

# IEEE Kerala Section Report 2023



## PART A - SECTION SUMMARY

### A.1 Executive Summary

- [Section Executive Committee 2023 Member List](#)

Role	Name
Chair	Prof. Muhammed Kasim S
Vice Chair	Dr. Giles M P
Secretary	Dr. Biju K
Treasurer	Prof. Nandan S
Immediate Past Chair	Dr. Mini Ulanat
Immediate Past Secretary	Dr. Bijoy Jose
India Council Nominee	Mr. Shahim Baker
Advisor	Dr. K R Suresh Nair
Advisor	Dr. Sameer S M
Chair, Malabar Subsection	Dr. Bindima T
Chair, Kochi Subsection	Dr. M. V. Rajesh
Chair, Awards Committee	Hareendralal A G
Chair, Conference Activities Board	Dr. Chinmoy Saha
Chair, Educational Activities	Dr. Sabiq PV
Electronic Communication Coordinator	Joel John Kandathil
Chair, Government Relations	Sasi P M
Chair, Grievance Redressal	Dr. Lillykutty Jacob
Chair, History Committee	Prof. V K Damodaran
Chair, Industry Relations	Dr. Bijoy Jose
Chair, Inter-Society Activities	Dr. K C Raveendranathan
Chair, Membership Development	Jyothi Ramaswamy
Chair, PIE (Promotion of Innovation and Entrepreneurship)	Dr. Imthias Ahamed T P
Chair, Professional Activities	Gopakumar S
Chair, Publications & Newsletter Editor	Prof. K. Gopalan Nair
Chair, Public Relations	Jayakrishnan MC
SDLP Co-ordinator	Dr. C. V. Anil Kumar
Chair, SIGHT	Prof. Sunitha Beevi. K
Chair, Strategic Initiatives [Industry Engagement]	Sarada Jayakrishnan
Chair, Strategic Initiatives [Academia]	Dr. Rekha K James
Chair, Student Activities	Mr. Shone Jose
Student Representative	Parvathy J S
Webmaster	Pooja Haridas
Chair, Consultant's Network Affinity Group	Narayanan AM
Chair, Life Member Affinity Group	Prof. Damodaran V K
Chair, WIE Affinity Group	Dr. Bijuna Kunju K
Chair, YP Affinity Group	Neeraj Ipe
Chair, Antenna & Propagation Society (APS)	Dr. Deepti Das Krishna
Chair, Circuits And Systems Society (CASS)	Sreelal S Pillai
Chair, Computer Society (CS)	Dr. Vishnukumar S
Chair, Communications Society (ComSoc)	Dr. Shamna H R
Chair, Education Society (EdSoc)	C M Varughese
Chair, Engineering in Medicine & Biology Society (EMBS)	Byju N B
Chair, Geoscience & Remote Sensing Society (GRSS)	Dr. Deepak Mishra
Chair, IA / IE / PEL Jt. Chapter	Dr. Vasanthi V
Chair, Microwave Theory and Techniques Society (MTT-S)	Dr. Apren T J
Chair, Power and Energy Society (PES)	Dr. Ajith Gopi
Chair, Photonics Society	Dr. Pramod Gopinath
Chair, Robotics and Automation Society (RAS)	Nandakumar R
Chair, Signal Processing Society (SPS)	Reshna S
Chair, Society on Social Implications of Technology (SSIT)	Varghese Cherian
Chair, Solid-State Circuits Society (SSCS)	Ajith Ravindran
Chair, RFID Council	Dr. Manoj B S

## Section Highlights

- **Globally 3rd largest IEEE Section** in terms of membership count.
- Computer Society Kerala Chapter stands **#1 among 2,711 Society Chapters** with 4,195 members.
- PES Kerala Chapter stands **#1 among PES Chapters** with 3,052 members (#2 among 2,711 Chapters).
- ComSoc Kerala Chapter stands **#1 among ComSoc Chapters** with 1,813 members.
- RFID Council Kerala Chapter stands **#1 among Council Chapters** with 1,643 members.
- Photonics Society Kerala Chapter stands **#1 among Photonics Society Chapters** with 1,444 members.
- RAS Kerala Chapter stands **#1 among RAS Chapters** with 1,179 members
- SPS Kerala Chapter stands **#1 among SPS Chapters** with 1,141 members.
- SIGHT AG Kerala Chapter stands **#1 among SIGHT AG Chapters** with 9,308 members.
- WIE AG Kerala Chapter stands **#1 among WIE AG Chapters** with 6,955 members.
- **4589 Events** reported by the Kerala Section and its sub-units in 2023.

## R00145 - Kerala Section Charts ?

These data counts and charts include the selected OU and all related organizational units. See below for individual OU numbers and charts.

Name	Prof	Tech	Non-Tech	Admin	Hum	Pre-U	Total
Kerala Section	529	2491	969	465	76	59	4589

Events by Week



## Major Events (International, National)

- **40th Anniversary Celebrations** of IEEE Kerala Section - Inaugurated by **2023 IEEE President, Prof. Saifur Rahman**. It was a momentous occasion that brought together over **150 professional members** and enthusiastic student members. The event featured engaging activities, a technical talk on climate change, and collaborations with K-DISC and InApp. As a heartfelt tribute, **a special token of appreciation & mementoes were presented to Past Chairs & Life Senior Members** of the IEEE Kerala Section, recognising their exceptional service and dedication to the IEEE community.
- **Leaders Meet** - This event, which brought together esteemed leaders and professionals within the IEEE community, featured insightful addresses from prominent figures, **Mr. Deepak Mathur (2023 IEEE MGA Vice-President-Elect)** and **Dr. Rakesh Kumar (Life Fellow IEEE and Chair, IEEE TA Data-based Strategy Ad Hoc Committee)**. The event had **more than 170 professional members** in attendance. Additionally, the **inauguration of the IEEE Vehicular Technology Society** added a significant dimension to the proceedings.
- **3rd Edition of IEEE PESGRE** - International Conference sponsored by IEEE Industry Applications Society, Power Electronics Society, IEEE Kerala Section, and IA/IE/PELS Jt. chapter Kerala was held from 17th to 20th December 2023 and showcased a dynamic amalgamation of academic excellence, industry insights, and networking opportunities. The Keynote Address by **Prof. Andy Knight (President, IEEE IAS)** set the tone for the day, providing valuable insights into DER integration. The conference received over **450 papers** and had a **delegate count of 260** spread over 8 tracks.
- **R10 YP CLAP** was hosted physically **for the first time with major industry collaboration with the UST campus** in Trivandrum, which gave recent graduates (2022 pass-outs) & YPs a **firsthand glimpse into industry dynamics**. The UST Campus Tour showcased the **10-floor facility**, unveiling real-world corporate settings and innovative products from their labs. CLAP featured a **Panel Discussion on AI Advancements**, complemented by sessions on **Team Building and Finance Management**. A **Mentalism** event added entertainment, while practical contests on **Startup Idea Pitching and Ethics Competitions** challenged participants. Visiting **Veli Tourist Village** provided a relaxing break by the beach at sunset.
- **National Symposium on Emerging Technologies for Green Energy** - **5 Society Chapters from Kerala**, along with IEEE EdSoc Hyderabad Chapter, hosted the **two-day National Symposium**, in union with **various leading industries**, which featured panel discussions bringing together researchers, academics and industry experts to share their insights on **Green Hydrogen, Energy Storage and Grid Stability, Renewable Energy, IoT, Blockchain, AI Adoption in Green Energy, Net Zero Energy Transition, and Renewable Energy Transition**. The event had **146 participants**, with **more than 90 professionals**, providing ample networking opportunities.

- **9th Edition of IEEE WiECon-ECE**, in collaboration with the IEEE Bangladesh Section, featured various plenary talks, technical paper presentations, and panel discussions. Higher Education Secretary of Govt of Kerala, Mrs Ishita Roy IAS, inaugurated the conference. There were over **260 papers received, 107 papers accepted and 86 papers presented**.

**Major Chapter Activities**

- **AICSSYC** - All India Computer Society Student Young Professional Congress 2023 - The **3 Day Congress** was graced by **Ms. Jyotika Athavale, 2024 President, IEEE Computer Society**, who delivered the Keynote Address. Furthermore, **Mr. Eric Berkowitz- Director of Membership, IEEE Computer Society**, spoke about membership development and the benefits and opportunities associated with a CS membership. The delegates enjoyed a **cruise along the Arabian Sea**, providing a wonderful sunset view. The event offered diverse, immersive VR experiences, each catering to different facets of virtual reality. There were **100 participants for 3 days**, and was held at Hotel Ginger from 20th to 22nd October 2023.
- **Bosch-IEEE EV Hack 3.0** - A landmark event in the electric vehicle (EV) innovation landscape, brought together more than 4000 participants from renowned institutions such as IITs and NITs. This **nationwide hackathon**, in collaboration with **Bosch Global Software Technologies**, aimed to foster innovation and problem-solving in the rapidly evolving field of electric vehicles. There were multiple rounds, from Bootcamp and Problem Statements to Screening Tests and Team Selections before the Grand Finale. Beyond being a platform for showcasing skills, the hackathon created avenues for participants to explore exciting opportunities, including **internships and potential employment** at Bosch.

