



# KOLKATA SECTION

Geo code R0 01 37

2017

## PART A - SECTION SUMMARY

### A.1 Executive Summary

- ✓ **2017 IEEE Calcutta Conference (CALCON 2017)**, a triennial event of IEEE Kolkata Section was organized at the Lalit Great Eastern, Kolkata, India during December 2-3, 2017.
- ✓ Kolkata Section is honored to host the **India Council Face-to-Face Meeting** at Kolkata on Sunday the 16th of April 2017 at VSNL Auditorium, IETE Kolkata Center ,Plot no. J1-7, EP Block, Salt Lake Electronics Complex Sector V, Salt Lake, Kolkata 700091
- ✓ **IEEE C. V. Raman Milestone Lecture** has been delivered by **Prof. Raj Mittra**, Pennsylvania State University, USA. on 18th December, 2017 at 3PM at Dr. Mahendra Lal Sircar Hall in Indian Association for the Cultivation of Science, Jadavpur.
- ✓ On December 14<sup>th</sup>, 2017 at DKS Hall, Desapriya Park, Kolkata, **Computer Chapter, IEEE Kolkata Section celebrated its 25 years.**
- ✓ **IEEE COMSOC Kolkata Chapter received CAA - 2017** Chapter Achievement Award
- ✓ Winners of "IEEE MTT-S Outstanding Chapter Award, 2017" , IEEE Kolkata section has received **IEEE MTT-S Outstanding Chapter Award, 2017.**
- ✓ **Prof. Sanghamitra Bandyopadhyay**, Director ISI, Kolkata has been awarded **Infosys Prize 2017** in Engineering and Computer Science.
- ✓ **Dr. Subhansu Ranjan Samantaray**, Secretary, IEEE Bhubaneswar Subsection, has been awarded **IEEE India Council Outstanding Volunteer Award - 2017.**
- ✓ **Prof. Nikhil R. Pal** of ECSU, Indian Statistical Institute has been elected as **President-Elect (2017) for IEEE Computational Intelligence Society.**
- ✓ **Prof Sanghamitra Bandyopadhyay** has been awarded prestigious **J. C. Bose fellowship** from Department of Science and Technology, Government of India.
- ✓ **Prof. Debatosh Guha** has been conferred **IEEE Fellow.**
- ✓ **WIE received an award of \$300** as WIE Support Fund. for the project ID: WIE-2017--3 Outreach Program on "Magic of Mathematics".
- ✓ Obtained **USD 20,000 for EDS Center of Excellence at the Heritage Institute of Technology**, IEEE EDS Kolkata Chapter.
- ✓ **IEEE Kolkata section Social Meet** has been organized at **Khordah Jute Mill** on Sunday, 19th. February 2017.
- ✓ **New Student Branch chapter** like IEM IEEE Circuits and Systems Society (CASS) Student Branch, KIIT University, Bhubaneswar AP/MTT Branch chapter, Institute of Radio Physics and Electronics, University of Calcutta AP/MTT Branch chapter. Jadavpur University Engineering in Medicine and Biology IEEE Student Branch Chapter.
- ✓ **Convolution-2017** – a three day technical meet was organized by the student members of Electrical Engineering Department, JU.
- ✓ In collaboration with **CAS Chapter** of IEEE, **ComSoC Chapter** of IEEE Kolkata Section jointly organized **IEEE 5G Summit followed by 28<sup>th</sup> Global ICT Standardization Forum for India (GISFI)** Meeting during March 17 – 18, 2017 at Kolkata.
- ✓ **ComSoc Kolkata Chapter** actively was the part of 6th **IEEE 5G Summit and 29 th GISFI** meeting series at SOA university, Bhubaneswar on 17-18 August, 2017.
- ✓ The **IEEE Computational Intelligence Society Summer School, RACI 2017**, was organized by the Machine Intelligence Unit of Indian Statistical Institute in collaboration with the IEEE Kolkata Section, during September 18-22 at Indian Statistical Institute, Kolkata, India.
- ✓ The **3rd International Conference on Condition Assessment Techniques in Electrical Systems (CATCON)** has been hosted by Department of Electrical Engineering, Indian Institute of Technology Ropar during 16th to 18th November 2017.
- ✓ The Student branch of IEEE at Institute of Engineering & Management organized a **Technology Awareness Programme** during September 8 – 10, 2017 in collaboration with IEEE Region Ten and IEEE Computer Society and IEEE Kolkata Section.
- ✓ **M. V. Chauhan All India Student Paper Contest 2017 first prize** in PostGraduate category has been awarded to Mr. Rajanikanta Swain, Berhampur University, Odisha

