PART A - SECTION SUMMARY

A.1 Executive Summary

- Section Executive Committee Member List

<table>
<thead>
<tr>
<th>Section Executive Committee</th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Chairman</td>
<td>Koduri Srinivas</td>
<td>Scientist, NRSA (Retd)</td>
<td>41274471</td>
</tr>
<tr>
<td>Vice-Chairman</td>
<td>Lakshminarayana Merugu</td>
<td>DLRL, (Retd)</td>
<td>573006</td>
</tr>
<tr>
<td>Secretary</td>
<td>Madhumita Chakravarti</td>
<td>RCI</td>
<td>80401554</td>
</tr>
<tr>
<td>Treasurer</td>
<td>Amit Kumar</td>
<td>CEO, BioAxis DNA Research Centre Pvt Ltd</td>
<td>90732008</td>
</tr>
<tr>
<td>Member</td>
<td>Satish Chaparala</td>
<td>Retd. IDPL</td>
<td>6807036</td>
</tr>
<tr>
<td>Member</td>
<td>Mohammed Osman</td>
<td>Project Management Consultant</td>
<td>80455277</td>
</tr>
<tr>
<td>Member</td>
<td>PVS Maruthi Rao</td>
<td>Vidcentum R&amp;D Pvt Ltd.</td>
<td>41249040</td>
</tr>
</tbody>
</table>

Computer Society Chapter

| Chairman                    | Sudhakar Kolluru                      | TCS                                  | 93031723         |
| Vice-Chairman               | S Bhattacharya                        | Consultant                           |                  |
| Secretary                   | G R Gangadharan                       | IDRBT                                | 90530299         |
| Treasurer                   | Vinit Kumar                           | TCS                                  | 92020956         |

PES/IAS/PELS Society Joint Chapter

| Chairman                    | Ramaswamy Balasubhmanian             | G. Narayanamma College of Engg.      | 7600737          |
| Vice-Chairman               | Valluri Srinivas                     | Director, Synergy Infra              | 92197392         |
| Secretary/Treasurer         | K. Santosh Kumar                     | BSNL                                 | 92146216         |

COMSOC/SP Society Joint Chapter

| Chairman                    | N. Venkatesh                         | Redpine Signals                      | 41506407         |
| Vice-Chairman               | GVV Sharma                           | IIT Hyderabad                         | 90539415         |
| Secretary                   | Kasyapa Balemartthy                  | OFS Optics                           | 90286547         |
| Treasurer                   | Sanjeev Nimishakavi                  | Qualcomm                             | 80250684         |
| Member                      | D Naga Raju                          | Matrusri Engineering College         | 92937395         |

MTT/AP/EMC Society Joint Chapter

| Chairman                    | Nukala Srinivasa Rao                 | Matrusri Engg.College                | 85017068         |
| Vice-Chairman               | Yogesh Kumar Verma                   | DRDL                                 | 90392860         |
| Secretary                   | D. Rama Krishna                      | ECE Dept, OU                         | 92130488         |
| Treasurer                   | K. Yedukondalu                       | BRECEW                               | 91083374         |

WIE Affinity Group

| Chairperson                 | A. Swarna Bai                        | RCI                                  | 90356439         |
| Vice-Chairman               | Vijayalakshmi Biradar                | Vignan Institute of Technology and Science | 92478983        |
| Secretary                   | M. Sowmya                            | HCL                                  | 92110418         |

Young Professionals Affinity Group

| Chairman                    | Manohar Sharma Madiraju             |                                      | 90807790         |
IEEE HYDERABAD SECTION, 16.2.2016

<table>
<thead>
<tr>
<th>Secretary/Treasurer</th>
<th>Fazil Sajeer</th>
<th>Qualcomm</th>
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**Computational Intelligence Society Chapter**

<table>
<thead>
<tr>
<th>Chairman</th>
<th>Vice-Chair</th>
<th>Secretary/Treasurer</th>
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<tbody>
<tr>
<td>Atul Negi</td>
<td>Bapi Raju</td>
<td>N Yadaiah</td>
</tr>
<tr>
<td>University of Hyderabad</td>
<td>University of Hyderabad</td>
<td>JNTUH College of Engineering</td>
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<tr>
<td>3803707</td>
<td>41291096</td>
<td>80356774</td>
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**Education Society Chapter**

<table>
<thead>
<tr>
<th>Chairman</th>
<th>Vice-Chair</th>
<th>Secretary</th>
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</thead>
<tbody>
<tr>
<td>Ravi Shankar</td>
<td>Syed Musthak Ahmed</td>
<td>Venkatesh Choppella</td>
</tr>
<tr>
<td>TCS</td>
<td>S R Engineering College, Warangal</td>
<td>IIIT Hyderabad</td>
</tr>
<tr>
<td>92134939</td>
<td>80394326</td>
<td>92015287</td>
</tr>
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</table>

**Photonics Society Chapter**

<table>
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<tr>
<th>Chairman</th>
<th>Vice-Chair</th>
<th>Secretary/Treasurer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jagannath Nayak</td>
<td>P. Venkata Ramana</td>
<td>K. Indusekhar</td>
</tr>
<tr>
<td>RCI</td>
<td>Vasavi College of Engineering</td>
<td>RCI</td>
</tr>
<tr>
<td>90843547</td>
<td>92486559</td>
<td>92530547</td>
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</table>

