

Region 10 Section Report Format

IEEE Madras Section

PART A - SECTION SUMMARY

A.1 Executive Summary –

- **Section Executive Committee Member List**

| Sl.No. | Name | Position |
|--------|------------------------|----------------------|
| 1 | Dr. M.A. Atmanand | Chairman |
| 2 | Dr. N.R. Alamelu | Immediate Past Chair |
| 3 | Mr. H.R. Mohan | Vice Chairman |
| 4 | Dr. N. Kumarappan | Vice Chairman |
| 5 | Dr. T. Micheal N Kumar | Secretary |
| 6 | Dr. P. Sakthivel | Treasurer |
| 7 | Dr. B. Paramasivan | Member |
| 8 | Dr. S. Koteeswaran | Member |
| 9 | Mr. P. Subramanian | Member |
| 10 | Dr. S. Radha | Member |
| 11 | Dr. R. Dhanasekaran | Member |
| 12 | Dr. P. A Manoharan | Member |
| 13 | Dr. V. Thulasi Bai | Member |
| 14 | Mr. C.R. Sasi | Ombudsman |

- **Section Highlights**

- **❖ 2017 IEEE MINI POCO (Panel of Conference Organizers):**

The IEEE Madras Section organized a mini POCO (Panel of Conference Organizers) event for the benefit of conference organizing community on 29th Oct 2017 at the Conference Hall, Alumni Centre, Anna University. The idea behind this Mini-POCO event was to help participants in gaining in-depth knowledge to hold International conferences of high level, commensurate with IEEE standards. The event aimed to provide exposure to Timeline Planning, Procedures, Research Papers Preparation, Plagiarism Check, Publication, and IEEE Best Practices etc. This event also attempted to clarify and guide in all factors related to organizing a conference following global standards.

The 2017 edition of IEEE MAS mini POCO which attracted about 50 participants was a one day event with the following sessions and covered almost all topics relating to organizing a quality IEEE conference.

- Conference Organizer Best Practices by Dr R. Hariprakash, Sr. Member, IEEE Madras and Chair, IEEE Constol Systems Society
- How to Write Good Journal Papers by Dr. V. Jagadeesh Kumar, Dept of Electrical Engineering, IIT Madras
- Timeline and Factors for Consideration to Organize an Quality Conference – IEEE Conf. Sponsorship
- Overview & Conf. Application Process by Dr. M.A. Atmanand, Chair, IEEE Madras Section & Former Director, NIOT, Chennai
- Supporting IEEE Authors by Mr. Dhanu Pattanashetti, IEEE Client Services/University partnership Program Manager, IEEE India Office (through video conference from Bangalore)
- Tools for Plagiarism Check and Quality Conf. Publications by Mr. H.R. Mohan, Vice Chair, IEEE Madras Section & Chairman, IEEE Professional Communication Society
- Guidelines for Madras Section Technical Sponsorship for Conferences by Mr. H.R. Mohan, Vice Chair, IEEE Madras Section
- Event & Membership Management Platform offering Pre-event, event-day, post- event SaaS application for Events by Nithin Samuel, Sales Manager, Explara

The participants interacted with the presenters and clarified various aspects relating to the conference organizing since the IEEE HQ has of late become very strict in approving conferences under its banner in the context of growing plagiarism. It was decided that similar events are to be organised at different centers to educate the conference organizers who could not participate in this event. The presentations made and select photos of the event are shared at <https://goo.gl/pC534F>

❖ **IEEE Day 2017 and IEEE R10 Large Section Award Celebrations:**

The IEEE Day 2017 and IEEE R10 Large Section Award Celebrations was organised on 28th Oct 2017 at TAG Auditorium, Anna University. About 120 members participated in the event. The event started with the welcome address and briefing on the event highlights by Mr. H.R. Mohan, Vice Chair, IEEE Madras Section. Dr. Atmanand, Chair, IEEE Madras Section in his presidential address thanked all the members, SBs and others who made it possible for the Section to get the R10 Large Section Award for the year 2017 based on the activities of 2016. He stressed the need to organise quality and branded events and take the chapter to a newer height. Dr. Krishna M Sivalingam, Prof. and Head, Dept. of Computer Science and Engineering, IIT Madras and IEEE Fellow was the chief guest at the celebrations. Dr. P. Sakthivel, Treasurer, IEEE Madras Section introduced Dr Krishna M Sivalingam who had shared how the membership in IEEE had helped in both academically and in his career progression. He also presented the member achievement certificates to 48 of our Section Members who have been recognised for their achievements in 2017. The list is at <https://goo.gl/tF5moY> After the formal vote of thanks by Dr. Michael Kumar, Secretary, IEEE Madras Section, the formal IEEE Day Cake cutting and a group photo session took place.

Following this a brief quiz session on Know Your IEEE was conducted by Mr. H. R. Mohan, Chair, Student Activities, IEEE MAS in which members enthusiastically participated and answered various questions relating to IEEE and its activities and received cash prizes. Ms. K. Visalini, a young achiever and 17 year old, 3rd CSE student at Kalasalingam University and a young IEEE & IEEE CS Student Member (presented by IEEE MAS & IEEE CS for her 5 World Records and completing 13 International Certifications in the last 10 years as a token of appreciation) delivered a motivational talk. Her presentation is available at <https://goo.gl/Ht1iJd> A brief presentation on IEEE MAS entrepreneurship initiatives was made by Mr. Vijay Srinivas and shared at <https://goo.gl/jW9Gsr> Following this, a stand-up comedy show on the theme, Humor as a medicine in day to day life was performed by Mr. Sridhar Krishnan & P. Venkatesan. Eight Student Branches presented their activities and shared the best practices followed at their SB. Their presentations are available at <https://goo.gl/MbVjr5> A session on Fun Activities & Networking by IEEE MAS volunteers was enjoyed by all and provided a good networking opportunity. The Photos taken at the event are shared at <https://goo.gl/1xPjKv>

❖ **IEEE Student Branch Officers' Meet:**

The IEEE Madras Section Student Branch (SB) Officers Meet -2017 was organised on 5th Feb 2017 at the TAG Auditorium, Anna University Campus. About 100 participants comprising of SB Counselors and SB Officer Bearers from about 70 student branches across the state actively participated in the meet and benefited. The meet started with the IEEE code of ethics read by Mr. Suriya Thilipan, Section Student Representative. Mr. H.R. Mohan, Chair, Student Activities welcome the gathering and stated that the meet is being organised in the beginning of the year to facilitate the SB officers to get familiarized with the opportunities well in advance and make use of the same and benefited. Further, he stated that combining with the Annual Meeting & Awards Presentation event of the Section will also facilitate the SBs to receive their awards in person. Dr. M.A. Atmanand, Chair, IEEE MAS, in his address, urged the members to participate in various projects, competitions and funding initiatives supported by R10 and HQ and get global recognition. He also stressed the need for the SBs to be active in the context of around 150 SBs been identified (by a subcommittee headed by Dr. S. Elangovan.) as inactive and not yet revamped and being recommended to R10 for their closure for not meeting the requirements. Then the programme started with the self-introduction session in which the participants introduced briefly about their SBs and the spelt out their expectations from this meet.

The various sessions of the meet included the following:

- Hands-on session on drafting an annual action plan by Mr. A. Aravindhan
- Highlights on competition & awards by Mr. A. Aravindhan
- Newsletter Reporting & Issues by Mr. M. Arun & Mr. H. R. Mohan
- Websites for SBs using WordPress by Mr B. Ashvanth
- Publishing SB activities on the web using Word and gDrive by Mr. H.R. Mohan
- Tools for Volunteers by Mr. Prasanth Mohan
- India Strategic Initiatives by Mr. Nivas Ravichandran
- IEEE USA Perspective. Innovation & Creativity by Mr. R. Sampath, CEO & MD, BeWo
- Benefits from the Section & India Council by Mr. H.R. Mohan
- SB Funding Opportunities from other IEEE sources by Dr. S. Elangovan
- Highlights on Young Professionals Affinity Group by Mr. Nivas Ravichandran
- Presentations by Select SBs (BIT, Cape Inst, KIOT, KLNCE, Panimalar, SJCE, SSNCE and SXCCE) on their activities and best practices
- Presentations by chairs of COMSOC, CIS and Mr. Mohan on Society Chapters.

In the valedictory and the open discussions session, the queries raised by the SBs in the survey conducted by the Section and during the session were clarified by the OBs of IEEE Madras Section. The participation certificates were presented to all the participants and the meet ended with a group photo session. The participants had ample time to interact, network with other SB officers and the IEEE Madras Section Office Bearer, Execom members and society and affinity group chairs and explore various avenues for organising events. This IEEE MAS SB officers' meet was organized by Mr. H.R. Mohan, Chair, SAC with the support of Dr. P. Sakthivel, Secretary cum Treasurer, IEEE MAS and a group of student volunteers with the funding from IEEE Madras Section. All the presentations made during the meet and few select photos are shared in the gDrive of the IEEE MAS Events at <https://goo.gl/3nOLF5>

❖ **Student Project Funding:**

In order to encourage technology advancements, Creativity and innovation project proposals were invited from all the Student branches of the Madras Section. 50 different project proposals were received and the proposals were scrutinized by the member review committee of the relevant specialization and based on the recommendation by the committee, 16 project proposals were short listed. The presentation and demonstration of these projects will be held in the month of April and the best projects will be funded .

❖ **Technical Sponsorships and Financial Assistance to the student branches**

IEEE Madras Section provides Financial Assistance to the activities such as, Conferences, Workshops, Seminars, Symposia, etc., organized by the student branches. The norms have been defined for such Financial Assistance is based on the number of members available in each branch. During the year 2017, 22 such programs have been extended financial support to the tune of Rs. 1,42,100/-. The Section has also approved for 15 more student branches in-principle.