**Major Student and Affinity Group Activities**

- **All Kerala Student Congress (AKSC)** - AKSC was a grand success with more than **1500+ students and 300+ organisers** attending it from all corners of the state with registrations from **78 SBs and 6 other colleges without SBs**. The event was inaugurated by **Shri. S Somanath, the Chairman of the Indian Space Research Organisation (ISRO)**. AKSC's blend of advanced workshops and the convergence of student enthusiasm with industry expertise set it apart from other events.
- **All Kerala Branch Counselors and Chapter Advisors Congress (BCC) 2023** was organised on the 14th of October 2023. The event aimed to provide a forum for the Student Branch Counselors and Chapter Advisors to come together and learn more about IEEE and the functioning of Student Branches. It featured the presence of **Mr. Deepak Mathur, the 2023 IEE MGA Vice President-Elect**. **Over 80 Counselors and Chapter Advisors attended the congress**.
- **WIE Kerala Leadership Summit** - The event happened during International Day for Elimination of Violence against Women. The honourable **Mayor of Thiruvananthapuram Corporation, Mrs. Arya Rajendran**, inaugurated the summit in the gracious presence of wonderful women from various domains. The one-day summit was a mixture of diversified segments, including Noopuradhwani, Rocket Girls, Lighting Hearts, a Wellness Session, a Panel Discussion and a Tech Talk.
- **Awards**
  - R10 Humanitarian Technology Activities Outstanding Section Award - **IEEE Kerala Section**
  - IEEE WIE Affinity Group of the Year Award (Honourable Mention) - **IEEE WIE Kerala AG**
  - SPS Chapter of the Year Award – **SPS Kerala Chapter**
  - R10 CASS Chapter of the Year – **CASS Kerala Chapter**
  - **2** Winners of IEEE CS Richard E Merwin Scholarship Spring 2023
  - **7** IEEE SPS Scholarship
  - **4** IEEE India Council Awards
  - **6** IEEE Regional Exemplary Student Branch Award
  - **8** Darrel Chong Student Activity Award (4 Gold \* 4 Bronze)
  - **7** IEEE IAS Awards

**A.2 Financial Report – (Please follow the format given below)**

IEEE KERALA SECTION ACCOUNTS (01 January 2023 to 31 December 2023) ABSTRACT			
Sl. No.	Head	Receipts (in Rs.)	Payments (in Rs.)
1	Opening Balance - cash	2,219.00	
2	Opening Balance - bank	1,11,60,421.04	
3	Income	3,12,41,352.70	
4	Expense		2,89,52,963.71
5	Closing Balance-Cash-in-hand		268.00
6	Closing Balance-Bank		1,34,50,761.03
	<b>Total</b>	<b>4,24,03,992.74</b>	<b>4,24,03,992.74</b>
7	Closing Balance	1,34,51,029.03	
8	Payables to Student Branches (Rebate & Society Chapter funds)		54,64,053.64
9	Payables (Project funds)		26,29,634.00
10	Payables (Individual award money)		41,120.00
11	Payables to different Societies including the fund received		36,24,942.48
12	Amount earmarked for AGM & Awards function		12,00,000.00
	<b>Total</b>	<b>1,34,51,029.03</b>	<b>1,29,59,750.12</b>
	<b>Balance</b>		<b>4,91,278.91</b>

Sl. No.	Fund	Amount (in Rs.)
1	\$17000 - Funding from MTTs to Prof Chinmoy Saha and Prof. BS Manoj, IIST Trivandrum - SIGHT project	14,14,400
2	\$9600 - to Prof. Alex James - CAS Chapter Initiatives- Making CASS inclusive - workshop series	7,89,888
3	\$8,496 - to Mr. Abhinav Rajeev - HTB Project - SIGHT Chapter	6,96,162
4	\$7,535- to Dr. Job Chunkath - HTB- Project - ComSoc Chapter	6,26,912
5	EPICS in IEEE project Grant to Debabrata Dalai & Dr. B. S. Manoj - IIST Trivandrum	5,83,904
6	\$5,958 - to Dr. Jayachandran E.S.-HTB Project - College of Engineering, Adoor	4,88,199
7	Computer Society Support for AICSSYC'23	4,16,000
8	2022 IEEE SPS Seasonal school on Recent Trends in Speech, Image, Video, and Multidimensional Signal Processing	4,13,550
9	\$4,794.63 to Sidharth Shelly - HTB Project - Mar Athanasius College of Engineering	3,97,091
10	SPS - 2022 Cycle 2 CDI IMPULSE 4.0 - FISAT Angamaly	3,89,560

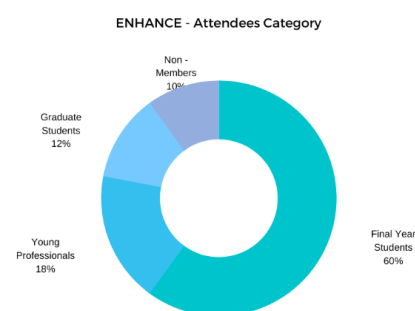
## PART B - ORGANIZATIONAL ACTIVITIES

### B.1 Membership Development Activities

- Total number of active members in the past 3 years.

Month/ Year	Life Senior	Senior Member	Member	GSM	Asso. Member	Student Member	Total
31 Dec 2020	18	207	894	392	32	6705	<b>8255</b>
31 Dec 2021	25	322	1097	500	69	11467	<b>13513</b>
31 Dec 2022	27	367	1156	483	48	12959	<b>15040</b>
31 Dec 2023	29	386	1177	551	42	12884	<b>15074</b>

- Conducted **3 Section Student Branch Revival Programs (Envigor, Enthlpy, Revamp)** across the 3 Hub of Kerala Section funded by IEEE R10 SAC. Dormant Student Branches were divided into various clusters, and various tasks were given. Leadership Training Sessions were conducted by young professionals, and various interactive activities were used, through which the participants learned about the importance, benefits, and exposures of IEEE Membership and the role of IEEE Student Branches in enhancing them. **28 Student Branches were reactivated.**
- Conducted the **4th edition of Renaissance**, an R10 MDLT-funded program that successfully promoted membership development and strengthened Student Branches' network across the Kerala Section with about **98 participants from 39 SBs**. The event provided a platform for knowledge sharing, networking, and collaboration among students, professionals, and experts, contributing to the growth and advancement of the IEEE community.
- "ENHANCE - Fostering Young Professionals and Industry-Academia Linkage"** commenced with immense anticipation and enthusiasm on August 19, 2023, at the Amphitheatre, Kerala Startup Mission, Kochi. The event had **110 participants**, a few volunteers and guest speakers. ENHANCE aims to empower the next generation of professionals and bridge the gap between academia and industry. The event successfully brought together **final-year engineering students and young professionals** to explore emerging technologies, fostering networking opportunities among attendees and providing insights into the benefits of IEEE membership.



