

Section Report Format

PART A - SECTION SUMMARY

A.1 Executive Summary

- **Section Executive Committee Member List**

Sl.No.	Name	Position
1.	Dr. N.R. Alamelu	Chairman
2.	Mr. T.S. Rangarajan	Immediate Past Chair
3.	Dr. M. A. Atmanand	Vice Chairman
4.	Dr.S. Arumugam	Vice Chairman
5.	Dr.N. Kumarappan	Secretary
6.	Prof.A. Darwin Jose Raju	Treasurer
7.	Prof. T. Michael N. Kumar	Member
8.	Dr. D. Vinodkumar	Member
9.	Prof. S. Elangovan	Member
10.	Dr.T. Rama Rao	Member
11.	Dr.T. Vijayakumar	Member
12.	Dr. B. Pramasivan	Member
13.	Dr.R.Hariprakash	Member
14.	Mr. Prashant Nair	Member
15.	Mr. B. Anand	Member
16.	Mr. M. Barnabas	Member

- **Section Highlights**

D) IEEE MADRAS SECTION IEEE STUDENT BRANCH OFFICERS' MEET

IEEE Student Branch Officers' meet 2014 was organized on 20.09.2014. 62 members of the Student branch officers from 42 colleges attended the meeting. The meeting started with the IEEE code of ethics read by Mr.C.R.Chellaiah, Section student representative. All the student branch officers' gave presentation about the activities done in their respective student branches. These presentations were useful to all the other student branch officers as a take away for innovative activities in their student branches. Mr.C. Jinesh, Treasurer, IEEE MAS Young Professional had explained about the student branch reporting using the online reporting web portal, IEEE vTools for the first time student branches. Dr.A. Darwin Jose Raju, Treasurer, IEEE Madras Section explained about the funding available in Madras section and about the rebate, allotment from IEEE Madras section. This Student branch officers' meet was organized by Prof.S. Elangovan, Chair, Student Activities Committee, IEEE Madras Section. This meet covered the following objectives:

1. Networking of Student Branch officers.
2. To have a better knowledge about the roles and responsibilities of IEEE Student Branch Officers (Student Branch Counselor, Student Chair, Vice Chair, Secretary, Treasurer, Executive committee members and others).
3. To get the awareness about the IEEE membership benefits, IEEE student member / professional member resources available.
4. To know the IEEE financial support from IEEE to the Student branches.

5. To network with the IEEE Madras Section Executive Committee members and other Student Branch officers.
6. To get an idea to start Student Branch Society chapters / Affinity Groups in the Student branch.
7. To know about the Awards / Rebates from IEEE to the Student branches.

The participants had interaction with all executive committee members of IEEE Madras section, Chair persons of Technical Society chapters, Life Senior member, Fellow during the various sessions. The certificates and memento were issued to the participants by Dr.N.R. Alamelu, Chair, IEEE Madras Section.

II) 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. 46 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, 14 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 .

III) IEEE Section Newsletter

MAS-link is the monthly newsletter of Madras Section published electronically and the soft copy of the newsletter is circulated to all the members of the section including student members. Every monthly issue is uploaded in the IEEE Madras Section web site as well 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. Announcements regarding the Conferences, Workshops, Seminars, Symposia, etc., coordinated by the student branches and the Technical Society Chapters functioning in various institutions.
5. Book reviews
6. Achievements of professional members.
7. Activities of the section, technical Society chapters and affinity group.

IV) 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 2014, 33 such programs have been extended financial support to the tune of Rs. 2,49,829/-.

V) Educational Activities

i) Faculty Development Program

In order to enhance the quality of teaching – learning 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 2014, 3 such Faculty Development programs were organized as below:

- Soft Computing and Simulation for Power Engineering
- Mobile application Development using Android: A Next Generation Technique,
- Big Data Analytics with Hadoop

About 123 faculty members have been benefited, through these programmes.

ii) Teacher in Service Program (TISP)

Teaching-Learning is an important process in academic institutions. Transfer of knowledge takes place from the teacher to the students only when the teaching is effective. As a service to the teaching community, IEEE Madras Section under educational activity had organized Teacher In-service program (TISP). This program served as an excellent opportunity to increase the level of understanding among the pre- university educators. It enhanced the level of technological literacy of pre-university educators and gave guidance to pre-university educators on professional development areas that students need. It identified ways on how the pre-university educators can assist schools and school system in technological literacy. About 65 teachers participated from various schools and got benefited.

iii) Technical Seminar

Held on 18th July 2014 on Embedded System by Dr. V. Kamakotti, Professor, Dept. of CSE, IIT Madras and “VLSI Design” by Dr. J. Raja Paul Perinbam, Former Professor, Dept. of ECE, CEG, Anna University, Chennai, The program was attended by 61 participants.

VI) Motivational Awards

During annual general body meeting (AGM), 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 chapters. The student chapters having maximum number of members are also honored during the AGM. 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 General Body 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
- The Student Branch having maximum number of members, award given to top three colleges

VII) Technical Lectures by Society Chapters

IEEE Madras Section has 19 Technical Society Chapters and 3 Affinity Groups. The tables below summarize the Technical Society Chapters and Affinity groups with the Chairpersons of each one of them

a) Technical Society Chapters

Sl.No.	Society Name	Chairperson
1.	Aerospace and Electronic Systems (AES)	Dr.A. Nagappan
2.	Antennas and Propagation (APS)	Dr.K. Selvan
3.	Computer Society (CS)	Mr. H.R. Mohan
4.	Communication (COMSOC)	Dr.N.R Alamelu
5.	Computational Intelligence (CI)	Dr. N. Kumarappan
6.	Control Systems (CSS)	Dr.T.Thyagarajan
7.	Engineering in Medicine & Biology (EMBS)	Dr.B. Santhanaraj
8.	Electron Devices (EDS)	Dr. N. Mohan Kumar
9.	Education (ES)	Prof. M.Ramalatha
10.	Electromagnetic Compatibility (EMC)	Dr.Subbarao Bandaru
11.	Industrial Applications (IAS)	Dr. S. Rajavel
12.	Microwave Theory and Techniques (MTTS)	Dr. S. Salivahanan
13.	Power and Energy Society (PES)	Mr. K.V. RupChand
14.	Power Electronics Society (PELS)	Dr.V.T. Sreedevi
15.	Product Safety Engineering (PSES)	Dr.G.V. Rao
16.	Professional Communication (PC)	Mr.H.R.Mohan
17.	Robotics and Automation (RAS)	Dr. P.A. Manoharan
18.	SIPCICOM	Dr. Krishnan Nallaperumal
19.	Technology Management Council (TMC)	Mr. K.V. Rupchand

b) Affinity Groups

Sl.No.	Affinity group Name	Chairperson
1.	WIE Affinity Group	Dr.V. Vydeki
2.	Young Professional	Prof.A. Elangovan
3.	SIGHT	Mr.B. Anand

• Major Events (International, National)

IEEE R10 HTC 2014 – International Event

IEEE R10 Humanitarian Technology Conference 2014 was organized by IEEE Madras Section & IEEE Madras Section SIGHT during 6 -9 Aug 2014 at Hilton, Chennai. The Theme of the conference was “Engineering sustainable future for Humanity”. The major topics covered are:

- Health, Medical Technology, Telemedicine
- Water Planning, Availability & Quality
- Disaster Warning, Avoidance and Response

- Urban Planning and Sanitation
- Reducing Ethnic Conflict and Terrorist Events
- Power Infrastructure/Off-grid Power/Renewable and Sustainable Energy
- Connectivity and Communications
- Conservation of Natural Resources
- Technologies (data/voice) for Remote Locations
- Educational Technologies
- Agricultural Technologies
- Applying Science, Engineering and Technology for Environmental Sustainability
- Humanitarian Challenges and Opportunities

The conference was attended by more than 300 delegates presenting papers on the theme of the conference. The following members participated in the conference. The program included preconference lectures and 3 Tutorial, 6 Keynote, 6 Workshops & 7 Technical Tracks. The program was concluded by conducting student contests like Student Paper contest, Student Poster and Student Project contest program also organized.