❖ **Faculty Development Program**

In order to enhance the quality of teaching – learning Section is actively conducting the Faculty Development Programs in the relevant technical areas in various Engineering Institutions located at different parts of Tamil Nadu. During the year 2017, 3 such Faculty Development programs were organized as below:

- ✓ Practical Issues & Challenges in MM Wave Communication for 5G Applications December 13-14, 2017 at Jeppiaar Institute of Technology
- ✓ Automation using Internet of Things November 29-30, 2017 at Panimalar Institute of Technology
- ✓ Internet of Things: Communication Technologies April 27-28, 2017 at PSNA College of Engineering
- ✓ Advances in Robotics and Autonomous Systems April 10-11, 2017 at St. Joseph's Institute of Technology

❖ **Section Technical Chapters**

IEEE Madras Section has 24 Technical Society Chapters and 3 Affinity Groups. The tables below indicate the Technical Society Chapters, Affinity groups Chairpersons.

a) **Technical Society Chapters**

| Sl.No. | Society Name | Chairperson |
|--------|--|---------------------------|
| 1. | Aerospace and Electronic Systems (AES) | Dr.A. Nagappan |
| 2. | Antennas and Propagation (APS) | Dr.S. Joseph Gladwin |
| 3. | Computer Society (CS) | Dr. P. Shakhivel |
| 4. | Communications (COMSOC) | Mr. P. Subramanian |
| 5. | Computational Intelligence (CIS) | Dr. N. Kumarappan |
| 6. | Control Systems (CSS) | Dr. R. Hariprakash |
| 7. | Engineering in Medicine & Biology (EMBS) | Dr.B. Santhanaraj |
| 8. | Electron Devices (EDS) Coimbatore | Dr. D. Nirmal Kumar |
| 9. | Education (ES) | Lovelin Auguskani |
| 10. | Electromagnetic Compatibility(EMCS) | Dr.Subbarao Bandaru |
| 11. | Industrial Applications (IAS) | Dr. S. Rajavel |
| 12. | Information Theory (ITS) | Dr.B. Paramasivan |
| 13. | Instrumentation and Measurement (IMS) | Dr. V. Jagadeesh Kumar |
| 14. | Microwave Theory and Techniques (MTTS) | Dr. V. Abhaikumar |
| 15. | Nano Technology Council (NTC) | Dr. R. Devanathan |
| 16. | Power and Energy (PES) | Dr. R. Sarathi |
| 17. | Power Electronics (PELS) | Dr.V.T. Sreedevi |
| 18. | Product Safety Engineering (PSES) | Mr. V. Jayaprakasan |
| 19. | Professional Communication (PCS) | Mr.H.R.Mohan |
| 20. | Photonics (PS) | Mr.T.N. Subash |
| 21. | Robotics and Automation (RAS) | Dr. P.A. Manoharan |
| 22. | SIPICOM | Dr. Krishnan Nallaperumal |
| 23. | Social Implications of Technology (SITS) | Mr. C. Jinesh |

| | | |
|-----|-------------------------------------|------------------|
| 24. | Technology Management Council (TMC) | Mr. S. Sundaresh |
|-----|-------------------------------------|------------------|

b) Affinity Groups

| Sl.No. | Affinity group Name | Chairperson |
|--------|---------------------|-------------------|
| 1. | WIE Affinity Group | Dr.V. Vydeki |
| 2. | Young Professional | Dr. M. Venkatasen |

❖ Motivational Awards

During Annual Meet (AM), every year, Cash awards and appreciation certificates are awarded to the active and dynamic student branches based on the performance of the student chapters and society units. The student Branches having maximum number of members are also honored during the AM. During the last year, appreciation certificates were given to top 3 best performing Student Branches and 23 society chapters of the section. These awards were distributed during the Annual Meetings, to motivate the student branches to perform better and it resulted in enhancement in the formation of student branches and also higher level of performance of the student branches.

Below are the awards given to Student Branches to Motivate the Members:

- Top3 College hosted IEEE Xtreme Contest – Certificate and Cash award
- Top 5 Teams Scored higher Rank From the Section in IEEE Xtreme Contest – Certificate and Cash award.
- IEEE Student Enterprise Award
- IEEE Larry K Wilson Student volunteer Award (Special Mention)
- R10 First Place MGM recruiter
- Student Branches conducting good number of activities.
- The Student Branch having maximum number of members, award given to top three colleges

❖ IEEE Section Newsletter:

MAS LINK, the newsletter of Madras Section is being published monthly as a eNewsletter is circulated to all the members of the section including student members. Each issue of every month is uploaded in the IEEE Madras Section web site in order to reach more number of members around and to add more information. The newsletter includes the following:

1. Chairman's Message
2. Editor's Column
3. Activities reported by the various branches of the section to encourage for better performance.
4. Activities reported by the various Society Units.
5. Announcements and reporting regarding the Conferences, Workshops, Seminars, Symposia, etc., coordinated by the Technical Society Chapters and student branches functioning in various institutions.
6. Achievements of professional members.

• Major Events (International, National)

❖ IEEE Madurai HUB Congress:

The IEEE Madurai Hub Congress-2017, held at Thiagarajar College of Engineering (TCE) on 19th Aug 2017 was an initiative of IEEE Madras Section to spread the importance of IEEE and the opportunities provided by IEEE in the Madurai region. The participants of this one day event were the students, student members of IEEE and few student branch counselors from various colleges numbering about 125 members from 13 colleges. At the inaugural session, Dr. K. Kalyani- SB Counselor, TCE welcomed the gathering and Dr. V. Abhaikumar, Principal, TCE and Chair, IEEE Microwave theory and Techniques Society, IEEE Madras section, delivered the presidential address. Dr. M. A. Atmanand, Chair, IEEE Madras Section, Mr. H. R. Mohan, Chair, Students Activities Committee (SAC) and Vice Chair, IEEE Madras Section, Dr. S. Elangovan, Chair-SB Revamp committee and Co-Chair, IEEE Madras Section SPF, Dr.S. Rajaram, Secretary, IEEE Circuits and Systems Society and Associate Professor, Dept of ECE, TCE took part in the inaugural session along with Mr. Nivas Ravichandran, Mr. Vijay Srinivas, IEEE MAS Entrepreneurship Committee, and Mr. Aswin Vairavan, CEO, Deducely. The hub congress sessions began with Dr. M. A. Atmanand addressing the gathering about the importance of IEEE for an engineer. In the next session Mr. H. R. Mohan highlighted the benefits of IEEE to the members, awards and grants from IEEE and the volunteering opportunities one can have with IEEE as a member. He also explained about various technical societies under IEEE Madras section and the scope of research in those areas and encouraged the participants to join in them and get technically benefited in their respective domains / specialization. Dr. S. Elangovan, addressed the gathering on how to effectively run a student branch and keep it active to get the eligible benefits.

In an interactive and thought provoking entrepreneurship session handled by Mr. Ashwin Vairavan, CEO, Deducely, he had highlighted the advantage and hurdles to be overcome to become an entrepreneur. In an

interactive networking session by Mr. Nivas Ravichandran and Mr. Vijay Srinivas, the explained the power of networking and the participants were made to get introduced with each other by means of a task. The winners were awarded with IEEE T-shirts. In the afternoon session, student volunteers from Mepco Shlenk Engineering College, Sivakasi, KLN College of Engineering, Madurai, K. Ramakrishnan College of Engineering, Trichy and PSNA College of Engineering and Technology, Dindigul presented the work of their student branch and shared their best practices. Dr. M. A. Atmanand provided critical evaluation of their work and presentations. In the technology update session, Dr. S. Balaji, Dept. of Chemistry, TCE explained on battery technology and the scope for research and improvements. The participants posted a number of queries and got clarified by the speaker. In the last session by Dr. S. Rajaram, Associate Dean, Career Guidance, Dept. of English, TCE spoke on placement training and resume writing -- an important and useful topic for the students going for placement. In the valedictory session, few students and branch counselors provided feedback on the sessions of the hub congress and expressed their satisfaction in attending and benefited from the event. Some institutions that do not have the IEEE SB have been motivated to start the SB. Both the Chair & Vice Chair of IEEE Madras Section appreciated the IEEE SB of TCE and the volunteers for the successful conduct of the IEEE Madurai Hub Congress, the first in the series of four being held in a span of two months in the Section.

❖ IEEE Chennai HUB Congress:

The IEEE Chennai Hub Congress - 2017 was hosted by Hindustan University on 31st Aug 2017 & 1st Sep 2017. The chief guest at the inaugural function was Dr. Kallol Roy, Chairman, & Managing Director–BHAVINI, IGCAR, Kalpakkam and Mr. H.R Mohan, IEEE Vice Chairman, was the guest of honour. Dr. Uppu Ramachandraiah, Professor & HoD/EEE welcomed the guests and the participants of the congress and traced the initiatives of HITS in fostering the spirit of research and innovation among the students through various technical associations such as IEEE and appealed the participants to learn from the congress sessions to the best possible extent. Dr. R. Devanathan, Professor Emeritus, Dept. of EEE, delivered the felicitation address in which he emphasized the importance of participation by students in professional bodies like IEEE and advised the participants to network with the other participants and experts invited and pursue socially relevant projects. Delivering the special address, Dr. N. Vasudevan, Dean (Academics), HITS, emphasized the importance of acquiring skills relevant to industry needs and advised the young engineers to build skills that are relevant to industry and be strong enough in basic concepts. Based on several research reports and surveys, he called for the attention of the active collaboration of professional bodies, industry and academia to empower the young engineers with industry relevant skills. Dr. A K Parvathy, Professor, Dept. of EEE, introduced the Chief Guest Dr. Kallol Roy. She invited the attention of participants to the excellence and eminence of Dr. Kallol Roy which is an inspiration to all young engineers. Dr. Kallol Roy, Chairman, & Managing Director–BHAVINI, IGCAR, Kalpakkam, in his key note address, encouraged the students to experiment and learn. He said the eco-system for innovation and entrepreneurship is ripe in our country and it is essential for the young engineers to step forward and utilize the opportunity. He appealed the young engineers to be entrepreneurial and create products with relevance to market. Mr. H. R. Mohan, Vice Chair, IEEE, gave a detailed overview of the different services offered by IEEE to its members. He provided insights into how IEEE opens the door to opportunities that will help young engineers to develop their professional identity in IEEE's designated fields of interest: sciences, technology, engineering, and mathematics (STEM). In addition to accessing a range of membership benefits, he said the members can get global connections with people who shall help them along their targeted career path through IEEE's international community of members and volunteers. He gave a detailed description of different schemes available under the IEEE and advised the student members to utilize the opportunities provided by IEEE. About 150 participants comprising of IEEE student members from Hindustan University and HITS faculty members external college participants were present at the inaugural session.