### B.2 Chapter Activities

- Total number of Chapters in the Section: **17 (16 Society Chapters, 1 Council Chapter)**
- Number of Chapters formed in the current year: **1 (Vehicular Technology Society Kerala Chapter)**
- Number of active Chapters (Chapters who have reported required number of meetings during the year) **15**
- Summary of Chapter activities (Chapter wise with attachment table/information)

Chapter (Events Reported)	Notable Events
Antennas & Propagation Society ( <b>5 events</b> )	IEEE AP-S SB GEC Wayanad Chapter Inauguration on August 11 2023. Multi Societal Workshop on Advanced Microwave & Antenna Technologies on August 19, 2023. AP DL talk by Dr Hui Li on September 23, 2023 on "Multiple Antennas in Terminal Devices". Field visits organized for students from various colleges
Circuits & Systems Society ( <b>37 events</b> ) \$15,600 USD funding from IEEE CASS for CASS Outreach Initiative	CASS Kerala Chapter conducted a variety of programs in 2023 consisting of Workshops at Educational Institutions, Lectures by experts on various topics such as VLSI, MEMS and Nanotechnology and Workshop series on IC design using Open-source tools at colleges around the state. It won the <b>2022 Chapter of the Year Award</b> and Outreach proposal funding from IEEE CASS HQ.
<a href="#">Communications Society</a> ( <b>15 events</b> )  Connect the Lives - \$4,794.63 TRIDEA - \$7,535.00 under the IEEE ComSoc & IEEE HTB Internet for All initiative.	IEEE ComSoc Kerala Chapter expanded its membership from <b>1060 to 1865</b> , showcasing substantial growth. Throughout the year, the chapter hosted several key events. <b>PROCOMM 2023</b> , a notable communications project competition, was organized at RIT Kottayam on October 2, 2023. The flagship event, <b>All Kerala Communications Society Students Conclave 2023 (AKComSocSC '23)</b> , occurred on November 4th and 5th at IEEE SB St. Joseph's College of Engineering and Technology. The chapter celebrated International Women's Day with a talk by Dr. Anupma Thakur and launched the inaugural Young Professional (YP) meet-up, marking the formation of <b>IEEE ComSoc YP Kerala</b> . Other events are the 5th edition of The Graduate Congress, an online event <b>ARISE</b> , the <b>Morse iT!2.0</b> decoding competition, a volunteer training session, and a workshop on data science trends.
<a href="#">Computer Society</a> ( <b>86 events</b> )	<b>AICSSYC 2023</b> hosted in collaboration with IEEE SB AJCE and <b>IEEE CS SYP Activities</b> featuring technical sessions, panel discussions, networking opportunities, and cultural programs. <b>Ms. Jyothika Athawale, IEEE Computer Society President 2024</b> , inaugurated the event with <b>Mr. Eric Berkowitz, Director of Membership Development, IEEE Computer Society</b> , who participated and handled a session. Technical sessions covered Generative AI, Language Models,

	<p>Sustainable Computing, and the Metaverse. <b>Hands-on AR/VR</b> experience translated theoretical knowledge into practical skills, fostering a hands-on learning approach. Cultural programs, including musical performances, DJ night, cruising, and a culinary experience, added a unique dimension to the event.</p> <p><b>Colloquium on Cyber Security</b> on February 25th, 2023, at Kochi Office. Ms. Anita Nair, Assistant Director EY, inaugurated the event. This event is <b>exclusively organised for working professionals</b> and proved immensely beneficial for professionals by offering a unique platform for networking and knowledge-sharing in cybersecurity. <b>More than 50 professionals</b> attended the colloquium. The participants were engaged in insightful talk sessions on Secure Architecture, Malware Detection, and Recent Trends in Cybersecurity.</p> <p><b>AKCSSC'23</b> (All Kerala Computer Society Student Convention) was conducted from November 24th to 26th, 2023, at GEC Wayanad. <b>Prof. Mohammed Rawidean, R10 Coordinator of IEEE Computer Society</b>, inaugurated the event. The event brought together a diverse gathering of <b>115 participants, with 65 IEEE members</b> among them. It featured two dynamic tracks: <b>Singularity, presented by SIG AI</b>, delved into AI and machine learning, captivating tech enthusiasts, and <b>Startups of Tomorrow, presented by EIC</b>, engaged those interested in entrepreneurship, offering insights into startup revolutions and trends.</p>
<a href="#">Education Society</a> (27 events)	<p>Education Society conducted numerous events, notably The HerQuest Ep. 6 event, '<b>Reaching for the Stars: Women in Space Science</b>,' celebrated World Space Week, featuring Er Priya C Kurian, a Scientist at VSSC/ISRO. The masterclass '<b>Unleashing Your Inner Warrior</b>' empowered Al-Ameen College students on resilience. 'Discovering STEM' introduced pre-university students to <b>AI and Data Analytics</b>, fostering curiosity. A workshop on 'National Education Policy 2020' discussed its implications for higher education. The seventh HerQuest episode showcased the all-women team at LPS Institute of Technology for Women, Kerala, who developed India's first satellite payload, OD from Campus Cosmos, marking a historic milestone in space exploration.</p>
<a href="#">Engineering In Medicine &amp; Biology Society</a> (13 events)	<p>A national conference on Biomedical Instrumentation was organised in collaboration with TKM Institute of Technology. A monthly talk series, '<b>Pulse talks</b>', is organised for the students. A number of technical talks were arranged in collaboration with technical institutions.</p>
Geoscience & Remote Sensing Society (11 events)	<p>International Conference on Machine Intelligence for GeoAnalytics and Remote Sensing (MIGARS) held in Hyderabad from 27th to 29th January 2023. IEEE GRSS Kerala Chapter AGM held on 29th April 2023</p>
<a href="#">IA/IE/PELS Jt. Chapter</a> (55 events)	<ol style="list-style-type: none"> <li><b>1. PESGRE 2023</b> - The Conference focuses on the latest technologies, strategies and challenges faced by power electronic systems, electric drives, renewable energy resources integration, the interconnection to modern power systems, and operation in the smart grid for a better, smarter and more environment-friendly power system.</li> <li><b>2. EV HACK 3.0</b> - EV Hack (Bosch – IEEE Hackathon) is an Electric Vehicles Hackathon organized by IEEE IA/IE/PELS Jt. Chapter Kerala, in association with Bosch Global Software Technologies and IEEE Kerala Section. This hackathon is exclusively for 3rd-year undergraduate engineering students across India, which provides ample opportunity for students to get industry exposure and work on industry-level projects with mentoring from experts in the Electric Vehicle department.</li> <li><b>3. Eventure (organised jointly with SB AJCE)</b> - EVenture is an opportunity for professionals, innovators, and enthusiasts to advance the EV industry and work towards a sustainable future. With the keynote speech, panel discussion, EV showcase, workshops, and networking sessions, attendees will gain knowledge, experience, and exposure to the latest developments and trends in the EV industry. The event also helps to evangelise the benefits of being an IAS member. This also provides a professional development source for the students. It provides a platform to interact with professionals, students, and senior and professional members of IEEE.</li> <li><b>4. INNOVATEX</b> - INNOVATEX is an <b>All Kerala Project Competition</b> organised by IEEE IA/IE/PELS Jt. Chapter Kerala and IEEE SB JECC in association with IEEE IAS &amp; PELS SBC JECC and IEDC JECC exclusively for B. Tech students under KTU.</li> </ol>
Photonics Society (18 events)	<p><b>Photonics Society Kerala Chapter</b> fosters professional and technical growth through impactful activities. The 'Optics to School' outreach program engaged over <b>15 schools, reaching 970 higher secondary students</b>, instilling curiosity about optics. Distinguished Lecture Programs featured talks like "Know your Maths: Physical Meaning of Mathematical Expressions," exploring the practical implications of mathematical concepts. Additionally, a Stress Management session provided students and researchers at International School of Photonics with valuable coping techniques. In collaboration with Vimal Jyothi Engineering College, the chapter organized a two-day workshop on "Introduction to LiFi," aimed to educate participants about LiFi technology.</p>
<a href="#">Power &amp; Energy Society</a> (71 events)	<p>The IEEE day <b>PES Quiz 2023</b>'s preliminary round engaged 33 colleges, encouraging familiarity with IEEE for first-year engineering students. A webinar on "<b>Conscious Living for a Happy</b></p>