**EDS/CAS Joint Chapter**

<table>
<thead>
<tr>
<th>Chairman</th>
<th>Vice-Chair</th>
<th>Secretary/Treasurer</th>
</tr>
</thead>
<tbody>
<tr>
<td>P. Govindacharyulu</td>
<td>Kaleem Fatima</td>
<td>Arifuddin Sohel</td>
</tr>
<tr>
<td>40152076</td>
<td>41424639</td>
<td>90871309</td>
</tr>
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</table>

**Technology and Engineering Management Society**

<table>
<thead>
<tr>
<th>Chairman</th>
<th>Vice-Chair</th>
<th>Secretary/Treasurer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Srinivas Jasti</td>
<td>Jose R</td>
<td>TSN Murthy</td>
</tr>
<tr>
<td>TCS</td>
<td>TCS</td>
<td>Assistant Professor, JNTU, Vijayanagaram</td>
</tr>
<tr>
<td>41250549</td>
<td>91129303</td>
<td>90399100</td>
</tr>
</tbody>
</table>

**Section Sub-committees**

- Student Activities Committee
- Technology Management Council
- Awards Committee
- Membership Drive
- News Letter/SYNAPSE Editors
- Web Master
- Vizag Sub-Section Committee

**IEEE India Council & R10 Committee Representation**

- R10 Industry Relationship Chair
- India Council Vice Chair- Technical and Professional Activities
- R10 WIE-AG Committee Member 2015 & Vice Chair, WIE-AG, India Council 2015
- Membership Growth and sustainability Committee, Member

**Section Activity Highlights**
IEEE Hyderabad is one of the most active sections in R10. The section has 9 Chapters and two affinity groups.

The section conducted 95 Technical and Administrative Events and the month-wise break-up of the events are given.

**Figure 1: Month-wise distribution of Section Activities**

The Chapters and Affinity Groups conducted about 120 technical events and more than 25 administrative meetings during 2015. The break-up of Technical Events for each chapter and Affinity Group is shown in the figure.

**Figure 2: Technical & Administrative Activities organized by Chapters and Affinity Groups**
## Significant Highlights of Section Technical & Professional Activities

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015-03-05</td>
<td>Alexander Graham Bell Lecture by Prof Ranjan Mallick, IIT Delhi</td>
</tr>
<tr>
<td>2015-09-22</td>
<td>25th Faraday Memorial Lecture, “An Effort Under-way to strengthen National R&amp;D Culture” by Prof Narendra Ahuja, FIEEE</td>
</tr>
<tr>
<td>2015-11-30</td>
<td>Sir Jagadish Chandra Bose Memorial Lecture “Answer to long-standing quest” by Prof Debotosh Guha, IIT Kharagpur</td>
</tr>
<tr>
<td>2015-09-22</td>
<td>One Day Tutorial Program at RCI, DRDO on “Representation, Discovery, Recognition and Segmentation of Objects and Activities” by Prof Narendra Ahuja, FIEEE</td>
</tr>
<tr>
<td>2015-12-08</td>
<td>Lecture on “Trustworthiness &amp; Reliability of Engineering &amp; IT Professionals” at TCS, Hyderabad by Dr. Mahammad H Rashid,</td>
</tr>
<tr>
<td>2015-12-09</td>
<td>Lecture on “Si chips at Microwave and mmW frequencies” at AMPL by Dr. Goutam Chattopadhyay, JPL, NASA</td>
</tr>
<tr>
<td>2015-03-07</td>
<td>International Women’s Day</td>
</tr>
<tr>
<td>2015-03-13</td>
<td></td>
</tr>
<tr>
<td>2015-08-28</td>
<td>IEEE Entrepreneurship and Internship Program by SAC and YP AG</td>
</tr>
<tr>
<td>2015-10-18</td>
<td></td>
</tr>
<tr>
<td>2015-10-4</td>
<td>SAC Chairs and Branch Counsellors meet</td>
</tr>
<tr>
<td>2015-10-2/3</td>
<td>IEEE Hyderabad Section Student Congress 2015</td>
</tr>
<tr>
<td>2015</td>
<td>Mini-POCO Program at Rajampet</td>
</tr>
<tr>
<td>2015</td>
<td>4 Zonal Congress: Warangal, Vizag, Guntur, Ananthapuramu</td>
</tr>
<tr>
<td>2015</td>
<td>Skill Connect Program in association with IEEE SBs</td>
</tr>
<tr>
<td>2015</td>
<td>Monthly SEC Meetings. SAGM and AGM</td>
</tr>
<tr>
<td>2015</td>
<td>Supported Subsection Programs at Vijag, Guntur, Ananthapuramu and Warangal with Section Representations</td>
</tr>
</tbody>
</table>

- **Major International/National Conferences conducted by Section**
  - Prime Asia 2015; 27-29 Nov 2015; Papers from Japan, China, Australia, and India