In an interactive session, Mr. Aravindan Anabazhagan, Chair, Student Activities Committee, IEEE Computer Society India Council, explained in detail about the student activities in IEEE. He emphasized that the SAC is the IEEE committee responsible for student programs and benefits and making recommendations to the Member and Geographic Activities (MGA) board. These volunteer members provide important viewpoints and information and represent the voice of the over 100,000 IEEE Student and Graduate Student members worldwide. He quoted several examples and success stories of student branches, which inspired the members and participants in a big way. Mr. Aneesh Rajeev of IEEE SIGHT Project at Sirumalai Hills, gave an interesting insight into the project which brought together the young engineers, NGO, tribal people and a MNC company to resolve the electrification issue of the village. Being a tribal village, the place had limited access to electricity. Under the IEEE SIGHT project the village has been provided with CFL bulbs. It was an informative session how networking has to be done with different stakeholders to solve a real-life problem. Mr. Abhishek Iyer, IEEE Computer Society Volunteer, presented his experiences as a volunteer of the IEEE computer society and how a small step and enthusiasm can open up new opportunities. He described the steps that he and his team took up to achieve successes in their multifarious projects. Mr. Eugene Kingsley, Young Professional, gave a lot of insights into how a potential idea can be developed into a business and taken to market. He spoke about how an active IEEE student hub can promote the spirit of innovation among the young engineers.

Mr. Premachandran, Pan IIT Alumni Leadership Series Core Committee member described several methods and self-reflection questions to consider for the success of the need for empathetic innovation and focusing innovation to the market needs. He emphasized the need to adopt the Design Thinking methodology to solve

problems. He also insisted upon application oriented learning which will strengthen the basics of an engineer which is a key to innovation. He also appealed to the participants to try making products which are relevant to market requirements. The Day 2 of the IEEE Madras Section Student Hub Congress began with the session by Dr. E. Bhaskaran, Deputy Director, EDI, Government of TN, who briefed the students on the support schemes for technopreneurs offered by the Tamil Nadu Government. He gave a detailed account of the MSME scenario, role of different agencies, important schemes like PMGSY, NEEDS, etc. He also gave information about the cluster development initiatives, different subsidy linked schemes and special schemes for women entrepreneurs. In innovative Idea Box contest for which seven teams had registered on the first day, the contestants made their presentations to Mr. Dorai Thodla, Chief Mentor, HTBI & HEIC. Each team was given three minutes to present their idea and two minutes for Q&A. It was a racy experience in which the teams brought out their best pitch to impress the expert. At the end Mr. Dorai gave them the feedback and tips on how to prepare for an elevator pitch which is very important for raising money from investors. He advised them on how to plan such presentations and highlighting “Dos” & “Don’ts” in such pitching sessions. The session was well received by all. Mr. Harish S, Co-Founder, Infinite Engineers, described about the interesting venture of Infinite Engineers, which provides the school kids with a Hands-On Experiential exposure that helps in triggering the Child’s thinking, to ask innovative questions, learn challenging concepts easily and retain and apply it in real life situations. Students are provided with Kit Boxes called the “Dexter Box” to “Do and Learn” to create an enhanced learning experience. The Box has been designed to make the learning experiences long lasting and memorable. An opportunity for the students to explore science is the key to this approach. The Kits are mapped to the CBSE and TN-Samacheer syllabus. The teachers can easily integrate it with their lesson plans. Mr. Harish described the complete process of the enterprise promotion from ideation stage to testing and commercialization, which was well received. Mr. Thirukumaran Saravanan, Co Founder & Head of Operations, MetaVRse Technologies, described about the venture MetaVRse, which is a collective virtual shared space, including the sum of all virtual worlds, augmented reality, and the internet. The startup has successfully roped in major MNCs as its clients. He appealed to young engineers to explore the real industry problems, as they give an opportunity to create solutions which are interdisciplinary in nature. M. K. Badri Narayanan, Prof MBA & Coordinator, HTBI & HEIC, gave an orientation to the participants on the Business Model Canvas, which is a strategic tool to analyse a business idea from the different dimensions. The IEEE Student participants from various institutions like Satyabhama University, Panimalar and M.N.M Jain College presented about their respective IEEE branches and activities that are conducted in their institutions. Chairman of IEEE Student Branch – Hindustan University Mr. Praveen Tanda presented the IEEE activities of the University citing the no. of student branch chapters and activities that had taken place under the societies.

The Hub Congress ended with Valedictory Session with Dr. M. A. Atmanand, Chairman, IEEE Madras Section, Scientist-G & Former Director of NIOT as the Chief Guest. In his address Dr. M. A. Atmanand appealed the participants to work with zeal and make the best use of the opportunities provided by IEEE to prosper in their engineering career. The external participants expressed their happiness and usefulness of the sessions in the feedback session. The participants were distributed with certificates by Dr. Atmanand and Mr. H. R. Mohan. Mrs. M. Maheswari, Assistant Professor, EEE & IEEE SB Counselor, proposed the vote of thanks. Overall the program achieved its objective of inspiring the young IEEE members to make their learning process more meaningful and socially relevant.

❖ **IEEE Coimbatore HUB Congress:**

The IEEE MAS sponsored two-days IEEE Coimbatore Hub Congress-2017 was hosted by The IEEE Student Branch at Knowledge Institute of Technology, Salem during 8-9 Sep 2017. The congress attracted 208 participants with over 50 coming from various nearby institutions of which few of them are not having IEEE student branches.

On first day, in the inaugural session, Dr. P. S. S. Srinivasan, Principal, KIOT, in his presidential address stressed the need for entrepreneurship in the changing job scenario. Mr. H.R. Mohan, Vice Chair, IEEE Madras Section and Chair, Student Activities briefed on the initiatives of IEEE Madras Section in bringing together members and creating opportunities for networking, sharing of experiences and best practices and creating awareness on IEEE and its benefits through hub congress in different centers. He added that the Coimbatore Hub Congress is the third of the four hub congresses being held in 2017. In the first session of the congress, the resource person Mr. H. R. Mohan, Vice-chair-IEEE MAS Section, Vice Chair, Professional Activities, IEEE IC, Chair-Student Activities, Chair- IEEE PCS, IEEE Madras, Chennai provided an overview on IEEE MAS Section and Student Activities. Dr. S. ELANGO VAN, Chair, Revamping & Co-chair Student Project Funding, IEEE MAS Section, Professor & Head, Dept. of EEE, Jansons Institute of Technology, Coimbatore took a session highlighting on IEEE Awards, Grants, Societies, Volunteering Opportunities. Dr. P. RAJENDRAN, Director-Placement, Knowledge Institute of Technology explained on Internship Experiences and Interview Preparation. Dr. M. THANGAVEL, Director-Training, Knowledge Institute of Technology gave valuable input on preparing students for Career: Step 1-Resume Preparation. On the second day, Mr. G. BARATH VIGNESH, Alumnus of KIOT and former IEEE student member and currently Software Engineer, IVTL Infoview Technologies Pvt. Ltd, Chennai discussed on Future Directions in Technology. Mr. KARTHIK RAJA KARAN, Founder/CEO, Madique Technologies, Salem presented on “Startup Village - Student Entrepreneurship”. Dr. K. VISAGAVEL, Chief-Coordinator, Entrepreneurship Development Cell, Vice Principal, KIOT shared his experience and various initiatives relating to Entrepreneurship development in

KIOT. . Mr. A. GOWTHAMAN, IEEE-SB Chairman & EDC Student Coordinator, KIOT, in his session, discussed on opportunities available for Student Entrepreneurs. In valedictory function, certificates to participants were distributed by Dr. N. SANTHIYAKUMARI, IEEE-SB Counselor/KIOT. The hub congress events were coordinated by a host of volunteers under the guidance of Mr. M. Bharanidharan, IEEE SB In charge at KIOT.

❖ IEEE – Tirunelveli Hub Congress 2017

IEEE SB of Kalasalingam University organized the IEEE Madras Section sponsored IEEE Tirunelveli Hub Congress 2017 during 22nd & 23rd Sep 2017. Dr. S. Saravanasankar, Vice- Chancellor presided over the congress, which was inaugurated by Mr. H. R. Mohan, Vice Chairman, IEEE Madras Section. Around 300 students attended from various colleges in the Tirunelveli vicinity. Various speakers included:

- Mr. Govindasamy, AMD, Bangalore
- Mr. V. Udaya Sankar, Regional Head, NASSCOM
- Mr. K.S. Ravindranath, Director, Indowind Energy, Chennai
- Dr. S. Radha, Executive Member, IEEE Madras Section
- Dr. R. Chandrasekhar, Dean/Management
- Prof. A. Darwin Jose Raju, St.Xavier's Catholic College of Engg., Nagercoil
- Mr. Aravindhan Anbazhagan, Fellow in Teach for India
- Mr. Jim Isaac, Ms. Angelin Indira and Mr. B. Ashvanth, IEEE volunteers
- Mr. Praveen Kumar, Software Engineer, CTS

Various events in the hub congress included talks, workshops, contests, industry sessions and entrepreneurship awareness sessions. Dr. P. Aruna Jeyanthi, HOD/EEE; Dr. D. Devaraj, SBC; Ms. S. J. Swathi, SB Secretary; Mr. Pranav and Mr. Eugene Kingsley also spoke. The best SB award went to Cape Institute of Technology. .

❖ IEEE Madras Student Conference cum Paper Contest:

IEEE Madras Section and IEEE SB of Sri Eshwar College of Engineering jointly organized the 2nd IEEE Madras Student Conference cum Paper Contest -2017(SCPC-2017) during 15th and 16thSep 2017 at Sri Eshwar College of Engineering, Coimbatore. At the inaugural session on 15thSep 2017, held at SECE auditorium. Dr. Sudha Mohanram, Principal, Sri Eshwar college of Engineering welcomed the gathering. Mr. E.Venugopal, IEEE SBC & coordinator of IEEE MAS SCPC 2017, briefed on the Student Conference cum Paper Contest and highlighted the participation statistics. The conference was inaugurated by Mr. H. R. Mohan, Vice Chairman & Chairman, Student Activities at IEEE Madras Section and Dr. N. Kumarappan, Vice Chairman, IEEE Madras Section. Ms. K. Sridevi AP-ECE, proposed the vote of thanks. SCPC-2017 received 106 papers from 25 colleges and universities in and around Tamilnadu, for there different tracks namely: Track 1: Electrical, Electronics and Communication Engineering, Track 2: Computing and Information Technology, and Track 3: Mechanical, Civil and other Engineering. After preliminary review, 83 papers were scrutinized further for to select 61 papers in total for presentation. Out of this 29 papers were presented in track-1, 19 papers in track-2 and 13 papers in track-3. Dr S. Koteeswaran, Co-Chair, SAC & Excecom Member, IEEE madras Section Dr. Malarvizhi from VelTech University and faculty members of SECE constituted the panel of judges who evaluated papers & presentations and selected the prize winners. Techno vista - a national level technical event was also conducted during this period. On 15th Sep, workshops on DevOps, Cyber Security and Internet of Things were conducted by resource persons from industries. On 16th Sep, events such as Web Page Designing, Coding, Solar Lamp Design, Circuit Debugging, Circuit Designing, Robo Route, Robo Expo and Technical Quiz were conducted.

