PART A - SECTION SUMMARY

A.1 Executive Summary

- **Formation of new chapter:** formation of **Signal Processing Chapter** has been approved.
- **Formation of India Council Chapter:** IEEE India Council on Electronic Design Automation Chapter has been formed.
- **IEEE Kolkata section received the outstanding section membership recruitment performance award.**
- **Prof. Debatosh Guha** has been conferred **IEEE Fellow.**
- **Prof. Debatosh Guha** has been appointed as an **Associate Editor of the IEEE Transactions on Antennas and Propagation.**
- **Prof. Debatosh Guha** has been awarded by **IETE** for one of their highest recognition of **"RAM LAL WADHWA AWARD"**.
- **IEEE-IAS Kolkata Chapter** once again bagged the prestigious **“Outstanding Small Chapter –Continuing Performance”** award for the year 2016.
- **Ms. Chandreyee Sarkar**, Institute of Radio Physics and Electronics, University of Calcutta, is a recipient of **INAE Engineering Excellence Award** 2016 in the category of Innovative Student Project at Masters level.
- **Convolution-2016** – a student programme was organized by the students of Electrical Engineering Department, JU. The Programme was sponsored by IAS, PES, CSS-IMS & DEIS Chapters.
- **DEIS Kolkata Chapter** has organized an **industrial visit** to High Voltage Equipment Manufacturer Factory, BMC Electroplast Pvt. Ltd. 130/22, B. S. Industrial Estate, Hanspukur, Bakhrabad Road, Kolkata.
- On April 8th, 2016 at DKS Hall, Desapriya Park, Kolkata, IEEE Kolkata Section and its Computer Chapter jointly celebrated the Golden Jubilee of Commissioning (2nd April, 1966) of **ISIJU-I Computer:** the first indigenous Second Generation Digital Computer designed and implemented jointly by Indian Statistical Institute and Jadavpur University.
- A Dinner meeting has been organized at Kolkata on Monday 12th of December 2016 to **felicitate** Dr. Ramakrishna Kappagantu R-10 director.
- In 2016 ComSoc Kolkata Chapter created a new **ComSoc MIST Student Branch** Chapter with 30 student members.
- **IEEE First International Conference on Control, Measurement & Instrumentation (CMI-2016)** has been organized by IEEE CSSIMS chapter in Jadavpur University, Kolkata India on January 08-10, 2016.
- **IEEE GRSS Kolkata Chapter** organized an **educational visit** to the Doppler Weather Radar of the Regional Meteorological Centre situated at the new Secretariat building, Kolkata on 29 November, 2016.
- **1st International Conference on VLSI Device, Circuit and Systems (VLSI-DCS 2016)** was technically cosponsored by IEEE SSSCS chapter. The conference was held on 19th and 20th October at Science city Auditorium of Kolkata.
- **Circuistic of Convolution 2016**, 20th February, 2016. This activity, organized by the Students of the Department of Electrical Engineering, Jadavpur University, Kolkata, India, in collaboration with DEIS Kolkata Chapter.
- **Felicitation program** of Prof. R.K.Mishra and Prof. Sanghamitra Bandyopadhyay was organized by IEEE Kolkata section on 5th September in Calcutta club.
A.2 Financial Report

Opening Balance: Rs. 35,01,955.32

Income: Rs. 28,78,170.00

Expenses: Rs. 29,89,509.60

Closing Balance: Rs. 33,90,615.72

A.3 List of Section Officer and Executive Committee Members

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
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<tbody>
<tr>
<td>Chandan K Sarkar</td>
<td>Chairman</td>
</tr>
<tr>
<td>Sujit K Biswas</td>
<td>Chairman-Elect</td>
</tr>
<tr>
<td>Kesab Bhattacharyya</td>
<td>Vice-Chairman</td>
</tr>
<tr>
<td>Sayan Chatterjee</td>
<td>Secretary</td>
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<tr>
<td>Suparna Kar Chowdhury</td>
<td>Treasurer</td>
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<tr>
<td>Rana Dattagupta</td>
<td>Member</td>
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<tr>
<td>Sarmistha Neogi</td>
<td>Member</td>
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<tr>
<td>Iti Saha Misra</td>
<td>Member</td>
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<tr>
<td>Sanjay Kar Chowdhury</td>
<td>Member</td>
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<td>Amitava Chatterjee</td>
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<td>Gargi Keeni</td>
<td>Member</td>
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<td>Saibal Chatterjee</td>
<td>Member</td>
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<td>Kausik Das Sarma</td>
<td>Member</td>
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<td>Jamuna K Sing</td>
<td>Member</td>
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<td>Debangshu Dey</td>
<td>Member</td>
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<td>Sawpndip De</td>
<td>Member</td>
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<tr>
<td>Rajarshi Gupta</td>
<td>Member</td>
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<tr>
<td>Poulomi Gupta</td>
<td>Member</td>
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<td>Immediate Past Chair</td>
<td>Debatosh Guha</td>
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<td>AP/MTTS Chapter Elected</td>
<td>Satyajit Chakraborti</td>
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<td>CAS Chapter Elected</td>
<td>Salil Kumar Sanyal</td>
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<td>Official</td>
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<td>CIS Chapter Elected</td>
<td>Ujjal Maulik</td>
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<tr>
<td>Computer Chapter Elected</td>
<td>Mita Nasipuri</td>
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<tr>
<td>COMSOC Chapter Elected</td>
<td>Iti Saha Misra</td>
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<td>DEIS Chapter Elected</td>
<td>Arijit Basu Roy</td>
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<td>EDS Chapter Elected</td>
<td>Atanu Kundu</td>
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<td>Photonics Chapter Elected</td>
<td>Nikhil Ranjan Das</td>
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<tr>
<td>YP Affinity Group Elected</td>
<td>Himadri Shekhar Dutta</td>
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<td>WIE Affinity Group Elected</td>
<td>Manidipa Roy</td>
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<tr>
<td>CSS-IMS joint chapter</td>
<td>Dipankar Sanyal</td>
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<tr>
<td>SIGHT</td>
<td>Jawad Y. Siddiqui</td>
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</table>
PART B - ORGANIZATIONAL ACTIVITIES

B.1 Membership Development Programs

Total Member: 3468

Effort in Membership Development:

- Recognizing efforts of members in rendering services as a dedicated volunteer, recruiting new members as well as retention of existing members by awarding citations & personalized plaques. This Year Kolkata Section has recognized the efforts made by its members by awarding personalized plaque.
  - The best volunteer award was given to Mr. Riddhi Ghosh, DEIS Chapter
  - IEEE Kolkata Section felicitated Prof. Debatosh Guha for being elected Fellow of IEEE.
- Membership drive was made at Techno India Institute of Technology, Rajarhat, by Dr. Debangshy Dey, SAC on 16th December, 2016. In that program more than 100 students and 5 faculty members were present.
- In Netaji Subhash Engineering College 12 Faculty members have taken their new membership. Presently, total number of IEEE professional member is about 22. Total No of IEEE Student Members is 64 with the formation of new student branch. Eight new student branch chapters have been formed.
- In Meghnad Saha Inst. Of Technology, ComSoc and PEs student branch chapter has been formed
- India Council on Electronic Design Automation Chapter has been formed
- In 2016, awards are given to three general members and three student members who renewed membership within 30th November. The awardees were selected through lucky draw. The winner of “Early Membership Renewal Award of IEEE Kolkata Section” are:

<table>
<thead>
<tr>
<th>Category</th>
<th>Sl. No.</th>
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<tr>
<td>Student member / Graduate</td>
<td>1.</td>
<td>Karuna Kiran</td>
<td>93736156</td>
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<tr>
<td>Graduate Student Member /</td>
<td>2.</td>
<td>Jeet Dutta</td>
<td>93919704</td>
</tr>
<tr>
<td>Associate Member /</td>
<td>3.</td>
<td>Rahul Kumar</td>
<td>93981464</td>
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<tr>
<td>Affiliate</td>
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<td></td>
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<tr>
<td>Member / Senior Member</td>
<td>1.</td>
<td>Swapan K. Ray</td>
<td>04454807</td>
</tr>
<tr>
<td>Member / Fellow /</td>
<td>2.</td>
<td>Sayantan Dhar</td>
<td>90484499</td>
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<tr>
<td>Life Member / Life</td>
<td>3.</td>
<td>Rajib K. Das</td>
<td>93242996</td>
</tr>
<tr>
<td>Senior Member / Life</td>
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<td></td>
<td></td>
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<tr>
<td>Life Member</td>
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</tr>
</tbody>
</table>
Evidence of retention of members:
- Each default member is contacted through email / mobile phone and persuaded to renew his / her membership.

B.2 Chapter Activities
Total Active Chapters: 13

AP/MTT

- Seminar and Workshop:
  - Activities began with a lecture meeting on 4th April 2016 organized by AP/MTT Chapter, Kolkata Section at Heritage Institute of Technology. Dr. Surendra Pal, Vice Chancellor, DIAT, Pune delivered the talk on “Indian Global Navigation Satellite System (GNSS) Paradigm”.
  - The 1st outreach program was organized by IEEE AP/MTT Chapter Kolkata Section in association with the Institute of Engineering and Management (IEM), Kolkata on 23rd April 2016, the title of which was “Spectrum”.
  - The 2nd lecture meeting was arranged by the chapter on 23rd May 2016 at the Institute of Radio Physics and Electronics, University of Calcutta. The lecture was delivered by Dr. Jayanta Sarma, Visiting Researcher, Dept. of Electronic and Electrical Engineering, the University of Sheffield, UK on “Plasmonic Materials and High Frequency/Optical Applications”.
  - Another lecture meeting was arranged by the chapter on 27th May 2016 at the Institute of Radio Physics and Electronics, University of Calcutta. It was delivered by Dr. Chandrakanta Kumar, Scientist, ISRO, Bangalore on “Spherical Phased Arrays - Challenges and Optimized Design for Spacecrafts”.
  - A lecture meeting organized by the chapter was held on 15th July 2016 at the Institute of Radio Physics and Electronics, University of Calcutta. It was delivered by Dr. Somak Bhattacharyya, IIIT, Allahabad, the title being “Studies on Ultra-thin Microwave Metamaterial Absorber for Multiband and Wideband Applications”.
  - A lecture meeting followed by a hands-on training cum workshop was arranged by the chapter on CST simulation tools on 12th Sep 2016. The topic of lecture was “Modeling of Antennas and Microwave Circuits with CST MW studio. It was arranged for students, young researchers and faculty members. The sessions were conducted by technical experts from CST group..