- **Conferences organized and Technically Co-sponsored by Section**
  - 2015 IEEE MTT-S International Microwave and RF Conference (IMaRC2015); 10-12 Dec 2015;

- **Conferences Technically Co-sponsored by Section**
  - Conference on Power, Control, Communication and Computational Technologies for Sustainable Growth (PCCCTSG2015); 10-12 Dec 2015;
  - 5th International Conference on Fuzzy and Neural Computing (FANCCO 2015); 16-19 Dec 2015
Summary of Chapter and AG activities

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Summary of Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTT/AP/EMC Joint Chapter</td>
<td>20 Technical Programs, IMaRC 2015, J C Bose Memorial Lecture</td>
</tr>
<tr>
<td>PES/IAS/PELS Joint Chapter</td>
<td>ICPSPCIC 2015, 12 Technical Programs, Power Colloquium</td>
</tr>
<tr>
<td>Computer Society Chapter</td>
<td>9 Technical Prog, Computer Colloquium</td>
</tr>
<tr>
<td>Com-Soc/SP Joint Chapter</td>
<td>Alexander Graham Bell Lecture, 12 Technical Programs, Communication Colloquium</td>
</tr>
<tr>
<td>CIS Chapter</td>
<td>FANCCO 2015, 3 Technical Prog</td>
</tr>
<tr>
<td>Photonics Society Chapter</td>
<td>DL (1), 2 Lecture Programs</td>
</tr>
<tr>
<td>EDS/CAS Joint Chapter</td>
<td>Prime Asia Conference, 10 Technical Programs, 8 Administrative Programs</td>
</tr>
<tr>
<td>Education Society Chapter</td>
<td>9 Technical and Administrative Programs</td>
</tr>
<tr>
<td>Technical Management</td>
<td>3 Lecture Programs</td>
</tr>
<tr>
<td>Young Professional AG</td>
<td>8 Technical and Administrative Programs</td>
</tr>
<tr>
<td>WIE Affinity Group</td>
<td>8 Technical and Administrative Programs, 2 media related activities</td>
</tr>
<tr>
<td>Vizag Bay Sub-section</td>
<td>20 Technical and Administrative Programs</td>
</tr>
</tbody>
</table>

Major Section level student, WIE-AG and YP-AG Activities
- Section Student Congress 2015
- 4 Zonal Students Congress
- R10 Student/YP/WIE Congress Representation
- R10 SAC Meet at Hyderabad
- IEEE India Internship / Entrepreneurship Program by YP and SAC
- IEEE Xtreme
- AISYC 2015 in Kerala
- International Women’s Day Celebration
- Student Branch Counsellors and Mentors Meet
- Industrial Visit
- WIE Leadership Summit in Chennai
- About 40 Student Branches reported over 300 activities in 2015

Awards & Recognition Activities

- Award(s) received from R10
  - R10 Outstanding Volunteer Award: Dr M Lakshminarayana, Vice Chair
  - IAS most Vibrant Chapter: IAS/PES/PELS Joint Chapter
- Award constituted by the section
  - Vibrant Student Branch Award
  - Emerging Student Branch Awards
  - Best Young Volunteer of Section Award

A.2 Financial Report –

- Summary (as per submitted net-suite)
  - Income (As on December 31st, 2015) : INR 4,036,676.00
  - Expenses (As on December 31st, 2015) : INR 4,323,123.00
PART B - ORGANIZATIONAL ACTIVITIES

B.1 Membership Development Activities

- Total number of active members:

  2015: Total Members as on December 31st: 5417

<table>
<thead>
<tr>
<th>Membership Type</th>
<th>Count</th>
</tr>
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<tbody>
<tr>
<td>Associate Member</td>
<td>83</td>
</tr>
<tr>
<td>Graduate Student Member</td>
<td>472</td>
</tr>
<tr>
<td>Life Fellow</td>
<td>7</td>
</tr>
<tr>
<td>Life Member</td>
<td>4</td>
</tr>
<tr>
<td>Life Senior</td>
<td>10</td>
</tr>
<tr>
<td>Member</td>
<td>1524</td>
</tr>
<tr>
<td>Senior Member</td>
<td>138</td>
</tr>
<tr>
<td>Student Member</td>
<td>3179</td>
</tr>
</tbody>
</table>

- Summary and evidence of work done to improve the value of membership, which leads to retention and growth of members
  - 150+ Technical Events conducted by the Section/Chapters/AG during 2015
  - 6 major International and National Conferences held. An overwhelming participation of industries in all major conferences.

