

IEEE KERALA SECTION

ANNUAL REPORT -2018



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PART A - SECTION SUMMARY

A.1 EXECUTIVE SUMMARY

- **Section Executive Committee Member List**

Role	Name
Chair	Dr. S.M. Sameer
Vice Chair	Ms. Sarada Jayakrishnan
Secretary	Mr. Shahim Baker
Treasurer	Ms Jyothi Ramaswamy
Immediate Past Chair	Dr. Suresh Nair
Immediate Past Secretary	Dr. Bijuna Kunju K
Section Representative to IEEE India Council	Dr. Suresh Nair
Chair, Kochi Subsection	Dr. C.K. Aanandan
Vice Chair, Kochi Subsection	Mr. Sabarinath Pillai
Secretary, Kochi Subsection	Mr Paul Ansel
Chair, Malabar Subsection	Dr. Gopakumar A
Vice Chair, Malabar Subsection	Dr. S. D. Madhukumar
Secretary, Malabar subsection	Mr. Edet Bijoy K
Chair, Awards Committee	Mr. Satish Babu
Convener, Awards Committee	Mr. Shahul Hameed
Chair, Conference Activities Board	Prof. K. P. Mohandas
Convener, Conference Activites Board	Nandakumar R Nandanam
Advisor, Educational Activities	Prof. K. P. Mohandas
Chair, Educational Activities	Dr.B.Premlet
Secretary, Educational Activities	Nandan S
Electronic Communication Coordinator	Mr.Sridev Shyam K.V
Chair, Government Relations	Prof. V K Damodaran
Co-Chair, Government Relations	Muraleedharan M
Chair, Industry Relations	Mr.Varghese Cherian
Co Chair, Industry Relations	Mr.Aju Thomas Abraham

Inter Society Activities	Mr. J Muraleemohan Lal
Membership Development Chair	Mr. Ranjit R Nair
Membership Development Co Chair	Mr. Abey Easow Joseph
Chair, PIE (Promotion of Innovation and Entrepreneurship)	N.Krishnan
Co-Chair, PIE	Mr.Sandheep Vattappara
Chair, Professional Activities	Mr. Jayakrishnan M C
Publications	Prof. K Gopalan Nair
Public Relations coordinator	Mr.Joseph Joshy
SDLP Co-ordinator	Mr.Shanu N
Advisor, SIGHT	Mr. Amarnath Raja
Chair, SIGHT	Mr. Sasi PM
Secretary, SIGHT	Mr.Sarath Chand TP
Chair, Strategic Initiatives	Mr. Unni Sankar
Advisor , Student Activities	Mr. S Gopakumar
Chair, Student Activities	Mr. Sabarinath Pillai
Vice Chair, Student Activities (Travancore)	Nandan S
Vice Chair, Student Activities (Kochi)	Dr.Binu Paul
Vice Chair, Student Activities (Malabar)	Dr Ansar S M
Student Representative	Amrith M
Webmaster	Nithin RS
Chair, Consultant's Network	Mr. Satish Babu
Chair, Life Member AG	Mr. Hareendralal AG
Vice Chair, Life Member AG	Dr.Madhu Mangal
Secretary, Life Member AG	Mr. K Gopalan Nair
Chair, WIE Affinity Group	Ms. Mini Ulanat
Vice Chair, WIE Affinity Group	Ms. Laly James
Secretary, WIE Affinity Group	Aisha Nazia
Advisor, YP Affinity Group	Dr. Suresh Nair
Chair, YP Affinity Group	Mr. Bibin Parukoor Thomas
Vice Chair, YP Affinity Group	Nithin RS
Secretary YP Affinity Group	Thomas Sabu
Chair, Antenna & Propagation Society	Dr. Chinmoy Saha
Vice Chair, Antenna & Propagation Society	Dr. P. Abdulla

Secretary, Antenna & Propagation Society	Dr. Deepthi das Krishna
Chair, Circuits And Systems Soceity	Mr Jithin Krishnan
Secretary, Circuits And Systems Soceity	Mr.Dhanaraj K. J.
Chair, CS chapter	Mr. K.B. Senthilkumar
Vice Chair, CS chapter	Mr. Giles M.P
Secretary, CS Chapter	Mr.Jishnu K
Chair, Comsoc Chapter	Dr. Lillykutty Jacob
Vice Chair, Comsoc Chapter	B.S Vineeth
Secretary, Comsoc Chapter	Shankar J
Chair, Engineering in Medicine & Biology Soceity	Mr. Korothu P Varghese
Vice Chair, Engineering in Medicine & Biology Soceity	George C Paul
Secretary, Engineering in Medicine & Biology Soceity	Vivek George
Chair, IE, IA & PEL Chapter	Prof. Muhammed Kasim S
Vice Chair, IE, IA & PEL Chapter	Dr. Bijuna Kunju K
Secretary, IE, IA & PEL Chapter	Mr.Biju K
Chair, PES Chapter	Mr.Suhair A K
Vice Chair, PES Chapter	Ms Sunitha Beevi K
Secretary, PES Chapter	Mr.Jaikrishnan
Chair, Robotics and Automation Society	Dr. Mithun Bhaskar
Vice Chair, Robotics and Automation Society	Dr. Jisha V. R.
Secretary, Robotics and Automation Society	Dr.Bijilash Babu
Chair, Signal Processing Society	Dr Suresh K
Vice Chair, Signal Processing Society	Krishnakumar S
Secretary, Signal Processing Society	Mr. Edet Bijoy K
Chair, SSIT Chapter	Mr. Amarnath Raja
Secretary, SSIT Chapter	Mr.Ranjit R Nair
Chair, RFiD Council Chapter	Mr Jithin Krishnan
Member At Large	Prof. Gomathy K Muraleedharan
Member At Large	Mr. N T Nair
Member At Large	Mr. G Vijaya Raghavan
Member At Large	Mr. N.A.P. Thampy
Member At Large	Mr. E E Rajakumar

Member At Large	Mr. Srinivasan R
Member At Large	Dr. A K Unnikrishnan



● Section Highlights

- Kerala Section celebrated the 35th Anniversary of formation.
- Kerala Section received highest amount (\$5000) as Incentive from R10 for 2018 Activities. Received an additional amount of \$5000 as incentive towards the Flood Rescue & rehabilitation activities undertaken by the section
- Global Awards Received by 3 Chapters of Kerala Section- LMAG, APS, PES
- 2 MGA Volunteer Awards -Sabarinath Pillai & Nithin RS
- 1 India Council Award -Er.Hareendralal
- Conferences/ Major events - WiE ILS, RAICS , Mini PoCo
- Membership Rankings:
 - Ranking in India: No: 2
 - Ranking in R10 : No.3
 - Global Membership Ranking : No.5
- Third position in IEEE R10 retention award
- Active Involvement in Kerala Floods Rescue & Rehabilitation Activities

- Were able facilitate opportunities for Students to receive job offers via coding competition and job fairs

- **Major Events (International, National)**

- WiE ILS
- RAICS
- Mini PoCo

- **Women In Engineering International Leadership Summit**

IEEE WIE ILS 2018, the 2-day leadership summit of IEEE WIE was held at the picturesque location of the Le Meridien Hotel, Cochin, Kerala, India, in the presence of an eminent group of dignitaries, delegates and leading lights of the society, along with various national & international establishments, on September 7th and 8th 2018. For the summit, IEEE Kerala Section selected the theme 'emPOWERing TOgetHER' in the light of its relevance in the global push to improve women's rights, at the anniversary of the #TimesUp movement that swept across the world. More details of the event available [here](#)



- **RAICS 2018**

This flagship conference of IEEE Kerala Section was held on December 6th -8th , 2018 at Mascot Hotel, Thiruvananthapuram. This year the theme was “Smart Systems for a Smarter World”

Tracks included :

1. Data Analytics and Machine Learning
2. Internet of Things
3. Healthcare: Devices, Systems and Technology
4. Robotics, Automation and Control
5. Signal Processing
6. Energy Systems
7. Computational techniques for engineering applications
8. Technologies for societal applications

260 Papers were received and 63 Papers were accepted to be presented. (24.2% Acceptance Ratio)

- **IEEE Mini POCO 2018**

IEEE Kerala Section In Association with IEEE Region 10, IEEE India Council and IEEE Malabar Subsection organized a mini Panel of Conference Organizers workshop on 10th November 2018. The workshop was well attended with 64 registered participants including two nominees from IEEE Kolkata section. Potential conference organizers deputed from more than 25 engineering colleges in Kerala attended the workshop. More details and photos of the event available [here](#)

- **Awards**

- MGA 2018 Life Member AG Award: “Awarded to the Kerala LMAG for its service to society through a broad range of activities and engagement of Kerala IEEE members.”
- APS BEST CHAPTER AWARD: Awarded to Kerala APS Chapter for 2017 Activities, awarded on 2018
- Outstanding PES Chapter Award : Won by Kerala PES Chapter for 2017 activities, received on 2018
- IEEE Region 10 Exemplary Student Branch Award 2018: Won by College of Engineering, Karunagappally
- IEEE India Council Outstanding Volunteer Award : Awarded to Er. Hareendralal, Senior Member and Volunteer of IEEE Kerala Section

- 2018 MGA Young Professional Achievement Award won by : Er. Sabarinath Pillai and Er.Nithin RS of Kerala Section

- **IEEE Day Celebrations:**

IEEE Day was celebrated at various parts of Kerala. The details of celebration at Northern region of Kerala is listed [here](#). At the central region of Kerala (Kochi) a celebration was followed after a Technical Talk. Details of the event is given in the [link](#). At the Southern Region-Thiruvananthapuram, IEEE Day was celebrated along with IEEE SIGHT Chair, Dr.Daniel Lottis. Details are listed [here](#)

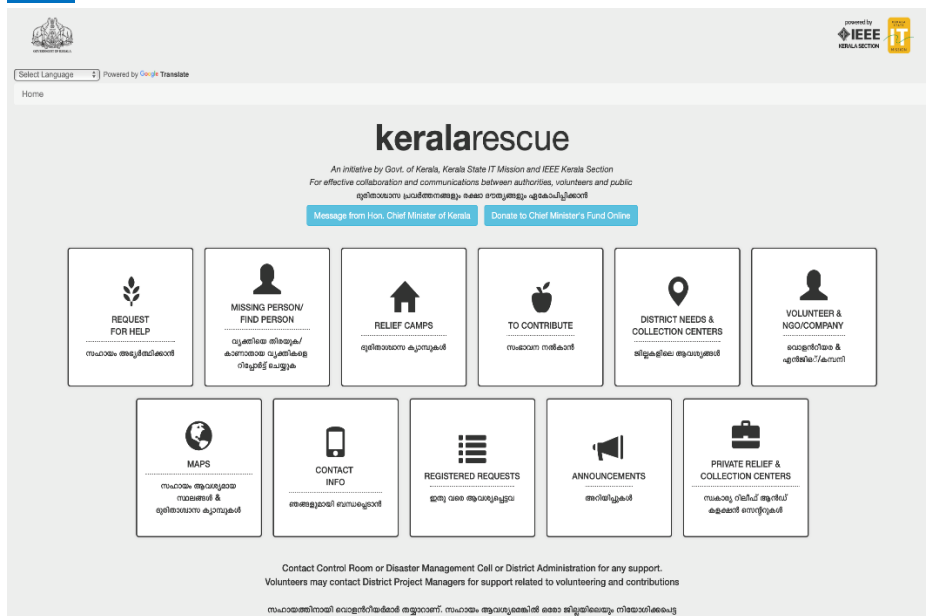
- **Rescue and Rehabilitation Activities Done by IEEE Kerala Section in Connection with the Kerala Floods in August 2018:**

Kerala State in India had one of the worst floods in History in the month of August. Between 8 and 10 August, the state received 256 percent more rainfall than normal, reported at 310 mm of rain in the first 24 hours, which is double the average amount for the entire month of August. About 370 people have died and 33,000 people have been rescued. Over 3,274 relief camps have been opened at various locations to accommodate the flood victims. It is estimated that 1.2 million people had found shelter in such camps. The flooding has affected hundreds of villages, destroyed an estimated 10,000 km (6,200 mi) of roads and thousands of homes have been damaged or destroyed. Most of the households had their electricity cut and electrical wiring rendered useless.

- The volunteers of IEEE Kerala Section, which is known for its generous humanitarian work, got active and were in the forefront for disaster relief. We took-up numerous innovative uses of technology for rescue and rehabilitation apart from many other volunteering efforts at the grass root level. Some of the important projects taken-up by Section volunteers are outlined below. Detailed reports are available in the section website in the corresponding web links.

- Over 55,000 registered volunteers
- Over 45,000 help requests
- Over 17 Million hits on the website
- Over 1.2 Million people in camps
- Setup Over 4000 flood relief camps across the state
- over 1000 commits
- over 1900 users in slack
- **ZERO outage** during 2 weeks of operation

A detailed report of the background and activity cycle of the site which became the official portal of Government of Kerala for rescue and rehabilitation is available [here](#).



ii. Project “Watts and Water- JalajyothiIEEE”

Most of the submerged buildings had their electrical wiring soaked and unusable. In order to reconnect the wires to the grid most of the wiring had to be redone. At a discussion with the Kerala State Electricity Board (KSEB), IEEE Kerala Section members put forward a plan to develop a temporary connection board to which the grid could be reconnected. This will cost as low as \$40 for quickly getting the grid back on-line. This design and method put forward by Section was accepted by KSEB. IEEE Kerala Section provided 500 such boards to the poor and needy community out of 300 boards were sponsored by National Institute of Technology in Tiruchirappalli. A detailed report of the project can be found [here](#).



iii. **Distribution of Medicines**

Kerala Section volunteers joined hand with AmeriCares India foundation, a non-governmental organization, for distributing 110 cartons of medicines and chlorine tablets to the people occupied in disaster relief camps across the state.

iv. **Mission Re-connect Project**

The IEEE Student branch in TKM College of Engineering along with the alumni and faculty associations of the college also has distributed 610 temporary electrification boards which section has designed to re-connect to the grid. A detailed report of the initiative is available [here](#).

v. **Project Candela & Power Banks**

As electric power supply was not available in flood affected areas, two important needs of people in relief camps were emergency lamps and facility for charging their mobile phones (low cost power banks). Many IEEE student branches and volunteers across the state have contributed to these projects. A gist of some of the activities can be found [here](#).

- **Strategic Partnership with Governmental Agencies:**

Being a pioneer professional organization in Kerala, IEEE has good rapport and official tie ups with various government bodies.

- IEEE Kerala Section has long term association with the State owned Power Utility KSEB. In 2018, along with KSEB and IEEE Kerala Section PES Chapter, Kerala Section organized a Series of Seminars and Project Paper competitions.
- IEEE Kerala Section, through its PES Chapter has joined hands with the govt agency - ANERT (Agency for Non-conventional Energy and Rural Technology), for conducting solar panel installation training for students.
- Tie Up with Energy Management Centre, another governmental agency in Kerala has helped in conducting Energy management workshops for the benefit of the public.
- IEEE Kerala Section is maintaining continuing relationship with Kerala StartUp mission to promote Entrepreneurship among Engineering students in Kerala.
- IEEE Kerala Section is helping C-Sis (Centre for Science in Society) at Cochin University of Science & Engineering.
- Kerala Section has been associating with IT Mission, the nodal IT implementation agency of government of Kerala. During the recent floods, this partnership resulted in saving hundreds of lives and helping thousands of flood victims. IEEE volunteers developed a portal for coordinating the flood relief and rescue operations, and with the help of IT mission, this portal was declared by the government as the official site for coordination of flood related activities.
- Another partnership that became useful at the time of flood was the one with KSEB. IEEE Kerala Section designed and supplied temporary electric connection boards to be installed at flood affected houses to reconnect electricity by KSEB.

A.2 FINANCIAL REPORT

The summary of financial activities of the Section as per audited report presented in AGM is as below

Balance Sheet Generated from Netsuite

Financial Row	Amount
Current Assets	
Bank	
70199 - Indian Overseas Bank KERALA	Rs.65,54,320.95
72242 - KERALA Petty Cash	Rs.460.00
Total Bank	Rs.65,54,780.95
Total Current Assets	Rs.65,54,780.95
Current Assets Less Current Liabilities	Rs.65,54,780.95
Total Assets Less Current Liabilities	Rs.65,54,780.95
Long Term Liabilities	
74246 - Reserve Allocation Payable	Rs.2,37,658.29
Total Long Term Liabilities	Rs.2,37,658.29
Total Assets Less Total Liabilities	Rs.63,17,122.66
Capital and Reserves	
Retained Earnings	Rs.16,01,839.51
Net Income	Rs.47,15,283.15

Total Capital and Reserves	Rs.63,17,122.66
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PART B - ORGANIZATIONAL ACTIVITIES

B.1 MEMBERSHIP DEVELOPMENT ACTIVITIES

Member Grade	2016	2017	2018
Life Members	13	16	17
Senior Members	131	127	142
Members	939	875	820
Associate Members	40	39	35
Graduate Student Members	617	531	394
Student Members	6170	7488	6583
Total	7910	9076	7991

- Organized Membership development sessions at **76** student branches each of the session with a participation of more than 100 students
- Conducted industry interaction programs at various companies which helped in the recruitment of professional members.
- Training on OU analytics was given to Section Society Chapter office bearers, branch counsellors and student branch office bearers
- Achieved the third position in IEEE R10 retention award for exceptional membership retention.
- **No. 2** in India and **No. 4** in R10, in terms of membership, as of December 2018
- Conducted 87 Membership Drives all over Kerala Section in 2018

B.2 CHAPTER ACTIVITIES

- Total number of Chapters in the Section :10
- IEEE Kerala section is having independent chapters of APS, Computer Society, CAS, ComSoC, EMBS, PES, RAS, SPS and SSIT and a joint chapter of IAS/IES/PELS
- Number of Chapters formed in the current year: 0
- Number of active Chapters (Chapters who have reported required number of meetings during the year): 9
- Summary of Chapter activities (Chapter wise with attachment table/information):

Antenna And Propagation Society

- IEEE APS Lecture IEEE APS Lecture by Dr. Deepti Das Krishna, CUSAT at the Dept of Physics, Maharaja's college, Ernakulam on Applied Electromagnetics
- IEEE APS Programme for School Students IEEE APS Programme for School Students Lecture cum Demonstration to Higher Secondary school students in Fundamentals in Electronics Govt Higher Secondary School,
- IEEE APS Invited Lecture series by Prof. Jean-Marc Laheurte
- IEEE APS Invited Lecture series by Prof. Jean-Marc Laheurte University of Paris-Est Marne-La-Vallée, France & DST VAJRA Adjunct Professor, Department of Electronics, CUSAT Prof. Laheurte delivered a series of Lectures in the Department of Electronics, CUSAT as well as at the Department of Physics, Maharajas College, one of the oldest and prominent Government College in the city of Ernakulam.
- One day session on "Multi-functional Antennas for Cognitive Radio Applications" Venue: Indian Institute of Space Science and Technology (IIST), Trivandrum Date: 27th of March, 2018 The seminar was organized on 27th of March, 2018 (Tuesday), at the Indian Institute of Space Science and Technology (IIST), D3 Building, Trivandrum where Mr. Latheef A. Shaik, Scientist, Space Application Centre (SAC) ,ISRO, Ahmedabad handled a one day session on "Multi-functional Antennas for Cognitive Radio Applications". The event was attended by the staff and students of IEEE SB at IIST Trivandrum.
- A seminar talk on "Antenna Design for 5G Wireless Standards: Current Status and Future Prospects" Venue: Lourdes Matha College of Science and Technology, Trivandrum Date: April 27, 2018 The seminar was hosted on April 27, 2018,

Seminar Hall, Lourdes Matha College of Science and Technology, Trivandrum where Dr. Mohammad S. Sharawi, Professor, King Fahd University of Petroleum and Minerals, Saudi Arabia delivered a seminar talk on “Antenna Design for 5G Wireless Standards: Current Status and Future Prospects”.