## A.2 Financial Report

Opening Balance: Rs. 3,390,615.72

Income: Rs. 6,975,400.00

Expenses: Rs. 6,136,570.60

Closing Balance: Rs. 4,229,445.12

## A.3 List of Section Officer and Executive Committee Members

Sujit Kr. Biswas	Chairman
Kesab Bhattacharyya	Chairman-Elect
Sanjay Kar Chowdhury	Vice-Chairman
Sayan Chatterjee	Secretary
Suparna Kar Chowdhury	Treasurer
Sarmistha Neogi	Member
Iti Saha Misra	Member
Madhubanti Maitra	Member
Nibaran Das	Member
Amitava Chatterjee	Member
Gargi Keeni	Member
Saibal Chatterjee	Member
Kaushik Das Sarma	Member
Jamuna K Sing	Member
Debangshu Dey	Member
Swapnadeep Dey	Member
Rajarshi Gupta	Member
Poulomi Gupta	Member
Immediate Past Chair	Chandan Kr. Sarkar
AP-MTTS Chapter Elected Official	Satyajit Chakraborti
CAS Chapter Elected Official	Salil Kumar Sanyal
CIS Chapter Elected Official	Sushmita Mitra
Computer Chapter Elected Official	Sarmistha Neogy
COMSOC Chapter Elected Official	Iti Saha Misra
DEIS Chapter Elected Official	Arijit Basu Roy
EDS Chapter Elected Official	Atanu Kundu
GRSS Chapter Elected Official	Ashish Ghosh
IAS Chapter Elected Official	Prasid Syam
PES Chapter Elected Official	Kesab Bhattacharyya
Photonics Chapter Elected Official	Gopa Sen
YP Affinity Group Elected Official	Himadri Shekhar Dutta
WIE Affinity Group Elected Official	Sudipta Chattopadhyay
CSS-IMS joint chapter Elected Official	Madhubanti Maitra
SSCS Chapter Elected Official	Chandan K Sarkar
Signal Processing Chapter Elected Official	Sovan Dalai
SIGHT	Jawad Y. Siddiqui

# PART B - ORGANIZATIONAL ACTIVITIES

## B.1 Membership Development Programs

**Total Member: 2892**

### Effort in Membership Development:

- IEEE, its activities and membership benefits" on 12.09.2017 around 2 PM in Technology Campus, University of Calcutta.
- Techno India Batanagar on 9th August , 2017
- MSIT tech Auditorium on 22nd February, 2017
- 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 is given to Dr. Atanu Kundu, EDS chapter
  - Best Student Volunteer award is given to Ms. Srishti
- In 2017, awards are given to three general members and three student members who renewed membership within 30<sup>th</sup> November. The awardees were selected through lucky draw. The winner of "Early Membership Renewal Award of IEEE Kolkata Section" are:

Category	Sl. No.	Name	Membership No.
Student member / Graduate Student Member / Associate Member / Affiliate	1.	<b>Rajkishor Kumar (GSM)</b>	<b>93369573</b>
	2.	<b>Shreyasi Ghosh (SM)</b>	<b>94148931</b>
	3.	<b>Palash Ghosal (GSM)</b>	<b>92208281</b>
Member / Senior Member / Fellow / Life Member / Life Senior Member / Life Fellow	1.	<b>Baidya Nath Roy (M)</b>	<b>93293184</b>
	2.	<b>Chinmay Ghosh (M)</b>	<b>90552696</b>
	3.	<b>Ajit K Mandal (LSM)</b>	<b>04976445</b>