- DL Programme:
  - An IEEE APS Distinguished Lecture Program was organized by this Chapter, at the Indian Institute of Engineering Science and Technology, Shibpur on 16th Dec 2016.
The speaker Prof. Yahia M Antar, Department of ECE, Royal Military College, Canada delivered the DL talk on “A New Class of Printed Leaky Wave Antennas and Microwave Guiding Structures”.

- **Major Event**
  - The AP/MTT Kolkata Chapter also organized its flagship workshop cum conference **IAW 2016**. The 7th edition of Indian Antenna week 2016 was organized in association with IEEE AP-S Madras Chapter and Thiagarajar College of Engineering, Madurai during 6th - 10th June, 2016 at Hotel Heritage, Madurai, Tamilnadu, India. About 75 research papers were received, out of which 49 papers were accepted for oral and poster presentation. Total 137 participants were attended.

**CASS**

- **Technical Lecture:**
  - Improving Yield and Reliability of Chip Multiprocessors delivered by Mr. S. Kundu on 08 January 2016 in IT Dept. IIEST.
  - Synergy of IoT, Big Data and Cloud: A Smart City Perspective delivered by Mr. V. Roychoudhury on 08 January 2016 in IT Dept. IIEST Shibpur.
  - Design of FIR Filters delivered by Dr. S.K. Sanyal on 22 April 2016 in ECE Deptt. FIEM.
  - Implementation of Wavelet Based ECG Compression using Digital Signal Processor delivered by Mr. R. Chandwani on 21 June 2016 in ETCE Deptt. JU.
  - Design of PLL Based Frequency Synthesizer using 65 nm MOS Technology delivered by Mr. A. Pal on 21 June 2016 in ETCE Deptt. JU.
  - A novel technique on Wireless Charging of Electric Vehicle delivered by Dr. S. Halder on 24 June 2016 in EEE Deptt. PCMT.
  - Design of RFID based Electronic Voting Machine delivered by Mr. S. Dogra on 25 June 2016 in EEE Deptt. PCMT.
  - Designing Low Power Intelligent Chips in the face of Statistical Variations of Nanoscale Devices: The Neuromorphic Solution delivered by Dr. A. Basu on 08 July 2016 in ETCE Deptt. JU.
  - Signal Processing aspects of OFDM based next generation Broadband Wireless Communication System delivered by Mr. B. Bhattacharyya on 05 December 2016 by ETCE Deptt. JU.

The CAS Chapter extended collaborative hands to Department of Electrical & Electronics Engineering of Pailan College of Management & Technology in organizing the National Conference on “Computing, Electronics & Electrical Engineering – TECH MEET 2016” on June 24-25, 2016 as Technical Sponsor.
This meeting was held on Friday July 08, 2016 from 3 PM onwards at the Department of Electronics and Tele Communication Engineering, Jadavpur University, Kolkata – 700 032. The speaker of this DLP was Dr. Arindam Basu of School of Electrical and Electronics Engineering, Nanyang Technological University, Singapore.

**COMPUTER**

- **Pioneer activity**


- **Technical Lecture:**
  - An Overview of Quantum Information and Computation delivered by Dr. Goutam K. Paul, Indian Statistical Institute, Kolkata on 29th January, 2016
  - AWESOME: A Polystore Data Platform for Social Media Analytics delivered by Dr. Amarnath Gupta, Director, Advanced Query Processing lab, Science R&D Division, San Diego Supercomputing Center, University of California at San Diego, USA on 16th March, 2016
  - Security Issues in Internet of Things delivered by Dr. Biplab Sikdar, Associate Professor Department of ECE, National University of Singapore on 5th July, 2016
  - Design consideration for Intermittently Connected Sensor Networks delivered by Asis Nasipuri, Professor and Chair Electrical and Computer Engineering The University of North Carolina at Charlotte, USA on 12th July, 2016
  - Using semantic information to improve IR systems delivered by Prof. Paulo Quaresma, University of Evora, Portugal on 9th December, 2016
  - Some research interests at VISTA@UEVORA delivered by Prof. Teresa Gonçalves, University of Evora, Portugal on 9th December, 2016
  - Memristor
  - Prof. Indranil Sengupta CSE Department, IIT Kharagpur

**COMSOC**

- **DL Programme:**
  - Prof. Luiz Da Silva, Professor of Telecommunications Trinity College Dublin has delivered the DLT program on 20 June 2016 at KP Basu Memorial Hall, Jadavpur
University on the topic “Sharing Infrastructure and Spectrum: A Vision for the Future of Mobile Networks”.

- Prof. Anura P. Jayasumana, Professor, Electrical & Computer Engineering Department Colorado State University, USA delivered a lecture on Internet of Things: A Pervasive Technology for Innovation”. The event was organized by IEEE ComSoc Kolkata Chapter and and MSIT ComSoc Student Branch Chapter and ECE Dept. MSIT. on 29th September, Thursday, at 2.00 pm

➢ **Technical Lecture:**

- Dr. Shamik Sengupta, Assistant Professor in the Department of Computer Science and Engineering at University of Nevada, Reno (UNR) delivered a lecture on How to sustain in the emerging Cyberspace: A Game Theory Perspective in Dept of ETCE, JU at 3.00 pm on 8th January, 2016.
- Dr. Angshul Majumdar, Assistant Professor, Indraprastha Institute of Information Technology, Delhi delivered a lecture on Representation Learning a.k.a Deep Learning & Dictionary Learning in Dept of ETCE, JU at 3.00 pm on 18th January, 2016.
- Anindita Mondal, METCE, Jadavpur University delivered a lecture on Development of Sensor Network for Agricultural Application in Broadband Wireless Communication Lab, ETCE, JU on 24th June, 2016.
- Sudipta Basu, MTech, DMC, Jadavpur University delivered a lecture on FPGA Based Hardware Design for Adaptive Equalizer in Broadband Wireless Communication Lab, ETCE, JU on 24th June, 2016.
- Prof. Anura Joyasumana Professor of electrical and computer engineering at Colorado State University, Ft. Collins, USA delivered a lecture on Network Aware Nodes: A Localization-Free Self-Organization Approach for Internet of Things in Broadband Wireless Communication Lab, ETCE, JU on 29th September, 2016.
- IEEE Special Lecture series has been held on 15th Nov 2016, Tuesday, at the West Bengal University of Technology organized by IEEE ComSoC Chapter. There were total 4 series of lectures selected topics of Internet of things presented by 4 speakers from TCS, Kolkata Innovation LAB.

**ComSoc Representation of IEEE 5G Summiit at IIT Patna**

In order to engage industry members with high value and innovative technologies, IEEE Communication Society held a series of high impact one day Summits in emerging technology areas (e.g., SDN/NFV, 5G, IoT, Big Data, and Cybersecurity). The first 5G summit was held at Princeton University in May 2015 followed by two other summits in Toronto and Santa Clara. The IEEE Patna 5G Summit was the fourth one in the series and first one in India, and has held at IIT Patna on Tuesday on March 29, 2016. Prof. Iti Saha
Misra has highlighted the ComSoc activities for 5G initiative over the world. She is one the member of 5G Summit steering Committee.

**ComSoc Representation of IEEE 5G Summit In New Delhi**
The 27th GISFI Standardization Series Meeting (GSSM) Jointly with IEEE 5G Summit on the Theme: Smart City was held during December 2-3, 2016, Venue :IETE Delton Hall 2, Institutional Area, Lodhi Road, New Delhi, India. ComSoc Chairperson Prof. Iti Saha Misra has delivered an invited talk on the topic “Cognitive Radio: A prospect for 5G Communication”. The two days program was really a fruitful practice discussing on different aspects of 5G research and Indian Scenarios.

**International Conference : ComSoc Kolkata Chapter Technical Sponsorship**

- 3rd IEEE International Conference on Recent Advances in Information Technology (RAIT-2016) organized by The Department of Computer Science & Engineering of Indian School of Mines, Dhanbad during 03-05 March 2016.
- The 4th International Conference on Advanced Computing, Networking and Informatics is hosted at the Centre
- For Computer Vision and Pattern Recognition, NIT Rourkela, Odisha, India. For this event being hosted forth time, held 22-24 September, 2016, the theme is Computer Vision and Pattern Recognition. IEEE Communication Society Kolkata Chapter hosted a Contest Session for best communication related articles. First prize won by Ms. Anindiata Mondal for the paper 'Intelligent Building Control Solution using Wireless Sensor - Actuator Networking Framework' and the Second prize won by Ms. Sudipta Basu for the paper 'FPGA Based Equalizer Design using a Novel Adaptive Reward-Punishment VSSLMS Algorithm for Rayleigh Fading Channel'.

**4-day Workshop on Telecommunication and Future Technology (TFT-2016)**
A 4-day workshop was organized by IEEE ComSoc MSIT SBC in Association with IEEE ComSoc Kolkata Section and IEEE GRSS Kolkata Section during 27-30 July 2016. The very young and vibrant enthusiastic students of Meghnad Saha Institute of Technology (MSIT) Student Branch Chapter (SBC) who have become the ComSoc Students last year 2015, are the main driver for the program.

- **Out Reach Programs**
  - The first outreach program was held on April 23, 2016 jointly with IETE at Tripura State Centre. A halfday seminar was organized and Prof. Iti Saha Misra delivered an IEEE Technical Lecture on the topic “ Some Emerging Research Aspects on Wireless Communication”. There were 50 participants in the lecture.
- The Second outreach program was held on May 28, 2016 jointly with EE Department NIT Rourkela, Oddisa. Prof. Susmita Das the ComSoc execom member of Kolkata Chapter has organized a IEEE public lecture for the Master and PhD students. Prof. Iti Saha Misra delivered an IEEE Technical Lecture on the topic “Cognitive Radio Networks and its Application”.

