering, Chennai.

Dr. N. Bhalaji, Chief Coordinator, SSN Incubation Foundation delivered a lucid and engaging presentation on "Deep Tech Startup Opportunities For CSE/IT Students & Professionals".

After the Q&A session following the presentation, the felicitation session for the recognition award "T. Michael Elliott Distinguished Service" from IEEE CS to Mr. H. R. Mohan, IEEE Ambassador, Chair – Events & Imm. Past Chair, IEEE CS Madras, Imm. Past Chair, ACM Chennai & Past National President, CSI, Former AVP (Systems), The Hindu Chennai, was started.

The guest of honor Dr. Krishna Moorthy Sivalingam presented the award plaque to Mr H.R. Mohan offered his felicitation highlighting the volunteering activities of Mr Mohan for having organized 575+ events till 2022.



Following this, few members from IEEE / CS / CSI / ACM and fellow professionals offered felicitation to Mr. Mohan. Some of his associates, who couldn't join the event in person, had sent their felicitation messages through email and the same were presented and readout by Dr Sakthivel.

Mr Mohan in his address briefly narrated his career in computing and volunteering opportunities at the technical societies right from his student days at IIT Madras dating back to 1974. He added that his membership and volunteering in CSI, IEEE, IEEE CS and ACM widened his professional network across the country and abroad and provided him extensive learning opportunities

and several recognitions including the recent "T. Michael Elliott Distinguished Service Certificate" for the year 2023.

Mr Mohan dedicated the recognition bestowed on him to all his fellow members (of IEEE, IEEE CS, CSI, ACM and other like minded societies to which he is affiliated and collaborates with), mentors, professional friends and associates, collaborators, his employers -- Seshasayee Paper & Boards Ltd & The Hindu and his family members who supported whole heartedly in all his volunteering activities.

The event concluded with the vote of thanks by Dr. S. Koteeswaran, Treasurer, IEEE CS Madras. The event ended with dinner.

SETS, IEEE LMAG, IEEE CS, ACM and CCM organized a Hybrid presentation on Perspectives on Computer Networking and Cloud Computing by Dr. S. Ramakrishnan, Founder Director, ERNET & Former DG, CDAC on 3rd Aug 2023 at 3.30 pm IST.

#### IEEE MADRAS SECTION

"Faculty Development Programme (FDP) on Recent Advancements in Machine Learning and Its Applications"

IEEE Madras Section, organized a three days Faculty Development Programme (FDP) on "Recent Advancements in Machine Learning and Its Applications" during 19-21 July 2023.

FDP provided research focus on AI and Machine Learning applications in various domains and facilitated hands-on experience in real time applications. Eminent resource persons covered following topics during the FDP includes, Scope of Artificial Intelligence in Real-Time Applications, Application of Machine Learning Techniques in Wind Power Predictions,

Application of Machine Learning in Medical, Imaging & Signal Processing, Hands-on-Training on Machine Learning tools using MATLAB, Current Trends in Data Analytics, Practice on Data Analytical Tools and Techniques.

"Webinar on Awareness on Awards"

IEEE Madras Section organized the Awareness on Awards Webinar by Dr. D. Nirmal, Chair, Subcommittee, Awards, IEEE Madras Section on 15.09.2023. Speaker spoke on various opportunity available for members in IEEE, he also insisted active volunteers to apply for awards. He also shared insights on IEEE Medals and various awards honored by MGA, R10, IC awards

"Webinar on the life of Tamil literature"

IEEE Madras Section collaborated with IEEE SJCE SB Maanavar Mandram of St. Joseph's College of Engineering and conducted a webinar event Ilakkiyam Arivom The life of Tamil literature by Mr.K.Rajanthiran, Past HM, GHSS. related to Tamil literature on 08.08.2023 between 6:00 pm to 7:00pm. Overall, 85-90 people attended the session.







Dr. Vijayalexmi Biradar Program Chair IEEE WIE ILS 2023. Raipur

# **Madhya Pradesh Section**

# IEEE Women in Engineering (WIE) International Leadership Summit (ILS) 2023

Date: 25th & 26th August 2023

Venue: Hotel Babylon Capital, Raipur, Chhattisgarh

IEEE Women in Engineering (WIE) International Leadership Summit (ILS) 2023, Raipur was organized at hotel Babylon Capital, Raipur on 25th & 26th August 2023 in a grand scale. Dr. Vijayalaxmi, the Program Chair of this event received the opportunity to host this event at one of the 8 venues throughout the world. Such event has happened for the first time in Chhattisgarh. This event focused on four tracks namely

i. Innovations & Entrepreneurship

ii. Climate Change & Sustainability

iii Humanitarian

iv. Women in Space

More than 45 Speakers from these tracks and guests from Industries and academia were present during the event. More than 200 participants have registered for the event and attended in person at the venue.

# Inauguration:

The event was inaugurated in a grand way in the presence of Smt. Savita Mishra, Secretary, Chhattisgarh Building and other construction workers Welfare board, Dept. of labor, Govt. of Chhattisgarh, Dr. Sandeep Arora, Chancellor, Kalinga University, Dr. Reshma Kaur, Vice Chairperson, Guru Nanak





Group of Institutions, Bidar, Dr. Pradeep K Sinha, Vice Chancellor & Director, IIIT Naya Raipur, Dr. Sandeep Gandhi, Registrar, Kalinga University, Shri. Puneet Kumar Mishra, BOG, IEEE AESS, Dr. Sadhana Atavar, Director, VITM, Bangalore & Vice Chair, Humanitarian Technology Activities, IEEE India Council, Prof. G S Tomar, Chairperson, IEEE MP Section. Dr. Celia Shahnaz, 2023-24 IEEE WIE Committee Chair & Dr. Nita K Patel, President, IEEE Computer Society.

Dr. Vijayalaxmi, the program chair and Prof. G S

Tomar, Chairperson, IEEE MP Section stressed upon the theme of the event "Embracing Equity with Leadership and Sustainability". IIOT lab of Kalinga University was inaugurated during this event by the Chancellor of the University.

The event sponsors like Chhattisgarh Tourism Board, Labor Dept. of Chhattisgarh Govt, Humanitarian Technology Board, AESS Society, IEEE Computer Society, Eblu, IEEE SPS, IEEE PES, Polygon Geospatial, DIVINE, Technoviz Automation, Sambhavi Creations, IEEE CIS Bangalore, IEEE Kalinga University Student Branch, Aerolaunch, IEEE YP MP Section etc. have extended their support in organising this event. The section Chair Prof. G S Tomar and the Program Chair, Dr. Vijayalaxmi expressed thanks to all the sponsors for supporting the event.

# Key Note Sessions & Sessions:

Followed by the inauguration, there were three keynote sessions handled by eminent speakers like Dr. Abhilasha Gaur, COO (Officiating CEO), Electronics Sector Skills Council of India, Ministry of Skill Development & Entrepreneurship, Mr. Pravin Kulkarni, Senior GM, R & D and Projects EV, Godawari E Vehicles Pvt. Ltd. Dr. Abhilasha talked about skill development among individuals for making a better tomorrow. She has also inspired women participants to come forward in generating skills among them and focus towards entrepreneurship through innovative approaches whereas

Mr. Pravin delivered the innovations in EV design and development to make pollution free climate. After that, there were some sessions handled by Mr. Kapil Khurana, from Technoviz Automation, Dr. K Ramakrishna from IEEE PES Governing Board and Dr. Shubhda Chaturvedi from Chhattisgarh Tourism Board and delivered their talks on IIOT for Smart manufacturing, Women in Power to light the future and Chhattisgarh tourism respectively.

# Track 1 (Innovation & Entrepreneurship):

On day one, the first session was headed by Mr. Rahul Pinnamaneni as a speaker. His talk was on the topic "Unleashing the power of Geospatial innovation"

He owns a Startup Polygon Geospatial, which is a smart digital reality solution. During his talk he focused on various problems geospatial industry and also talked about the need for satellite data integration, use of drones for data Collection, target industries etc.

The speaker was also informative about his products as an entrepreneur. The main takeaway in his talk was the of Al in innovation.

The Second session Speaker was Mr. Jignesh Talasila, he is the co-founder of startup Gedanken VR. He spoke about "power of less of more". His talk focused on providing a clear vision to all the young people who wish to innovate in coming future. He explained. The participants to pick one passion and focus deep into it.



He also opened up how the failure helps to be strong from his own story as an innovator, who failed multiple times and stood strong and turned strongly to prove himself with New visionary idea. He shared his success mantra as "Fail multiple times and stand strong until you find success". His innovative start-up of blending VR with the educational industry have motivated the young minds to explore and innovate for new ideas.

The third session was taken up by Mr.Joginder Tanikella as the speaker He focused on "How to get started". He covered various topics including entrepreneurship, Mindset of initiative, recognizing the resources and many more. The most important resource about which he opened up for innovation is passion. He also quoted the famous inspirational stories of Karsanbhai Patel; the founder of Nirma detergent, Dhirubhai Ambani , founder of Reliance and Sachin Bansal & Binny Bansal founders of Flipkart. He concluded his session with growth mindset concept comprising Bumble bee principle and jet jealous less nature. At last pointed that "In the Excel sheet of Rejection, the only thing you need is one Yes".

The initial session of day 2, entitled "Fueling Innovation for Sustainable Growth," was presented by Speaker Vinu Pillai. She delved into the realms of entrepreneurship and social competence, shedding light on the 7 'C's that comprise creative and innovative environments: cultural sensitivity, critical thinking, creativity, collaboration, curiosity, community, and communication. Vinnu Pillai illustrated how these elements could be harnessed to

enhance society, citing exemplars like Gpay and Paytm. She also highlighted the "DigitAll" theme observed on Women's Day, emphasizing the role of innovation and technology in achieving gender equality. Her captivating presentation concluded with the inspiring notion that even our wildest dreams can be attained through artistic visualization. With this, the first session of the day came to a close.

The second session, led by Navita Gupta, an energy auditor and certified engineer, explored the theme of "Innovation and Entrepreneurship." She commenced her talk by distinguishing entrepreneurship from startups. underlining the creative transformation of ideas into tangible entities. Gupta drew upon the success story of Vandana Luthra, the founder of VLCC, to illustrate this transformation. Challenges inherent in entrepreneurship. such as market competition, workforce retention, and brand establishment, were discussed in depth. Gupta stressed that quality service, rather than monetary gain, is the driving force behind business success. Innovative thinking and resilience were presented as solutions to entrepreneurial challenges, and the importance of learning from failures was emphasized. Gupta's expertise in non-destructive testing (NDT) and its applications in medical and industrial diagnostics were also shared. The session concluded with an engaging Q&A session, where Gupta addressed gueries from the audience.

The third session, titled "Innovation and Incubation," was presented by Abhishek Ranjan Kumar. He began by



highlighting the transformative impact of the Smart India Hackathon, which empowered 88% of its participants with knowledge of product design and a deeper understanding of India's multifaceted challenges. Kumar also discussed the Toy Business League, a hackathon promoting learning, culture, diversity, and Indian history through toy design. He touched upon various hackathons. both national and international, offering young talents platforms to showcase their skills and expand their horizons. Kumar introduced the Institutions Innovation Council (IIC), a massive network spanning thousands of institutions, known for its comprehensive innovation and startup support programs. He detailed the staggering number of activities and innovations recorded within this network. Additionally, he mentioned a new 3-credit course on Intellectual Property Rights (IPR) offered via Swayam from January 2023, emphasizing the importance of IP awareness. Kumar concluded by highlighting the Innovation Entrepreneurship Venture Development (IEV)



program, offering MBA/PGDM degrees, and India's pioneering launch of a dedicated design thinking course in law. The session ended with a stimulating question-and-answer segment.

With an audience of 45-60 attendees, including Session speakers and coordinator Dr. Nilam Choudhary, this day was a testament to the collaborative spirit of the event. We extend our heartfelt appreciation to the esteemed speakers, engaged participants, and dedicated volunteers whose contributions made this session enlightening and productive. Your active involvement exemplifies the drive and unity that propel our community forward.

Track 2 (Women in Space):

The track aimed to highlight the significant contributions of women in the space industry and explore various aspects of space technology and exploration. The first day of the "Women in Space" track was marked by a series of enlightening sessions. Day 1 session started with panel discussion on "women in power-challenges and opportunities", followed by keynote speakers from ISRO.

Panel Discussion on "women in power-challenges and opportunities":

The session's moderator, Dr. Trapti Jain, commenced by introducing the esteemed panel members. Dr. Ramalatha Marimuthu, an educator, entrepreneur, and IEEE impact creator, is deeply committed to humanitarian technology and service learning through projects. Dr. Tripta Thakur, serving as the Director General of the National Power Training Institute (NPTI), which is the apex body under the Ministry of Power, Government of India. Additionally, Er. Suraiya S Khader, holds the position of General Manager (Quality) at Bhilai Steel Plant, bringing extensive expertise in quality control processes.

Dr Ramalatha discussed about challenges and opportunities for women. Discussed about gender stereotype, implicit bias and discrimination, how it is affected in power and energy sector. Dr. Ramalatha also addressed issues related to bias and discrimination faced by women in fieldwork. She emphasized the importance of work-life balance and proposed creating individualized

support systems, asserting that everyone deserves happiness and mentorship. She discussed the evolving opportunities enabled by mentorship, networking, and skill development. As an example, even women managing households can be trained to read meters, expanding their skill sets and roles in the sector.

Dr Tripta hakur discussed about challenges faced by women in power engineering and given insights of companies like Dr Reddy laboratories, tech Mahindra and wipro which maintains gender equality index. Drawing from her personal experiences, she stressed the significance of women taking the initiative to pave their paths. Dr. Tripta Thakur discussed the SAR-100 initiative and expressed gratitude towards IEEE for their support in encouraging women to step into leadership roles. She highlighted that around a hundred women were trained through the SAR-100 program online, and there are plans to facilitate their certification by taking them to Bangkok for further training and recognition.