An exclusive session was conducted by WIE affinity group. In order to motivate the motto of IEEE HTC, Students paper presentation poster present, project contest were also encouraged

• Major Chapter Activities

Sl.No.	Society Name	No. of Meetings Conducted
1.	Aerospace and Electronic Systems (AES)	2
2.	Antennas and Propagation (APS)	8
3.	Computer Society (CS)	30
4.	Communication (COMSOC)	5
5.	Computational Intelligence (CI)	10
6.	Control Systems (CSS)	2
7.	Engineering in Medicine & Biology (EMBS)	3
8.	Electron Devices (EDS)	7
9.	Education (ES)	5
10.	Electromagnetic Compatibility (EMC)	4
11.	Industrial Applications (IAS)	3
12.	Microwave Theory and Techniques (MTTS)	3
13.	Power and Energy Society (PES)	46
14.	Power Electronics Society (PELS)	3
15.	Professional Communication (PC)	8
16.	Robotics and Automation (RAS)	8
17.	SIPCICOM	8
18.	Technology Management Council (TMC)	7

• Major Student and Affinity Group Activities

Student Activity

- 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. This initiative benefited about 500 student members.

Affinity Group Activities

Sl.No.	Affinity group Name	No. of Activities
1.	WIE Affinity Group	6
2.	GOLD Affinity Group	12
3.	SIGHT	5

Sl.No	Date	Topic	Speaker
1.	07/03/14	Women's Day Celebration and Project Exhibition	WIE Student Volunteers
2.	07/03/14	Women Issues and Opportunities	Dr.Ramalatha Marimuthu, Past Chair, IEEE WIE
3.	08/08/14	Pattern Mining from online Social Media	Dr.Takako Hashimoto, R10 WiE Coordinator
4.	09/08/14	R10 HTC, Hotel Hilton,	Dr.Takako Hashimoto, R10 WiE Coordinator
5.	09/08/14	R10 HTC, Hotel Hilton,	Ms.Vijayanthi, Yuvashakthi Member
6.	19-21/11/14	2014 Grace Hopper Celebration of Women in Computing India	WiE Chair & Volunteers
7.	04/12/14	Returning Mothers Workshop	Dr.Satish Babu

WIE

Sl.No.	Date	Topic	Speaker
1.	22/3/2014	National Level solar Competition	Multiple
2.	6-9/8/ 2014	IEEE Region 10 Humanitarian Technology Conference 2014	Multiple
3.	9/8/2014	IEEE SIGHT Community Engagement Workshop	Multiple
4.	7-8/8/2014	IEEE Humanitarian Technology Student Contest – Paper, Project & Poster	Multiple
5.	12/12/2014	Talk on Humanitarian Engineering & Social Entrepreneurship	Prof. Khanjan Mehta

Young Professional

Sl. No.	Date	Topic	Speaker
1.	17/04/2014	Workshop on “Computational Intelligence with Engineering Applications”	Dr.Kumarappan, Mr.M.Venkateshkumar,
2.	24/05/2014	Competency Development Programme	Dr.N.R. Alamelu, Dr.S. Selvam,
3.	19/07/2014	Technical Seminar on "Embedded System and VLSI Design"	Dr.V. Kamakoti, Dr.J. Raja Paul Perinbam
4.	17/09/2014	STEP - Grid Integration of Renewable Energy Sources	Er. K.V. Rupchand,
5.	20/09/2014	Student Branch Officers Meet	All MAS Execom and Past Chairs
6.	11/10/2014	STEP - Bridging the Gap – Industry Institute Interface	.Dr.S.Umashankar Mr. S.Prabhu Mr.V.Kumaravel Ms.K.Dharini
7.	15/10/2014	STEP - Smart Intelligent Control System for Engineering Application	Dr.A.Manju, Dr.P.Muthukannan, Prof.M.Venkateshkumar
8.	15/10/2014	STEP- Bridging the Gap – Industry Institute Interface	Dr. S. Umasankar, Execom
9.	17/10/2014	Workshop on “Electromagnetics-made simple”	Mr.K.R.S.Ravi Kumar Mr.Debojyoti

10.	27/10/2014	STEP- Grooming Engineers with Social concern	Dr.S.Sundar Manoharan, Prof.S. Elangovan
11.	12/12/2014	STEP - Sustainable Solid waste Landfill Management	Dr. Michael N Kumar Dr. Kurian Joseph
12.	19/12/2014	STEP - Arduino Controller	JAY Robotics Club, Chennai

SIGHT

• Awards

- IEEE Madras Section SIGHT has been awarded with "Notable SIGHT Groups of 2014" and awarded with \$500
- IEEE COMSOC has received performance bonus of \$900 for its active performance.
- Dr. Thiruvengadam, has been recognized for the conferment of OUTSTANDING ENGINEER AWARD [OEA] of PES Chapter, Madras Section for the year 2014.
- IEEE Student Enterprise Award
- IEEE Larry K Wilson Student volunteer Award (Special Mention)
- R10 First Place MGM recruiter

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

• Summary (will be submitted on 20th Feb 2015 by online 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)
- ✓ Teacher-In-Service Program (TISP)
- ✓ Technical Lectures
- ✓ Technical Seminar
- ✓ Section financially supported to Mr.B.Anand to attend the R10 HTC 2014 as secondary delegate.

PART B - ORGANIZATIONAL ACTIVITIES

B.1 Membership Development Activities

The Section takes lot of initiatives to enhance the membership of the section. Two senior members of the Executive committee have been identified to take initiatives for the enhancement of Membership and for elevation of members to senior members. With these initiatives 2 new members have been elevated as Senior member with section having 127 Senior members in 2014 as against in 2013. The following activities have been conducted during 2014 for the enhancement of the members including the student membership:

- a. Student Branch officer's meet
- b. Faculty Development Programs

- c. Project funding for the students
- d. Sponsorship for the conferences , Workshop , Seminars, Symposiums
- e. Recognition and awards to student branches having good number of members and conducting good number of activities

There is a slight increase in the Graduate Student Members and Senior Member

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

The details of Membership as on 31st Dec 2012, 2013 and 2014 are given below:

	<u>31st Dec 2012</u>	<u>31st Dec 2013</u>	<u>31st Dec 2014</u>
➤ Life Fellow	2	2	1
➤ Fellow	2	3	4
➤ Life Seniors	10	12	13
➤ Senior Members	111	125	127
➤ Life Members	4	4	5
➤ Members	2349	2590	2416
➤ Affiliate Members	24	15	25
➤ Associate Members	254	120	107
➤ Graduate Student Members	746	1351	1399
➤ Student Members	7990	8142	6219
TOTAL MEMBERSHIP	11492	12364	10316

- **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 2014

Sl. No.	Name of the Student Branch	Date of approval	Branch counselor	Branch code
1.	Shree Venkateshwara Hi-Tech Eng College	15 th May 2014	C. Nallasivam	STB15541
2.	Rathinam Technical Campus	24 th Oct 2014	S.Shanthi	STB16201
3.	Karpagam Institute of Technology	14 th Nov 2014	K. Geetha	STB16171
4.	Sir Issac Newton College of Engineering & Technology	14 th Nov 2014	Giftson Samuel George	STB16461
5.	Sree Sastha College of Engineering	19 th Nov 2014	Padmashini .R.K	STB16431
6.	St.Joseph's Institute of Technology	22 nd Nov 2014	Jayapragash. R	
7.	KLN College of Information Technology	1 st Dec 2014	T. Karthick	STB16661
8.	Kings College of Engineering	22 nd Dec 2014	Venugopal E	STB16621