B.2 Chapter and Affinity Group Activities

Total number of Chapters in the Section: 9

- Computer Society Chapter
- PES/IAS/PELS Joint Chapter
- COMSOC/SP Joint Chapter
- MTT/EMC/AP Joint Chapter
- CIS Chapter
- Photonic Chapter
- Educational Society Chapter
- CAD/EDS Joint Chapters
- Technology & Engineering Management Chapter
  - Two Affinity Groups: Women in Engineering and Young Professional

- Number of Chapters formed in the current year: 0
- Number of Active Chapters (Chapters who have reported required number of meetings during the year): All the Nine Chapters have reported the required number of meetings during 2015

Summery of Chapter and Affinity Groups Activities

- MTT/AP/EMC Joint Chapter
  - Distinguished Microwave Lecture on “Opportunities in Microwave Education & MEMS Concepts in Circuit level simulation” by Dr.S.K.KOUL, Professor, IIT NEW Delhi
IEEE HYDERABAD SECTION, 16.2.2016

- Distinguished Microwave Lecture on “Smart RFIC’s Millimeter Wave Giga bit Trans receiver with Digitally enabled built in self calibration & Auto switching functions” by Tian-Wei Huang, National Taiwan University- Taipei.
- Invited talk on “Radar Instrumentation for Polar Research: Status and future” by Dr. Prasad S Gogineni, FIEEE.
- Distinguished Microwave Lecture on “Design, Analysis and Applications of Waveguide-Fed Slot Arrays” by Sembiam R Rengarajan, Professor, California State University, Northridge, USA.
- Special Invited Technical Talk on “Reconfigurable Antennas” by Dr. M .Lakshmi Narayana, Vice Chair, IEEE HYD.
- Distinguished Lecturer Program on “Periodic Structures and their Applications to Antennas” by Dr. Arokiaswami Alphones, Nanyang Technological University, Singapore.
- Distinguished lecturer program on “Development of Educational App with FDTD Simulations on Portable Devices” by Dr. Tan Eng Leong, Nanyang Technological University, Singapore.
- IEEE INCEMIC-AU Waltair IR : a Three day conference on EMI/EMC
- Sir J C Bose Memorial Lecture on “Answer to long-standing quest” (Invention of Wireless Radio and related ) by Dr. Debotosh Guha, Professor of ECE , IIT-Kharagpur.
- IMaRC2015: International Microwave and RF Conference in Novotel Airport Hotel.
- DML on “Overview of Radiated facilities” by Dr. Vignesh Rajamani, Vice President, Oklahoma State University, USA.
- DML on “Fundamentals concepts of EMI/EMC & Testing of Radiated facilities” by Dr. Vignesh Rajamani, Vice President, Oklahoma State University, USA.
- One Day International Workshop on “Recent Advances in Satellite Payloads & Antenna Design for Industry experts/practicing engineers” at Hotel Marriott.
- A number of lectures in different Colleges in and around Hyderabad in association with Student Branches

**PES/IAS/PELS Joint Chapter**

- Technical Lecture on “Energy Management Systems and Role of State Estimation” by Dr Shekhar M. Kelapure, General Manager (R&D), Power Research and Development Consultants Pvt Ltd, Bangalore, India.
- Technical Lecture on “Selecting correct HT Circuit Breaker” by Mr S. Santosh Reddy, Sr R & D Engineer, Powell Industries, Houston, USA.
- Two days Symposium on “How To Prevent Fatal Electrical Accidents”.
- Distinguished Lecture on “Grounding” by Dr. Peter E. Sutherland, GE Energy Industrial Solutions, USA.
- Tutorial on “Establishing an Effective Electrical Safety Program” by Dr. Daleep C Mohla, FIEEE, Consultant, USA.
- Distinguished Lecture on “Mitigating Harmonics in Power Systems” by Dr. Peter E. Sutherland, GE Energy Industrial Solutions, USA.
- Professional talk on “Trustworthiness & Reliability of Engineering and IT Professionals” by Dr. Muhammad H. Rashid, Professor, Department of Electrical and Computer Engineering University of West Florida, USA.
IEEE HYDERABAD SECTION, 16.2.2016

- Half day tutorial on “Advanced and Adaptive Protection of Emerging Distribution Systems” by Dr.S.S.(Mani) Venkata, Life Fellow of IEEE Principal Scientist, GE Grid Solutions and Affiliate Professor of EE, University of Washington, USA.
- Power Colloquium in collaboration with IEEE SBs

CAS/EDS Joint Chapter

- Distinguished Lecturer Program on “Low Power Design Techniques for Nano-Scale Era” by Dr. Rajeev Joshi, T.J. Watson Research Center, IBM, USA.
- Distinguished Lecturer Program on “Quantum Nanoengineering-Nonequilibrium High-Electric-Field Transport for Signal Propagation” by Prof. Vijay K. Arora, Wilkes University USA.
- Technical Talk on “Mapping Algorithm to Architecture for Constraint-Driven Systems” by Dr. P.K. Meher, Purdue University, USA.
- Technical Talk on “Nanotechnology – Promises and Reality” by Dr. M. Ghanashyama Krishna, Professor, Centre for Advanced Studies in Electronics Science and Technology, School of Physics, University of Hyderabad.
- Technical Talk on “Conformable Electronics” by Dr. Ravinder Dahiya from School of Engineering, University of Glasgow, United Kingdom.
- Technical Talk on “Building Devices for the Internet of Things – with the WyzBee IoT Platform” by Mr. N. Venkatesh, Sr. Vice President, Redpine Signals.
- One Day Workshop on Carbon the soul of Future Nanoelectronics by Prof. Vijay K. Arora, Wilkes University, USA.
- IEEE CAS Workshop – Collaboration event with IEEE CAS Japan and CAS Hyderabad