Er. Suraiya S Khader candidly shared her personal experiences from her professional journey. She acknowledged that bias issues are commonplace for every woman, including herself, and that addressing these challenges is an essential part of the journey. Through the lens of a few case studies, she delved into the numerous challenges faced by women, notably highlighting the confidence gap, gender bias within company practices and structures, the absence of role models, and the intricacies of balancing leadership roles with family responsibilities.

Speaker: Jayanthi Rajesh, Group Director, SIG

Topic: Spacecraft Assembly Integration and Testing (AIT) – Criticalities and Challenges (online)

Ms. Jayanthi Rajesh provided an insightful overview of the different phases involved in the process of preparing and launching a satellite. Her presentation encompassed various aspects of satellite assembly, integration, testing, and launch operations.

In her discourse, Ms. Jayanthi Rajesh discussed the distinct types of satellites and offered an in-depth exploration of the assembly, integration, and testing

procedures specific to INSAT/GSAT satellites. She delved into the challenges associated with aligning mission objectives with spacecraft configuration and the complexities of developing mechanical and electrical ground support equipment.

During Phase 1, Ms. Jayanthi Rajesh outlined the process starting from the spacecraft structure's arrival in a clean room environment. She detailed the installation of propulsion systems, routing of propulsion plumb lines, and assembly of fuel tanks. Additionally, she highlighted the integration of thermal heaters, the fabrication and testing of harnesses, and the comprehensive testing involved in this phase.

In Phase 2, Ms. Jayanthi Rajesh provided insights into transferring equipment onto panels for integration. She discussed the meticulous segregation and routing of harnesses, the placement of equipment panels on the Payload Interface Frame (PIF), and the intricate electrical and mechanical thermal operations before panel closure checks are conducted. This phase also encompasses integrated spacecraft tests and thermovac tests conducted in a controlled environment.

Moving on to Phase 3, Ms. Jayanthi Rajesh explored the assembly of critical components such as solar panels, reflectors, antennas, and propulsion systems like LAM engines. She detailed the alignment process for sensors and actuators, and the inclusion of RF sensors. This phase includes a range of rigorous tests including acoustics and vibration tests.

The final phase, Phase 4, involves activities at the launch pad. Ms. Rajesh explained the essential operations such as fuel filling and prelaunch preparations that are undertaken before the satellite's launch.

Ms. Jayanthi Rajesh's presentation offered a comprehensive glimpse into the journey from satellite installation to launching. Her breakdown of the satellite's cycle, from initial assembly to final launch preparations, provided valuable insights into the meticulous processes involved in a successful satellite mission.

Speaker: Kalpana Arvind, Associate Director, Laboratory for Electro-Optics system, ISRO

Topic: Eyes in the space-Electro Optical Sensors (online)

Ms. Kalpana Arvind commenced the session with an enlightening introduction to attitude and the close-loop attitude control system. She provided a detailed discourse on attitude representation, emphasizing the imperative role of attitude control and the diversity of attitude representations.

In her presentation, Ms. Arvind shared invaluable insights into the motion patterns of satellites and the array of applications where these principles find significance. She offered a holistic view of the sensors, often referred to as the "eyes" of spacecraft that play a pivotal role in this domain.

Ms. Kalpana Arvind delved into the specifics of various attitude sensors, starting with those focused on the sun, earth, and stars. She elucidated the working principles of sun sensors and provided comprehensive details about different types of sun sensors along with their specifications. Similarly, she explained the workings of earth sensors, delving into their operational specifications. The discussion extended to star sensors, encompassing their working, calibration methodologies, and the specifications associated with various star sensor models and facilities.

Beyond the sun, earth, and stars, Ms. Kalpana Arvind provided detailed insights into other essential sensors, including Magnetometers and fibre optic gyroscopes. She explained their functionalities and significance in satellite systems. Additionally, she highlighted how the choice of sensors depends on the specific application of the satellite.

Ms. Kalpana Arvind wrapped up the session by emphasizing a collective responsibility for the wellbeing of our planet and the vast expanse of space.

The "Women in Space" track at WIE ILS 23's first day provided an engaging platform for attendees to delve into the contributions of women in the space industry and the technological advancements driving space exploration. The track even succeeded in fostering a deeper understanding of the Women challenges and opportunities.

On the second day, Dr. Anuradha S Prakasha, Associate Project Director, Communications and Navigation Satellites, ISRO delivered her talk and gave insight of different mechanisms adopted in rockets to send satellites into space. She also delivered the way of shifting the orbits with the example of Chandrayaan 3 mission. Different types of fuels required for different operations were also discussed during the session. It was quite interactive session as many of the participants have shown their interest in understanding the background of recently executed project of ISRO. A hands on training on making satellites was conducted by the team members Aerolaunch India followed by this. During this session. participants came to know various parts included in the satellite along with the basic ideas for making this possible to connect this to rockets. They gave overview of different types of satellites moving around the space and also gave a detailed technicality behind working of those. Overall the women in space left a remarkable impression on the participants as they could hear from eminent personalities.

Track 3 (Climate Change & Sustainability):

Speaker 1: Ms.C S Rama Lakshmi IFS

Session started with the Quote by Guy McPherson

"If you really think that environment is less important than the economy, try holding your breath while you count your money "

#### Highlighted the importance of the following

- Environmental change is a change or disturbance
  of the environment most often caused by human
  influences and natural ecological processes.
  Environmental changes include various factors, such
  as natural disasters, human interferences, or animal
  interaction.
- Global warming" refers to the rise in global temperatures due mainly to the increasing concentrations of greenhouse gases in the atmosphere. "Climate change" refers to the increasing changes in the measures of climate over a long period of time – including precipitation, temperature, and wind patterns.

- Climate, refers to the long-term regional or global average of temperature, humidity and rainfall patterns over seasons, years or decades.
- · While the weather can change in just a few hours,
- Temperatures in India have risen by 0.7 °C (1.3 °F) between 1901 and 2018, thereby changing the climate in India
- In May 2022 severe heat wave was recorded in Pakistan and India. The temperature reached 51 °C. Climate change makes such heat waves 100 times more likely

#### **Environmental Changes**

- · Climate change and other changes to the atmosphere
- Land use changes and soil degradation,
- Freshwater depletion and contamination,
- Biodiversity loss
- Partly or largely unknown!!!
- Threats to human health.

#### Change in global scenario in last 20 yrs.

- Global temperature has risen six-tenths of a degree in those 20 years.
- Population has increased by 1.7 billion people.
- Sea levels have risen 3 inches
- and extreme weather in the U.S. has increased by 30 percent
- In Greenland and Antarctica, ice sheets have lost 4.9 trillion tons of ice

#### **Vulnerable Indians**

- As per 2019 India is 7th most affected country and discussed with Statistics
- Malnutrition

#### **Child stunting**

How much forest cover has India lost?

Ecological restoration - Possible? Can it be reversed?

- Major Land-Use Change or Degradation
- Industrialization
- Mining
- · Unsustainable Farming
- Monoculture Plantations
- Logging, And Overharvest Have Transformed Many Natural Ecosystems to Highly Degraded States
- Led to Loss of Biodiversity and Water Security, Soil Erosion, Invasion of Alien Species
- Increased The Vulnerability of The Ecosystems
- And Human Communities to Climatic Extremes at A Time of Global Climate Emergency
- Ecological Restoration vs Eco-Conscious Activities
- Agroforestry
- Food Forests
- Tree Plantations
- Organic Farming
- Permaculture
- May Support Human Needs with Less Impact on The Environment
- Do Not Strictly Count as Ecological Restoration
- Passive & Active restoration

# Ethical role of Politicians/planners/ engineers/ contractors

- Integrity
- Objectivity
- Professional competence and due care
- Confidentiality
- Professional behavior
- All risks are properly identified, evaluated, and provided through modern management systems to ensure successful delivery of high-quality infrastructure that deliver value and do not compromise with health,

safety and sustainability of our ecology and planet earth.

- Ways for engineers can contribute to that net-zero goal?
- Role of engineers in achieving sustainability
- Reduce the amount of plastic waste sent to landfills
- Need for engineers to think about equity in their work on climate change - designing systems that protect
- Role of engineers in achieving sustainability
- Achieving Sustainability
- Advocating citizens right to a sustainable and healthy future.
- Influence government policy making efforts to promote inclusive and climate-responsive programming.
- Strengthening service delivery that reflect climate mitigation, adaptation and resilience outcomes.
- Empowering communities, especially women and children, with the resources they need to advocate for themselves and drive action; and
- Investing in opportunities for convergent program delivery
- public-private partnerships, and financing or funding that will effectively amplify positive inputs and results contributing to climate action and environmental sustainability.

Ms. Rama Lakshmi talk was welled received by all the audience. Each point has been explained with statistics. Finally, session closed by the quote by Barack Obama

"We are the first generation to feel the impact of climate change and last generation that can do something about it"

Speaker 2: Mr. Nikhil Kaushik

Topic: Climate Action- Putting Pollution to Reuse

Started the session with 1st Industrial revolution (1765) -an extraordinary jump forward in the story of civilization.

Mr. Kaushik discussed the following points with Statistics

- ◆ Air pollution kills about 5 million people globally
- We've added 1615 Billion Tonnes of CO2 into the atmosphere in the last 250 years leading to global warming.
- Mitigation Measures
- Reduce
- Reuse
- Recycle
- Carbon based Economy
- Much of today's economy is based on carbon inputs
- Captured CO2 is a better source of carbon
- The emerging CO2 utilization market is forecast to grow to 1 Trillion USD by 2030 and beyond
- Fossil Fuels Dependent Today
- High Cost
- Environmental Pollution
- Key Driver of Climate Change
- Opportunity
- Make Materials of everyday use for 7 billion people by capturing carbon emissions and putting them to use to reducing dependence on petroleum.
- COP 26 net zero targets
- Demand for non- petroleum-based inputs
- Governments looking beyond petroleum for their energy needs
- AIR-INK- World's grade ink created from air pollution and explained various case studies
- Discussed the captured Co2 from various cities
- Impact
- To produce these products, such as AIR-INK Fabrics, AIR-INK Flexo and AIR-INK Consumer



- ~ 4000 Kgs of Carbon PM2.5 removed
- ~700 Tonnes worth of CO2 impact.
- $\sim$  2.2 M USD in revenues.

The session concluded by Pollution is nothing but the resources we are not harvesting. We allow them to disperse because we've been ignorant of their value by R Buckminster Fuller. It's eye-opening session for all the attendees.

Speaker 3: Dr. Rajasekhar

Topic: Our Changing Climate

- · What have we heard?
- Understanding of greenhouse effect, global warming and climate change?
- What proof do we have that climate change is happening?
- Why is it happening?
- Climate variability is the "variations in the mean state of the climate on all temporal and spatial scales in simpler terms, variability is the range of climate compared to its average
- Climate change is a shift in climate relative to a given reference time period. Changes in ANY of the climate components, whether internal or the external forcing cause the climate to vary or change.
- Why does the climate vary/change?

The climate system changes in response to both its own internal dynamics and the effects of external factors known as forcing's.

- Discussed difference between Global Warming and Climate Change
- Climate change is... Simple, Serious and Solvable
- Due to human activities, there are now 40 more greenhouse gases in the atmosphere than there were a few hundred years ago.
- The Earth has already warmed as the consequence of this, and scientists expect that

- the next 20 to 100 years the world will warm a lot more!
- Greenhouse Effect: The Earth is surrounded by a thin layer of gasses we call greenhouse gases. These gases are what make up our atmosphere.
- · Scientific Consensus on Climate Change
- o Carbon dioxide (CO2) and other greenhouse gases warm the planet
- o Human activities have increased the concentration of the major greenhouse gases since 1950.
- o Average global temperature has increased since 1906. Warming since the 1950s very likely (>90% chance) due to human increases in GHG.
- · Glaciers are melting
- Ice caps on both North and South polls melting:
- Olivares Alfa glacier in Chile has
- lost 66 percent of its ice mass since 1953.
- Animals & Ecosystems
- o Moving northward and to higher elevation
- o Mismatched timing between animals and food sources
- o Increasing vulnerability to invasive species & extinction
- Global decline in coral reefs.
- Health
- Worsening air quality
- More heat-related illnesses
- Longer, stronger allergy seasons
- Increasing risk of insect and food borne diseases
- Food & Farming
- Stress from increased weather extremes (droughts & floods)
- Shifting planting zones

· Increased crop diseases and pests

Climate Change from Space

International Cooperation on Climate Change: ESA NASA

Strategic Partnership in Earth Sciences

- Sentinel6 Michael Freilich
- IceBridge/CryoVEx
- CRY02ICE
- IMBIF
- · Multi mission Algorithm and Analysis Platform
- Cristal (Sentinel 9)
- · Next Generation Gravity Mission

Mr. Rajasekhar discussed with graphs and true pictures. All the participants appreciated the session and got many clarifications

Track 4 (Humanitarian):

First track was' Technology for disaster management' by Dr. Sadhana Attavar, Director, VITM Bangalore. She spoke about various disasters and how to be prepared to overcome such things. HRM radio can work alot towards this, drones can do areial mapping of flooded areas, supply food packets and medicines. Big Data is another way to keep a track of people surviving natural calamities. ISRO Satellites can trace the exact position of landslide

and the floods of Kerela in 2018, then Al can do the predictive analysis, when the cyclone is likely to happen and evacuate that area. Snake robots can go where the humans cannot go to find people inside the debris of an earthquake.