- The third outreach program was held in Tripura University on 23 Nov 2016 at the Department of ECE for the students and faculties from IT, Computer science and ECE. Prof. Iti Saha Misra delivered technical talk and membership motivational talk for the gathering.

- **Formation of Student Chapter**
  - In the year Dec 2016 ComSoc Kolkata Chapter created a new ComSoc MIST Student Branch Chapter with 30 student members. This chapter has received a financial grant of amount 950 USD from IEEE HQ in 2016.

**CSS-IMS**

- **International Conference**

- **DL Programme:**

  - Professor Wukiang Yang, University of Manchester delivered a lecture on Non-ideal OPAMP circuit analysis on 11th January, 2016 in Jadavpur University, Kolkata.
  - Dr Octavian Postolache, Instituto de Telecomunicações, Universidade de Lisboa, Lisboa, Portugal delivered a lecture on Unobtrusive Smart Sensing and Pervasive Computing: Cardio Respiratory and Motor Activity Assessment on 27th August, 2016 in Meghnad Saha Auditorium, University of Calcutta, Kolkata, India under DL Program of Instrumentation & Measurement Society. USA
  - Dr Ajoy Kumar Roy, Director, Indian Institute of Engineering Science & Technology, Kolkata delivered a lecture on Early Diagnosis of Oral Cancer from Histopathological Images: A Computer Vision Theoretic Approach on 27th August, 2016 in Meghnad Saha Auditorium, University of Calcutta, Kolkata, India under DL Program of Instrumentation & Measurement Society. USA
Technical Lecture:

- Professor Wukiang Yang, University of Manchester delivered a lecture on Electrical Capacitance Tomography for Imaging Industrial processes in Department of Applied Physics, University of Calcutta, India. on 11th January, 2016.

- Dr Octavian Postolache, IEEE IMS Distinguished Lecturer delivered a lecture on “Unobtrusive Smart Sensing and Pervasive Computing for Healthcare: Cardio respiratory and Physical Rehabilitation Assessment” in Electrical Engineering Dept, NIT Meghalaya, Shillong, Meghalaya, India on 29th August, 2016.

- Dr Amitava Chatterjee (Section’s representative), Professor of EE, Jadavpur University, and Associate Editor, IEEE TIM and IEEE Sensors Journal delivered a lecture on “Instrumentation Systems for Hand Vein Based Biometrics using Thermal Imaging” in Electrical Engineering Dept, NIT Meghalaya, Shillong, Meghalaya, India on 29th August, 2016.

- Dr. Kaushik DasSharma (Chapter’s representative), Associate Professor, EE Section, Dept of Applied Physics, University of Calcutta delivered a lecture on “Nano-Bio Sensors for Cancer Sub-Group Detection from Gene Expression Data in Electrical Engineering Dept, NIT Meghalaya, Shillong, Meghalaya, India on 29th August, 2016.

- Dr Octavion Postolache, IEEE IMS Distinguished Lecturer delivered a lecture on “Unobtrusive Smart Sensing and Pervasive Computing for Healthcare: Cardio respiratory and Physical Rehabilitation Assessment” in Tata Consultancy Services, Kolkata, India on 31st August, 2016.


- Professor Subhas Mukhopadhyay, FIEEE, Macquarie University, Sydney, Australia delivered a lecture on WSN for Health and Home Management in Seminar Room (First Floor), Electrical Engineering Department, Jadavpur University on December 20, 2016.

- Prof. Janaka B. Ekanayake, FIEEE, Department of Electrical and Electronic Engineering Faculty of Engineering, University of Peradeniya, Sri Lanka delivered a lecture on SMART Metering with demand side management in Seminar Room (First Floor), of Applied Physics, University of Calcutta on December 22, 2016.

- Dr. Sakunthala Ekanayake, Department of Education, Faculty of Arts, University of Peradeniya, Sri Lanka delivered a lecture on Role of Science & Technology in Engineering Education in Seminar Room (First Floor), of Applied Physics, University of Calcutta on December 22, 2016.
Technical Co-Sponsored Conference/ events

- Department of Applied Physics, University of Calcutta organized 2016 2nd International Conference on Control, Instrumentation, Energy and Communication (CIEC16) during 28th January to 30th January, 2016 at Department of Applied Physics, University of Calcutta.
- The National Conference on Recent Advances on Science, Engineering and Management (RASEM-2016) was organized by Bengal Institute of Technology and Management, Santiniketan, West Bengal, India on February 20-21, 2016.
- Lecture Series on
  organized by Department of Applied Physics, University of Calcutta, India. on March-May 2016
- Workshop on MES’16(Microcontroller Based Embedded System organized by Techno India Salt Lake, Kolkata, India on Date: October 1-3, 2016,
- One Week Short Term course on “Sensor Network For IOT & Cloud Computing” has been organized by Dept of AEIE, techno India Salt Lake, Kolkata and CSS IMS Chapter Kolkata section on December 20-24, 2016.

CIS

Technical Lectures

- Dr. Indrajit Saha, NITTTR, Kolkata delivered a lecture on Evolutionary Computing for Optimization Problems at Murshidabad College of Engineering and Technology, Baharampore, West Bengal, India 16th January, 2016
- Prof. Ujjwal Maulik, Professor delivered a lecture on Department of Computer Science and Engineering, Jadavpur University, Kolkata on “Data Mining: Issues, Challenges and Applications” at Murshidabad College of Engineering and Technology, Baharampore, West Bengal, India on 1st April, 2016
- June 28: Mrs. Srinka Basu, Assistant Professor, Department of Engineering and Technological Studies, University of Kalyani, Kalyani delivered a lecture on Link Mining in Dynamic Social Networks at Indian Statistical Institute, Kolkata, West Bengal, India (Co-organized with ISI Kolkata). on 28th June, 2016
July 22: Dr. Hillol Kargupta, co-founder and President of Agnik and former Professor of University of Maryland Baltimore County, USA delivered a lecture on Distributed Data Analytics for Connected Cars and IoT: Journey through Academia and Industry at Indian Statistical Institute, Kolkata, West Bengal, India (Co-organized with ISI Kolkata) on 22nd July, 2016.

Dr. Anirban Mukhopadhyay, Associate Professor, Department of Computer Science and Engineering, University of Kalyani, delivered a lecture on Technical Document Writing using Latex at MCKV Institute of Engineering, Liluah, West Bengal, India (Co-organized with MCKV Institute of Engineering) on 24th September, 2016.

Dr. Sayan Bhattacharya, Institute of Mathematical Sciences, Chennai, India delivered a lecture on “Design of Dynamic Algorithms via Primal-Dual Method” at Indian Statistical Institute, Kolkata, India (Co-organized with ISI Kolkata) on 8th December, 2016.

Prof. Dipankar Dasgupta, Department of Computer Science, University of Memphis, USA delivered a lecture on “Adaptive Multi-Factor Authentication” at Jadavpur University, Kolkata, India on 8th December, 2016.

Prof. Mrinal K. Naskar, Department of Electronics and Telecommunication Engg., Jadavpur University, Kolkata on “Intelligent Digital Circuit Design and Description using Verilog” at University of Kalyani, Kalyani, India on 26th December, 2016.

DL Programme:

IEEE CIS Distinguished Lecture Program by Prof. Gary G. Yen, School of Electrical and Computer Engineering, Oklahoma State University, USA on “State-of-Art Evolutionary Algorithm for Many-Objective Optimization”.

Workshop Organized

IEEE CIS Kolkata Chapter, in collaboration with IEEE Kolkata Section and Indian Statistical Institute, Kolkata, organized a workshop on “Recent Advances in Computational Intelligence” on 22nd November 2016 at the Platinum Jubilee Auditorium of Indian Statistical Institute, Kolkata. The workshop featured two technical lectures and an IEEE CIS Distinguished Lecture as follows:

- First Lecture by Prof. Amitava Chatterjee, Department of Electrical Engineering, Jadavpur University, Kolkata on “Infrared Imaging of Hand Vein Pattern based Biometric Solution using Collaborative Representation Based Classification”.

- Second Lecture by Prof. C. A. Murthy, Machine Intelligence Unit, Indian Statistical Institute, Kolkata on “Set Estimation Technique for Face Recognition”.

Awards and Grants
IEEE Computational Intelligence Society was awarded a grant of USD 200 from IEEE for organizing membership promotion events and technical lectures. Two such events were organized, one at Jadavpur University on 22\textsuperscript{nd} December, 2016 and another in University of Kalyani on 26\textsuperscript{th} December, 2016. Prof. Dipankar Dasgupta, Department of Computer Science, University of Memphis, USA and Prof. Mrinal K. Naskar of Dept. of Electronics and Telecommunication Engineering, Jadavpur University delivered lectures in these two events, respectively.

**DEIS**

- **Student Activity**
  - Circuistic of Convolution 2016, 20\textsuperscript{th} February, 2016. This activity, organized by the Students of the Department of Electrical Engineering, Jadavpur University, Kolkata, India, in collaboration with DEIS Kolkata Chapter, was a competition where students from various institutions in groups took part in making circuit solutions related to practical engineering problems.

- **Technical Lecture**
  - Mr. Arijit Basu Ray Managing Director, Neo Tele-Tronix Pvt. Ltd.(NTPL) delivered a lecture on Electrical Insulation for High Voltage, an overview on 1\textsuperscript{st} March, 2016 in APC Roy Hall, Electrical Engineering Department, Netaji Subhash Engineering College.
  - Mr. Siddhartha Mitra Director, BMC Electroplast Pvt. Ltd. delivered a lecture on Electrical Insulation Engineering In Practice on 1\textsuperscript{st} March, 2016 in APC Roy Hall, Electrical Engineering Department, Netaji Subhash Engineering College.

- **Seminar Activity**
  - Two day Industry Institute Interaction Programme (IIIP) on ‘Condition Monitoring of Transformer / High Voltage Equipment’ was held at the Department of Electrical Engineering NERIST, Nirjuli, Arunachal Pradesh on 24\textsuperscript{th}-25\textsuperscript{th} Sep, 2016.