- Comsoc/SPS Joint Chapter
  - Alexander Graham Bell Memorial Lecture by Dr. Ranjan Mallik.
  - Technical Talk on “Towards Internet of Everything: IOT, CPS and SNSS” by Prof. Ram D. Sriram, IIIT Hyderabad.
  - John Bardeen Memorial Lecture on “Super Semiconductors and Their Applications” by Prof. N. R. Munirathnam.
  - Technical Talk on “Joining the Electronics Industry in India” by Mr. N. Venkatesh
  - Technical Talk on “Building Devices for the IOT” by Mr. N. Venkatesh
  - Technical Talk on “Shannon Meets Nash” by Prof. Ramana Sonti.
  - Technical Talk on “Digital Communications: Technology that Powers the Gen-Y Lifestyle” by Prof. Kasyapa Balemarthy

- CIS Chapter
  - Lecture on “Advances in Computational Method for Decision Support” by Dr M Naresh Kumar
  - One day Workshop on “Predictive Analytics with Rapid Miner” on 22nd August 2015
  - 5th International Conference on Fuzzy and Neural Computing (FANCCO 2015) from 16th to 19th of Dec 2015
• **Computer Society Chapter**  
  - 1 Day Workshop on Cyber security Workshop in Sept-Oct 2015 at JNTU Anantapur  
  - FDP on IOT program at GCET in December  
  - Entrepreneurship & Internship Program in collaboration with YP & R10 in August  
  - Technical Talk On The Pandemic of Falsity on the World Wide Web and Plausible Cures from Machine Learning and Knowledge Representation Perspectives in January  
  - DLP on Green IT: Enabling Sustainable Development and Environment, the IT way by Sam Murugesan in August  
  - International Conference, ICECIT 2015 at SRIT Anantapur in December  
  - Computer Colloquium in association with IEEE SBs

• **Photonics Society Chapter**  
  - Lecture on ‘Fiber and the Future’, by Prof David M Payne, Southampton, UK  
  - Lecture on ‘Optical Sensors’ by Prof T Srinivas, IISc, Bangalore on 15th Oct  
  - Lecture on ‘Optical Logic’ by Syed Azeemuddin, IIIT, Hyderabad on 7th Dec

• **Technology & Engineering Management Society Chapter**  
  - Management Lecture on “Managing Expectations: From Expectations to Acceptance” by Sister Ranjana, Ishwariya Vishwa Vidyalaya, Gurgaon.  
  - Management Lecture on “The Relevance of Yogic Wisdom to Business Organization” by Dr Prasad Vemuri, CEO, Vemuri Consultants, Hyderabad (Along with IEEE Education Society)  
  - Technical Talk on “Trustworthiness & Reliability of Engineering and IT Professionals” by Prof Dr Muhammad H. Rashid, Fellow IET (UK), Life Fellow IEEE (USA), Dept of Electrical and Computer Engineering, University of West Florida, USA.

• **Education Society Chapter**  
  - "Outcome Based Education and Accreditation" by Prof Ravi Sankar Chandu, on 09 Oct 15, Friday from 5pm to 6.30 pm at Upper Durbar, TCS Deccanpark  
  - Skill Connect Programs with IEEE SBs

• **Vizag Bay Sub-section Programs**  
  - A Two Day “Skills Development Workshop on Sustainable and Clean Energy Technologies & Resources”, by Prof. Deepak L. Waikar, Singapore, 22-23 Jan ‘15  
  - A distinguished talk by K.Rama Krishna, Director, IEEE R10, on the “Activities of IEEE R10 and Membership engagement”. 13 June 2015  
  - Faculty Development Program on “Real-Time Applications of Micro-Controllers & DSP at MVGR college of Engineering, Vizianagaram. 15-19th June, 2015  
  - A workshop organized on “Innovations in variable speed drives in industrial applications" was organised on 17-07-2015 in Vijaywdad. Around 150 delegates participated in this workshop.
A workshop on "Membership advantages with IEEE" was organized at AITAM, Tekkali, Srikakulam Dist. Dr. S. Laskhminarayana, Chair IEEE Vizag Bay Sub Section delivered the speech. 01 August 2015

A Two-day national workshop “Advanced antenna technology” was organised at DIET, Anakapalli. There were more than 450 participated from 13 various institutions, 22-23 Sept 2015

Two Day Workshop on “Hadoop Architecture and Administration for Big Data Solutions” was organized at Potti Sriramulu Chalavadi Mallikharjuna Rao College of Engineering & Technology, Vijayawada. 16-17 October 2015:

A Two day National Conference on VLSI Signal and Image Processing Communications & Embedded Systems"(V-SPICE-2015) was organised at JNTU Kakinada College of Engineering. 6-7 November 2015:

Distinguished Lecture (DL) on “Applications of Dynamic Ratings in Real time operation of the Grid” by Prof. N D R Sarma, ERCOT, Texas, United States at GVP college of engineering, 23 November 2015

IEEE Hyderabad Section in association with IEEE Vizag Bay Subsection has organized Vizag Bay Student Zonal Congress at GVP College of Engineering. Shri K. Ramakrishna, Director IEEE R10 (Asia & Pacific) was the Keynote speaker. 4-5 Dec 201530 December 2015:

A one day workshop on “EMPOWERMENT OF WOMEN IN RESEARCH” is being organized by IEEE Student Branch in association with IEEE Vizag Bay Sub Section at Gayatri Vidya Parishad College of Engineering (A), Visakhapatnam, 30th Dec 2015

B.3 Professional and Continuing activities

Skill Connect Program: The IEEE Hyderabad Section, Education Society and the SAC have jointly launched a program named 'Skill Connect'. This program is aimed at providing Employability skills to the 3rd Year Engineering Students.