Second session was on the topic 'Generational effect of retention of women Engineers in Industry' Ms. Neerja Singh, . Author of four books. She started her session by Saluting Dr. Ritu Karidhal, Rocket women of India, by breaking the ceiling. She explains the things differently starting from the traditional, Millennials and Generation X. A women can achieve better heights with the help of In laws, male mentors and domestic help also. We have few demons in our society like Bias, opposition and Antagonism.

Third Session was on 'Humanitarian projects for women' by Dr. Vydeki Vijaykumar, VIT, Chennai. She is the member of HTB Madras Section. She asked students, what will do if asked to submit a project, an average student will obviously Google, and then select the title, then start working on it. Various trucks have been overload, and due that, they tumbled down, so students can do a project on overload sensor with the given dimensions of the truck. Following UN sustainability goals, In 2021, 600 volunteers participated in funded projects and around 20000 people got benefitted by HTB activities.

Session Coordinator Prof. Shravani Mathur, felicitated all the three speakers and participants would be benefitted in near future.



#### **Cultural Event & Networking:**

During the cultural event, participants from 17 different states of India and 4 other countries have represented their culture by their dance, songs and play. Truly the level of performance shown by the performers justified the International platform. Being the host state, two batches of solo and group performers represented Chhattisgarh. Participants from Karnataka, Andhra Pradesh, Madhya Pradesh, Bihar, West Bengal, Odisha, Tamil Nadu etc. have brought their state's culture into the lime light. Delegates from Nepal, Nigeria, South Sudan also performed during the event. During this session, participants of different culture could meet with each other and had a fruitful networking. Speakers, guests and other delegates also involved into the networking session and exchanged their thoughts.

#### Valedictory:

During the valedictory, Dr. K Ramakrishna, IEEE PES Governing body, REP Asia Pacific 2023-24, S.S. Bajaj (Retd. IFS), Director General, CGCOST, Raipur, Chhattisgarh, Tejaswani Ananth Kumar, Managing Director, Adamya Chetana, Dr. Rajesh Ingle, Dean Academics, IIIT Naya Raipur were present and graced the occasion. Overall the event received appreciation by all the speakers and participants and have shared their experience during the event. All the sponsors, volunteers

were appreciated at the end for their contribution in making this event successful. All the guests invited for the valedictory were felicitated at the end.

All the sponsors like Chhattisgarh Tourism Board, Chhattisgarh Govt. Labor Dept, IEEE AESS, PES, and CIS Societies, EBLU, Polygon geospatial etc. were acknowledged for their support in making the event successful.

This event brought together leaders from various domains, guests who hold excellent position in their field, participants from different cultures, volunteers having enthusiasm and skills. Finally, the IEEE WIE ILS 2023, Raipur have created a remarkable impact on the society and women in engineering.





Reported by
Dr. Abhijit Khurepe
Pune Section

# **Pune Section**

Sr. No.	Activity	Date
	'Industry-Academia Engagement Program' focused on Industry 4.0 AI, ML, and Deep Learning Applications in the Electrical Power Industry	15 <sup>th</sup> July 2023
	Celebration of IEEE Women in Engineering Day 2023	22 <sup>nd</sup> July 2023
	Faculty Development Program On "AI IN HEALTHCARE"	24 <sup>th</sup> July 2023 to 28 <sup>th</sup> July 2023
	A Biomedical Instrumentation workshop at MIT ADT	28 <sup>th</sup> July 2023
	Visit to Vigyan Ashram	30 <sup>th</sup> July 2023
	A Session on Career in Data Science	05 <sup>th</sup> August 2023
	Solar Practical	04th August 2023
	Participation of Chair at Sections Congress at Ottawa	11 <sup>th</sup> to 13 <sup>th</sup> August 2023
	Visit the Pune Underground Metro Development	19th August 2023
	Data Science Workshop	19th August 2023
	Keynote Session under IEEE Pune Sensor Council held at ICCUBEA 2023 Pimpri Chinchwad College of Engineering	19 <sup>th</sup> August 2023
	DL Session under IEEE Pune Sensor Council held at D. Y. Patil University Akurdi	19 <sup>th</sup> August 2023
	IEEE Smart City Projects Development Lab	24th August 2023
	PROJECT RISE	25 <sup>th</sup> August 2023
	Leadership Insights and Creating Business Values	28th August 2023
	Canva Session	
	3D Printing	29th August 2023
	IEEE R10 YP Upskill - Pune Section 2023	03 <sup>rd</sup> September 2023



IoT Bootcamp for Science Teachers	08 <sup>th</sup> and 09 <sup>th</sup>
	September 2023
IEEE Student Branch Awareness program	11th September 2023
IEEE student branch awareness program.	12 <sup>th</sup> September 2023
Inauguration Of The leee Student Branch And leee Smart Village Student	12 <sup>th</sup> September 2023
Branch	·
IEEE Membership Drive at Eaton	13 <sup>th</sup> September 2023
Virtual Treasure Hunt	15 <sup>th</sup> September 2023
Visit of CMET (Centre for Materials for Electronics Technology)	15 <sup>th</sup> September 2023
Unlocking the Power of IEEEXTREME	16 <sup>th</sup> September 2023
IEEE Student Branch Awareness Program	22 <sup>nd</sup> September 2023

# 1. 'Industry-Academia Engagement Program' focused on Industry 4.0 AI, ML, and Deep Learning Applications in the Electrical Power Industry

Abstract: on 15th July 2023, the IEEE PES/IAS Chapter of IEEE Pune Section, in collaboration with the Industry Relations Committee of IEEE Region 10 (Asia-Pacific Region), organized an exciting 'Industry-Academia Engagement Program' focused on Industry 4.0 AI, ML, and Deep Learning Applications in the Electrical Power Industry.

The various experts for several industries and academic institutions discussed Student Engagement, Academia Dependency, Industry Exposure, and several other Industry 4.0 factors which have been enhanced by AI-ML and Deep Learning Tools. Dr. Geetanjali Vaidya - Chair IEEE PES/IAS Pune Jt. Chapter & SAS Powertech Pvt. Ltd., Dr. Mandar Bhawalkar - Vice Chair IEEE PES/IAS Pune Jt. Chapter & PVG's COET, Preeti Khatri - Secretary IEEE PES/IAS Pune Jt. Chapter. Dr Surekha Deshmukh - Chair IEEE Pune Section, Abhijit Khurape - Secretary IEEE Pune Section, Vinit Kulkarni - Greenovative Energy Solutions, Narendra Duvedi - SAS Powertech Pvt. Ltd... Dr. Sanjay Dambhare - COEP Technological University, Bibhudatta Patnaik - Eaton, Shripad Desai - BVCOEP, D.S. Bankar - BVCOEP, Dr. PRIYA Gokhale - JSPMs Jayawantrao Sawant College of Engineering, Handewadi Road, Hadapsar, Pune 28, Rakshit Jain - SSR IEEE Pune Section, and Shruti Bhandurge -IEEE Pune Section SAC Member were present at for the event.





#### 2. Celebration of IEEE Women in Engineering Day 2023

Abstract: On 22nd July 2023, we were thrilled to witness the concluding ceremony of IEEE Women In Engineering Day 2023, jointly organized by the IEEE Women In Engineering Affinity Group, Pune Section, and Pravidhi: Student Branch of SICSR-Symbiosis Institute of Computer Studies and Research. The event was a grand success, bringing together the brightest minds and celebrating the remarkable achievements of women in engineering and technology!

The ceremony featured a series of empowering initiatives that left a lasting impact on everyone present:

- · Valedictory Ceremony for WiE Day Talent Competition
- Project Completion: Maitri Yojna A Helping Hand
- · Workshop on Generative AI by IBM

This memorable event would not have been possible without the active participation of all the attendees, volunteers, and participants. Your enthusiasm and dedication have made IEEE Women in Engineering Day 2023 a resounding success! Let us carry forward this momentum and work together to create a future where women's contributions to engineering are celebrated and recognized worldwide.

# 3. Faculty Development Program On "AI IN HEALTHCARE"





Abstract: IEEE Sponsored Faculty Development Program On "AI IN HEALTHCARE" Jointly organised by MIT School Of Computing and IEEE Engineering in Medicine and Biology Society Pune Chapter from 24th July to 28th July 2023.





ONE WEEK FACULTY DEVELOPMENT PROGRAM (FDP)- HYBRID MODE ON

# Artificial Intelligence in Health Care"

Date: 24" to 28" July 2023 | Venue: N518, IT Building, SOC























# "Artificial Intelligence in Health Care"

Date: 24" to 28"July 2023 | Venue: N518, IT Building, SOC

## GUEST SPEAKERS



Dr. Arun Jamker



Dr. Valshall Jadhay HEART PARC



Mr. Anand Deshmukh



Mr. Arnol Bavadekar



Dr. Anlruddha Sinha



Dr. Dinesh Kabre











#### 4. A Biomedical Instrumentation workshop

Abstract: A Biomedical Instrumentation workshop was held on 28th July 2023. The Seminar was on ECG machines and the emerging AI and ML technologies in Health Care. The lecture was given by Prof. M. J. Khurjekar a senior member in the subject. He gave a seminar of

around 1.5 hours starting from 10.00 AM to 11.30 AM. The presentation was given in one of the seminar halls of the college. The faculties as well as the students of the respective branches attended the seminar. The seminar was also broadcast on the college channel. After concluding the presentation, the physical demonstration of the ECG was done in the classroom. The ECG of a student was obtained and a Study was done on the same.





#### 5. Visit to Vigyan Ashram

Abstract: The IEEE Young Professionals Pune Section organized a captivating visit to Vigyan Ashram on 30th July 2023. This activity was supported by IEEE Region 10 (Asia-Pacific Region) Educational Activities. From immersive workshops on 3D printing to hands-on sessions on sustainable living [], the experience left us inspired and eager to explore new horizons. The warm welcome from Vigyan Ashram's passionate team of educators and researchers added to the enriching atmosphere. Engaging in discussions encouraged students to think innovatively and apply simple technology to solve real-world challenges. Mandar Khurjekar, Dhiraj Mani Chaurasia, Vaishnavi Nair, Nupur D. Kulkarni, Parv Gupta, Shraddha Bhandurge, Jigyasa B., Rakshit Jain, IEEE VIIT Student Branch, IEEE Student Branch MMCOE





Pune, IEEE IMS Student Chapter, VIT Pune, IEEE Young Professionals Pune Section were present at the visit.

#### 6. The session on Career in Data Science

Abstract: "It's not about how much data you have, but how you use it." - Stan Lee.

On 05th August 2023, the IEEE Young Professionals Pune Section organized an exciting session in the Career Path Discovery Series.



The session on Career in Data Science is to be delivered by Dr Neha Sharma Tata Consultancy Services, Founder Secretory, Society of Data Science.

The session aims to guide participants through the essential aspects of building a successful career in data science. An enlightening session was organized on the thriving field of data science on Saturday, August 5 at 10.30 a.m. IST and discover the rewarding opportunities it offers for aspiring professionals.





#### 7. Solar Practical

Abstract: On 04th August 2023, the IEEE Pune section and VIIT Student Branch organized a session on "Solar Practical" The Solar Cell Practical Performance event concluded on a high note, leaving the participants inspired

and motivated to explore the limitless possibilities of solar energy. The hands-on experience offered a profound understanding of the potential of solar panels in meeting the world's energy needs sustainably.

The event served as a catalyst for raising awareness about renewable energy sources among the students at Vishwakarma Vidyalaya. By witnessing the practical applications of solar energy, the attendees developed a greater appreciation for the importance of adopting ecofriendly and sustainable technologies.

The guidance provided by Prof. Mandar Khurjekar and Mrs. Dipti Pandit played a pivotal role in the event's success. Their expertise and mentorship not only enriched the attendees' learning experience but also encouraged them to consider future contributions to the field of renewable energy.

The Solar Cell Practical Performance event marked a significant step towards promoting green energy solutions among the youth. The IEEE VIIT Student Branch takes immense pride in fostering an environment of sustainable learning and extending knowledge beyond the boundaries of the classroom.

Through such initiatives, we aspire to create a brighter and greener future, where renewable energy takes center stage in powering the world sustainably.













8. Participation of Chair at Sections Congress-2023 at Ottawa

Abstract: IEEE Section Congress "Grateful for the incredible experience at #IEEESectionCongress 2023 in Ottawa! Meeting passionate IEEE volunteers from 160 countries across 300+ sections was inspiring. Dr Surekha Deshmukh, Chairperson of the IEEE Pune Section, was proud to accept appreciation from IEEE President Saifur Rahman for our commitment to initiatives like #ClimateChange and #TRYengineering. Exploring opportunities in various IEEE programs, especially IEEE Smart Village, was enlightening. Together, we pledge to combat climate change and build a sustainable future. Thrilling days in Ottawa.

#### 9. Visit the Pune Underground Metro Development

Abstract: On 19t August 2023, the Commince College of Engineering, Pune organized a visit to the Pune Underground Metro Development. This visit helped in the process of exploring and understanding the workings of different telecommunication systems with experts. The following points were discussed in comprehensive detail:

- The workings and angles of different cameras used in the stations as well as the operation units.
- Explanation of how communication was done among operators and other workers.
- · Understanding various emergency protocols.
- How systems work under an emergency situation.
- How solar panels help in the running of entire metro stations and how they store energy for cloudy days.
- How metro systems are automated and how their timings are adjusted according to traffic.





- The working of systems in case of a natural calamity or fire hazard
- Demonstration of different power units, switches, and generators for the smooth operation of the metro.
- · Discussion on safety measures in place for travelers.
- Automatic ticket collection and the ease of traveling with metro cards.
- Over 5,000 people travel by the Pune Metro on a daily basis.

The session was very informative and conveyed the use of technology in the advancement of infrastructure and travel.

#### 10. Data Science Workshop

Abstract: 19th August 2023. Unlocking the Power of Data: Where Curiosity Meets Discovery. The IEEE Women In Engineering Affinity Group, Pune Section Affinity Group, in collaboration with Aspire For Her, presents a captivating Data Science workshop online on 19 August 2023 in online mode.