DETAILS OF NEW STUDENT BRANCH CHAPTERS / AFFINITY GROUPS STARTED DURING 2014

Sl. No.	Name of the student branch chapter	Date of approval	Branch counselor	Branch code
1.	Women in Engineering Student Affinity- Thangavelu Engineering College	14 th March 2014	A. Pandiyan	STB28141
2.	Power & Energy Society -Sri Muthukumaran Inst Of Tech	7 th April 2014	Sadhana Samuel	
3.	IEEE Madras Section - Coimbatore Electron Devices Society Chapter.	19 th Nov 2014	Nirmal D	CH10711
4.	Power & Energy Society - Sri Sai Ram Engineering College	14 th Nov 2014	Azhagumurugan Ramamoorthy:	SBC60981B
5.	Signal Processing Society - Hindustan Institute of Technology & Science	19 th Nov 2014	Vanaja Shivakumar	SBC29351G
6.	Instrumentation and Measurement - Hindustan Institute of Technology & Science	19 th Nov 2014	Vimala Govindarajan	SBC29351F
7.	Power & Energy Society Student Branch Chapter - Hindustan Institute of Technology & Science	5 th Dec 2014	Sathyalakshmi Sivaji	SBC29351C
8.	Robotics and Automation Society Student Branch Chapter - Hindustan Institute of Technology & Science	5 th Dec 2014	J. S. Prasath J. Srinivasan	SBC29351B
9.	Communications Society Student Branch Chapter - Hindustan Institute of Technology & Science	5 th Dec 2014	Palaniyappa Meiyandam Rubesh Anand	SBC29351E
10.	Computer Society - Hindustan Institute of Technology & Science	5 th Dec 2014	Sathyalakshmi Sivaji	SBC29351D
11.	Communications Society Student Branch Chapter - Ganadipathy Tulsi's Jain Engineering College	5 th Dec 2014	A. Manimegalai	SBC64911A
12.	Antennas and Propagation Society Student Branch Chapter - Saveetha School of Engineering	22 nd Dec 2014	Muthu Kannan	SBC12071C
13.	Industry Applications Society Student Branch Chapter - St. Joseph's College of Engineering	11 th Dec 2014	Jayarama Pradeep	SBC60101A
14.	Signal Processing Society Student Branch Chapter - Panimalar Institute of Technology	13 th Aug 2014	Arun M	SBC15181A
15.	Robotics and Automation Society - Vellore Inst of Technology Student Branch Chapter	13 th Aug 2014	Joshua Reddipogu	SBC33311F
16.	Electron Devices Society - Vellore Institute of Technology	13 th Aug 2014	Lakshmi B	SBC09591B

17	Panimalar Institute of Technology Communications Society Student Branch Chapter	12 th Aug 2014	Arun M	SBC15181C
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B.2 Chapter Activities

- Total number of Chapters in the Section: 220

IEEE Madras Section has currently 19 Technical Society Chapters : Pls refer Page no. 5

- Number of Chapters formed in the current year**

DETAILS OF NEW SOCIETIES FORMED UNDER IEEE MADRAS SECTION 2014

Sl. No.	Name of the student branch chapter	Date of approval	Society Chair
1.	Computational Intelligence Society	3 rd Jan 2014	Dr.N. Kumarappan
2.	Nano Technology Council	3 rd July 2014	Dr.R.Devanathan

- Number of Active Chapters : 18**

Sl.No.	Society Name	No. of Meetings Conducted
1.	Aerospace and Electronic Systems (AES)	2
2.	Antennas and Propagation (APS)	8
3.	Computer Society (CS)	30
4.	Communication (COMSOC)	5
5.	Computational Intelligence (CI)	10
6.	Control Systems (CSS)	2
7.	Engineering in Medicine & Biology (EMBS)	4
8.	Electron Devices (EDS)	7
9.	Education (ES)	5
10.	Electromagnetic Compatibility (EMC)	5
11.	Industrial Applications (IAS)	3
12.	Microwave Theory and Techniques (MTTS)	3
13.	Power and Energy Society (PES)	55
14.	Power Electronics Society (PELS)	3
15.	Professional Communication (PC)	8
16.	Robotics and Automation (RAS)	8
17.	SIPCICOM	13
18.	Technology Management Council (TMC)	8

- Summary of Chapter activities chapter wise with attachment table / information**

Aerospace and Electronic Systems

S.No.	Date	Topic	Resource Person
1	20–21/8/2014	Ethical Hacking and Cyber Forensics	Mr. Om prakash
2	4-5/9/2014	Next Generation Embedded Systems Using Renesas 16-Bit Microcontrollers, R178 Family	Mr. M. Balaji

Antennas and Propagation

Sl.No	Date	TOPIC	Speaker
1	03.01.2014	Symposium on Electromagnetics and Engineering Education	Multiple
2	05.03.2014	Workshop on Computational Electromagnetics and Antennas	Multiple
3	09.05.2014	Seminar on Antennas and Microwaves and Student's Poster session	Multiple
4.	28.06.2014	Distinguished Lecturer's Seminar	Prof. Ahmed Kishk,
5	18.10.2014	Seminal on Antenna	Dr. P.H. Rao,
6.	04.10.2014	Distinguished Lecturer's Seminar	Dr. Arun K. Bhattacharyya,
7	5-7 /11/ 2014	3 – Day Workshop on Advanced Antenna Technology	Multiple
8	09.12.2014	Distinguished Lecturer's Seminar	Dr. Sudhakar Rao

Computer Society

Sl.No.	Date	Topic	Speaker
1	6/1/2014	Securing the Unsecured in Cyber Space	Prof. K. Subramanian
2.	7/1/2014	Technologies for catapulting Tamil to the digital Forefront	Dr. A. G. Ramakrishnan
3.	3/2/2014	Rural Upward Mobility: Ultimate Android Solutions for Social Impact	R. Sampath
4.	19/2/2014	Big Data Mining	Dr. Archana Ramesh
5.	10/3/2014	Vedic Mathematics in Engineering Applications	Mr. V. J. K. Kishore Sonti
6.	19/3/2014	Big Data Problems in Social Media Analytics	Dr. R. Chandramouli
7.	26/3/2014	Cybernetics of De-Schooled Learning	Dr. T.V. Gopal
8.	3/4/2014	Trillion Dollar by 2025 - North Star for Indian IT	Mr. S. R. Ramaswami
9.	12/4/2014	Questions Turing Left Behind	Prof. Barry S Cooper
10.	17/4/2014	Panel Discussion on “Export of IT and ITES - Opportunities & Challenges”	Multiple
11.	5/5/2014	Cell phone nation: How mobile phones changed India	Dr. Robin Jeffrey Dr. Ashok Jhunjhunwala
12.	5-6/5/2014	ICSECSRE 2014: International Conference on Signal Processing, Embedded Systems, Communication Technologies and their applications for Sustainable & Renewable Energy.	Multiple
13	8-9/5/2014	ICASG 2014: International Conference on Architecture Software systems and Green computing.	Multiple
14	28/6/2014	Games, Puzzles and Computer Science	Dr. Prof. Venkatesh Raman
15	23/7/2014	Half day workshop on “Cross Border Cyber Crime & Security	Multiple

16.	26/7/2014	Half day workshop on “Statement of Purpose (SoP) for admission to Universities abroad	Multiple
17.	28/7/2014	Introduction to Software Defined Networking - Meeting the requirements for Next generation Data center networks	Mr. Shivakumar Sundaram
18.	19/8/2014	Secured Governance for Techno-Economic Growth”	Dr. P. Sekhar,
19.	23/8/2014	Cyber-Security 2014 Challenges	Dr. Gabi Siboni
20.	20/9/2014	Introduction To Quantum Computing And Its Potentials	Dr. Prof. Sibasish Ghosh
21.	27/9/2014	ETL Tool DataStage	Mr. Raja Sivanandam
22.	12/11/2014	Trends in Big Data Analytics	Dr. David Chaiken
23.	20/11/2014	Master Minds of IT and What We Can Learn from Them	Dr. San Murugesan
24.	21/11/2014	One Day Professional Development Programme on Internet of Things (IoT)	Multiple
25.	2/12/2014	Programme on Mobile Security	Prabhaker Mateti
26.	15-16/12/2014	CONNECT-2014: The Annual Conference cum Exposition on Information and Communication Technology focusing on Tamil Nadu’s growth in ICT Sector	Multiple
27.	29-30/12/2014	Faculty Development Programme on "Big Data Analytics with Hadoop	Multiple
28	Special Program	IEEE/ACM Distinguished Speaker/Visitor Program Talks	Dr. Lakshmi Narasimhan
29	Special Program	IEEE/CSI Distinguished Speaker/Visitor Program Talks	Dr. K. Subramanian
30	Special Program	Student Essay Contest: Harnessing the Power of ICT for our New Initiatives	

