This report summarizes activities and initiatives taken by IEEE Bangalore section during the year 2012.
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<td>IEEE Communications Society Bangalore Chapter</td>
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<td>IEEE Photonics Society Bangalore Chapter</td>
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<tr>
<td>IEEE Power &amp; Energy Society Bangalore chapter</td>
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</tr>
<tr>
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<td></td>
</tr>
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<td>GOLD Affinity Group</td>
<td></td>
</tr>
<tr>
<td>Women in Engineering (WIE) Affinity Group</td>
<td></td>
</tr>
</tbody>
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IEEE Bangalore section and TIE Society and chapter reports for 2012 Report
AGM 2013

2012 was the year of many firsts. During AGM of 2011, Chairman of IEEE Bangalore section outlined initiatives, plans and goals for Bangalore Section. Combined with data from membership feedback coupled with active, dynamic and young volunteers, Section has been able to deliver on many of its plans.

Section bid for many events and successfully completed All India Student Congress and IEEE CONNECT. These events were a true success for the relentless efforts of volunteers.

Professional activities garnered speed with the newly formed collaboration (MoU) with Institute of Engineers and The Indus Entrepreneurs (TiE). Section is in advanced stages of negotiations with NSRCEL at IIM-B and some more to formulate member benefits. These collaboration efforts are for member benefits as it opens up new horizons in the field of technical - business - entrepreneurship. Section stands committed as the outcome of AIYEHUM and EPICS (student humanitarian challenge programs) have had commendable success and a potential that needs to be nursed and nurtured. In order to recognize members and elevate their membership to senior members, Section organized a workshop called ‘SIMPLE’ which translated into successful senior memberships. Section also bid and won to host the annual A&A (Admissions and advancement) senior member panel in Bangalore in March.

Technical front, IEEE CONNECT was launched as a flagship IEEE International Conference as a successor to Annual Symposium. The aim is to further strengthen this conference and make it truly an international conference.

Student activities have been cherry on the cake for Section for long and this year, it was entrusted with hosting the All India Student Congress where nearly 200 students from across the country participated. Student level contests like Xtreme programming contest saw new programming heroes emerge from India competing to best programmers from across the world.

Living to the spirit of Engineering for humanity, AIYEHUM and SIGHT activities were well received and appreciated alike. Further many humanitarian projects were funded to support and strengthen the cause.

Professionally, networking events for careers, education etc. in Singapore was organized giving members a unique chance to garner right information enabling them to progress professionally.

With advancements to social media, Section has invested time and resources to keep its section website updated, Twitter chatter ongoing and Facebook feeds active. This has enabled many of our members to stay connected. Event registrations have been streamlined by using online payment gateways and pilot runs to record events and host it on our website were undertaken. For volunteers to organize meetings, Section has set up a voice conferencing facility where users can use toll free dialing facility.
ANNUAL GENERAL BODY MEETING 2012 (MOM)

Office bearers on podium
- Mr. V. V. Srinivasan, Chair
- Mr. Hitesh Mehta, Vice-chair
- Dr. G.K. Viswanadha Raju, Secretary
- Mr. Suresh Viswanathan, Treasurer

Agenda of the Meeting
- Welcome
- Approval of the Minutes of AGM 2011
- Presentation of Activities report
- Presentation of Financial report
- Report on Student Activities
- Report on Membership development
- Report on AIYE-HUM
- Report of Society Chapters & GOLD group
- Report on IEEE Xtreme
- Awards presentation – Felicitation of Fellow
- Felicitation of Senior Members
- Felicitation of K. Ramakrishna – Immediate past Chair
- Felicitation of IEEE Transaction Authors
- Award-MDC Survey winners
- Felicitation of IEEE Xtreme volunteers
- BRV Vardhan Student paper prize awards
- Section Awards
- Slate presentation
- Election of Executive committee for 2012
- Presentation of the new EXECOM
- Address by Outgoing Chairman
- Address by New Chairman
- Any other item(s)
- Vote of Thanks

Minutes
- The AGM was attended by 452 members and presented a full house and held at PESIT, Bangalore.
- Mr. A. Ravikiran initiated proceeding of the meeting by welcoming the Chairman, Vice-Chairman, Secretary, Treasurer and gathering of the AGM.
- Mr. V. V. Srinivasan proposed the minutes of the AGM 2011 and requested any feedback from the members
  - Dr. H.S. Bhatia proposed the acceptance
  - Dr. Kini seconded the proposal.
- Dr. G.K. Viswanadha Raju presented the activities report of the year 2011.
  - Mr. Mahajan proposed the acceptance
  - Mr. K. Ramakrishna seconded the proposal
- Mr. Suresh Viswanathan presented the financial report of the year 2011.
  - Dr. S. Parameswaran proposed the acceptance
  - Mr. Nagaraja seconded the proposal.
• Esteemed members raised the following points.
  o Dr. Das suggested shifting of fixed deposit in Karur Vysya Bank to some Nationalized Bank.
  o Mr. H. Ramakrishna suggested instituting new awards so as to encourage members in volunteering for the Section activities.
• Mr. V.V.Srinivasan said amount has been deposited in Karur Vysya Bank because it is offering more interest rate and expressed his willingness to shift the same to nationalized bank. Also said that new EXECOM will look into these points.
• Dr. D. Das presented the student activities report. During the presentation he briefed on the activities conducted Student Branches and Section.
• Membership development report was presented by Mr. Ravikiran and he elaborated on the membership status of the Section and explained about outcome of survey conducted by the Section. Based on the survey, Ravikiran requested Student Branches to conduct more activities and requested members to pro-actively volunteer in various activities of the Section.
• The following reports were presented Society Chapter and Affinity group office bearers
  o Women in Engineering – Mrs. Deepa Shenoy, Affinity group Chair
  o Consumer Electronics Society –
  o Power and Energy Society – Dr. G. K. Viswanadha Raju, Chapter Secretary
  o Photonics Society –
  o Circuits and systems Society –
  o Signal processing Society – Mr. Chandrasekhar
  o Control systems Society – Dr. A. Venkateswarulu, Chapter Chair
  o Communication Society – Dr. Subir Saha, Chapter Chair
  o GOLD – Mr. Prakash Sudhir, Affinity group Chair.
• Mr. Deepak Awari presented AIYE-HUM report and briefed about the all India AIYE-HUM exhibition and mentioned that the same has been approved for broadcast in IEEE TV.
• IEEE Xtreme report was presented by Mr. Gowtham Prasad and said that it’s was a proud moment to India as the event was led by the Section. He requested suggestions from the gathering which could help the team to organize the event in a better way in 2012.
• Hitesh Mehta announced that three members from the Section were elevated to Fellow grade in 2011 and introduced Dr.T.Asokan and Dr. Gopakumar to the gathering. Dr.S. Parameswaran felicitated Dr. Asokan and Mr. V.V.Srinivasan felicitated Dr. Gopakumar and both Fellow members addressed the audience.
• Mr. Ravikiran announced the names of members who elevated to senior member grade during 2008-2011. Mr. A. Rajarao felicitated the new senior members.
• Mr. V.V.Srinivasan felicitated Mr. Ramakrishna, Immediate past chair, and briefed about his achievements and services towards the section during last decade.
• Dr. Y.V.S Lakshmi, Awards committee chair, announced the authors of the papers that were published in IEEE Transactions during 2011 and Mr. V.V.Srinivasan felicitated the authors.
• Mr. V.V.Srinivasan drew lottery, one from student and professional member’s categories, and presented MDC survey awards to the winners.
• Mr. Gowtham Prasad announced volunteers of the IEEE Xtreme and Mr. V.V.Srinivasan felicitated the volunteers.
• Mr. Karthik Kulkarni received a prestigious Region 10 MGA GOLD achievement award and Mr. K. Ramakrishna presented the award.
Dr. D.Das, Student Branch activities chair, announced the BRV Vardhan student paper contest results and presented the awards.

Dr. Y.V.S. Lakshmi, Awards committee chair, announced the student branch awards. Mr. Hitesh Mehta presented awards to awardees. Details of the awardees are as follows

- Outstanding student branch counselor: Dr. Deepa Shenoy
- Outstanding student volunteer: Vishwas
- Outstanding student branch: PESCE, Mandya
- Best student branch website: UTL Technologies

Mr. K. Ramakrishna, Nomination committee chair, announced the slate for 2012.

The Nominations Committee Chaired by K.Ramakrishna with Prof R. Manick Vasagam and Prof. A Selvarajan as members have proposed the following slate for the Executive committee (EXECOM) of the Section for the year 2012.

- Chairman : Mr. Hitesh Mehta, Eagle Photonics
- Vice-Chair : Prof. K V S Hari, Iisc
- Vice Chair : Mr. A Ravikiran, Teritree Technologies
- Treasurer : Mr. Suresh Viswanathan, POWERGRID
- Joint-Treasurer : Dr. G K V Raju, GE Global Research
- Secretary : Mr. Niranjan Patil, Packetverify
- Joint Secretary : Mr. Nitin Keshav, Nokia Siemens Networks

Committee Members:
1. Dr L Murali Krishna Reddy, NDRF
2. Dr T Srinivas, IISc
3. Mr Siva Reddy, SV CE
4. Dr. Debabrata Das, IIITB
5. Mr. N. Siva Moorty, Nokia Siemens
6. Dr. Neelaksh Srinivasan, IISc
7. Mr. A. Durga Prasad, Mahindra Satyam
8. Dr. Siva Yellampalli, UTL Technologies
9. Mr. P Srikanta, IBM
10. Dr. Suersh Janghamshetti, BEC, Bagalkot
11. Mr. Gowtham Prasad, Microsoft
12. Dr. YVS Lakshmi, C-DoT
13. Mr. A Raja Rao
14. Mr. L. Ravi, BESCOM
15. Immediate Past Chairs: Mr. V.V.Srinivasan and Mr. K. Ramakrishna

Mr. Ramakrishna declared that new EXECOM is elected and welcomed the members. During his address he requested the audience to pro-actively volunteer and support AIYE-HUM and revisited the benefits of being IEEE member.

Mr.V.V.Srinivasan addressed the gathering at the capacity of outgoing Chair and thanked EXECOM and other members of the Section for supporting him for last two years. He also briefed on new chapters and flagship events of the Section activities conducted during his tenure. He requested the audience to pro-actively volunteer for the Section activities which helps in conducting more events.

Mr. Hitesh Mehta, new Chair of the Section, addressed the gathering and shared his vision for 2012.