In valedictory session of SCPC-2017 held on 16th Sep, Mr. E. Venugopal, IEEE SBC & coordinator presented the report of the paper presentation contest and announced the winners (three in each track). Mr. H. R. Mohan, Vice Chairman& Chairman, Student Activities at IEEE Madras Section and Dr. Sudha Mohanram, Principal, SECE presented the cash prizes (Rs. 7500, Rs. 5000 & Rs. 2500 for 1st, 2nd & 3rd best papers in each track and for all three tracks) and certificate to the winners. The cash prizes were sponsored by IEEE Madras Section.

• Major Chapter Activities

Chapter Activities

| Sl.No. | Society Name | Meetings Conducted |
|--------|--|--------------------|
| 1. | Aerospace and Electronic Systems (AES) | |
| 2. | Antennas and Propagation (APS) | 5 |
| 3. | Computer Society (CS) | 21 |
| 4. | Communications (COMSOC) | 8 |
| 5. | Computational Intelligence (CIS) | 10 |

| Sl.No. | Society Name | Meetings Conducted |
|--------|---|--------------------|
| 6. | Control Systems (CSS) | 7 |
| 7. | Engineering in Medicine & Biology (EMBS) | |
| 8. | Electron Devices (EDS) | |
| 9. | Education (ES) | |
| 10. | Electromagnetic Compatibility(EMCS) | |
| 11. | Industrial Applications (IAS) | |
| 12. | Information Theory (ITS) | 15 |
| 13. | Instrumentation and Measurement (IMS) | |
| 14. | Microwave Theory and Techniques (MTTS) | |
| 15. | Nano Technology Council (NTC) | 3 |
| 16. | Power and Energy (PES) | 5 |
| 17. | Power Electronics (PELS) | |
| 18. | Product Safety Engineering (PSES) | 23 |
| 19. | Professional Communication (PCS) | 11 |
| 20. | Photonics (PS) | 3 |
| 21. | Robotics and Automation (RAS) | 7 |
| 22. | SIPCICOM | |
| 23. | Social Implications of Technology (SITS) | 1 |
| 24. | Technology and Engineering Management Society (TMC) | 12 |

• Major Student and Affinity Group Activities

Student Activity

- Entrepreneurship Awareness Camp (EAC)
- IEEE Hub Congress
- Student Branch officer's meet
- Technical Lectures different region of section: In order to have more student centric participation, from technical lectures were conducted in different cities by the section, technical and student activities committee.

Affinity Group Activities

| Sl.No. | Affinity group Name | No. of Activities |
|--------|------------------------------------|-------------------|
| 1. | WIE Affinity Group | 4 |
| 2. | Young Professionals Affinity Group | 10 |

- Awards : please see page 18

A.2 Financial Report –

- Summary (as per submitted L50)
(will be submitted by 15th Feb 2018 by online through netsuit to HQ)
- Any other financial activities
 - ✓ Project funding for the students
 - ✓ 24 National/International Conferences organized by the Student Branches in different Engineering Colleges and Chapters of the IEEE Societies were co-sponsored by the Madras Section.
 - ✓ Faculty Development Program (FDP)
 - ✓ Technical Lectures

- ✓ Hub Congress
- ✓ Student Paper Contest
- ✓ IEEE Mini POCO
- ✓ Entrepreneurship Awareness programs
- ✓ Section financially supported for two delegates to attend the IEEE Section Congress as secondary delegates.
- ✓ Travel grant given to two delegates for attending the International Conference for paper presentation
- ✓ Travel support given for two Execom members for attending the Mini POCO.
- ✓ Sponsored Rs.25000/- to AISYWC-2017 held at IIT Allahabad.

PART B - ORGANIZATIONAL ACTIVITIES

B.1 Membership Development Activities

- Total number of active members in the past 3 years.
The details of Membership as on 31st Dec 2015, 2016 and 2017 are given below:

| | <u>31st Dec 2015</u> | <u>31st Dec 2016</u> | <u>31st Dec 2017</u> |
|----------------------------|---------------------------------|---------------------------------|---------------------------------|
| ➤ Life Fellow | 5 | 0 | |
| ➤ Fellow | 4 | 4 | 4 |
| ➤ Life Seniors | 13 | 12 | 15 |
| ➤ Senior Members | 127 | 196 | 218 |
| ➤ Life Members | 5 | 7 | 8 |
| ➤ Members | 2191 | 2246 | 2099 |
| ➤ Affiliate Members | 19 | 21 | 21 |
| ➤ Associate Members | 92 | 55 | 68 |
| ➤ Graduate Student Members | 962 | 818 | 683 |
| ➤ Student Members | 5119 | 5188 | 5654 |
| ----- | | | |
| TOTAL MEMBERSHIP | 10315 | 8537 | 8770 |
| ----- | | | |

- Summary and evidence of work done to improve the value of membership, which leads to retention and growth of members

DETAILS OF NEW STUDENT BRANCHES STARTED DURING 2017

| Sl. No. | Name of the Student Branch | Date of approval |
|---------|---|---------------------------|
| 1. | Sri Ramakrishna Institute of Technology | 21 st Jul 2017 |
| 2. | T.J.S Engineering College | 4 th Aug 2017 |
| 3. | Saint Joseph University School of Engineering | 1 st Sep 2017 |
| 4. | Gojan School of Business & Technology | 28 th Sep 2017 |
| 5. | Kongunadu college of Engineering and Technology | 15 th Oct 2017 |
| 6. | Chettinad College of Engineering & Technology | 17 th Nov 2017 |
| 7. | K. Ramakrishnan College of Technology | 29 th Nov 2017 |
| 8. | Nehru Institute of Engineering and Technology | 10 th Dec 2017 |
| 9. | K. Ramakrishnan College of Engineering | 11 th Dec 2017 |

B.2 Chapter Activities

- Total number of Chapters in the Section :24
- Number of Chapters formed in the current year : 1
- Number of active Chapters : 15
- Summary of Chapter activities (Chapter wise with attachment table/information)

Antennas and Propagation (APS)

| Sl.No. | Date | Topic | Recourse Person |
|--------|---|----------------------------------|----------------------------|
| 1. | 18 th Jan 2017 | Distinguished Lecturer's Seminar | Sembiam R. Rengarajan, |
| 2. | 27 th Mar 2017 | Seminar | Multiple |
| 3. | 18 th Aug 2017 | Seminar and Poster Session | Multiple |
| 4. | 21 st Sep 2017 | Distinguished Lecturer's Seminar | Professor Karl F. Warnick, |
| 5. | 30 th Oct – 3 rd Nov 2017 | Refresher Course on Antennas | Multiple |

Computer Society (CS)

| Sl.No. | Date | Topic | Recourse Person |
|--------|--|--|-------------------------------|
| 1. | 3 rd Mar 2017 | Cyber Awareness Program – Insight Perspective | Multiple |
| 2. | 6 th Mar 2017 | CSI Day Celebrations with presentations by student members on their projects | Celebrations |
| 3. | 6 th Mar 2017 | ICT Quiz | H.R. Mohan |
| 4. | May - Oct 2017 | IEEE MAS Website Development Contest | Multiple |
| 5. | 11 th Sep 2017 | IT Quiz | H.R. Mohan |
| 6. | 15 th Mar 2017 | E-Waste Management | Dr. K. Prabhakaran |
| 7. | 18 th May 2017 | Trends in Data Analytics | Mr. Ramakrishnan Venkataraman |
| 8. | 12 th Jun 2017 | Acoustics & Speech Processing and its Applications | Mr. R. Kishore Kumar |
| 9. | 20 th Jun 2017 | Impact on GST in IT and Business | Mr. T.R. Srinivasan, |
| 10. | 6 th Jul 2017 | Technology in E-Commerce Logistics | Mr. Vinoth Poovalingam, |
| 11. | 13 th Jul 2017 | Semiconductor Device Progression and Impact on Human Thought Process | Dr. M. K. Radhakrishnan |
| 12. | 21 st Jul 2017 | Near Real Time Data Analytics | Mr. K. S. Sreedharan |
| 13. | 23 rd Aug 2017 | Cloud Computing | Mr. Rathinasabapathy |
| 14. | 14 th Oct 2017 | Making the Invisible Visible | Dr. Srinivas Ramaswamy |
| 15. | 25 th Oct 2017 | Crypto Currency – Unplugged | Dr. B. Srinivasan |
| 16. | 18 th Nov 2017 | Changing IT Scenarios- Changing Service Options | Mr L.Ashok |
| 17. | 11 th Dec 2017 | Cyber Security – Protecting the Human Point | Mr. Ajay Dubey |
| 18. | 4 th Apr 2017 | Research Scholars' Symposium on Social Network Analysis | Multiple |
| 19. | 7 th -8 th Nov 2017 | The Internet of Things and its Applications | Multiple |
| 20. | 9 th -10 th Nov 2017 | Succeeding in Research | Multiple |

| | | | |
|-----|---------------------------|---------------------------|----------|
| 21. | 16 th Nov 2017 | Library week Celebrations | Multiple |
|-----|---------------------------|---------------------------|----------|

Communications Society (COMSOC)

| Sl.No. | Date | Topic | Recourse Person |
|--------|---|--|--|
| 1. | 28 th Jan 2017 | “E-Waste Management” | Dr. K. Prabhakarn & Mr. T. Udhayakumar |
| 2. | 17 th -18 th Feb 2017 | Importance of Switching and Routing In Computer Networks Using Cisco Packet Tracer | Dr.V.Jayaprakasan & Mr.B.S.Ananth |
| 3. | 24 th Feb 2017 | Satellite Technology – Advancements and Challenges | Shri Purushothaman Seetharaman, |
| 4. | 21 st March 2017 | Security Challenges and Opportunities in SDN/NFV and 5G Networks | Dr. Ashutosh Dutta |
| 5. | 6 th Apr 2017 | Digitalization Trends in Enterprises | Mr. Pon Manivannan |
| 6. | 9 th Aug 2017 | Importance of Multirate Signal Processing for Secure Communication, | Dr V. Jayaparakasan |
| 7. | 16 th Aug 2017 | Technology Awareness Program for School Students | Mr. C. Kumar |
| 8. | 14 th Oct 2017 | Making the Invisible Visible | Dr. Srin Ramaswamy |