### 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: 14**

**India Council Chapter : 1**

Region	Council	Section	Grade Category	Grade	Total
R10	India Council	Kolkata Section	IEEE Grades	Associate Member	39
				Fellow	8
				Graduate Student Member	666
				Life Fellow	2
				Life Member	3
				Life Senior	26
				Member	1,270
				Senior Member	270
				Student Member	581
			Other Grades	Affiliate	27
Total					2,892
Total					2,892
Grand Total					2,892

*Data upto 12<sup>th</sup> January, 2018*

### AP/MTT

- **Seminar and Workshop:**
- The AP/MTT Chapter's Activities began with an one-day seminar on "Antenna Research Challenges and Success" at CRNN Building (Centre for Research in Nanoscience and Nanotechnology), Calcutta University, Kolkata on 10<sup>th</sup> Feb 2017. Participant 32.
  - Speakers
    - Prof. R K Misra (Berhampur University, Oddisha)
    - Prof. Bhaskar Gupta(Jadavpur University)
    - Prof. J Y Siddiqui (Calcutta University)
    - Chandrakanta Kumar (ISRO, India)
- A lecture program was organized by the Chapter on 6<sup>th</sup> March 2017 at the Institute of Radio Physics and Electronics, University of Calcutta. Prof. Kazuya Kobayashi, Chuo University, Tokyo, Japan delivered the talk on "Radar Cross Section of a Finite Parallel Plate-Waveguide with Material Loading". Total participants 24 (IEEE members 10).
- A National Workshop (the 1st outreach program) on "Microwave and Antenna Technology" was arranged by the chapter at Siliguri Institute of Technology, Siliguri on 31<sup>st</sup> Mar - 1<sup>st</sup> April 2017. Total participants 66
  - Speakers
    - Prof. Susanto Parui (IEST Kolkata)
    - Dr. Koushik Dutta (NCSM Kolkata)
    - Mr. Satyajit Chakrabarti (SAMEER Kolkata Centre)
- One Day Workshop, "Setting A Horizon of Antennas (SAHA)" was 26<sup>th</sup> Oct 2017. Total participants 80 (IEEE members 25).
  - The lectures were delivered by
    - Mr. Satyajit Chakrabarti (SAMEER Kolkata Centre)

Prof. J Y Siddiqui (Calcutta University)

Prof. Susanto Parui (IEST Kolkata)

Dr. Koushik Dutta (NCSM Kolkata)