- **Distinguished Lecture Programme**
  - Prof. Cherney, an internationally acclaimed and renowned expert in the field of high voltage outdoor insulating materials, came to Jadavpur University to conduct the DLP in Seminar Room, Electrical Engineering Department Jadavpur University. The topic of the lecture is Tracking and Erosion Protection Mechanisms of Inorganic Fillers in Polymer Materials for Outdoor Insulation

- **Industry Visit**
• DEIS Kolkata Chapter has organized an industry visit to High Voltage Equipment Manufacturer Factory, BMC Electroplast Pvt. Ltd. 130/22, B. S. Industrial Estate, Hanspukur, Bakhrahat Road, Kolkata – 700 104 India on 13th December, 2016. The students were taken to BMC Electroplast Pvt. Ltd., where they were shown how epoxy cast instrument transformers are manufactured. Mr. Siddhartha Mitra, Director of BMC Electroplast Pvt. Ltd., explained to the students how different technologies are employed in moulding the epoxy resin and the pros and cons of each technology.

EDS

➢ DL Programme

• On February 22, 2016 Prof. Durga Madhava Misra has delivered a DL on Advantages High-K Material in Meghnad Saha Inst. Of Technology
• On April 20, 2016 Prof. C K Sarkar has delivered a DL on Optoelectronic Devices in Meghnad Saha Inst. Of Technology.
• On April 20, 2016 Prof. Subir K Sarkar has delivered a DL on Low Power VLSI Design in Meghnad Saha Inst. Of Technology.

➢ Mini-Colloquium (MQ) Program held:

<table>
<thead>
<tr>
<th>Date</th>
<th>Speakers</th>
<th>Topic</th>
<th>No. of attendees</th>
<th>Place</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 22, 2016</td>
<td>Prof. G. N. Dash</td>
<td>CMOS Scaling issues and Tunneling Graphene FET</td>
<td>43</td>
<td>Silicon Institute Of Technology, Bhubneshwar</td>
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<tr>
<td></td>
<td>Prof. C K Sarkar</td>
<td>GaN based Heterostructure Nano Transistor</td>
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<td></td>
<td>Prof. Samar K. Saha</td>
<td>Planar MOSFET Devices for Nanoscale CMOS Technology</td>
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<tr>
<td></td>
<td>Prof. Ajit Kumar Panda</td>
<td>Beyond CMOS, HEMT is a Prospective Device</td>
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</tbody>
</table>

➢ Technical Sponsorship

• International conference on Micro-Electronics and Telecommunication Engineering on September 22 & 23, 2016 in SRM University, NCR Campus, Ghaziabad.


• 1st International Conference VLSI DCS 2016 on October 19-20, 2016 in Meghnad Saha Institute of Technology, Kolkata.


• 1st International Conference on Nanocomputing and Biotechnology (NanoBioCon 2016) on October 3-4, 2016 Science City Auditorium, Kolkata.

• 5th International Conference on Computing, Communication and Sensor Network (CCSN 2016) on December 24-25, 2016 Cruise Ship (MV Paramhansa)

• 1st IEEE MSIT Student Paper Contest 2016 on May 23, 2016 Meghnad Saha Institute of Technology, Kolkata

• Poster Presentation For Research Scholars along with students on February 22, 2016 in Silicon Institute of Technology, Bhubneshwar.

➢ Seminars/ One-day Lecture Programs

• On August 07, 2015, Prof. Santanu Mahapatra IISC Bangalore delivered a one day lecture on Tunnel FET in Meghnad Saha Institute of Technology, Kolkata.

• On February 15, 2016 Dr. Nabarun Bhattacharyya Associate Director, C-DAC delivered a lecture on Artificial Olfaction – The Emerging Frontier of Electronic Perception in Heritage Inst. Of Technology, Kolkata.

• On June 29, 2016 Prof. N. Mohan Kumar, Principal, SKP Institute of Technology delivered a lecture on GaN, InAs and GaSb based TeraHertz (THz) electronics for Bio-Medical Sensing & Imaging Applications in Dept. of ETCE, Jadavpur University.

• On August 17, 2016 Dr. Bijay Kumar Behera, Principal Scientist, (ICAR) Indian Council of Agricultural Research-Central Inland Fisheries Research Institute delivered a lecture on Applications of Electronics in Agriculture and Environmental Studies

• On September 01, 2016 J. K. MANDAL, Professor, Kalyani University delivered a lecture on Recent Developments in coding theory, data and network security in Kalyani Govt. Engg. College

➢ List of EDS-ETC Program:

<table>
<thead>
<tr>
<th>Date</th>
<th>Organized by</th>
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<tbody>
<tr>
<td>October 3, 2015 and</td>
<td>EDS HITK Student Branch Chapter jointly with IEEE EDS Kolkata Chapter, Kasba</td>
</tr>
<tr>
<td>October 5, 2015</td>
<td></td>
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<tr>
<td>Date</td>
<td>Event Description</td>
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<tr>
<td>January 18, 2016</td>
<td>EDS HITK Student Branch Chapter jointly with IEEE EDSKolkata Chapter, the NGO ‘Aalo’, and Cognizant Technology Solutions Outreach team</td>
</tr>
<tr>
<td>March 10, 2016</td>
<td>IEEE EDS Heritage Institute of Technology Student Branch Chapter and IEEE EDS Kolkata Chapter</td>
</tr>
<tr>
<td>March 26, 2016</td>
<td>EDS HITK Student Branch Chapter jointly with IEEE EDSKolkata Chapter and Cognizant Technology Solutions</td>
</tr>
</tbody>
</table>

**GRSS**

- **Technical Lectures**
  - Data Fusion for Computer Vision based Surveillance Applications delivered by Dr. Ananda S. Chowdhury on 17 August, 2016 at A. N. Daw Meeting Room, Institute of Radio Physics & Electronics, Kolkata.
  - Remote diagnosis and monitoring of Patients in Rural India: An IEEE SIGHT Initiative delivered by Dr. Jawad Y. Siddiqui on 2nd December, 2016 at A. N. Daw Meeting Room, Institute of Radio Physics & Electronics

- **Workshop organized**
  - A two day workshop on Remote Sensing of Earth and Atmosphere 2016 was organized by IEEE GRSS Kolkata Chapter in association with Centre for Soft Computing Research, Indian Statistical Institute to be held at RA Fisher Bhawan, ISI, Kolkata during March 1-2, 2016.
  - IEEE Comsoc Meghnad Saha Institute of Technology (MSIT) Student Branch Chapter (SBC) in association with IEEE GRSS Kolkata Section and IEEE ComSoc Kolkata Section to spread the knowledge about the advancement in modern telecommunication and upcoming future technologies. This initiative took shape in the form of a 4-day workshop organized by the members of the IEEE ComSoc MSIT SBC on the topic- ‘Telecommunication and Future Technology (TFT-2016)’. The venue was at Meghnad Saha Institute of Technology Kolkata.
A one day workshop was organized by IEEE GRSS Kolkata Chapter in association with Institute of Radio Physics & Electronics, University of Calcutta on 17 December, 2016 at Indismart Hotel, Salt Lake, Kolkata.

Conference sponsorship

ECE Department of Narula Institute of Technology has organized a National Conference on “Advanced Computation on Electronics and Remote Sensing” under TEQIP phase II, in Technical Collaboration with IEEE GRSS Kolkata Section on 19th and 20th August, 2016. NCACERS-16 aims to bring the engineers, academicians, scientists, industrial professionals and re-searchers from all over the world to present their original research work.

Outreach activity

IEEE GRSS Kolkata Chapter organized an educational visit to the Doppler Weather Radar of the Regional Meteorological Centre situated at the new Secretariat building, Kolkata on 29 November, 2016.

IA

Lecture Meeting

A lecture Meeting was organized on 28th January, 2016, at the Department of Electrical Engineering at Jadavpur University, Kolkata, on the topic “PWM Control of Inverter fed Drives”. The talk was delivered by Prof. K. Gopakumar, Professor and ex-Chairman, Electronic Systems Engineering, Indian Institute of Science, Bangalore, India.

A lecture Meeting was organized on 9th March, 2016, at the Department of Electrical Engineering at the Indian Institute of Engineering Science and Technology, Shibpur, on the topic “Modern Trends in Electrical Distribution – CESC Perspective.” The talk was delivered by Mr. Debasis Gupta, General Manager – Special Projects, at CESC Limited.

A lecture Meeting was organized on 6th August, 2016 at the Alumni Seminar Hall of the Indian Institute of Engineering Science and Technology, Shibpur, on the topic “Industry Applications – Thermal Power Sector.” The talk was delivered by Mr. Sabyasachi Roy, Consultant and Ex Chief-Manager at WEG Electric (India) Pvt. Ltd.

A lecture Meeting was organized on 13th August, 2016 at the Alumni Seminar Hall of the Indian Institute of Engineering Science and Technology, Shibpur, on the topic “Design and Selection of Motors – An Industrial Perspective.” The talk was presented by Mr. Sabyasachi Roy, Consultant and Ex Chief-Manager at WEG Electric (India) Pvt. Ltd.

A lecture Meeting was organized on 7th September, 2016 at the Department of Electrical Engineering at Indian Institute of Engineering Science and Technology, Shibpur, on the topic “Internet of Things & its Future in Technology.” The talk was
presented by Dr. Joyanta Kumar Roy, founder chairman and technical advisor, System Advance Technologies Pvt. Ltd.

- A lecture Meeting was organized on 16th November, 2016 at the Department of Electrical Engineering at Indian Institute of Engineering Science and Technology, Shibpur, in association with TEQIP, Phase-II, IIEST-Shibpur on the topic “GMD Impacts on Bulk Power Systems.” The talk was presented by Dr. Tapan K. Manna, Technical Consultant, Burns & McDonnell (HVDC and FACTS).

  ➢ **DI Programme**

- DL programme was organized on 2nd November, 2016 at the Department of Electrical Engineering at Indian Institute of Engineering Science and Technology, Shibpur, under the Distinguished Lecture Program Scheme of the IEEE.

- The first distinguished lecture was on the topic “Energy Efficiency in Electricity Supply Chain” by Mr. A. M. Narayanan, Head, Energy Efficiency Division, Energy Management Centre, Govt. of Kerala, INDIA.

- The second distinguished lecture of this program was on the topic “Solar Energy: Let us open the doors” by Prof. P. S. Chandramohanan Nair, Chairman of Educational Activities, IEEE Kerala Section, INDIA.