The employability skills or 'competence to do' is built by providing competence in technical topics and by getting the students to build specific applications that are similar to what companies want. Later an internship is provided with various Small and Medium Enterprises (SMEs). In 2015, the SMEs provided to the students are those that deal with Embedded Software to build mobile research programs, Healthcare industry and so on.

The program was conducted in some colleges with the College Managements and the IEEE Branch Counsellors. The program is aligned with college and University calendar, as follows

Duration: May 2015 to December 2015

Eligibility
Internship or Project work: Only IEEE Student Branch Member
Technology streams: Linux/Python, Java/J2EE or C & Embedded Systems

Phases in the Program:
Basic or Primitive training: May end to June end - Provided by 3rd Party - Cost to be paid by each student
Development Workshops: July to August/Sept 2016 (6-8 weekends)
Internships: Jan - April 2016 - For those selected by Small and Medium Segment enterprises
Project work: Jan - April 2016 - For all others and will be done under guidance of IEEE Experienced experts
At the end of the Workshops, those who clear the tests and qualify will be eligible for internships to the extent available. Quiz and Tests will be conducted at the end of each phase and only those who qualify will go to the next phase of the program.

- **Summary of International/National Conferences conducted in 2015**
    - **General Chair:** C. Satish, Life SMIEEE, SEC Member, Hyderabad.
      - Tutorial Sessions : 4
      - Invited Talks : 3
      - Papers Presented : 39
      - Exhibition Stalls : 17
    - **Attendance:**
      - Tutorial: 85 (90% from Industry)
      - Conference: 120 (80% from Industry)
    - **General Co-Chairs:**
      - P.A. Govindacharyulu, Chair, CAS Chapter, IEEE Hyderabad Section
      - Rui Martins, University of Macau, Macau, China
    - Half day Tutorials : 4
    - No. of Papers Selected : 29
    - Acceptance Rate : 23%
    - Plenary Talks : 2
    - **Attendance:** 150, Papers from Japan, China, Australia, and India
  - **Conferences organized and Technically Co-sponsored by Section**
    - **2015 IEEE MTT-S International Microwave and RF Conference (IMaRC2015);** 10-12 Dec 2015; Venue: Novotel Hyd Airport.
    - **General Co-Chairs**
      - Lakshminarayana Merugu, Vice Chairman, IEEE Hyderabad Section
      - Alaa Abunjaileh, Airbus DS
    - No. of Tutorials : 6
    - Keynote Talks : 2
    - No. of Invited Papers : 9
    - No of papers Accepted :96 (3 Parallel Tracks and 3 Poster Sessions)
    - Acceptance Rate : 33%
    - **No of delegates** : 400 from 19 Countries worldwide
      - No. of Exhibition Stalls : 29
      - Special Sessions : 3
      - Ph.D Initiative : 18 Students by MTT Education
    - Best Paper Awards for IMaRC and SIGHT presentations
    - Special Interest Groups in Humanitarian Technologies (SIGHT) and HAM radio sessions by IEEE MTT-SIGHT
• Conferences Technically Co-sponsored by Section
  ➢ Conference on Power, Control, Communication and Computational Technologies for Sustainable Growth (PCCCTSG2015); 10-12 Dec 2015, GPR EC, Kurnool.
    - No. of Papers Accepted: 116
    - No. of Papers Presented: 73
    - No. of Parallel Tracks: 4
    - Keynote Talks: 3
    - No. of Tutorial Sessions: 4
  ➢ 5th International Conference on Fuzzy and Neural Computing (FANCCO 2015); 16-19 Dec 2015, IDRBT Hyderabad
    - No. of Tutorials: 2
    - No. of Papers Selected: 25
    - Acceptance Ratio: 37%
    - Strong International Participation

• Highlight of other activities and lecture programs
  ➢ Computer Colloquium
  ➢ Power Colloquium
  ➢ Communication Colloquium
  ➢ All the Chapters and sub sections conducted over 60 DLs, Lecture programs, Workshops.
  ➢ MTT-Sight inauguration program was conducted on 10th Dec 2015. Student members attended the SIGHT program free of cost. HAM Radio Session was organized for IEEE Student members (100 per day) for attending the session during IMaRC, 10th-12th Dec 2015

B.4 Students Activities
• Total number of Student branches in the Section: 140
• Number of Student branches formed in the current year: 12
• Number of Student branches re-initiated in the current year: 9