	<p><b>Life</b>" marked World Mental Health Day, addressing mental well-being among students. The <b>All Kerala Power and Energy Society Student Congress 2023</b> focused on reducing carbon emissions, emphasizing sustainability through informative talks, workshops, and industrial visits. A webinar on "<b>Navigating Career in AI and Data Science</b>" provided insights from industry expert Meghana Negi.</p> <p>Lastly, the PES R10 Chapter Chairs Meet in Chiang Mai, Thailand, brought global IEEE PES leaders together, where the Kerala Chapter presented a SWOT analysis and shared its achievements. The event facilitated valuable interactions and discussions on strengthening the chapter.</p>
RFID Council (21 events)	SHE-Technia : Talks, <b>PSUDOKU</b> , Industrial Visit to VSSC, Vega Hackathon – in collaboration with C-DAC Trivandrum, December 2023, Pixelate
<a href="#">Robotics &amp; Automation Society</a> (22 events)	<p><b>AKRASC 2.0</b>, the flagship initiative of IEEE RAS Kerala Chapter, offers multifaceted education for IEEE student members. Workshops and Student Project Expo bridge theory with real-world applications, exploring cutting-edge robotics and automation topics. The Expo cultivates creativity, showcasing innovative projects and networking between students and industry experts. AKRASC 2.0 inspires innovation and meaningful contributions to the field.</p> <p>Robotic Masterminds, integral to AKRASC, catalyses professional development within IEEE. Its dual essence includes a professional meetup and a panel discussion. Renowned experts share insights on space explore</p>
<a href="#">Signal Processing Society</a> (58 events)  \$51175 total funding from IEEE SPS \$500 Membership Growth Reward \$6000 K-12 - SIGNAL HOUSE project \$7000 SPS Scholarships \$9100 for ICASSP 23 \$9500 for ICIP 23 \$32750 for conducting member-driven initiatives	<p>Awarded the <b>IEEE SPS 2023 Chapter of the Year Award</b>. As a certified chapter of SPS, we have not only elevated the reach, dimension, and quality of our activities but have also secured vital resources, including funding, <b>IEEE SPS Scholarships, and travel grants for ICASSP 23, ICIP 23 &amp; PROGRESS Workshops and 5-Minute Video Clip Contest</b> winnings which will undoubtedly benefit our members.</p> <p>Initiatives such as the <b>K-12 Signal House Project, INCEPTION, SIGNAL 2.0</b>, and more have played pivotal roles in enhancing the visibility of the SPS chapter. <b>K-12 - SIGNAL HOUSE project</b> aimed to familiarise school students with signal processing concepts through a movable kiosk.</p> <p><b>Seven</b> students secured the coveted <b>IEEE SPS Scholarships</b> through their exceptional merit, each valued at <b>\$1000</b>. Our team has attended and won the 5-Minute Video Clip Contest conducted with ICAASP 23 and ICIP 23, supported by travel grants. The chapter actively conducted online and offline Membership Development (MD) sessions, emphasising the benefits of joining IEEE and SPS.</p> <p>The combined efforts resulted in remarkable growth, making the IEEE SPS Kerala Chapter the largest SPS chapter, boasting <b>27 student branch chapters with 888 student members and 161 Professional Members</b>.</p>
Society on Social Implications of Technology (3 events)	Workshop on Cyber Security: 13th October 2023 - Online mode in association with IEEE SB MACE
<a href="#">Solid-State Circuits Society</a> (14 events)	Meeting of Professional Execom on 2nd November 2023. Collaborated event with IEEE CUSAT SB "VEGA Workshop: Nationwide Roadshow" on 17 & 18th November
Vehicular Technology Society	Since its <b>establishment on August 25, 2023</b> , the IEEE Vehicular Technology Society (VTS) Kerala Chapter has swiftly progressed. Notable technical talks in December, including "Future of E-Mobility for Kerala" and a presentation on " <b>Smart EV Charging</b> " by Er. Manoharan J and Er. C M Varghese, respectively, drew substantial participation, showcasing the chapter's commitment to knowledge enrichment. December also witnessed student leadership team interviews, laying the foundation for an exciting year ahead with an array of technical events and workshops.

### B.3 Professional and Continuing Education Activities

#### Educational Activities:

<b>One Day Workshop on Data Visualization and Story Telling using Power BI</b>	<b>30 Oct 2023</b>
Technical Talk #1: <b>Sensors for Electric Vehicles</b>	<b>19 Oct 2023</b>
Technical Talk #2: <b>Electricity Market</b>	<b>15 Nov 2023</b>
Technical Talk #3: <b>AI Applications Across Industries</b>	<b>30 Nov 2023</b>
<b>National Education Policy (NEP 2020): Opportunities and Challenges!</b>	<b>5 Aug 2023</b>
<b>National Education Policy (NEP 2020): Opportunities and Challenges! (2.0)</b>	<b>1 Dec 2023</b>

## Conferences:

Name of the Conference	Organizing Institute/Venue	Date (2023)
6th Advanced Computing and Communication Technologies for High-Performance Applications (ACCTHPA 23)	Federal Institute of Science And Technology, Angamaly	20-21 Jan
International Conference on Advances in Intelligent Computing and Applications (AICAPS 2023)	Cochin University of Science and Technology	1-3 Feb
2nd International Conference on Computational Systems and Communication (ICCSA 2023)	LBS Institute of Technology for Women, Poojappura, Trivandrum	3-4 March
4th International Conference on Power, Instrumentation, Control and Computing	Government Engineering College Thrissur	19-21 April
3rd International Conference on Advances in Computing, Communication, Embedded and Secure Systems (ACCESS 22)	Adi Shankara Institute of Engineering & Technology, Kalady	18-20 May
5th International Conference on Control Communication and Computing (ICCC 2023)	College of Engineering Trivandrum	19-21 May
International Conference on Innovations in Engineering and Technology (ICIET 2023)	Ilahia College of Engineering and Technology	13-14 July
9th International Conference on Smart Computing and Communications (ICSCC 2023)	Muthoot Institute of Technology and Science, Ernakulam	17-19 Aug
International Conference on Circuit, Power and Computing Technologies (ICCPCT2023)	Baselious Mathews II College of Engineering, Kollam	10-11 Aug
International Conference on Quantum Technologies, Communications, Computing, Hardware and Embedded Systems Security (iQ-CHESS 23)	IIIT Kottayam	15-16 Sept
International Conference on Intelligent Systems(AICERA 2023)	Amal Jyothi College of Engineering	16-18 Nov
International Conference on Recent Advances in Systems Science and Engineering (RASSE 23)	Saintgits College of Engineering, Kottayam	8-11 Nov
9th International WIE Conference on Electrical and Computer Engineering (WIECON-ECE 2023)	Sree Chitra Thirunal College of Engineering, Trivandrum	25-26 Nov
3rd International Conference on Power Electronics, Smart Grid, and Renewable Energy (PESGRE 2023)	IA/IE/PELS Jt Chapter at Hotel Hycinth, Trivandrum	17-20 Dec

## B.4 Students Activities

- Total number of Student Branches in the Section: **115 SBs**
- Number of Student Branches formed in the current year: **8 New Student Branches**
- Number of active Student Branches (Student Branches who have reported required number of meetings during the year): **87**

**14039 Student Members, 115 SBs, 4149 Reported Student Activities, 34 SAC Activities**

- [Section level student activities](#) (student congress, paper and other contests, awards etc):

### [All Kerala Student Congress - Largest Student Member Congress in IEEE](#)

- Being the **annual flagship Student Event** of the IEEE Kerala Section, AKSC drew participants from all corners of the state for enriching experiences. AKSC, a **techno-managerial extravaganza**, aimed to enhance the technical knowledge of undergraduate participants, providing a pivotal platform for students to meet and collaborate with peers. The event was inaugurated by **Shri. S Somanath, the Chairman of the Indian Space Research Organisation (ISRO)**. The events were held parallelly, and cultural events, games, and exhibitions were organised. To sum up, AKSC was a grand success, with **more than 1000 students** from all over Kerala attending it. The event was possible thanks to the collaboration of 16+ society chapters, 50+ speakers, and major sponsors. Over 40 tracks/events were held parallelly to keep all the participants engaged. A few of the events were Fossify, Workshop on Solar PV Design, Hands-on Workshop on MATLAB/Simulink, IoT - A Classic Recipe, Career Opportunities in Data Science, Session on Innovation, Incubation, and IPRs, Self Awareness and Stress Management Workshop, Exploring the Future of EV Battery Charging Technologies, Impactthon - Ideathon Contest, Fitness Session - Aerobics for Health and many more.
- [Kochi Hub Meet & Malabar Hub Meet](#) - The annual student event of the Hubs. They were held on 18th & 19th November at Kanjirappally & Kannur. With over 230 & 160 delegates at KHM & MHM respectively. "Paths Untravelled" unfolded as a profound and enlightening session led by **Ms. Madhuri D M, the Program Director of the Data and AI department at the renowned IBM Software Labs.**