Communication

Sl.No.	Date	Topic	Speaker
1.	27/2/2014	Workshop on Image Processing	Mr. P Subramanian
2.	10/3/2014	Big data problems in social media analytics	Dr R Chandramouli
3.	23/7/ 2014	IMAGE PROCESSING USING MATLAB	Mr. P Subramanian
4.	13/9/2014	IMAGE PROCESSING USING SCILAB & SCILAB	P Subramanian Mr R karthikeyan
5.	26/9/2014	WORKSHOP ON EMBEDDED SYSTEMS	Multiple

Computational Intelligence

Sl.No.	Date	Topic	Speaker
1.	15/2/2014	“Soft and Cloud Computing”	Mr.SankarNagarajan, Mr.R.Ramanan, Dr.C.Christober Asir Rajan
2.	17/4/2014	Computational Intelligence with Engineering Applications	Dr.N.Kumarappan Mr.M.Venkateshkumar, Dr.A.Manju
3.	19/4/2014	National Conference on “Emerging Technologies in Electrical and	Dr.N.Kumarappan

		Electronics Engineering”	
4.	8-9/5/2014	Soft Computing and Simulation for Power Engineering	Dr.N.Kumarappan Mr.R.Arulraj Mr.M.Venkateshkumar, Dr.A.Manju
5.	1-2//8/2014	“Neural Network, Fuzzy Logic and its Applications	Dr.N.Kumarappan Mr.R.Arulraj Mr.M.Venkateshkumar
6.	25-27/08/2014	Implementation of soft computing techniques using Matlab	Dr.M.Willjuice Iruthayarajan Ms.R.V.Maheswari Dr.L.Kalaivani Mr.N.B.Prakash
7.	27/10/2014	Applications of Mathematical Transformations in Image Processing	Dr.R. Balasubramanian
8.	24/11/2014	Computational Intelligence Tools in Engineering	Dr.N.Kumarappan
9.	17/12/2014	Swarm Intelligence based on Competition and Social Learning for Scalable Optimization	Dr.Yaochu Jin
10.	29-30/12/2014	Big Data Analytics With Hadoop	Mr.H.R.Mohan, Dr.P.Venkatesan, Mr.RoyAntony, Mr.Thiruvalluvan.M.G.

Control Systems

Sl.No.	Date	Topic	Speaker
1	21-22/ 11/ 2014	Two days Workshop and Hands on Training on Control Systems – Real Time Applications	Dr.K.Udhaykumar Dr.S.Jeevananthan,
2.	5/12/2014	“Inverse Kinematics and Control of Serial Robots”	Dr.SandipanBandyopadhyay

Engineering in Medicine & Biology

Sl.No.	Date	Topic	Speaker
1.	25/3/2014		
2.	4/07/2014		
3.	/11/2014		
4.	/11/2014		

Electron Devices

Sl.No.	Date	Topic	Speaker
1.	27/1/2014	IEEE Madras Section Sponsored international workshop at SKP Engineering College	Multiple
2.	20/2/2014	EEE Madras Section Sponsored DL talk at MRK Institute of Technology	Dr.N.Mohankumar
3.	27/3/2014	IEEE Madras Section Sponsored technical seminar at University College of engineering, Tirunelveli	Dr.N.Mohankumar Dr.S.Baskaran
4.	18/5/2014	IEEE Madras Section Sponsored International Conference at Karunya University, Coimbatore	Dr.N.Mohankumar Prof.H.Iwai. Prof.Durga Madhab Misra Prof.Edward Chung
5.	31/6/2014	IEEE Madras Section Sponsored Technical Talk at VIT , Chennai	Dr.N.Mohankumar Dr.NandhaGopal
6.	20/8/2014	IEEE Sponsored workshop on TCAD Software at SKP Engineering College	Mr.Deepak Anandan Mr.Venkatesan
7.	24/12/2014	IEEE Sponsored DL Talk for Final year Students at SKP Engineering College	Mr.Roy Antony

Education

Sl. No.	Date	Topic	Speaker
1.	31/3/2014	Workshop on Embedded Systems and its applications using PSOC	Mr. Karthikeyan Mahalingam
2.	24 /5/2014	Competency Development Programme	Dr. S. Selvam
3.	4/8/2014	Seminar on Innovation and Entrepreneurship	Dr. Jimmy Gandhi
4.	5 /8 /2014	Membership drive and Awareness Programme	Dr. Takako Hashimoto
5.	23/9 / 2014	Resume Lab Workshop	Mr.Suresh Mr.Kanagaraj

Electromagnetic Compatibility

Sl.No	Date	TOPIC	Speaker
1.	16/1/2014	An Introduction to Software Defined Radio for Microwave Engineers	Dr. Jeffrey Pawlan
2.	28/2/2014	Applications of Electromagnetics	Dr. B. Subbarao Dr. Krishnasamy T.Selvan, Ms.Sheela M.krishnaswami
3.	20/3/2014	Immunity testing by bulk current injection and Effective Automotive Component EMC testing:CISPR25,ISO 1145-2 and equivalent standards	Prof.Sergio A.Pignari, Garth D'Abreu
4.	20/8/2014	Workshop on Elelctromagnetic Interference and compatibility(EMI/EMC)	Dr. B. Subbarao, Smt.Sulabha Ranade Shri. Milind. Y. Joshi

Industrial Applications

Sl.No.	Date	Topic	Speaker
1.	7/11/2014	IEEE IAS Program for Faculty Members under PALS	Mr. Abdul Hanif Khan
2.	7/11/2014	IEEE IAS Program for Faculty Members under PALS - Visit to L&T Technical Museum	Shamala Vsn Nadendla
3.	7/11/2014	IEEE IAS Program for Faculty Members under PALS	Harshitha S. Kumar
4.	7/11/2014	IEEE IAS Program for Faculty Members under PALS - Visit to L&T Rooftop Solar PV Installation	Milan Kumar

Microwave Theory and Techniques

Sl.No.	Date	Topic	Speaker
1.	15/1/2014	MTT-S DML on An Introduction to Software Defined Radio for Microwave Engineers	Dr. Jeffrey Pawlan
2.	9/5/2014	Seminar On Antennas And Microwaves and Microwaves And Students' Poster Session	Multiple
3.	5/11/2014	Three Day Workshop On Advanced Antenna Technology	Multiple