- A seminar talk on “COMSOL- A case study” Venue: Department of Electronics Auditorium, Cochin University of Science and Technology, Cochin Date: May 15, 2018 The hands on workshop was held on May 15, 2018 at the Department of Electronics Auditorium, Cochin University of Science and Technology, Cochin. The workshop showcased the capabilities of COMSOL, case study analysis and how COMSOL can be used for teaching and research across various departments such as electronics, chemical, mechanical, civil, communication and other allied disciplines. It was followed by a live demo to set up a model using COMSOL. This was organised in collaboration with Department of Electronics, Cochin University of Science and Technology and COMSOL Multiphysics Pvt Ltd, Bangalore.
- A two day workshop on “MoM based IE3D software” Venue: Department of Electronics Auditorium, Cochin University of Science and Technology, Cochin Date: 25 & 26 of June, 2018 The hands on workshop was organized on the 25 and 26 of June, 2018, Department of Electronics Auditorium, Cochin University of Science and Technology, Cochin. This event was conducted in collaboration with the Division of Electronics, School of Engineering, Cochin University of Science and Technology and Trident Techlabs Pvt Ltd., Bangalore. The two day workshop involved hands on session of the latest version of the MoM based IE3D software. Several HF designs for antennas, filters, FSS and their simulations were demonstrated and discussed. Both the workshops were well attended from the research scholars, PG students and faculty members from CUSAT as well as other neighbouring institutions across Kerala.
- IEEE APS Invited Lecture series by Prof. Jean-Marc Laheurte, University of Paris-Est Marne-La-Vallée, France Venue: Department of Electronics Auditorium, Cochin University of Science and Technology, Cochin Date: 23rd, 25th of July, and Aug 9, 2018 The first of his talk was on the 23rd of July, 2018 at the Department of Electronics, CUSAT on the research topics around UHF RFID antennas
- IEEE APS Invited Lecture series by Prof. Jean-Marc Laheurte, University of Paris-Est Marne-La-Vallée, France Venue: Department of Physics, Maharajas College, MG University Date: Aug 9, 2018 On Thursday, Aug 9, 2018, Prof. Laheurte delivered an invited lecture for the PG students, Research Scholars and Faculty of the Department of Physics, Maharajas College, MG University. The title of the talk was “Antenna fundamentals: Physics, applications and current challenges” and during which he presented the fundamentals of antennas to a non-expert audience with a good background in physical science or electronic engineering. The physics

of the radiation process was explained as well as the main parameters characterizing a radiating element. Various topologies of antennas was depicted as well as the main applications in telecommunication, tele-detection or EM field sensing. Examples of nowadays challenges in the antenna technology was described. More specifically, the requirements for miniaturization and embedding in the context of the Internet of Things (IoT) was emphasized.

- Lecture cum Demonstration to Higher Secondary school students in Fundamentals in Electronics Venue: Govt Higher Secondary School, Kuttamassery, Aluva Date: Aug 14, 2018 IEE APS Programme for School Students Lecture cum Demonstration to Higher Secondary school students in Fundamentals in Electronics Govt Higher Secondary School, Kuttamassery, Aluva by Mr Resel PP, from CUSAT and also an Amateur Radio Enthusiast.
- Lecture on Applied Electromagnetics Venue: Department of Physics, Maharajas College, MG University Date: Sept 7, 2018 IEEE APS Lecture by Dr. Deepti Das Krishna, CUSAT at the Dept of Physics, Maharaja's college, Ernakulam on Applied Electromagnetics. In the program, Dr. Krishna gave a glimpse of the fundamental equations that defines the world of electronics along with their applications in the real world. It was attended by PG students and research scholars.
- IEEE APS Seminar Lecture on Installation and Commissioning of Ground Station in Polar Region for LEO Satellites Data Reception Venue: Indian Institute of Space Science and Technology (IIST), Trivandrum Date: Sept 11, 2018 IEEE APS Kerala Chapter, IEEE IIST Student Branch and IEEE APS SB Chapter jointly hosted the IEEE APS Seminar Lecture on "Installation and Commissioning of Ground Station in Polar Region for LEO Satellites Data Reception" September 11'2018. The talk was delivered by Mr. Sandip Sankar Roy, Senior Scientist, National Remote Sensing Centre, Hyderabad, Indian Space Research Organization, India and was well attended research scholars, PG and UG students from various academic and research organization. Picture below shows the speaker along with chapter officers and participants.
- Awareness Programme on IEEE and Activities of IEEE AP-Society on September 14'2018 during IIST Day Celebration Venue: Indian Institute of Space Science and Technology (IIST), Trivandrum Date: Sept 14, 2018 IEEE APS Kerala Chapter, IEEE IIST APS Student Society Chapter and IEEE IIST Student Branch joined hands together to organize 'Awareness Programme on IEEE and Activities of IEEE APS- Kerala Chapter' along with a demonstration of basic ideas/model on Antennas and Propagation on September 14 2018 for Scholl students, mainly from XI-XII standard level. The event was organized during IIST Day Celebration on September 14'2018 and was attended by more than 1000 students from various schools around Trivandrum and other parts of Kerala. A group of M.Tech. and PhD

students of IEEE IIST students branch with guidance of faculty members, explained /discussed the diversified role of IEEE on technical education, standardization and social/ humanitarian activities. Another group of students demonstrated various fundamental concepts of EM engineering and various antennas through posters and hardware experiments. Pictures below shows various activities of the day highlighting technical demonstration, poster demonstration and discussions.

- IEEE APS, Kerala Section: Meet & Interact Program Venue: Department of Electronics Auditorium, Cochin University of Science and Technology, Cochin Date: 3rd Oct, 2018 Ambient intelligence: adaptivity by using artificial intelligence, Machine learning, and biometrics in worldwide cloud-based environments Prof. Vincenzo Piuri, FIEEE Department of computer Science Università degli Studi di Milano, Italy This talk looked at the opportunities offered by technologies to support the realization of adaptable operations and intelligent services for smart living in an ambient intelligent infrastructures. Faculty members and students in and around CUSAT, Cochin attended and interacted during the forenoon of 3rd October.
- IEEE APS, Kerala Section: Meet & Interact Program Venue: MBCET and Vakkam Maulavi Foundation Trust, Trivandrum Date: 4th Oct, 2018 Ambient intelligence: adaptivity by using artificial intelligence, Machine learning, and biometrics in worldwide cloud-based environments and Advanced Biometric Technology and its Humanitarian Applications Prof. Vincenzo Piuri, FIEEE Department of computer Science Università degli Studi di Milano, Italy
- One day Faculty Development Program and Technical Seminar on “Digital Techniques in Microwave System Configuration” Venue: ST Thomas College for Science and Technology, Trivandrum Date: 29th Sept, 2018 A technical Seminar on “Digital Techniques in Microwave System Configuration” was organized by the department of Electronics and Communication, St. Thomas Institute for Science and Technology in association with the Institute of Electrical and Electronics Engineers (IEEE) Antennas and Propagation (AP-S), Kerala Chapter on September 29th, 2018 at STIST campus. The program was conducted as the part of FDP and Technical seminar with the support and sponsorship from IEEE APS Kerala Chapter. Dr. T.J. Apren, Professor, STIST, initiated the idea of conducting the program in the college. Dr. Chinmoy Saha, Chairman IEEE APS Kerala Chapter, was the distinguished speaker for the day. Dr. Chinmoy Saha, IIST, Trivandrum, Dr. Basudeb Ghosh, IIST, Trivandrum, Dr. TJ Apren, Ex. VSSC, ISRO, Ms. Shirley Joy Head, RF Systems Division, AVN/VSSC, ISRO and Mr. R Krishnan, Director, Ananth Technologies Ltd talked on various aspects of state of the art Microwave Systems and modern applications. Nearly 65 participants from

STIST, IIST, VSSC and from other institutions include Government Engineering College, Barton Hill, Trivandrum and ACE College of Engineering Trivandrum, participated in the IEEE AP-S technical seminar. As a part of the FDP and Technical seminar sponsored by IEEE APS Kerala Chapter, the students of STIST were introduced to the IEEE APS Students Kerala Chapter in the college. Many students showed enthusiasm and interest in joining the same. The chairman of the IEEE APS Kerala Chapter has ensured full support, co-ordination and sponsorship for future endeavors in the college. The program was truly enlightening, inspiring and an enriching experience.

- Industrial Visit to ISRO Propulsion Complex Conducted by: IEEE APS Kerala Chapter and IEEE SB GEC, Barton Hill Date: 27th Oct, 2018 The one day industry visit to IPRC, Mahendragiri was organized by IEEE SB GEC Barton Hill & IEEE APS Kerala chapter under the leadership of Mr. Anu Mohamed, Assistant Prog. GEC, Barton Hill and Dr. Chinmoy Saha, Chapter Chair IEEE APS Kerala chapter. The journey started at 5 AM on October 27 2018 with 40 students from GEC Barton Hill & Indian Institute of Space Science & Technology. Students were thrilled to visit and get acquainted with various facilities and activities like, high altitude facility (HAT) for spacecraft motor (liquid apogee motor), its exhaust flow, 3rd stage of GSLV rocket motor nozzle, lander platform for the upcoming Chandrayaan mission and associated technologies. A video demo of actuating CUS motor at HAT facility (GSLV 3rd stage) was shown to students at MACC center
- Nov 12: Technical poster competition on antennas for space application
- Dec 3-5: The International Symposium on Antennas & Propagation (APSYM)
- Dec 6-8: IIWE 2018
- Dec 21: ISAW 2018

The details of the activities conducted along with Antenna and Propagation Society Chapter are listed [here](#)

Circuits And Systems Society

- Workshop on **SCADA**
- PCB Designing and Fabrication Workshop held in association with CAS Society Chapter, IEEE Kerala Section, during IEEE Travancore Hub Meet
- Embedded Project challenge as a part of 8th **International Symposium on Embedded Computing and System Design**
- Workshop on ‘Simulation bench to product space ‘
- Technical talk on High speed systems and design considerations.

- Technical talk on BioCAS - Bio instrumentation systems

Computer Society Chapter.

- Chapter chairs Meet Date: 03/02/2018 Venue: IEEE Kerala section office, Trivandrum
- Tech Talk on BIG DATA & High-Performance Computing in collaboration with CSI Kochi Chapter. Overview of HPC and Big Data platform, Integrating HPC to HADOOP, HPC Programming models for Data SPEAKER Prof. Binu A
- SAATHI is about being a companion, co-traveller and a facilitator encouraging girls to use their abilities to get involved in technical industry and make them aware of the vast pool of opportunities available to them.
- Webinar on AWS
- Amazon Web Services (AWS) is a secure cloud services platform, offering computing power, database storage, content delivery and other functionality to help businesses scale and grow.
- WEBINAR ON DATA PROTECTION AND SECURITY In this digital era, protecting data from compromise and data privacy have become more important than ever before. This webinar will provide an overview on Data leak through social media
 - Risk using Open Wi-Fi Mobile OS security ATM cards and Netbanking
- WEBINAR ON Dev-Ops DevOps is the practice of bringing together operations and development teams in the entire life cycle right from designing to production support. If done well, it can lead to a continuous loop where teams plan, develop, test, deploy and monitor to deliver better software quicker. Speaker: Amal Dev of UST Global
- WEBINAR ON INTERNET AND PRIVACY This webinar, organized by IEEE Computer Society, Kerala Section and Internet Society-Trivandrum Chapter (ISOC-TRV), aims to highlight the basic issues involved in privacy, the role of a data protection framework such as GDPR, and its impact on individuals and organizations, all from a novice's perspective.
- Webinar on GDPR
- Workshops conducted on :
 - Blockchain,
 - cyber security
 - cyber forensics
 - AR
 - VR
 - ML
- Talks on

- Neural Networks
- Artificial Intelligence
- Competitive Coding
- Digital Marketing
- Open source platforms

Communication Society Chapter

- Workshop on Women in Cybersecurity 18
The workshop served as a venue for women teachers, research scholars, post graduate students and corporate professionals across India to exchange their ideas and best practices in Cybersecurity. The two day workshop imparted novel ideas and enlightening sessions by eminent speakers from renowned institutions in and outside India.
- ADCOM Meeting #2- Online [Minutes of webex Meeting 2018](#)
- Webinar How Autonomous Car Perceive its environment Driver-less cars, which were hitherto limited only to sci-fi movies, are fast becoming a reality. Autonomous vehicles are expected to play a pioneering role in alleviating the problem of traffic congestion, in lowering pollution levels and in preventing accidents. An autonomous vehicle uses body-mounted sensors to detect and respond to changes in its environment. Relying on the feedback from the sensors, it responds to obstacles on the road, avoids collisions and ensures adherence to traffic rules. The sensors used by such vehicles range from ultrasonic sensors to radar, Lidar and image sensors. The discussion covers the application of various perception sensors in the autonomous vehicle.
- IEEE COMMUNICATION SOCIETY STUDENT BRANCH CHAPTER INAUGURATION @MACE Kottamagalam Mrs. Nommy Paul, Assistant General Manager, Vodafone Idea Limited, Kerala Technical Talk on the Topic: 4G and Beyond.
- SMART HEALTHCARE: CHALLENGES AND OPPORTUNITIES Smart healthcare has become a significant development to support the aging population who are susceptible to many chronic illnesses, and in easing the struggle by the younger people from various abuses and lifestyle diseases. Smart healthcare technologies such as iot are instrumental in the prevention of diseases and early

diagnosis of the symptoms of diseases. This talk explores these new technologies and investigates how they contribute to the objective of the high-value health system for all, and addresses the opportunities and challenges in deploying smart healthcare technologies. Prof M P Sebastian Professor IT & Systems at Indian Institute of Management Kozhikode.

- IEEE COMMUNICATION SOCIETY STUDENT BRANCH CHAPTER INAUGURATION @UKFCET, Paripally IEEE comsoc Student Branch Chapter has been inaugurated on 12th October 2018 at 10.30 am by the chief guest Mr. Hemachandran S, Deputy Director, ISRO Inertial Systems Unit, ISPE.
- Future of Advanced Driver Assistance Systems and Autonomous Cars 2018 The session that was handled by Ms. Anjana P Das as a part of Ignite 4.0 was on the topic Future of Advanced Driver Assistance Systems and Autonomous Cars . The session went through the basics of Autonomous cars and went in through the application and the issues being faced in that area. Advanced driver assistance systems (ADAS) was then discussed and its application in auto-nomos cars was nicely described. The session went through a case study in America where the sector of autonomous cars is fast developing. The session guided the participants through a new future where the autonomous cars replace the conventional car
- Distinguished Lecture Talk “Data Center Networking” The distinguished lecture titled “Data Center Networking” was handled by Dr. Suresh Subramaniam, Professor and Chair, Department of Electrical and Computer Engineering, George Washington University. A total of 64 members (with 43 IEEE members) have attended the programme including Dr. Lillykutty Jacob (IEEE ComSoc Chapter Chair, Kerala Section), Dr. A. V. Babu (IEEE ComSoc Student Branch Advisor), Execom members of the Student Branch, faculty and student IEEE members. A live streaming of the whole programme was also arranged at <https://comsoc.ieeekerala.org/dlpjuly18/> by Shijon Joy & Dharanee Dharan of IEEE NITC SB with the support of Sridev Syam and Shankar Jayaraj of IEEE Kerala Section, for viewers outside NITC.
- LiFi Workshop – KHM The workshop was taken by Mr. Thomas Sabu from Neo Green Labs, a member of the IEEE Kerala Section’s Young Professional Community. Mr. Thomas began the workshop at around 10 AM at Chanakya Hall, TIST with an introduction to the LiFi technology and explained about it’s applications and scope. This was followed by a hands-on training in the same. The workshop was attended by 48 delegates from various institutes across the state. The workshop was interactive and engaging. It came to a close at 5 PM with a feedback session from the students and the organizers thanking Mr. Thomas for his services. Aravind Kumar, member of IEEE ComSoc addressed the participants and has mentioned about the society to the attendees.

- ADCOM Meeting #1- Online ComSoc AdCom Meeting #1 – Kerala Chapter – Online The following members were present Dr. Lillykutty Jacob – Chair Dr. Vineeth B.S – Vice Chair Mr. Shankar J – Secretary Dr. Sabu M Thampi – Core member Dr. Lakshmi Narasimhan Theagarajan – Core member Mrs. Anjana P Das – Core member
- Workshop Think, Design and Make – Spider Bot A brief summary of the event in 120 words including the name of the main speakers The workshop was on the topic “Think, Design and Make : Spiderbot”. It aims to provide a hands-on experience in 3d printing with robotics and discover its possibilities. The workshop session was covered in two parts. Forenoon session was introduced with the 3d printing from scratch starting from product development life cycle of robot with the introduction to 123d design and ultimaker cura 3.0. The students designed basic models like key chain in 123d design and worked the way up in designing basic body of spiderbot. Familiarisation of 3d printer and it’s software ultimaker cura 3.0 was done after successful completion of 3d modelling basics. Afternoon session kick-started with the familiarisation of arduino with basic programming. The session went to next level with basic interfacing of servos and bluetooth and ended with successful deployment of spiderbot. Students worked with the spiderbot and programmed it to perform different gestures. During feedback session, students have asked to conduct more sessions like these in the field of 3d printing and robotics. The workshop was handled by mr.shankar j, assistant professor in the electronics and communication engineering department at ukfcet, paripally. He also serves as the secretary of communication society, ieee kerala section.
- Technical talk embedded platform for ai, ml and blockchain mr. L. K. Prasad, managing director, accelaron labs pvt. Ltd. Bangalore
- Technical talk ‘index coding for big data : machine learning meets source coding’ dr. Lakshmi narasimhan t, (assistant professor in the electrical engineering department at iit palakkad) gave an insight into the index coding scheme, which is a source coding technique employed to improve the throughput of the system. He also introduced the idea of dictionary learning, to learn the subspace structure of any given data, in order to use it to solve the index coding problems. The talk was followed by interaction of students with the speaker. The speaker was thanked by the student chapter chair, Ms. Poornima s. Finally, the speaker was presented a memento as a token of gratitude, by dr. Lillykutty jacob, ieee comsoc kerala chapter chair in the presence of Dr. A.v. Babu, branch chapter advisor.
- Technical talk ‘interoperability, security, and reliability for a scalable internet of things?’speaker Dr. Axel sikora is a distinguished personality with rich industrial and academic experience. His fruitful career encompasses prominent positions in telecommunication and semiconductor industries, baden-wuerttemberg

cooperative state university loerrach and offenburg university of applied sciences. He is also deputy member of the board and head of the “software solutions” division at hahn-schickard association of applied research (germany), one of the leading institutes around cyber-physical systems (cps) for industry 4.0 applications in germany.