  ➢ **Award**

- IEEE-IAS Kolkata Chapter once again bagged the prestigious “Outstanding Small Chapter –Continuing Performance” award for the year 2016.

**PES**

- Membership drive workshops in Budge Budge Institute of Technology and Pailan College of Management and Technology.

- Sponsored programmes in IIT Patna.

- Sponsored a quizzing event during CONVOLUTION 2016.


  ➢ **Technical lecture**

- Lecture on "Recent Trend in Transformer Parameter Estimation" by Prof. S. Kar Chowdhury at Budg Budge Institute Of Technology

- Lecture on "Renewable Energy: Rooftop Solar PV Source and Net working" by MR. Rajib Kumar Das at Jadavpur University
• Lecture on "LOOKing into the Future Protection, Automation and Control System" by Dr. Ratan Das at Jadavpur University.

• Advanced Diagnostics of EHV Grade Power Transformers' on 22/09/2016 at department of Electrical Engineering, IIEST under TEQIP-II scheme.

➢ Technically Sponsored

• "National Conference on Computing & Electronics" held on 14th & 25th June 2016 at Hotel Hidusthan International by Pailan College of Management & Technology

• "ELECTRO-One Day Seminar cum Workshop" organized by Pailan College of Management & Technology on 27th August 2016

➢ DL Programme

• Arranged a DL programme on "Practical Power Flow Controller " by dr. Kalayan Sen.

Photonics

A. Photonics Society Distinguished Lecture: (20.08.2016)

“Semiconductor nanowires for optoelectronic and energy application”, Prof. H. Tan, Department of Electronic Materials Engineering Research, School of Physics and Engineering, The Australian National University Canberra, ACT 2601, Australia, at the Department of radio Physics and Electronics, University of Calcutta, India.

B. Outreach program: (February 02-03, 2016)

Seminar to celebrate closing of International Year of Light, organized at Rashtraguru Surendranath College Barrackpore (RSCB), W.B., India, by RSCB with IEEE Photonics Society Kolkata Chapter jointly with IEEE Calcutta University Student Branch.

a) Lectures:

• “Light in Quantum and Relativity aspects with significance of IYL" by Prof. A.K. Ghatak (Formerly Professor IIT Delhi)

• “Infrared Photon Detectors”, by Prof. N. R. Das, Chairman, IEEE PS Kolkata Chapter, & Dean, Engg. & Technology, Head, Radio Physics and Electronics, University of Calcutta

• “From Fiber Optics to Photonics and nano-Photonics”, Prof. S.N.Sarkar (Former Chairman, PS chapter, & former Professor Dept of Electronic Science, University of Calcutta)

• Prof. S Dhar (Former Professor Dept of Electronic Science, University of Calcutta)
• “Philosophical Aspects of Light and Consciousness”, Prof. Asit Ghosh (Formerly Associate Professor of Vidyasagar College for Women, Calcutta)
• “Significance and activities of IYL and Bio-luminiscence”, Dr. Kanchan Choudhury (Curator, Indian council of National Sc. Museum, Kolkata)
• “Lasers and Ophthalmology”, Dr. Manish Singh & Dr. Krishnendu Nandi (B B Eye Foundation, Kolkata)

b) Demonstration of Models:
Developed and Demonstrated by members of the IEEE Photonic Society Calcutta Chapter, and IEEE CU Student Branch.

C. Other Lectures:
• 29.09.2016: "THz Electronics, Photonics and Communication", by Prof. P.K. Basu, former Professor Radio Physics and Electronics, University of Calcutta.
• 22.07.2016: "Laser Cooling or Optical Refrigeration in Semiconductors: A Primer", by Prof. P.K. Basu, former Professor Radio Physics and Electronics, University of Calcutta.

SSCS

➢ Technical Lecture

• Dr. Subhajit Roy Chowdhury, Assistant Professor, School of Computing and Electrical Engineering, Indian Institute of Technology, Mandi, India delivered a lecture on Biomedical Application of VLSI in Department of Electronics and Telecommunication Engineering, Jadavpur University, Kolkata, India.
• Dr. Manoj Kumar Majumder, Assistant Professor, Department of Electronics and Communication Engineering, Techno India University, Kolkata, India delivered a lecture on Biomedical Application of VLSI in Department of Electronics and Telecommunication Engineering, Jadavpur University, Kolkata, India.
• Dr. N.Mohankumar, Professor, Department of Electronics and Communication Engineering, SKP Institute of Technology, Tiruvannamalai, Tamilnadu, India delivered a lecture on GaN, InAs and GaSb based Terahertz (THz) electronics for Bio-Medical Sensing & Imaging Applications in Department of Electronics and Telecommunication Engineering, Jadavpur University, Kolkata, India.

➢ DL Programme:

• Dr. Meyya Meyyappan, Chief Scientist from NASA, Ames Research Center delivered a lecture on Nanomaterials in Nano electronics and Optoelectronics(Jointly with IEEE Electron Devices Society, and IEEE Kolkata
IEEE KOLKATA SECTION

Section) on 6th January, 2016 in Department of Electronics and Communication Engineering, Heritage Institute of Technology, Kolkata, India.

➢ **Co-Sponsorship**

- One FDP was organized by MCKV Institute of Engineering and technically co-sponsored by IEEE SSCS chapter. This five day program presented comprehensive details Front to back end design of Integrated Circuit using EDA Tools. The event was organized on 11th to 15th July, 2016 in MCKV Inst. of Engineering.

- 1st International Conference on VLSI Device,Circuit and Systems(VLSI-DCS 2016) was technically cosponsored by IEEE SSCS chapter. The conference was held on 19th and 20th October at Science city Auditorium of Kolkata.

**IEEE India Council on Electronic Design Automation Chapter has been formed**

**B.3 Professional and Continuing Education Activities**

IEEE Kolkata Section has organized the following lecture meetings on various topics in the year 2016. The lectures were well attended and organized at different locations with very high degree of interactions among the members of industry and academia, including students.