## B.5 Affinity Group Activities

### Young Professional (YP)

- **Region 10 Young Professionals Career & Leadership Aid Program** was hosted in a physical mode for the first time with major industry collaboration with UST campus in Trivandrum, that gave recent graduates (2022 pass outs) & YPs, a firsthand glimpse into industry dynamics. The UST Campus Tour showcased the 10-floor facility, unveiling real-world corporate settings and innovative products from their labs. CLAP featured a **Panel Discussion on AI Advancements**, complemented by sessions on **Team Building and Finance Management**. Additional sessions included "Take Leadership of Your Career" and "Navigating the Uncharted," offering insights from speakers who have taken unconventional paths. A **Mentalism event** added entertainment, while practical contests on **Startup Idea Pitching and Ethics Competitions** challenged participants. The visit to **Veli Tourist Village** provided a relaxing break by the beach at sunset. CLAP excelled in providing industry insights, and interactive contests, making it a highly beneficial event for IEEE members.
- **STEP'23 - Student Transition and Elevation Partnership** was conducted from 24th to 26th May 2023 at Government Engineering College Barton Hill, Trivandrum. The event was inaugurated by **Mr. Thomas Coughlin, IEEE President-Elect 2023**. There were various sessions on '**Open Source is the Next Best Career**', '**From concept to unicorn: Navigating the Startup Journey**' and a **Workshop and Activity on Team Building** handled by Ms. Fincy Yousuff, VP of Growth - Equip and many more. After these enriching sessions, the participants also got to indulge in solving an escape room where their team-playing and problem-solving skills were tested. STEP 2023 ended with an **experience-sharing and MD session** by the IEEE Kerala Young Professionals.
- **STEP 2.0** - In collaboration with IEEE Student Branch College of Engineering, Chengannur, STEP 2.0 was conducted on 23rd September 2023. The event had a total of 85 participants. There were a few sessions on "**IEEE Kerala Section and Student Transition**", "**Professional Pathfinders Navigating the Career Landscape**", and "**Tech Talk – Interview Strategies**". The event concluded with an interactive session, "Chit-Chat with YPs", which also included an ice-breaking session.
- **YP Talk** - The YP Talk Session on the **Basics of Circuit Theory** was successfully conducted on 19 May 2023. The session aimed to provide first-year engineering students with a solid understanding of the fundamental concepts in circuit theory. The event featured Sreehari A S, a PG student at the University of Liverpool, as the esteemed speaker. Throughout the event, participants actively engaged in the discussion by sharing their thoughts, asking questions, and sharing their own experiences related to circuit theory. In conclusion, the session proved to be a valuable and informative event.
- **YP Talk** - The "**Strategies to Crack EEE Jobs**" event, organised by IEEE PELS SBC GCEK, successfully took place on November 11th, 2023. The event aimed to provide insights into unlocking a **successful Electrical and Electronic Engineering career**. During the one-hour talk, Jacob Thomas Puthukeril, a seasoned professional in System Architecture Productization Software at Weatherford, shared valuable strategies and experiences.
- **YP Talk** - The "**Career in Semiconductor Industry**" talk was organised as part of the PELS Day Celebrations, which took place on June 25, 2023. The event garnered an overwhelming response, with more than **130 registrations** pouring in before the event. The keynote speaker for the event, Mr. Rony Alex Thomas, a distinguished figure in the semiconductor industry, took the stage and delved into the intricacies of semiconductor technology. It aimed to provide participants with insights into the dynamic and ever-evolving world of semiconductors, its diverse applications, and the exciting career prospects it offers.

### Women In Engineering (WIE)

- **Returning Mothers Conference 2023** - Collaborated with the IEEE Returning Mothers Conference. Prof Deepa A K, Vice Chair, Dr Anu Chacko, Secretary, Arundhathi, YP and Hridya A S Student Representative attended the Conference representing IEEE Kerala Section WIE AG.
- **IEEE WiECon-ECE** - The **9th edition** was jointly organised by WIE AGs of the IEEE Bangladesh Section and IEEE Kerala Section hosted at SCT College of Engineering, Trivandrum, and marked a significant gathering of global minds in the fields of electrical engineering and computer science. The conference featured various plenary talks, technical paper presentations, and panel discussions. Higher Education Secretary of Govt of Kerala, Mrs Ishita Roy IAS, inaugurated the conference.
- **WOMEN'S DAY**, in collaboration with Civil20 India '23, along with the aim of uniting all the SB AGs of IEEE WIE Kerala Section under the label **WIEbiela: WIE WEEK CELEBRATION 2023**. The program commenced on 6 March 2023 and concluded on 15 March 2023. Around **64 SB AGs** of the Kerala Section participated in the week-long event.
- **Net Zero Homes: Awareness Campaign for Women Champions**, in collaboration with IEEE PES Kerala Chapter and Poojappura Yuvana Samajam Library, organised an awareness campaign to **educate and empower women champions** about energy conservation, management, and renewable energy options for residential consumers.
- **Breaking Barriers: Unveiling the Glass Ceiling in Tech** - To celebrate **International Women in Engineering Day** on June 23, we organised a thought-provoking panel discussion to raise awareness about the industry's persistent glass ceiling and foster discussions to address this issue. The panel discussion aimed to empower women and promote inclusivity in the tech industry by bringing together professionals from diverse backgrounds.



- **Aerobic Session:** Where Fitness meets fun! - As part of the AKSC'23, IEEE WIE Kerala conducted an energetic aerobic session at TKMCE, Kollam. Aneena S John, a renowned Physical Education Teacher and a **Calicut University Boxing Champion**, led the session. With over **400 enthusiastic participants**, the event aimed to promote physical fitness and well-being through aerobic exercises.

### **Life Member (LM)**

- LMAG Kerala became one of the active OUs of IEEE worldwide with 85 events in 2023, the majority of which were in alignment with the visions of **IEEE Climate Change Technical Community** – a new initiative of Prof. Saifur Rahman.
- Collaborated with **20 local governments, 5 large hospitals, 15 higher education institutions**, Kerala SIGHT, WIE Kerala, and NGOs: Green Energy Forum, Nature's Green Guardians Foundation, Vakkom Moulavi Foundation Trust, PTB Trust, and several other Colleges in Kerala in organised the various events.
- LMAG has been trying to draw up a **Roadmap for the Journey towards Carbon Neutrality in Kerala** for the past year. Various programs were devised to get different sections of the population engaged in activities of '**net zero**' focus.
- Other Prominent Initiatives by LMAG Kerala are
  - **Women Empowerment** through Green Energy Promotion & Green Energy Micro-enterprises
  - Nucleating **R&D hub for AI** for Carbon Neutrality at TKM College of Engineering
  - '**AI Energy Challenge**' - Contest for Engineering College Students
  - Supported Publication of Book "Millennium Wireman (Malayalam)"
  - Technical Lectures by Keralite Experts living outside Kerala to LMs and others in the Section, in addition to regular technical discourses by LMs
  - Threw open opportunities to LMs having difficulties in travelling, in engaging in various events.
  - **Leadership Training** for College (all streams) Students
  - Participating as Nominated Members of **State Government Policy Making Committees** on Energy, Science-Technology and Environment, Edu-Tech Colloquium, etc.

## **B.6 Awards & Recognition Activities**

- Award constituted by the Section

<b>Public Awards</b>	
<b>KPP Nambiar Award</b>	<b>Dr. S. Somanath</b> (Chairman, Indian Space Research Organization)
<i>The KPP Nambiar Award is established in the fond memory of the founding chair of IEEE Kerala Section, Sri. KPP Nambiar. The award is given to a personality who has contributed significantly to the IEEE vision of "Advancing Technology for Humanity" through (1) Research and technology advancement (2) Popularizing the use of Technology (3) Applying Technology for the underserved.</i>	
<b>Amarnath Raja Humanitarian Award</b>	<b>Light the Life by Ms. Jawahara Fathima &amp; Team</b> (MACE)
<i>The Amarnath Raja Humanitarian Award is established in the fond memory of Sri Amarnath Raja, Past Chair of IEEE Kerala Section, recognising his outstanding contributions in the area of Humanitarian Engineering. The award consists of INR 75,000 and a plaque.</i>	
Outstanding Woman Engineer Award	<b>Ms. Athula Devi S.</b> (Deputy Director, Avionics Entity, ISRO)
Friend of IEEE Award	<b>Dr. P. V. Unnikrishnan</b> (Member Secretary, KDISC, Kerala Govt)
Outstanding Teacher Award	<b>Dr. Bos Mathew Jos</b> (Principal, MA College)
Outstanding Startup Award	<b>Open Financial Technologies Pvt. Ltd.</b>
Industry Academy Collaboration Award	<b>Synthite Industries Pvt. Ltd.</b>
Outstanding Researcher Award	<b>Dr. Jayaprakash P.</b> (Principal, GCE Kannur)
Outstanding Industry Contribution Award	<b>Dr. K. R. Suresh Nair</b> (Managing Director, Amar Raja Design Alpha)
<b>Professional Awards</b>	
Outstanding Volunteer Award	<b>Ms. Sunitha Beevi K</b>
Outstanding Young Professional Volunteer Award	<b>Mr. Joel John Kandathil, Mr. Thomas K Gimmy, Mr. Salih Yoosaf</b>
Outstanding WIE Volunteer Award	<b>Dr. Meenakshy K</b>
Outstanding Humanitarian Volunteer Award	<b>Ms. Adithya P Rajeev</b>
Outstanding LMAG Volunteer Award	<b>Mr. Suhair A</b>
Outstanding Society Chapter Volunteer Award	<b>Dr. Rahul Satheesh</b>
Outstanding Large Society Chapter Award	<b>IEEE Computer Society Kerala Chapter</b>
Outstanding Small Society Chapter Award	<b>IEEE Circuits and Systems Society Kerala Chapter</b>
Best Professional Event Award	<b>National Symposium On Emerging Technologies for Green Energy</b>