# 11. Keynote Session under IEEE Pune Sensor Council held at ICCUBEA 2023 Pimpri Chinchwad College of Engineering

Abstract: IEEE Sensor Council DL Prof. Dr. Maryam Shojaei was invited as the keynote speaker for ICCUBEA 2023 Pimpri Chinchwad College of Engineering on 19th Aug 2023.

The topic of the keynote was Integrated Circuits and Electronics Systems for Agri-Sensing.

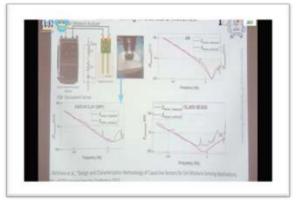
In the keynote, Dr. Maryam Madam emphasized the need for research and how research in agriculture needs to be sustainable as we cannot design a product for farmers and sell it to them as they cannot afford to buy. In her keynote on research in agriculture, she elaborated on the different sensors for agriculture. A capacitance-type device was discussed in detail for measuring soil moisture.

Following is the YouTube link of the keynote session: https://www.youtube.com/live/LX18QJkNSsU?feature=share









Snapshots of the Keynote

The keynote session was attended by more than 100 conference participants, faculty, and students of Pimpri Chinchwad College of Engineering.

# 12. DL Session under IEEE Pune Sensor Council held at D. Y. Patil University Akurdi

Abstract: IEEE Sensor Council DL Prof. Dr Maryam Shojaei was invited for DL session at D. Y. Patil University Akurdi on 19th Aug 2023

The topic of the DL session was Reducing Energy at Load side by operating the on Chip Devices at Unconventional Regions

The talk covered neuron to neuron transportation of information and LSM (liquid state machine). She explained

details of the project research carried out in this field at IIT Bombay in collaboration with Prof. Udayan Ganguly. Discussions further continued with faculty members on the EMG and how muscle control signals can be generated from future neurotrophic processors. The topic was mostly on research projects. It was attended by around 5 IEEE members and 20 Non IEEE Members.

Discussion was also held on research in health care along with discussion on increasing student branch strength at the college and proposing new membership for more faculties which was discussed by Prof. Mandar Khurjekar and Prof. Abhijit Khurape.

Snapshots of the DL session









#### 13. IEEE Smart City Projects Development Lab

Abstract: The first smart city project lab was inaugurated on 24 August 2023 at Sinhgad Academy of Engineering, Kondhwa, Pune. The lab was equipped with necessary project development boards, sensors, and measuring equipment along with all consumables that will be useful for developing Smart City's day-to-day life solutions. Prof.Tushar Mote (Chair, SIG Smart City, IEEE Pune Section) Dr. Rakhi Khedkar (Secretory, SIG Smart City, IEEE Pune Section) Prof. R. P. Rajput (Coordinator smart city project lab) Prof. Sneha Sapre (Coordinator smart city project lab) was instrumental for execution of the event. Dr.Surekha Deshmukh Inaugurated the Smart City Project Developments Lab. The Principal Dr.K.P.Patil, Vice Principal Dr.Kaustubh Gaikwad, HOD E&TC Prof.A.B.Ingole, other faculty members, and more than

a hundred students were present for the lab inauguration. The three project groups presented smart city-related projects in the laboratory.









#### 14. PROJECT RISE

Abstract: The PCCOE IEEE Student Branch and the Information Technology Students Association inaugurated Project RISE on the 25th of August along with the ITSA Induction Program 2023. The event commenced with a warm welcome extended to distinguished guests: Mrs. Swati Deole from Aakar Charitable Trust, Dr. Vaishali Lodha from Aakaar Charitable Trust, Mr. Dheerai Chaurasia from the IEEE Pune Section, and Ms. Nupur Kulkarni from the "Make the Difference' Organization. The ceremony was initiated with the lighting of the ceremonial lamp following a serene Saraswati Vandana, Chief Guests, Swati Deole and Dr. Vaishali Lodha, eloquently shared insights into the profound perspective of the Aakaar Charitable Foundation. offering valuable insightsinto the transformative Project RISE. This initiative's inauguration was accompanied by the launch of a website, both emblematic of the collective mission to empower slum communities through education







and skill development. During the event, Chief Guests Dheeraj Chaurasia and Ms. Nupur Kulkarni expressed their heartfelt gratitude to the ITSA Team and extended their best wishes for future endeavors. The celebration also embraced the joyous success of Chandrayaan-3 and the creators of the "Jaldindi Pratisthan" app were felicitated for their remarkable achievement.

#### 15. Leadership Insights and Creating Business Values

Abstract: On 28th August 2023, Cummins College of Engineering for Women organized a session on Leadership Insights and Creating Business Values. The session served as an introduction to explore our interest in technology or leadership. The guest speaker Sonali Galhotra, Senior Manager at Apple and an esteemed

alumni of Cummins College shared valuable insights into her personal journey, shedding light on how her experiences have contributed to her growth.

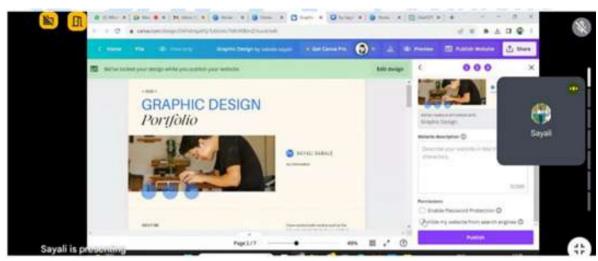
The following key points were discussed in comprehensive detail:

- The importance of Product Feedback Loop in an organization
- Different leadership learnings are essential to upskill yourself.
- Values and Focus like the trusted partnership with customers, obsess over customer experience, improve and optimize
- Various AppleCare Channels like Contact Centers, Retail Stores, Service Partners, and Digital Support.
- Digital Strategies like Quality, Value, and Connection are necessary to connect with customers.
- Also highlighted about the Apple Retail Store Layout.









#### 16. Canva Session

Abstract: On 29th August 2023, the VIIT Student Branch organized a 'Canva Session. The workshop aimed to introduce participants to Canva, teaching fundamental design principles and practical skills. It aimed to foster creativity and confidence in using Canva's features to create compelling visuals, while also promoting collaborative design practices. Lastly, participants' questions were addressed to ensure a comprehensive understanding of graphic design and Canva's capabilities.

### 17. 3D Printing

Abstract: on 29th August 2023 VIIT Student Brach organized a session on 3D Printing Session. The primary objective of the workshop was to empower participants with comprehensive knowledge and practical skills in the field of 3D printing. It aimed to bridge the gap between theoretical concepts and real-world applications, enabling participants to understand various 3D printing technologies, design considerations, and software tools. The 3D Printing Workshop conducted by the IEEE club at VIIT College played a pivotal role in enhancing participants' understanding and skills in the dynamic field of additive manufacturing. By bridging the gap between theory and practice, the workshop empowered participants to make informed decisions regarding the use of different 3D printing technologies, design methodologies, and software tools in various industries. The positive feedback





received from participants underscores the practicality and applicability of the knowledge gained. The event exemplifies the IEEE club's commitment to fostering innovation, skill development, and real-world application in emerging technologies.

#### 18. IEEE R10 YP Upskill - Pune Section 2023

Abstract: on 03rd September 2034, the IEEE R10 YP Upskill - Pune Section 2023 event was organized by

IEEE Young Professionals, IEEE Pune Section. This event brought together enthusiastic speakers who shared their insights on various tracks, making it a memorable learning experience for all attendees.

Track: Leadership and Entrepreneurship

Dr. Reena Pagare kicked off the day with a captivating talk on CREATIVE LEADERSHIP, inspiring our future leaders.

Track: Soft Skills

Dr. Ravindra Dey enlightened us on the art of effective communication and networking, skills essential for personal and professional growth.

Track: Student to YP Transition

A dynamic panel discussion featuring Mr Dhiraj Chaurasia and Mr Shreyas Joshi provided invaluable insights on the journey from being a student to becoming a Young Professional.

Track: Engineer in Society

Sheetal Atha led a thought-provoking session on design thinking for problem solvers, encouraging innovative solutions.

Dr. Archana Thosar shared her wisdom on the engineer's toolbox, equipping our attendees with the right skills to tackle real-world challenges.

We would like to extend our heartfelt gratitude to our venue partner, PCCOE IEEE SB, for their support and contribution to making this event a tremendous success.



It was indeed a fantastic networking opportunity for all the students who participated.

Thank you to everyone who attended and contributed to the success of IEEE R10 YP Upskill - Pune Section 2023.









#### 19. IoT Bootcamp for Science Teachers

Abstract: On 08th and 09th September 2023 MES Senior College in collaboration with IEEE Pune Section, Sensors Council Chapter, Educational Activities IEEE Pune Section, and Savitribai Phule Pune University organized a Two-Day Bootcamp on IoT The workshop was conducted by Dr. Rajashri Jain and Mr. Prahsant Joshi. A total of 50 Faculty members availed the benefits of the BootCamp.





# 20. IEEE student branch awareness program at MMCOE, Pune

Abstract: IEEE Pune Section's Student Activities Committee Visited to IEEE MMCOE Student Branch. The SAC team, along with the Pune Section Chair, had a fantastic time sharing insights about IEEE and IEEE Pune Section activities and initiatives and particularly why a student should join IEEE.

It was an inspiring session where passionate young minds got to hear the section Chair and Student members.



# 21. IEEE student branch awareness program at VIIT, Pune.

Abstract: The IEEE Student Branch Awareness Program. held on September 12, 2023, at the Seminar Hall, was a pivotal event aimed at acquainting students with the IEEE and its multifaceted opportunities. The centerpiece of this event was a seminar conducted by our distinguished quest speaker. Dr. Surekha Deshmukh. Chair of the IEEE Pune Section, Dr. Deshmukh's expertise in Power Market, Smart Grid, Renewable Sector, Uncertainty Management, and Electricity Policy Analysis set the stage for an informative and inspiring session. This event aimed to enlighten students about the IEEE and its myriad opportunities. The highlight of the program was the seminar delivered by our esteemed guest speaker, Dr. Surekha Deshmukh. Chair of the IEEE Pune Section. Dr. Surekha Deshmukh shared her extensive knowledge and insights into the world of IEEE and its significance in various domains. The session featured enlightening discussions on various facets of IEEE and its impact on academia and research. Dr. Deshmukh's seminar served as a cornerstone, offering participants insights into her role as IEEE Pune Section Chairperson and the broader contributions of IEEE to the field of technology.

The elucidation of IEEE membership benefits, participation in IEEE activities, and the interactive Q & A session all served to enrich the learning experience. The contributions of guest speakers, both from within and beyond our institution, added diverse perspectives and encouraged students to explore new horizons.









# 22. INAUGURATION OF THE IEEE STUDENT BRANCH AND IEEE SMART VILLAGE STUDENT BRANCH

Abstract: We have started the IEEE Student Branch (STB15153) with 20 students and 3 faculty members at TSSM's BSCOER Narhe Pune. Our faculty and students are involved in various community-based research projects in the field of Smart Grid Technologies, Hybrid Mini-Grids, and Cyber-Physical Systems (CPS) for rural development with support from IEEE and IEEE Smart Village. On the occasion of Engineer's Day, we arranged an inauguration function in collaboration with the IEEE Pune Section and IEEE Smart Village. Many distinguished guests from Industry and academia graced the event.





#### 23. IEEE Membership Drive at Eaton

Abstract: On 13th September 2023, the IEEE Pune Section Student Activity Committee (SAC) organized a

Membership Drive at Eaton. Dr. Surekha Deshmukh, Chair, IEEE Pune Section team Student Section Representatives addressed the gathering on the occasion.







24. Virtual Treasure Hunt

Abstract: On 15th September 2023, the IEEE PCCOE Student Branch organized a unique Virtual Treasure. The Information Technology Student Association conducted a "Virtual Treasure Hunt", a technical event on the occasion of Engineers Day on the 15th of September 2023 in theIT Department. The event was a huge success with enthusiastic participants and volunteers.

The events were conducted in two rounds-

The first round was an Online Quiz conducted by the technical team of ITSA. It mainly consisted of various technical-related questions. This round was a qualifying





round for participants. Based on the evaluation, selected students and teams were eligible for the next round. The next round was Offline-based and was conducted at our Dept. The rules of the second round were tricky and it made the event even more challenging for the participants. In this round, both technical and non-technical aspects were considered. This part of the quiz challenged their technical knowledge, searching skills, and logical reasoning all at once.

The Winners of the event are:

- 1st place Kunal Pawara
- · 2nd place Sushil Bang
- 3rd place Mahima Shinde

In conclusion, the event was an interactive way to celebrate Engineers Day and showcase their knowledge. Their dedication and skills truly shone through.

# 25. Visit of CMET (Centre for Materials for Electronics Technology)

Abstract: Under the guidance of Branch Counsellor Dr. Anup Vibhute, the visit of CMET (Centre for Materials for Electronics Technology) was hosted on 15/09/2023 at 2:00 by the IEEE Student Branch (STB64321) DIT, Pimpri





in collaboration with C-MET, Pune. Committee members of the student branch (namely Anshuman Misha-Branch chair,

Tejaswini-Secretary, Sudhanshu Department chair, and Anjali Arbuj) visited the CMET facility regarding the discussion about Information, Resources, Facilities, and Contacts CMET can provide to our student branch for future collaborations and technical events we will organize in our institute. The visit was hosted by Sudhir Arbuj Sir of CMET, Pune. Who enlightened our student members with information about the working of CMET, the different facilities they provide for the betterment of the electronics industry, and different projects that are being undertaken by the Pune center.