Plan to spread activities of the Section outside Bangalore.
Skill/Career enhancement activities for student and professional members
Programs to interact with Industry so as to bridge the gap between industry and academia.
• Membership enhancement of the Section and drive to increase senior and fellow members
• Enhance quality of Annual Symposium.
• House was kept open for members to discuss and present any ideas and provide feedback.
• Mr. K.S. Murthy addressed the gathering on power outages and their consequences.
• Dr. Suresh J Shetty suggested forming a forum which can help the student branches to jointly organize student activities. Mr. V.V. Srinivasan clarified that GINI is working towards that and intended to do so.
• Mr. K. Ramakrishna suggested to establish more sub-sections in Karnataka so as to spread the activities of the Section.
• Dr. S. Parameswaran requested to revisit and work towards the proposal for office space of the Section. Mr. Hitesh told that the item shall be taken up and work towards the same.
• Vote of thanks: Mr. R. V. Siva Reddy gave vote of thanks for the program
• He thanked representatives of the chapters and affinity groups, IEEE Fellows and senior members, management of PESIT.
• He also thanked EXECOM members, Awards committee and student volunteers.
• He thanked the audience for their support and constructive feedback.
## Income and Expenditure Account for the year ended 31st December 2012

<table>
<thead>
<tr>
<th>Schedule</th>
<th>31-Dec-12</th>
<th>31-Dec-11</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IEEE Headquarters Rebate and Support</td>
<td>13,41,408</td>
<td>12,47,202</td>
</tr>
<tr>
<td>All India Student Congress Receipts</td>
<td>2,10,416</td>
<td>-</td>
</tr>
<tr>
<td>Other Sponsorship and Event Income</td>
<td>1,05,887</td>
<td>10,65,780</td>
</tr>
<tr>
<td>Interest on SB accounts</td>
<td>28,154</td>
<td>54,762</td>
</tr>
<tr>
<td>Interest on Fixed Deposits (including accrued interest)</td>
<td>9,18,985</td>
<td>4,67,748</td>
</tr>
<tr>
<td><strong>Total (I)</strong></td>
<td>26,04,850</td>
<td>28,35,492</td>
</tr>
<tr>
<td><strong>Expenses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Section Support</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student Activity Expenditure</td>
<td>8</td>
<td>5,77,704</td>
</tr>
<tr>
<td>Programme and Event Expenditure</td>
<td>9</td>
<td>6,77,914</td>
</tr>
<tr>
<td>Annual General Meeting Expenditure</td>
<td></td>
<td>3,54,538</td>
</tr>
<tr>
<td>Other Administrative and General Expenditure</td>
<td>10</td>
<td>1,15,495</td>
</tr>
<tr>
<td><strong>Total (II)</strong></td>
<td>18,07,655</td>
<td>25,16,179</td>
</tr>
<tr>
<td><strong>Excess of Income Over Expenditure transferred to General Fund</strong></td>
<td>7,97,196</td>
<td>3,19,313</td>
</tr>
</tbody>
</table>

### Summary of significant accounting policies

The accompanying schedules are an integral part of the financial statements.

Note: The Section organised the international conference CONECT in January 2013 wherein the Section expended around Rs.10,24,000. The Conference being held in 2013, the same will be accounted in the financial statements of 2013.

As per our report of even date

For Usha and Associates
FRN 013099S
Chartered Accountants

For IEEE Bangalore Section

<table>
<thead>
<tr>
<th>Usha.S.C</th>
<th>Sd/-</th>
<th>Hitesh Mehta</th>
<th>Sd/-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietor</td>
<td></td>
<td>Chairman</td>
<td></td>
</tr>
<tr>
<td>Membership No. : 224749</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nitin.K</th>
<th>Sd/-</th>
<th>Suresh.V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secretary</td>
<td></td>
<td>Treasurer</td>
</tr>
</tbody>
</table>

Place: Bangalore
Date: 22.01.2013

IEEE Bangalore Section is society of Electrical and Electronics Engineers registered under the Karnataka Societies Registration Act, 1960 with the registration number BLU-S707-2006.

Summary of significant accounting policies and notes to accounts.
1. Basis of preparation
The financial statements are drawn up based on historical costs and mercantile basis of accounting has been followed.
2. Recognition of income
Sponsorship, registration fee for events and rebate from the IEEE Headquarters are recognized on the basis of receipts and as per the bank advice available.
3. Committed Funds
The registration fees and sponsorship received with a specific instruction and understanding that are to be paid to other Chapters/Society and earmarked Events/Conference/Projects are grouped as Committed Funds.
4. Miscellaneous
- The Society has kept all the unutilized amounts in the form of bank balances and term deposits with scheduled banks, which are in conformity with section 11(5) of the Income Tax Act, 1961.
- Fixed Deposits are disclosed including accrued interest net of Tax Deducted at Source.
- The expenditure for conference/events are recognized in the year in which such conference/event is held.
- Previous years’ figures have been regrouped, wherever necessary.

IEEE-Bangalore Section
Schedules to financial statements for the year ended 31 December 2012

1. Committed Funds

<table>
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<tr>
<th></th>
<th>ANTS</th>
<th>EPICS</th>
<th>PES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening Balance as on 1st January 2012</td>
<td>2,27,210</td>
<td>3,47,570</td>
<td>-</td>
</tr>
<tr>
<td>Add: Sponsorship/Contribution received during the year</td>
<td>4,32,695</td>
<td>-</td>
<td>12,14,000</td>
</tr>
<tr>
<td>Less: Released upto 31st Dec 2012</td>
<td>-</td>
<td>69,000</td>
<td></td>
</tr>
<tr>
<td>Closing Balance as on 31st Dec 2012</td>
<td>6,59,905</td>
<td>2,78,570</td>
<td>12,14,000</td>
</tr>
</tbody>
</table>

2. General Reserve

<table>
<thead>
<tr>
<th></th>
<th>31-Dec-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excess of Income over Expenditure</td>
<td></td>
</tr>
<tr>
<td>Balance as per last financial statements</td>
<td>84,37,099</td>
</tr>
<tr>
<td>Add: Surplus /(Deficit) for the period</td>
<td>7,97,196</td>
</tr>
<tr>
<td>Surplus carried to Balance Sheet</td>
<td>92,34,295</td>
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</table>

3. Other current liabilities and Provisions

<table>
<thead>
<tr>
<th></th>
<th>31-Dec-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rebate payable to chapters</td>
<td>1,00,116</td>
</tr>
<tr>
<td>Creditors for expenses</td>
<td>89,411</td>
</tr>
<tr>
<td>TDS refundable to others</td>
<td>23,250</td>
</tr>
<tr>
<td>Provision for Taxation(PY)</td>
<td>3,01,272</td>
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<td></td>
<td>5,14,049</td>
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### 4. Fixed Deposits

<table>
<thead>
<tr>
<th>Bank Name</th>
<th>Amount (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andhra Bank Kalpataru Deposit</td>
<td>7,31,645</td>
</tr>
<tr>
<td>Corporation Bank KCC-106</td>
<td>21,92,820</td>
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<tr>
<td>Corporation Bank KCC-107</td>
<td>15,66,293</td>
</tr>
<tr>
<td>Karur Vysya Bank FD</td>
<td>23,94,168</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>68,84,926</strong></td>
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</table>

### 5. Cash and Bank Balances

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>i Balances with banks</strong></td>
<td></td>
</tr>
<tr>
<td>On savings bank accounts</td>
<td></td>
</tr>
<tr>
<td>Bank of India</td>
<td>10,263</td>
</tr>
<tr>
<td>Canara Bank A/C No.10153</td>
<td>3,12,221</td>
</tr>
<tr>
<td>Canara Bank A/C No.3970</td>
<td>23,612</td>
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<tr>
<td>Corporation Bank A/C No.007286</td>
<td>5,09,311</td>
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<tr>
<td>Corporation Bank A/C No.008569</td>
<td>2,92,399</td>
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<tr>
<td>Corporation Bank A/C No.080007</td>
<td>36,08,056</td>
</tr>
<tr>
<td><em>(including Rs.35,91,000 in Sweep Account)</em></td>
<td></td>
</tr>
<tr>
<td><strong>ii Cash on hand</strong></td>
<td>130</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>47,55,992</strong></td>
</tr>
</tbody>
</table>

### 6. Advances and other receivables

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDS receivable:</td>
<td></td>
</tr>
<tr>
<td>Previous years</td>
<td>1,58,723</td>
</tr>
<tr>
<td>Current year-2012</td>
<td>89,437</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,48,160</strong></td>
</tr>
</tbody>
</table>
# 7. Section Support

<table>
<thead>
<tr>
<th></th>
<th>31-Dec-12</th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>i IEEE Computers Society</td>
<td>8,986</td>
<td></td>
</tr>
<tr>
<td>ii IEEE Control System Society</td>
<td>20,000</td>
<td></td>
</tr>
<tr>
<td>iii IEEE Gold Affinity Group-Step Event</td>
<td>36,960</td>
<td></td>
</tr>
<tr>
<td>iv R10 Meeting - MGA Award</td>
<td>16,058</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>82,004</td>
</tr>
</tbody>
</table>

# 8. Student Activity Expenditure

<table>
<thead>
<tr>
<th></th>
<th>31-Dec-12</th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>i All India Student Congress Meet 2012</td>
<td>3,85,844</td>
<td></td>
</tr>
<tr>
<td>ii Branch Counselors Workshop</td>
<td>16,860</td>
<td></td>
</tr>
<tr>
<td>iii BVB IEEE Student Branch</td>
<td>15,000</td>
<td></td>
</tr>
<tr>
<td>iv IEEE NMIT</td>
<td>15,000</td>
<td></td>
</tr>
<tr>
<td>v IEEE Student Branch PES</td>
<td>25,000</td>
<td></td>
</tr>
<tr>
<td>vi IEEE Student Branch SJCE</td>
<td>15,000</td>
<td></td>
</tr>
<tr>
<td>vii IEEE Student Branch Tumkur</td>
<td>15,000</td>
<td></td>
</tr>
<tr>
<td>viii IEEE Student Branch VTU</td>
<td>15,000</td>
<td></td>
</tr>
<tr>
<td>ix IEEE Student Branch Canara College</td>
<td>15,000</td>
<td></td>
</tr>
<tr>
<td>x IEEE Student IISC</td>
<td>15,000</td>
<td></td>
</tr>
<tr>
<td>xi IEEE Techfest Novas</td>
<td>15,000</td>
<td></td>
</tr>
<tr>
<td>xii IEEE UVCE</td>
<td>15,000</td>
<td></td>
</tr>
<tr>
<td>xiii IEEE VVIET Student Branch</td>
<td>15,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5,77,704</td>
</tr>
</tbody>
</table>

# 9. Programme and Event Expenditure

<table>
<thead>
<tr>
<th></th>
<th>31-Dec-12</th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>i AIYEHUM Project Assistance and Event</td>
<td>2,80,019</td>
<td></td>
</tr>
<tr>
<td>ii Awards and Prizes</td>
<td>1,23,194</td>
<td></td>
</tr>
<tr>
<td>iii Felicitation Expenses( members )</td>
<td>36,490</td>
<td></td>
</tr>
<tr>
<td>iv IEEE HQ rebate disbursement</td>
<td>1,00,116</td>
<td></td>
</tr>
<tr>
<td>v Tech Friday expenses</td>
<td>6,739</td>
<td></td>
</tr>
<tr>
<td>vi SAC R10 GINI</td>
<td>20,961</td>
<td></td>
</tr>
<tr>
<td>vii Section Congress 2011</td>
<td>51,813</td>
<td></td>
</tr>
<tr>
<td>viii SIMPLE Event</td>
<td>47,753</td>
<td></td>
</tr>
<tr>
<td>ix Technical Lecture</td>
<td>10,829</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>6,77,914</td>
</tr>
</tbody>
</table>

Note: The Section organised the international conference CONECCCT 2013 in January 2013 wherein the Section expended around Rs.10,24,000. The Conference being held in 2013, the same will be accounted in the financial statements of 2013.