Section level student activities
  ➢ SAC & YP Activity (13 March 2015)
  ➢ R10 Student/YP/WIE Congress Srilanka 9th – 12th July 2015
  ➢ AISYC 2015 – Kerala 7-9 August 2015
  ➢ IEEE India Internship / Entrepreneurship Program 28 Aug 2015 Hyderabad TCS, SAC and YP
  ➢ Warangal Zonal Student Congress 4 – 5 Sept 2015
  ➢ WIE ILS – Chennai 10 – 12 Sept 2015
  ➢ Section Student Congress 3 - 4 Oct 2015 HCU
  ➢ R10 SAC Meet 4 Oct 2015 HCU
  ➢ IEEE India Internship / Entrepreneurship Program 18 Oct 2015 Vizag
  ➢ IEEE Xtreme 24 Oct 2015
  ➢ Vizag Zonal Student Congress : 4 – 5 Dec 2015
  ➢ Ananthapurum Zonal Student Congress : 29–30 Dec 2015
B.5 Affinity Group Activities

- R10 Student/YP/WIE Congress Srilanka 9th – 12th July 2015
- AISYC 2015 – Kerala 7 -9 August 2015
- IEEE India Internship / Entrepreneurship Program 28 Aug 2015 Hyderabad TCS, SAC and YP
- WIE ILS – Chennai 10 – 12 Sept 2015
- IEEE India Internship / Entrepreneurship Program 18 Oct 2015 Vizag Inauguration of WIE SB CJITS, Jangaon Warangal- 13th Jan. 2015
- International Women’s Day - 7th Mar. 2015
- Industrial visit to RCI, DRDO, Hyderabad - 18th Aug. 2015
- WIE Zonal Congress -18th - 19th Sept. 2015
- Role of WIE Education through IEEE - 19th Sept. 2015
- WIE AG Student Branch Activities & Career Opportunities for Women Engineers -21th Sept. 2015
- Small & Medium Scale Enterprise for Women - 18th Oct. 2015
- Trustworthiness & Reliability of Engineering & IT Professionals- 8th Dec. 2015
- Published e-Newsletter “WIE-ZINE” – March & June 2015 issues
- Created Website for WIE AG IEEE Hyd. Section - 8th July 2015
- YP Activities jointly with CS Chapter

B.6 Awards & Recognition Activities

- Award constituted by the section
  - Vibrant Student Branch Award
  - Emerging Student Branch Awards
  - Best Young Volunteer of Section Award
  - All 2015 outgoing section officers on completion of their services were given a Certificate of Appreciation.

- Award(s) received from R10
  - R10 Outstanding Volunteer Award: Dr M Lakshminarayana, Vice Chair
  - IAS most Vibrant Chapter: IAS/PES/PELS Joint Chapter
  - Region 10 WIE Support Funds
  - Region 10 Education Society Fund for Skill Connect Program
B.7 Communication Activities (Newsletter, Home Page, E-mail etc.)

- Home Page of the section: www.ieeehyd.org
  The section website is updated at least once every week. The website also provides up to date information about the awards and recognition received by the Section, volunteer resources, and officer information. Payment gateway for conferences have been linked with section website

- Other means of contacts with section members: IEEE LISTSERV is used for Email communications only if the members opt for section communication in their IEEE Account (Communication Preferences).

- Section News-Letter Publication
  - SYNAPSE: 4 Editions have been published.
    - 1st Edition in May ’15
    - 2nd Edition in Sept ‘15
    - 3rd Edition in Nov ‘15
    - 4th Edition in Jan ‘16
  - One Special issue on Conferences (held in 2015) is ready to be published.

B.8 Industry Relations

- Membership growth and retention
- Activities for/with industrial members

  - Members from Industry are very much an integrated part of the section. Section Chair, Vice-Chair, Section Secretary, Treasurer, Past Chair, Executive Committee Members and some Chapter Chairs are all from the Industry.
  - Section has a healthy practice of sponsoring Industrial visits.

  - All major conferences held in 2015 had been supported by the industries in and around Hyderabad also from all India level.
  - There was an overwhelming response from the Industries in attending the conferences in 2015
  - The workshops and lecture programs conducted by different Chapters also had good response from industries.
  - Membership retention has been maintained

B.7 Humanitarian Technology Activities

  - MTT-S SIGHT activity at IMaRC 2015 in Hyderabad was a significant effort where SIGHT panel session, SIGHT Design contest, HAM RADIO event was conducted successfully. 28 SIGHT design contest proposals were received from various institutes across India and abroad at IMaRC 2015. About 250 students from different Engineering colleges attended HAM Radio Sessions on all three days of conference during IMaRC 2015 at Novotel, Airport

  - A Two-day Symposium on "How to Prevent Fatal Electrical Accidents" was conducted by IAS/PES/PELS joint Chapter. After the symposium volunteers continued field trips to villages around Hyderabad to raise awareness on this issue
B.8 Community Activities

- **IEEE Exhibits @ BM Birla Science Centre** is a group of interactive exhibits in science and engineering created by the IEEE for pre-college students, and presented in partnership with BM Birla Science Centre. Section also works with Schools in developing IEEE Exhibits.

- **During Conference Dinner** of Major conferences, family members of Conference organisers and Section Executive Committee members have been invited for networking with the eminent scientists and researchers.