The visit was very fruitful as Sudhir Arbuj sir agreed to provide various means to our student branch for industrial visits and projects. Also, student members got a chance to gain practical knowledge about various aspects of electronic materials. At last, Sudhir Arbuj Sir and respected staff members of CMET, Pune were given a vote of thanks by Anshuman Mishra.

#### 26. Unlocking the Power of IEEEXTREME

Abstract: On 16th September 2023 PCCOE Student Branch in association with IEEEXTREME, IEEE Computer Society Pune Chapter, and IEEE Pune Section organized a Webinar on Unlocking the Power of IEEEXTREME'. IEEEXtreme 17.0 Pune Section team, in partnership with IEEE PCCOE ITSOC Chapter and IEEE Computer Society Chapter of IEEE Pune Section! Esteemed Speakers: Mr. Adwaith Satheesh Kumar | Chair, IEEEXTREME 17.0 and Mr. Prasanth Mohan | Vice Chair, MGA - Student Activities Committee explained the potential of the IEEEXTREM.

#### 27. IEEE Student Branch Awareness Program

Abstract: The IEEE Pune Section Student Activities Committee (SAC) paid a visit to the IEEE I2IT Student Branch on Friday, September 22, 2023. The Section Student Representative, along with the Pune Section Chair, had an enriching and informative session where they shared valuable insights about IEEE and the activities and initiatives of the IEEE Pune Section. They also delved into the numerous advantages of student membership in IEEE, highlighting the access to resources, networking opportunities, and professional development programs it offers.

The session served as a source of inspiration for the eager young minds of the IEEE I2IT Student Branch. The students were particularly intrigued by the myriad ways to engage in IEEE activities, including involvement

in technical committees, participation in student conferences, and volunteering opportunities.

The enthusiasm and vitality displayed by the members of the IEEE I2IT Student Branch were truly commendable.









Reported by
Dr. Mohammad Rihan
UP Section

# **Uttar Pradesh Section**

#### Report 1

'National Seminar on 'Green energy transition and the role of Academic Institutions'

In line with IEEE's sustainable development commitment. IEEE SB ZHCET AMU, Aligarh, in collaboration with AMU's Electricity Department, hosted a Seminar on 'Green energy transition and the role of Academic Institutions on July 15, 2023 under the G20 sub-theme Clean Energy for a Greener Future. Keynote speaker was Mr. Lalit Bohra IRTS. Joint Secretary Ministry of New and Renewable Energy (MNRE), Government of India and Director General, National Institute of Solar Energy, MNRE. The keynote speaker emphasized that, in view of the impending climate crisis, one of the greatest challenges is the sustainable generation and use of energy. In India also these concerns are on top priority of the government and policy makers. Because of this vision India has, in recent years, taken large strides in adopting green and renewable sources of energy. The 500GW by 2030 target is reflective of this. In this rapid transition of energy scenario in the country universities and other academic institutions have a critical role to play. The universities and colleges have to contribute by: research and development for providing effective solutions to related problems, educate and train manpower, and promote interdisciplinary collaboration in this area. Other speakers Mr. Atul Vats IAS, Vice Chairman Aligarh Development Authority, Mr. Mehtab Singh IRSEE, Former Chief Electrical Engineer Indian Railways highlighted the challenges related to green energy transition in civil construction and Indian Railways and they enumerated the important opportunities for engineers in this transition. The audience included senior and young faculty members, and students from various departments and schools. The seminar's success was due to the active involvement of IEEE SB, SIGHT, and WIE volunteers, promoting green energy in the fight against climate change.







Report 2

# National Seminar on 'Mission LiFE' (Lifestyle for Environment)

In line with IEEE's sustainable development commitment, IEEE SB ZHCET AMU, Aligarh, in collaboration with AMU's Electricity Department, hosted a Seminar on Mission LiFE on August 26, 2023. Keynote speakers included Mr. Yugal Kishore Joshi, Mission Director for LiFE and Adviser for SDGs at NITI Ayog, Government of India, and Professor

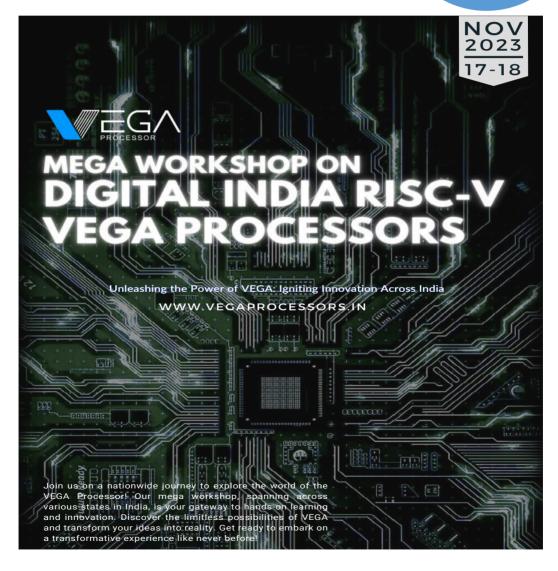
Janakarajan Ramkumar from IIT Kanpur. Mr. Joshi emphasized individual contributions as the foundation of Mission LiFE, launched by the Hon'ble Prime Minister of India at the 26th Conference of Parties in Glasgow, now a global movement promoting pro-environmental lifestyles. Prof. Ramkumar stressed the importance of innovation and fresh perspectives in problem formulation and sustainable solution design. The audience included senior and young faculty members, and students from various departments and schools. The seminar's success was due to the active involvement of IEEE SB, SIGHT, and WIE volunteers, promoting energy conservation and efficiency in the fight against climate change.





# Students & Young Professionals

Prepared by
Dr. John Jose
Vice-Chair, Industry Academic
Relations, IEEE-IC





## **ABOUT THE WORKSHOP**

A national workshop on the newly launched indigenous RISC-V based DIR-V VEGA Processors jointly organised by C-DAC, MeitY along with the IEEE India Council. The training will be handled by experts from C-DAC, who are part of VEGA Processor development team. The DIR-V VEGA workshop will provide an insight into the VEGA series of processors and ecosystem focusing on both the theoretical and practical aspects including development boards, SDK and on building applications. The hands-on sessions will be conducted on the ARIES development board which is Arduino compatible. Target audience for this workshop is Students/Faculties/Research Scholars/Industry Professionals. Certificates will be issued after the successful completion of the workshop.

## **AGENDA**

- Inaugural Session
- Technical sessions from industry experts
- Introduction to VEGA Microprocessors
- Overview of ARIES development board
- Sensor interfacing with ARIES board
- IoT application development

## Digital India RISC-V Program

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- AMRITA UNIVERSITY, BENGALURU
- BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE-PILANI, HYDERABAD
- CHANDIGARH UNIVERSITY, MOHALI
- COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY, COCHIN
- GURU TEGH BAHADUR INSTITUTE OF TECHNOLOGY, NEW DELHI
- INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, BHOPAL
- KIET GROUP OF INSTITUTIONS, GHAZIABAD
- K L DEEMED TO BE UNIVERSITY, GUNTUR
- MODY UNIVERSITY OF SCIENCE AND TECHNOLOGY, SIKAR
- NETAJI SUBHASH ENGINEERING COLLEGE, KOLKATA
- PSG COLLEGE OF TECHNOLOGY, COIMBATORE
- THAKUR COLLEGE OF ENGINEERING AND TECHNOLOGY, MUMBAI
- VARDHAMAN COLLEGE OF ENGINEERING, HYDERABAD
- VELLORE INSTITUTE OF TECHNOLOGY, CHENNAI

# Digital India RISC-V Program

www.vegaprocessors.in

# MEGA WORKSHOP ON DIR-V VEGA PROCESSORS WHO CAN ATTEND?

The VEGA Processor Mega Workshop is open to a diverse range of participants, including students, research scholars, faculty members, and industry professionals who are eager to explore indigenous microprocessors and their capabilities.

- Student
- Research Scholar
- Faculty
- Industry professional

Limited seats are available in regional venues for the workshop, so please book your seats quickly to secure your spot

## **Digital India RISC-V Program**

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#### **REGISTRATION LINK**

Interested Students/Faculties/Research scholars/Industry Professionals can register in the below link.



https://forms.gle/Qb3QZE4XtB5X9ML97

[Last Date: Wednesday, 25.10.2023]

## **IMPORTANT DATES**

Last Date for the Participants to Register for the Workshop: 25.10.2023

Announcement of the First List of Participants: 27.10.2023

Last date for Paying Registration Fee: 02.11.2023

Announcement of the Second List of Participants: 03.11.2023

Last date for Paying the Registration Fee: 10.11.2023

Mega VEGA Workshop at Regional Venues: 17.11.2023 - 18.11.2023

Certificate Distribution to Participants: 30.11.2023

## **Digital India RISC-V Program**

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# MEGA WORKSHOP ON DIR-V VEGA PROCESSORS ORGANIZING TEAM

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## Digital India RISC-V Program

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# MEGA WORKSHOP ON DIR-V VEGA PROCESSORS INSTITUTIONAL COLLABORATORS































## **Digital India RISC-V Program**

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# EEE INDIA

#### **Call for Academic Mentors**

Dear Professional.

Greetings from IEEE India Council Industry Academia Young Professionals Sub-Committee.

We invite you to join our esteemed mentoring program as a **mentor**. Your experience and expertise can make a significant impact on the personal and professional growth of mentees assigned to you, who are young faculty members who are in the early stage of their teaching careers.

There are many faculty members in our institutions across the country who are passionate and forward-looking for growth opportunities. What they lack is a mentor who can guide them by having one-to-one discussions. Your goodwill and volunteering effort can help them to become successful teachers.



#### **Key Roles of a Mentor**

Dedicate a minimum of I hour per week to both one-on-one and group mentoring sessions.

Provide constructive feedback, advice, and support to mentees to foster their professional development.

Collaborate with mentees to establish clear goals and assist in creating action plans to achieve them.

Share your personal professional experiences, challenges, and lessons learned to inspire and guide mentees.

#### **Qualifications of a Mentor**

Ph.D degree from a reputed university and a minimum of 8 years of teaching experience.

Passion to mould and groom young faculty members.



Interested mentors may please register your details here. https://forms.gle/obdfAwo3C82PcAr39

Registration deadline 02.09.23 Selection of intimation 10.09.23 Beginning of the first batch 01.10.23

#### For any queries contact:

**Dr. John Jose**, IIT Guwahati Vice-Chair, IEEE India Council johnjose@iitg.ac.in 9048665842

**Dr. Mansi Subhedar,** Pillai HOC CET Vice-Chair, CC, IEEE Bombay Section mansisubhedar@ieee.org 9867967304



# **2023 IEEE Photonics Conference Student & Young Professionals Travel Grants**

The IEEE Photonics Society is providing travel grant opportunities to encourage early career participation at the IEEE Photonics Conference (IPC 2023), in Orlando, Florida.

The IEEE Photonics Society is committed to providing equal opportunity to all scientists and engineers, inclusive of ethnicity, race, nationality, disability, socioeconomic status, sexual orientation, religion, gender, age, and/or personal identity. All qualified individuals are encouraged to apply.

Note: Submitting a paper to IPC 2023 is not required, but encouraged. There also isn't a limit to how many student chapter volunteers can apply from one chapter. However, each application requires individual responses, Recipients from developing nations or in additional financial need may receive a complimentary registration upon review.

#### Student & Young Professionals (SYP) Travel Grants

Students pursuing degrees in photonics and optics fields of interest and in early career, up to 15 years post their first degree, are encouraged to apply. Grantees chosen will receive funding to help cover travel, lodging expenses, and registration to the conference.

#### Requirements:

An applicant should be:

- A full time, degree seeking student, i.e. undergrad, graduate, post-doc, etc., or early career professional, up to 15 years post first degree.
- An IEEE Photonics Society Member.
- Volunteer experience or service in the photonics community is encouraged.

Supported by an advisor, professor, mentor or direct supervisor, (200 words or less support statement will need to be provided)

#### **IEEE Women in Photonics Travel Grants**

The IEEE Photonics Society is awarding a select number of Society members and volunteers of the IEEE Women in Photonics program with travel grants. The grant funds are intended to be used for travel, lodging expenses and registration to the conference.





#### **IEEE Women in Engineering Scholarships Call for Submissions -Open Until 8 November 2023!**

The IEEE Frances B. Hugle Scholarship and IEEE WIE International Scholarship Call for Submissions will be open from 8 September to 8 November 2023. Undergraduate female students are invited to submit their applications to receive a one-time scholarship in the amount of US\$2,500!