# 10. Other Administrative and General Expenditure

<table>
<thead>
<tr>
<th></th>
<th>31-Dec-12</th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>i Execom Meeting Expenses</td>
<td>17,600</td>
<td></td>
</tr>
<tr>
<td>ii Audit and Professional Fee</td>
<td>25,000</td>
<td></td>
</tr>
<tr>
<td>iii Bank Charges</td>
<td>98</td>
<td></td>
</tr>
<tr>
<td>iv Honorarium</td>
<td>10,000</td>
<td></td>
</tr>
<tr>
<td>v Conveyance</td>
<td>6,524</td>
<td></td>
</tr>
<tr>
<td>vi Rent</td>
<td>50,000</td>
<td></td>
</tr>
<tr>
<td>vii Website renewal</td>
<td>6,273</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1,15,495</td>
</tr>
</tbody>
</table>
SECRETARY REPORT
Round up of activities in 2012

This section outlines the various significant activities undertaken and supported by Section in 2012. All information about the event can be found on Section website.

IEEE CONECCT
IEEE CONECCT was the outcome of a collective desire of the IEEE Bangalore Section Executive Committee, in June of 2012, to organize an International Conference relevant to academia and industry. It was felt that the current day electrical engineer is being confronted with complex problems, which requires a multi-faceted approach to solve them. Several modern systems have become a confluence of Electronics, Computing and Communication technologies, embedded with Control strategies. Hence a broad based conference was envisaged to attract the attention. We tried to get a suitable acronym and after a few iterations on a late evening, the Executive Committee came up with the name CONECCT. To reflect the collective effort of a large number of members of the section, several Bangalore chapters of various societies were approached seeking their support. We are fortunate that many chapters agreed to be the technical Sponsors. Indian Institute of Science has always been the academic pillar for such conferences.

IEEE CONECCT received an overwhelming 457 papers for review. Papers were received from 18 countries which included India, Iran, Singapore, USA, Sweden, Taiwan, Korea, Japan, Sri Lanka, Finland, Malaysia, Turkey, New Zealand, Vietnam, Canada, South Africa, Italy, and Pakistan. A total of 40 TPC members and more than 150 reviewers assisted us in the review process. Each paper had at least 2 reviewers per paper and finally, we selected 46 papers for ORAL presentation which will be included in the IEEE Xplore database. We also selected 26 POSTER papers which will not be included in Xplore but will be included in the conf proceedings.

The technical programme comprised of Distinguished Plenary Lectures and technical sessions of peer-reviewed papers. We were very fortunate to have the following Distinguished Speakers:

- Prof. M. Vidyasagar, Fellow of the Royal Society, University of Texas at Dallas, USA
- Prof. Sadaoki Furui, Tokyo Institute of Technology, Japan
- Prof. Paul Berger, The Ohio State University, USA
- Dr. K. K. Ramakrishnan, AT&T Research Labs, USA
- Prof. Jeff Bilmes, University of Washington, USA
Over 150 engineers and scientists participated in the IEEE CONECCCT Conference.
Over 100 engineers and scientists participated in the following tutorials:

- Topics on Storage Systems and Networks Prof. K. Gopinath (IISc), Durga Prasad Allada (Mahindra Satyam), Udayan Singh(TCS)
- Microsoft Windows 8, Saba Halem, Microsoft
- Android – A serving plate for Embedded Domain, Satish Patel, Texas Instruments

AISC 2012
The most popular IEEE Student event in India: All India Student Congress 2012 (AISC 2012) was organized at Bangalore Section on September 28th, 29th, 30th 2012 at Reva Institute of Technology and management (RITM), Bangalore. The theme of theme of the congress was “Empowering Students to Interact, Lead, Innovate & Inspire”. ASIC 2012 was a conglomeration of some of the most vibrant and most vivacious minds from different IEEE branches from all over the country right from Delhi in North to Kanyakumari in south, Gujarat in West to Kolkata in East. The AISC provides a stage for branches from across the nation to come together and share thoughts, ideas and the best practices, to learn and gain from each other, foster leadership growth and for students to interact with people and cultures from every corner of India. AISC 2012 was a roaring success with proud and satisfies participants and organizers.

AISC 2012 Highlights:
- 550 Registrations and 300+ recommendation via emails
- 200 Number of students participated with almost 1:1 boy: girl ratio
- 14 Sections & Sub Section participated
- 60 Student Branches participated
- 25 Speakers from IEEE & Industry
- 3 Speakers from R10: Mr. Darrel Chong , Mr. Aby Kurian
- 1 Speaker from India Council
- 2 speakers from MGA
- 3 Keynotes each on Leadership, Innovation and Entrepreneurship
• 20+ Senior IEEE volunteers present and 75% outside Bangalore Section
• 2 Competitions: Innovative Student Branch Competition, Ethics Skit Competition
• 20,000 Rs Cash Prize and 100 + goodies and prizes given away
• 45 Student Volunteers from Reva and 7 Volunteers in Core Organizing team
• 2 Cultural Programs and fun activities.
• 3 days of ultimate networking and learning.

DAY-1 September 28th 2012: AISC 2012 was formally inaugurated by Dr. V K ATRE-Former Scientific Advisor to Ministry of Defense, Mr. Ramakrishna Kappagantu IEEE R-10 Director, Dr. Prerana Gaur, SAC Chair IEEE India Council, Dr. Rana Pratap Reddy, Principal, REVA ITM, Bangalore, and Mr. Hitesh Mehta, Chairman IEEE Bangalore Section, Prof. Siva Reddy SAC Chair IEEE Bangalore Section, Mr., Gowtham Prasad , IEEE Xtreme Lead & AISC 2012 Organizing Chair in the presence of AISC Organizing Committee, RITM Management, staff & students of Reva ITM and the enthusiastic AISC participants.

Inaugural Keynote was delivered Dr. V K Aatre: which inspired the gathering, who emphasized on the importance of technology & engineering in today’s world and what Indian students have achieved globally and can aspire to achieve. Later Mr. Ramakrishna Kappagantu addressed students and encouraged them to volunteer for IEEE. For the first time a live streaming session was arranged at AISC and Mr. Darrel Chong, MGA SAC Chair spoke from Singapore IEEE Office. He talked to students about latest updates from MGA SAC and how students can benefit from IEEE. It was followed by talk from M/S Prerna Gaur India Council SAC.

Inaugural ceremony was followed up by Ice Breaking Session, a Networking/fun where participants mingled with one another to find answers to questions about other participants.

Post lunch following sessions followed: ‘Student Benefits, Awards, competitions and funding’ by Mr. Vishwas Jois - IEEE Bangalore Section and ‘Journey of a student in IEEE’ by Mr. Gowtham Prasad K N- IEEE MGA SAC.

Remainder of the afternoon saw participants engaged in Team Building Activity organized by Rakesh Biradar, GOLD Bangalore Section. The enthusiastic participants were divided into groups & given challenging and yet fun activities to do tasks. Each group had 5 min to talk why they are proud of the state they come from and it call for a lot of interesting facts and excitement to be shared.

The first day ended with an explosive Cultural evening with 2 hours of non-stop dance performances and live band performances. Every single person in the auditorium couldn’t help but dance to the tune.

Day-2 September 29th: Second day started with Keynote on Innovation by Mr. Sudeendra Koushik, Chair Consumer Electronic Society, Bangalore chapter. It was followed by the session below:

• ‘IEEE, A bigger Picture & Membership Retention’ by Mr. Prasanna Venkatesan, Board Member, IEEE EAB.
• ‘Leveraging IEEE Xplore’ by Mr. Dhanu.P, Client Services manager, IEEE India Office.
• Parallel Track on IEEE Technical Societies
• Track 1 on Computer Society by Mr. Aditya Rao, MGAB - Computer Society
• Track 2 on VLSI /COM SOC /Signal processing Society by Dr. T Srinivas, Chair - Photonics Society & EXECOM, COMSOC Society Bangalore Chapter
• ‘Student branch administration’ by Mr. Arjun Pillai - IEEE R10 SAC Team
• ‘Pursuing Research opportunities in India’ by Mr. Siddarth, Microsoft Research India

IEEE Group Discussion activity was planned in the afternoon. About 20 handpicked debatable issues relevant to IEEE such as Scenarios, benefits & key concerns were given for the groups
to brainstorming. Some of the interesting topics were: IEEE & Social needs IEEE & networking. How to overcome challenges from College Management, Marketing IEEE the right way et al. Some key ideas that were provided as input to India Student network team to convert to actionable items.

Two interesting competitions were organized:

**Innovative Student Branch Competition**

SBs were asked to submit their nominations prior to the congress, and come of the India’s most vibrant student branches were selected to present how innovative are they in their approach and activities. 3 teams were awarded a total cash prize worth 20,000 Rs.

**Ethics skit Competition**

Engineering & Human Ethics are two infinitely valuable practices that keep the spirits high & making the world better &selfless some fancy things / quotes about Ethics. Teams were asked enact a small skit emphasizing on social values and what can an individual do to bring about a change. With just few hours of practice the teams gave the gathering a fabulous performance made the judges to think twice before announcing the results. Team from Delhi Section won this competition.

**DAY-3 September 30th 2012:** Final day started with Keynote on Entrepreneurship by Mr. Ashutosh Lawania, Co-Founder, Myntra. Being a young Engineering grad with high ambition opens a door of infinite opportunities of taking up an idea from discussions to papers to the markets. With this view we had a talk by Mr. Ashutosh Lawani who shared his entrepreneurship story on starting the largest online fashion store business in India. He shared his story of success and also encouraged the students to take-up entrepreneurship as their career. The session as very interactive and students had many questions which were answered very well.