- **The family members** are invited in AGM and special cultural program have been arranged for the family members by YP and WIE AG of the section.

- **Field trips** arranged by Section in association with Joint Chapter of PES/IAS/PELS for conducting awareness program in villages in and around Hyderabad.

PART C - OTHERS

C.1 Special Events

**MTTs SIGHT Inauguration Program during IMaRC 2015**

MTT-S SIGHT activity was a significant effort where SIGHT panel session, SIGHT Design contest, HAM RADIO event was conducted successfully. 28 SIGHT design contest proposals were received from various institutes across India and abroad at IMaRC 2015. About 250 students from different Engineering colleges attended HAM Radio Sessions on all three days of conference during IMaRC 2015 at Novotel, Airport.

C.2 Relationship with National and International Societies and NGOs

Section has a special relationship with IETE/ACM/IE and SEMCEI. The conferences and lecture programs were conducted jointly. The following events were jointly conducted in 2015

i. J C Bose Memorial Lecture  
ii. Prime Asia 2015  
iii. IMaRC 2015  
iv. FANCCO 2015  
v. A number of lecture programs conducted by Chapters

The Seminar Hall of IETE and auditorium of UOH, OU, MJCET, MVSIR, RCI (to name a few) have been used for conducting lecture programs, Section Students’ Congress and workshops.

C.3 Collaboration with other IEEE Section

India Council and R10 Executive Committee Representation from IEEE Hyd-section

- R10 Industry Relationship Chair
- India Council Vice Chair- Technical and Professional Activities
IEEE HYDERABAD SECTION, 16.2.2016

- R10 WIE-AG Committee Member 2015 & Vice Chair, WIE-AG,
- India Council Membership Growth and sustainability Committee, Member

IEEE Hyderabad Section participated in
- R10 Student/YP/WIE Congress Srilanka 9th – 12th July 2015
- AISYC 2015 – Kerala 7 -9 August 2015
- IEEE India Internship/Entrepreneurship Program in IEEE Kolkata Section
- WIE ILS – Chennai 10 – 12 Sept 2015

Conducted Workshop and Conferences jointly with
- IEEE Macau Section
- IEEE Japan Section
- IEEE Society Head-quarters

C.4 Support extended for the formation of a Sub-section or transition of a Sub-section into a full Section

- With Support of Hyderabad Section IEEE Vijag Section conducted over 20 programs in Vijag Bay.
- Support was also extended to Guntur Zone and a number of program conducted. Due to the continuous efforts of section executive committee GUNTUR subsection is made active again and slate is formed in for 2016
- A number of programs have been conducted in Ananthapuramu Zone. Filing of a sub-section petition is encouraged and will be submitted shortly
- Warangal zone also conducted a number of programs in association with Hyderabad Section.
- All Chapters and AGs encouraged to host several programs in 2015 which exceeds minimum mandated number of events.

C.5 Best Practices of our section

- Face to face meetings of Section Executive Committee every month
- Encouraging the Chapters/AG (via financial support and otherwise) for organizing more than the minimum mandated number of events.
- Sponsoring active volunteers/SEC members for Conference Leadership programs within and outside of India.
- Funding (partial) for student members for presenting research papers within and outside of India.
- Supporting students and researchers to attend Conference workshops free of cost (Wherever possible)
- Representation of section executive committee members in all major technical programs and workshops.

C.6 Problems anticipated and suggestions for solutions

- Increasing member participation in Section events: Though section has witnessed a significant increase in participation in 2015, there is a constant effort by section executive committee to increase the number. Organizing events in venues that are easily accessible to all the members
- Attracting volunteers for Section activities especially from public sectors
- Managing the sub-Sections
- Managing the increasing number of requests for conference sponsorships from private engineering colleges
Proposed Solution: Conducting the technical programs in association with Industry partners; preferably in respective premises to increase awareness about IEEE.

PART D - GOALS AND PLANS

D.1 Continuation of Project/Activity in Progress and Their Implementation Plans

- Section flagship events: Faraday Memorial Lecture, A G Bell Lecture, J C Bose Memorial Lecture, Section Student Congress will be conducted with fervor in 2016 as well.
- IEEE Hyderabad Skill Connect program initiated by the Education Society Chapter and SAC will be supported in 2016.
- Section has plans to organize National/International conferences in 2016.
- Section will continue releasing the newsletter once every quarter.
- Conference Organisers Workshop and Internship/Entrepreneur Program will be supported in 2016 as well.
- Liaison with the income tax officials in the Indian jurisdiction regarding the tax exemption status.

D.2 Goals and Future Plans

- Sustain the momentum of the Section/Chapter/AG activities
- Ensure the quality of conferences.
- Flagship events to be created for every Chapter/AG
- Faculty Training program will be initiated through Education Society Chapter
- Innovative Research paper award will be announced for YP members
- Initiating SIGHT activities and filing petition for SIGHT and at least one Society Chapter in the section
Keynote Speakers Dr V K Saraswat and Vijay Nair with organizing Committee members of IMaRC 2015

IEEEHYD CAS Chapter Workshop in Collaboration with IEEE CAS Chapter JAPAN