Dr. Sujoy Biswas

- Workshop (the 2nd outreach program) on “Microwave Antennas in Present-days Communication” was arranged by the chapter at KIIT University, Bhubaneswar during 28<sup>th</sup> – 29<sup>th</sup> Oct 2017. Total participants 50 (IEEE members 12).
  - Speakers
    - Prof. D. Guha (Calcutta University)
    - Prof. R K Misra (Berhampur University, Oddisha)
    - Prof. Susanto Parui (IEST Kolkata)
    - Dr. Koushik Dutta (NCSM Kolkata)
    - Mr. Satyajit Chakrabarti (SAMEER Kolkata Centre)
    - Prof. J Y Siddiqui (Calcutta University)
- Special one-day workshop was organized on 4<sup>th</sup> Nov 2017 at SAMEER Kolkata Centre. The title of the workshop was “Microwave Application - Trends and Challenges”. Total participants 46.
  - Speakers
    - Prof. Susanto Parui (IEST Kolkata)
    - Prof. M K Mondal (IIT, Kharagpur)
    - Mr. A Majumder (SAMEER Kolkata Centre)
- The inaugural lecture for the students branch chapter (formed at the Institute of Radio Physics and Electronics, University of Calcutta) was delivered by Prof. Raj Mitra, (Pennsylvania State University, USA) on 16<sup>th</sup> Dec 2017 at the CRNN campus of Calcutta University (sectot-3, Salt Lake). Total participants 30.
- **DL Programme:**
- An IEEE APS Distinguished Lecture Program was organized by this Chapter, at the Institute of Radio Physics and Electronics, University of Calcutta, on 30th March 2017. The speaker, Dr. Sudhakar Rao (Northrop Grumman Aerospace), delivered the DL talk on “Advanced Antenna System for 21<sup>st</sup> century Satellite Communication Payloads”. Total participants 36 (IEEE members 16).
- **Major Event**
- The chapter also organized the 8<sup>th</sup> edition of its flagship workshop cum conference IAW 2017. The event was organized during 5<sup>th</sup> - 9<sup>th</sup> June, 2017 at the Defense Institute of Advanced Technology (DIAT), Pune. About 90 research papers were accepted for oral and poster presentation. Total 18 tutorial sessions and 6 industry sessions were conducted. Total 160 participants were attended (IEEE members 58).
- Another flagship event of the chapter - International conference, “Applied Electromagnetic Conference (AEMC) 2017” held during 19<sup>th</sup> - 22<sup>nd</sup> Dec 2017 at Maharashtra Institute of Technology, Aurangaband, Maharashtra, India.

## CASS

- **Technical Lectures**
- System aspects of Digital India-Requirements, Architecture and Standardization Status delivered by Mr. V. B. James, Qualcomm India, Bangalore on 17 March, 2017 at Senses Hotel, Salt lake, Kolkata

- MIMO in 5G delivered by Mr. M.Chandrasekharan, CEWiT, Chennai on 17 March, 2017 at Senses Hotel, Salt lake, Kolkata
- Role of Satellite in 5G delivered by Dr. K. Bandyopadhyay, Deptt. of E&ECE, IITKGP on 18 March, 2017 at Senses Hotel, Salt lake, Kolkata
- Millimeter Wave link for outdoor communications in 5G networks delivered by Dr. N. Kumar, Deptt. Of EC, Amrita School of Engineering, Bangalore on 18 March, 2017 at Senses Hotel, Salt lake, Kolkata
- VHDL Modeling and Efficient FPGA Implementation of some Interleavers for applications in OFDM based Wireless Communication Systems delivered by Mr. B. K. Upadhyay, TIT, Narsingharh, Agartala on 21 April 2017 at ETCE Deptt. JU, Kolkata
- Application of Embedded System in VEC Cyclotron Resonance Ion Source & Injection Line Vacuum System for Superconducting Cyclotron delivered Mr. S. K. Guha, VECC, Salt Lake. Kolkata on 24 April 2017 at VECC, Salt Lake, Kolkata
- Encoders & Read-out System for Accelerator Control delivered by Mr. N. Chadda, VECC, Salt Lake. Kolkata on 24 April 2017 at VECC, Salt Lake, Kolkata
- Study of Thermal instability of Geographical region before Earthquake using Remote Sensing Network delivered Mr. S. K. Guha, VECC, Salt Lake. Kolkata on 19 May 2017 at VECC, Salt Lake, Kolkata
- Development of Low Current Measurement module by Mr. N. Chadda, VECC, Salt Lake. Kolkata on 19 May 2017 at VECC, Salt Lake, Kolkata
- Hardware Software Co-simulation of FIR Filters on FPGA Platform delivered by Ms. A. Ghosh, Deptt.of ETCE, JU,Kolkata on 23 June 2017 at Deptt.of ETCE, JU,Kolkata.
- Some aspects of Communication & Wireless Networks delivered by Dr. S. K. Sanyal, Deptt. of ETCE, JU (Retd.), Kolkata on 05 September 2017 at UGC-HRDC, Salt Lake Campus, JU, Kolkata
- IEEE CAS Activities through Student Branch delivered by Dr. S. K. Sanyal, Deptt. of ETCE, JU (Retd.),Kolkata on 07 September 2017 at IEM, Salt Lake, Kolkata
- Affordable & Non-Invasive Sensing Augments Human Intelligence delivered by Dr. T. Chakravarty, TCS Research, Kolkata on 15 September 2017 at ECE, Deptt, Narula Institute of Technology, Agarpara, Kolkata
- Why Fuzzy? delivered by Mr. K. Sarkar, NIT, Agarpara, Kolkata on 29 November 2017 at ECE Deptt, Narula Institute of Technology, Agarpara, Kolkata
- Solution to the Random Network Coding Problem delivered by Dr. A. Ghatak, NIT, Agarpara, Kolkata on 01 December 2017 at ECE, Deptt, NIT, Agarpara, Kolkata
- **Collaboration :**  
The CAS Chapter of IEEE Kolkata Section extended collaborative hands to the ComSoC Chapter of IEEE Kolkata Section in jointly organizing IEEE 5G Summit followed by 28<sup>th</sup> Global ICT Standardization Forum for India (GISFI) Meeting during March 17 – 18, 2017 at Kolkata. Such summit has been organized for the First time at Kolkata. The Two day event was held at Senses Hotel, Sector V, Salt Lake, Kolkata with the theme “Digital India”.
  - Speakers
    - Prof. R. Prasad, the founder Chair of GISFI and Professor of Aarhus University, Denmark.
    - Dr. Asutosh Dutta from AT&T, USA and IEEE 5G Co-Chair
    - Sri T. Kumar, IAS, Principal Secretary, Consumer Affairs, Govt. of West Bengal
    - Prof. C. Bhattacharjee, Dean, FET, Jadavpur University