It was followed by the sessions below:

**IEEEXtreme 6.0 by Mr. Gowtham Prasad K N & Srikanta P, IEEEXtreme, MGA SAC**

**Career Progression talks by**
- Mr. Rakesh Godhwani, IIM B
- Mr. ViswanathPoosala, Bell Labs
- Mr. BalaGirisaballa, Yahoo
- Mr. Ravikiran, Vice Chairman Bangalore Section and Entrepreneur

AISC 2012 was concluded by Valedictory Ceremony. It involved AYEHUM Award ceremony, thanking note by Organizing team, A quick video of ‘memories of AISC 2012’, Attendee Experience sharing session. Student volunteers got a standing ovation from the participants. With new friendships created, new bridges built and new ambitions in eyes participants started back to their cities.
# TECHNICAL TALKS

What aspect of your technical life would you like to strengthen?

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Date</th>
<th>Details</th>
</tr>
</thead>
</table>
| 1     | 23-08-2012 to 25-08-2012 | IEEE Boot Camp on Design for Test by Mrs. Roopa Ramaswamy, Consultant, conducted at VTU Extension Centre, UTL Technologies Bangalore  
*Organized by IEEE Bangalore Section and Hosted by IEEE Student Branch, VTU Extension Centre, UTL Technologies Ltd.*  
The three day boot camp was conducted by Ms. Roopa Ramaswamy who has eight years of industrial experience on Design for Test. During the labs sessions she was supported by Mr. Ramana and Mr. Shishir from VTU Extension Centre. Twenty Nine participants have participated in the event. The participant included people from both industry (Nine) and academia (Twenty). |
| 2     | 20-09-2012 to 22-09-2012 | IEEE Boot Camp on Verilog by Mr. Ramana reddy, Assistant Professor, VTU Extension Centre, UTL Technologies Bangalore  
*Organized by IEEE Bangalore Section and Hosted by IEEE*  

17
Below table lists some of the talks conducted in 2012. Full list and details are available on Section website.

<table>
<thead>
<tr>
<th>3</th>
<th>20-10-2012</th>
<th>IEEE One day workshop on SCILAB - Introduction and Applications in Engineering Education</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Organized by IEEE Bangalore Section and Hosted by IEEE Student Branch, VTU Extension Centre, UTL Technologies Ltd.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The one day workshop was organized by IEEE Bangalore Section on October 20\textsuperscript{th} 2012 and was hosted by IEEE Student Branch, VTU Extension Centre, UTL Technologies Ltd. The workshop was conducted by Mr. Bhasker from Techpassion and he is supported in the lab by two of his colleagues from Techpassion. The participant included people from research organizations and academia. A total of twenty three participants have registered for the event.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Short title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talk on amateur radio communications by Dr. Miroslav Skoric</td>
</tr>
<tr>
<td>Talk on renewable integration from Prof Janaka</td>
</tr>
<tr>
<td>Control, Imaging and Sensing opportunities in Healthcare Systems</td>
</tr>
<tr>
<td>Creating a Sustainable Society using Power Semiconductor Devices</td>
</tr>
<tr>
<td>Spatiotemporal Gabor Filters for Motion Processing</td>
</tr>
<tr>
<td>Dark Secrets of RF Design by Prof Tom Lee</td>
</tr>
<tr>
<td>Seminar on cloud computing</td>
</tr>
<tr>
<td>Conference on Cloud Computing for Emerging Markets</td>
</tr>
<tr>
<td>Spatial Statistical Tools in Data Processing and Analysis</td>
</tr>
<tr>
<td>Enabling a sustainable society with Power Semiconductor Technology by Jayant Baliga</td>
</tr>
</tbody>
</table>
**GALLOPING MEMBER BASE**

With many outreach programs, membership development drives, membership elevation programs and strengthening the benefits for members, IEEE Bangalore Section has been able to generate buzz and drive its membership numbers to new levels. With keen interest to carve out sub sections in Mangalore and Hubli, the right focus is being continuously worked upon.

<table>
<thead>
<tr>
<th>IEEE Grade</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>% Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fellow</td>
<td>7</td>
<td>10</td>
<td>11</td>
<td>11</td>
<td>12</td>
<td>15</td>
<td>16</td>
<td>6.7%</td>
</tr>
<tr>
<td>Life Fellow</td>
<td></td>
<td>1</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>200%</td>
</tr>
<tr>
<td>Life Member</td>
<td>3</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>(25%)</td>
</tr>
<tr>
<td>Life senior</td>
<td>14</td>
<td>19</td>
<td>18</td>
<td>16</td>
<td>17</td>
<td>19</td>
<td>18</td>
<td>(5.3%)</td>
</tr>
<tr>
<td>Senior Member</td>
<td>150</td>
<td>158</td>
<td>162</td>
<td>177</td>
<td>202</td>
<td>211</td>
<td>254</td>
<td>20.4%</td>
</tr>
<tr>
<td>Member</td>
<td>1196</td>
<td>1267</td>
<td>1549</td>
<td>1489</td>
<td>1761</td>
<td>1894</td>
<td>2078</td>
<td>9.7%</td>
</tr>
<tr>
<td>Associate member</td>
<td>102</td>
<td>145</td>
<td>106</td>
<td>89</td>
<td>93</td>
<td>131</td>
<td>91</td>
<td>(30.5%)</td>
</tr>
<tr>
<td>Affiliate</td>
<td>43</td>
<td>52</td>
<td>50</td>
<td>81</td>
<td>102</td>
<td>82</td>
<td>51</td>
<td>(37.8%)</td>
</tr>
<tr>
<td>Student member</td>
<td>1785</td>
<td>2060</td>
<td>2633</td>
<td>3172</td>
<td>3709</td>
<td>3072</td>
<td>3760</td>
<td>22.4%</td>
</tr>
<tr>
<td>Graduate SM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>648</td>
<td>800</td>
<td>23.5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3300</td>
<td>3716</td>
<td>4542</td>
<td>5039</td>
<td>5901</td>
<td>6078</td>
<td>7075</td>
<td>16.4%</td>
</tr>
</tbody>
</table>

The below table stands testimonial to one of our member benefit programs ‘SIMPLE’. Simple was aimed at promoting senior members at Bangalore level. It was conducted for senior members to network and recommend other deserving members. This was held at WTC Sheraton. It was a huge success with more than 60 members participating and submitted their forms. It was followed with interactions on how members could contribute of various fronts and more such events are planned for 2013.

To further our efforts in membership elevation, Section has successfully bid and won the opportunity to host the A&A (Admissions and Advancements) senior member panel to be hosted in Bangalore on March 30, 2013.

**IEEE Fellow**

IEEE Bangalore Section is extremely proud with elevation of Prof. Jayant R. Haritsa to prestigious IEEE Fellow. IEEE Fellow is a distinction reserved for select IEEE members whose extraordinary accomplishments in any of the IEEE fields of interest are deemed fitting of this prestigious grade elevation. Jayant R. Haritsa is a professor of database systems in the Supercomputer Education & Research Centre and the Department of Computer Science & Automation at the Indian Institute of Science, Bangalore. He received the BTech degree in Electronics and Communications Engineering from the Indian Institute of Technology (Madras), and the MS and PhD degrees in Computer Science from the University of Wisconsin (Madison). He is a Fellow of the Indian National Academy of Engineering (INAЕ), the National Academy of Sciences, India (NASI), and the Indian Academy of Sciences (IASc), and is also a Distinguished Scientist of ACM. He is a recipient of the Swarnajayanti Fellowship, the Vikram Sarabhai Research Award, the Shanti Swarup Bhatnagar Prize, and the Distinguished Alumnus Award of IIT Madras.
Membership grade elevation in 2012 to senior members

<table>
<thead>
<tr>
<th>Region 10</th>
<th>Last Name</th>
<th>First Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bangalore Section</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balakrishnan</td>
<td>Jaiganesh</td>
<td></td>
</tr>
<tr>
<td>Balaraman</td>
<td>Kannan</td>
<td></td>
</tr>
<tr>
<td>Bhatt</td>
<td>Rajen</td>
<td></td>
</tr>
<tr>
<td>Biradar</td>
<td>Rajashekhar</td>
<td></td>
</tr>
<tr>
<td>Boregowda</td>
<td>Lokesh</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>Palanivel</td>
<td></td>
</tr>
<tr>
<td>Divakaran</td>
<td>Jayakrishnan</td>
<td></td>
</tr>
<tr>
<td>Garg</td>
<td>Shashank</td>
<td></td>
</tr>
<tr>
<td>GL</td>
<td>Ganga Prasad</td>
<td></td>
</tr>
<tr>
<td>Goel</td>
<td>Nitin</td>
<td></td>
</tr>
<tr>
<td>Gope</td>
<td>Dipanjan</td>
<td></td>
</tr>
<tr>
<td>Gupta</td>
<td>Parul</td>
<td></td>
</tr>
<tr>
<td>Kamath</td>
<td>Anant</td>
<td></td>
</tr>
<tr>
<td>Kariwala</td>
<td>Vinay K.</td>
<td></td>
</tr>
<tr>
<td>Karmakar</td>
<td>Bhaskar</td>
<td></td>
</tr>
<tr>
<td>KN</td>
<td>Premnath</td>
<td></td>
</tr>
<tr>
<td>Kokku</td>
<td>Ravi</td>
<td></td>
</tr>
<tr>
<td>Kumar</td>
<td>Chandrakanta</td>
<td></td>
</tr>
<tr>
<td>Kumar Y B</td>
<td>Chethan</td>
<td></td>
</tr>
<tr>
<td>Madanapalli</td>
<td>Syam</td>
<td></td>
</tr>
<tr>
<td>Malik</td>
<td>Rahul</td>
<td></td>
</tr>
<tr>
<td>Manji</td>
<td>Kaustuvmani</td>
<td></td>
</tr>
<tr>
<td>Nagaraja</td>
<td>Ramappa</td>
<td></td>
</tr>
<tr>
<td>Padhi</td>
<td>Radhakant</td>
<td></td>
</tr>
<tr>
<td>Prabhakar</td>
<td>Anantha</td>
<td></td>
</tr>
<tr>
<td>Prakash</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>Radhakrishnan</td>
<td>Venkatesh Babu</td>
<td></td>
</tr>
<tr>
<td>Ranjan</td>
<td>Sohan</td>
<td></td>
</tr>
<tr>
<td>Seelamantula</td>
<td>Chandra Sekhar</td>
<td></td>
</tr>
<tr>
<td>Sharan</td>
<td>Dr. Preeta</td>
<td></td>
</tr>
<tr>
<td>Shenoy</td>
<td>Deepa</td>
<td></td>
</tr>
<tr>
<td>Sujatha</td>
<td>D N</td>
<td></td>
</tr>
<tr>
<td>Suratkal</td>
<td>Dayananda</td>
<td></td>
</tr>
<tr>
<td>Thiagarajan</td>
<td>Ganesan</td>
<td></td>
</tr>
<tr>
<td>Tiwari</td>
<td>Arvind</td>
<td></td>
</tr>
<tr>
<td>Valluru</td>
<td>Hanumantharao</td>
<td></td>
</tr>
<tr>
<td>Vittal K</td>
<td>Panduranga</td>
<td></td>
</tr>
</tbody>
</table>
STUDENT ACTIVITIES
The year 2012 had been quiet exciting for student activities. The high point was organizing the AISC 2012 by the section at REVA ITM.