Control System Society (CSS)

| Sl.No. | Date | Topic | Recourse Person |
|--------|--|--|---------------------------------|
| 1. | 5 th - 8 th Jan 2017 | Cyber Physical Systems – IEEE winter School funded by IEEE CSS outreach fund. | Multiple |
| 2. | 24 th Feb 2017 | Satellite Technology –Advances and Challenges | Mr. S. Purushothaman |
| 3. | 3 rd Mar 2017 | PID Controller and Fractional Order PID Controller. | Dr.J.Prakash |
| 4. | 21 st Mar 2017 | Security Challenges and Opportunities on SDN/NFV and 5G Networks | Dr. Ashutosh Dutta |
| 5. | 8 th Aug 2017 | Quiz Competition on Control System | Dr. N. Bhuvaneshwari |
| 6. | 22 nd - 23 rd Sep 2017 | Workshop on Cyber Physical Systems. | Prof. Sidharth Mukopadyay |
| 7. | 25 th Sep 2017 | Cyber Physical System Synthesis of control Engineering for rail network using game based methodology | Prof. Michael Reichhardt Hansen |

Computational Intelligence

| Sl.No. | Date | Topic | Recourse Person |
|--------|---|--|-----------------|
| 1. | 2 nd -6 th Jan 2017 | Winter School on Computational Intelligence: Fundamental Theory and Practical Applications | Multiple |
| 2. | 20 th -21 st Jan 2017 | International Conference on Intelligent and Efficient Electrical Systems | Multiple |
| 3. | 28 th Jan 2017 | Workshop on Soft Computing | Multiple |
| 4. | 1 st Mar 2017 | Workshop on Recent Development in Science and Engineering Materials | Multiple |

| | | | |
|-----|---|--|---------------------|
| 5. | 5 th May 2017 | National Conference on Design, Testing and Applications of Embedded & Power Electronic System | Multiple |
| 6. | 11 th -12 th May 2017 | International Conference on Trends in Electronics and Informatics | Multiple |
| 7. | 20 th 21 th Jul 2017 | Research submit on Computational Intelligence | Multiple |
| 8. | 2 nd – 4 th Aug 2017 | International Conference on Smart Technologies and Management for Computing, Communication, Controls, Energy and Materials | Multiple |
| 9. | 23 rd Sep 2017 | International Conference on Advances in Electrical Technology for Green Energy (ICAETGT'17) | Multiple |
| 10. | 11 th Dec 2017 | Applications of Soft computing Techniques in Power Systems, | Dr.I.Jacob Raglend, |

Information Theory Society (ITS)

| Sl.No. | Date | Topic | Recourse Person |
|--------|---------------------------|--|-----------------|
| 1. | 5 – 7 Jan 2017 | Wireless Smart System Technologies (WiSST 2017) | Multiple |
| 2. | 9 th Jan 2017 | Placement Awareness program | Multiple |
| 3. | 28 th Feb 2017 | Artificial intelligence and Green computing. | Multiple |
| 4. | 31 st Mar 2017 | Internal working of computer system | Multiple |
| 5. | 18 th Apr 2017 | OS Installation | Multiple |
| 6. | 21 st Jun 2017 | School Life vs College Life | |
| 7. | 4 th Jul 2017 | How to face current IT Sector | Multiple |
| 8. | 13 th Jul 2017 | Tricks and Tracks to face interviews | Multiple |
| 9. | 19 th Aug 2017 | Agile delivery models in IT industries | Multiple |
| 10. | 9 th Aug 2017 | Success factors in life | Multiple |
| 11. | 7 th Sep 2017 | Cashless Transactions | Multiple |
| 12. | 4 th Sep 2017 | Higher studies in foreign Nations | Multiple |
| 13. | 7 th Oct 2017 | Introduction to IEEE, Talent Test Technical Quiz | Multiple |
| 14. | 17 th Nov 2017 | Introduction to computers | Multiple |
| 15. | 14 th Dec 2017 | Steganography | Multiple |

Nano Technology Council (NTC)

| Sl.No. | Date | Topic | Recourse Person |
|--------|---------------------------|--|---------------------------------------|
| 1. | 20 th Jun 2017 | Industrial Visit to Centre for Nano Science and Technology | Dr.S.Moorthy Babu |
| 2. | 7 th Sep 2017 | Basics and Applications of Carbon Based Nano materials | Dr.S. Ramaprabhu |
| 3. | 27 th Nov.2017 | Solar Cell Modeling and Design | Dr.S.Moorthy Babu Dr.N.Rajalakshmi |

Professional Communication Society (PCS)

| Sl.No. | Date | Topic | Recourse Person |
|--------|---------------------------|--|-----------------------------|
| 1. | 15 th Mar 2017 | Data Driven Infographics | Dr. Fakhurul Hazman Yusoff, |
| 2. | 6 th Mar 2017 | ICT Quiz | H.R. Mohan |
| 3. | 6 th Mar 2017 | CSI Day Celebrations with presentations by student members on their projects | Multiple |

| | | | |
|-----|--|--|---------------------------------|
| 3. | 4 th Apr 2017 | RSS-SNA- 2017: Research Scholars; Symposium on Social Network Mining | Multiple |
| 4. | May-Oct 2017 | IEEE MAS Website Development Contest | Multiple |
| 5. | 18 th May 2017 | Trends in Data Analytics | Mr. Ramakrishnan Venkataramanan |
| 6. | 12 th Jun 2017 | Acoustics & Speech Processing and its Applications | Mr. R. Kishore Kumar |
| 7. | 6 th Jul 2017 | Technology in E-commerce Logistics | Mr. Vinoth Poovalingam |
| 8. | 21 st Jul 2017 | Near Real Time Data Analytics | Mr. K.S. Sreedharan |
| 9. | 9 th -10 th Nov 2017 | Succeeding in Research | Multiple |
| 10. | 16 th Nov 2017 | Library week Celebrations with three sessions | Multiple |
| 11. | 21 st Nov 2017 | Guidelines and Support for writing Conf. Paper & Journal Paper | Multiple |

Power and Energy Society(PES)

| Sl.No. | Date | Topic | Recourse Person |
|--------|--|---|---|
| 1. | 2 nd – 4 th Aug 2017 | IEEE ICSTM | Multiple |
| 2. | 1 st Sep 2017 | Design and Control of Power Electronic Devices using MATLAB | Dr. M. Venkateshkumar |
| 3. | 9 th Sep 2017 | Hands on Workshop on MATLAB/Simulink | Dr. M. Venkateshkumar Dr. Umashankar |
| 4. | 21 st - 22 nd Sep 2017 | SPESC'17 State level PES Congress 2017 | Multiple |
| 5. | 6 th Oct 2017 | Effective way of research planning, and paper writing | Multiple |

Photonics Society(PS)

| Sl.No. | Date | Topic | Recourse Person |
|--------|--|--|---------------------------------|
| 1. | 15 th - 16 th Mar 2017 | Two Days National Seminar on Advances in optical Burst Switching | Mr.Boney Varghese |
| 2. | 6 th -7 th April, 2017 | International Conference on Emerging Trends in Information and Communication EMTIC- 2k17 | Mrs.Geeta & Dr.T.D.Subash |
| 3. | 9 th - 10 th Nov 2017 | Two Days Research Awareness Seminar Boot Camp for Engineering Researchers | Dr. R.Suchithra & Dr.T.D.Subash |

Product Safety Engineering Society(PSES)

| Sl.No. | Date | Topic | Recourse Person |
|--------|--|--|-------------------|
| 1. | 28 th Jan 2017 | E-Waste Management | Dr. K. Prabhakarn |
| 2. | 23 rd Jan 2017 | Career Opportunities in Medical Electronics and Health Safety | Shri.N.Nandakumar |
| 3. | 4 th Feb 2017 | The Important of Renewable Energy for Forthcoming Generation and Ecological Safety | Dr.S.Vijayakumar |
| 4. | 4 th Feb 2017 | IEEE Student Branch (STB 10012) Inauguration | Dr.V.Jayaprakasan |
| 5. | 10 th - 11 th Feb 2017 | Two Days National Level Conference "Emerging Trends of Science and Humanities in Engineering" (NCETSHE-2017) | Multiple |

| | | | |
|-----|--|--|---------------------------------|
| 6. | 18 th Feb 2017 | Challenges in E-waste Management | Dr.V.Jayaprakasan |
| 7. | 17 th -18 th Feb 2017 | Importance of Switching and Routing in Computer Networks Using Cisco Packet Tracer | Multiple |
| 8. | 20 th – 21 st Feb 2017 | Recent Trends and Challenges in Communication and Networking Using Cisco Packet Tracer | Multiple |
| 9. | 28 th Feb 2017 | National level Project Design Contest – PDCON-2017 | Mrs.J.Hareni & Dr.S.Vijayakumar |
| 10. | 9 th Mar 2017 | Recent Advancement in Medical Electronics for Human Safety | Multiple |
| 11. | 21 st Mar 2017 | Security Challenges and Opportunities in SDN/NFV and 5G Networks | Dr. Ashutosh Dutta |
| 12. | 25 th Mar 2017 | The advancement of New Technology – Positive or Negative | Dr.V.Jayaprakasan |
| 13. | 8 th Apr 2017 | Challenges and Importance of Electronic Waste Management | Dr.S.Vijayakumar |
| 14. | 20 th Apr 2017 | Challenges and Importance of E-waste Management & Environment Issues | Dr.V.Jayaprakasan |
| 15. | 11 th – 12 th Aug 2017 | Importance of Switching and Routing Concepts in Computer Communication using Cisco Packet Tracer | Dr.V.Jayaprakasan & Mr.C.Kumar |
| 16. | 9 th Aug 2017 | Importance of Multi-rate Signal Processing for Secure Communication | Dr.V.Jayaprakasan, |
| 17. | 16 th Aug 2017 | Technology Awareness Program | Mr. C. Kumar |
| 18. | 21 st Aug 2017 | “Programmable Logic Controller-PLC” | Multiple |
| 19. | 9 th Sep 2017 | Importance of Multi-rate Signal Processing for Digital Communication | Multiple |
| 20. | 9 th Sep 2017 | Control System Design for Safety Automation | Dr.I.Thangaraju |
| 21. | 17 th Oct 2017 | Fire Safety Awareness Program | Mr. P.Vinayagam |
| 22. | 10 th Nov 2017 | Nanotechnology – Etymology, Trends & Safety for Future Generation | Dr.S.Vijayakumar |
| 23. | 4 th – 9 th Dec 2017 | Series of Technical Talk on “Codes and Standards Week” | Multiple |