- IEEE ComSoc Student Branch Chapter Inauguration @NIT Calicut The event started in the presence of Dr. Sameer S. M., IEEE Kerala Chair, Dr. Lillykutty Jacob, ComSoc Kerala Chair, Dr. A. V. Babu, Branch Chapter Advisor, Mr. Anand M. (C-DoT, Bangalore), the speaker for the day, and Ms. Poornima S., the Branch Chapter Chair. The faculty members of NIT Calicut, IEEE ComSoc student members and other IEEE student members were in attendance. The inauguration ceremony started off with a silent prayer. The audience repeated the IEEE Code of Ethics as prompted by Meljo, an IEEE student member. Dr. A. V. Babu welcomed the Chief guest Dr. Sameer S. M., the office bearers, and all IEEE student members and faculty. The IEEE ComSoc Student Branch was officially inaugurated by Dr. Sameer S. M. with a message to use this Society as a networking platform and to use the vast resources including webinars and other resources offered by IEEE. Dr. Lillykutty Jacob felicitated the event and urged the members to use this platform as an inspiration for their professional growth. Ms. Poornima S. thanked the dignitaries on the dais and the audience for gracing the occasion. Mr. Anand M., a Senior Research Engineer at the Centre for Development of Telematics, Bangalore, delivered a talk on ‘How to Contribute to 5G Standardization efforts in India?’.
- ComSoc Track : Ignite 4.0 | Travancore hub IGNITE is the annual Women in Engineering (WIE) Congress of IEEE Travancore Hub. This year’s edition happened on July 27,28 and 29 at Sree Chithra Thirunal College of Engineering, Thiruvananthapuram. In connection with this year’s Congress, on a non-technical note a series of informal talk sessions and a panel discussion for our participants, along with talks on latest technologies and women empowerment. In association with Educational Activities Board of IEEE Kerala Section, a pre-event was conducted for IGNITE 4.0 on Career Guidance and Opportunities for girl school students.
- ComSoc Project contest 2018 | KITeS 2018
- ComSoc Professional Meetup
- International Symposium on Embedded Computing & System Design
- Workshop on Machine Learning for Cyber Security

Engineering in Medicine and Biology Society Chapter

- Inauguration of IEEE EMBS SB in Model Engineering College on 24th of February 2018 IEEE Engineering in Medicine and Biology Society (EMBS) is the world's largest international society of biomedical engineers. The organization's 12,000 members reside in some 97 countries around the world. EMBS provides its members with access to the people, practices, information, ideas, and opinions that are shaping one of the fastest growing fields in science. IEEE EMBS members are focused on the development and application of engineering concepts and methods to provide new solutions to biological, medical and healthcare problems.
- SCIENTIFIC WRITING WORKSHOP at SAHRDAYA COLLEGE OF ENGINEERING AND TECHNOLOGY, March 21st, 2018 IEEE Engineering in Medicine and Biology Society (EMBS) is the world's largest international society of biomedical engineers. The organization's 12,000 members reside in some 97 countries around the world. EMBS provides its members with access to the people, practices, information, ideas, and opinions that are shaping one of the fastest growing fields in science. IEEE EMBS members are focused on the development and application of engineering concepts and methods to provide new solutions to biological, medical and healthcare problems.
- Role of Clinical Engineers in Hospitals- Talk given by Mr. Koruthu Varghese at Institute of Engineers Hall, Trivandrum on 28th March 2018
- HEATS – 30 (12th May 2018) HEATS- 30 is the 30th series of a continuing training program 'HEATS' (Hospital equipment Awareness and Training Series). HEATS program was started in 2013 at Sree Chitra Tirunal Institute for Medical Sciences and Technology (SCTIMST) by Mr. Koruthu P Varughese, Head of Division of Clinical Engineering and Chairman of IEEE EMBS Kerala Chapter. HEATS is planned to arrange continuous training and proper awareness to various users like Doctors, Nurses, Technicians, Engineers, and others who handle the equipment in their respective level, by well-experienced authorized experts or in-house faculty. The main objective of this series is to arrange a common platform for all the users to have a brainstorming session to deliver a healthy and sustainable life for Equipment. These series revealed that a harmonious and coordinated work of all groups could exhibit a healthy environment for equipment.
- BECON '18 at Cochin Gymkhana, July 14th, 2018 Continuous technological developments in the healthcare field have saved countless lives and improved the quality of life. Not only has technology changed the lives of patients and families, but it's also had a huge impact on medical processes and the practices of healthcare professionals as a whole. Becon '18 conducted by Excel 2018, annual

techfest of Govt. Model Engineering College, Thrikakara, in association with IEEE EMBS MEC SB, aimed to showcase the best and latest technological advancements in the field of healthcare by a one-day conference with sessions covering the significance of medical technology and bioinformatics for healthcare. Mr. Pranav Valson, Chairman, Excel 2018, welcomed the gathering. The event was inaugurated by Mr. Vivek V George, Secretary, IEEE EMBS Kerala EXECOM. The presidential address was given by Prof. Dr. V. P. Devassia, Principal, Model Engineering College, Thrikakara. Felicitation was given by Dr. Renu John, Associate Prof. & HoD, Dept. of Biomedical Engineering, IIT Hyderabad. The inaugural ceremony concluded with a vote of thanks delivered by Ms. Geetanjali Menon, Student Chairperson IEEE EMBS MEC Kerala Chapter.

- Brain conn 18, december 28,29,30 2018

Details of Activities of Engineering in Medicine and Biology Society Chapter are listed [here](#)

IA/E/PEL joint society chapter

- F2F & Execom meeting Date: 25th March 2018 Place: Kollam Face to face meeting and Execom meeting of IA/IE/PELS Jt.Chapter Kerala section was conducted on 25th March 2018 at Kollam. The meeting was conducted in a house boat. The meeting started at 10 AM with a silent prayer. It was followed by a self-introduction of the participants. Chair, IA/IE/PELS Jt.Chapter Kerala section, Prof.Muhammed Kasim welcomed the gathering. It was followed by a tea break. Secretary, IA/IE/PELS Jt.Chapter Kerala section, Mr.Biju K, presented the activity report for the year 2017& 2018 till date. The chairs/ advisors of the IAS SB chapters presented their activity report and plan of activities. After that, a discussion on 'Vision plan 2018' for IA/IE/PELS Jt.Chapter Kerala was conducted. Lot of ideas were turned up in the discussions, and ideas were formulated into action plans. It was followed by a lunch break at 1.30 PM. Execom meeting of the chapter was conducted after the lunch break. The Execom discussed the various activities to be conducted in the year 2018 in the light of the deliberations on 'Vision plan 2018', and finalized a few activities to be conducted in the year 2018. The highlight of the discussions was to organize a biennial International conference in the area of Power electronics and related renewable energy. The time for the conduct of the conference is tentatively decided as December 2019. Dr.Jaison Mathew, Chair

Conference activities, IA/IE/PELS Jt.Chapter Kerala, was entrusted to prepare a proposal to be submitted to IEEE Kerala section and IEEE Industry Applications Society for technical sponsorship. After the execom meeting, officer training for SB chapter office bearers was conducted. The session emphasized the need for events scheduling and reporting through vtools event reporting system. Tea was also served in the middle. The meeting concluded at 4.30 PM and a group photo was taken at the end.

- **ELEKTRA 2018** Date: 2-4 March 2018 Venue: College of Engineering Munnar A 3-day Technology summit 'ELEKTRA 2018' was held at College of Engineering Munnar from 2-4 March 2018. The event was coordinated by Department of EEE in association with IEEE PES & IAS SB chapters of College of Engineering Munnar. The event was inaugurated on 2nd March, by Dr.R. Harikumar, Director, ANERT, Govt. of Kerala. Dr.R. Harikumar talked about Renewable technologies and its social relevance in his keynote address. It was followed by a technical session by Er. Aby Joseph, Associate director CDAC Trivandrum. He talked on the topic 'Design and implementation of grid-connected solar PV systems'. The programmes on first day ended up with a campfire in the evening followed by dinner. The proceedings of the second day started with an industrial visit to Pullivasal hydroelectric power plant. The delegates were shown the operation of the plant and control room by the KSEB staff. There were 3 parallel workshops scheduled in the afternoon from 1 PM-7 PM. The workshops were on Energy auditing, Blockchain, and Real-time Interfacing of MATLAB with DSP. The workshops were handled by experts from the respective fields. Cultural programmes were presented by both external and internal delegates in the evening. The second day ended with a dinner thereafter. The third-day programmes started with a session on 'Entrepreneurship and innovation' by Shalini V Nair, MD, Ohile technologies, Bangalore. The last session was a technical talk on 'Nuclear energy, the need, the perceptions and the realities' by Sri.A.V. Satheesh, Scientific Officer, Kudamkulam Nuclear power plant. The delegates were given awareness on nuclear energy, and their concerns on nuclear energy were addressed during the session. The 3-day programme ended up with lunch. A group photo was also taken after lunch.
- **RASPBERRY PI WORKSHOP** Date: 18th March 2018 Venue: College of Engineering Attingal A 1-day workshop on 'Exploring IoT with Raspberry Pi' was conducted on 18.03.2018 at College of Engineering Attingal. The event was organized by IA/IE/PELS Jt.Chapter Kerala section in association with IAS SB Chapter College of Engineering Attingal. The event was started at 9.30 AM with the inaugural function. The event was inaugurated by Prof.Muhammed Kasim, Chair,IA/IE/PELS Jt.Chapter Kerala section. The workshop started at 10 AM. The resource person for the workshop was Dr.Sunil T T, Principal, College of

Engineering Attingal. The workshop ended at 4 PM. Feedback session and group photo session was arranged at the end.

- Coding contest Date: 01.09.2018 The coding contest finals jointly organized by IEEE IAS/IES/PELS Kerala Jt Chapter and UST Globals Trivandrum was held on 01.09.2018. Registration invited from Students of 3rd and 4th year IEEE Members. 127+ Technical enthusiasts are registered for first round. First-round conducted in 6 different venues around Kerala. Based on their performance 10 students were shortlisted for the final. The final conducted at UST Global Kerala HQ, Kazhakkuttam, TVM. The students are directed to find a solution for open questions and they should develop a mobile application to solve this. The competition starts at 10.00 AM and end at 1.00 PM. Within 3 hrs, students developed different mobile applications. UST global arranged Campus tour for participants, which was an effective visiting because most of them got an idea about the industry and their working environment. They are introduced current working applications such as VR, AR, MR related projects and their demo. Introduction to Quantum computing, UST Infinity Lab and its working, new innovations etc. The idea and demo presentation started at 2.30 PM. The three experts from UST global evaluated the idea and demo of the applications. The judges appreciated the sparkling ideas and the effective apps which are developed within 3hr. The judges declared the winners. Praveen Raj from Rajagiri School of Engineering bagged first prize. The top 3 students offered placement in UST global. All other finalists will get an internship opportunity at UST global. The industrial experts Mrs. Shilpa Menon and Mr. Vargees quoted about the event and the future edition of the same. The event completed by 6.30 PM. Prof. Mohammed Kasim (IAS/IES/PELS Jt. Chapter Kerala Chair) & Prof. Bijuna Kunju (IAS/IES/PELS Jt. Chapter Kerala Vice Chair) monitored and coordinated the event.
- WORKSHOP ON IoT Date: Mar 9 – 11, 2018 Venue: Musaliar College of Engineering IAS/IES/PELS joint Chapter of Kerala Section together with IEDC Unit of Musaliar College of Engineering, Chirayinkeezhu conducted a workshop on IoT during Mar 9 – 11 at Musaliar College of Engineering. Prof Muhammed Kasim, Chair IAS/IES/PELS Jt. Chapter inaugurated the workshop. Prof Arif M K, HOD CSE & Ms Aswini, IEDC Coordinator of CE Dept. attended the function. Mr Achus & Mr Nandan from Neo Green labs, Kochi handled the workshop. The workshop was planned with 80% hands-on training. Training was given with 4 /3 students per team. 41 students from Civil, Mechanical, Electrical & Electronics participated in the workshop. It was a very useful workshop for the students.
- IEEE VJEC PELS Inauguration Report Date: 1st August 2017 Venue: Vimal Jyothi Engineering College, Chemperi Inauguration The IEEE PES Inauguration was

held on 1st August 2017 at Vimal Jyothi Engineering College, Chemperi. The Inauguration was graced with the presence of Mr.Arjun Pandian IAS, Assistant Collector, Kannur district. IEEE Chairman Jishnu J Purushothaman delivered the IEEE code of ethics. The program began with a welcome address by the branch councilor Prof.Laly James HOD EEE Dept. Presidential address was delivered by Mr.Benny Joseph, Principal VJEC. The inauguration was officially done by lighting the ceremonial lamp by the chief guest and other dignitaries. The felicitation was delivered by Fr.Jinu Vadakkemulanjanal, Administrator VJEC, and Mr.Sebastian Puthanpura, PRO VJEC. And finally, the vote of thanks is proposed by Ms.Raveena M, IEEE PELS SB Chair. The IEEE PELS staff advisor Mr.Prabin James coordinated the event and helped in making the event a great success. The speeches by all the members inspired the students a lot. The students from 1st to the 4th year of EEE department were present at the audience. Altogether the IEEE PES Inauguration was a great success and all the members are very excited in taking forward this society to greater heights.

- Industrial visit to Travancore Titanium Products Ltd. Date: 11th July 2018
- Venue: Travancore Titanium Products Ltd, Veli, Trivandrum Industrial visit to Travancore Titanium Products Ltd, Veli, Trivandrum was jointly organized by IA/IE/PEL Jt.Chapter Kerala section and IAS SB chapter Musaliar Engineering College Chirayinkeezhu on 11th July 2018. The operations of the company were explained to the students by the engineers of the company. 56 students & 3 faculty members participated in the Industrial visit. 12 IEEE Student members & 3 IEEE faculty members joined the trip. The visit was in the forenoon. After the visit, the students were taken to a nearby tourist location, namely Veli Park. The students enjoyed the trip.
- One Day Workshop On Technical Writing Skills & IOT Trends Date: August 4, 2018
Venue: Alumni Hall NSS College of Engineering The IEEE student branch of NSS College of Engineering, Palakkad attained an amazing growth in the year 2018. The membership strength has increased as compared to the previous year. The students were much interested in the technical activities especially in the field of computer science, Electrical engineering and Electronics engineering. This lead to the thought of conducting various workshops on new topics
- Seminar talk on In-Vehicle Networking for Electric Vehicle Technology Date: 11th April 2018 Venue: Indian Institute of Space Science and Technology (I.I.S.T) A Seminar talk on “In-vehicle networking for EV technology” was organized by IEEE Industry Application Society Student branch chapter-Indian Institute of Space Science and Technology (I.I.S.T) at 3.00 p.m on 11th April 2018 at Science block (D2), I.I.S.T campus. The seminar talk was given by Mr. Sigi C. Joseph, Principal Engineer, Power Electronics group, Centre for Development of Advanced

Computing (C-DAC), Trivandrum. IEEE I.I.S.T Student branch chairman Pranav Kumar Singh welcomed the participants to the program. The program was chaired by Dr. Sudharshan Kaarthik, IEEE Industry Applications Society (IAS) student branch chapter Advisor and Assistant Professor of Avionics Department I.I.S.T.

- Inauguration of IAS SB Chapter at Jyothi Engineering College Thrissur Date: 2nd February 2018 Venue: Jyothi Engineering College Thrissur Inaugural ceremony of IEEE – IAS SB Chapter was organized on 2nd February 2018 at 10 a.m. in the Insight Hall (Jyothi Engineering College). In this inaugural function, Er. S. Jayakrishnan, IRSEE, Senior Divisional Electrical Engineer (Traction Distribution), Southern Railway, Palakkad Division has graced the occasion as the Chief Guest. Welcoming the Chiefguest and other dignitaries, Mr Jithin.K. Jose (Staff Advisor, IEEE-IAS) has presented the welcome address describing the inception and establishment of the new chapter and AEEE. The inaugural ceremony commenced with the lighting of lamp by a group of dignitaries. The Hon'ble Principal of the institution Fr. Dr. Jaison Paul Mulerikkal CMI delivered the Principal's address. Speaking on the occasion as the guest of honour Er. S Jayakrishnan, laid stress on the importance of evolving skill training from a young age. He motivated everyone to actively participate in the workshops to get benefited. In his presidential address, Fr. Roy Joseph Vadakkan (Asst Manager (A&A), JECC) congratulated the entire team of IEEE-IAS by untiring efforts made by them. Er. Thomas Mathew (Administrator) and Prof. Ratnan P, HOD (EEE Dept) also addressed the function. In the end, Ms. Geethanjali representative from final year students offered a vote of thanks to all. She thanked all the invited guests and participants for gracing the occasion by their solemn presence.
- 2nd IEEE International Conference on Power, Instrumentation, Control and Computing (PICC2018) Date: January 18-20, 2018 Venue: Government Engineering College Thrissur The second international conference on Power Instrumentation, Control and Computing (PICC2018), January 18-20, 2018, at Government Engineering College Thrissur focused on the recent trends in power electronics, power systems and the allied areas. The conference was organized by the Department of Electrical Engineering Govt. Engineering College Thrissur, Kerala, India. The conference was organized as part of the umbrella conference – Fifth biennial International Conference on Emerging Trends in Engineering science & Technology, ICETEST 2018. ICETEST consists of seven sub-conferences in different Engineering streams including PICC2018. Papers in PICC track are published by IEEE whereas papers in other sub-conferences are published by CRC Press.
- IEEE IA/IE/PELS Distinguished Lecture at Indian Institute of Space Science and Technology Trivandrum, Kerala, India Date: 14th May 2018 Venue: Indian Institute

of Science&Technology (IIST) campus Trivandrum An IEEE Distinguished Lecture was held on 14th May 2018 at Indian Institute of Science&Technology (IIST) campus Trivandrum. The Distinguished lecture was delivered by Dr. Akshay Kumar Rathore, Associate Professor, Concordia University Canada on 'Impulse Commutated Frequency Modulated Soft-switching Current-fed Converters'

- **Activities organised with IA/E/PEL joint society chapter are listed [here](#)**