Many new student branches were approved by IEEE. They are:
1) IEEE Student Branch, Sri Devi Institute of Engineering and technology, Tumkur
2) IEEE Student Branch, HKBK college of Engineering, Bangalore
3) IEEE Student Branch, Kuvempu University
4) IEEE Student Branch, Marata Mandal college of Engineering, Belgaum
5) IEEE Student Branch, SKSJ, Bangalore
6) IEEE Student Branch, RV College of Engineering, Bangalore

The BRV Varadan UG and PG paper presentation contest was organized by IEEE student branch of PES college of Engineering Mandya on October 31st.

The branch counselors meet of IEEE Bangalore Section was organized in April 2012. Eighty six members representing 24 colleges participated. The programme was organized in Institute of engineers.

Section Level Student Activities
- Organized Branch Counselors meet on 30th April at Institute of Engineers
- Organized All India Student Congress on 28th 29th and 30 Sept. 2012
- Organized BRV Varadan UG/PG paper presentation Contest at PES College of Engineering, Mandya
- UTL Technologies VTU Learning Center organized 3 programmes
  - Analog CMOS Design
  - Verilog Workshop

The following Colleges organized the Annual Tech-fests:
- SJCE Mysore organized "CYBERIA-12" in the month of March 2012
- BIT Bangalore organized their annual tech fest 30th March 2012
- Canara Engineering Mangalore,
- UVCE Bangalore,
- VVIEET Mysore,
- PES College of Engineering Mandya,
- SIT Tumkur, RNSIT Bangalore,
- KLE Belgaum,
- SVCE Bangalore,
- BEC Bagalkot,
- TOCE Bangalore,
- IISc Bangalore organized the annual techfests.
- Half a day session on INNOVATION was held in REVA ITM in the month of March 2012.

Number of Active Student Branches: 26

Number of Student Branches: 69
BRV VARDHAN’12
IEEE-PESCE Student Branch successfully conducted BRV VARDHAN’12, a national level paper presentation contest in association with IEEE-Bangalore section on 31st October at PESCE Mandya.

Publicity was given importance and various committees were formed. The website (http://ieeepesce.com/brv) was built by SB. The publicity of the event was held all over the India via Emails, Posters, FB, online partners etc.

Call for Papers: The last date given to send the extended abstract of the paper was 6th October. As a result of good publicity and network among the various colleges, event received papers from 58 teams, 55 UG and 3 PG teams respectively. The extended abstract received were sent to review panellist consisting of 14 eminent academicians. Out of 58 abstract 54 were selected to send their full paper. After receiving all the papers 28 papers were selected as best for the final round. Inauguration:

Chief guest Mr. Sudhindra Koushik, Practice Director at HCL inaugurated the event along with Dr. V. Sridhar, the branch mentor of our student branch and Principal of PESCE, and Mr.Sudhindra.K.R, Manager at Idea Cellular. Dr.K.A.Radakrishna Rao, Branch counsellor of IEEE-PESCE student branch and Mr Thejus.U the student chair were on the dais.

Paper presentation: There were two panels and judges for the panel-1 were Mr. Sudhindra Koushik, the practice director at HCL and D.R Umesh, Asst Professor CS&E department PESCE, Mandya. For the panel-2 judges were Mr.Sudhindra.K.R, Manager at Idea Cellular and V.Chetan Kumar, Asst Professor CS&E department PESCE, Mandya.

Prize Winners: Winners from UG section

- First prize: Rohit Mini and Rajat Guptha, VIT University, Vellore.
- Second prize: Sunil Kumar T, Jayanth Prasad D.K and Rathnakara S, SJCE, Mysore.
- Winners from PG section
- Consolation: Usham Dias and MilindRane, VIT, Pune.
All India Young Engineers Humanitarian Challenge 2012 (AIYEHUM 2012):

IEEE Bangalore Section in collaboration with IEEE EPICS (Engineering Projects for Community Service) announced annual Humanitarian Technology Challenge which invites students and graduates to apply science and technology for the benefit of mankind with focus on practical/on the ground / society implementations. The projects were funded under two categories -
1) Scale upto 75,000 INR – EPICS Category
2) Scale up to 10,000 INR – Prototype Category

Some highlights from AIYEHUM 2012 are:
- Received proposals from about 200 colleges across India including IITs, NITs and many reputed colleges across the country.
- 24 projects Shortlisted under Prototyping Category with funding of Rs.10,000/- Each & mentoring Support.
- 6 projects funded under EPICS support for 1500 USD & Mentoring support.
- About four projects in the process of filing Patents.

The final exhibition for AIYEHUM and EPICS was organized on 29th September, 2012 at REVA Institute of Technology and Management, Bangalore with Top 10 Prototypes and 6 EPICS projects being exhibited.

The jury for the final round consisted of
- Dr. T Srinivas, IISc, Bangalore
- Mr. Sudheendra Kaushik, Director-Innovations, HCL India.
- Dr. Preetha Sharan, Oxford College of Engg., Bangalore
- Prof. Chetan Balaji, CIT, Tumkur.
- Mr. Laksmanan B, Texas Instruments, Bangalore.

Prize Winners under AIYEHUM 2012:
1st prize – Virtually Writing Gloves, VIT University, Tamil Nadu
2nd prize – Moisture sensor based watering system, Shri Matha Vaishnodevi University, Jammu and Kashmir
3rd Prize – Tactograph, IIT, Madras
4th Consolation Prize – Talking Calculator for visually impaired people, Vasantadad Patil Institute of Technology, Pune

Projects funded under EPICS:
- Communicative Hand Glove For Deaf and Dumb, BVB CET, Hubli, Bangalore
- Smart Mirror, DHARMA Foundation, Delhi
- Real Time Sign Language Conversion To Audio and Text Form For the Hearing Impaired, RNSIT, Bangalore
- Indian Rural Cardiac Care: Exploring ICT For Cardiovascular Diseases Using Phonocardiography, REVA ITM, Bangalore
- Laptop Interfaced Multi-Purpose Probe, MSRIT, Bangalore
- Eye Gesture Controlled Semi Automatic Mobility Assist With Electro-Oculography Based Human Wheelchair Interface, RVCE, Bangalore
SIGHT - SPECIAL INTEREST GROUP ON HUMANITARIAN TECHNOLOGY.

Building on the IEEE theme of Advancing Technology for Humanity, the Special Interest Group on Humanitarian Technology was formed under IEEE to endeavor to promote activities which use sustainable technologies to benefit the most vulnerable sections of humanity. Special Interest Groups on Humanitarian Technology are being the IEEE entities targeted and dedicated towards humanitarian activities. They will serve the purpose of identification, categorization and inventory of all IEEE Humanitarian Activities.

**Objective of SIGHT**

- To promote the mission of IEEE regarding Humanitarian Activities, particularly,
- To bring together members / IEEE OU’s working in or wishing to work in humanitarian fields and to encourage and promote them in activities which use humanitarian technologies by giving them an opportunity for participation.
- To engage with NGOs, Civil Society Organizations, UN Organizations, Corporate and other similar bodies to synergize efforts in delivering useful and sustainable technologies in their operations.
- To work with other bodies in the Engineering Fraternity who have similar goals and help each other in delivering to the ideals and participate in joint activities like E4C.

From Bangalore Section a SIGHT group was formed in The Oxford College of Engg. Bangalore led by Ms. Preeta Sharan. The group consists of 10 volunteers all including the principal, HOD etc.

The group secured 5th rank on the humanitarian challenge award from IEEE R-10. The title of the project was “Wireless Head Mounted Mouse & Keyboard for Physically Disabled People”. One student member applied on Global Humanitarian Challenge and was granted 5000USD.
IEEE XTREME
IEEEXtreme 6.0 was held on October 20th and was led by Gowtham Prasad K N from Bangalore Section. Srikanta P and Dushyant Jadeja were two more core committee members from IEEE Bangalore Section. IEEXtreme was a huge success and broke already one another time.

Interesting thing to note is that team from Bangalore section stood no. 1 for India and we had three teams from Bangalore Section in India top 5:

<table>
<thead>
<tr>
<th>Global Rank</th>
<th>Team</th>
<th>College</th>
<th>R10 Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>91</td>
<td>KodeKallas</td>
<td>NIT K</td>
<td>25</td>
</tr>
<tr>
<td>99</td>
<td>DexDDDevil</td>
<td>NIT K</td>
<td>28</td>
</tr>
<tr>
<td>146</td>
<td>CodeMasters</td>
<td>BMSCE</td>
<td>35</td>
</tr>
</tbody>
</table>

Highlights of IEEXtreme 6.0

- Marketing & Participation
  - 1941 Teams registered - 28% YOY Growth with 95 % participation rate
  - 5100 Students from 60+ Countries, 613 proctors
  - 1931 Universities / SB with team
  - 13721 Likes on Facebook
  - Healthy new membership during the IEEXtreme time
  - 5 Volunteers, 7 IEEE Staff, 11 Judges
  - New Official IEEXtreme Video created

- Technical Infrastructure
  - New platform Interview Street introduced with better UI
  - Support for 4 more languages: C#, Python, Ruby and PHP
  - 6 db servers, 90 webservers, 120 code-checker servers, 2 mem-cache servers run on cloud
  - 150,095 total Code submissions = 5X load compared to last time

- Problems Quality and difficulty
  - 20 Questions released – Highest in the history of IEEXtreme
  - All Questions were solved but for the first time no single team could solve all problems raising the quality bar high

- Prizes and Recognition
  - 1st Prize : All Expense paid trip to IEEE Conference of team’s choice
  - 2nd and 3rd Prize : Surface RT or iPad
  - Digital + Print certificate and T-shirts to all participants

- Team and People
  - Two new volunteer positions created : Marketing Lead and Industry Lead
  - Good collaboration with Computer Society
  - Survey to gather feedback to improve IEEXtreme

- Financial Improvement
  - Drastically Reduced cost of the platform hosting by almost one third
  - Volunteer team helped get 5,000 USD from Intel Software
MGA ACHIEVEMENT AWARD 2012

It was an honor for IEEE Bangalore section to have Dr. Debarata Das, Professor, IIIT-B as a recipient of the prestigious 2012 MGA Achievement Award.