**a) Technical Lecture**

<table>
<thead>
<tr>
<th>SL. NO.</th>
<th>TITLE OF THE TALK</th>
<th>SPEAKER</th>
<th>DATE</th>
<th>VENUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Improving Yield and Reliability of Chip Multiprocessors</td>
<td>Mr. S. Kundu</td>
<td>08 January 2016</td>
<td>IT Deptt. IIEST</td>
</tr>
<tr>
<td>2.</td>
<td>Synergy of IoT, Big Data and Cloud: A Smart City Perspective</td>
<td>Mr. V. Roychoudhury</td>
<td>08 January 2016</td>
<td>IT Deptt. IIEST</td>
</tr>
<tr>
<td>3.</td>
<td>Design of FIR Filters</td>
<td>Dr. S.K. Sanyal</td>
<td>22 April 2016</td>
<td>ECE Deptt. FIEM</td>
</tr>
<tr>
<td>4.</td>
<td>Implementation of Wavelet Based ECG Compression using Digital Signal Processor</td>
<td>Mr. R. Chandwani</td>
<td>21 June 2016</td>
<td>ETCE Deptt. JU</td>
</tr>
<tr>
<td>5.</td>
<td>Design of PLL Based Frequency Synthesizer using 65 nm MOS Technology</td>
<td>Mr. A. Pal</td>
<td>21 June 2016</td>
<td>ETCE Deptt. JU</td>
</tr>
<tr>
<td>6.</td>
<td>A novel technique on Wireless Charging of Electric Vehicle</td>
<td>Dr. S. Halder</td>
<td>24 June 2016</td>
<td>EEE Deptt. PCMT</td>
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<tr>
<td>7.</td>
<td>Design of RFID based Electronic</td>
<td>Mr. S. Dogra</td>
<td>25 June 2016</td>
<td>EEE Deptt. PCMT</td>
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<tr>
<td>Title of the Talks</td>
<td>Speakers</td>
<td>Date</td>
<td>Venue</td>
<td>No. of Participants</td>
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<td>Voting Machine</td>
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<tr>
<td>8. Designing Low Power Intelligent Chips in the face of Statistical Variations of Nanoscale Devices: The Neuromorphic Solution</td>
<td>Dr. A. Basu</td>
<td>08 July 2016</td>
<td>ETCE Deptt. JU</td>
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<tr>
<td>9. Signal Processing aspects of OFDM based next generation Broadband Wireless Communication System</td>
<td>Mr. B. Bhattacharyya</td>
<td>05 December 2016</td>
<td>ETCE Deptt. JU</td>
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<tr>
<td>Title of the Activity</td>
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<td>Venue</td>
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<tr>
<td>Frequency Response Analysis (FRA) on Transformer Windings - New Developments</td>
<td>Prof. L. Satish, IISc Bangalore</td>
<td>24&lt;sup&gt;th&lt;/sup&gt; Sep 2016</td>
<td>Department of Electrical Engineering</td>
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<td>NERIST, Nirjuli Arunachal Pradesh 791109</td>
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<tr>
<td>Mechanical Damage in Transformer Windings - Where is it located? How severe is it?</td>
<td>Prof. L. Satish, IISc Bangalore</td>
<td>24&lt;sup&gt;th&lt;/sup&gt; Sep 2016</td>
<td>Department of Electrical Engineering</td>
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<td>NERIST, Nirjuli Arunachal Pradesh 791109</td>
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<tr>
<td>Pulsed Power Based Conditioning Monitoring of Electrical Equipment</td>
<td>Mr. Arijit Basu Ray Neo Tele-Tronix Pvt. Ltd.(NTPL)</td>
<td>24&lt;sup&gt;th&lt;/sup&gt; Sep 2016</td>
<td>APC Roy Hall, Electrical Engineering Department</td>
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<td>Netaji Subhash Engineering College Kolkata 700152</td>
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<tr>
<td>Condition Monitoring of Power Transformer</td>
<td>Mr. Prasenjit Paul, Schneider Electric</td>
<td>25&lt;sup&gt;th&lt;/sup&gt; Sep 2016</td>
<td>Department of Electrical Engineering</td>
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<td>NERIST, Nirjuli Arunachal Pradesh 791109</td>
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<tr>
<td>Dissolved Gas Analysis carried out in Manufacturing Industry</td>
<td>Mr. Somenath Chattopadhyay, Schneider Electric</td>
<td>25&lt;sup&gt;th&lt;/sup&gt; Sep 2016</td>
<td>Department of Electrical Engineering</td>
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<td>NERIST, Nirjuli Arunachal Pradesh 791109</td>
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<thead>
<tr>
<th>Date</th>
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<th>Place</th>
<th>Attendees</th>
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<tbody>
<tr>
<td>August 07, 2015</td>
<td>Tunnel FET</td>
<td>Prof. Santanu Mahapatra (IISc Bangalore)</td>
<td>Meghnad Saha Institute of Technology, Kolkata</td>
<td>23</td>
</tr>
<tr>
<td>February 15, 2016</td>
<td>Artificial Olfaction – The Emerging Frontier of Electronic Perception</td>
<td>Dr. Nabarun Bhattacharyya Associate Director, C-DAC</td>
<td>Heritage Inst. Of Technology, Kolkata</td>
<td>132</td>
</tr>
<tr>
<td>June 29, 2016</td>
<td>GaN, InAs and GaSb based Terahertz (THz) electronics for Bio-Medical Sensing &amp; Imaging Applications</td>
<td>Prof. N. Mohan Kumar, Principal, SKP Institute of Technology</td>
<td>Dept. of ETCE, Jadavpur University</td>
<td>32</td>
</tr>
<tr>
<td>August 17, 2016</td>
<td>Applications of Electronics in Agriculture and Environmental Studies</td>
<td>Dr. Bijay Kumar Behera, Principal Scientist, (ICAR) Indian Council of Agricultural Research-Central Inland Fisheries Research Institute</td>
<td></td>
<td>163</td>
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<tr>
<td>Septembe r 01, 2016</td>
<td>Recent Developments in J. K. MANDAL, Professor, Kalyani</td>
<td>J. K. MANDAL, Professor, Kalyani</td>
<td>Kalyani Govt. Engg. College</td>
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<tr>
<td>Date</td>
<td>Speaker</td>
<td>Topic</td>
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<td>29/01/2016</td>
<td>Dr. Goutam K. Paul, Indian Statistical Institute, Kolkata</td>
<td>An Overview of Quantum Information and Computation</td>
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<td>16/03/2016</td>
<td>Dr. Amarnath Gupta, Director, Advanced Query Processing Lab,</td>
<td>AWESOME: A Polystore Data Platform for Social Media Analytics</td>
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<td>Science R&amp;D Division, San Diego Supercomputing Center, University</td>
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<td>of California at San Diego, USA</td>
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<td>05/07/2016</td>
<td>Dr. Biplab Sikdar, Associate Professor</td>
<td>Security Issues in Internet of Things</td>
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<td></td>
<td>Department of ECE, National University of Singapore</td>
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<td>12/07/2016</td>
<td>Asis Nasipuri, Professor and Chair</td>
<td>Design consideration for Intermittently Connected Sensor Networks</td>
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<td>Electrical and Computer Engineering, The University of North Carolina</td>
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<td>at Charlotte, USA</td>
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<td>09/12/2016</td>
<td>Prof. Paulo Quaresma, University of Evora, Portugal</td>
<td>Using semantic information to improve IR systems</td>
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<tr>
<td>09/12/2016</td>
<td>Prof. Teresa Gonçalves, University of Evora, Portugal</td>
<td>Some research interests at VISTA@UEVORA</td>
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<td>19/7/2016</td>
<td>Prof. T. K. Sarkar, Department of Electrical Engineering and Computer</td>
<td>Physics, Mathematics and Realization of Electromagnetic Wave</td>
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<td></td>
<td>Science, Syracuse University, NY, USA</td>
<td>Propagation for Cellular System</td>
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<tr>
<td>29/8/2016</td>
<td>G. B. Shrestha, visiting professor in the Department of EEE, IIT</td>
<td>Physics, Logic, and Mathematics in Panini’s Code for Sanskrit</td>
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<tr>
<td></td>
<td>Guwahati.</td>
<td>(Sanskrit) Grammar</td>
<td></td>
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</tr>
<tr>
<td>23/9/2016</td>
<td>Mr. Rajib Kumar Das, DGM, Planning, CESC Ltd., Kolkata</td>
<td>Renewable Energy ; Rooftop Solar PV Source and Net Metering</td>
<td></td>
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</tr>
</tbody>
</table>

### b) Technical Co-Sponsorship

IEEE Kolkata Section extended technical Co-Sponsorships to the following conferences falling under the jurisdiction of Kolkata Section.

<table>
<thead>
<tr>
<th>No.</th>
<th>Organizer</th>
<th>Event name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>JITM</td>
<td>International conference on Communication, Signal Processing, Power, Intelligent Embedded System and Data analytic (CSPID)</td>
</tr>
<tr>
<td>No.</td>
<td>Organizing Body</td>
<td>Event Details</td>
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<tr>
<td>3</td>
<td>IEEE GRSS Kolkata chapter and ISI</td>
<td>Two-day Workshop on Remote Sensing of Earth and Atmosphere on 1-2 March 2016</td>
</tr>
<tr>
<td>4</td>
<td>Department of EE and AEIE of RCC Institute of Information Technology, Kolkata</td>
<td>International Conference on Intelligent Control, Power and Instrumentation (ICICPI-2016) on 21st - 23rd October, 2016</td>
</tr>
<tr>
<td>5</td>
<td>IEEE Kolkata section and IEEE Computer Chapter, Kolkata section</td>
<td>Golden Jubilee celebration of commissioning ISIJU-I</td>
</tr>
<tr>
<td>6</td>
<td>Meghnad Saha Institute of Technology</td>
<td>Innovation Challenge 2016, 27th -28th April 2016</td>
</tr>
<tr>
<td>7</td>
<td>Centurion University of Technology &amp; Management</td>
<td>International conference on Signal Processing, Communication, Power and Embedded System</td>
</tr>
<tr>
<td>8</td>
<td>Techno India University</td>
<td>2016 International Conference on Computer, Electrical &amp; Communication Engineering (ICCECE)</td>
</tr>
<tr>
<td>9</td>
<td>IEEE Kolkata Section</td>
<td>India Antenna Week -2016</td>
</tr>
<tr>
<td>10</td>
<td>International Institute of Information Technology, Bhubaneswar (IIIT)</td>
<td>2016 International Conference on Information Technology</td>
</tr>
<tr>
<td>11</td>
<td>Department of Computer Science &amp; Engineering of Indian School of Mines, Dhanbad</td>
<td>3rd IEEE International Conference on Recent Advances in Information Technology (RAIT-2016)</td>
</tr>
<tr>
<td>12</td>
<td>Centre for Computer Vision and Pattern Recognition National Institute of Technology Rourkela, Odisha</td>
<td>4th International Conference on Advanced Computing, Networking, and Informatics</td>
</tr>
<tr>
<td>13</td>
<td>C.V. Raman College of Engineering, Odisha, India</td>
<td>First International Conference on Advance Computing and Intelligent Engineering</td>
</tr>
<tr>
<td>14</td>
<td>IEEE Kolkata section and IEEE CIS chapter</td>
<td>IEEE CIS Distinguished Lecture Programme and Workshop on 26th/27th September 2016 in association with IEEE Kolkata section 26th and 27th September</td>
</tr>
<tr>
<td>15</td>
<td>West Bengal University of Technology</td>
<td>1st International Conference on Nanocomputing and Nanobiotechnology 2016 , 3rd October - 4th October 2016</td>
</tr>
<tr>
<td>17</td>
<td>IEEE India council</td>
<td>Travel support of Prof. Sivaji Chakraborty for attending extraordinary general meeting of IEEE India Council, 24 July , 2016.</td>
</tr>
<tr>
<td>18</td>
<td>IEEE ComSoc MSIT SBC in Association with IEEE ComSoc Kolkata Section and IEEE GRSS Kolkata Section</td>
<td>A 4-day workshop was organized during 27-30 July 2016.</td>
</tr>
<tr>
<td>19</td>
<td>IIT Guwahati</td>
<td>International Conference on Accessibility to Digital World (ICADW-2016), 16-18 th Dec, 2016</td>
</tr>
<tr>
<td>20</td>
<td>IEEE Kolkata section</td>
<td>Felicitation program of Prof. R.K.Mishra and Prof. Sanghamitra Bandyopadhyay 5th September in Calcutta club</td>
</tr>
<tr>
<td>21</td>
<td>West Bengal University of Technology</td>
<td>1st International Conference on Advanced Computing (ICAC-2016) 23rd to 25th September, 2016</td>
</tr>
<tr>
<td>22</td>
<td>Young Professionals Affinity Group</td>
<td>1st International conference on Advancement of Computer Communication &amp; Electrical Technology (ACCET)</td>
</tr>
<tr>
<td>No.</td>
<td>Event Description</td>
<td>Venue/Details</td>
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</tr>
<tr>
<td>23</td>
<td>IEEE Meghnad Saha Institute of Technology Student Branch, IEEE Meghnad Saha Institute of Technology EDS Student Branch Chapter, Department of ECE, Meghnad Saha Institute of Technology, IEEE EDS Kolkata Chapter and IEEE SSCs chapter</td>
<td>International Conference on VLSI Device, Circuits and Systems on 19th-20th October, 2016</td>
</tr>
<tr>
<td>24</td>
<td>IEEE Young Professionals affinity group and IEEE Kolkata section</td>
<td>Application of Artificial Intelligence In Jadavpur University</td>
</tr>
<tr>
<td>25</td>
<td>NIT Meghalaya</td>
<td>International conference in Innovations in Electronics, Signal processing and Communication to be held on 6th April, 2017.</td>
</tr>
<tr>
<td>28</td>
<td>C.V. Raman College of Engineering</td>
<td>2nd International Conference on Man and Machine Interfacing- 2017, MAMI 17</td>
</tr>
<tr>
<td>29</td>
<td>Dept. of Computer Science and Engg. Sikkim Manipal Inst. Of technology</td>
<td>International Conference on Advanced Computational and Communication Paradigms and Applications</td>
</tr>
<tr>
<td>31</td>
<td>IEEE GRSS chapter</td>
<td>Workshop on Remote Sensing application and science, 17th December, 2016 in Indismart Hotel</td>
</tr>
<tr>
<td>32</td>
<td>MCKV Institute of Engineering and technically co-sponsored by IEEE SSCS chapter</td>
<td>One FDP was organized on 11th to 15th July, 2016</td>
</tr>
<tr>
<td>33</td>
<td>Pailan College of Management &amp; Technology and IEEE PES chapter</td>
<td>National Conference on Computing &amp; Electronics&quot; held on 14th &amp; 25th June 2016 at Hotel Hindustan International</td>
</tr>
<tr>
<td>34</td>
<td>Pailan College of Management &amp; Technology and IEEE PES chapter</td>
<td>ELECTRO-One Day Seminar cum Workshop&quot; organized on 27th August 2016</td>
</tr>
</tbody>
</table>