Student Awards	
Outstanding Student Volunteer Award	Ms. Neha Jasmin, Ms. Hridya A S, Ms. Chethana Raj, Mr. Navaneeth V Nair
Outstanding -Humanitarian Student Volunteer Award	Mr. Saiyad Ali Rapheeqe, Ms. Aleena Binu, Ms. Irene Alsa George, Ms. Malavika M M
Outstanding WiE Student Volunteer Award	Ms. Alna Maria Ben, Ms. Aleena K Shibu
Outstanding Branch Counsellor Award	Dr. Elizabeth Rita Samuel, Dr. Hari Kumar R
Outstanding Student Branch Award	IEEE SB College of Engineering Adoor
Outstanding Student Branch Award Kochi Hub	IEEE SB Mar Athanasius College of Engineering
Outstanding Student Branch Award Malabar Hub	IEEE SB Government Engineering College, Wayanad
Outstanding Student Branch Award Travancore Hub	IEEE SB TKM College of Engineering
Outstanding Student Branch Award (Special Mention)	IEEE SB Government Engineering College Barton Hill, IEEE SB College of Engineering Trivandrum, IEEE SB College of Engineering Chengannur, IEEE SB Adi Shankara Institute of Engineering and Tech, IEEE SB Government College of Engineering Kannur, IEEE SB NSS College of Engineering, Palakkad
Best Student Event Award	E Venture

- Please list all Awards and Recognitions received by the Section, and members in the Section, from R10 and IEEE HQ

Award Name	Award Winner
IEEE MGA YP Achievement Award	Mr. Albin Paul
Educational Society Edwin C Jones Meritorious Service Award	Mr. Abhinav R
Bozena Pasik Duncan Humanitarian Mentorship Award	Mr. Abhinav R
IEEE SPS Meritorious Regional/Chapter Service Award	Mr. Sarath S
IEEE WIE Inspiring Student Member of the year Award	Ms. Abirami Chandramouli
IEEE WIE Affinity Group of the Year Award	IEEE WIE Kerala AG
SPS Chapter of the Year Award	SPS Kerala Chapter
IAS Outstanding Chapter Chair Award	Prof. Bijuna Kunju K
IAS Outstanding Student Branch Chapter	College of Engineering Chengannur
IAS Continued Outstanding Performance SB Chapter	Rajiv Gandhi Institute of Technology
IAS Outstanding Student Branch Chapter Chair	Ms. Malavika S R
IEEE IAS CMD Humanitarian Contest 1st Prize	Mr. Vishnuraj A, MACE
IEEE IAS CMD Humanitarian Contest 2nd Prize	Ms. Radhika S Menon, ASIET
IEEE IAS CMD Humanitarian Contest 3rd Prize	Mr. Saiyad Ali Rafeek & Mr. Muhammed Safad P
IEEE CS Richard E Merwin Scholarship Spring 2023	Ms. Chethana Raj T, AJCE
IEEE CS Richard E Merwin Scholarship Spring 2023	Mr. Sujith Kumar A, CEA
Global Life Member Individual Service Award	Mr. Koruthu P Varughese
R10 Life Member Individual Service Award	Mr. Koruthu P Varughese
R10 Humanitarian Technology Activities Outstanding Section	IEEE Kerala Section
R10 Outstanding Volunteer Award	Dr. Bijuna Kunju
IEEE Larry K Wilson Regional Student Activities Award	Mr. Gokul C. M
CASS R10 Chapter of the Year Award	IEEE CASS Kerala Chapter
IEEE India Council Outstanding Student Branch	IEEE SB Mar Athanasius College of Engineering
IEEE India Council Outstanding Student Volunteer Award (3)	Mr. Muhammed Nifal C H, Ms. P K Harsha, Mr. Ajithabh Krishna P A
IEEE Regional Exemplary Student Branch Award (6)	IEEE SB Amal Jyothi College of Engineering, IEEE SB College of Engineering, Trivandrum, IEEE SB Government College of Engineering Kannur, IEEE SB Government Engineering College Barton Hill,

	IEEE SB Mar Athanasius College of Engineering, IEEE SB Sree Chitra Thirunal College of Engineering
Darrel Chong Student Activity Award (Gold) (4)	IEEE SB Amal Jyothi College of Engineering, IEEE SB College of Engineering, Karunagappally, IEEE SB Government College of Engineering Kannur, IEEE SB Rajiv Gandhi Institute of Technology
Darrel Chong Student Activity Award (Bronze) (4)	IEEE SB College of Engineering, Vadakara, IEEE SB LBS College of Engineering, Kasaragod, IEEE SB LBS Institute of Technology for Women, IEEE SB St. Joseph College of Engineering & Technology

## B.7 Communication Activities (Newsletter, Home Page, E-mail etc.)

- Newsletter (name and number of issues in the year): [IKS Newsletter \(4 per year\)](#)
- Home Page of the Section (give the URL and how often it is updated): <https://www.ieeekerala.org>
- Other means of contacts with Section members including social media:
  - Facebook: <https://www.facebook.com/IEEEKerala/>
  - Instagram: <https://www.instagram.com/IEEEKerala/>
  - Twitter: <https://twitter.com/IEEEKerala>
  - LinkedIn: <https://www.linkedin.com/company/IEEEKerala/>
  - eNotice



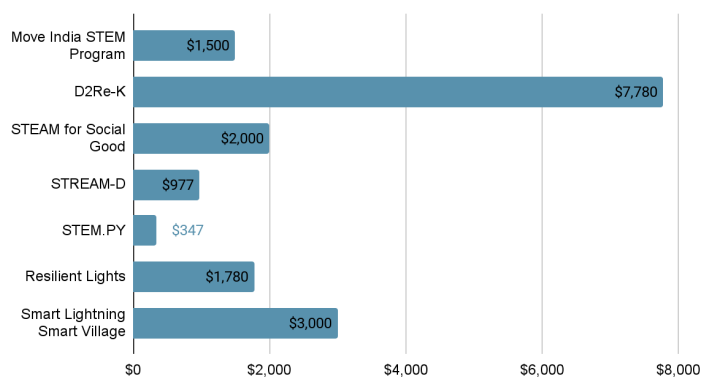
## B.8 Industry Relations

- [Launchpad Kerala 2023](#), the successor of the **IEEE Job Fair** series, was powered by IEEE Kerala Section and **GTech MuLearn**, sponsored by **Kerala Knowledge Economy Mission (KKEM)** and co-sponsored by the **National Institute of Electronics & Information Technology (NIELIT)**. The event paved the way for a total of **80 job offers**, with the highest annual salary reaching **7 LPA**. The candidates secured placements with esteemed organisations such as **Tata Elxsi, CareStack**, etc. As a result, Launchpad emerged as a resounding success, creating unprecedented opportunities for students that would have otherwise remained out of reach. This marks the significance of the event and highlights the pivotal role played by Launchpad in supporting the professional advancement of the students of Kerala. **Launchpad 2500 Participants, 800 Interviews, 400 Shortlisted, 80 Offers**
- [National Symposium on Emerging Technologies for Green Energy](#) - 2-day National Symposium was sponsored by various leading industries like **BPCL Kochi, Cochin Shipyard, Energy Management Centre Kerala, and KREEPA**, which featured panel discussions that offered attendees the opportunity to engage in discussions regarding the challenges and advancements in the field of green energy in light of increasing global concerns about the need for sustainable energy sources. The event had **146 participants, with more than 90 professionals**, providing ample networking opportunities.
- [R10 YP CLAP](#) was hosted with major industry collaboration with **UST Campus** in Trivandrum, which gave recent graduates (2022 pass-outs) & YPs a **firsthand glimpse into industry dynamics**. The UST Campus Tour showcased the **10-floor facility**, unveiling real-world corporate settings and innovative products from their labs. CLAP excelled in providing industry insights, informative sessions, and interactive contests, making it a highly beneficial event for IEEE members.
- **Bosch-IEEE EV Hackathon 3.0** - A landmark event in the **electric vehicle (EV)** innovation landscape, brought together more than **4000 participants** from renowned institutions such as IITs and NITs. This nationwide hackathon, in collaboration with **Bosch Global Software Technologies**, aimed to foster innovation and problem-solving in the rapidly evolving field of electric vehicles. The grand finale, held on November 11, was a star-studded event attended by key figures in the industry. **Mr. R K Shenoy, CTO and Senior Vice President (Mobility Engineering, BGSW)**, inaugurated the ceremony, emphasising the significance of such hackathons in driving innovation in the EV sector. Beyond being a platform for showcasing skills, the hackathon created avenues for participants to explore exciting opportunities, **including internships and potential employment at Bosch**.
- [Eventure](#) - An **EV Conclave** organised by IEEE IAS SBC AJCE in collaboration with IA/IE/PELS Jt. Chapter Kerala significantly benefited IEEE members in various ways. The event attracted over **100 participants**, offering a rich learning experience through hands-on workshops, a stimulating panel discussion and an **EV Expo spanning two days**. A key highlight was the **partnership with OLA, a leading EV company**, allowing participants to experience cutting-edge EV technology. **OLA's EV Expo**, featuring a **test drive opportunity** and a presentation, provided invaluable practical exposure that transcended conventional knowledge. **Renji V Chacko, Senior Director at CDAC**, and **Pradeep Kumar Keloth, Former Head of Engineering for EV Bosch**, shared their insights into the future of EV technology.