Robotics & Automation Society(RAS)

| Sl.No. | Date | Topic | Recourse Person |
|--------|---------------------------|--|--------------------------------------|
| 1. | 24 th Feb 2017 | Tech. meeting “Satellite Technology – Advancements and Challenges” | Multiple |
| 2. | 15 th May 2017 | International Conference on Innovative Emerging Trends in Engineering and Technology - | Dr. PA Manoharan & Multiple |
| 3. | 23 rd Jun 2017 | International Conference on Intelligent Computing and Control (I2C2) | Dr. P A Manoharan & Dr. B Nagaraj |
| 4. | 7 th Jul 2017 | Embedded System design using PSoC4 – Erode | Dr. P A Manoharan & Dr. K. Narayanan |

| | | | |
|----|--|---|--|
| 5. | 9 th - 10 th Aug 2017 | “Embedded System design using PSoC 4” – Chennai | Dr. P A Manoharan & Mr.G. S. Uthayakumar |
| 6. | 12 th Aug 2017 | Embedded System design using PSoC 4 - Ramanathapuram | Dr. P A Manoharan & Dr. R Dhanasekaran |
| 7. | 22 nd Dec 2017 | One Day workshop on Marine Autonomous Underwater Vehicle Design | Multiple |

Social Implications Society (SIS)

| Sl.No. | Date | Topic | Recourse Person |
|--------|---------------------------|--|-----------------|
| 1. | 20 th Jan 2017 | One Day Seminar on m-Health- Diabetes Management | Multiple |

Technology and Engineering Management Society(TEMS)

| Sl.No | Date | Topic | Recourse Person |
|-------|---|---|-------------------------------------|
| 1. | 28 th Jan 2017 | E waste management | Dr.K.Prabhakaran & Mr.T.Udhayakumar |
| 2. | 10 th -11 th Mar 2017 | Digital Transformation in Indian Industries”/ 14 resource Persons | Multiple |
| 3. | 10 th -11 th Mar 2017 | Digital transformation in Indian Industry | Multiple |
| 4. | 15 th Mar2017 | Data Driven Infographics | Dr.Fakhrul Hazman Yusoff, |
| 5. | 6 th Apr 2017 | Digitalization Trends in Enterprises | Mr.Pon.Manivannan |
| 6. | 18 th May 2017 | Trends in data Analytics | Mr.Ramakrishnan Venkatramanan |
| 7. | 6 th Jul 2017 | Technology in e- Commerce logistics | Mr.Vinoth Poovalinagam |
| 8. | 21 st Jul 2017 | Near Real Time Data Analytics | Mr.K.S. Sreetharan |
| 9. | 23 rd Aug 2017 | Cloud Computing | Mr.Rathinasabapathy |
| 10. | 25 th Oct 2017 | Crypto Currency | Dr.B.Srinivasan |
| 11. | 18 th Nov 2017 | Changing IT scenarios – Changing Service Options | Mr.L.Ashok |
| 12. | 11 th Dec 2017 | Cyber Security – Protecting the Human Point | Mr.Ajay Dubey |

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

Educational Activities: **Mr. P. Subramanian**

- Faculty Development Program (FDP) – 3

| Sl.No. | Date | Topic | Venue |
|--------|----------------------|--|--------------------------------------|
| 1 | April 10-11, 2017 | Advances in Robotics and Autonomous Systems | St. Joseph’s Institute of Technology |
| 2 | April 27-28, 2017 | Internet of Things: Communication Technologies | PSNA College of Engineering |
| 3 | November 29-30, 2017 | Automation using Internet of Things | Panimalar Institute of Technology |
| 4 | December 13-14, 2017 | Practical Issues & Challenges in MM Wave Communication for 5G Applications | Jeppiaar Institute of Technology |

Technical Activities

- A presentation was held on E-Waste Management on 28th Jan 2017 by Dr. K. Prabhakaran and Mr. T. Udhayakumar
- A technical talk on Satellite Technology – Advancements and Challenges on 24th Feb 2017 by Shri Purushothaman Seetharaman.
- A Distinguished lecture on Security Challenges and Opportunities in SDN/NFV and 5G Networks by Dr. Ashutosh Dutta was held on 21st Mar 2017.
- A presentation on Digitalization Trends in Enterprises was held on 6th Apr 2017 by Mr. Pon Manivannan.
- A technical meeting on Technology in E-commerce Logistics was held on 6th Jul 2017 by Mr. Vinoth Poovalingam.
- IEEE Distinguished lecture on Semiconductors Device Progression and Impact on Human Thought Process on 13th Jul 2017 by Dr. M.K. Radhakrishnan.
- A seminar on Near Real Time Data Analytics was held on 21th July 2017 by Mr. K.S. Sreedharan.
- A seminar on “Adopting ICT – AV Solution for Digital Growth & Transformation “ on 9th Aug 2017 by multiple speakers.
- A technical lecture on Computational Intelligence Techniques for Image Analysis on 20th Oct 2017 by Dr. M. Madheswaran.
- A technical talk on The Future of Electronics - From 2D Semiconductor’s Perspective on 21th Dec 2017 by Dr. MayankShrivastava.

B.4 Students Activities

- Total number of Student Branches in the Section - 257
- Number of Student Branches formed in the current year – 9

| Sl. No. | Name of the Student Branch | Date of approval |
|---------|---|---------------------------|
| 1. | Sri Ramakrishna Institute of Technology | 21 st Jul 2017 |
| 2. | T.J.S Engineering College | 4 th Aug 2017 |
| 3. | Saint Joseph University School of Engineering | 1 st Sep 2017 |
| 4. | Gojan School of Business & Technology | 28 th Sep 2017 |
| 5. | Kongunadu college of Engineering and Technology | 15 th Oct 2017 |
| 6. | Chettinad College of Engineering & Technology | 17 th Nov 2017 |
| 7. | K. Ramakrishnan College of Technology | 29 th Nov 2017 |
| 8. | Nehru Institute of Engineering and Technology | 10 th Dec 2017 |
| 9. | K. Ramakrishnan College of Engineering | 11 th Dec 2017 |

- **Section level student activities (student congress, paper and other contests, awards etc)**

- IEEE Madras Student Conference cum Paper Contest : Pls ref pg no. 7
- IEEE Xtreme 11.0 24 Hours Programming Competition:

The SSN IEEE SB and Department of Information Technology in association with IEEE Madras Section hosted IEEE Xtreme 11.0 24-Hour Coding Competition between 14th October 2017 (5:30 am) and 15th October 2017 (5:30 am) was a grand success. IEEE Xtreme 11.0 had 3348 teams in global level, 1083 teams registered at National level and 246 teams registered under Madras Section. At SSN CE, the Chennai host, had 66 registered teams and total participants of 145 from various colleges like SSN CE, VIT University, Jeppiaar Engineering College, Jeppiaar Institute of Technology, Anna University – College of Engineering, MNM Jain Engineering College, Panimalar Institute of Technology, Sri Sai Ram Engineering College and Sri Venkateshwara College of Engineering.. The event commenced at 5: 30 a.m on 14th October 2017 headed by Prof. T. Nagarajan, HoD, IT and Mr. Prashant Mohan, Chair, IEEE Xtreme 11.0. The coordinators of the event were Dr. T. Sree Sharmila, ASP, SSN IEEE SBC and Dr. S. Karthika, ASP, WIE-Faculty Advisor and Mr. Kavin, Chair, SSN IEEE SB. The event was felicitated by members from IEEE Madras Section and Dr. R. Srinivasa who delivered a talk titled “Making the invisible visible“. The participants were motivated by one to one interaction with Mr. H. R. Mohan, Vice Chair, Dr. Sakthivel, Treasurer, Dr. Koteeswaran, Member and other members of IEEE Madras Section.

The team **Heuristics** with members Chandramowli J (Team Administrator), Murugappan S and Rahul Ramji from department of Information Technology, SSN CE have secured the First place in the Madras Section, Third place at National level, 36th place in IEEE Region 10 and 101th place in the international level. The active volunteers from SSN IEEE Student branch showed great enthusiasm in hosting the event by organizing the accommodation and food arrangements in exemplary manner. There were also few stress busting events like Mannequin challenge and Hit the floor (dance performance) conducted during the competition. Finally, the event saw an activate crowd of participants in the valedictory lead by Mr. Prasanth Mohan sharing his wonderful experience of IEEE Xtreme 11.0. The participants highly appreciated the hospitality received at the host institute and it was followed by cake cutting ceremony to mark the successful completion of the event.

- Number of active Student Branches - 71
- Summary of Student Branch activities (Student Branch wise with attachment table/information)

| Sl.No | Name of the college | Topic | Amount in (Rs.) |
|-------|--|--|-----------------|
| 1. | Cape Institute of Technology | Three days Workshop on Internet of Things(IOT) | 7,500 |
| 2. | Sri Krishna College of Technology | National level Workshop on "Lab VIEW" (Engineering Solutions Using Graphical Systems Design - NI Lab VIEW and HW Platforms) | 5,000 |
| 3. | K.L.N. College of Engineering | National level seminar on " Recent trends in RF, Antennas and MIC | 10,000 |
| 4. | Jansons Institute of Technology | Workshop: Infolytica - MagNet | 5,000 |
| | Vel Tech | | 7,500 |
| 5. | National Engineering College | International conference on Wireless smart System Technologies | 10,000 |
| | Panimalar Institute of Technology | Second National Level Wrokshop on Network Simulation tools NS2 & NS3 | 10,000 |
| 6. | KCG College of Technology | One Day Seminar on " Practical Issues in Antenna Design" | 5,000 |
| 7. | Karunya University | Workshop on Research Challenges in Smart Power and Energy Management System for Digital India - SPEMS 16 | 7,500 |
| 8. | Prathyusha Engineering College | International conference on Advance in Electrical, Electronics, Information, Communication and Bio- Informations - AEEICB'17 | 5,000 |
| 9. | Sri Sai Ram Engineeirg College | Workshop on Emerging Trends and Future Perspective in Image Processing and Computer Vision | 10,000 |
| 10. | Sri Ramakrishna Engineering College | National conference on Emerging Trends in Instrumentation systems - NCETIS'17 | 5,350 |
| 11. | B.S. Abdur Rahaman | 4th National conference on Recent trends in Infrmation Technology - NCRTIT 2017 | 7,600 |
| 12. | Dr. Sivanthi Aditanar college of Engineering | One Day National Workshop on Controllers and Communication System design using Lab VIEW | 3,500 |
| 13. | Knowledge Institute Of Technology | National Level Seminar on " Research Challenges for Consumer Electronics In India | 3,750 |
| 14. | SSN College of Engineering | International Conference on Power and Embedded Drive Control(ICPEDC) | 12,500 |
| 15. | Jansons Institute of Technology | National conference on Communication, Networking, Technology Interventions in Human | 2,700 |

| | | Resource Development | |
|-----|--|---|-------|
| 16. | St. Xavier's Catholic College of Engineering | Symposium on Advancements in Smart Technology and Applications | 4,150 |
| 17. | St. Joseph Institute of Technology | Workshop on application of Simulation Tools for Electrical Research | 9,100 |
| 18. | Kalasalingam University | 2017 International Conference on Intelligent Techniques in Control, Optimization and Signal Processing (INCOS'17) | 2,550 |
| 19. | Kalasalingam University | 2017 International Conference on Intelligent Techniques in Control, Optimization and Signal Processing (INCOS'17) | 2,550 |
| 20. | Srikrishna College of Technology | National Level Workshop on Lab VIEW (Graphical solutions Using NI Lab VIEW) | 2,500 |
| 21. | S.A. Engineering College | Two days' Workshop on Internet of Robotic things(IoRT) | 5,900 |