Power and Energy Society

Sl. No.	Date	Topic	Speaker/Participants
1	08/01/2014	Lecture 'Energy Management System' @ JPR	Dr. Shanthi Swarup
2	09-10/01/2014	Workshop on ETAP Software @ JPR	M.Vinoth
3	25/01/2014	Workshop on 'Photoshop' @ VIT	Shashank Batkal
4	06/02/2014	Competition 'Planet Bollywood' @ VIT	Many
5	07/02/2014	Quiz Program 'Logo Quiz' @ VIT	Many
6	08/02/2014	Quiz Program on 'Ad Effect' @ VIT	R.Geetha
7	09/02/2014	Competition on 'Idiot Box' @ VIT	Dr. V.Ramesh
8	14/02/2014	Symp. on 'Fuzzy Logic Controller for Power Sys. Applns.'	Many
9	18/02/2014	Tech. Quiz 'Enigma' @ JPR	Many
10	19/02/2014	Orientation Meeting @ Sairam Engg. College	S. Brinda & Many
11	22/02/2014	Annual General Meeting of Madras Section	Section Officers
12	11/03/2014	Symp. On 'Recent Trends & Employment @ Nuclear Plants'	S.Balakumar
13	22/03/2014	Tech. Lecture on Water Energy Nexus' @ Instn. of Engrs.	K.V.Rupchand
14	15/03/2014	Tech. Symp. 'TAXICUM' @ Saveetha Engg. College	Many
15	22-23/03/2014	Conference 'SCOPES 14' @ VIT	Sandeep Sengupta et al
16	28.04.2014	Conference ICSE CSRE @ AVIT	Many
17	18-19/05/2014	R 10 Chapter Chairs Meeting @ Kuala Lumpur	PES Officers
18	20-23/05/2014	ISGT Asia2014-Key Note Address @ Kuala Lumpur	K.V.Rupchand + Many
19	17/06/2014	Lectures on Control of Elec. Field; Insulation of Earth Sys.	A.Haddad,H.Griffiths(Cardiff)
20	09/07/2014	Lecture on Renewable Energy Sources @ JPR	M. Venkateshkumar
21	15-16/07/2014	Outreach to RCM School 'i-Vision'	Branch Volunteers
22	26/07/2014	Seminar on 'Vedic Multiplication Approach'	Augusta Sophie, P.Beulet
23	26/07/2014	Symposium 'PRAKRITHI' @ Prathyusha	Many
24	27/07/2014	Workshop on 'Challenging Opportunities for R & D in India.	Many
25	27-30/07/2014	PESGM2014 – Panel Water- Energy-Food Nexus'	Maike Luiken,K.V.Rupchand
26	27-30/07/2014	PESGM2014-RTSC Meeting	K.V.Rupchand + Many
27	27-30/07/2014	PESGM2014-RTSC PV Working Group Meeting	K.V.Rupchand + Many
28	27-30/07/2014	PESGM2014- CC Meeting + Awards Luncheon	F.Lambert + PES Officers
29	06-08/08/2014	R 10 Human Technology Conference	K.V.Rupchand/Chair + Many
30	08/08/2014	Lecture on Career Guidance @ Prathyusha	Dr. V.Thulasibai
31	11/08/2014	Technical Workshop 'Prism Matlab' @ VIT	Many
32	12/08/2014	Technical Workshop 'Prism Photoshop' @ VIT	Many
33	12/08/2014	Inauguration of Student Chapter at SMIT	Chapter Officers

34	13/08/2014	Technical Workshop on 'After-Effects' @ VIT	Many
35	19/08/2014	Symposium 'IMPLUSO 14' @ Sairam Engg. College	Many
36	27/08/2014	Lect. on Fundamentals of Signals & Utility in Defence Sys.	Lt Col John Prince
37	29-31/08/2014	PES Student Congress at Ankara- Participation from JPR	PES Officers + Students
38	01/09/2014	Competition 'Power Spark2K14'-Ideas @ JPR	Many
39	02/09/2014	Conf. Water-Energy Nexus-Tech. Presentation @ TERI	K.V.Rupchand + Many
40	09/09/2014	Lecture on 'Industrial Embedded Systems'	Jeevan Kataria
41	11/09/2014	Lecture on Embedded Systems @ Prathyusha	G.T.Mnoharan
42	12/09/2014	Lecture on 'Transmission Lines'	K.R.S.Ravikumar
43	17/09/2014	Seminar on 'Grid Integn. of RE Sources @ Hindustan Univ	Chitti Babu, Karthik Balaji
44	22-26/09/2014	On-line Competition 'Wolf of Wall Street' @ VIT	Many
45	24-29/09/2014	Hands-on Training on Lab View & Robotics @ Prathyusha	Dr. M.Moorthi
46	25/09/2014	Lecture on Career Guidance @ Prathyusha	Dr. V.Thulasibai
47	26/09/2014	Competition on 'Masters of Morse Decoding' @ VIT	Many
48	06/10/2014	Training on Integrated Power Conditioning System@ Anand	Many
49	06/10/2014	Lecture on 'Energy Conservation Techniques'	G.S.Ayyappan (CSIR)
50	15/10/2014	Workshop on Intelligent Control System Engg. Applications	Many
51	15/10/2014	Orientation Meeting VIT 100	Many
52	15/11/2014	Lecture on Water-Energy-Food Nexus @ IEEE Office	K.V.Rupchand
53	27-29/11/2014	Conference ICSEMR @ Veltech	Many
54	05-06/12/2014	Workshop on 'Nano Materials for Solar Energy' @ SSN College	Many
55	16-17/12/2014	National Conference NCET NRES EM2014 @ AVIT	Many

Power Electronics Society

Sl.No.	Date	Topic	Speaker
1	06/10/2014	Energy Conservation Techniques for Induction Motor Drives	Mr.GS.Ayyappan,
2	28/11/2014	Power Converters for Renewable Energy Applications	Dr. Sreedevi.V.T Dr. R. Seyezhai Prof. Meenakshi.J Prof. Nilanjan Tewari,
3.	5 – 6/12/2014	Nanomaterials for Solar Energy Conversion	Dr.Shamima . Dr.P.Ramasamy, Dr.G.M.Bhalerao,

Professional Communication

Sl.No.	Date	Topic	Speaker
1.	19/2/2014	Big Data Mining	Dr. Archana Ramesh
2.	10/3/2014	Vedic Mathematics in Engineering Applications	Mr. V. J. K. Kishore Sonti
3.	19/3/2014	Big Data Problems in Social Media Analytics	Dr. R. Chandramouli
4.	26/3/2014	Cybernetics of De-Schooled Learning	Dr. T.V. Gopal
5.	12/4/2014	Questions Turing Left Behind	Prof. Barry S Cooper
6.	26/7/2014	Half day workshop on “Statement of Purpose (SoP) for admission to Universities abroad	Multiple
7.	20/11/2014	Master Minds of IT and What We Can Learn from Them	Dr. San Murugesan,
8	Special Program	Student Essay Contest: Harnessing the Power of ICT for our New Initiatives	

Robotics and Automation

Sl.No.	Date	Topic	Speaker
1	31/03/ 2014	Embedded System and its Applications using Programmable System on Chip	Dr. Ramalatha Mr. Praveen Kumar
2	9/04/ 2014	Energy efficient Technologies – MEMS	Dr P A Manoharan
3	6/05/2014	Robotics”	Dr P A Manoharan
4	8/08/2014	Concepts and Design of PWM Controller and Data Logger Using Embedded System	Dr. P. A. Manoharan Dr. Jonathan Joshi
5	22/09/2014	Concepts and Design of PWM Controller and Data Logger Using Embedded System	Dr. P. A. Manoharan Dr. Jonathan Joshi
6	30/10/2014	Concepts and Design of PWM Controller and Data Logger Using Embedded System	Dr. P. A. Manoharan Dr. Jonathan Joshi
7	12/12/ 2014	Programmable System on Chip	Dr. P. A. Manoharan
8	17/12/ 2014	Robot in the Power Sector	Dr. P. A. Manoharan

SIPCICOM

Sl.No.	Date	Topic	Speaker
1	12/01/2014	Pattern Recognition for License Plates	Dr.N.Vishwanath
2	19/01/2014	General Body Meeting	Many
3.	8/02/2014	Research Methodology for Science &Engineering	Dr. Krishnan Nallaperumal
4.	15/02/2014	Handling BigData	Dr.M.Karthikeyan
5.	1/03/2014	Consultative Committee meeting for IEEE ICCIC 2014 Conference	Many
6.	19/04/2014	Data Mining for Medical Images	Dr.Nelson Kennedy Babu
7.	12/07/2014	Advisory Committee Meeting of IEEE ICCIC 2014	Many
8.	16/08/2014	Technical Committee Meeting on ICCIC 2014	Many
9.	13/09/2014	Writing Winning Research Proposals	Dr.M.Karthikeyan
10.	25/10/2014	Image Processing with IDL	Dr. Krishnan Nallaperumal
11.	22/11/2014	Writing Winning Research Proposals	Dr. Krishnan Nallaperumal
12.	18/12/2014	IEEE ICCIC 2014	Many
13.	19/12/2014	IEEE ICCIC 2014	Many

Technology Management Council

Sl.No.	Date	Topic	Speaker
1	19/02/2014	Big Data Mining	Dr. Archana Ramesh
2	22/02/2014	Annual General Meeting	Section Officers
3	10/03/2014	Vedic Mathematics in Engineering Applications	V.J.K.Kishore Sonti
4	28/04/2014	Conference ICSE CSRE @ AVIT	Many
5	06-08/04/2014	R 10 Human Technology Conference	K.V.Rupchand/Chair + Many
6	15/11/2014	Water-Energy-Food Nexus @ IEEE Office	K.V.Rupchand
7	27-20/11/2014	Conference ICS EMR @ Veltech	Many
8	16-17/11/2014	Conference NCET NRES EM2014 @ AVIT	Many

B.3 Professional and Continuing Education Activities

The Madras Section is very keen in promoting professional and continuing education activities through different schemes. During the current year the following activities have been supported by the section for the enhancement of continuing education activities.