Dr. Debarata Das received his Ph.D. degree from the Indian Institute of Technology Kharagpur. At present he is serving as Professor and Hewlett Packard Chair at IIIT-Bangalore (IIIT-B). Before joining IIIT-B, he had served at G S Sanyal School of Telecommunication at IIT-Kharagpur and later at Kirana Networks in New Jersey, USA. At present he is Principal Investigator (PI) of Department of Electronics and Information Technology, Government of India Sponsored project on Green Broadband Wireless Network and Nokia sponsored project in the area of Mobile Computing. His areas of teaching interest are, Wireless Access Network, Mobile Computing with IMS and Internetworking. His main areas of research interest are Wireless Access Network's MAC, QoS, Power saving and IP Multimedia Subsystems. Dr. Das has more than 65 peer reviewed papers in different journals and International conferences. He and his wireless network team had contributed three ideas to IEEE 802.16m Broadband Wireless Standard. He is Chairman of IT-Service Management Forum India (itSMF), OCAC of Orissa Govt.; and a member of e-Governance committee under Govt. of Karnataka. He is Member Development Chair of IEEE Bangalore Section and Vice Chair of IEEE Computer Society Bangalore. He was General Chair of IEEE International Conference IMSAA and TPC Co Chair of IEEE CONECT2013. He was General Co Chair of IEEE India Industry Day 2011. He has been TPC member of number of international conferences and reviewers of IEEE Journals.

AFFINITY GROUP OF THE YEAR AWARD

IEEE Bangalore section is extremely proud of WIE (Women In Engineering) affinity group for winning the Affinity Group of the year award. Dr. P Deepa Shenoy, Chairman, The IEEE WIE Bangalore Section, received the award for her stupendous efforts to making WIE a vibrant community and scaling new heights. The IEEE WIE Bangalore Section also received a prize of $250USD. Dr PDS completed her B.E in Electrical Engineering from Bangalore University (1983), M.E Power Systems Bangalore University and PhD again from Bangalore University. She has over 27 years of teaching experience and has been serving as the Branch Counselor of IEEE UVCE over the past 5 years. She is currently the WIE chairperson, IEEE Bangalore Section and also a part of the International Committee of WIE. Her leadership has helped WIE Bangalore Section to be rated as the Best Affinity group for its activities in the year 2011. On her professional front, she has published 95 papers, 3 PhD awards and currently handles placements for UVCE as well.
BANGALORE SECTION PRESENCE IN REGION 10

It’s a true testimonial for a volunteer’s passion and determination towards IEEE and IEEE Bangalore Section. Section is extremely elated and proud with successful elevation of Mr. Ramakrishna Kappagantu, for winning the R10 Director Elections by a huge margin of around 1000 votes!

Ramakrishna Kappagantu has over 27 years of rich experience in Indian Power Sector viz. NTPC, POWERGRID & POSOCO. Presently he is serving as Additional General Manager in the Southern Regional Transmission System II of the Power Grid Corporation of India Limited. He contributed significantly in Power Sector in the areas of Southern Indian Grid Management, Network Operation and Maintenance, Real Time Dispatch, Commercial, Regulatory and SCADA at Power Grid Corporation of India Limited. Graduated in Electrical Engineering from National Institute of Technology, Jaipur, he completed Master of Technology in Automation & Control from Jawaharlal Nehru Technological University, Hyderabad, India. He possesses an Advance Diploma in Management and Human Resources. His Volunteer services & leadership to IEEE are certainly focused on providing opportunities/encouragement for members, students & young professionals to recognize/advance their technical/professional skills. He made it possible Signing MOU during 2008 Sections Congress for Sister Section Relationship with Princeton Central Jersey Section thus making Bangalore, one of the first Sections in R10 and India to do so. He steered Bangalore section to reach very high membership. He completely changed the landscape of PES Society of Bangalore in last 5 years and made it the most vibrant society of Bangalore Section and India Council

Gowtham Prasad K N from Bangalore Section has been appointed as R10 Electronics Communication Information Management Coordinator. His role involves carving out Communication strategy for Region 10. Professionally, he works as a Business Development Manager at Microsoft India. He is responsible for nurturing App Ecosystem in India for latest Microsoft technologies like Windows 8, Windows Phone 8, and Windows Azure etc. He also leads the Microsoft Startup Program –Bispark for India. Gowtham Prasad K N completed his B.E from SIT, Tumkur. Gowtham has been very active volunteer in IEEE right from his student days. He was founding member of SIT IEEE Student Branch and secured Best Student Branch Award in his tenure as Vice Chairman. He along with a great team revived GOLD in Bangalore and also organized R10 GOLD Congress in 2010. For his efforts and contributions, he was awarded ‘R10 GOLD Achievement award’ at R10 Meeting in Indonesia. He also introduced GINI to Bangalore Section which is one of the great student networks in IEEE today. He later joined IEEE Global Student Activities committee as IEEE Xtreme Lead, First Volunteer outside USA to lead the global competition. Under his leadership, IEEE Xtreme has grown 30% YOY and has reached more than 60 countries worldwide which makes it the only event of IEEE to have such a massive reach on a single day! He part of Bangalore Section EXECOM and was the organizing chair of All India Student Congress 2012 which was voted by students as one of the best AISC ever organized.

Section Awards
Bangalore Section in an endeavour to appreciate the efforts of its members, announced the following awards and felicitations.

- Lifetime felicitation
- Fellow felicitation
- Senior Members felicitation
- Outstanding volunteers awards
  - Best Branch counselor
  - Best student branch
  - Best student volunteer
  - Best Chapter
- Special volunteering teams recognition
- Publications felicitation
- BRV Vardhan awards
- Extreme awards
- Past Chair felicitation

**Section communication:**
Section keeps its members updated by regular email updates via listserv and has invested time and effort into maintaining.

- Facebook private group - https://www.facebook.com/groups/ieeebangalore/
- Twitter - https://twitter.com/ieeebangalore
- Website: http://bcp.ieeebangalore.org/
- Quarterly newsletter: http://bcp.ieeebangalore.org/ (newsletter tab)

**PROFESSIONAL DEVELOPMENTS**

Bangalore Section in an effort to provide professional members networking opportunities to explore careers in other countries organized networking session exclusively for section members with Contact Singapore. The event covered working and living in Singapore followed by networking session.

IEEE Bangalore Section is in the process of signing up MoU with two or more organizations to derive more member benefits by means of collaborating on educational, professional and technical fronts. Section is in advanced stages of talking to Swissnex, a Swiss Government sponsored organization for innovation in pure Science and NSRCEL at IIM-B for entrepreneurship support for new technologies.
IEEE BANGALORE SECTION AND TiE

MoU between TiE Bangalore Chapter (hereafter called only as TiE) and IEEE Bangalore section (hereafter called only as IEEE) was formulated for benefits for Bangalore section members. The details of the MoU are

Background:
IEEE Mission: To foster technological innovation and excellence for the benefit of humanity
TiE Mission: Fostering entrepreneurship globally

Given our respective missions (mentioned above), IEEE Bangalore section and TiE Bangalore has agreed on a MoU. This MoU is valid for one year from the date of signing and can be renewed with mutual consent thereafter.

The salient points of the MoU are as follows:
- TiE and IEEE communication points of contact will exchange information regarding each others’ activities. The same will be communicated to their respective communities
- TiE and IEEE members can attend each others’ events and avail membership discounts. For this the information regarding the participants should be provided beforehand
- TiE and IEEE will participate in each others’ events and can have a stall / speaker slot / stream depending on the type of event
- IEEE professionals will be considered to be a part of the TiE mentors group subject to fitment and approval by TiE board. The selected IEEE mentors need not necessarily be TiE members
- TiE will provide feedback on the effectiveness of IEEE mentors to the single point of contact appointed by IEEE.

As a first initiative, IEEE Bangalore section is partnering with TiE on their major event called the ‘Startup Festival of India’ which is being held in Bangalore during March 7th-10th. IEEE Bangalore is listed as an outreach partner and will be hosting panel discussions on three days of the event. More information about the event can be found on the webpage http://www.startupfestival.in/
SOCIETY AND CHAPTER REPORTS FOR 2012 REPORT
Round up of activities in 2012

This section outlines brief reports from various Bangalore Chapter of respective IEEE Societies.

IEEE Circuits and Systems Society
IEEE Communication Society
IEEE Components, Packaging, Manufacturing & Transportation Society
IEEE Computer Society
IEEE Consumer Electronics Society
IEEE Control Systems Society
IEEE Electron Devices Society/Solid-state Circuits Society
IEEE Engineering in Medicine & Biology Society
IEEE Power & Energy Society
IEEE Systems Man & Cybernetics Society
IEEE Signal Processing Society
IEEE MTT Society/AP Society
IEEE Photonics Society
IEEE Technology Management Council

IEEE Computational Intelligence Society Bangalore Chapter
IEEE CIS Bangalore chapter was successfully inaugurated on 17th August 2012. Prof. Amit Bhaya (Electrical Engg. Dept., Graduate School of Engineering of the Federal University of Rio de Janerio, Brazil) delivered the inaugural talk at IISC Bangalore.

The first EXECOM meeting was held on 4th of Oct 2012 at IISC Bangalore. CIS working committee for 2013 was decided as follows:
- Dr. M Arunkumar (Philips Research India) – Chapter Chair
- Dr. Rajen Bhat (BAE Systems) – Vice Chair
- Dr. Saroj Meher (Indian Statistical Institute) – Secretary

Hosting various technical events of interest to CIS community and fostering active participation and collaboration among CIS members was decided to be the focus for the chapter in 2013.

Regarding next steps, we have decided to organize a one-day workshop in Q1 of 2013 jointly with other local societies hosted by institutions around Bangalore.

IEEE Computer Society Bangalore Chapter
IEEE CS conducted various events ranging from tech talks to technical sponsorship.
- Distinguished Lecture-Implications of Storage Class Memories (SCMs) on Software and Hardware Architectures
- IEEE Distinguished Lecture by Dr. C. Mohan, IBM Almaden Research
- ExpertTalk-RegulatoryCompliantCloud Computing (RC3) Arshad Noor, CTO of StrongAuth Inc

Technical Co-Sponsorship

Strategic Focus Areas for 2013
- Offline Mentorship for programming contests
- Information Security
- IPv6
- Social Networks
- Mobile & Cloud Computing areas
- Faculty Development Program (FDP)
- e-Education (Technology For Education)

IEEE EMC Bangalore-Chennai Chapter
Technical half day seminar on Understanding EMC Design and Test Challenges Posed by Radiation and Emerging Automotive EMC Test Requirements was held in Chennai jointly.

IEEE Consumer Electronics Bangalore Chapter
The IEEE Consumer Electronics Society, Bangalore Chapter had a year of value added activities in 2012 which it’s second year. A number of workshops were held and crucial relationships established between industry and academia. The activities were conducted targeting the professional and student communities in and around Bangalore.