# Diary of Events In & Around IC

#### **Events in the Third Quarter – 2023**

#### July

- 01. Workshop Drive of IEE Kolkota Section towards Net Zero Carbon Emission at 5.00pm Speakers: Megha Nath, Arjun P Gupta & Vivek Adhia. Online program.
  - Inauguration of IEEE Student Branch Societies at GPCET, networking and announcing the approval of 15 societies, Hyderabad Section.
  - 'Connecting the Dots' 2.0 an event organized by Madras Section at College of Engg, Guindy.
- 01-02 NMITCON 202310 IEEE CESC Milestone Lecture 2023 Zoom meeting
- 01 to 16 August Internship program (6weeks) on 'Roof-top Solar PV Systems' organized by PES Jt Chapter Hyderabad Section and PES R10 West Chapters.
- O3 Guru Purnima program in different locations.
  - 09:30 PM Kolkata IEEE India Council voting started (IC Chair-Elect 2023.)
- 03 07 IISC IEEE Summer School 2023: Enriching Educational Opportunities, by Bangalore Section.
- 06 InDIITA Workshop 2023 at IIITB, Balgaluru.
- A meeting of MDC in an online WebEx platform- Council and Section MD Meet.
- 09 2023 Chair-Elect Webinar topic: Meet the candidates Chair-Elect 2023 IC.
  - SB Councilors Meet under Hyderabad Section at Hotel The Plaza, Hyderabad.
- 10 IEEE CESC Milestone Lecture 2023, 04.30 pm. Zoom meeting.
  - Lecture on topic Climate Change and Net-zero Transition by IEEE President Dr. Saifur Rahman at Dr. Triguna Sen Auditorium, Jadavapur University.
- 12 Visit of Dr. Saifur Rahman, IEEE President and his lecture at Lower Ground Floor, Mini Auditorium, MPSTME, Mumbai.
- 13 IC Execom #4 Zoom meeting. 9.00 am. Hybrid mode. Meeting with IEEE President.
  Invited Talk by Prof. Ananjan Basu, IIT Delhi organized by IEEE AP-MTTS SBC IIT Kharagpur.
- 13-14 International Conference on Innovations in Engineering and Technology (ICIET-23). Venue: Ilahia College of Engineering and Technology, Muvattupuzha, Kerala.
- 14 Successful launching of Chandrayan.
- 14 16 International Conference on Digital Applications, Transformation, and Economy (ICDATE 2023),

- Miri Malaysia, co-organized between Curtin University Malaysia and University of Technology Sarawak in collaboration with IEEE Malaysia Section Signal Processing Society.
- 15 'Industry-Academia Engagement Program' focused on Industry 4.0 AI, ML, and Deep Learning Applications in the Electrical Power Industry by Pune Section.
  - A Seminar on 'Green energy transition and the role of Academic Institutions by IEEE SB ZHCET AMU, Aligarh, UP Section.
- 15 16 IEEE R10 Young Professionals UpSkill 2023: Kharagpur.
- 15 -16 YP group Kharagpur organized 'IEEE R10 YP Upskill 2023-Kharagpur'.
- 17 IC Chair-Elect 2023 Closing of voting at 9.00pm.
- 17 19 2023 Summer Topical Meeting Series, IEEE Photonics Society at Sicily, Italy.
- Google meet- IEEE Distinguished Lecture Topologically Transformed Electronics for Internet-of-Things Applications. Organized by Malaysia ED/MTT/SSC, Penang Joint Chapter.
- 19-21 Three days Faculty Development Programme (FDP) on "Recent Advancements in Machine Learning and Its Applications" by Madras Section.
- IEEE Bharat 6G Summit Exploring the future of Next-generation Networks at IISc Bangalore. 'UPSKILL MADRAS – 2023' at St Joseph's College of Engineering, OMR, Chennai. Celebration of IEEE Women in Engineering Day 2023 by Pune Section.
- 24 28 45th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC2023) at Sydney, Australia.
- 27 Think Tank weekly Quiz series commenced under Students Activities.
- 28 'Physical Execom Meeting #5 MYSURU'.
- 29 IEEE MADRAS YP MEETUP was organized by the Young Professionals at the Klase Hotel in Guindy, Chennai,
- 30 'Hear from Unheard' a series of talk by volunteers to express their views on Membership Development, Quality Conferences, Ethics, Networking between Sections & Subsections, Elections, and Dispute resolution.
- 30 IEEE YP-WiE Talk Series. First talk inauguration speaker Dr. Celia Shahnaz.

#### **August**

- The deadline to submit nominations for 2024 IEEE MGA N&A Committee Member and Liaison Positions.
- 01-31 Career mentoring program for Young Women Professionals by IBM, an IC ICA program.
- MoU on strategic collaboration enabling impactful cooperation in Research, academia and premier conferences partnership signing ceremony at Qualcomm Office, Whitefield, Bangalore
- Panel discussion on Membership Development in association with R10, Bangalore Section & Mysore Subsection
- 05-07 The IEEE INDISCON-2023 at GSSS Institute of Engineering & Technology for Women, in association

with IEEE India Council and IEEE Bangalore Section, is the 4th flagship annual subsection International Conference of the IEEE India Council. The theme is to encourage researchers from academia and Industry to explore and exchange their ideas and knowledge in the cutting-edge research of Computational Intelligence and Learning Systems.

Signing of MoU, IEEE IC with Qualcomm – a visionary partnership.

- 06 IC execom meeting #5.
- 10-11 'IEEE Smart Village India 2023 Conference' organised at Institute of Technical Education and Research (ITER), Bhubaneshwar.

IEEE Sections Congress - one major meeting sponsored by IEEE at Shaw Centre in Ottawa, ON, Canada. A triennial gathering of section leaders from around the world who gain new perspective, knowledge and can share ideas, concerns, and solutions.

- 11-13 Participation of Chair at Sections Congress at Ottawa by Pune Section Chair.
- The "Meet the 2024 IEEE President-Elect Candidates Forum" from 5:45 pm to 6:45 p.m. ET at the IEEE Sections Congress in Ottawa, Canada. 2023 IEEE President and CEO Saifur Rahman hosted and moderated the event.
- 15 The 2023 IEEE Annual Election dead line.

Call for applications / nominations for IEEE India Council Awards – 2023. Submission starts...

- 17 Declaration of IC Chair Elect. Dr. Prerna Gaur won the first woman Chair.
- 17 A talk by CBIT SB WiE in association with WiE AG Hyderabad Section.
- A meeting with Mr. Mike Wilson senior program manager MOVE International and MOVE India Volunteers at GIEEE Office Bangalore.
- 19 WIE MAS Leadership Conclave 2023 at Sri Sairam Engineering College Chennai.
- 21-25 RASP-2023 organized by Hyderabad Section.
- 22 Invited online lecture by WiE and Control Systems Chapter of Kharagpur Section.
- 23 Successful landing of Chandrayan 3 on Moon.

Invited lecture on "Curvature bounded trajectories of desired lengths for a Dubins vehicle" by Kharagpur Section.

- 25-26 IEEE WiE International Leadership Summit 2023 at Babylon Capital, VIP Chowk, Raipur, Chhattisgarh. 'Inspiring minds empowering change'. Speaker: Sudeshna Choudhury & Rajesh Ingle.
- A Seminar on Mission LiFE SB ZHCET AMU, Aligarh, in collaboration with AMU's Electricity Department. Speaker: Mr. Yugal Kishore Joshi, Mission Director for LiFE and Adviser for SDGs at NITI Ayog, Government of India, and Professor Janakarajan Ramkumar from IIT Kanpur.
- 28 Leadership Insights and Creating Business Values by Pune section.

#### September 01-02 NMITCON 2023 International Conference on Networking, Multimedia and IT at Nitte Meenakshi Institute of Technology, Bangaluru, 03 IEEE R10 YP Upskill - Pune Section 2023 05 Teachers Day The IEEE Region 10 Symposium (TENSYMP), a flagship annual conference organized by the IEEE 06-08 Region 10 (Asia Pacific). The theme for 2023 is Technology for an Autonomous World™." 08-09 The 4th International Conference on Public Key Infrastructure and its Applications (PKIA 2023), a ioint conference by IEEE CS (Computer Society) and IAS (Industry Application Society) Bangalore Chapter. 08-09 IoT Bootcamp for Science Teacher program by Pune section. 08-09 IEEE India Blockchain Forum at IISc, Bangalore. 11-13 2023 IEEE Research and Applications of Photonics in Defense Conference (RAPID) at Hilton Sandestin Beach Golf Resort & Spa. Miramar Beach, FL. USA A talk on Disaster management in hybrid mode at Seminar Hall od CS & IT Department Maulana 12 Azad National Urdu University, Hyderabad. Webinar on 'Importance of Gate' 6.00pm to 7.00 pm, Platform GMeet. 13 IEEE Membership Drive at Eaton by Pune Section. A two-day workshop on "Easy and Solid Logics for Research Paper Writing in High Impact 14-15 Journals" sponsored by IEEE Signal Processing Society, Madras Section. Call for applications / nominations for IEEE India Council Awards – 2023. Submission deadline. 15 16 INSINYP 2023 (IEEE IC and Singapore YP Connect 2023) IEEE R10-Bangalore Section Student Summit.

18 2023 MGA Individual Awards deadline - online.

Event 'Unlocking the Power of IEEEXTREME' by Pune section.

- 21-23 The Third International Conference on Emerging Techniques in Computational Intelligence, ICETCI 2023 at Mahindra University, Hyderabad, technically co-sponsored by the IEEE Computational Intelligence Society (CIS).
- IEEEDay and IEEEXtreme organized an insightful webinar on the topic: "IEEEDay and IEEEXtreme: Boosting Membership Drive and Engagement" at 03.00pm UTC.
- 26 EMBS Résumé Database Initiative Webinar
- Annual General Body Meeting of IEEE India Council online event from 08:00 pm to 09:00 pm.
- Online event 'Teaching and Learning Pedagogy with reference to New Education Policy in India' by Educational Activities unit of Kharagpur Section.

#### **Forthcoming Events**

#### October

- 01-30 to 11-2023 Professional Mentoring Program for Young Faculty Members by IC IAYPSC.
- Dead line to cast vote for Annual Election of IEEE President Elect 2024.
- O3 IEEE Day 3rd October 2023 (Tuesday) celebrations. Thousands of IEEE members in local communities collaborate on ideas that preserve IEEE Day's theme: "Leveraging Technology for a Better Tomorrow."
- Deadline to vote IEEE EMB Society AdCom Election.
- World Habitat Day Celebrations under different Sections.
- The 14th International Conference on Information & Communication Technology and System (ICTS 2023)- "Securing the future, one byte at a time". held at the Informatics Department building, Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia. https://icts2023.edas.info/
- O5 Ecofriendly Automotive Sector Challenges to Industrial Electronics Product Development and Sciences at ECIL, Hyderabad.
- O6 Social Awareness Event on 'Health and Well Being and Environment Protection' held at the main campus by IEEE NSUT under IC Educational Activities.
  - A workshop on IEEE Senior Member Elevation organized by Prof. Muhammed Kasim S, Chair Kerala Section.
- 06-08 International Conference on Blockchain & Distributed System Security (IEEE ICBDS 2023) at Nava Raipur India.
- O7 Grand finale of MOVE-A-THON by IEEE MOVE Outreach India on Saturday at the CNES auditorium in IISc from 9.30 AM till 1:30 PM in hybrid mode.
- 07-08 IC Hack 2.0 Nationwide Hackathon first phase commence.
- 07-08 IEEE Region-10 Conference Quality and Management Workshop at College of Engineering Trivandrum with the support of IEEE Kerala Section.
- 12 R10 Talk #12 Building Trust through IEEE SA Standards by Ruth Levis, Katina Michael and Roba Abbas.
- World Standards Day 2023 a hybrid event at Presidency University, Rajanakunte by IEEE India Operations Center.
- 12-27 9th IEEE World Forum on Internet of Things (IEEE WF-IoT 2023), Aveiro, Portugal.
- 13 IEEE Membership Development Webinar at 10.00 am.
- A Unique IEEE Leadership Webinar Directly from the Chair of IEEE IC, titled "Insights from IEEE Leadership", aims to provide you with unique insights and perspectives directly from the leadership. Mode: Cisco WebEx

- 15-18 The IEEE EMBS International Conference on Biomedical and Health Informatics in Pittsburgh, Pennsylvania.
- 16-18 11th, 2023 IEEE R10 Humanitarian Technology Conference (HTC 2023) A flagship conference of R10 IEEE organized and hosted by the IEEE Gujarat Section, at Marwadi University, Rajkot, India.
- 16-18 22nd International Conference on Communications and Information Technologies (ISCIT 2023), Sydney, Australia.
- 16-19 IECON 2023 is co-organized by Industrial Electronics Chapter of IEEE Singapore Section, the School of Electrical & Electronic Engineering, Nanyang Technological University, and IEEE Industrial Electronics Society. It is supported by Singapore Exhibition & Convention Bureau. Held at Marina Bay Sands Expo and Convention Centre, Singapore.
- 21-22 IC Hack 2.0 Nationwide Hackathon second phase commence.
- 'Hear the Unheard' an IC successive event talk by selected volunteers from 10.30 am to 13.00 pm.

#### November

- 02 IEEE AESS Golden Jubilee Celebration
- 03-05 AISYWLC'23 by Bombay Section at Diwatel Grande Resort Gold Valley, Road, Tungaril, Lonavala, Maharashtra 410403.
- 06-07 IEEE Industrial Electronics and Applications Conference (IEACon 2023) hosted in Batu Ferringhi, Penang Island, MALAYSIA.
- 08-11 RASSE 2023 3rd IEEE International Conference on Recent Advances in Systems Science and Engineering, organized and hosted by Saintgits College of Engineering (Autonomous), Kottayam, Kerala, sponsored by IEEE Systems Council, IEEE and IEEE Kerala Section.
- 12-16 IEEE Photonics Conference at Orlando, Florida, USA.
- 15-17 2023 IEEE Fifth International Conference on DC Microgrids (ICDCM)- in Auckland, New Zealand.
- 17-18 IEEE IC in association with C-DAC conducting 2 days' workshop on VEGA processor ecosystem (India's first indigenous microprocessor), in multiple parallel venues. Nationwide Roadshow on Digital India RISC-V VEGA Processors at 14 venues. Locations: Bengaluru, Chennai, Coimbatore, Cochin, Ghaziabad, Guntur, Hyderabad, Kolkata, Mohali, Mumbai, New Delhi, Sikar. Due to state elections the event will be held on November 15-16, 2023 in Bhopal.
- 19-22 APCCAS 2023 at Hyderabad.