## B.9 Humanitarian Technology Activities

- **SIGHT CAMP'23 (D2Re-K)** - Kuthiralakudi village in Adimali was visited as part of IEEE SIGHT Kerala Section's SIGHT Camp 2023 on 17 May 2023. The objective of the visit was to analyse and study the issues faced by the village and formulate a project to help address those issues. A team under the guidance of an executive from the tribal department visited the village and conducted an oral survey and interaction with the natives, officials, and authorities.
- **STEM.PY** - A 16-hour **IEEE Try Engineering funded Python Workshop Series** in collaboration with the IEEE Education Society and IEEE SB NIT Calicut on 10 June 2023. The workshop's primary objective was to provide participants with a comprehensive understanding of **Python programming and its applications in STEM fields**.
- **SIGHT Congress 2023** - The first ever SIGHT Congress in Kerala was held on the 2nd and 3rd of September 2023 at CUSAT Kochi. The event showcased organisational dedication and participant enthusiasm, ensuring a resounding success in promoting innovation with a humanitarian perspective.
- **STEAM from Social Good** - STEAM for Social Good was a **6-day training programme** on IoT and app development + a 2-day-makeathon. The participants were divided into groups and asked to devise solutions based on **UNSDGs**. This one-of-a-kind venture **enabled pre-university students** to step into real-world problems and propose innovative, compact solutions for issues often unaddressed or not treated well.
- **IEEE SIGHT R&D Expo** - IEEE SIGHT RandD Expo, held at the TKMCE, Kollam, on September 17, 2023, was a landmark event that brought together distinguished guests, esteemed members of the IEEE community, and passionate enthusiasts of cutting-edge technology. The IEEE SIGHT RandD team, Kerala Section, is a pioneering force in Kerala, championing innovation and technological advancement. The event welcomed various visitors, including tech enthusiasts, distinguished IEEE members, and industry professionals. Notably, representatives from esteemed organisations such as **KMML and ANERT** graced us with their presence.
- **IEEE MOVE India STEM Program** - A dynamic and interactive two-day STEM activity was associated with IIT Palakkad, IEEE MOVE India, IEEE India Council, and the Institution's Innovation Council (IIC). The event aimed to foster an environment of learning and innovation by providing **hands-on training and workshops in various STEM domains**. One of the most notable achievements of the day was the manufacturing of **25 units of solar emergency mobile chargers**.

SIGHT Total Funding: \$14384



## B.10 Community Activities

- **IEEE Day** was celebrated at the Kerala Section Office in Trivandrum. Past Chairs and Senior members of IEEE Kerala Section shared the experiences of IEEE when they joined. The event was followed by dinner. A quiz competition named **"Inquisite"** was organized as a part of **IEEE Day 2023 by the LINK team**. The quiz was held on the official Instagram page of IEEE LINK and was based on **facts about IEEE**. It received a good amount of participation and was a grand success.
- **WOMEN'S DAY**, in collaboration with Civil20 India '23, along with the aim of uniting all the SB AGs of IEEE WIE Kerala Section under the label **WIEbiela: WIE WEEK CELEBRATION 2023**. The program commenced on 6 March 2023 and concluded on 15 March 2023. Around **64 SB AGs** of the Kerala Section participated in the week-long event. The week had a repertoire of 24 quintessential sessions, each with an appreciable strength of participants. The Mission and Vision of the event is to provide a platform for women to delve into and evaluate themselves in various domains in existence today. Also, to facilitate collaboration amongst all the SB AGs of the Section.
- **Shastra Vismaya** - Collaborated with IEEE SB College of Engineering Munnar to organise Shastra Vismaya for the **higher secondary and high school students of GHSS Devikulam, Munnar**. It was a one-day event hosted at the College of Engineering Munnar with two sessions: a water rocket building and an orientation session.

## PART C - OTHERS

### C.1 Special Events

- **Cyboisium** - India's **1st ever IEEE RAS Technical Education Program**, was the pinnacle of technical and non-technical events organized in collaboration with leading companies and organizations in the robotics and automation industry. It was conducted in a **span of 26 days**, in hybrid mode, from 19th March 2023 to 1st May 2023 with a total of **144 IEEE and non-IEEE members**. The main goal of the event was to help students grow technically in the field of robotics, with a primary focus on the courses. The event received a total of **\$24,998 in funding**.

- **All-Kerala Student Congress (AKSC) 2023**, held at TKM Engineering College in Kollam, marked a historic milestone by becoming the **largest IEEE section student congress ever**, with **over 1500 participants and 300 organizers**. The flagship event of IEEE LINK attracted attendees from **78 Student Branches and 6 colleges without Student Branches** across the state. AKSC, a techno-managerial extravaganza, aimed to enhance the technical knowledge of undergraduate participants by providing advanced workshops and fostering collaboration between students and industry experts. Notable sub-events, including **Fossify, workshops on solar PV design and MATLAB/Simulink**, and sessions on IoT and data science, covered a wide array of technical topics. AKSC 2023 successfully combined industry expertise with student enthusiasm, creating a platform for knowledge-sharing, skill development, and networking.
- Funding secured from the IEEE and external sources, including sponsorships

HEAD	INR	Dollar-\$
Total Amount received from Sponsorship	₹ 11,50,000.00	\$ 13,873.81
Total Amount Received from Global IEEE	₹ 2,74,07,307.00	\$ 330,646.72
Fund Released to the Student Branches	₹ 126,40,130.00	\$ 152,492.82
Fund Released to the Chapter	₹ 30,75,666.52	\$ 37,105.40
Total	₹ 4,42,73,103.52	\$ 534,118.75

Major Sponsors		Major Sponsors	
IEEE JobFair (Launchpad 202)		PESGRE 2023	
Head	Amount (in Rs.)	Head	Amount (in Rs.)
NIELIT Calicut	2,00,000.00	OPAL - RT	1,25,000.00
Green Energy Symposium		Mathworks	75,000.00
Head	Amount (in Rs.)	Nayak Power Systems	3,00,000.00
BPCL	2,00,000.00	Innovative Instruments Inc.	50,000.00
Cochin Shipyard-RCM	50,000.00	CDAC	75,000.00
Kerala Renewable Energy Entrepreneurs & Promoters' Association (KREEPA)	50,000.00	Quarbz Info Systems	50,000.00

## C.2 Relationship with National & International Societies & Non-Government Organizations (NGO)

- As part of the **Disaster Resiliency Project** funded by the Internet Society Foundation, IEEE India and IEEE Kerala Section has collaborated and **signed MOU with the General Education Department, Government of Kerala**. The project “Transforming Lives of the rural communities through the Power of the Internet, especially in disaster-prone villages across India”, was designed and implemented by IEEE India Philanthropy. The outputs of the program are to Install internet in 200 villages and the **Installation of 100 digital classes** across three states (Karnataka, Kerala and Bihar), **training 250 VLEs / VLTs (Village Level Technicians/ Entrepreneurs)** and **500+ junior technicians** extensively using translated BWCN (Building Wifi Community Network) course at BLP platform in **five languages**.
- **In partnership with InApp, the Amarnath Raja Humanitarian Technology Award** is established in memory of Sri Amarnath Raja, the Cofounder of InApp and Past Chair of IEEE Kerala Section, recognising his outstanding contributions in the area of **Humanitarian Engineering** and upliftment of underprivileged communities within society with Engineering solutions. The award's primary objective is to honour individuals or groups making significant contributions to Humanitarian Engineering, resulting in substantial improvements in the lives of the underprivileged. The award includes a cash prize of **Rs. 75,000 and a plaque/citation**.
- **MOU with K-DISC**: IEEE Kerala Section signed a Memorandum of Understanding with the **Kerala Development and Innovation Strategic Council (K-DISC), a Government of Kerala undertaking organisation**. This collaboration aims to establish a platform for technical and professional collaborations, fostering innovation and supporting the growth of the technological ecosystem in the region.
- IEEE Kerala Section has a long-standing relationship with other major professional societies in the state like **Computer Society of India, Aeronautical Society of India, Systems Society of India, Project Management Institute, Indian National Society for Aerospace and Related Mechanisms, Society of Aerospace Manufacturing Engineers, Indian Society for Training and Development, Internet Society, Society of Energy Engineers & Managers and Vakkom Moulavi Foundation**. Along with some of these bodies, the IEEE Kerala Section annually arranges weekly Technical/Professional talks on various topics on Wednesdays. **45 Inter-Society Talks** were held under the collaboration.