- Innovation workshops were held for college students at various colleges.
- Innovation workshops were held for Professionals which was very well received.
- After a successful first graphics workshop, a second graphic workshop was held for industry professionals with very good participation.
- Sudeendra Koushik presided over the annual technical symposium Kagada at UVCE on Nov 2012
- Couple of technical talks was also held – conducted by Industry professionals.
- Our chapter also encouraged student innovation by sponsoring two awards – Innovative student project award and Innovative student chapter award.
- Our chapter secretary Sudeendra Koushik delivered the Keynote on Innovation at the All India Student congress held at RITM Bangalore. The best student chapter award was also given on this occasion
- A meeting with academia and industry was organized which was very well received. Actions from this workshop is being used for 2013 planning
- The Execom of CE met regularly to discuss, plan and manage the chapter activities

Technical Activities Summary
1. Graphics workshop (GFX 2012)
The Advanced Graphics workshop for Computational/Graphics professionals working on Android and other Operating systems was held in 2012, continuing from GFX 2011.
The workshop covered Graphics theory and implementations, and specification aspects, apart from hands-on labs which were implemented in the online labs, by all the participants. The participants were able to immediately appreciate the API implementation, the parameters, and the syntax of the various APIs, by actually implementing and debugging various problems. Overall 5 labs were implemented, debugged and completed by the participants, and more than 10 pre-built labs were referred to. The workshop was coordinated and conducted by Prabindh Sundareson, IEEE CE Chapter. A breakdown of the Industry segment of the participants based on post-workshop survey is shown in image on the previous page.

2. Innovation workshop for professionals
The unique workshop on Innovation was held at Institute of Engineers on July 28, under IEEE Consumer Electronics Chapter. This workshop was conducted by Sudeendra Koushik, Secretary of CE Bangalore Chapter. There was a tremendous response for the pre-registration itself. The workshop was attended by very well attended by professionals and including academia. The aim of the workshop was to create a confidence in the professionals and others alike about Innovation capabilities. The report can be seen here.

The workshop was attended by professionals from Schneider, Pace, Philips, IBM, Motorola, HP, Bosch, academia etc.

· The summary of the feedback from participants is below:
  - Trainer: 4.24 out of 5
  - Content: 4.4 out of 5
  - The workshop was possible with the able support of Kousik Sankar, Arun DN, Bhaskar and Prajit. Kousik Sankar was present through the session while Arun and Bhaskar took turns to support the workshop.

3. Student Innovation Project Day with winner and runner awards at VVIET Mysore
- The IEEE student Branch of Vidyavikas Institute of Engineering & Tech, Mysore celebrated the IEEE day on the 3rd Nov 2012. On this occasion Most innovative student project contest for displaying live projects was organized.
- The First Place was won by the Electrical and Electronics students for the “Health Monitoring System” and the second place was won by Electronics and Communication engineering students of VVIET for “Automatic Electronic Baby Cradle”.
- A detailed report can be seen here from the college

4. Innovation workshop at Bagalkot.
- Organized by BEC, Bagalkot Engineering college this workshop was conducted on the first day of the two day event. The feedback from the students was excellent and very well appreciated.
- Feedback from the college – Hi Sir..Your Talk on Innovation was extremely superb. You have Redirected our minds towards the Innovative thinking...
  If Possible Please Visit Once again...
5. Industry Academia meet at Bangalore
   • The key representatives from 5 colleges and CE Chapter execom met at Bangalore, courtesy UVCE, and discussed various options of helping student and industry in effective ways.
   • Several points were discussed in very engaging session and action points were concluded upon
   • The action points are being followed up and used as a basis for 2013 planning for the chapter’s student activities

6. Sensors and systems – a Tech talk at Aptina, Bangalore
IEEE Consumer Electronics Bangalore Chapter’s, Technical Talk on Image Sensor was held at Aptina India Ltd, on Dec 12, 2012. This talk was conducted by Dr. David Burrows, Vice President of Euro India R&D Design Center of Aptina Imaging Ltd. Imaging Professionals from leading companies in Bangalore and Researchers from Academia attended the talk. Speaker covered the history and the basics of Image sensor including the complexities of the design involved. He also covered some of the trends in imaging and the processing requirement to meet those challenges.

2013 Roadmap: The IEEE Consumer Electronics society will further the areas of CE in 2012 to reach out to more collaboration between industry and students. Indian industry often complains about the students being not ready for the industry while the colleges struggle with the fact that Industry doesn’t support them in preparing the students. We have started working with the academia and industry to bridge this gap. So focus will be on industry-academia collaboration, Increase Innovation training for students & professionals and students and lay the foundation to bring an international conference to Bangalore in 2014. Some of the actions are stated below

   o Career oriented workshop to be conducted in February – led by Prabhu
   o Faculty training to be held in January – led by Sudeendra
   o Student interactivity sessions to be held – to improve technical questioning ability led by Kousik
   o Student project ideas and mentors to be started – led by Vijay
   o Innovation awards – students, projects – led by Sudeendra

IEEE Geosciences and Remote Sensing Society Bangalore Chapter
IEEE Bangalore Section Geosciences and Remote Sensing Society Chapter (IEEEBS-GRSSC) has been approved recently. On 14th January 2013, a letter confirming the approval was received, and the effective date of this new chapter formation was 24 December 2012. In the month of March 2013, a formal inauguration of this Chapter would be held. In Bangalore, India, researchers, technologists and managers—from the institutions like Indian Space Research Organization (ISRO), Regional Remote Sensing Service Centre (RRSC), Indian Institute of Science (IISc), Indian Statistical Institute (ISI)—and many others are dealing with research related to remote sensing technologies, remote sensing applications, satellite remote sensing data processing and analysis, and geographical information science. This IEEE Bangalore Section GRSS Chapter (IEEEBS-GRSSC) would emphasize on bringing like-minded members of IEEE, who have interest in the research areas related to remote sensing and geosciences, less than one umbrella to deal with the activities that include:
   • To discuss the research activities related to remote sensing and geosciences to explore potential cross fertilization by organizing meetings, conferences, seminars and courses under IEEE-BSGRSSC,
• To arrange lectures time to time by IEEE GRSS Distinguished Lecturers,
• To share the research results that appeared in Remote Sensing Journals among members and attract more IEEE members to join GRSS,
• To identify and encourage qualified IEEE GRSS members belonging to IEEE Bangalore section to have elevation in their membership grades,
• To help academia in India in designing course curricula on remote sensing and geosciences,
• To report annually the successes and challenges of the IEEE-BSGRSSC to the society and to IEEE GRS-Newsletter,
• To help young researchers and PhD scholars, dealing with research related to remote sensing and geosciences in publishing their research results in IEEE GRSS flagship journals. Those IEEE Bangalore Section members, who have interest in participating in the above activities,

Chair for 2013: B. S. Daya Sagar of Indian Statistical Institute at bsdsagar@isibang.ac.in.

IEEE Signal Processing Society Bangalore Chapter

The following activities were organized by the Bangalore Chapter during 2012.

• Short term course on SPARSE SIGNAL PROCESSING, organized by IEEE Signal Processing Society, Bangalore Chapter and the Department of ECE, Indian Institute of Science Bangalore, during the period 13 -17 February, 2012. The course was delivered by Dr. Saikat Chatterjee, KTH-Royal Institute of Technology, Stockholm, Sweden. Over 100 students and engineers participated in this short term course. Course website: http://sites.ieee.org/bangalore-sps/2011/12/14/ssp2012/
• Technical sponsorship of JEDI Project Challenge. This event was organized by Limberlink Technologies and members of the Chapter were part of the Jury to select the best final year UG projects in the fields of Electronics and Computer Science. Website: http://jedi.in/challenge/
• Technical co-sponsorship and TPC activities: SPCOM 2012. The Execom members participated on the TPC of SPCOM 2012, and greatly helped in the organisation of the conference, both technically (reviewing papers) as well as with arranging tutorials, finances, sponsorships, etc. Website: http://www.ece.iisc.ernet.in/~spcom2012/
• 8 talks by distinguished speakers were organised which included SPS Distinguished Lecturers. Website:http://sites.ieee.org/bangalore-sps/category/invited-talks/
• Awarded travel grant to 1 student to partially support expenses in attending a premier IEEE international conference, ICIP.
• Chair: Dr. K.V.S Hari, IISc and focus area is strengthening technical activities.

IEEE Communications Society Bangalore Chapter

Talks (DLTs)

• Koichi Asatani, IEEE Fellow, Kogakuin univ., Next Gen Networks, 30 Jan 2012.
• Narayan Mandyam, Rutgers Univ, Network Coding as a Dynamical System, 21 Sep 2012
• Xavier Fernando, Ryerson University, Toronto, Radio over the fiber for wireless comm, 17 July 2012

Tutorials/Symposia/Sponsorship/etc

• IEEE-Standards Association meeting at L&T Infotech, 8 March 2012; Mary Lynne Nielsen, Director, Corporate Programs, IEEE Standards Association
• Information Theory workshop, 7 Sep 2012; IISc faculty; 100 participants;
• SPCOM 2012: 22-25 July 2012
• Supported Workshops: IISc, SVCE, TOCE, etc

Dr. T. Srinivas, IISc has been elected as Chair for 2013 and the focus for 2013 will be Industry relations and Comsoc Student Chapters.

IEEE Photonics Society Bangalore Chapter

Major Events

• International Conference on Optical Engineering, ICOE 2012, conducted on 26-28 July 2012 with the financial support of VTU, Belgaum;
• About 200 participants; 10 invited talks, two tutorials, 66 papers, 10 experts from abroad
• Prominent participants: Prof. Shevgaonkar, Director IITD, Prof. B P Pal, Vice-president—IEEE photonics Pacific, Prof. N Goto, Toyohashi Univ of Technology, Japan, Prof Ajoy Ghatak, IITD etc
• Technical Support: IEEE Photonics Society HQ, IEEE Blr section; Papers appear in IEEE Explore

Talks/Workshops/etc

• Simple Talks: 16;
• Workshop: Photonics Based Organic Materials, 12 Nov 2012, IISc; Mitsuyoshi Onoda, University of Hyogo; Shuzi Hayase, Kyushu Inst of Tech
• ICEP-IAAC2012, Tokyo, Japan (19 April 2012) (T Srinvas, IISc, represented India)
• Photonics 2012, IIT Chennai, 9-12 Dec 2012
• Indo-Taiwan Workshop on Advances in Photonics & Optical Materials (9 Feb 2012); SSN College, Chennai
• Sri Venkateswara college of Engg; half a day workshop on mobile and optical communications on 20th Oct 2012
• The Oxford college of Engg; Workshop on Optical sensors, systems and applications (3 Nov 2012)
• Helped forming IEEE Photonics society Hyderabad chapter; IEEE Photonics India Council Chapter in the making
• Co-operation with SPIE, OSA, OSI, etc

Chair for 2013: Prof. M V Satyanarayana, MCE Hassan, continues

Main Objective for 2013: membership development

IEEE Power & Energy Society Bangalore chapter

PES has been actively involved in various programs under the leadership of the chairman Dr. R. Nagaraja, MD, PRDC Pvt Ltd with the support of the Execom. The PES Bangalore chapter has a total membership of 136 as on date. The PES chapter has been successful in receiving the HPCP award for the year 2011.