#### December

- 01-03 2023 Global Conference on Information Technologies and Communications (GCITC), an International Conference technically sponsored by IEEE Bangalore Section and Hosted by Reva University.
- O3-06 The 2023 IEEE International conference on Energy Technologies for Future Grids (IEEE ETFG 2023) (https://attend.ieee.org/etfg-2023/), the first biennial event organized by the Australian

- Research Council (ARC) Industrial Transformation Training Centre in Energy Technologies for Future Grids (ARC Future Grids ITTC) in collaboration with the Government Organizations, Universities and Industries in Australia. Location: Wollongong, Australia.
- The 40th Anniversary Celebrations of IEEE Kerala Section in the AN at Mascot Hotel, Trivandrum. Inauguration by IEEE President Dr. Saifur Rahman.
- 14-17 INDICON 2023 The 20th IEEE India Council International Conference 2023 at National Institute of Technology-Warangal (NIT-W), Telangana State, India.
- 15-16 2023 IEEE TEMSCON-ASPAC. A TEMS (IEEE Technology & Engineering Management Conference) flagship Asia Pacific Conference in Bengaluru.
- 17-20 IEEE International Conference on Power Electronics, Smart Grid and Renewable Energy (IEEE PESGRE 2023) at Hotel Hyacinth, Trivandrum, Kerala, India. Organized by IEEE IA/IE/PEL Jt. Chapter Kerala.
- 22-24 CFP ICECIE'2023. 5th International Conference on Electrical, Control and Instrumentation engineering-2023, at InterContinental Hotel, Kuala Lumpur, Malaysia. Technically sponsored by IEEE Industry Application Society, USA.

#### Jan 2024

- 03-07 16th International Conference on COMmunicatio Systems and NETworkS (COMSNETS), Bangalore.
- 11-12 Fourth IEEE International Conference on Advances in Electrical, Computing, Communications and Sustainable Technologies (ICAECT 2024) scheduled at Shri Shankaracharya Technical Campus (SSTC), Bhilai, Chhattisgarh, India
- 17-19 International Conference on Green Energy, Computing and Sustainable Technology 2024 (GECOST 2024) organized by the Department of Electrical and Computer Engineering, Curtin University Malaysia, and technically sponsored by IEEE Malaysia Power & Energy Society.
- 22-24 Apscon 2024 in Goa, 2nd International IEEE Applied Sensing Conference.

#### March 2024

01-03 3<sup>rd</sup> International Conference on Innovation in Technology, Bangalore.

#### **April 2024**

14 -16 IEEE Life Members Conference to hold in Austin, Texas, USA.

#### May 2024

- 16-18 International Conference on Recent Advances in Intelligent Computational Systems (RAICS 2024) is organized by Mar Athanasius College of Engineering Kothamangalam, Kerala and financially co-sponsored by IEEE Kerala Section.
- 27-30 IEEE International Symposium ISBI 2024 at Athens, Greece.

#### Student Branch Rebate Distribution

If you have not received your Student Branch rebate, contact your IEEE Section Treasurer for more information. Still have questions? Email student-services@ieee.org

# Bangalore Section

#### **IEEE North Karnataka Subsection Flagship International Conference (NKCon)**

Sat, 18-Sun, 19 Nov 2023

The Conference aims to provide an active platform for researchers, scientists and engineers throughout the world to present their latest research findings, ideas, and application in the fields of interest which fall under the scope of IEEE at Belagavi, Karnataka.

# IEEE International Conference on High Performance Computing, Data, and Analytics 2023 (HiPC 2023)

18 - 21 Dec 2023

The 30th edition of the IEEE International Conference on High Performance Computing, Data, and Analytics, known as HiPC 2023, will take place in Goa, India.

The event will focus on High Performance Computing (HPC) and Scalable Data Science, featuring a single-track technical program and keynote lectures.

# 16th International Conference on COMmunication Systems and NETworkS (COMSNETS)

03-07 January 2024,

Bangalore, India

COMSNETS is a premier international conference dedicated to advances in Networking and Communications Systems. The conference is a yearly event for a world-class gathering of researchers from academia and industry, practitioners, and business leaders, providing a forum for discussing cutting edge research, and directions for new innovative business and technology. For more details visit: https://www.comsnets.org/

### **IEEE Conference-3rd Inocon**

3rd International Conference for Innovation in Technology, Karnataka, India
Hosted By: Sai Vidya Institute of Technology
Technically co-sponsored by: IEEE Bangalore Section

MARCH 1ST - 03RD 2024 at - BANGALORE, INDIA

Website: http://inoconf.org/

# Hyderabad Section









# **SYRES-2023**



#### SYMPOSIUM OF RESEARCH SCHOLAR

JOINT CHAPTER OF AP-S/MTT-S/EMC-S (JCAME), PUNE AND MTT-S/AP-S/EMC-S JOINT CHAPTER HYDERABAD SECTIONS PRESENT A NATIONAL LEVEL SYMPOSIUM FOR RESEARCH SCHOLARS (SYRES - 2023) WORKING IN THE FIELD OF MICROWAVE TECHNOLOGIES, ANTENNAS & PROPAGATION, ELECTROMAGNETICS COMPATIBILITY.



**DATE: OCTOBER 28, 2023** 



TRAVEL GRANT

PRIZES WORTH RS 25000

IMPORTANT DATES

Registration open: August 25, 2023

Abstract close: October 03, 2023

Registrations and Submission of

Confirmation of Registration with



**VENUE: HYDERABAD** 

#### SYMPOSIUM TOPICS

Key topics include (but not restricted to)

- Wave Propagation
- Ultra-Wide Band Technology
- Millimetre and Tera-Hertz technologies
- Multi-frequency and Broadband Antennas
- MU-MIMO and Massive MIMO
- · 5-G systems and beyond
- Al-ML for RF and Microwave
- RFICs and MMICs
- RF Sensors
- · Phased Array Antennas
- Meta Materials and Meta surfaces
- · Antenna and Microwave Measurements
- Electromagnetic Interference & Compatibility

# Payment: October 06, 2023 • Online Presentations for Shortlisting:

- Online Presentations for Shortlisting:
   October 09, 2023
- Declaration of Shortlisted Candidates: October 11, 2023

#### **DETAILED BROCHURE**

https://bit.ly/3ENOJyc

#### **REGISTRATION LINK**

https://forms.gle/B7UBFHkyhC9LWO2A6



#### FOR FURTHER DETAILS CONTACT

Dr Yerram Ravinder, Member Secretary ieeepunesyres2022@gmail.com

Dr Sulakshana Chilukuri

ieeesyreshyd2023@gmail.com

# Kerala Section

#### **IEEE WIECON 2023**

9th IEEE International WIE Conference on Electrical and Computer Engineering 2023 (9th IEEE WIECON ECE 2023) <a href="https://wiecon-ece.org/">https://wiecon-ece.org/</a>

Conference Dates: 25-26 November 2023

Venue: Sree Chitra Thirunal College of Engineering, Thiruvananthapuram, Kerala. India

9th Edition of IEEE International Women in Engineering Conference on Electrical and Computer Engineering 2023, jointly organized by IEEE Women in Engineering Bangladesh Section and IEEE Kerala Section with the collaboration of WIE Affinity Group, is to be conducted on 25-26 November 2023 in hybrid mode at Sree Chitra Thirunal College of Engineering, Thiruvananthapuram.

Papers are from all domains of Electrical and Computer Engineering.

For more details, please visit https://wiecon-ece.org/

General Chair: Dr. Bijuna Kunju K, Mob: 9895163961, Email: kbijuna@gmail.com

#### **IEEE PESGRE 2023**

IEEE International Conference on Power Electronics, Smart Grid and Renewable Energy (IEEE PESGRE 2023)

www.pesgre2023.org

Conference Dates: 17-20 December 2023 Venue: Hotel Hycinth, Trivandrum, Kerala, India

General Chair:

Dr. K. Biju, Mob: 9446808243, Email: bijuk@ieee.org

6th International Conference on Recent Advances in Intelligent Computational Systems (RAICS 2024)

https://raics.ieeemace.org/

16 – 18 May 2024

Mode of Conference: Physical Mode. Organized by Mar Athanasius College of Engineering Kothamangalam, Kerala and financially co-sponsored by IEEE Kerala Section.

General Chair

Dr. Siddharth Shelly, Mar Athanasius College of Engineering, Kothamangalam



## Madras Section



IEEE Madras Section feels proud to share it's yet another flagship event.

"IEEE R10 STUDENT SUMMIT - Common Plenary - SB Officers Training"
In association with IEEE Region 10 SAC & Madras Section SAC

Date: 14 October 2023 Time: 09:00 AM - 06:30 PM Venue: TAG Auditorium, Anna University, Chennai

With Regards, **Dr.K.Porkumaran**Chairman, IEEE Madras Section

# IEEE India Council Calling Industry Experts!

Are you a dynamic professional working in the field of technology? There are many institutions and students who are not privileged to host lectures and interaction sessions by industry experts either due to location disadvantage or due to lack of proper connections with the industry.

Your expertise and goodwill can be a great source of learning for less privileged ones. Your life story and experiences in your career paths can inspire some of them. If you feel your expertise can value add to budding engineering students and young professionals of our country, then we invite you to be a part of the prestigious Industry Speakers Panel powered by the Industry-Academia and Young Professionals Subcommittee of IEEE India Council.

By volunteering as a speaker for this initiative of IEEE India Council, you not only contribute to the democratization of knowledge but also gain invaluable benefits that can enhance your professional journey, networking, self-brand building, and above all great support to our country's technology ecosystem.

Please express your willingness by filling up the registration form. Our core team members will get back to you to understand your key domain and interests and accordingly arrange sessions for you. Based on your interests and preferences we can connect you with different IEEE organization units comprised of 62,000 members across 1300 higher education institutions and industries in India.

#### **Exclusive Invitation of IC Hack 2.0**

#### The Ultimate Coding Challenge is Here!

We are excited to bring you the second edition of IC Hack, the most anticipated event of the year for tech enthusiasts across India. IC Hack is more than just a hackathon; it's a celebration of innovation and collaboration, where you can showcase your coding skills, learn from experts, and make a real impact. This year, IC Hack 2.0 promises to be even bigger and better, with two exciting phases of coding brilliance:

#### Phase-I: Hybrid Mode & Phase-II: Offline Mode

Seize this golden chance to be a part of the coding revolution and stand a chance to win from a prize pool worth **INR 1,00,000**. Register now through this link: <a href="https://bit.ly/ieee\_ic\_hack\_2023">https://bit.ly/ieee\_ic\_hack\_2023</a>

#### **Happy Coding!**

The IC Hack 2.0 Team, IEEE India Council

#### **INDICON 2023**

#### 20th IEEE India Council International Conference - 2023

Conference Dates: 14 - 17 December 2023

Venue: National Institute of Technology-Warangal (NIT-W), Telangana State

The 20th Edition of IEEE India Council Flagship International Conference (INDICON2023) is being hosted by IEEE Hyderabad Section at the National Institute of Technology, Warangal from 14th to 17th December 2023. INDICON intends to bring global researchers both in academia and industry to the heritage city of the state of Telangana. INDICON 2023 will feature comprehensive technical programs and shall address state of the art topics in the areas of computing, communications, circuits and power systems.

INDICON cover original technical papers in theoretical or applied research on a wide range of topics, but not limited to the following areas.

Track 1: Al and Data Science

Track 2: Security and Privacy

Track 3: Data and Software Engineering

Track 4: Machine Intelligence Systems and Technologies

Track 5: Next-Generation Computing and Applications

Track 6: Robotics and Cybernetics

Track 7: Devices, Circuits and Systems

Track 8: Control, Instrumentation, Signal Processing and Multimedia

Track 9: Antenna, Microwave Techniques, Communications, Networks and IoT

Track 10: VLSI and Nanotechnology

Track 11: Power, Energy and Power Electronics

Track 12: Biomedical Engineering and Healthcare Technologies

Track 13: Smart & Sustainable Energy Solutions

Track 14: EducationTechnologies Track 15: Women\* in Engineering

Author Registration: 15 October 2023 Conference Dates: 14 - 17 December 2023

Please click here for the published proceedings of the previous editions of INDICON Conference series:

https://ieeexplore.ieee.org/xpl/conhome/1002060/all-proceedings

We look forward to your participation to the success of

# **INDICON 2023**

# **IEEE WIE Social Innovation Camp (4-5th Nov 2023)**

# IEEE Women in Engineering Social Innovation Camp

IEEE WIE Social Innovation Camp is the motivation from <u>IEEE Women in Engineering Student-Teacher</u> and <u>Research Engineer/Scientist (STAR)</u> to motivate Pre-University students, especially girls to step into technical fields.

This event is organized to motivate and give awareness about "Social Innovation" and "Pre-University Education" among Pre-University Students (Grade 10-12th), Teachers/Educators & IEEE Volunteers.

#### Learn More



Pre-University
Students

(14-18 Years)



Pre-University Educators/Teachers

(14-18 Years)



**IEEE Volunteers** 

(Anyone across IEEE Region 10)

#### **Event Registration**

This one-of-a-kind event which will bring together Pre-University community from around the Asia-Pacific Region to collaborate on learning about Social Innovation & Problem-based Approach. You'll have the opportunity to learn from experts and network with peers.

Register today and join us in creating a better future!

IEEE SA

A BETTER

WORLD



Rajanakunte



Standards touch almost every part of our daily lives. Standards are very important to make sure that products and services work the way that we expect them, to make our life safer and easier. The standardization system has the greatest impact when all stakeholders work together—from the public and private sector;

to national and international representatives; to consumers, industry, governments, academia, and non-governmental organizations. The aim behind establishing the day is to raise awareness about the importance of standardization to the global economy among the consumers, regulators and industry.

The Sustainable Development Goals (SDGs), which project to address social imbalances, develop a sustainable economy, and slow the rate of climate change, are highly ambitious. To reach them will require the cooperation of many public and private partners, and the use of all available tools, including international standards and conformity assessment.