Power & Energy Society Chapter

- Workshop on Computer Based Design of Electrical Systems – 23rd Jan 2018
- Distinguished Lecture Program on Direct Current Gas-Insulated Transmission Lines – 6th Feb 2018
- Workshop on Solar PV System Design and Installation – 3 Mar 2018
- PES Press For Progress – 7th Mar 2018
- PES Kerala Execom Meeting #1 – 10th Mar 2018
- PES One-On-One Leaders under the same roof – 7th Apr 2018
- Technical talk on 'Advanced Biometric Technology and it's Humanitarian Application' A technical talk on 'Advanced Biometric Technology and it's Humanitarian Application' was organised by PES Kerala Chapter on Oct 4, 2018. The talk was led by Prof. Vincenzo Piuri, 2019 IEEE President Elect Candidate. Prof. Piuri elaborated how technologies like IOT, Neural Networking, AI etc can be induced in Biometric Technologies thus enhancing its Humanitarian Applications. The talk was attended by Senior IEEE Members, GSM as well as students. The interactive talk lasted for 90 mins.
- All Kerala Power and Energy Society Student Colloquium The second edition of AKPESSC was organised on 27-28 Oct 2018 at College of Engineering, Chengannur. The two day extravaganza witnessed a series of talks on topics ranging from 'Renewable Energy Sources', 'Future of Power Systems' to 'How to excel in the current Educational Systems'. The 120 delegates from Engineering Colleges across Kerala got an opportunity to learn, unlearn and to expose themselves to the current cutting edge in technologies in the field of Power and Energy. Exhibitions from L&T, KSEB, FABLAB and DEVCOM was another attraction of the colloquium. A fun filled cultural night added the icing on the cake and created a perfect balance between networking and Learning.
- KSEB Engineers Association 9th State level Seminar Series Contest IEEE Power & Energy Society Kerala Chapter in association with Kerala State Electricity Board Ltd

Engineers Association Conducted 9th edition of state-level Seminar Series Contest on 31st March 2018. The contest mainly consists of 3 stages. College level, District level, and State Level

- PES Kerala Chapter organised the 9th edition of IEEE Day PES Quiz PES Kerala Chapter organised the 9th edition of IEEE Day PES Quiz exclusively for 1st year Engineering Students at Bishop Jerome Institute, Kollam on 13th Oct, 2018. Students who qualified at the college level contest, participated in the Hub level contest. The winners of Hub Level Contests qualified for the Final State level Contests. Cash Prizes worth Rs. 20000 was awarded to the winners of the State Level Quiz. 78 students from 41 Engineering Colleges across Kerala participated in the Hub Level contest. The Quiz Master for the event was Dr. Premlet, IEEE Senior Member.
- PES Kerala Earth Day – 22 Apr 2018
- Electrification Project ,Rosemala – 15 May, 2018
- IEEE PES Kerala Chapter Execom Meeting #2 – 30 Jun 2018
- Workshop On Web Content Management Using Wordpress – 7th Jul 2018
- Project Presentation Competition – 4th Aug 2018
- Workshop on Green Homes – 4th Aug 2018
- IEEE PES Women In Power Initiatives 3–day Hands–on Training Workshop for Women – 2nd, 3rd, and 4th Oct 2018
- Technical talk on System Protection Engineering – 25th Oct 2018
- Electrical Workshop for Women Members of Self-Help Groups – 15-17 Nov 2018
- Lights For The Working Hands – 5th Nov 2018
- IEEE PES Distinguished Lecture Programme on "Condition Monitoring of Oil-Paper Insulation of Transformers" – 30th Nov 2018
- IEEE PES Kerala Chapter Execom Meeting # 3 – 15 Dec 2018
- Smart City Opportunities and Challenges – 22-12-2018
- Electrical Safety Workshop for Women and nearby residents – 22-12-2018
- Annual General Meeting PES Kerala Chapter – 5th Jan 2018

Robotics & Automation Society Chapter

- Autonomous Walking Control for Humanoid Robots Date: 8th October 2018
Venue: CETAA Hall, College of Engineering Trivandrum. Time : 4:30 to 6 PM The quest for understanding the science behind stable human locomotion has been active ever since the time of the ancient Greek philosopher, Aristotle. The essence

of bipedal walking control is to sustain near-periodic gaits with the certain desired postural pattern while the biped is steered forward with a specified velocity over a fairly known terrain. Active research in bipedal locomotion control started with the pioneering work of Serbian mechanical engineer, Miodir Vukobratović in the late 1960's. However, even after five decades of concentrated academic and industrial efforts, there are almost no successful human-like bipedal robots in use today having autonomous walking capability under realistic outdoor walking situations. The biggest bottleneck has been the lack of a control oriented stability concept applicable to uncertain terrain conditions.

- **Model Predictive Control: Advanced Control Laws** Date: Wednesday, 19th September 2018 Venue: Meetup Cafe, Thejaswini Bldg, Technopark Time: 5 PM to 6.30 PM Conventional controllers such as Proportional-Integral-Derivative (PID) have been widely employed to control plants or processes in industries for several decades now largely due to their simplicity and excellent performance. However, designing controllers for physical systems with PID controllers is simply not the best choice because it does not provide straightforward control design for multi-variable systems with constraints. Additionally, PID does not take the benefits of optimality such as, increase profitability, reduce cost, optimal trajectories, increase throughput and efficiency into account. Model Predictive Control (MPC), a powerful algorithm (control strategies) based on optimization techniques, can easily handle multi-variable system with constraints on inputs, states and outputs in a systematic fashion. MPC exploits the combination of predictive strategies and optimization to address problems where PID simply does not. Since the turn of the millennium, MPC has been gaining attention in diverse areas ranging from electrical and chemical to automotive and robotics due to its straightforward design formulations and powerful algorithms. In this presentation, introduction, formulation, design and advantages of the MPC will be delivered. MPC strategies concerning practical applications including auto-steering of autonomous vehicles will also be briefly presented.
- **Develop and Deploy Deep Learning Algorithms Using MATLAB** Date: 6th August 2018 Venue: NASSCOM Startup Warehouse, Infopark Campus, Kakkanad, Kochi Time: 4:00 pm – 6:00 pm Designing and deploying machine learning and deep learning-based computer vision applications to embedded CPU and GPU platforms is challenging because of resource constraints inherent in embedded devices. A MATLAB® based workflow facilitates the design of these applications and automatically generated C or CUDA® code can be deployed on boards like the Jetson TX2 and DRIVE™ PX to achieve very fast inference.
- **Deep Learning Revolution: How Deep Learning is changing Robotics** Speaker: Vijay Natarajan Date: Thursday, 15th March 2018 Venue: College of Engineering,

Trivandrum Time: 5 to 6.30 PM Conventional learning algorithms in robotics require hand-designed parameterized models and features, which are infeasible to design for many tasks. Deep learning transforming Robotics talks about how Deep learning techniques help in solving some of Robotics unique challenges to move Robotic platforms from lab and into the real world. Deep learning algorithms are general non-linear models which are able to learn features directly from data, making them an excellent choice for such robotics applications. Discuss about the Challenges, Role, Research & Recommendations of Deep learning architectures for various Robotic tasks.

- Design for Reliability Date: Tuesday, 13 March 2018 Venue: NIELIT Calicut Reliability engineering is a sub-discipline of systems engineering that emphasizes dependability in the lifecycle management of a product. Reliability describes the ability of a system or component to function as per the specifications, under stated conditions for a specified period of time. Design for reliability stands for a collection of processes, performed during the design of the product so as to ensure that, the product is able to perform to a required level of reliability.
- Optimal Motion Planning of Robots Date: 8th March 2018 Venue: CETAA Hall, College of Engineering Trivandrum. Time: 5 to 6 PM Hybrid algorithm for robot path planning consists of an optimal path planner supervised by an intelligent path follower. The system is analogous to our everyday experience of “finding our way around”. Suppose we don’t know the way to our destination, we will use our mobile phone to get the directions to our destination from a stored/online map, and then we hop into our car/bike and “intelligently” navigate through the busy roads to reach our destination. The optimal motion planning is the first and the important part of the journey. The concept of optimality is implicitly applied by us for the above example, we select a route with “minimum” congestion or “minimum” time or some “minimum” or “maximum” criterion that is available in the map on our mobile device. So why not apply the same natural concept to the robot path planning problem? In this talk ,the problem of optimal path or motion planning for a robot that is provided with 3D geographic map of its territory will be addressed.
- Enabling Technologies for Self-Driving / Autonomous Vehicles Speaker: Nijesh PS Date: Thursday, 14th Dec 2017 Venue: Meetup Cafe, Thejaswini Bldg, Technopark Time: 5 to 6 PM The automotive industry is undergoing an unprecedented drastic change today and autonomous vehicles are leading the way. An autonomous vehicle is a self-driving vehicle that plans the route, navigates between destinations negotiating with live traffic and following all the traffic rules without a human driver. Major automotive OEMs, suppliers and technology giants have announced their autonomous vehicle programmes with ongoing research and developments targeting next 5 to 10 years to make production models

available in the market. Rapid advancements in enabling technologies such as sensors, high performance computing platforms, HD maps, V2X etc. also help accelerate the development of production-ready self-driving vehicles. The talk includes an overview of autonomous vehicles, key players and projects, levels of autonomy, enabling technologies and challenges.

Signal Processing Society Chapter

- DISTINGUISHED LECTURE PROGRAM – Prof. Rick S Blum IEEE SPS Conducted organized a DLP on the topic “Cyber Attacks on Internet of Things Systems” by Prof. Rick S Blum, Lehigh University
- MACHINE LEARNING WORKSHOP: TEXT MINING: IEEE Signal Processing Kerala Chapter in association with IEEE Student Branch NSS College of engineering, Palakkad organised a Workshop on text mining on 28th and 29th July, 2018. The workshop was specifically meant for those delegates who were interested to know the basis of Python, text categorisation, text clustering etc. From the list of 55 delegates, a total of 50 delegates participated in the workshop. The session was handled by Mr. Manu Madhav, the research scholar, CSED, NIT Calicut. His interests include teaching and programming. He is also an active member of in NLP community of GEC Palakkad. He is an expert in various computer languages as, Python, Java, PHP, C, C++, HTML etc.
- WORKSHOP ON PYTHON FOR SIGNAL PROCESSING inShare IEEE Signal Processing Society Kerala Chapter in association with Department of Electronics and Communication Engineering, MES College of Engineering Kuttippuram conducted a Workshop on Python for Signal Processing on 17th March 2018. The event was scheduled in side-line with MESTECH '18, the annual techno cultural fest of MES College of Engineering. The workshop was handled by Mr. Musfir Muhammed, Data Scientist, Data Scientist, Attinad Software, Trivandrum. The topics covered in workshop are: Brief Introduction to Python Programing, Signal Generation, Sampling Theorem, Windowing, Fourier Transform and Filtering. B.Tech and M. Tech students and few faculties attended the workshop.
- TECH TALK “NATURE INSPIRED OPTIMIZATION ALGORITHMS FOR SIGNAL PROCESSING APPLICATIONS” inShare IEEE Signal Processing Society Kerala Chapter in association with IEEE Signal Processing Society Student Branch Chapter, MES College of Engineering Kuttippuram conducted a technical talk as per the schedule below: Date : 10th October 2018 (Wednesday) Venue : Main Seminar Hall, MES College of Engineering, Kuttippuram, Malappuram. Time : 04.30 pm to 05.30 pm Topic : Nature Inspired Optimization Algorithms for Signal Processing Applications. Speaker : Dr. Shilpa Suresh, Assistant Professor, Dept of ECE MES College of Engineering Kuttippuram

- DLP - Teaching Signal Processing with Geometry by Prof. Vivek Goyal- 6th Dec 2018
- DLP - Computational Imaging with Few Photons, Electrons, or Ions by Prof. Vivek Goyal – 7th Dec 2018

B.3 PROFESSIONAL AND CONTINUING EDUCATION ACTIVITIES

Summary of continuing Educational activities including conferences, technical activities, training courses, and distinguished lecture programs with attachment table / information

Professional Lecture Series

In association with seven other Professional societies in Kerala, IEEE Kerala Section has been arranging a series of Technical/Professional Knowledge Sharing series on Wednesdays every week at Institution of Engineer;s Hall, Thiruvananthapuram for more than two decades. This year, **34** such talks were delivered.

- Talk on 'Complex Networks: A Networking Perspective' by Mr. Abhishek Chakraborty, Senior Project Fellow, Department of Avionics, Indian Institute of Space Science and Technology, Thiruvananthapuram on 03-01-2018
- Session on 'Medical Incubators' by Mr. Rajkrishnan Rajan, Scientist –E, BMT Wing, Sree Chitra Tirunal Institute of Medical Sciences and Technology, Government of India, Thiruvananthapuram on 10-01-2018
- Session on 'New Project Ideas' by Mr.S Gautham Yogeeswar, Asst. District Industries Officer, District Industries Centre, Thiruvananthapuram on 24-01-2018
- Talk on the topic Movement Disorders and Modalities – An Engineering Approach by Mr. Jithin Krishnan, Scientist/Engineer, BMT Wing, Sree Chitra Tirunal Institute of Medical sciences and Technology, Government of India, Thiruvananthapuram on 31-01-2018
- Talk on "Scandinavian Model and the Danish Culture" by Mr. Jinu Jayapalan, Freelance Cross Cultural Consultant, India/Europe, Integrate APS Copenhagen.on 07-02-2018
- Session on topic " 'A Tale of Two Magical Incubators'" by Mr.M.Harikumar, Former Head, IT Systems and Computer Networking, VSSC, ISRO, Thiruvananthapuram.on 14-02-2018

- Session on “Managing Innovation in the 4th Industrial Revolution” Dr. Arun Surendran, Strategic Director & Principal, Trinity College of Engineering, Thiruvananthapuram on 21-02-2018
- Talk on Sustainable Energy – Efficient Design by Mr.Sankar N Menon, Director, SEED Engineering Consultants & Academy on 28-02-2018
- Talk on Modern Biogas and Related Projects Mr.Sunil Ahamed, Executive Director, Venadu Resource Management, Kollam on 07-03-2018
- Session on Digital Transformation After the Internet by Mr. Lokanath M.P., Manager Retired, Telecom. On 14-03-2018
- Talk on “ Role of Clinical Engineers in Hospitals” by Mr. Koruthu P. Varughese, Biomedical Engineer, Sree Chitra Tirunal Institute for Medical Sciences and Technology, Thiruvananthapuram.on 28-03-2018
- “Make Hay when the Sun Shines”- Talk on Solar Power by Mr. J.Sudhakaran Nair, Retired Deputy Chief Engineer, Kerala State Electricity Board on 04-04-2018
- Talk on ‘Empowerment of Engineers’ by Er.M.K.Abdul Majeed, Retired Deputy Director, VSSC, ISRO.on 11-04-2018
- Technical talk on ‘Environment and Development in Kerala Scenario’ by Dr.V.Subhash Chandra Bose, Former Director, CCDU, (Communications and Capacity Development Unit), Government of Kerala on 18-04-2018
- Session on “‘Raft Foundation for residential buildings founded on highly reactive clay’ by Mr.Biju Balakrishnan, Principal Structural Engineer, Advent Consulting Engineers Pvt. Ltd., Australia on 25-04-2018
- Session on “‘Environmental Audit and Management Systems’ by Mr.S.Venugopal, Deputy General Manager, HLL Lifecare Limited, Thiruvananthapuram on 02-05-2018
- Talk on “‘Electrical Safety’ by Mr.Brijesh S., Assistant Executive Engineer, Supply Chain Management, Kerala State Electricity Board Limited, Thiruvananthapuram.on 09-05-2018
- ‘SNAGS Analytics’ by Dr. M.Jayaraju, Principal, MES Institute of Technology and Management, Chathannoor, Kollam.on 16-05-2018
- ‘Basic Energy Management & Energy Audit’ by Mr.Aneesh Rajendran, Energy Technologist, Energy Management Centre – Kerala.on 23-05-2018
- ‘Taking over A Brand New Second Hand Bulk Carrier Vessel’ by Mr.S.K.Namboothiri, FIE, M.I.Mar.E, Chartered Engineer, Ex Chief Engineer Orient Ship Management Limited on 30-05-2018
- ‘Potential of Engineering Studies and Its Relevance in Present Day World’ by Dr.V.V.Karunakaran, Formerly: Head of Division (APD)/Dy Proj. Director, ISRO (Cryo Upper Stage Project),VSSC.on 13-06-2018
- “Trends in Military Space’ by Prof.Abdul Majeed M K, Former Scientist, VSSC, ISRO 20-06-2018

- 'Bali: a byword of World Natural Conservation' by Dr P M C Nair, RP (Tech), Energy Management Centre – Kerala.on 27-06-2018
- Talk on 'Failure Analysis and Problem Solving in Construction Field' by Mr.P.A.Prabhakaran, Retired Chief Engineer, Department of Space 04-07-2018
- Talk on 'Tremendous Opportunities in e-teaching & e-learning-an awareness Campaign' by Mr.Sebastian Panakal, Chairman, Social Networking Homes, India on 11-07-2018
- Talk on 'Green Productivity by Conserving Nature's Resources' by Mr.Fabian Prince, Chief Operating Officer, Mercy Hospital and Nursing College, Kottarakkara on 18-07-2018
- Talk on 'Converting nature's weeds at Akkulam Lake to value added materials through Engineering Students' by Mr. A. Rajagopalan Achari, Energy Consultant & Dy. Electrical Inspector (Retd.), Electrical Inspectorate – Kerala.on 25-07-2018
- Talk on 'The Art of Travelling Across Cultures' by Mr. Jinu Jayapalan, Freelance Trainer & Management Consultant, Thiruvananthapuram on 01-08-2018
- Talk on 'Information Security' by Ms. Jyothi Ramaswamy, Information Security Manager Tata Consultancy Services, Technopark, Thiruvananthapuram on 08-08-2018
- Talk on "Human Error Management" by Dr. U. S. Paul Russel, Assistant General Manager (Engineering), Maintenance Training Organisation (MTO), Air India Engineering Services Ltd., Thiruvananthapuram on 29-08-2018
- Talk on 'Key Tips for Project Success' by Mr.E.J.Francis, Retired Group Director, CCQG, VSSC, Thiruvananthapuram on 05-09-2018
- Talk on Amphibious Construction" – a challenge to flood prone areas by Mr.Nanma Gireesh, M.Tech Student, Translational Engineering, Translational Leadership and Professional Leadership Centre, Government Engineering College, Barton Hill, Trivandrum on 12-09-2018
- Talk on 'Trends in Logistics'by Dr.P.Ravikumar, Associate Director, Intelligent Transportation and Networking Section (ITNS), Centre for Development of Advanced Computing (C-DAC), Thiruvananthapuram.on 19-09-2018
- Talk on 'Kerala – Flood and after' by Mr.P. Abraham Paul, Freelance Consultant, ICT & ICN.on 26-09-2018

Distinguished Lecture Programs

- The Communication Society Chapter organised a Distinguished Lecture Talk on "Data Center Networking". The lecture was handled by Dr. Suresh Subramaniam, Professor and Chair, Department of Electrical and Computer Engineering, George

Washington University. A total of 64 members have attended the programme. A live streaming of the whole programme was also arranged.