The programs had been planned such that they would enhance the technical knowledge and create awareness. The programs have been beneficial for the people from different backgrounds – Utilities, Industries, Regulators, Faculty from Engineering Colleges, Research Scholars and School Children.

Major Workshops:
1. PRDC-VTU Research Centre and the EEE Department, CMR Institute of Technology jointly organized five day national workshop on “Power System Stability and Control” with technical sponsors IEEE PES, Bangalore Chapter at CMR Institute of Technology from February 27th to March 02nd.

2. In April, AGM was conducted along with the HOD interactive session.

3. In June, The EEE Department, R.V. College of Engineering (RVCE) in association with Power Research & Development Consultants Pvt. Ltd (PRDC)., and IEEE PES Bangalore chapter had organized three day workshop on "Modeling, Simulation and Analysis of Modern Power System" from 27th June to 29th June 2012.

4. In July, Poster Making Competition on "Renewable Energy & Smart Home" for high school students was organized in which 21 schools participated. About 8 students were awarded amongst 41.

5. In August, A press meet was arranged for the Concept Note Release for the Workshop on Advances in distributed generation.

2 day workshop on "Advances in Distributed Generation: Microgrid, Net metering & Renewable Integration" was organized. The program was well attended with about 172 participants. The felicitation of Outstanding Engineer Award -2012 to Sri K. Ramakrishna was also conducted.
6. Technical Talks arranged at various institutions:

IEEE Electron Device Society – Solid States Circuits Society Bangalore Chapter

Members Summary:

<table>
<thead>
<tr>
<th></th>
<th>SSCS</th>
<th>EDS</th>
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<td>Student/ Associate Members</td>
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</tr>
<tr>
<td>Fellow</td>
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</tr>
<tr>
<td>Total</td>
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<td>68</td>
</tr>
</tbody>
</table>

Summary of activities for the year 2012

The following colloquium was held at IISc. It was a two day seminar with eminent speakers from all over the world giving lectures/tutorials. The following talks were held, mostly at IISc. These talks were typically attended by students, IEEE Bangalore members and industry people. The average strength for a talk was around 20 people.

- IEEE EDS/SSCS Talk: By IBM Distinguished Engineer, John Barth – A 45nm SOI Embedded DRAM Macro for POWER7TM 32MB On-Chip L3 Cache
- EDS/SSCS Seminar: Thin-Film Transistors: Versatile Building Blocks
- Clocking techniques for high performance ASICs and Microprocessors: Talk by Natesan Venkateswaran from IBM Fishkill
- EDS/SSCS Seminar: Nov 8 2012: Semiconductor Technology: Trends, Challenges & Opportunities
- Research Opportunities in VLSI in India
- Talk by Chandu Visweswariah Distinguished Engineer, IBM on Monday 1st Oct 2012
- Dark Secrets of RF Design by Prof. Thomas Lee
- Two ISSCC 2012 paper talks from Rambus, May 16 2012
- SSCS Minicolloquium: July 27-28 2012

More details can be found at our website which is kept up to date. http://sscs-eds.ieeebangalore.org/events/

IEEE Publications in 2012
**Amrutur Bharadwaj:**

**Janakiraman V:**
doi: 10.1109/TCAD.2012.2207955

**GOLD Affinity Group**
IEEE GOLD Bangalore had an eventful year with lots of new activities and increased involvement from the GOLD members.
Following are the highlights:
1. IEEE GOLD Bangalore partners with Bangalore Start Weekend 2012 to encourage entrepreneurship and innovation among the members. Website link http://bangalore.startupweekend.org/
2. Talk on “Excitement of research & Global Technology Outlook 2012” by Dr. C.Mohan (http://gold.ieeebangalore.org/2012/01/talk-on-excitement-of-research-global-technology-outlook-2012-by-dr-c-mohan/) at IIIT- Bangalore
3. Successfully completed two TISP workshops at SIT, Tumkur and UVCE, Bangalore (details below).
4. GOLD Members participated in South Asia GOLD meet organized by IEEE GOLD Kerala Section.
5. Successfully co-organized All India Student Congress 2012.

**TISP Workshop by IEEE GOLD at UVCE (Teacher in Service Program)**
IEEE UVCE in association with IEEE GOLD Bangalore Section organized yet another Teacher In Service Program in UVCE on the 24th of November 2012. The concept and implementation of this idea called TISP has grown tremendously since its introduction by IEEE GOLD. A Teacher is no doubt a very important part of the society and this program is leaving no stone unturned in helping turn the teacher into a catalyst for the growth of science education.
The teachers at the program were from schools that were associated with an NGO, SMILE,
a foundation which works on education, healthcare etc for underprivileged children. The program started with Dr P Deepa Shenoy, Branch Counselor, WIE Chairperson Bangalore Section and Branch Counselor IEEE UVCE sharing her thought on the importance of teachers and the unique program i.e. TISP. She stressed on example based learning while teaching subjects.

Teachers were split into teams and discussions on teaching methodologies were discussed as Teachers came forward and expressed their views on practical learning and how it was lost in their curricula. They were given the concepts of wind energy and began to design their very own wind mill with very basic stationery. The groups came up with the designs of their own and it is notable to say that all their models were apt and working. Then they broke up for lunch served amidst the greenery of the rock garden of UVCE. The post lunch session had yet another challenging activity for the teachers. They were asked to build a circuit so that the Morse code can be encoded by one person and sent to another person who was supposed to decode the message sent. This activity kept the teachers busy arranging the circuit and trying out various messages’ encoding and decoding using Morse code. Many found the activity very interesting as it was something which they would not have had done or heard before. All the groups were successful in this activity. Then the valedictory function was conducted which was presided by Dr. Venugopal K R, principal UVCE. The teachers were all ears to the words of experience and guidance by principal sir. On the whole, the event was appreciated not only by the teachers who attended, but also other people who came to know about it. This initiative by the IEEE GOLD Bangalore section turned out to be a success and teachers were looking forward to attend many more events and training programs like this.

Taking the momentum forward, IEEE SIT WIE organized a similar event. This event started off with inauguration by Mr. Eshwaraih, DDPI (development), Principal, District Institute of Education and Training (DIET), Tumkur, accompanied by Mr. Ratnaiah, Block education Officer, and Tumkur. Dr. K V Suresh, Branch counselor IEEE-SIT presided over this event. Around 40 teachers actively participated in this event. All these teachers explored the child inside themselves and enjoyed every moment of this event. The second session was about electronic telegraphs, coding and de-coding of electronic messages and also to prove ohm’s law using simple low cost materials.
Women in Engineering (WIE) Affinity Group

WIE Bangalore Section, an Affinity Group of IEEE Bangalore Section was started in December 2008 with the aim of involving women engineers in a variety of Technical and Nontechnical activities thus providing them with a platform to increase their confidence. Through its activities, the affinity group has been promoting, nurturing and inspiring women engineers across the section by organizing exclusive activities for them and providing them ample opportunities.

International Events

- For the Activities of WIE Bangalore Section Affinity Group through the year 2011, the 2011 Women in Engineering Affinity Group of the year Award was presented to the Affinity Group. This award was won on an International Level in competition with WIE Chapters all around the world.
- Region 10 WIE Conference was held at Sri Vishnu College of Engineering, Bhimavaram, AP. On the occasion, Dr P Deepa Shenoy gave a lecture on improving participation of girl students in research at the Undergraduate level.
- Dr P Deepa Shenoy and Ms Chetana Hegde took part in a panel discussion on “Balancing Professional and Personal Life”
- WIE National Conference was held at Dadi Institute of Engineering and Technology, Vishakapatnam on 24th Sept 2012. Dr Deepa Shenoy gave a talk on activities of IEEE UVCE Student Branch.

Section Activities

- WIE Affinity Group was formally inaugurated on 10th February 2012 in MS Ramaiah Institute of Technology. An android workshop was organized as an introductory activity of WIE MSRIT following the inauguration.
- Biotechnology Carnival was organized by WIE Affinity Group of Oxford College of Engineering on the 16th and 17th of February 2012.
- WIE Bangalore Section in association with IEEE Student Branch, Canara Engineering College conducted a National Level Technical UG and PG Paper Presentation Competition on “Seeking a Sustainable Future” along with their Technical Fest EMERGIA 2012 on 28th April 2012.
- As part of Cyberia, the technical fest of IEEE SJCE, a Panel discussion on “Preparing Students for Corporate Life” was held on 17th March 2012 wherein Dr P Deepa Shenoy, YVS Lakshmi and Dr Naina Jain participated and shared their opinions on the same.
- IEEE WIE SIT organized Teacher in Service Program (TISP) along with the help of IEEE GOLD. The event saw participation of over 50 teachers and pictures of the event was featured on the home page of IEEE website.
- Women Empowered – WIE Summit was held at Impetus 2012, the Annual Tech Fest of UVCE. Team building events like skits were included on the theme of Women Engineers role in the Society.
- INNOWIETION, an exclusive WIE event by North Karnataka Hub WIE Affinity Group was organized by Basaveshwar Engineering College on 31st March and 1st April.
- WIE IEEE UVCE organized section level talks on Image Processing and Biometrics along with Computer Networks in the month of May in order to help students involved in research.
- A Talk on InMemory Data Processing and Management was held by Prof PCP Bhatt Retired Professor IITD/IITB at UVCE.
- WIE Congress on Information Processing was held at BMSCE IEEE on 24th September 2012 which included talks on Information and Communication Technology (ICT) and Panel Discussions.
- Grace Hopper Celebration for Women in Computing India organized a talk on enhancing research and career interests of women in computing on the 27th September 2012 in UVCE.
- A Session on WIE and IEEE and their various benefits to the student community was organized at All India Student Congress 2012 at REVA ITM.
- Exclusive WIE paper presentation session at KAGADA 2012, Annual Technical Student Conference of IEEE UVCE on 2nd November. This was held to promote research and instill confidence among the women researchers.
- As part of the STAR program WIE IEEE UVCE along with the help of BMSCE IEEE organized an elocution competition for students of Mahila Mandali School, gave them tips as to how they could improve themselves and also awarded the two best speakers with a cash prize.
- WIEMINE (Motivating, Inspiring and Navigating Engineers towards Data Mining) was conducted by WIE IEEE UVCE. It was a two day event that included lectures on concepts of Data Mining, practical applications and the tools available for the same.
- WIE Affinity Groups were introduced alongside IEEE Student Chapters in RNSIT, NMIT this year and will soon be opened in other existing Student Branches as well.
- Under the STAR initiative, WIE BMSCE in association with Mahila Mandali School has organized a 16 week programme for personality development of school children. A variety of activities are conducted in the school on a weekly basis.