#### AGENDA:

Time	Session Details	
2.00 - 2.15 pm	Address by Dr. Abdul Sharief, Dean, School of Engineering	
2.15 - 3.00 pm	Talk by Shri Mustafa Wajid, MD & CEO, MEHER Group Net Zero Warriors for a better world	
3.00 - 3.45 pm	Virtual talk by Dr. Gopal Pingali, MD, Accenture, USA  Accelerating progress towards a Sustainable World	
3.45 - 3.55 pm	Question and Answers	
3.55 – 4.00 pm	Vote of Thanks	

#### Our mailing address is:

IEEE, 26/1, 5th Floor, WTC-Brigade Gateway Dr. Rajkumar Road, Malleswaram, Bengaluru, 560055, India



9th IEEE World Forum on Internet of Things (IEEE WF-IoT 2023)

Theme: The Blue Planet: A Marriage of Sea and Space

12-27 October 2023, Aveiro, Portugal

https://wfiot2023.iot.ieee.org

Register now: <a href="https://wfiot2023.iot.ieee.org/registration">https://wfiot2023.iot.ieee.org/registration</a>

Don't miss the opportunity to join the 9th IEEE World Forum on Internet of Things (IEEE WFIoT2023), which is a premier event of the IEEE IoT Technical Community, a multiple Society initiative aggregating the wide expertise inherent to the IoT domain. The conference will be live online and in person in Aveiro, Portugal from 12–27 October 2023.

This year, the theme for the World Forum is "The Blue Planet: A Marriage of Sea and Space". We aim to recognize the increased importance that the Sea has in our daily activities and to signal the importance that Space has for our future as a sustainable society.

WF-IoT 2023 will cover the breadth of activities, technologies, and applications in IoT, reflecting the vast range of interests and investment in IoT and its building blocks, with a series of sessions including Plenary Program, Technical Paper Program, Special Sessions, Workshops, Industry Forums, Tutorials, and more.

We hope you will join us in Aveiro or across the world virtually and take this opportunity to engage with your fellow colleagues in these challenging times.

#### Confirmed Plenary Keynote Speakers:

Mário Campolargo, Secretary of Digitalisation and Administrative Modernisation, Portugal Catherine Warner, Director, Center for Maritime Research and Experimentation, NATO Science and Technology Organization

Bruno Carvalho, Access.Space Alliance, Ambassador for Portugal and advisor to Astralintu Space Technologies in Ecuador

Tom De Block, Steering Board Vice-Chair of AIOTI

Antonio Skarmeta, Professor, University of Murcia, Spain



International Conference on Green Energy, Computing and Sustainable Technology 2024 (GECOST 2024)

17-19 January 2024 Virtual Conference https://gecost.curtin.edu.mv/

We are pleased to inform you that the "International Conference on Green Energy, Computing and Sustainable Technology (GECOST 2024)" will be held virtually between 17-19 January 2024. GECOST 2024 is organized by the Department of Electrical and Computer Engineering, Curtin University Malaysia, and technically sponsored by IEEE Malaysia Power & Energy Society.

GECOST 2024 is a conference designed for engineers, researchers, and specialists from academia, research centers, and industry worldwide to discuss and present the latest developments and applications related to the challenges of securing green and clean energy sources for the 21st century to protect the environment. The program of GECOST 2024 consists of reputed keynotes, invited sessions, oral sessions, and best paper awards across all tracks.

GECOST 2024 brings the theme of "Green Sustainable Technologies for the Benefit of Humanity." The main areas of interest include, but not limited to, the following tracks:

- Track 1: Green Computing and Security
- Track 2: Green Communications, Networks, and Signal Processing
- Track 3: Intelligent Embedded Systems and Analytics
- Track 4: Green Energy and Power System, Smart Grid
- Track 5: Sensors, Green Materials, Alternative Energy and Control Process
- Track 6: Industrial and Government Digital Applications

For more information, please visit: <a href="https://gecost.curtin.edu.my/">https://gecost.curtin.edu.my/</a> For enquiries, please contact us at: <a href="mailto:gecost@curtin.edu.my">gecost@curtin.edu.my</a>



## Special News...!

# Sivaji Chakravoti *Elected!*

(Advisor, IEEE India Council)

In the 32nd AGM of West Bengal Academy of Science and Technology held on 4th July, I have been elected as President of WAST.

# Congratulations!!!

# **IEEE Region 10 WIE Pre-U Championship**

We at IEEE Region 10 WIE Committee believe that "Spreading awareness among Pre University Students gives impact to our own Future". So become part of this regional initiative to give your hands to this movement by becoming IEEE R10 WIE Pre-U Champion.

Apply today and join us in spreading the word!

## **Congratulations to all selected Pre-U Champions!**

Pre-U Champion Name	IEEE Section	IEEE Region
Biradar, Vijayalaxmi	IEEE MP Section	Region 10
Thakkar, Rushali	IEEE Bombay Section	Region 10
Arakeri, Megha	IEEE Bangalore Section	Region 10
Singh, Sangeeta	IEEE Hyderabad Section	Region 10
DIXIT, AVINASH	IEEE Uttar Pradesh Section	Region 10
Balagalla, Umaya	IEEE Sri Lanka Section	Region 10

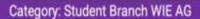
GOPAL S, ABHIJAY	IEEE Madras Section	Region 10
SUBHADRA, HARIVARDHAGINI	IEEE Hyderabad Section	Region 10
Pachiappan, Krishnagandhi	IEEE Madras Section	Region 10
Parida, Monnie	IEEE Kharagpur Section	Region 10
Divyanjalee, Gayashani	IEEE Sri Lanka Section	Region 10
Bhowmik, Tanima	IEEE Kolkata Section	Region 10
M, SOUMYA	IEEE Madras Section	Region 10

MATHEW, RENSI SAM	IEEE Kerala Section	Region 10
Nagarajan, Nithyavathy	IEEE Madras Section	Region 10
RAJAMANI SURENDRAN, SAI SAKTHIVEL	IEEE Madras Section	Region 10
Ayaan, Mohammed	IEEE Madras Section	Region 10
B, Meenakshi	IEEE Madras Section	Region 10
S, VAISHNAVI	IEEE Madras Section	Region 10
G, ROOBINI	IEEE Bangalore Section	Region 10
S, Suganya	IEEE Madras Section	Region 10
CHANDRASEKARAN, DANYA	IEEE Madras Section	Region 10

TARIFUL ISLAM,	IEEE Bangladesh	Region 10
SHEIKH	Section	Thegion To
D. Chachanle	IEEE Bangalore	Decies 10
B, Shashank	Section	Region 10
Maharana,	IEEE Kolkata	Dogion 10
SoumyaRanjan	Section	Region 10
Muqtadiroh, Feby	IEEE Indonesia	Decies 10
Artwodini	Section	Region 10
T Crae Chermile	IEEE Madras	Decies 10
T, Sree Sharmila	Section	Region 10
R K, SAI SUNIL	IEEE Madras	Degion 10
KUMAR	Section	Region 10
Doddy Harabitha A	IEEE Bangalore	Decies 10
Reddy, Harshitha A	Section	Region 10
I Cnahalatha	IEEE Uttar Pradesh	Degion 10
L, Snehalatha	Section	Region 10
Davi Vankatraman	IEEE Madras	Degion 10
Ravi, Venkatraman	Section	Region 10
I/han M. Abdullah	IEEE Bangladesh	Decies 10
Khan, M. Abdullah	Section	Region 10

# **Award Announcement**

R10 WIE Special Support Fund (Climate Change Theme)





Awarded OU	Project Name	Mode	Award granted
College Of Engineering Adoor, WIE (SBA61101) IEEE Kerala Section	ECOSYNC	Onsite	200
Mar Athanasius College Of Engrg,WIE (SBA32041) IEEE Kerala Section	'Prakrith' STAR program	Onsite	250
Mehran Univ of Eng and Technology, WIE (SBA21131) IEEE Karachi Section	Women in Engineering Role in Solar based technology for mitigating/reducing the effects of climate	Hybrid	300





2023 IEEE Region 10	D Award Winners	
Award Plaque	2023 Region 10 Outstanding Large Section Award	Delhi Section
& Prize US\$ 1,000	2023 Region 10 Outstanding Medium Section	Madhya Pradesh
Award Plaque	Award	
&	2023 Region 10 Best Membership Growth Large	Vizag Bay Section
Prize US\$ 500	Section Award	
	2023 R10 Humanitarian Technology Activities	Kerala Section
	Outstanding Section Award	
	2023 R10 SAC Outstanding Student Branch	Sri Sai Ram Engineering
	Award	College Student Branch (Madras Section)
	2023 R10 Women In Engineering Outstanding Section	Kharagpur Section WIE
	Affinity Group Award	AG
	2023 R10 Young Professionals Outstanding Section	Uttar Pradesh Section
	Affinity Group Award	Young Professionals
	2023 R10 Humanitarian Technology Activities	Kerala Section
	Outstanding Section Award	
	2023 R10 SAC Outstanding Student Branch Award	Sri Sai Ram Engineering College Student Branch(Madras Section)
	2023 R10 Women In Engineering Outstanding Section	Kharagpur Section WIE
	Affinity Group Award	AG
	2023 R10 Young Professionals Outstanding Section	Uttar Pradesh Section
	Affinity Group Award	YP AG

Award Plaque & IEEE Membership	2023 R10 Outstanding Volunteer Award	BijunaKunju K (Kerala Section)
Fee for 2024 (Basic*)	2023 R10 Outstanding Volunteer Award	Rajendrasinh B Jadeja (Gujarat Section)
	2023 R10 Education Activities Outstanding Volunteer Award	Mayank Dubey (MP)
	2023 R10 Women In Engineering Outstanding Studentl Volunteer Award	Abinayaa T (Madras Section)
	2023 R10 Young Professionals Outstanding Volunteer in Industry Award	Yeshwanth L M (Bangalore Section
2023 R10 Special R	ecognition Award	
Award Certificate	2023 IEEE R10 Special Recognition of Student Branch Award	Maharaja Surajmal Institute Of Technology Student Branch (Delhi Section)
Award Certificate	2023 IEEE R10 Special Recognition of Student Branch Award	Visvesvaraya University College of Engineering Student Branch (Bangalore Section)
Award Certificate	2023 IEEE R10 Special Recognition to SAC Volunteer Award	BrindhaSaminathan (Madras Section

#### **Invitation of Nominations/Applications for PGCIL Award**

Purpose of the Award: For recognizing outstanding individual contributions to Indian Power Sector, IEEE India Council (<a href="https://site.ieee.org/indiacouncil/">https://site.ieee.org/indiacouncil/</a>) and POWERGRID (<a href="www.powergrid.in">www.powergrid.in</a>) have jointly instituted coveted National Awards titled "POWERGRID and IEEE India Council (IC) Awards for Excellence" in the following two categories: Category-1: General category: For engineers (Indian citizens only) who are professionally active (with no age limit).

Category-2: Young Engineer Category: For engineers (Indian citizens only) up to 35 years age (as on 1st December 2023)

Nominees shall have significant and exceptional individual contributions in last 5 years in any of the following areas: Power System Operation and Control, Asset Management, Power equipment design and development and New Technologies, Renewable Energy Integration, Digital Power System including Smart Grid Smart, and Cyber security. One award shall be given in each of the two categories. Each award should carry a cash prize of Rupees 75,000.00 plus a plaque / citation and travel expenses (Total Rs 1,00,000/-)

The awards will be conferred on in the IEEE Flagship Conference, INDICON.

Nominations can be submitted from 1st October to 25th October 2023 by sending the materials to ieeepowergridaward@gmail.com.

# Congratulations!

#### Kathleen A. Kramer Elected 2024 IEEE President-Elect



6 October - Kathleen A. Kramer has been elected as the 2024 IEEE President-Elect. Pending acceptance of the IEEE Tellers' Committee report by the IEEE Board of Directors on 19-20 November, Kramer will begin serving as IEEE President-Elect on 1 January 2024. Kramer will succeed 2024 IEEE President Thomas M. Coughlin. The other candidate for IEEE President-Elect was Roger U. Fujii.

A complete list of <u>2023 IEEE Annual Election results</u> can be found on the <u>2023 IEEE Election website</u>.

#### **Media contacts:**

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# About Kathleen Kramer

IEEE Senior Member Kathleen Kramer has been elected as the 2024 IEEE president-elect. She is set to begin serving as president on 1 January 2025.

Kramer, who was nominated by the IEEE Board of Directors, received 19,105 votes in the election. IEEE Life Fellow Roger U. Fujii received 14,525.

At press time, the results were unofficial until the IEEE Board of Directors accepts the IEEE Teller's Committee report in November.

Kramer is a Professor of Electrical Engineering at the University of San Diego, where she served as Director of Engineering from 2004 to 2013. As Director she provided academic leadership over its engineering programs.

#### Kramer's Goals as President-Elect

- 1. Inspire and engage the next generation of IEEE members, especially women, young professionals, and students.
- 2. Better advance technology by including the organization's global and diverse members effectively and equitably in the process.
- 3. Collaborate as a community on IEEE's transformational public imperatives including community, education, history, humanitarian technologies, and policy.
- 4. Improve the effectiveness and efficiency of IEEE while honoring its obligations to members.
- 5. Empower the success of IEEE's technical communities worldwide in sharing and fostering technical knowledge and enhancing members' professional lives.

She was a member of the technical staff at several companies including Bell Communications Research, Hewlett-Packard, and Viasat.

Kramer is the past vice president of the IEEE Aerospace and Electronic Systems Society and is a distinguished lecturer for the society.

She has emphasized collaboration when serving in various high-level IEEE leadership roles such as IEEE Secretary, Director of IEEE Region 6, and Chair of governance and of the IEEE ad hoc committee on innovating funding models. In these positions she contributed to advancing IEEE's mission across a wide spectrum of activities and technical communities.

Kramer earned bachelor's degrees in electrical engineering and physics from Loyola Marymount University, in Los Angeles. She earned master's and doctoral degrees in EE from Caltech.

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