- IEEE SPS Conducted organized a DLP on the topic “Cyber Attacks on Internet of Things Systems” by Prof. Rick S Blum, Lehigh University
- DLP - Teaching Signal Processing with Geometry by Prof. Vivek Goyal- 6th Dec 2018
- DLP - Computational Imaging with Few Photons, Electrons, or Ions by Prof. Vivek Goyal – 7th Dec 2018
- IEEE IA/IE/PELS conducted a Distinguished Lecture at Indian Institute of Space Science and Technology Trivandrum, Kerala, India. Date: 14th May 2018. The Distinguished lecture was delivered by Dr. Akshay Kumar Rathore, Associate Professor, Concordia University Canada on ‘Impulse Commutated Frequency Modulated Soft-switching Current-fed Converters’

Section Distinguished Lecture Program

Section Distinguished Lecture Program (SDLP) is an initiative of IEEE Kerala Section, in the format of DLPs, to support student branches and other IEEE subunits in Kerala in terms of technical expertise for talks, workshops, tutorials, seminars and conferences. The objective of SDLP is to increase the outreach of the Section and update members and student members on new technologies. Section could arrange three programs at various venues

- TALK ON PLUG-IN ELECTRIC VEHICLES OPPORTUNITIES AND RESEARCH CHALLENGES:: A discussion on plug-in electric vehicles and its relevance in smart grid ,its opportunities and research challenges were conducted. The session was handled by Dr. Ajay Babu , Assistant Professor, Dept of Electrical and Electronics Engineering, NSSCE Palakkad. The session covered different areas of plug-in vehicles, which include evolution of plug-in electric vehicles , general block diagram ,different types of plug-in vehicles, different operating modes etc. It was an interactive session. The resource person ensured active participation of the students by including questioning sessions and providing rewards for the correct answers. The event was conducted in the main seminar hall of College of Engineering Trikaripur on 6th October 2018 at 1pm. About 107 students actively participated in the session.
- SDLP AT COLLEGE OF ENGINEERING THALASSERY: On 12th of October SDLP was conducted .An interactive SDLP session was held by the chief guest Dr. MV Rajesh.He spoke about breaking gender barriers and encouraged participation of women in field of technology. There was an active participation of 50 students from different departments.

- SDLP AT COLLEGE OF ENGINEERING KARUNAGAPALLY: CEK conducted an SDLP on 5th of October 2018. The program was an expert talk on VLSI. The session was handled by Dr. Sreelal S. Pillai from VSSC. He has published extensively in national and international conferences, journals and books and holds one US and three Indian patents. He is a senior member of IEEE, a life member of Electron Devices Society of IEEE and a member of the Distinguished Lecture Panel formed by IEEE India Council for the National Distinguished Lecture Program (NDLP). 65 students of various departments and teachers attended the program

Educational Activities

As part of Educational Activities, in 2018, Kerala Section organised Continuing Education Programs for Academicians and Researchers, Career guidance, awareness sessions and Technology HandsOn workshops for Pre University students. The educational activities conducted for university level students are reported as part of student activities. The details of **16** Educational Activities can be found in the [link](#)

- One day workshop on Space Science and Technology
As part of Space week celebrations, Educational Activities team of IEEE Kerala Section and MES Institute of Technology and Management, Kollam jointly organized a workshop on 'Space Science and Technology' on 03/10/2018 at MES Institute of Technology and Management. The workshop attended by students from around ten nearby schools.
- Expert Talk on higher education and career opportunities after B-tech
IEEE Educational Activities team of Kerala Section organized an expert talk on "Higher Education and Career Opportunities after B-Tech" for university students of Travancore Hub. The event was held at LBS Institute of Technology for Women, Trivandrum on 15-03-2018. More than 80 students attended the event. The session was handled by Mr. Levakumar V, Career expert and Rtd. Deputy Director, VHSE, Kerala.
- Workshop on "Teacher a performing artist"
Educational Activities team of IEEE Kerala Section organized a one day workshop for the faculty members "Teacher as a performing artist" at Mar Baselios College of Engineering and Technology, Trivandrum on 23rd July 2018. The main objective of the workshop was capacity building of teacher educators and school teachers and people working in the education discipline. First session of the workshop started with brief introduction of the participants. The speaker Dr. B. Premlet,

delivered his talk on “Education as Academic vs Professional field” which was followed by a discussion session.

- Space Week Celebration – Workshop on Space Science and Technology

As part of Space week celebrations, Educational Activities team of IEEE Kerala Section and TKM college of Engineering, Kollam jointly organized a workshop on ‘Space Science and Technology’ on 04/10/2018 at TKM College of Engineering. The workshop attended by students from around ten nearby schools. The technical sessions were led by Dr.K.N.Uma, Ms. Anjana S.J., Scientists, VSSC. A talk on current trends in space technology and the opportunities in space education was delivered by Dr. B. Premlet, Chair, Educational Activities, IEEE, Kerala Section.

- Space-week-celebration-one-day-workshop-on-space-science-and-technology

As part of Space week celebrations, Educational Activities team of IEEE Kerala Section and S.N.College for Women, Kollam jointly organized a workshop on ‘Space Science and Technology’ on 04/10/2018

- Science awareness session for pre-university students

IEEE Educational Activities team of Kerala Section organized Conducted Science Awareness program for pre-university students. The program also focused on education needs, career guidelines and entertainments for all age groups. The programme was organised to inculcate scientific temper among the young generation. Dr. B. Premlet gave an inspiring speech and answered an array of questions fielded by the students

- Career Guidance and Orientation Program

IEEE Educational Activities team of Kerala Section organized an expert talk on “Career Guidance and Orientation” for university students of College of Engineering, Kottarakkara. The event was held at College of Engineering, Kottarakkara on 02-07-2018. More than 100 students attended the event. The session was handled by Dr. B. Premlet, Career expert and Rtd. Professor, TKMCE.

- Workshop on “Teaching, Learning and Research methodologies”: IEEE Educational Activities team of Kerala Section organized a one day workshop on “Quality Research” for research scholars on 7th and 8th June at UKF College of Engineering, Kollam. More than 80 research scholars attended the event. The session was handled by Dr. B. Premlet, Chair, Educational Activities, IEEE Kerala Section.

- One day workshop on Quality Research

IEEE Educational Activities team of Kerala Section organized a one day workshop on “Quality Research” for research scholars on 7th July at Dept. of Electronics, CUSAT. More than 80 research scholars attended the event. The session was handled by Dr. B. Premlet, Chair, Educational Activities, IEEE Kerala Section, Dr. Sameer S. M, Chair, IEEE Kerala Section, Dr. K. Suresh Nair, Immediate past chair, IEEE Kerala Section, Dr. K P Mohandas, Chair, Conference Committee, IEEE Kerala Section. The core objective of the workshop was to equip the research scholars with set of skills and potentiality to undertake the research very effectively in the disciplines of social science and to turn completed research into publishable material of high quality in the form of articles, journals and books.

- One day workshop on Research Methodology

IEEE Educational Activities team of Kerala Section organized a one day workshop on research methodology for research scholars on 11th April at Catholicate college, Pathanamthitta. More than 80 research scholars attended the event. The session was handled by Dr. B. Premlet, Chair, Educational Activities, IEEE Kerala Section.

- Career Guidance Workshop :IEEE Educational Activities team of Kerala Section organized an expert talk on “Career Guidance” for pre-university students. The event was held at Janasevini Library Hall, Neerkunnam, Alappuzha on 14-04-2018. More than 200 students attended the event. The session was handled by Mr. Nandan S., Mr. Dileep V. K., and Mr. Suresh V. R, Career experts.

- ROADMAP TO SUCCESS IN ENGINEERING STUDIES

Educational Activities, IEEE Kerala Section in association with IEEE Travancore Hub organized a one day event, ROADMAP TO SUCCESS IN ENGINEERING STUDIES 2018 at SCERT Hall, Poojappura, Trivandrum, Kerala on 11th April 2017. The session was exclusively for engineering aspirants who have completed 12th standard and looking forward for engineering admissions.

- ENGINEERING SUMMER CAMP

Educational Activities team of IEEE Kerala Section in association with IEEE Travancore Hub initiated a 5-day Engineering Summer camp for pre-university students. Summer Camp was designed to challenge and inspire students to explore academic and career paths in engineering. The goal of our Engineering Summer Camp was to provide every student with an unforgettable summer experience that builds confidence, develops skills and helps them discover engineering's endless possibilities. Camp for rising 10th through 12th grade students offers them an authentic university or college experience, deep exploration of engineering topics, and networking opportunities with peers and mentors. The curriculum was designed to ensure team based activities, hands-on projects, guest speakers, project exhibitions, creative activities and more. Fully immersed in a campus environment, students could explore unique aspects of their chosen campus' facilities and features.

- EXPERT TALK ON HISTORY OF ELECTRONICS

IEEE Educational Activities team of Kerala Section organized an expert talk on "History of Electronics and its Applications" for the students of UKF College of Engineering and Technology, Parippally, Kollam. The event was held on 16-02-2018. More than 80 students attended the session. The session was handled by Prof. (Dr.) B. Premlet, Chair, Educational Activities, IEEE Kerala Section and former Professor, TKM College of Engineering, Kollam.

- ILLUMINE

Educational Activities team of IEEE Kerala Section organizes ILLUMINE, an educational outreach programme for the pre-university students, which involves bringing up a young generation with a better idea of what it means to be an engineer and what he/she can do as an engineer.

Conferences

Since past few years, IEEE Kerala Section organises one flagship conference directly by the section. In addition to this, the section technically co sponsor multiple conferences, which are usually hosted by some of the premium institutes in Kerala. Kerala Section maintains a Conference Activities Board with Senior IEEE Members from Research , Academia and Industry as its members. Technical co-sponsorship is approved after a thorough review of the proposal submitted by the host institute, making sure that highest level of quality will be ensured. The board provides guidance , mentoring and technical support for the smooth conduct of the program and to ensure that only original technical work with highest quality are accepted to be presented.

IEEE Kerala Section's Biennale Flagship Conference: RAICS 2018

- Recent Advancements in Intelligent Computational Systems
- This flagship conference of IEEE Kerala Section was held on December 6th -8th , 2018 at Mascot Hotel, Thiruvananthapuram. This year the theme was "Smart Systems for a Smarter World"
- Tracks:included
 1. Data Analytics and Machine Learning
 2. Internet of Things
 3. Healthcare: Devices, Systems and Technology
 4. Robotics, Automation and Control
 5. Signal Processing
 6. Energy Systems
 7. Computational techniques for engineering applications
 8. Technologies for societal applications



Technically Co Sponsored Conferences of IEEE Kerala Section

The following is the list of Technically Cosponsored conferences approved by the Conference Activities Board of Kerala Section

1. International Conference On Power, Instrumentation, Control And Computing 2018 By Gec Thrissur From 18th -20th January 2018
2. International Conference On Control, Power Communication And Computing Technologies 2018 at VJEC , Kannur on 23rd & 24th March 2018
3. International Conference On Control, Communication And Computing at College of Engineering, Thiruvananthapuram from 05th To 07th July 2018
4. International Conference on Emerging Trends and Innovations in Engineering& Technological Research at ToCH Institute of Science & Technology, Cochin from 11th to 13th July 2018
5. International Conference on Data Science and Engineering 2018 at CUSAT from 07th to 09th Aug 2018
6. 8th International Symposium on Embedded Computing and System Design at CUSAT from 13th to 15th Dec 2018
7. Advanced Trends in Medical Imaging Analysis at Muthoot Institute of Technology & Science from 15th to 17th Nov 2018

8. International Symposium on Antennas and Propagation at CUSAT from 03rd to 5th Dec 2018

Women In Engineering International Leadership Summit

IEEE WIE ILS 2018, the 2-day leadership summit of IEEE WIE was held at the picturesque location of the Le Meridien Hotel, Cochin, Kerala, India, in the presence of an eminent group of dignitaries, delegates and leading lights of the society, along with various national & international establishments, on September 7th and 8th 2018. For the summit, IEEE Kerala Section selected the theme 'emPOWERing TOgetHER' in the light of its relevance in the global push to improve women's rights, at the anniversary of the #TimesUp movement that swept across the world. More details of the event available [here](#)

IEEE Mini POCO 2018

IEEE Kerala Section In Association with IEEE Region 10, IEEE India COuncil and IEEE Malabar Subsection organised a mini Panel of Conference Organizers workshop on 10th November 2018. The workshop was well attended with 64 registered participants including two nominees from IEEE Kolkata section. Potential conference organizers deputed from more than 25 engineering colleges in Kerala attended the workshop. More details and photos of the event available [here](#)

B.4 Students Activities

- Total number of Student Branches in the Section:91
- Number of Student Branches formed in the current year: 3
- Number of active Student Branches (Student Branches who have reported required number of meetings during the year):79
- Summary of Student Branch activities (Student Branch wise with attachment table/information)

The student activities of IEEE Kerala Section are organised under "LINK" (Local Integrated Network of IEEE in Kerala). LINK is an innovative concept that originated in IEEE Kerala Section in India, aimed at networking student branches in an effective way, thereby increasing the value in IEEE Student membership . The LINK is structured as three different hubs which in turn consists of a number of Student branches. **1200+** student activities were organised in 2018 in Kerala

Section, out of which **1069** were Student Branch events. The rest were intercollegiate events organised by LINK directly or through the 3 Hubs. The list, description and photos of student activities organised by the LINK are listed [here](#). A **190 Page report** of the Student Activities of Kerala Section is available in the [link](#). A summary of the student activities can be listed below:



STUDENTS ACTIVITIES 2018

The student Activities of Kerala Section is vibrant in organizing activities and promoting the vision of IEEE across the section. With 91 student branches and 8059 members, the student team led by the student activities chair support and volunteer to any activity that needs technological solutions.

For effective management of such a vibrant, geographically spread student membership, the section has been following the hub and spoke administrative model; the Local Integrated Network of IEEE in Kerala (LINK). The primary aim of LINK is networking student branches in an effective way, thereby increasing the value in IEEE Student membership. LINK has achieved tremendous results, causing an exponential increase in student branches and student activities in IEEE Kerala Section. The LINK and its subsidiary HUB teams (three in numbers divided as Travancore Hub, Kochi Hub and Malabar Hub for the geographic distribution of Kerala Section) are being trained with effective leadership skills which is being passed on to the student community, thus improving key skills like professionalism and ethics in students.

NEW STUDENT BRANCH CHAPTERS

a. Communications Society S B Chapter

1. UKF College of Engineering and Technology

b. Industry Applications Society S B Chapter

1. UKF College of Engineering and Technology
2. College of Engineering Trivandrum

c. Computer Society S B Chapters

1. John Cox Memorial CSI Institute of Technology
2. Government Engineering College - Barton Hill

d. Power & Energy Society S B Chapter

1. St Joseph's College Of Engineering & Technology
2. Viswajyothi College Of Engineering & Technology

e. Instrumentation and Measurement Society S B Chapter

1. Adi Shankara Institute of Engineering & Technology

f. WiE SB Affinity Group

1. Muthoot Institute of Technology and Science
2. Government Engineering College Wayanad
3. College of Engineering Thalassery
4. UKF College of Engineering and Technology

SECTION LEVEL STUDENT ACTIVITIES

HIGHLIGHTS

- 20% increase in activities over 2017.
- 7 LINK Events, 62 Hub events, 1200+ student community events.

FACE TO FACE

The Section sponsors an officer training program to newly inducted SB officers. Officer Trainings of 2018 was held at Albertian Institute of Science and Technology to train student officers on effective student branch administration and planning.

BRANCH COUNSELLORS CONGRESS

In recognizing and appreciating the efforts of the Branch Counselors, Kerala Section offers its counselors an opportunity to network and improve their professional sphere. Industry experts deliver talks on industry requirements and try to bridge the Industry-Institute gap. Volunteer Leadership and Training for branch counselors on student branch life cycle are emphasized upon.

The Branch Counselors Congress 2018 was organized by IEEE Kerala Section Student

Activities Committee on the sidelines of WIE International Leadership Summit 2018 at Le Meridien Kochi.

IEEE JOB FAIR'18

It is a recruitment drive which provides a rostrum for all the IEEE members across the country to clearly express their potential contributions, their technical, managerial and 'soft skills' such as communication and professionalism. IEEE Job Fair is also an opportunity for the attendees to evaluate different organisations and whether the opportunity they've applied for aligns with their professional interests, skills, values, and goals. The event had participation from 42 student branches across the IEEE Kerala Section and was held on 23rd and 24th February 2018 at School Of Engineering, CUSAT, Kalamassery. A total of 09 companies from various sectors sought to utilise the opportunity to get the best talents for their organisation. Around 598 students attended the event bringing about a change of great magnitude in their approach to professional life.

WIE WAVE 2.0

As part of International women's Day on March 8, WIE WAVE has been celebrated by IEEE SBs across Kerala. The event consisted of massive participation from students in each SBs. "Embrace and Empower" were the theme for the year and was scheduled from March 1-10th of 2018 but the student branches were free to conduct programs in association with it before/after the mentioned dates. This year 40% more events were conducted across Kerala compared to last year as a part of IWD. A total of 120+ events conducted across Kerala.

SCIENCE WEEK

To convey the importance of National Science Day on February 28th, the student community of IEEE Kerala Section decided to conduct a series of events related to science, creating awareness about the day and how the day was declared as Science Day. Various technical events, conferences and competitions were conducted in SB's across Kerala. The event focused to develop the technical skills of the student in a comprehensive and effective way through various hands on session. A total of 80+ events were conducted across Kerala.

All Kerala Student Congress 2018

- All Kerala Student Congress lays special emphasis on boosting student careers through IEEE.
- The IEEE All Kerala Student Congress 2018 was held at Federal Institute of Science and Technology, Angamaly from 21st to 23rd of September, 2018. The annual flagship event of IEEE LINK gave the delegates from around Kerala, a wonderful platform to enhance their technical knowledge and cater a passion for volunteering.
- AKSC had 200 + participants from 50 student branches in Kerala.

IEEE Day

With more than 100+ events pinned in Kerala Section at the student branch level, the 2018 IEEE day saw widespread activity throughout the section.

Kerala IEEE Technical Exhibition and Symposium 2018 (KITEs 2018)

- The flagship event of IEEE LINK, Kerala IEEE Technical Exhibition and Symposium took place on 10th and 11th November, 2018 at Government College of Engineering Kannur.

- The various events included-

Workshops on

- o SCADA
- o Blockchain
- o Energy Auditing

Competitions

- o Isha 1.0 - Idea Pitching
- o Paper presentation
- o Project Presentation

Other events

- o COMSOC - Project Presentation Competition
- o WYBO '18 - Work Your Brain Out

IEEE LINK CAMP

LINK CAMP is a two day introspection event where all the student branch executive committee members come together to present the activities at their SBs in the previous year. It also plays a major role in developing a strong network between the new executive committee members of different student branches. Held at LBS institute of technology for women on December 1st and 2nd. Annual election for student leadership 2018 was also held.

MALABAR HUB

1.Malabar Hub Meet-2018

Date : 27th July 2018 to 29th July 2018

Venue :NSS College of Engineering, Palakkad

No. of participants: 250

4 Workshops

2. AVENSIS'18 - WIE CONGRESS

Date : 23rd & 24th December 2018

Venue : Government Engineering College Wayanad

No. of Participants : 125

4 sessions, live demonstration and makeathon .

3.SheCanCode

Date : 1/03/2018

Venue: 10 Sbs across Malabar Hb

Time : Nil

No. of participants: 150+

SheCanCode was initiated with a vision of neutralizing the gender imbalance in tech field. By this we mainly focused on developing coding interests in our participants and setting a platform for them to fulfil their interests.

4. Women in Digital Designing

Date : 1/03/2018

Venue: 12 Sbs across Malabar Hb

Time : Nil

No. of participants: 150+

The main aim of the program was to develop more lady graphic designers from each student branch.