**C) Educational Activity**

- An one-day hands-on training cum workshop was arranged by the chapter on CST simulation tools on 12th Sep 2016. It was arranged for students, young researchers and faculty members. The sessions were conducted by technical experts from CST group.
- Circuistic of Convolution 2016, 20th February, 2016. This activity, organized by the Students of the Department of Electrical Engineering, Jadavpur University, Kolkata, India, in collaboration with DEIS Kolkata Chapter.
- Two day Industry Institute Interaction Programme (IIIP) on ‘Condition Monitoring of Transformer / High Voltage Equipment’ was held at the Department of Electrical Engineering NERIST, Nirjuli, Arunachal Pradesh on 24th-25th Sep, 2016.
- DEIS Kolkata Chapter has organized an industry visit to High Voltage Equipment Manufacturer Factory, BMC Electroplast Pvt. Ltd. 130/22, B. S. Industrial Estate, Hanspukur, Bakhrahat Road, Kolkata – 700 104 India on 13th December, 2016. The
students were taken to BMC Electroplast Pvt. Ltd., where they were shown how epoxy cast instrument transformers are manufactured.

- EDS HITK Student Branch Chapter jointly with IEEE EDS Kolkata Chapter, Kasba Social Development Society, Dino Bondhu Trust and Cognizant Technology Solutions Outreach team. The program was organized for the poor but very meritorious school students from class V to X on October 3, 2015 and October 5, 2015.

- EDS HITK Student Branch Chapter jointly with IEEE EDS Kolkata Chapter, the NGO ‘Aalo’, and Cognizant Technology Solutions Outreach team organized a program on 18th January which was a part of scholarship program of the NGO ‘Aalo’. This scholarship is for the students from class XI and XII of of West-Bengal. Few projects were demonstrated to the students with the help of the ‘Electronic snap circuits’.

- On 10th March EDS-ETC workshop named ‘MINDSPARK’ was organized with 26 children from standard VI, actively working hand in hand with 13 student volunteers from IEEE EDS HIT SBC The goal of the program was to introduce young minds to the mysteries and magic of science and technology and help them explore the various new concepts.

- On 26th March a program was held in Bangur School as a part of weekly Science/Computer/English class.

- The one-day Workshop titled “MS Excel & Power Point Presentation” was organized by WIE AG, IEEE Calcutta Chapter at the Institute of Radio Physics and Electronics, University of Calcutta on 19.02.2016 for the under graduate students of Bethune College, Kolkata.

- A 2-Day Workshop on “LINUX Essentials” by IEEE EDS University of Calcutta Student Branch jointly organized with the Department of Computer Science and Engineering, A.K. Choudhury School of Information Technology and IEEE Women in Engineering, Affinity Group Kolkata Section.

- One-day workshop on “Basic Computer literacy” & Science awareness outreach program for tribal boys, girls and children has been organized on 23.10.2016 at ACC Jain College of Education, Village-Joypur, PO-Seharakuri, PS-Md. Bazar, Birbhum WB.

- Himakshi Choudhury, student member, IIT Guwahati, has been approved Rs 5000/- for attending the conference TENCON 2016 in Singapore.

- Saurabh Pandey has been approved Rs 5000/- for attending 55th IEEE Int. Conference on Decision and Control in USA.

- Sri Rohan Kumar Das of Electronics and Electrical Engineering, Indian Institute of Technology (IIT) Guwahati has been granted INR 5000/- for attending Interspeech 2016, which was held at San Francisco in September 2016.

- Sri Sikandar Kumar of Department of Electronics and Electrical Engineering, IIT Guwahati has been granted INR 5000/- for participating and presenting his work in
IEEE R10 Distinguished Student Paper Award Competition to be held in 5-8 August 2016 at City University of Hong Kong, China.

- Golden Jubilee Celebration of Commissioning (2nd April, 1966) ISIJU-I Computer: the first indigenous Second Generation Digital Computer designed and implemented jointly by Indian Statistical Institute and Jadavpur University, was organized by IEEE Kolkata Section and its Computer Chapter on April 8th, 2016 at DKS Hall, Desapriya Park, Kolkata.

- Workshop on Remote Sensing application and science, 17th December, 2016 in Indismart Hotel organized by IEEE GRSS chapter

- One day Workshop on Remote Sensing Applications and Sciences (RSAS 2016) has been organized by IEEE GRSS chapter.

**d) Outreach Activities**

- EDS HITK Student Branch Chapter jointly with IEEE EDS Kolkata Chapter, Kasba Social Development Society, Dino Bondhu Trust and Cognizant Technology Solutions Outreach team. The program was organized for the poor but very meritorious school students from class V to X on October 3, 2015 and October 5, 2015.

- One-day workshop on “Basic Computer literacy” & Science awareness outreach program for tribal boys, girls and children has been organized on 23.10.2016 at ACC Jain College of Education, Village-Joypur, PO-Seharakuri, PS-Md. Bazar, Birbhum WB.

- The first outreach program was held on April 23, 2016 jointly with IETE at Tripura State Centre. A half day seminar was organized and Prof. Iti Saha Misra delivered an IEEE Technical Lecture on the topic “Some Emerging Research Aspects on Wireless Communication”. There were 50 participants in the lecture.

- The second outreach program was held on May 28, 2016 jointly with EE Department NIT Rourkela, Oddisa. Prof. Susmita Das the ComSoc excom member of Kolkata Chapter has organized a IEEE public lecture for the Master and PhD students. Prof. Iti Saha Misra delivered an IEEE Technical Lecture on the topic “Cognitive Radio Networks and its Application”.

- The third outreach program was held in Tripura University on 23 Nov 2016 at the Department of ECE for the students and faculties from IT, Computer science and ECE. Prof. Iti Saha Misra delivered technical talk and membership motivational talk for the gathering.

- IEEE GRSS Kolkata Chapter organized an educational visit to the Doppler Weather Radar of the Regional Meteorological Centre situated at the new Secretariat building, Kolkata on 29 November, 2016.
• A group of forty-two (42) tribal children from rural background dressed in their best outfits, waiting curiously for the outreach program to begin. Dr. Manidipa Roy and Dr. Sudipta Chatterjee have conducted the tribal children workshop. They were given topics based on day to day problems facing by them for debate and extempore speech and were encouraged to speak out.

• Golden Jubilee Celebration of Commissioning (2nd April, 1966) ISIJU-I Computer: the first indigenous Second Generation Digital Computer designed and implemented jointly by Indian Statistical Institute and Jadavpur University, was organized by IEEE Kolkata Section and its Computer Chapter on April 8th, 2016 at DKS Hall, Desapriya Park, Kolkata.

B.4 Student Activities

Number of Active Student Branches: 38
Total Active Student Member: 1250
Total Active Graduate Student Member: 625

• Active Student Branches/ chapter activity

  ➢ Kalyani Government Engineering College (EDS Student chapter)


  • IEEE EDS KGEC Student Branch Chapter organized a Lecture Meeting on 01st September 2016 in the Language Lab of Kalyani Govt. Engg. College. Professor J. K. MANDAL of Kalyani University delivered a lecture on "in Language Lab, KGEC from 12.00 to 2.00 P.M.

  • An EDS Distinguished Lecture (DL) on "Engineering Evolution in Electronics and 50 Years of Moore" by Dr. M. K. Radhakrsishnan, IEEE EDS Vice-President of Regions & Chapters was held on 22nd September, 2016, jointly organized by IEEE EDS Kalyani Government Engineering College Student Branch Chapter and Department of ECE, KGEC.

  ➢ Meghnad Saha Inst. Of Technology Student Branch Chapter (EDS chapter)

  • Organized 1st international conference VLSI DCS-2016 on 19-20th October, 2016 in MSIT.
• Organized jointly by IEEE MSIT Student Branch, IEEE MSIT EDS Student Branch Chapter, IEEE EDS Kolkata Chapter and the Department of ECE, MSIT 1st IEEE MSIT Student Paper contest 2016 on 23rd May, 2016.

• Two DL lecture (Prof. C.K.Sarkar and Prof. S.K.Sarkar) has been organized jointly by IEEE EDS Kolkata Chapter and the Department of ECE, MSIT and IEEE MSIT EDS Student Branch Chapter on 20th April, 2016.