Mr. V.B.James from Qualcomm India  
Mr. I. Sanyal from Ericsson  
Mr. P. Suthar from CISCO  
Mr. V. Gupta from Polaris Network  
Prof. P. Lindgren from Aarhus University, Denmark  
Mr. T. Gupta from National Instruments, India  
Mr. S. Misra from RS Software

- **Student chapter activities**
- The Institute of Engineering & Management (IEM), IEEE Circuits and Systems Society (CASS) Student Branch was formally inaugurated on September 7, 2017 at IEM Gurukul Campus Language Lab , Salt Lake, Sector V by Prof. S.K.Sanyal, Chairman of CAS Chapter of IEEE Kolkata Section.
- The IEM IEEE Circuits and Systems Society (CASS) Student Branch has also organized one Workshop on IC Fabrication Technology on November 18 , 2017 from 11 am to 5.00 pm at IC Design & Fabrication Centre, Jadavpur University.
- **Outreach Activities**
- The 2017 Outreach Activity of the CAS Chapter was held on September 15, 2017 at the Department of Electronics and Communication Engineering (ECE) of Narula Institute of Technology (NIT), Agarpara, Kolkata. The speaker was Dr. T. Chakravarty, Principal Scientist, TCS Research, Tata Consultancy Services, New Town, Kolkata and the topic was “Affordable & Non-Invasive Sensing Augments Human Intelligence”.