5. Roadmap to Success in Engineering Studies - 2018

Date : 12th May, 2018

Venue : Regional Science Centre & Planetarium, Calicut

Time : 10:00 am - 4:30 pm

No. of participants: 41

The main objective of the program was to introduce the features, scopes and academic structure of various engineering disciplines like Electronics Engineering, Electrical Engineering, Computer Science and Engineering, Information Technology, Mechanical Engineering, Automobile Engineering, Production Engineering, Civil Engineering and Architecture, to engineering aspirants who completed 12th standard and looking forward for engineering admissions.

6.Vacation Activities

Date : 1st June to 30th July

Venue : Across 10 SBs in Malabar Hub

No. of participants: 150+

The vast world of internet laid the platform for vacation activities. All the student branches were supported to host online activities during the vacations, keeping the student branch active.

7.CONTESSA 3.0

Date : 29 May 2018

Venue : Across Malabar Hub

No. of participants: 600 (9 Events/ 9 Schools)

A companion to wisdom - Contessa was a bridge laid by IEEE student volunteers of

Malabar Hub to motivate and encourage young budding engineers. WIE STAR event, to introduce various engineering fields and road to engineering career, to higher secondary students.

8. RHEA 2.0

Date : 30 September 2018

Venue : Across Malabar Hub

No. of participants: 200 (4 Events)

Rhea is put forth aiming to unite the student community and bring about a big leap in the menstrual hygiene of women, both technologically as well as mentally.. The event basically aims to ensure that the students (irrespective of gender) understand about the necessity of hygiene during the menstruation period and also attempts to remove the taboo surrounding the subject.

9. SHEIN 2.0

Date : 26 September 2018

Venue : Across Malabar Hub

No. of participants: 310 (4 Events)

Session on self-defense in their respective colleges.

10. WISE 3.0

Date : 16th September 2018

Venue : Across Malabar

No. of participants: 205 (8 Events)

WISE is an IEEE Malabar Hub initiative initiated in the year 2016 to provide digital literacy to all the home makers in the villages across Malabar. Along with professionalism, technical skills makes the event to outshine in every aspect and promises to be the best digital knowledge development program.

KOCHI HUB

1. The IEEE Kochi Hub Meet 2018

Date : 20-22 July 2018

Venue : Toc H Institute of Science and Technology, Arakkunnam

No. of participants: 250+

4 prominent workshops

prolific lineup of speakers

2. SHE - IEEE KOCHI HUB WIE CONGRESS

Date : 21 & 22 November, 2018
Venue: Government Model Engineering College, Thrikkakara.
No. of participants: 120+ participants
Talks , workshops and industrial visits.

3. MINERVA 3.0

Date: March 2018
Venue: College of Engineering Cherthala, University College of Engineering,
Thodupuzha , Amal Jyothi College of Engineering, Kanjirappally
No of Participants: 150+ participants

4. (WIE STAR) Enlighten 3.0 Phase 1 Zone 5

Date : 31st June 2018
Venue : Our Lady's Girls Higher Secondary School
No. of participants: 60

5. Enlighten 3.0 Phase 1 Zone 2

Date : 21st July 2018
Venue : Kendriya Vidyalaya No:02, Naval Base, Kochi
No. of participants: 60

6. Enlighten 3.0 Phase 1 Zone 4

Date : 31st July 2018
Venue : Petta Government High School , Kanjirappally
No. of participants: 60

TRAVANCORE HUB

1. The IEEE Travancore Hub Meet 2018

Date : 5,6,7 October 2018
Venue : College of Engineering Pathanapuram
No. of participants: 250
Talks and multiple workshops

2. IGNITE-WIE CONGRESS

Date : 27th July 2018 to 28th July 2018
Venue: Sree Chitra Thirunal College of Engineering , Trivandrum
No. of participants: 110
Career guidance class for school students, other sessions, talks and workshop for college students.

3. ENGINEERING SUMMER CAMP

Date: 10 APRIL -15 APRIL
Venue : LBSITW

No. of participants: 50+ SCHOOL STUDENTS

4. WIEDZA

Date : July-December , 2018

WIE STAR program of IEEE Travancore Hub is conducted every year under IEEE WIE. It was developed to address the growing concern of girls being discouraged to pursue an engineering career. It all works on the idea that none should be deterred from the right to enter the engineering world full of fun, logic and surprises. This educational outreach program promotes involvement of IEEE members with local junior high and high schools in order to create a positive image of engineering careers. All Student Branches were asked to select volunteers and conduct this event.

HUB/LINK INITIATIVES

1. Internship Drive

Date : 1st March 2018 to 1st June 2018

No. of participants: 240 from all over Kerala

A total of 20 internships were generated. Baker and Grey, Riafy Technologies, TerrificMinds, UST Global, aTeamIndia and Coorporate360 participated.

2. Spectrum War

Date : Conducted every month

Venue : 12-17 Student Branches across the Hub

No. of participants: around 150 for every editions

IEEE Spectrum War, which is online quiz competition conducted to popularize the use of IEEE Spectrum Magazine among Student Members. Each edition of Spectrum war would be based on a particular edition of IEEE Spectrum. February, March, April, May editions of the same were conducted.

3. Sanitation Challenge

Date : 1st December 2018

Venue : Kerala Startup Mission

No. of participants: 120 participants

IEEE Kochi hub in association with Paytm build for India, Kerala Suchitwa mission and Kerala Startup mission conducted Sanitation Design Challenge, the finals of which was conducted on 1st December 1st 2018 at KSUM. Kochi.

4. Spectrum Clip

Date : 18 June 2018

Venue: Across Malabar Hub

No. of participants: 6 SBs

Spectrum Clips is a platform where members can receive video clips on featured topics from Spectrum till date at their fingertips. Student branches under Malabar volunteers to make spectrum experience the best with their vlogging skills. Videos are being actively prepared and uploaded by the student branches.

5. PROJEXON -INDUSTRIAL VISIT

Date : 4th July 2018 to 14th July 2018

Venue : 6 industries

No. of participants: 105

Series of industrial visits.

6. VRIDHI 1.0

Vridhi 1.0, an event of IEEE Women in Engineering, Travancore Hub with the sole aim of providing a platform for all final year IEEE students (both girls and boys) across Kerala to prepare themselves for upcoming IEEE Job fair'19.

7. ISHA 1.0

Webinar and Idea Pitching Competition exclusively for WiE members.

SUMMARY ON STUDENT ACTIVITIES AWARD

R10 SYWL Congress 2018, Bali

- First prize in Infographic Contest - IEEE Kerala Section

RICHARD E MERWIN SCHOLARSHIP

- 2 Students From Kerala Section

IEEE WiE Student Branch Affinity Group of the Year

- Vimal Jyoti Engineering College, Chemperi

R10 Exemplary Student Branch Award

- College of Engineering Karunagappally

Section Student Awards

Outstanding Student Volunteer: Mr. Sahil Sameer, MEC & Mr. Kishore C M, SIMAT

Outstanding Student WIE Volunteer Award: Ms. Ananya R, LBSITW & Ms. Athira M, ASCET

Outstanding Student Branch Counsellor Award: Prof. Raju M, CE Karunagappally

Outstanding Student Branch Award: Govt. College of Engineering, Kannur & College of Engineering, Chengannur

STUDENT BRANCH EVENTS

Over **1200 events** reported by SBs across Kerala, evenly spread across the 3 hubs. 2018 was one of the milestone years for IEEE Kerala Section, touching 1200+ events for its 6700+ student members with adequate geographic spread so as to improve student membership benefits to a high extent. A 190 Page report of the Student Activities of Kerala Section is available in the [link](#).

B.5 AFFINITY GROUP ACTIVITIES

Young Professional (YP)

IEEE Young Professionals AG of Kerala Section has reported **10 Events**. The events consists of Technical talks, workshops, panel discussions, Industry visit, Social events, Outreach activities and meetups. Apart from the events reported by Young Professionals AG, the active volunteering of Young Professional AG members were seen in most of the activities undertaken by the section.

- Panel Discussion on Higher studies abroad

With the vision of providing awareness on the higher studies opportunities and the benefits of doing it abroad, IEEE Kerala Young Professionals organized a panel discussion on Higher studies abroad at Kochi. We had two eminent panellists; Dr. Bijoy Jose, MS & PhD from the United States of America, Mr. Vijay S Paul, MS from Australia. The panellists shared their experience of pursuing higher studies from foreign universities.

- Talk on Blockchain at Infopark Kochi

IEEE Kerala Young Professionals organized a talk on Blockchain at the IT hub of Kochi, which is Infopark, Kakkanad on 11th October as a part of IKYP IEEE Day celebration at Kochi. Mr. Sreeraj S and Mr. Sachu Abraham from netObjex delivered the talk.

- IEEE Day Celebration Trivandrum region

Event kick-started with open space networking at Kowdiar Park, Trivandrum. We are fortunate to have Dr.Daniel Lottis, Chair, IEEE SIGHT for our IEEE Kerala Young Professionals – IEEE Day Celebrations. Mr. Nithin, Vice Chair, IEEE Kerala Young Professional shared how IKYP volunteers are involved in relief operations.

- YP Meetup Trivandrum

The vibrant volunteers of IEEE Kerala Young Professionals gathered at Cricket Shack, Kazhakootam Trivandrum on 20th June at 6.00 pm. The agenda of the meeting was to discuss the monthly meetup for 2018.

- IEEE Day Celebration Calicut Region

IEEE Young professionals in the northern side of Kerala gathered at NIT Calicut and celebrated the IEEE day on 8th October 2018, Monday at 4pm. Senior members of IEEE Kerala Section, Dr. Sameer S M, Chair of IEEE Kerala Section, Dr. Dhanaraj K J, Treasurer of IEEE Malabar subsection and Dr. Madhu Kumar S D, Vice Chair of IEEE Malabar subsection were the guest of the event. We celebrated the day by having the sweet and delicious IEEE Day Cake.

- Eyes Free Science Camp

IKYP organized Eyes Free Science Camp, in association with Chakshumathi, an NGO helping blind and visually impaired students. We had done a TISP workshop for these students to attract them towards technology. The event started with welcoming the gathering. Then we did an ice-breaking session for the participants to build the vibe required for the workshop. The next session was the introduction to Electric Fan, history and its working. Then the students were grouped into four teams and each team was asked to build their own Electric fan working model using the items that we provided.

- Step 2K18

IEEE Kerala Young Professionals, the most vibrant YP affinity group organized the STEP 2018 event at Hotel Park Centre Kochi on June 17th. Mr. Bibin Purakoor Thomas, Chair of the AG brought the attention of audience through the journey of IKYP. Dr. Rekha James, Dr. Bijoy Jose and Dr. Rajesh M V were the panellists for the Discussion on Career opportunities in Academia and Research. Mr. Joseph Joshy, Volunteer of IKYP handles the workshop on Building the career. Mr. Shahim Baker, Mr. Premy Varghes and Ms. Liz Thomas were the panellists for the discussion on Industry expectations.

- Social Mixer

A social meeting of members was convened to strategize and plan a roadmap for the initiatives for 2018. Dr. Suresh Nair, Advisor of the affinity group addressed the young professionals. Dr. Sameer S M, Chair of IEEE Kerala Section explained the role of Young Professionals in Section. Mr. Shahim Baker, Past chair of IKYP shared his experiences. Mr. Ranjit R Nair, past IKYP chair shared his views on how to make use of IEEE membership for professional development. The afternoon session was a team bonding activity at the seashores of Gods own country.

- Workshop on Embedded System Programming with ARM Architecture

IEEE Kerala Young Professionals organized a hands-on workshop on ARM Architecture on 24th October 2018 at Kochi. Mr. Nazir S from ARM India Sales Bangalore delivered the keynote address. Ms. Geetha Nazre from Embedded System Solutions, Bangalore handled the workshop.

- Industrial Visit to SFO TEchnologies, Kakkanad, Kochi

As a part of the Industry Relations, IEEE Kerala Young Professionals Organized an Industrial visit on July 7th, Saturday. SFO Technologies, the flagship company of NeST Group, incorporated in 1990, provides total ODM Plus solutions to diverse industries such as Aerospace & Defence, Communications, Energy & Industrial, Healthcare and Transportation. 7 working Professional members who are into Electronics domain attended the visit. Dr. Suresh Nair, CTO of SFO provided necessary guidance during the visit.

More details of the Young Professional AG events are available at the [link](#).

Women In Engineering (WIE)

- Women In Engineering Affinity Group of Kerala is active among professionals as well as students. Women in Engineering AG organised **135+** events including Professional and Student activities. The activities included an International Leadership Summit, various professional outreach and networking activities, 13 WiE Star activities, Student Congresses and a set of 120+ events by the name WiE WAVE 2.0. Details of the events are available at the [link](#).

- WIE Wave

The International Women's Day activities of IEEE LINK were conducted under the name 'WIE Wave' from March 1-10, 2018 across IEEE Kerala Section. All the three hubs and the student branches under it came up with a multitude of events to host under the WiE Wave. The themes adopted this year were - "Press for Progress" (Travancore Hub) and "Domestic Technology Familiarization for Women" (Kochi Hub).

The IEEE Kochi Hub organized the third edition of "Minerva" – a WIE Exclusive program held in connection with the International Women's Day and WIE Wave 2.0. This year, Minerva focused on the idea of empowering the women in our student community technically. An inventive program initiated at every zonal Minerva was acquainting the WIE members with "Domestic Technology and its possibilities".

IEEE Travancore Hub celebrated International women's day in the name VIRAGO 1.0 as a part of WIE WAVE 2.0. The event mainly aimed to felicitate and honor some great women personalities from different sectors of society along with a panel discussion with them .Also the event provided a great opportunity for students to interact with these personalities .

No. of Events - 120+

No. of Student Branches Involved - 40+

No. of Student WiE Members Involved - 1500

- WIE Star

IEEE WIE STAR was organised by IEEE KERALA SECTION with an active participation of most Student Branches. The event was organised HUB wise starting from June 2018. Throughout the process of implementation the core aim was to enrich the technical and social skills of school students to make them independent in the society as well as to help them to grow as a person. Each HUB was given their own space of how to carry forth the WiE Star in their HUBs. Kochi Hub went on to host an array of events at a zonal level under the name "Enlighten 3.0" , the Travancore Hub came up with a program called "WIEDZA" and Malabar Hub hosted their Star events under the tag "Contessa 3.0".

No. of Events - 30+

No. of Student Branches Involved - 40+

No. of Student WiE Members Involved - 1100+

- Women In Engineering International Leadership Summit

IEEE WIE ILS 2018, the 2-day leadership summit of IEEE WIE was held at the picturesque location of the Le Meridien Hotel, Cochin, Kerala, India, in the presence of an eminent group of dignitaries, delegates and leading lights of the society, along with various national & international establishments, on September 7th and 8th 2018. For the summit, IEEE Kerala Section selected the theme 'emPOWERing TOgetHER' in the light of its relevance in the global push to improve women's rights, at the anniversary of the #TimesUp movement that swept across the world. More details of the event available [here](#)

- WIE Congress

Each of the three hubs under the IEEE Kerala Section hosts their unique Women In Engineering Congresses every year.

IGNITE 4.0:

Ignite 4.0 was the fourth edition of the IEEE Travancore Hub Annual Women In Engineering Congress. IEEE SCT SB was honoured to host IGNITE 4.0, the annual flagship event of Women In Engineering IEEE Travancore Hub on 27, 28 and 29 July 2018. The event saw a participation of 100+ students from all over the state.

SHE (Style Her Enigma) 2018

SHE (Style Her Enigma) is the annual Women In Engineering Congress of IEEE Kochi Hub. The IEEE Kochi Hub Women In Engineering Congress, SHE 2018 was held on 21st and 22nd of December, 2018 at Government Model Engineering College, Thrikkakara. The event saw a participation of 120+ delegates from across the section, a vast majority of them being girls. This year, we had restructured the congress to better benefit the students by including effective programs like Industrial Visits and Peer-to-Peer learning sessions.

AVENSIS'18

AVENSIS is the annual Women In Engineering Congress of the IEEE Malabar Hub. The IEEE Malabar Hub WiE Congress was conducted at Government Engineering College Wayanad on 23rd and 24th December 2018 with a new face. With a very robust and fervent 125 participants from across Malabar region and 45 exuberant volunteers, AVENSIS'18 began its endeavor on 23rd of December and rose to two day successfully till 24th of December.

- VRIDHI 1.0

Vridhi 1.0, an event introduced by WiE Travancore Hub came with the sole aim of providing a platform for all final year IEEE Student members across Kerala to prepare for the IEEE Job Fair 2019. It is an online placement training facility.

Life Member (LMAG)

- The Life Member Affinity group of IEEE Kerala Section is providing remarkable volunteering services to the Section and the Civil society in general.. Their association has helped the Section and various society chapters of the section to conduct a number of successful events. Though the size of the team is small , the quantity and quality of the activities organised by the AG is highly commendable. The AG has reported **26** events in 2018, which includes Technical Talks, Awareness Sessions to the public, Humanitarian Activities, workshops and so on. Details of LMAG activities available [here](#)
- Technical Presentation On “Green Homes: Towards Energy Efficient Housing”
For Skill Development:Lecture, Group Activity Supervision and Training to Prepare Greener Planning on 04 Aug 2018 at College of Engineering Trivandrum
- Planning For Training Women Workers To Do Home Electrical Maintenance
Advice to Archana Women's Centre, Ettumanoor, Kottayam Dt. on Empowerment of Women through technology on 30 Jun 2018
- Training Women Workers To Do Home Electrical Maintenance Lectures And Practicals To Women Workers At Archana Women's Centre On Empowerment Of Women Through Technology
Skill Development Hands-on Workshop to do Home Electrical Maintenance from 17 Jul 2018 to 20 Jul 2018 at Archana Women's Centre, Ettumanoor, Kottayam
- Inspirational Lecture to Higher Secondary School students
Date: 22 May 2018, Location: Higher Secondary School, Kattukulam, Palakkad
- Presentation on Challenges in Power Systems to Post Graduate Students and Faculty
Invited Presentation on Challenges in Power System at Amrita University to PG students and Faculty of Electrical and Electronics Department on 21 May 2018 at Amrita ViswaVidyaPeetham
- Solar Roof Top PV Promotion in Kerala
Invited Presentation of Report on the Feasibility and a 3 Stage Action Plan from the Kerala Government on 16 Apr 2018 at the Secretariate, Government of Kerala

- Humanitarian Technology Interventions for Improving Welfare of ST in Kerala
Need Assessment using Participatory Learning Methods at Kombukuthy Tribal Population
on 14 Apr 2018 at the Tribal School, Kombukuthy, Kottayam, Kerala

- **Institution Evaluation for Innovation Training for Engineering Students**

Technical Scrutiny of S&T Capabilities by Expert Team - Visit to Various facilities and Laboratories etc at the University Campus

Date: 27 Feb 2018

Time: 11:00 AM to 03:30 PM

Location: Kalasalingam University

Anand Nagar, Krishnankoil

Virudhunagar, Tamil Nadu, India

- **Hands-on Training Program on Computer-Aided Design of Electrical System of High Rise Residential Buildings**

A One Day Hands-on Training Program on Computer-Aided Design of High Rise Residential Buildings in Trinity College of Engineering, Trivandrum

Date: 27 Feb 2018

Time: 09:30 AM to 03:30 PM

Location: Trinity College of Engineering

Poovada

Trivandrum, Kerala

India 695528

- **Waste to Energy**

Technical Talk in Workshop related to National Science Week

Date: 26 Feb 2018

Time: 12:00 PM to 01:00 PM

Location: Kanakakunnu Palace

Vellayambalam

Trivandrum, Kerala

- Hands-on Training Program on Computer-Aided Design of Infrastructure Development:

A One Day Hands-on Training Program on Computer Aided Design of Infrastructure Development in Lourdes Matha College of Engineering, Trivandrum on 20 Feb 2018

- Gas-Insulated Transmission Lines

Distinguished Lecture Program on Gas-Insulated Transmission Lines on 06 Feb 2018 at National Institute of Engineering, NIT Campus, Calicut, Kerala

- Inaugural Sitting of the Solar PV programme Advisory Committee for Kerala State for Formulating Criteria for Licensing of Integrators and Implementers

Guidance to State Government on how to Expedite the Solar PV Promotion Activities on 05 Feb 2018 at ANERT, Near PMG Office, Trivandrum, Kerala

- Panel Discussion and Interaction with Post Graduate Students with a Panel of 14 National Experts

Response to Queries from Research Students as Member of Panel on 30 Jan 2018 at Govt. Brennen College, Thalassery, Kannur, Kerala

- Dream Home Contest – Finals

The Finals of a Student Contest on "My Energy Efficient Dream Home" Contest organised previously at College Level and Hub Level. Now, the Finals was conducted at the State Level on 27 Jan 2018 at Energy Management Centre

- Design of Electrical Infrastructure Development and Electrical System of Industry Complex

One Day Workshop in the Design of Electrical Infrastructure Development and Electrical System of Industry Complex on 23 Jan 2018 at Baselios Mathew II College of Engineering, Sasthamkotta, Kollam, Kerala

- Interaction with NGOs, Former VC of Karunya on restoration of the Singanellloor Lake in Coimbatore

Participatory Intervention of Heavily Polluted Singanellloor Lake of 1.25 sq. km Area.