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

Educational Activities

Educational Activities organized during the year 2014 are furnished below:

- **Educational Activity – Chairperson: Dr. N Kumarappan.**

- Faculty Development Program (FDP) – 3
- Teacher-In-Service Program (TISP) – 1

Sl.no.	Topic	Venue and period	Participants
1.	Soft Computing and Simulation For Power Engineering (FDP)	S.A. Engineering College, Poonamallee,AvadiRoad, Thiruverkadu, Chennai – 600 077, 8-9 May 2014	31
2	Mobile Application Development using Android: A Next Generation Technique FDP)	National Engineering Col lege K.R.Nagar, Kovilpatti – 628 503, 14-15 Nov 2014	36
3	Big Data Analytics with Hadoop (FDP).	Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology University Campus, Avadi , Chennai - 6000 62, 29 -30 Dec 2014	56
4	Teachers In services program - (TISP)	S.K.P Engineering College, Thiruvannamalai - 606 611, 12 Sep 2014	65
5.	Technical Seminar on VLSI Design & Embedded System	Emerald Hall, Sangeetha Residency, Mylapore, Chennai, 18 th July 2014	61

- **Sponsorship for Conferences**

Sl.No:	Name of the college	Event	Sponsorship in INR
1	Kongu Engineering College	AVANZARE'13	10000.00
2	Karunya University	International conference on Renewable Energy and Sustainable Energy" (ICRESE-13)	5000.00
3.	VMKV	International Conference on Sustainable approaches for green Computing Economy and Environment	5000.00
4.	SMIT	SAGE'13	5000.00
5.	Sri Krishna College of Engineering And Technology	Workshop on " Security in next Generation wireless networks	5000.00
6.	MRK Institute of Technology	Workshop on MATLAB based Modeling and Analysis of Power system	5000.00
7.	Sona College of Technology	Techgrill'13	17500.00
8.	NEC	Workshop on Android Applications	5000.00
9.	St.Xavier's Catholic college of Engineering	Technical symposium - VISMAY'13	12329.00

10.	Eswari engineering College	National Conference on Information, Communication and Networking	10000.00
11.	K.S.R College of Engineering	Innovational In electrical Engineering	5000.00
12.	M.P. Natchimuthu Jaganathan Engineering College	6th National Level One Day Conference - IEEE -14	5000.00
13.	K.S. Rangasamy College of Technology	International Conference on Frontiers of Computational Intelligence (ICFCI' 14)	5000.00
14.	Selvam College of Technology	National Level Conference ESCON-2013(Advancement in electrical Power, Signal Processing and Communication network system).	5000.00
15.	Eswari Engineering College	National Conference - VCaN 2014 - VLSI, Communication And Networks	10000.00
16.	S.A. Engineering College	International Conference on Information, Communication & embedded Systems, ICICES2014	5000.00
17.	Karpagam College of Engineering	International Conference on " Innovations in Information, Embedded and Communications systems - ICCIECS 2014	20000.00
18.	KIOT	National Level seminar on "VLSI For Wireless Communication"	7500.00
19.	Selvam College of Technology	Workshop on Recent Control Techniques for Industrial Drives	5000.00
20.	Sathyabama University	National Level Technical Symposium (Technosummit'14)	7500.00
21.	National Engineering College	Workshop - A two day Hands on Training on Digital Animation Techniques for Engineering Students	5000.00
22.	Amirtha School of Engineering	Seminar on Emerging Prospectives in Nanoelectornics R&D	5000.00
23.	Sri Krishna College of Engineering And Technology	One day International conference on Emerging Trends in Powering the Nation (ICETPN'14)	5000.00
24.	Sona College of Technology	Symposium TECHGRILL'14	7500.00

B.4 Students Activities

- Total number of Student branches in the Section : 220
- New Student branches formed in the current year: 8 Student Branches
- **Section level student activities :**
 - Student Branch officer's meet
 - Project funding for the students
 - IEEE Humanitarian Technology student contest – Paper, Project & Poster
 - Technical Lectures – at section and in other regions- Coimbatore, Nagergoil,
- **Number of Active Student branches : 52**
- **Summary of Student branch activities student branch wise with attachment table / information:**

Sl. No.	College	TOTAL
1.	Karpagam College of Engineering	43
2.	Sri Muthukumaran Inst. of Technology	35
3.	Sri Ramakrishna Engineering College	13
4.	Knowledge Inst. of Technology	11

5.	Mepco Schlenk Engineering College	11
6.	Jeppiaar Institute of Technology	10
7.	Jeppiaar Engineering College	10
8.	Kongu Engineering College	9
9.	Panimalar Institute of Technology	9
10.	St. Xavier Catholic College of Engineering	8
11.	Thiagarajar College of Engineering	8
12.	Muthayammal Engineering College	7
13.	Vellammal Engineering College	7
14.	Arulmigu Meenakshi Amman College of Engineering	6
15.	Dr. Sivanthi Aditanar College of Engineering	6
16.	National Engineering College	5
17.	Dr. N.G.P Institute of Technology	5
18.	SRM University	4
19.	Saveetha School of Engineering	4
20.	Sri Sairam Engineering College	4
21.	Coimbatore Inst. of Engg. and Tech.	4
22.	PSNA College of Engineering & Technology	3
23.	K.S. Rangasamy College of Technology	3
24.	Kalasalingam University	3
25.	Kathir College of Engineering	3
26.	Hindustan University	2
27.	M. Kumarasamy College of Engineering	2
28.	Vinayaka Mission University	2
29.	Easwari Engineering College	2
30.	Kumaraguru College of Technology	2
31.	Sona College of Technology	2
32.	K.C.G College of Technology	2
33.	Sathyabama University	2
34.	K.S.R. College of Engineering	1
35.	Karunya University	1
36.	P.A College of Technology	1
37.	Vel Technology	1
38.	Shree Venkateswara Hi-Tech Engineering College	1
39.	Amirta School of Engineering	1
40.	Jayaram College of Engineering & Technology	1
41.	S.K.P. Engineering College	1
42.	Valliammai Engineering College	1
43.	B.S. Abdur Rahman University	1
44.	Ranganathan Engineering College	1
45.	Nandha College of Technology	1
46.	KLN College of Engineering	1
47.	Saveetha Engineering College	1
48.	Selvam College of Technology	1
49.	EGS Pillay Engineering College	1
50.	Gnanamani College of Technology	1
51.	Infant Jesus College of Engineering	1
52.	Sri Krishna College of Engineering	1

B.5 Affinity Group Activities

- **WIE**

Sl.No.	Date	Topic	Speaker
1.	07/03/14	Women's Day Celebration and Project Exhibition at Olcott Memorial High School, Chennai	WiE Student Volunteers
2.	07/03/14	Women Issues and Opportunities	Dr.Ramalatha Marimuthu, Past Chair, IEEE WIE
3.	08/08/14	Pattern Mining from online Social Media at Easwari Engineering College	Dr.Takako Hashimoto, R10 WiE Coordinator
4.	09/08/14	R10 HTC, Hotel Hilton, Chennai: R10 WiE – Best Practices	Dr.Takako Hashimoto, R10 WiE Coordinator
5.	09/08/14	R10 HTC, Hotel Hilton, Chennai: Women – Soft Power of India	Ms.Vijayanthi, Yuvashakthi Member
6.	19 – 21/11/14	2014 Grace Hopper Celebration of Women in Computing India, Bangalore: WiE Booth	WiE Chair & Volunteers
7.	04/12/14	Returning Mothers Workshop at KCT, Coimbatore	Dr.Satish Babu