- Travel Support given to 6 delegates (4 students and 2 Execom Members from Section)

| Sl.No. | Delegate Name | Institution Name | Amount in (Rs.) |
|--------|--------------------------|-------------------------------------|-----------------|
| 1. | Kutty Raj (Student) | Sri Ramakrishna Engineering College | 5385 |
| 2. | Madhi Rajan(Student) | SSN College of Engineering | 5020 |
| 3. | Pragya Thiwari (Student) | St. Joseph College of Engineering | 4360 |
| 4. | Kirubakaran (Student) | Panimalar Institute of Technology | 3940 |
| 5. | Mr. H.R. Mohan | Vice Chair, Madras Section | 5190 |
| 6. | Dr.P. Sakthivel | Treasurer, Madras Section | 5190 |

B.5 Affinity Group Activities

- **Young Professional (YP)**

| Sl.No. | Event Date | Topic of the Event | Resource Person |
|--------|--|---|---|
| 1. | 10 th -12 th Jul 10 th – 2017 | Entrepreneurship Awareness Camp | Multiple |
| | 2 nd – 4 th Aug 2017 | IEEE ICSTM | Multiple |
| 2. | 19 th Aug 2017 | IEEE Madurai Hub Congress | Multiple |
| 3. | 1 st Sep 2017 | Workshop on Design and Control of Power Electronic Devices using MATLAB | Dr. M. Venkateshkumar |
| 4. | 9 th Sep 2017 | Hands on Workshop on MATLAB/Simulink | Dr. M. Venkateshkumar Dr. Umashankar |
| 5. | 8-9 th Sep 2017 | IEEE Young Professionals Event Approved - SS12 | Multiple |
| 6. | 23 rd Sep 2017 | IEEE International Conference on “Advances in Electrical Technology for Green Energy” | Multiple |
| 8. | 6 th Oct 2017 | Effective way of research planning, and paper writing | |
| 9. | 7 th Oct 2017 | IEEE STEP – Young Professionals Skill Development and Career Guidance” | Multiple |
| 10. | | IEEE Coimbatore Hub Poco – | Dr.Ramalatha , Dr.Elangovan |

| | | | |
|-----|---------------------------|--------------------------|----------------------------|
| | | IEEE STEP | |
| 11. | 10 th Dec 2017 | IEEE VOLT | Mr. H. R. Mohan, Mr. Nivas |
| 12. | 16 th Dec 2017 | Industrial visit - IGCAR | |

- **Women In Engineering (WIE)**

| Sl.No. | Event Date | Topic of the Event | Resource Person |
|--------|---------------------------|-----------------------|-----------------|
| 1. | 11-12 Jul 2017 | Python & Raspberry Pi | Multiple |
| 2. | 14 th Mar 2017 | BASICS OF PYTHON | Multiple |
| 3. | 9 th Sep 2017 | SS12 Project Contest, | Contest |
| 4. | 14 th Oct 2017 | Kalam Fest | Contest |

- Life Member
The Section has 8 life members

B.6 Awards & Recognition Activities

- **Award constituted by the section:**

To encourage the student branches & societies to conduct more activities, cash awards & certificates of appreciation are being distributed every year at the AGM. The selection of SBs for the awards is based on the parameters such as activities conducted, membership strength, reporting in the newsletter, website maintenance, society chapters in the SBs, awards, funding received etc., Similarly, the Society Chapters and Affinity Groups are awarded based on their activity level, accounts submission, website maintenance etc.,

SB Activities can be viewed at:

https://drive.google.com/drive/folders/1m_n8mmdy5h5DLjKgjHy-_p9obv0KF9OW?usp=sharing

- List of all Awards and Recognitions by the Section to SBs:

| SB Name | Grade | Award (Rs) | Certificate |
|--|-------|------------|-------------|
| Panimalar Institute of Technology | S | 10000 | Yes |
| Sri Sivasubramaniya Nadar College of Engineering | S | 7500 | Yes |
| Knowledge Institute of Technology | S | 5000 | Yes |
| St. Joseph's College of Engineering | A | 3000 | Yes |
| Sri Ramakrishna Engineering College | A | 3000 | Yes |
| St. Joseph's Institute of Technology | A | 3000 | Yes |
| Karpagam College of Engineering | A | 3000 | Yes |
| St. Xavier's Catholic College of Engineering | A | 3000 | Yes |
| Jansons Institute of Technology | A | 3000 | Yes |
| SA Engineering College | A | 3000 | Yes |
| K.S. Rangasamy College of Technology | A | 3000 | Yes |
| Hindustan Institute of Technology and Science | A | 3000 | Yes |
| Jeppiar Institute of Technology | A | 3000 | Yes |

| | | | |
|--|---|------|-----|
| VIT University | A | 3000 | Yes |
| Thiagarajar College of Engineering | A | 3000 | Yes |
| Kalasalingam Academy of Research and Education | A | 3000 | Yes |
| Kongu Engineering College | A | 3000 | Yes |
| Bannari Amman Institute of Technology | B | 2000 | Yes |
| Prathyusha Engineering College | B | 2000 | Yes |
| PSNA College of Engineering | B | 2000 | Yes |
| Sri Sairam Engineering College | B | 2000 | Yes |
| Dr. Sivanthi Aditanar College of Engineering | B | 2000 | Yes |
| Sri Eshwar College of Engineering | B | 2000 | Yes |
| K. Ramakrishnan College of Engineering | B | 2000 | Yes |
| Panimalar Engineering College | B | 2000 | Yes |
| Dr.NGP Institute of Technology | B | 2000 | Yes |
| KPR Institute of Engineering and Technology | B | 2000 | Yes |
| M. Kumarasamy College of Engineering | B | 2000 | Yes |
| Aarupadai Veedu Institute of Technology | B | 2000 | Yes |
| Rajalakshmi Institute of Technology | B | 2000 | Yes |
| Velammal Engineering College | B | 2000 | Yes |
| Jeppiar Engineering College | B | 2000 | Yes |
| St. Peter's College of Engineering and Technology | B | 2000 | Yes |
| Rajalakshmi Engineering College | B | 2000 | Yes |
| Sathyabama Institute of Science and Technology | B | 2000 | Yes |
| Mepco Schlenk Engineering College | B | 2000 | Yes |
| SCAD Institute of Technology* | B | 2000 | Yes |
| B.S. Abdur Rahman Crescent Institute of Science and Technology | B | 2000 | Yes |
| Dr. Mahalingam College of Engineering and Technology | C | 1000 | Yes |

| | | | |
|---|---|------|-----|
| SCAD College of Engineering and Technology | C | 1000 | Yes |
| Kings College of Engineering | C | 1000 | Yes |
| Cape Institute of Technology | C | 1000 | Yes |
| Vaigai College of Engineering | C | 1000 | Yes |
| Akshaya College of Engineering and Technology | C | 1000 | Yes |
| RVS Technical Campus | C | 1000 | Yes |
| PA College of Engineering and Technology | C | 1000 | Yes |
| JCT College of Engineering and Technology | C | 1000 | Yes |
| Valliamai Engineering College | C | 1000 | Yes |
| Kumaraguru College of Technology | C | 1000 | Yes |
| Francis Xavier Engineering College | C | 1000 | Yes |
| KCG College of Technology | C | 1000 | Yes |
| Rathinam Technical Campus | C | 1000 | Yes |
| KLN College of Engineering | C | 1000 | Yes |
| Ganadipathy Tulsi's Jain Engineering College | C | 1000 | Yes |
| Muthayammal Engineering College | C | 1000 | Yes |
| Saveetha Engineering College | C | 1000 | Yes |
| SVS College of Engineering | C | 1000 | Yes |
| Mahendra Engineering College* | C | 1000 | Yes |
| PSG College of Technology | C | 1000 | Yes |
| Sri Krishna college of Technology | C | 1000 | Yes |
| Sri Krishna College of Engineering and Technology | D | | No |

Society Activities can be viewed at:

<https://drive.google.com/open?id=1X2yYM0t2ukjVHaL3K12GPj3geKckIMTr>

| | | | | |
|--|--------------|-------------------|--------------------|-------------|
| IEEE MAS SC-AG Awards - 2017 Based on the Activities Report submitted for the year 2017 | | | | |
| Society / Affinity Group | Grade | Award (Rs) | Certificate | Rank |

| | | | | |
|---|---|-------|-----|--------|
| Computer Society | S | 10000 | yes | First |
| Product Safety Engineering Society | S | 7500 | yes | Second |
| Professional Communication Society | S | 5000 | yes | Third |
| Young Professionals Affinity Group | A | 3000 | yes | |
| Information Theory Society | A | 3000 | yes | |
| Computational Intelligence Society | A | 3000 | yes | |
| Technology and Engineering Management Society | B | 2000 | yes | |
| Communication Society | B | 2000 | yes | |
| Robotics and Automation society | B | 2000 | yes | |
| Control System Society | B | 2000 | yes | |
| Antennas and Propagation Society, | B | 2000 | yes | |
| Power & Energy Society | B | 2000 | yes | |
| Photonics Society | C | 1000 | yes | |
| Nanotechnology Council | C | 1000 | yes | |
| Society for Social Implications of Technology | D | 0 | no | |

• **Awards given to Student Branches having Large Membership by the section**

| Sl. No. | Student Branch Name | Total no. of members | Position |
|---------|--|----------------------|----------|
| 1. | Sri Sivasubramaniya Nadar College of Engineering | 257 | I |
| 2. | M. Kumarasamy College Of Engineering | 237 | II |
| 3. | B S Abdur Rahman Crescent Engineering College | 217 | III |