Date: 10 Apr 2018, Location: Karunya Nagar

- Visit to Laboratories and Interaction with EEE Faculty at Karunya University
Interactive Address to Staff Members and Selected Student

Date: 10 Apr 2018, Location: Karunya Nagar

- Two Day Workshop on Design of Electrical System of High Rise Residential Buildings

A Two Day Workshop in the “Design of Electrical System of High Rise Residential Buildings” at T.K.M. College of Engineering, Kollam. Dates: 09 Apr 2018 to 10 Apr 2018

- Challenges in Power Systems and Solar PV Prospects for Kerala

Along with PES Face to Face Program at EMC, Trivandrum on 07 Apr 2018 at Energy Management Centre, Sreekaryam, Trivandrum, Kerala

- Humanitarian Technology Intervention related Rapid Participatory Appraisal of Tribal Colony

Promotion of Welfare through Technologies of a Tribal Hamlet, Kombukuthy, Mundakkayam on 27 Mar 2018

- Interaction with Women Builders on Energy Conservation in Buildings at Archana Women’s Centre

Discussion on Formulating an Appropriate Training Programme for Building professionals and Technicians on 26 Mar 2018

- Waste to Energy

Technical Lecture at the First Telangana State Environment Congress at Hyderabad

Date: 21 Mar 2018 to 25 Mar 2018 **Location:** National Institute for Micro, Small and Medium Enterprises

- Research Collaboration Discussions and Clean Energy Technologies Training in the State

Inspection of facilities at Muthoot Institute of Technology & Science, Ernakulam and Discussion with Principal on 16 Mar 2018, at Muthoot Institute of Technology & Science

- Challenges in Power Systems

Technical Scrutiny of S&T Capabilities by Expert Team - Visit to Various facilities and Laboratories etc at the University Campus on 28 Feb 2018 at T.K.M. College of Engineering

B.6 AWARDS & RECOGNITION ACTIVITIES

Awards constituted by the Section

- K.P.P Nambiar Memorial Award
 - Awarded to Kris Gopalakrishnan, In recognition of his outstanding contributions in leveraging technology for society, his exemplary commitment to professional ethics, all the while proving to be an inspiration to the young minds, motivating them towards a path of excellence.
- Friend of IEEE Kerala Section Award
 - Awarded to Mr. Saji Gopinath, In recognition for his continued support to IEEE, specifically for conferences, joint activities and sponsoring memberships, IEEE Kerala Section is proud to honour him with the "Friend of IEEE" award at the 2018 Annual General Meeting of the Section.
 - Awarded to M/s. SFO Technologies /NEST Group, In recognition to the continued support to IEEE, specifically for academia-industry interactions, providing exposure to our members through joint activities and support during events like Job Fair, IEEE Kerala Section is proud to honour M/s SFO Technologies with the "Friend of IEEE" award at the 2018 Annual General Meeting of the Section.
 - Awarded to Dr Gita Gopal, In recognition for her continued support to IEEE, specifically for her guidance to IEEE's social initiatives, IEEE Kerala Section is proud to honour her with the "Friend of IEEE" award at the 2018 Annual General Meeting of the Section.
 - Awarded to Mr. A P Mohammed Hanish IAS, In recognition for his continued support to IEEE, particularly for events, IEEE Kerala Section is proud to honour him with the "Friend of IEEE" award at the 2018 Annual General Meeting of the Section.
- Best Women Engineer
 - Awarded to Dr. B Valsa, In recognition of her outstanding efforts as a woman engineer, contributing significantly to the achievements of India's Space revolution, and in this way, inspiring the next generation of women achievers.
- Best Teacher Award
 - Awarded to Dr. Mini Thomas, In recognition of her contributions as an outstanding teacher promoting value-based education and academic excellence, with compassion and service to humanity, and for her continuing role as an inspiration both to students and teachers alike.

- **Best Researcher Award**
 - Awarded to Dr. Shivaji Chakraborti, In recognition of his outstanding contributions as an academician, distinguished researcher and international collaborator in the area of High Voltage Engineering.
- **Industry Contributions Award**
 - Awarded to Varghese Cherian, For outstanding support to the IEEE Community, with special support to Young Professionals, the Student community and in playing an exceptional role in bringing industry partnerships to various IEEE events & conferences in Kerala, with emphasis on refining the academia-industry connect.
- **Outstanding Volunteer Award**
 - Awarded to Muhammed Kasim S, For influential leadership, outstanding contribution to the IEEE Community of Kerala Section particularly in the areas of Educational Activities, Student Activities and Technical Chapter Activities, all the while propagating the true spirit of joy of volunteering.
- **IEEE Outstanding WIE Volunteer Award**
 - Awarded to, Dr. Lillykutty Jacob, For outstanding contribution to the Women in Engineering activities of IEEE Kerala Section by exhibiting excellent leadership skills and organizing skills, all the while staying true to the spirit of volunteering.
- **IEEE Outstanding Humanitarian Volunteer Award**
 - Awarded to Muraleedharan M, For his outstanding contribution to the Kerala Rescue project, playing a pivotal role by establishing a connect with the bureaucracy in providing technology solutions to the community, all the while adhering true to the mission of “Advancing Technology for Humanity”.
- **IEEE Outstanding YP Volunteer Award**
 - Awarded to Abey Easow Joseph, For his continued contributions to the Young Professional AG and his exemplary services to the membership development activities of IEEE Kerala Section, all the while staying true to the spirit of volunteering.
- **Best Event**
 - **Best Student Event Award**
 - Awarded to CEC ISQIP - For setting the standards high in the overall quality, conduct, implementation and impact of an event, by providing excellent opportunities to the students of the Section in a sustainable manner, thereby setting a benchmark for student events in the section.
 - **Best Professional Event Award**
 - Awarded to WIE ILS - For setting the standards high in the overall quality, conduct, implementation and impact of an event, by bringing

excellent speakers together and bringing limelight to Kerala's strong line of women leaders and their achievements.

- Outstanding Student Volunteer Award
 - Awarded to Mr. Sahil Sameer, MEC, For significant contribution to student services beyond his responsibilities and to the section as a whole by innovative activities taking the section to spotlight in the global arena
 - Awarded to Mr. Kishore CM, SIMAT, For significant contribution to student services beyond his responsibilities and to the section as a whole by innovative activities taking the section to spotlight in the global arena
- Outstanding Student WIE Volunteer Award
 - Awarded to Ms. Ananya R, LBSITW, For significant and innovative contributions to the women student engineer community beyond her responsibility
 - Awarded to Ms. Athira M, ASIET, For significant and innovative contributions to the women student engineer community beyond her responsibility
- Outstanding Student Branch Counsellor Award
 - Awarded to Prof.Raju M, For significant contributions towards upbringing a dormant College of Engineering, Karunagapally student branch to the vibrancy of receiving the R10 Outstanding SB award in a few years
- Outstanding Student Branch Award
 - Awarded to Govt. College of Engineering, Kannur SB, For the exceptional growth and quality in activities engaging the members of the SB and for organizing high impact events for benefit of the Student Community at large.
 - Awarded to College of Engineering Chengannur SB, For setting the milestone high in terms of technical and professional activities engaging the members of the SB and for organizing high impact events for benefit of the Student Community at large.
- **Awards and Recognitions received by the Section, and members in the Section, from R 10 and IEEE HQ during the year 2018**
 - MGA 2018 Life Member AG Award: "Awarded to the Kerala LMAG for its service to society through a broad range of activities and engagement of Kerala IEEE members."
 - APS BEST CHAPTER AWARD: Awarded to Kerala APS Chapter for 2017 Activities, awarded on 2018
 - Outstanding PES Chapter Award : Won by Kerala PES Chapter for 2017 activities, received on 2018

- IEEE Region 10 Exemplary Student Branch Award 2018: Won by College of Engineering, Karunagappally
- IEEE India Council Outstanding Volunteer Award : Awarded to Er. Hareendralal, Senior Member and Volunteer of IEEE Kerala Section
- 2018 MGA Young Professional Achievement Award won by : Er. Sabarinath Pillai and Er.Nithin RS of Kerala Section
- IEEE Kerala Section Members volunteering in various roles in other IEEE OUs
 - Dr. Sameer SM: Treasurer, India Council
 - Mr. Amarnath Raja – Member, MGA Nominations & Appointments committee
 - Prof. VK Damodaran: Member, MGA Life Members Committee
 - Mr. Ranjit R Nair: Member, EAB SERC
 - Nithin RS : Webmaster, Region 10 and Cloud computing steering committee
 - Mr.Aju Thomas: YP Rep & Member MD Committee, IEEE Education Society
 - Ms. Aisha Nazia: Member, R10 TEMS YP Committee
 - Mr. Jaikrishnan- Regional Lead (India, Pakistan, Bangladesh) of IEEE Day 2018

B.7 COMMUNICATION ACTIVITIES (NEWSLETTER, HOME PAGE, E-MAIL ETC.)

- Newsletter (name and number of issues in the year)

Kerala Section regularly publishes annual newsletter for the last 27 years. Newsletter by the Name IEEE Kerala Section Newsletter is published every quarter of the year and is distributed as soft copy via e-Notice

- 1 annual print copy is distributed to all members in the section by post
- **Home Page of the Section**

<http://www.ieeekerala.org/>

The page is usually updated in a period of 2-4 weeks. Details of all the activities of the Section are included in the website

- **Other means of contacts with Section members**

- E-Notices are sent to members to update regarding major section activities.
- Season's Greetings sent by Post
- Invitation to Annual General Meeting is sent as e-Notice and as traditional printed mail
- Updates via Section's social media: Facebook Page, LinkedIn Page, Instagram, Twitter
- Live video feed of major events are streamed over social media

- **Section Social Media Handles:**

- <https://www.facebook.com/IEEEKerala> : Section Facebook Page
- <https://twitter.com/ieeekerala> : Section Twitter Page
- <https://www.instagram.com/ieeekerala> : Section Instagram Account
- <https://www.linkedin.com/company/13182671> : Section LinkedIn Page

B.8 INDUSTRY RELATIONS

- **Membership growth and retention**
 - 55.7% retention rate among professional members
- **Activities for/with industrial members**
 - Value adds to Professional Members of the section were introduced by way of MoUs.
 - Professional activities and meetups at the tech parks in Kerala
 - Formation of a Student Activities Board with members from both Industry and Academia to bridge the gap between what is required in the Industry and the deliverables from Academia.
 - Special Awards are given to IEEE Members and Non Members based on their Industrial contribution
 - Awards are also given to Industries/organisations , which support IEEE Kerala Section in Industry Academia Interaction Activities.
 - **Industry Interaction Program:** The MD team along with WIE leadership team visited the Kochi office of Baker Hughes, to have an interaction on IEEE Benefits and WIE membership, More details of the activity can be found [here](#) . As a part of the Industry Relations, IEEE Kerala Young Professionals Organized an Industrial visit to SFO Technologies. Details are available [here](#)

- Almost all events mentioned in Section B.2 and B.3 of this document had personnel from Industry as resource persons and invitations were sent out for the events to IEEE Professional members as well as local industries.

B.9 HUMANITARIAN TECHNOLOGY ACTIVITIES

- Humanitarian Technology related activities supported by the Section including collaboration with other OUs.

- **Eyes Free Science Camp:**

IEEE Kerala Young Professionals organized Eyes Free Science Camp, in association with Chakshumathi, an NGO helping blind and visually impaired students. A hands-on workshop was done for these students to attract them towards technology. The event started with welcoming the gathering. Then we did an ice-breaking session for the participants to build the vibe required for the workshop. The next session was the introduction to Electric Fan, history and its working. Then the students were grouped into four teams and each team was asked to build their own Electric fan working model using the items that we provided. Details available at the [link](#).

- Humanitarian Technology Intervention related Rapid Participatory Appraisal

The LMAG Chapter organised an activity on Humanitarian Technology Intervention related Rapid Participatory Appraisal of Tribal Colony.

- Meeting with Global SIGHT Chair

A meeting of section execom was arranged with Dr. Daniel Lottis, Global Chair, IEEE SIGHT, during his visit to Kerala. We discussed the ongoing and upcoming activities of Kerala SIGHT this year, especially “Forging the Assistive Technology Value Chain” conference going to hold on January 2019. Details of the event available [here](#)

- Rescue and Rehabilitation activities undertaken by IEEE Kerala Section during Kerala Floods is listed under the special projects section (C.1) of this document

B.10 COMMUNITY ACTIVITIES

- **Annual Awards Night:**

The Annual Awards night of IEEE Kerala Section was held along with the Annual General Meeting on 13th January 2018. Awards were given to Individuals and organisations who have given remarkable contributions to the society. Special award as a token of gratitude was given to organisations and individuals who provided commendable support to IEEE activities in Kerala. Awards for best volunteers from students and professional members were given. More details of the event available at the [link](#)

- **Honouring keralarescue.in team members:**

During the WiE International Leadership Summit, a Special Award Ceremony was conducted to honour the team which initiated keralarescue.in portal for coordinating rescue and relief operations during the floods that happened in Kerala in August 2018. More details available [here](#).

- **IEEE Day Celebrations:**

IEEE Day was celebrated at various parts of Kerala. The details of celebration at Northern region of Kerala is listed [here](#). At the central region of Kerala (Kochi) a celebration was followed after a Technical Talk. Details of the event is given in the [link](#). At the Southern Region-Thiruvananthapuram, IEEE Day was celebrated along with IEEE SIGHT Chair, Dr. Daniel Lottis. Details are listed [here](#)

PART C - OTHERS

C.1 SPECIAL EVENTS

- Please briefly describe the importance of special events and the outcomes achieved
- Funding secured from the IEEE and external sources including sponsorships

Rescue and Rehabilitation Activities Done by IEEE Kerala Section in Connection with the Kerala Floods in August 2018:

Kerala State in India had one of the worst floods in History in the month of August. Between 8 and 10 August, the state received 256 percent more rainfall than normal, reported at 310 mm of rain in the first 24 hours, which is double the average amount for the entire month of August. About 370 people have died and 33,000 people have been rescued. Over 3,274 relief camps have been opened at various locations to accommodate the flood victims. It is estimated that 1.2 million people had found shelter in such camps. The flooding has affected hundreds of villages, destroyed an estimated 10,000 km (6,200 mi) of roads and thousands of homes have been damaged or destroyed. Most of the households had their electricity cut and electrical wiring rendered useless.

The volunteers of IEEE Kerala Section, which is known for its generous humanitarian work, got active and were in the forefront for disaster relief. We took-up numerous innovative uses of technology for rescue and rehabilitation apart from many other volunteering efforts at the grass root level. Some of the important projects taken-up by Section volunteers are outlined below. Detailed reports are available in the section website in the corresponding web links.

1. The Disaster Management Portal keralarescue.in

The IEEE members, especially the students rallied around the people and started work on disaster management doing various important functions including creating and managing a disaster management website, which soon became the official Government website for managing the flood, rescuing people, mobilizing volunteers and relief aids. The work which was started by a few volunteers became live on 11th August, in less than 15 hours of mooted the idea of starting such a portal. The collaborative portal provided effective collaboration and communication between Government, volunteers and public using Open source technology such as Python, PostGreSQL, Django, GitHub, collaboration channel slack etc.

Some of the statistics for the 2 weeks of operation of the portal are:

- Over 55,000 registered volunteers
- Over 45,000 help requests
- Over 17 Million hits on the website
- Over 1.2 Million people in camps
- Setup Over 4000 flood relief camps across the state
- over 1000 commits
- over 1900 users in slack

- ZERO outage during 2 weeks of operation

A detailed report of the background and activity cycle of the site which became the official portal of Government of Kerala for rescue and rehabilitation is available [here](#).

2. Project “Watts and Water- JalajyothIEEE”

Most of the submerged buildings had their electrical wiring soaked and unusable. In order to reconnect the wires to the grid most of the wiring had to be redone. At a discussion with the Kerala State Electricity Board (KSEB), IEEE Kerala Section members put forward a plan to develop a temporary connection board to which the grid could be reconnected. This will cost as low as \$40 for quickly getting the grid back on-line. This design and method put forward by Section was accepted by KSEB. IEEE Kerala Section provided 500 such boards to the poor and needy community out of 300 boards were sponsored by National Institute of Technology in Tiruchirappalli. A detailed report of the project can be found [here](#).

3. Distribution of Medicines

Kerala Section volunteers joined hand with americares India foundation, a non-governmental organization, for distributing 110 cartons of medicines and chlorine tablets to the people occupied in disaster relief camps across the state.

4. Mission Re-connect Project

The IEEE Student branch in TKM College of Engineering along with the alumni and faculty associations of the college also has distributed 610 temporary electrification boards which section has designed to re-connect to the grid. A detailed report of the initiative is available [here](#).

5. Project Candela & Power Banks

As electric power supply was not available in flood affected areas, two important needs of people in relief camps were emergency lamps and facility for charging their mobile phones (low cost power banks). Many IEEE student branches and volunteers across the state have contributed to these projects. A gist of some of the activities can be found [here](#).