- **Young Professional**

Sl. No.	Date	Topic	Speaker
1.	17/04/2014	Workshop on “Computational Intelligence with Engineering Applications”	Dr.Kumarappan, Mr.M.Venkateshkumar,
2.	24/05/2014	Competency Development Programme	Dr.N.R. Alamelu, Dr.S. Selvam,
3.	19/07/2014	Technical Seminar on "Embedded System and VLSI Design"	Dr.V. Kamakoti, Dr.J. Raja Paul Perinbam
4.	17/09/2014	STEP - Grid Integration of Renewable Energy Sources	Er. K.V. Rupchand,
5.	20/09/2014	Student Branch Officers Meet	All MAS Execom and Past Chairs
6.	11/10/2014	STEP - Bridging the Gap – Industry Institute Interface	.Dr.S.Umashankar Mr. S.Prabhu Mr.V.Kumaravel Ms.K.Dharini
7.	15/10/2014	STEP - Smart Intelligent Control System for Engineering Application	Dr.A.Manju, Dr.P.Muthukannan, Prof.M.Venkateshkumar
8.	15/10/2014	STEP- Bridging the Gap – Industry Institute Interface	Dr. S. Umasankar, Execom
9.	17/10/2014	Workshop on “Electromagnetics-made simple”	Mr.K.R.S.Ravi Kumar Mr.Debojyoti
10.	27/10/2014	STEP- Grooming Engineers with Social concern	Dr.S.Sundar Manoharan, Prof.S. Elangovan
11.	12/12/2014	STEP - Sustainable Solid waste Landfill Management	Dr. Michael N Kumar Dr. Kurian Joseph
12.	19/12/2014	STEP - Arduino Controller	JAY Robotics Club, Chennai

- **Life Member:** Because of continuous efforts of section to elevate themselves, during the year 13 members of the section have become the life members.

B.6 Awards & Recognition Activities

- Award constituted by the section:**

To encourage the student branches & societies to conduct more activities the cash awards & certificates of appreciation are being distributed every year at the AGM. The selection of awards is based on the activities communicated and published in the MAS-LINK- Newsletter.

- 1) The Student Branch having maximum number of members, award given to top three colleges

S. No.	College Name	Total Nos.	Place	Amount
1.	Karpagam College of Engineering, Coimbatore	427	I	Rs.5000+ certificate
2.	Velammal Engineering College, Chennai	426	II	Rs.3000+certificate
3.	B.S. Abdur Rahman Crescent Engineering College	355	III	Rs.2000+certificate

- 2) .Student Branches conducting good number of activities.

S. No.	College	Amount
1	Karpagam College of Engineering	Rs.5000+ Certificate
2	Sri Muthukumaran Inst. of Technology	Rs.4000+ Certificate
3	Sri Ramakrishna Engineering College	Rs.3000+ Certificate
4	Knowledge Inst. of Technology	Rs.2000+ Certificate
5	Mepco Schlenk Engineering College	Rs.2000+ Certificate
6	Jeppiaar Institute of Technology	Rs.2000+ Certificate
7	Jeppiaar Engineering College	Rs.2000+ Certificate
8	Kongu Engineering College	Rs.1000+ Certificate
9	Panimalar Institute of Technology	Rs.1000+ Certificate
10	St. Xavier Catholic College of Engineering	Rs.1000+ Certificate
11	Thiagarajar College of Engineering	Rs.1000+ Certificate
12	Muthayammal Engineering College	Rs.1000+ Certificate
13	Vellammal Engineering College	Rs.1000+ Certificate
14	Arulmigu Meenakshi Amman College of Engineering	Rs.1000+ Certificate
15	Dr. Sivanthi Aditanar College of Engineering	Rs.1000+ Certificate
16	National Engineering College	Certificate
17	Dr. N.G.P Institute of Technology	Certificate

Criteria followed:

First	Rs.5000+ Certificate
Second	Rs.4000+ Certificate
Third	Rs.3000+ Certificate
More than 5 events	Rs.2000+ Certificate
3 to 5 events	Rs.1000+ Certificate
2 events	Only Certificate

- Award(s) received from IEEE HQ**

- o IEEE Madras Section SIGHT has been awarded as "Notable SIGHT Groups of 2014" and awarded with \$500 prize money.

- **Awards received from IEEE R10**

- Mr. Balaji and Zahir Hussain, SMIT, Chennai has won the IEEE Student Enterprise Award
- Mr. Prasanth Mohan, IV year CSE(2014) SMIT has won the IEEE Larry K Wilson Student volunteer Award (Special Mention)
- Mr. K. Balamurugan, Student branch Counselor, SREC has won R10 First Place MGM recruiter

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: 8 issues

Sl.No.	Date	Topic	Speaker
1.	7/11/2014	Program for Faculty Members under PALS	Mr. Abdul Hanif Khan, Harshitha S. Kumar
2.	7/11/2014	Faculty Members under PALS - Visit to L&T Technical Museum	Shamala Vsn Nadendla
3.	7/11/2014	IEEE IAS Program for Faculty Members under PALS - Visit to L&T Rooftop Solar PV Installation	Milan Kumar

- **Home Page of the section (give the URL and frequency which it is updated)**

URL: <http://ewh.ieee.org/r10/madras/>

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

IEEE Madras Section office is in regular touch with all the members through mail and by creating List IDs for Members, Students and other Student Branches.

The IEEE Madras Section Website has been upgraded using the concept of Drupal Content Management System. There are login credentials for different modules set up in this system.

- **B.8 Industry Relations**

- **Membership growth and retention**

Sl.No.	Date	Topic	Speaker
1.	7/11/2014	IEEE IAS Program for Faculty Members under PALS	Mr. Abdul Hanif Khan, Harshitha S. Kumar
2.	7/11/2014	IEEE IAS Program for Faculty Members under PALS - Visit to L&T Technical Museum	Shamala Vsn Nadendla
3.	7/11/2014	IEEE IAS Program for Faculty Members under PALS - Visit to L&T Rooftop Solar PV Installation	Milan Kumar

• **Activities for/with industrial members**

Sl.No.	Date	Topic	Speaker
1.	19/9/2014	Competencies and Skills for Core Engineers	Er.D. Devarajan, MD, Dev Solar & Dev International, Coimbatore
2.	8/8/2014	Concepts and Design of PWM Controller and Data Logger Using Embedded System	Dr. Jonathan Joshi, Chief Executive Officer , Eduvance (Vanmat Tech. Pvt. Ltd.).
3.	11/10/2014	STEP - Bridging the Gap – Industry Institute Interface	Dr.S.Umashankar, Execom member, IEEE MAS YP Mr. S.Prabhu, Associate Engineer, DELPHI Bangalore, Mr. V.Kumaravel, SCM-Analyst, i-Nautix, Chennai, Ms.K.Dharini, L&T InfoTech, Chennai.

B.9 Humanitarian Technology Activities

IEEE R10 HTC 2014 – International Event

IEEE R10 Humanitarian Technology Conference 2014 was organized by IEEE Madras Section & IEEE Madras Section SIGHT during 6 -9 Aug 2014 at Hilton, Chennai. The Theme of the conference was “Engineering sustainable future for Humanity”. The major topics covered are:

- Health, Medical Technology, Telemedicine
- Water Planning, Availability & Quality
- Disaster Warning, Avoidance and Response
- Urban Planning and Sanitation
- Reducing Ethnic Conflict and Terrorist Events
- Power Infrastructure/Off-grid Power/Renewable and Sustainable Energy
- Connectivity and Communications
- Conservation of Natural Resources
- Technologies (data/voice) for Remote Locations
- Educational Technologies
- Agricultural Technologies
- Applying Science, Engineering and Technology for Environmental Sustainability
- Humanitarian Challenges and Opportunities

The conference was attended by more that 300 delegates presenting papers on the theme of the conference the following members participated in the conference. The program included preconference lectures and 3 Tutorial, 6 Keynote, 6 Workshops & 7 Technical Tracks. The program was concluded by conducting student contests like Student Paper contest, Student Poster and Student Project contest program also organized.