• **Awards given to Student Branches for winning the Student Project funding:**

| S. No. | Project Title | Name of the Student | Name of the College | Funded amount |
|--------|---|--|-----------------------------------|---------------|
| 1. | Synthesis and characterization of Cadmium oxide nanocomposite materials for cervical cancer diagnostics | a) Ms. Sri Valli Meena S-93637140 b) Ms. Vindhajanani Y S - 93637143 c) Ms. Vignesh Priya B-93637127 | Rajalakshmi Engineering College | 15000/- |
| 2. | Robotic book scanner | a) Mr. Vinoth K - 93378107 b) Mr. Velagapudi Deepak - 93379617 c) Mr. Reddivari Sai Saran-93280001 | Panimalar Institute of Technology | 12000/- |

| | | | | |
|----|--|--|--|---------|
| 3. | Vehicle detectors for blind spots to prevent accidents | a) Ms. Nithila Shereen R-93636083 | Karunya University | 10000/- |
| 4. | Bhrty Artana | a) Mr. Simerna Jayanthi Sushil – 94036797 | KCG College of Technology | 8000/- |
| 5. | Implementation of secure LPG stove assistance system using IOT | a) Mr. Hariharasudhan M - 93275341 | Knowledge Institute of Technology | 6000/- |
| 6. | Intelligent security system based 24/7 lockers | a) Ms. Naomi sherin Lilly A - 93934211 b) Ms. Velayini S - 93934235 | Dr. Sivanthi Aditanar College of Engineering | 4000/- |

- **Awards received from R10:**

- Section received the 2017 IEEE Region 10 Outstanding Large Section Award

- **Award(s) received from IEEE HQ**

- IEEE Madras Section Computational Intelligence Society received IEEE CIS outstanding chapter award 17th May 2017 at Anchorage, Alaska, USA
- Mr H.R. Mohan, Vice-Chairman, Madras Section 2017 has been selected as a recipient of the 2017 MGA Leadership Award
- IEEE Product Safety Engineering Society, Madras Chapter, has been selected as chapter of the year for 2016 with award of \$250 USD.
- IEEE Photonics Society 2017 Chapter of the year presented to the a Madras India Chapter with award of \$500 USD

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

- Newsletter (name and number of issues in the year)
 - Name: IEEE Mas-Link
 - Number of issues in the year: 12 issues
 - Web Link for Newsletter: <https://drive.google.com/folderview?id=0B5jxEnDN1CofWlkxjBNei1vOXc&usp=sharing>
- Home Page of the Section (give the URL and how often it is updated)
 - URL: <http://sites.ieee.org/madras/>
- Other means of contacts with Section members including social media:
 - IEEE Madras Section office is in regular touch with all the members through mail and by creating List serv IDs for Members, Students and other Student Branches.
 - The IEEE Madras Section website has been upgraded There are login credentials for different modules set up in this system.

B.8 Industry Relations

- **Membership growth and retention:**

- **IEEE Madras YP Industrial Visit to Madras Atomic Power Station, Kalpakkam**

On 16th December 2017, a group of **31 students from 12 Student Branches** across Madras Section along with 3 Young Professional volunteers, Mr. Aravindhan Anbazhaagan, Mr. Vijay Srinivas and Mr. Ashvanth B were taken for an Industrial Visit to Madras Atomic Power Station, Kalpakkam. The program was organized by **IEEE Madras Young Professionals**. The IV started at 5:45 AM from various points of Chennai where the participants are comfortable for pickup. After having breakfast at Hotel Mamalla on the way, the team reached MAPS by 8:30 AM. We had a morning team huddle where the overview of the visit and the general guidelines

were discussed. The students were split into reflection circles with YP coordinators. The participants were asked to write down the most striking piece of information that they have heard about MAPS in their own perspectives.

This was followed by a protected entry to MAPS. We had **Mr. Ravi Shankar** (Senior Technical Audit Engineer) delivered a session about the various reactors available in India, the general types of reactors and the chemical processes occurring within the reactor. The participants were also informed about the ongoing and futuristic projects of expanding the station for power generation of about 500 MW. A quick break enabled networking and interaction between the attendees. The major issues such as technical explanation and detailed logistics were dealt with after the break. The participants expressed their enthusiasm by asking questions and learnt about some unique features of this indigenously built reactor. Next, a site tour within the office was conducted which showed the students the electrical and mechanical components used in the construction of the reactor along with a miniature model of the nuclear reactor was explained.

A practical tour of the reactor covering the Control Unit of the reactor to the turbines and generator proved to be very useful and interesting to the students. At the end of the visit, **closing reflection circle** was organised where the participants shared their views and opinions on the event. All the attendees reported the visit to be extremely useful and beneficial. The visit ended with a thank you note to the participants and the Young Professionals for their remarkable involvement to the success of the event.

- Activities for/with industrial members

| Sl. No. | Event Date/s | Topic of the Event | Resource Persons |
|---------|---------------------------|--|-----------------------------------|
| 1. | 16 th Dec 2017 | MAPS Industrial Visit at Kalpakkam poer plant | Industrial Visit |
| 2. | 10 th Dec 2017 | Volunteer Training Workshop at Karya Co Working Space, Chennai - | Entrepreneurship Track Activities |
| 3. | 23 th Nov 2017 | Design Thinking Workshop at Intellect Design Arena | Workshop |

B.9 Humanitarian Technology Activities

- Humanitarian Technology related activities supported by the Section including collaboration with other OUs. – Nil
- **SIGHT Activities**

| Sl.No. | Date | Topic | Resource Persons |
|--------|---------------------------|---|------------------|
| 1. | 30 th Jan 2017 | E-logbook for fishers | Multiple |
| 2. | 10 th Apr 2017 | Fishers' Guide (Meenavar Vazhikaatti) | Multiple |
| 3. | 6 th May 2017 | Involving Students to Monitor road Traffic & Prevent Accidents | Multiple |
| 4. | 17 th Jun 2017 | Consultation on Technology Interventions for Protecting Coastal Communities from Sea Incursions | Multiple |
| 5. | 11 th Dec 2017 | Consultation on Nano Satellite for Deep Sea Fishers: Design, Fabrication and Launch | Multiple |

B.10 Community Activities

- IEEE Social activities (Family day, IEEE day, Engineers Week)"
- IEEE day (Pls see pg no.2)

PART C - OTHERS

C.1 Special Events

- Please briefly describe the importance of special events and the outcomes achieved

HUB Congresses conducted : For Description pls see pg no. – 4-6

| Sl.No. | Date | Topic |
|--------|---------------------------|-------------------------|
| 1. | 19 th Aug 2017 | Madurai HUB Congress |
| 2. | 31 st Aug 2017 | Chennai HUB Congress |
| 3. | 8-9 Sep 2017 | Coimbatore HUB Congress |

Outcomes

- a) A networking opportunity to identify and contact others was given.
- b) A basement for future directions for the forum was constructed.
- c) Known about the funding for organizing activities.
- d) Updated about the funds available for student chapters

- Funding secured from the IEEE and external sources including sponsorships - Nil

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

- Nature of relationship and details of any formal agreement signed:
- IEEE Madras Section works in close collaboration with other Professional Society Chapters in Chennai. World Telecommunication day was organized by IETE centre, Chennai and was co-sponsored by IEEE Madras Section.
- IEEE Madras Section also co-sponsored the programs organized by Institution of Engineers (India), Chennai Centre.
- IEEE Madras Section, IEEE Computer Society and Computer Society of India, which is another National Professional Society jointly, organize programs of common interest like Object Computing.
- Details of joint activities
- Benefit to IEEE members (for example discounts, access to technical information etc.)
- Benefit to Section (for example help in membership development, venue facilities, cost saving etc.)

C3. Collaboration with other IEEE Sections : Nil

- Support extended to neighboring Sections
- Joint activities with any other Section

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

- Support extended for organising technical, educational and professional activities
- Joint activities for membership development : Nil
- Support extended for the formation of a Sub-section or transition of a Sub-section into a full Section : Nil

C.5 Best Practices of your Section (which you would like to share with other Sections for the benefits of members)

1. Regular Faculty Development programs in different locations in the state to benefit good number of faculty members.
2. Travel grant for members whose papers are accepted in International Conferences
3. Funding for the student projects submitted by the student branches of the section to motivate student membership and also to improve the quality of the student Projects at undergraduate level.
4. Technical Support and sponsorship by the section to the student branches for various technical programs – Conferences, Workshops, Seminars, Symposia etc., for the improvement of Quality Technical Program increasing the technical activity in the student branches.

5. Community out reach program to mold better youth of the country.
6. Technical Lecture series organized by the technical Society chapters
7. Communication and personality development programs organized by the section.
8. Recognition & Awards during Annual Meet to dynamic student chapter technical societies, good performance in Xtrem contest encouraging the awards & R10 and IEEE Head Quarters'
9. Entrepreneurship programs were also conducted

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

- Retention of Student members
- To increase in professional members on account of increase in members subscription

PART D - GOALS AND PLANS

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

plans:

1. The funding of the student projects to continue every year in order to constantly improve the quality of the projects.
2. A project exhibition contest to identify creative and innovative proposals and implementation of strategy for further improvement.
3. To plan more Faculty Development Programs in different parts in order to increase the number of beneficiaries. This will improve the quality of teachers and improve the teaching learning process as a whole.
4. More Skills Development Programs and Teacher-in- service programs based on popular demand from members.
5. More conference technical co-sponsorships to create critical mass of competencies in organizing world class conferences
6. More HUB congress to be conducted at different districts for the benefits of students.
7. To conduct Industry related and Entrepreneurship programs

D.2 Goals and Future Plans:

1. To geographically spread the technical activity organized by the section, the society chapters and affinity groups.
2. Plan to organize the Membership awareness programs and Recognition of outstanding student branch and outstanding student volunteer and Branch counselor.
3. To make the activity more student centric such that the future Engineers are more competent in all Endeavors.
4. To take the technical knowledge and state of the art technology to the rural parts as well. To create awareness about Science and Technology in school level.
5. To organize workshop of hands on training on advanced health care for better quality of life.
6. To increase the chapter membership and senior membership Programs
7. To coordinate with student branches for good industry connect.
8. Organize industrial visit for IEEE student members.
9. Organizing Lectures on emerging technologies.

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

- Planning to circulate IEEE months newsletter to all the educational Institution who are not part of IEEE- even if no IEEE Student Branch in order to enhance the member base both Student Member and Student Graduate Member and Professional Member.
- Recognition of outstanding student branch and outstanding student volunteer and Branch counselor.
- To conduct the Membership elevation programs.

IEEE Day And Large Section Award Celebration on 28th Oct 2017



2017 IEEE MINI POCO (Panel of Conference Organizers)



2017 Office Bearers Meet 5th Feb 2017