IEEE New Initiatives Committee Funded Project – One World One Education

One World, One Education is a project aimed to develop a platform which helps students and young engineers across the globe to access the educational contents available on the Internet such as from Open Course Wares (OCW) easily and use it effectively for developing competent skills.

- As of now, the awareness is very low especially in developing countries and only 5.5% of people across the globe that enrolls in open online courses complete it and earns a certificate.
- The project which is supported by IEEE New Initiatives Committee aims to improve the completion rate of course by employing Machine Learning techniques and also increase the awareness regarding the same.

C.2 RELATIONSHIP WITH NATIONAL AND INTERNATIONAL SOCIETIES AND NON-GOVERNMENT ORGANIZATIONS (NGO)

Association with Other Professional Bodies :

IEEE, Kerala Section has a long standing relation 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 and Indian Society for Training and Development. Along with these bodies every year, IEEE Kerala Section arranges weekly Technical/Professional talks on a variety of topics on wednesdays. In 2018, 34 such talks has been delivered by various speakers. Details of the Wednesday talk series can be found in this [link](#). IEEE Kerala Section has came into a tie up with the newly formed ISOC (Internet Society, Trivandrum Chapter) for conducting activities that are of mutual interest and beneficial to members /target audience of both organisations. This tie up resulted in starting a Webinar Series ([link](#)) by IEEE Kerala Section, in association with the CS Chapter of Kerala Section. IEEE Kerala Section and the PES Chapter of Kerala Section has joined hands with SEEM (Society of Energy

Engineers & Managers) for a Sustainable Energy Awareness program for the public and a competition for students.

Strategic Partnership with Governmental Agencies:

Being a pioneer professional organisation in Kerala, IEEE has good rapport and official tie ups with various government bodies. IEEE Kerala Section has long term association with the State owned Power Utility KSEB. In 2018, along with KSEB and IEEE Kerala Section PES Chapter, Kerala Section organised a Series of Seminars and Project Paper competitions. More details will be listed in the Part C of this document. IEEE Kerala Section, through its PES Chapter has joined hands with the govt agency - ANERT (Agency for Non-conventional Energy and Rural Technology), for conducting solar panel installation training for students. Tie Up with Enrgy Management Centre, another governmental agency in Kerala has helped in conducting Energy management workshops for the benefit of the public. IEEE Kerala Section is maintaining continuing relationship with Kerala StartUp mission to promote Entrepreneurship among Engineering students in Kerala. IEEE Kerala Section is helping C-Sis (Centre for Science in Society) at Cochin University of Science & Engineering. Kerala Section has been associating with IT Mission, the nodal IT implementation agency of government of Kerala. During the recent floods, this partnership resulted in saving hundreds of lives and helping thousands of flood victims. IEEE volunteers developed a portal for coordinating the flood relief and rescue operations, and with the help of IT mission, this portal was declared by the government as the official site for coordination of flood related activities. Another partnership that became useful at the time of flood was the one with KSEB. IEEE Kerala Section designed and supplied temporary electric connection boards to be installed at flood affected houses to reconnect electricity by KSEB. Details of both these can be found at the last portion of this report

C3. COLLABORATION WITH OTHER IEEE SECTIONS

● SUPPORT EXTENDED TO NEIGHBORING SECTIONS

- Volunteering – Dr. Sameer S M ,Chair, Kerala Section had served as the Treasurer of IEEE India Council
- Dr. K. R. Suresh Nair, immediate past Chair had served as Vice Chair of IEEE India Council for conference activities

● **JOINT ACTIVITIES WITH ANY OTHER SECTION**

- Many IEEE Members outside Section but belonging to R10 extended whole hearted support for the flood relief activities taken-up by the Section. Some of the notable contributions include supply of 300 temporary electrification boards for restoring electricity in flood affected areas by National Institute of Technology Trichy belonging to IEEE Madras Section. Financial contribution was also received from IEEE Nepal subsection.
- The Mini Panel of Conference Organizers (POCO) workshop sponsored by IEEE Region 10 and co-sponsored by IEEE India Council was conducted on 10th November at NIT Calicut, Kerala. Prof. Sivaji Chakravorti, Chairman, IEEE India Council inaugurated the event. The speakers include Mr. Harish Mysore from IEEE Bangalore office, Dr. Lillykutty Jacob, Professor, NIT Calicut, Dr. Sameer S.M, Professor, NIT Calicut, Dr. G. Santhosh Kumar, Professor, CUSAT, Dr. Bijuna Kunju, Professor, TKM Engineering College, Kollam and Mr. Nandakumar. R, NIELIT, Calicut. The workshop ended with an open forum moderated by Dr. K.P Mohandas, Life Senior member and Chair of Conference Activities Board of Kerala Section.

C.4 SUPPORT EXTENDED TO SUB-SECTIONS & SOCIETY CHAPTERS WITHIN THE SECTION

- Kerala Section has 2 Sub Sections (Kochi Sub Section and Malabar Sub Section), 10 Society Chapters and one Council chapter. All activities organized by the subsection / society chapters are supported both financially and technically by the Section.

C.5 BEST PRACTICES OF YOUR SECTION (WHICH YOU WOULD LIKE TO SHARE WITH OTHER SECTIONS FOR THE BENEFITS OF MEMBERS)

- Involvement of the entire Section members for the rescue and rehabilitation activities associated with Kerala floods happened in August 2018.

- The “KeralaRescue.in” model of social collaboration and co-sourcing is being effectively used during the damage assessment, rehabilitation and restoration activities in the state..
- The Section executive committee has representation and active participation of Chair, Vice Chair and Secretary of all Subsections, Affinity groups and Technical society chapters apart from core office bearers and volunteers assigned with specific responsibilities such as Educational activities, Professional activities etc. All former chairs of the Section are also included as member-at-large.
- Active participation of members ranging from Life senior members to student members in the section governance and activities
- Strong interaction and liaison with Government departments and local bodies of administration. This was particularly utilized to support crisis management at the Government level especially during natural calamities such as the Kerala floods in August 2018.
- Annual Awards by Section: Along with Annual general meeting of the Section, an award function is conducted with outstanding and phenomenal contributors from Industry, Government as well as academia are honored with special awards. Outstanding IEEE volunteers from all categories of the Section membership are also given special awards to recognize their volunteering efforts.
- Active presence in all social media channels such as Facebook, Twitter, Instagram as well as YouTube
 - Mentoring of new members and young professionals by appointing senior Section volunteers as advisors
 - Participation of academia, R&D, Industry in the Governance
 - Formation of Student Activities Board to provide a sense of direction and guidance to the Student Activities in the Section
 - Online fund transfer to all the end beneficiaries for speedy disbursement of section financials. More than 95% of the financial transactions of the Section are made through bank account only
- One of the most vibrant student activities team in R10 with about 6000+ student members across 70+ SBs. Coordination of student activities through Local Integrated Network (LINK) and 3 HUBs that coordinates the activities of IEEE Students in three zones of the Section
 - Student Representation in Sections decision making process
 - IEEE Job Fair-Aimed to educate, advise and connect young engineers to opportunities in the Industry has been continuing with resounding success for last three years with 100+ offers to IEEE Student members
 - Through the contacts that the execom members and our past volunteers in Industry, Section has extended internships to 150+ students in industry after the third year of their B.Tech program.

C.6 PROBLEMS ANTICIPATED AND SUGGESTIONS FOR SOLUTIONS, IF ANY

One problem that the Section experience is that the retention rate of student members is not up to the expected level. The Section leadership and student activities board (SAB) of the Section are actively working on providing valuable membership retention benefits such as support for internship in industries, job fair where industries are brought from various domains to recruit IEEE student members for job opportunities, guidance for higher studies etc.

PART D - GOALS AND PLANS

D.1 CONTINUATION OF PROJECT/ACTIVITY IN PROGRESS AND THEIR IMPLEMENTATION PLANS

Purpose	Activities	Description
To provide opportunities for graduate student members and research scholars to improve technical writing and presentation skills	Conduct workshops on Research Methodology, Publications and Patenting	One program was organized in 2018. Three such programs in three regions are planned for 2019

To create forums for Researchers and Academicians for interaction and exchange of ideas	Conferences with papers being published in IEEE Xplore digital library	One high quality IEEE international conference is organized directly by Section (RAICS/ SPICES) and several conferences are technically co-sponsored by Section (around 5-6 every year).
To bring in more students towards pursuing Engineering studies.	A program named “Roadmap to Success in Engineering Studies” is a regular annual event organized at various locations of the Section, where pre-university students are given an insight into various disciplines of engineering, and their future prospects.	Section organize multiple events for high school students where experts in respective engineering disciplines describe about what are the skillsets required for various engineering specializations as well as career prospects.
Bring in more active Young Professionals in IEEE activities	Organizes Young professional meet-ups on regular basis.	One to two day programs organised for Young professionals and leadership trainings are imparted. Micro-volunteering workshops are also conducted

Tips and techniques for young entrepreneurs	Promotion of Innovation and Entrepreneurship (PIE) and IEEE Consultants Network to join hands with Young Professionals	Section is planning to extend support for entrepreneurs through its wings and by joining hands with Start-up mission and Maker Village of Government of Kerala
To provide continuing education for engineers and academicians	Workshops, Seminars, and Technical programs	Various programs for each target group are organized by Society Chapters in Kerala Section – Computer Society, Communication Society, Power & Energy, Industrial Electronics, Industrial Automation, Power Electronics, Signal Processing, Antenna Propagation, Robotics & Automation and Engineering in Medicine & Biology

Programs in light with the vision of SIGHT and HAC	Community Engagement Workshops , Symposiums as well as low cost technology development workshops	Traditionally this is an area where Section has made some phenomenal contributions. It's proposed to hold a symposium on "Landslides happened in Kerala" during the Kerala floods is planned in the first quarter of 2019. It is also planned to prepare a documentary film on the landslides happened in Kerala in 2018. A few other activities for under privileged communities are also planned
To bring in Young professionals in main stream decision making positions	Like last year, Young professionals are continued to be selected as Secretaries of society chapters and affinity groups to nurture future leaders.	Young professionals are also financially sponsored to attend events happening at other Sections as well as Council/R10
IEEE Jobfair and Internship Programs	Like previous years, organize Job fair and Internship drives for IEEE student members	Aims to educate, advice and connect young engineers to opportunities in the Industry. Planning to continue these programs by bringing more companies to participate in these programs.

D.2 GOALS AND FUTURE PLANS

Kerala Section has conducted wide range of brain storming sessions among all membership of the Section and executive committee in 2017 and came up with a few special task groups to concentrate on specific domains where Section needs to focus in the coming years. The activities of these task forces are going on in full-swing and most of the future plans of the Section are going to be oriented towards realizing the goals of these task forces.

Task Force 1: Bringing more Young professionals to main stream:

1.1. Member Benefit Events : Young Professionals AG must conduct more events that are directly beneficial to its members. This will help in member retention and in increasing the IEEE membership counts. Local meetups with micro workshops need to be conducted at various locations more frequently.

1.2. Survey and Data Updation: A survey and data updation campaign is to be done among Young Professional members through phone call / mail to get their updated contact details, their volunteering preferences and the benefits they expect from IEEE membership

1.3 Volunteer Engagement : All those members who are interested in volunteering should be given opportunities to volunteer. Call for volunteers are to be done on a regular basis and those interested members should be given opportunity to volunteer in various activities conducted by the section (not just on Young Professional Activities). Those student members who passed out in the current year should be invited to volunteer for various events of the section and its sub units.

1.4. Leadership Through Focused Growth Path : Section should identify and mentor Young Professionals who have the potential to take up various leadership roles in Region and MGA levels. They should have a well defined and focused growth path.

3.1.5 Presence at National and international events: IEEE Kerala Young Professionals should be given opportunities to show their presence at Regional, MGA and India level events. There should be a fund earmarked for this every year.

1.6 Kerala Young Professionals Meetup: An informal meetup of IEEE Kerala Young Professional members is to be held and they should be

briefed about the various volunteering opportunities at Section, Council, Region, MGA levels

1.7 Visibility via Newsletters and Social Media: The activities of the Kerala Young Professional AG should have more visibility through newsletters, social media and other publications of various entities of IEEE.

1.8 Internships for passed outs : Most of the final year students drop their membership after graduation. To give a special benefit to final year students and thereby increase membership retention, an internship drive could be planned for the graduates of that particular year. IEEE Kerala Section will facilitate an internship drive and help the students to find out 3 month internships at different industries. This can increase visibility of IEEE in the industry also.

1.9 Sessions for Academicians: Special training programs and volunteering opportunities to be brought in for the IEEE Young Professional members from the Academia.

1.10 Focus groups at Tech Parks: Special activity teams must be formed at various tech parks in Kerala to regularly conduct IEEE events there and to attract more members

Task Force 2: Increasing Public visibility to IEEE

2.1 Public Events - IEEE should try and organize public events on technology topics which are of interest to the common people. These events if possible should be organized in association with government authorities and take help from local bodies for the conduct of these events.

2.2. Visual Media - Try and get some recurring time slots in the visual media for conducting technology related talks and bring in experts from IEEE circles for these talks. Section has started a You Tube Channel and it will be populated with more videos

2.3. Partnership with Start-up Mission/Block-Chain Academy - IEEE should try and have formal tie-up with industry organizations such as Start-up mission and Block Chain Academy of Government of Kerala. This will help IEEE to have visibility and presence in the Industry circles. This will help to reach-out to potential members in the industry.

2.4 Strengthen Social Media Presence - ECC of the section should be strengthened to have a continuous presence in the social media with appropriate content. A YouTube channel for the section will be useful with regular uploads of videos of all possible events organized by any group coming under Kerala Section. There should be a team of Execom members to review and approve these videos before uploading to the channel.

2.5. A short video showing various activities being conducted by the Kerala Section to be made and all those who are attending different IEEE meeting should try and show this video to share our activities among the IEEE community.

Task Force 3: Quiz Programs

Participation group: Students of Std VIII – Higher Secondary

Stage – 1

Zonal level Competition: The 14 districts are divided in to 8 zones given as below.

Zone - 1: Trivandrum & Kollam

Zone – 2: Alleppey & Pathanamthitta

Zone - 3: Kottayam & Idukki

Zone – 4: Ernakulam

Zone -5: Trissur & Palakkad

Zone – 6: Malappuram

Zone -7: Calicut & Wayanad

Zone – 8: Kannur & Kasargod

We with the help of Student Branches across Kerala request all School Head Masters / Principals of each zone to send one team from their School for the Zonal level competition to be held on the same date.

Student Branches are entrusted to work on this to get maximum School participation for the zonal level competition.

Preliminary: a written test. Top 5 teams are selected for the finals.

Finals: On stage final

Winner & two runner-up team qualifies for the state level finals

Prize money: 5K, 3K & 2K respectively.

Total Prize money at zonal level: 80K

24 teams from the 8 zones qualifies for the finals. We Pick 6 more team with highest score from among the zonal level finalist. The score sheets are collected for this purpose from the zonal level coordinators. A consolation Prize of 1.5 K is

given too these six team. Zonal level Prize money & Consolation Prizes are given at the state level finals.

Stage – 2

State level final

Prelims: a written test. Top 5 teams are selected for the finals.

Finals: On stage final

Prize money: 50K, 30K & 20K respectively for the winner & runner-up 1 & 2.

We have to try our best to get media partners (News paper / FM radio) & Sponsors (Platinum, Gold & silver).

Task Force 4: Project of Social Relevance

In line with the slogan of IEEE of Advancing Technology for Humanity, and reviewing the current technology needs of the Kerala community, the group suggested the following 'Big projects' for the rest of activity year for IEEE Kerala Section, to be continued in subsequent years too as appropriate.

4.1. E-Farming (Intervention in Agriculture)

IEEE Kerala Section may join hands with appropriate agencies to demonstrate the potential of Kerala to become self sufficient in food and agri-, horti-, and flori- culture production and ensure availability, affordability and safety ucts, learning from the successful efforts of Netherlands in becoming a major exporter of agricultural products, in spite of land constraints, and climate severities, using e-Farming technologies.

4.2. Mentoring at Pre University Education Level

School students especially at the HS and HSS levels should receive special attention from the IEEE Kerala Section through what could be called as Mentoring for getting motivated students to enter engineering schools, to inspire and handhold them for socially relevant innovations, and to alleviate the difficulties in appreciating the fundamentals of engineering science in their early years. To begin with, mentoring to the Atal Tinkering Labs promoted by Niti Ayog, for contests like Junior TechTop, School science Fests, Tinker Fests etc, in association with organizations like TechTop Trust, Experience Foundation, several IITs and Engineering colleges etc. Several scattered members and student members of the Section can actually be involved in these tasks in their own respective areas as Volunteers of IEEE.

4.3 ECFDP Pattern intervention in Engineering Teaching and Learning
With introduction of online learning, inadequate resources and facilities at several teaching institutions, the young teachers as well as most students now crave for making teaching and learning an easy task. Section should embark on a project like

the ECFDC in the past and help make the technical education arena to be successful, with every student being able to go through their studies with ease and facing their career with confidence.

4.4 Skill Development for Public to Benefit from Modern Technologies

The invasion of continuously emerging and fast evolving technologies in daily life has left the general public in Kerala as well as in developing countries like India, looking for help in understanding the fast unrolling technology vistas. There are several schemes currently progressing in the country for equipping workers with better sets of skills as well as others to make best use of such technologies. IEEE Kerala should complement and supplement skill development activities on the one hand and specially have programmes to address the dilemmas faced by housewives, aged citizens, and daily wage workers in the face of technology invasion – through lectures, reference literatures, training or demonstration classes etc.

TENCON 2019

The most important activity of IEEE Kerala Section planned for the year 2019 is the successful conduct of the flagship conference of Region 10 bestowed upon the Section. The conference will be organized at Hotel Grand Hyatt Bolgatty, Kochi during 17-19 October 2019.

D.3 ANY INNOVATIVE IDEAS TO MAKE IEEE MORE CREATIVE AND VALUE ADDED FOR SUSTAINING THE MEMBERSHIP RETENTION AND RECRUITMENT GOALS

a. Popular Awards

IEEE Kerala Section has instituted Popular Awards namely KPP Nambiar Award, Friend of IEEE from Academic, Industry and Government as well as Best Teacher Awards and Best Researcher Awards. These are open to even Non IEEE members, and thus a good relation is built with academia, Industry as well as Government agencies. This helps in having more IEEE Members as well as sponsorship to events and membership supports to existing members. Media attraction has reached to the top by having such awards and IEEE becomes popular among public.

b. Activities Spread Across the Section

It is seen that most of the Execoms as well as events are concentrated around a few institutes or few cities. This makes the members spread across abstain from activities. In Kerala Section, it was implemented to have Execoms across the Section as well as events in all parts of the Section, thus bringing in more members active in the main stream. This also demonstrated democratic way of having the Execom members instead having only a bunch of people always.

c. IEEE Loyalty Pins

It is decided to get the IEEE Pins from HQ office with year categories, and planned to personally supply to the loyal members.

d. Coding Contest

A statewide software coding contest is planned for student members of the section in the final year of their undergraduate program where the winners will be given job opportunities leading companies in the software technology park of Kerala. This was a grand success last year, and it will be continued in bigger scale. This is open exclusively for IEEE student members.