## C3. Collaboration with other IEEE Sections

- The **National Symposium on Green Energy** was held with the **IEEE Education Society Hyderabad Chapter**. Delegates from Hyderabad were supported and attended the 2-day Symposium in Kerala.
- IEEE Kerala Section was a **proud sponsor of the Returning Mothers Conference** held in Delhi in October 2023. Few WiE Kerala members were sponsored as delegates to attend the same.
- **IEEE WiECon-ECE** - The 9th edition was jointly organised by **WIE AGs of IEEE Bangladesh Section and IEEE Kerala Section** hosted at SCT College of Engineering, Trivandrum, marking a significant gathering of global minds in the fields of electrical engineering and computer science.

## C.4 Support extended to Sub-sections & Society Chapters within the Section

- The IEEE Kerala Section's Management Committee comprises the Section Chair, Vice Chair, Secretary, Treasurer, Immediate Past Chair, and the Chairs of two Subsections. This committee is responsible for financial and overall decision-making, **involving the participation of subsection chairs**.

- **Financial and technical backing** for activities organised by subsections and society chapters is provided by the Section. Support is granted for coordinating technical, educational, and professional events. New chapters are given funding, in addition to seeding funds provided by the society.
- **Funding Allocation:** INR 2 Lakh to each subsection, INR 25,000 to each Standing Committees. **INR 25,000 to INR 1 Lakh to each society chapters based on number of professional members to encourage more MD activities to professional members.**

### C.5 Best Practices of your Section

- The Section Executive Committee (ExeCom) actively involves the **Chairs, Vice Chairs, and Secretaries from all Subsections, Affinity Groups, and Society/Council Chapters**. In addition to Core Office Bearers, volunteers are assigned specific responsibilities, such as overseeing educational and professional activities. Former section chairs also serve as **members-at-large**. **Travel Allowance** is provided to Section ExeCom members attending meetings as representatives of the IEEE Kerala Section.
- Nomination Committees are established for each Organizational Unit (OU), with members in the GSM grade and above invited to submit nominations. Elections facilitated through **vTools Voting** are conducted if multiple candidates vie for a single post.
- An **Annual Award Ceremony** recognises outstanding contributors from Industry, Government, academia, and IEEE volunteers across categories.
- Annual **Volunteer Induction Programs** are organised for new ExeCom members, teaching them how to use **vTools**. New members and young professionals receive mentorship through senior section volunteers serving as advisors.
- The formation of the **Student Activities Board** guides student activities where student leadership is oriented and planning for the year is done at the beginning of the year involving student members across **108 active Student Branches (SBs)**. Student activities are coordinated through the **Local Integrated Network of Kerala (LINK)** and three Hubs representing different zones. The decision-making process includes student representation in sections, ensuring **diverse perspectives and inclusivity in governance**.
- Introducing the "**Section Interns**" (**IKS Interns**) concept, the IEEE Kerala Section involves them in assisting Office Bearers, ECC, Webmaster, and other Society volunteers to enhance member outreach and report activities to higher committees.

### C.6 Problems anticipated and suggestions for solutions, if any

- The imposition of **GST Tax on Membership Fees** has had a noticeable impact on the total membership count. The primary challenge faced by the Section is the retention rate of student members, with a notable decline during the transition to GSM/Membership status. Efforts made by MD volunteers in the previous year improved student members' retention rate.
- To enhance retention further, the Section is exploring avenues such as internships both within and outside the IEEE communities and **organising job fairs** to provide valuable opportunities for student members. These initiatives aim to make transitioning from **student membership to higher grades** more seamless and appealing.

## PART D - GOALS AND PLANS

### D.1 Continuation of project/activity in progress and their implementation plans

- The IEEE Kerala Section is committed to continuing the successful hosting of **LaunchPad, an IEEE Job Fair**, in collaboration with **GTech and MuLearn**. Anticipating participation from over **100 companies** across three locations in Kerala, the event aims to offer **internships to full-time job opportunities** for outstanding candidates.
- The Section is also gearing up for the **4th Edition of EV Hack**, a national-level hackathon in partnership with **BOSCH**. Building on the success of the previous three editions, where many students secured internship opportunities and full-time offers from Bosch, the upcoming edition seeks to empower further and connect talented individuals.
- Additionally, the IEEE Kerala Section is proud to host **two flagship international conferences, RAICS & SPICES**, in the coming year, providing a platform for knowledge exchange and networking.
- Efforts are also directed towards advancing **eligible professional members to Senior Members and Fellow grades**, with nearly 190 members elevated to Senior Members in the last two years.
- For 2024, the Section has set ambitious targets, aiming for 50% retention, 10% recovery, and 60% recruitment. The Membership Development (MD) team has been expanded, including a Chair, Vice Chair, Secretary, and Representatives from the Young Professionals (YP) Team, and MD team of the Student Activities Committee (SAC).
- Furthermore, the Section actively ensures the representation of **Kerala's Top 10 Largest Student Branches** in the **Student Activities Committee**, fostering strong engagement and collaboration.

## D.2 Goals and Future Plans

- **Professionalism Development:** Conduct workshops and seminars focusing on enhancing professional skills, ethics, and conduct within the community.
- **Educational Programs for Pre-University Students:** Introduce educational initiatives targeting pre-university students to inspire interest in STEM fields and provide career guidance.
- **Humanitarian Projects:** Undertake and promote more humanitarian projects to address community needs, contributing to social welfare and development.
- **Women Empowerment in Rural Areas:** Launch programs specifically designed to empower women in rural areas, providing education, skill development, and support for economic independence.
- **Membership Development Activities:** Implement strategies to attract new members, retain existing ones, and enhance the overall membership experience through targeted activities and benefits.
- **Entrepreneurship & Startup Guidance:** Kerala is known for startups and Entrepreneurship; a new committee is planned to support them through mentoring and allied support. This will bring in more members to the section and slowly grow industry involvement.

## D.3 Any innovative ideas to make IEEE more creative and value-added for sustaining the membership retention and recruitment goals.

- For the last two years, we have closely monitored membership growth, Retention, Recovery and Recruitment. The retention rate is much lower in the Member and Student Member categories.
- **Member Engagement for Professionals:** Organize networking events, industry talks, and professional meetups to engage and connect professional members.
- **Student Soft Skill Training:** Implement soft skill development programs and placement-oriented training for student members to enhance their employability.

## D.4 Business Plan for Sustainable Growth and Financial Stability.

The IEEE Kerala Section has emerged as a leader in membership growth, attaining one of the highest member counts among sections. Our commitment to financial discipline is reflected in adhering to local audit rules and following IEEE financial guidelines. To further enhance our effectiveness, we have outlined the following plan:

- **Professional Membership Growth:** Our focus is expanding professional membership by actively targeting student leaders from society chapters, encouraging their transition to Graduate Student Member (GSM) status and Young Professionals.
- **Elevation to Senior Members:** Recognizing the high retention rate of 90% or more for Senior Members, we aim to elevate members to this category, emphasising the importance and benefits it brings.
- **Enhanced Professional Member Interaction:** We plan to increase professional member interaction to foster engagement and retention. This includes creating avenues for involvement in IEEE activities and initiatives.
- **Funding-Related Workshops:** Conducting workshops on funding applications will empower members by providing insights into the process of applying for IEEE grants. This initiative aims to support activities through available financial resources.
- **Financial Discipline Training:** Emphasizing strict financial discipline, we plan to provide training sessions for all office bearers. This will ensure a comprehensive understanding of fund utilisation, promoting responsible financial management.

Through these strategic initiatives, the IEEE Kerala Section is dedicated to not only sustaining but further enhancing its leadership in membership growth and financial responsibility.