An exclusive session was conducted by WIE affinity group. In order to motivate the motto of IEEE HTC, Students paper presentation poster present, project contest were also encouraged

Sl.No.	Date	Particulars
1.	7-8 Aug 2014	IEEE Humanitarian Technology Student Contest – Poster, Project& Paper
2.	12 th Dec 2014	Talk on Humanitarian Engineering & Social Entrepreneurship

B.10 Community Activities

Sl.No.	Date	Topic	Speaker
1.	07.03.14	Women's Day Celebration and Project Exhibition at Olcott Memorial High School, Chennai	WiE Student Volunteers
2.	07.03.14	Women Issues and Opportunities	Dr.Ramalatha Marimuthu, Past Chair, IEEE WIE
3.	04.12.14	Returning Mothers Workshop at KCT, Coimbatore	Dr.Satish Babu

PART C - OTHERS

C.1 Special Events

Anita Borg Institute for Women and Technology and R10 IEEE Women in Engineering

Anita Borg Institute for Women and Technology proffered "Systers Pass It on Award Spring 2014" to Dr.Ramalatha Marimuthu who decided to use the award money for the benefit of women who take a break and wish to resume their career. IEEE Women in Engineering joined with Dr.Ramalatha to create a forum for women with emphasis on, "Women career enhancement". The forum consists of members of IEEE Women in Engineering and others who are passionate about helping other women in their career path. The forum is planning to organize a series of workshops addressing issues both psychological and environmental with an aim of finding feasible solution to those issues..

The first workshop in career enhancement was planned for women who take a break in their career and then wish to come back. The workshop addressed women of early career, who are on the verge of taking a break, who are on the break and who have already taken the break and wish to return.

Registration started at 09.00am with an overwhelming response of 65 women with various backgrounds from different Institutions in and around Coimbatore. The experience of the women ranged from 1 year to 30 years, careers ranging from students to consultants and experienced academicians. One fourth of them had industry backgrounds in various stages of break.

The first session was an icebreaking session conducted by Dr. Ramalatha Marimuthu to familiarize audience with each other.

The first speaker was Dr.Satish Babu, Director, International Centre for Free and Open Source Software (ICFOSS), Government of Kerala. He delivered a lecture on how to face the break from career and how to engage themselves during break. Also he shared about FOSS (Free Open Source Software) and career opportunities for women like work from home in FOSS. For a query on how the ICFOSS will contribute to the success of the forum, Dr.Satish Babu replied that ICFOSS will train any number of women who come through the forum to get projects with work from home options.

Then, Dr. Netiva Caftori, Vice Chair, Special Interest Group on Computing and Society, ACM, Professor (retired), Northeastern Illinois University, USA delivered her experience about the issues she faced during break and how to overcome the problems when a women wishes to come back after the break.

She shared the decision she took, their impact and how she bounced back to become one of the leaders of her profession. According to her, networking with contemporaries is an important step while planning for the break and during the break. The session ended by 01.00pm.

The breakout session was started at 02.00pm by Dr. Prema Narasimhan and Ms. Sangeetha from Sakthi Excellence Academy. They shared about the psychological issues and psychological upheavals women face during break. They divided the audience into 5 groups with 6 members in each group with various backgrounds and experience. And the groups were asked to brainstorm on issues like career enhancement, breaking glass ceiling, facing the break. Finally an action plan template was prepared with the outcome of discussion on what precautions the women should take to make their absence during the break, how they should update their skills in their relevant fields during the break and how they should approach their employers with confidence during the return.

Outcomes:

- a) A forum with likeminded women with the goal of ‘Women Empowerment’ was formed.
- b) A networking opportunity to identify and contact others was given.
- c) A basement for future directions for the forum was constructed.

C.2 Relationship with National Societies

1. 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.
2. IEEE Madras Section also co-sponsored the programs organized by Institution of Engineers (India), Chennai Centre.
3. 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.

C3. Collaboration with other IEEE Section:

- Support extended to neighboring sections:

Face –to-Face meeting was conducted on 24th May 2014 of all the section through India council hosted by IEEE Madras Section. The following members participated in this meeting:

Sl. No.	Membership No.	Name	Section
1.	04472254	Dr.M. Ponnaivaikko,	Chair,,India Council
2.	06667876	Dr. N.R. Alamelu	Chair, Madras Section
3.	40331593	Quraish Bakit	
4.	40331593	Anthony Lobo	Omburtsman, India Council
5.	42744271	Dr.K. Srinivasan	
6.	40298723	Sanjay Kar Chowdhry	

7.	41356203	Mandarj Khurjekar	
8.	4028631	Dr. Preeti Bajaj	Bombay Section
9.	90714766	Dr. Munesh C. Trivedi	Utter Pradesh.Section
10.	80237533	Dr.R. Hariprakash	Madras Section
11.	41432285	Dr. Alok Kanti Deb	Kharagpur Section
12.	92523596	Harish Mysore	GIEEE
13.	90511907	Srinivasan Ravindaran	Kerala Section
14.	41319104	Ravikiran Annaswamy	Bangalore Section
15.	40261758	Rajesh Ingle	Pune Section
16.	06925275	N.T. Nair	Newsletter, Editor,India Council
17.	01109545	Mr.T.S. Rangarajan	Secretary cum Treasurer, India Council

- Joint activities with any other Section:

C4. Support extending to sub- section & society Chapters within the Section

Sl.No	Date	Topic	Speaker	Sub- Section
1.	26/9/2014	Embedded Systems Applications,	Binosh Balachandra	Podhigai Sub section
2.	26/9/2014	LED, Timer Applications, LCD, Seven Segment Display, Buzzer, ADC, Keypad Hands on Training	S.Jayanthi	Podhigai Sub section

- **Society Chapters Meetings conducted within the Section**

Sl.No.	Date	Topic	Speaker	Conducted with
1.	15/2/2014	“Soft and Cloud Computing”	Mr.SankarNagarajan, Dr.N.Kumarappan, Mr.R.Ramanan, Dr.C.Christober Asir Rajan	CIS
2.	24/11/2014	Computational Intelligence Tools in Engineering	Dr.N.Kumarappan	CIS
3.	18/7/2014	Embedded System	Dr.V. Kamakotti, Dr.J. Raja Paul Perinmbam	Young Professional
4.	24/5/2014	Competency Development Program	Multiple	Young Professional
5.	3/2/2014	Rural Upward Mobility: Ultimate Android Solutions for Social Impact	R. Sampath	Computer society
6.	19/3/2014	Big Data Problems in Social Media Analytics	Dr. R. Chandramouli	Computer society

7.	5/5/2014	Cell phone nation: How mobile phones changed India	Dr. Robin Jeffrey Dr. Ashok Jhunjunwala	Computer Soceity
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C.5 Best Practices of your section (which you would like 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. Skills Development Program has been commenced based on feedback from Faculty Development Program
3. Travel grant for members whose papers are accepted in International Conferences
4. 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.
5. 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.
6. Community out reach program to mold better youth of the country.
7. Technical Lecture series organized by the technical Society chapters
8. Communication and personality development programs organized by the section.
9. Recognition & Awards during AGM dynamic student chapter technical societies, good performance in Xstream contest encouraging the awards & R10 and IEEE Head Quarters'

C.6 Problems to be Anticipated

- 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

D.2 Goals and Future Plans

1. Plan to organize the Madras Section Congress and Recognition outstanding student branch and outstanding student volunteer and Branch counselor.
2. To geographically spread the technical activity organized by the section, the society chapters and affinity groups.
3. To make the activity more student centric such that the future Engineers are more competent in all Endeavours.
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 increase the chapter membership and senior membership
6. To organize workshop of hands on training on advanced health care for better quality of life.
7. To coordinate with student branches for good industry connect
8. Organize industrial visit for IEEE student member.
9. Organizing Lecture 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- if no IEEE Student Branch inorder to enhance the member base both Student Member and Student Graduate Member and Professional Member.
- Recognition outstanding student branch and outstanding student volunteer and Branch counselor.