• Organized jointly by IEEE MSIT Student Branch, IEEE MSIT EDS Student Branch Chapter, IEEE EDS Kolkata Chapter and the Department of ECE, MSIT a lecture program by Dr. Writam Banerjee on 21st March, 2016 in Meghnad Saha Institute of Technology

➢ Heritage Institute of Technology Student Branch Chapter (EDS Chapter)

<table>
<thead>
<tr>
<th>Date</th>
<th>Organized by</th>
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<tbody>
<tr>
<td>October 3, 2015 and</td>
<td>EDS HITK Student Branch Chapter joint with IEEE EDS Kolkata Chapter, Kasba Social Development Society, Dino Bondhu Trust and Cognizant Technology Solutions Outreach team</td>
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<tr>
<td>October 5, 2015</td>
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</tr>
<tr>
<td>January 18, 2016</td>
<td>EDS HITK Student Branch Chapter joint with IEEE EDS Kolkata Chapter, the NGO ‘Aalo’, and Cognizant Technology Solutions Outreach team</td>
</tr>
<tr>
<td>March 10, 2016</td>
<td>IEEE EDS Heritage Institute of Technology Student Branch Chapter and IEEE EDS Kolkata Chapter</td>
</tr>
</tbody>
</table>

➢ Jadavpur University

• Convolution-2016 – a three day technical meet was organized by the student members of Electrical Engineering Department, JU. The Programme was sponsored by PES, CSS-IMS & DEIS Chapters. Students from different engineering colleges in and around Kolkata participated in the programme. Circuistic of Convolution 2016, 20th February, 2016. This activity, organized by the Students of the Department of Electrical Engineering, Jadavpur University, Kolkata, India, in collaboration with DEIS Kolkata Chapter

➢ IEEE Calcutta University Student Branch Activities
Seminar to celebrate closing of International Year of Light, organized at Rashtraguru Surendranath College Barrackpore (RSCB), W.B., India, by RSCB with IEEE Calcutta University Student Branch jointly IEEE Photonics Society Kolkata Chapter.

a) Lectures:

- “Light in Quantum and Relativity aspects with significance of IYL” by Prof. A.K. Ghatak
- “Infrared Photon Detectors”, by Prof. N. R. Das, Chairman, IEEE PS Kolkata Chapter, & Dean, Engg. & Technology, Head, Radio Physics and Electronics, University of Calcutta
- “From Fiber Optics to Photonics and nano-Photonics”, Prof. S.N.Sarkar
- “Philosphical Aspects of Light and Consciousness”, Prof. Asit Ghosh
- “Significance and activities of IYL and Bio-luminiscence”, Dr.Kanchan Choudhury
- “Lasers and Opthalmology”, Dr.Manish Singh & Dr.Krishnendu Nandi

b) Demonstration of Models:

IEEE CU Student Branch members developed Models and demonstrated those at RSCB jointly with members of Photonic Society Calcutta Chapter.

B. Ph.D. Student Lecture Series

- January 7, 2016 : "Wideband Energy Harvesting from Ambient Vibrations using Nonlinear Oscillators" by Dhiman Mallick, PhD student, Tyndall National Institute, Ireland
- January 7, 2016 :"Magnetism and spintronics at molecule-metal interfaces" by Kaushik Bairagi, PhD student, Universite Paris Diderot, France.

C. Seminar Lecture:

- July 7, 2016 : “Art and Challenges of Writing Paper for IEEE Journals ” by Prof. D. Guha, Radio Physics and Electronics, CU, jointly with EDS CU student chapter

- **Netaji Subhash Engineering College**
  - Training Programme on ‘C & C++ Programming and Data Structure’ by Prof. P. S. Dey, Professor, CSE Dept., IIT Kharagpur, 12th to 14th Dec, 2016.
  - One week training program on ‘Python Programming Language’ by industry experts during 12th to 16th Dec, 2016.

- **Membership Drive**
  - Membership drive was made at Techno India Institute of Technology, Rajarhat, by Dr. Debangshy Dey, SAC on 16th December, 2016. In that program more than 100 students and 5 faculty members were present.
• **Formation of New Student Branch/chapter**

New Student Branch

- Sikkim Manipal Institute

New Student Branch under chapter

- IEEE EDS SB Meghnad Saha Institute of technology
- IEEE COMSOC SB Meghnad Saha Institute of technology
- IEEE APs SB Netaji Subhash Engineering College
- IEEE Computer SB Netaji Subhash Engineering College
- IEEE CIS SB Netaji Subhash Engineering College
- IEEE Dielectric and Electrical Insulation Society Netaji Subhash Engineering College.
- IEEE PES SB Meghnad Saha Institute of technology

**B.5 Affinity Group Activities**

**Total Affinity Groups: 02**

**YP- AG**

- Two Day Seminar on Data Science: Analytics, Interpretation And Usability of Data has been organized by Govt. College of Engineering & Ceramic Technology, Kolkata on 25th -26th February, 2016.
- 5 Days Workshop On: Matlab®, Simulink® And LATEX has been organized by Dept. of Information Technology, Techno India College of Technology, Kolkata on 25th July To 29th July, 2016
- A lecture on Bad Practices in Research has been organized by ADMH, Department of CSE, Jadavpur University, Kolkata on 04th August, 2016. Prof. Debotosh Bhattacharjee, Department of CSE, Jadavpur University has delivered lecture.
- A Lecture on Holistic And Component-Based Dynamic Vegetative-Stage Plant Phenotyping Analysis has been organized by ADMH, Department Of CSE, Jadavpur University, Kolkata on 29th September , 2016. Dr. Sruti Das Choudhury, Department of CSE,University of Nebraska-Lincoln, United States has delivered lecture in this event.
- A lecture on Deep Learning has been organized by Language LAB, Kalyani Government Engineering College on 16th December, 2016. Mr. Snehasis Banerjee, Tata Consultancy Services has delivered the lecture.

- A two Days Seminar on Application of Evolutionary Computational Techniques In Electric Energy Optimization has been organized by Dept. of Electrical Engineering, Techno India College of Technology, Kolkata on 21st-22nd December, 2016

- A lecture on Adaptive Multi-Factor Authentication has been organized by ADMH, Department of CSE, Jadavpur University, Kolkata on 22nd December 2016. Prof. Dipankar Dasgupta, Dept. of Comp. Sc., University of Memphis, USA has delivered the lecture in this event.

- IEEE International Conference on Research In Computational Intelligence And Communication Networks (ICRCICN-2016) has been technically sponsored by YP affinity group and organized in The Stadel, Salt Lake, Kolkata, India on 23rd-25th September, 2016

- International Conference on Advancement of Computer, Communication and Electrical Technology (ACCET-2016) has been technically sponsored by YP affinity group and organized in MCET college campus, West Bengal, INDIA on 21st & 22nd October, 2016

**WIE-AG**

- 29th International Conference on VLSI Design and 15th International Conference on Embedded Systems was organized on 4.01.2016 to 8.01.2016 in ITC Sonar Bangla, Kolkata, India.
  - The one-day Workshop titled “MS Excel & Power Point Presentation” was organized by WIE AG, IEEE Calcutta Chapter at the Institute of Radio Physics and Electronics, University of Calcutta on 19.02.2016 for the undergraduate students of Bethune College, Kolkata.


- One-day workshop on “Basic Computer literacy” & Science awareness outreach program for tribal boys, girls and children was organized on 23.10.2016 in ACC Jain College of Education, Village-Joypur, PO-Seharakuri, PS-Md. Bazar, Birbhum WB.

- A one day workshop on System design using FPGA development board and experiments with cloud services, was organized by Department of Computer Science & Engineering, University of Calcutta in association with Women in Engineering (WIE), Affinity Group, IEEE Kolkata Chapter on 22nd December, 2016.
B.6 Awards & Accolades

- IEEE Kolkata section received the outstanding section membership recruitment performance award.
- Prof. Debatosh Guha has been conferred IEEE Fellow.
- Prof. Debatosh Guha has been appointed as an Associate Editor of the IEEE Transactions on Antennas and Propagation.
- Prof. Debatosh Guha has been awarded by IETE for one of their highest recognition of “RAM LAL WADHWA AWARD”.
- IEEE Computational Intelligence Society was awarded a grant of USD 200 from IEEE for organizing membership promotion events and technical lectures.
- IEEE-IAS Kolkata Chapter once again bagged the prestigious “Outstanding Small Chapter –Continuing Performance” award for the year 2016.
- Ms. Chandreyee Sarkar, Institute of Radio Physics and Electronics, University of Calcutta, an active member and leader of the IEEE Student Branch, Calcutta University is a recipient of INAE Engineering Excellence Award 2016 in the category of Innovative Student Project at Masters level.

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

- **Number of hard print Newsletter**: Discontinued
- **Section, Chapters and Student Branches Web Pages**:
  - A new look website for IEEE KOLKATA SECTION is active with address - www.ewh.ieee.org/r10/calcutta
  - Section and some of the Chapters have websites linked mutually.
  - All announcements / activities are uploaded in the website regularly.

B.8 Industry Relations

- DEIS Kolkata Chapter has organized an industry visit to High Voltage Equipment Manufacturer Factory, BMC Electroplast Pvt. Ltd. 130/22, B. S. Industrial Estate, Hanspukur, Bakhrahat Road, Kolkata – 700 104 India on 13th December, 2016. The students were taken to BMC Electroplast Pvt. Ltd., where they were shown how epoxy cast instrument transformers are manufactured. Mr. Siddhartha Mitra, Director of BMC Electroplast Pvt. Ltd., explained to the students how different technologies are employed in moulding the epoxy resin and the pros and cons of each technology.
IEEE GRSS Kolkata Chapter organized an educational visit to the Doppler Weather Radar of the Regional Meteorological Centre situated at the new Secretariat building, Kolkata on 29 November, 2016.

B.9 Community Activities

- Felicitation program of Prof. R.K.Mishra and Prof. Sanghamitra Bandyopadhyay was organized by IEEE Kolkata section on 5th September in Calcutta club.
- A Dinner meeting has been organized at Kolkata on Monday 12th of December 2016 to felicitate Dr. Ramakrishna Kappagantu R-10 director.

PART C - OTHERS

C.1 Relationship with National Societies

- The relationship with National Societies like The Institution of Engineers (India), The Institute of Electronics & Telecommunication Engineers India, Computer Society of India is cordial.

C.3 Problems to be Anticipated

- Involvement of members in section activities not as per expectation
- Limited participation of section volunteers in national and international committees
- Limited Funding for attending conference
- Number of members from industry is low
- Student member retention is low and some student branches become inactive - explore possibility of re-opening of student branch through incentive schemes. However new student branches are formed and new members are added every year

C.4 Best Practices of your Section

- Active student branches
- Active participation of local students in IEEE activities

PART D - GOALS AND PLANS

D.1 Goals
• Retention of existing members through membership development programs like elevation to Senior Member grade, recognizing the efforts of active members by awarding them citations or personalized plaques.
• Increasing activities of section by arranging more lecture meetings, not necessarily technical but also on public affairs, professional activities, educational trips for students to nearby industries.
• To spread the message of IEEE within Kolkata Section jurisdiction.

D.2 Implementation Plans

• To organize one day program involving all Branch Counsellors from all student branches.
• To organize meeting with other out stationed chapters and Bhubaneswar Subsection
• To organize some special memorial lecture in each year.
• To organize Calcon 2017.