## Computer

- **Technical Lectures**
- Prof. Bidyut Baran Chowdhury, ISI, Kolkata has delivered a lecture on 2-Day Seminar on Image Processing and Advanced Computing organized by Finishing School under Student Support, TEQIP II, in technical collaboration with Computer Chapter, IEEE Kolkata section, at MAKAUT, W.B on 15<sup>th</sup> March 2017, 11:30AM to 12:30 PM.
- Prof. Debotosh Bhattacharjee, Dept. of CSE, Jadavpur University has delivered a lecture on 2-Day Seminar on Image Processing and Advanced Computing organized by Finishing School under Student Support, TEQIP II, in technical collaboration with Computer Chapter, IEEE Kolkata section, at MAKAUT, W.B on 15<sup>th</sup> March, 2017, 1PM to 2 PM.
- Dr. Subhadip Basu, Dept. of CSE, Jadavpur University has delivered a lecture on 2-Day Seminar on Image Processing and Advanced Computing organized by Finishing School under Student Support, TEQIP II, in technical collaboration with Computer Chapter, IEEE Kolkata section, at MAKAUT, W.B on 15<sup>th</sup> March 2017, 2PM to 3 PM.
- Prof Sanjoy Kumar Saha, Dept. of CSE, Jadavpur University has delivered a lecture on 2-Day Seminar on Image Processing and Advanced Computing organized by Finishing School under Student Support, TEQIP II, in technical collaboration with Computer Chapter, IEEE Kolkata section, at MAKAUT, W.B on 16<sup>th</sup> March 2017, 11:30AM to 12:30 PM.
- Dr. Sarbani Roy, Dept. of CSE, Jadavpur University has delivered a lecture on 2-Day Seminar on Image Processing and Advanced Computing organized by Finishing School under Student Support, TEQIP II, in technical collaboration with Computer Chapter, IEEE Kolkata section, at MAKAUT, W.B on 16<sup>th</sup> March 2017, 1PM to 2 PM.



- Dr. Chandreyee Chowdhury, Dept. of CSE, Jadavpur University has delivered a lecture on 2-Day Seminar on Image Processing and Advanced Computing organized by Finishing School under Student Support, TEQIP II, in technical collaboration with Computer Chapter, IEEE Kolkata section, at MAKAUT, W.B on 16<sup>th</sup> March 2017, 2PM to 3 PM.
- **Student Chapter Activities**  
The Student branch of IEEE at Institute of Engineering & Management organized a Technology Awareness Programme during September 8 – 10, 2017 in collaboration with IEEE Region 10 and IEEE Computer Society and IEEE Kolkata Section. The Vice chairperson of IEEE Kolkata Section and the Chairperson of Computer Chapter, IEEE Kolkata Section were present during the inaugural ceremony along with other dignitaries.
- **DL Programme**  
On December 14<sup>th</sup>, 2017 at DKS Hall, Desapriya Park, Kolkata, Computer Chapter, IEEE Kolkata Section celebrated its 25 years. Prof. Dariusz Plewczynski, Laboratory of Functional and Structural Genomics, Centre of New Technologies, University of Warsaw was the Guest-of-Honour and he delivered a special lecture on the occasion.

## COMSOC

- **IEEE 5G Summit hosted by ComSoc Kolkata Chapter**  
In collaboration with CAS Chapter of IEEE, ComSoC Chapter of IEEE Kolkata Section jointly organized IEEE 5G Summit followed by 28<sup>th</sup> Global ICT Standardization Forum for India (GISFI) Meeting during March 17 – 18, 2017 at Kolkata. Such summit has been organized for the First time at Kolkata. The Two day event was held at Senses Hotel, Sector V, Salt Lake, Kolkata with the theme “Digital India”.
  - Speakers
    - Prof. R. Prasad, the founder Chair of GISFI and Professor of Aarhus University, Denmark.
    - Dr. Asutosh Dutta from AT&T, USA and IEEE 5G Co-Chair
    - Sri T. Kumar, IAS, Principal Secretary, Consumer Affairs, Govt. of West Bengal
    - Prof. C. Bhattacharjee, Dean, FET, Jadavpur University
    - Mr. V.B.James from Qualcomm India
    - Mr. I. Sanyal from Ericsson
    - Mr. P. Suthar from CISCO
    - Mr. V. Gupta from Polaris Network
    - Prof. P. Lindgren from Aarhus University, Denmark
    - Mr. T. Gupta from National Instruments, India
    - Mr. S. Misra from RS Software

### **Participation on IEEE 5G Summit at Bhubaneswar**

ComSoc Kolkata Chapter actively was the part of 6th IEEE 5G Summit and 29 th GISFI meeting series at SOA university, Bhubaneswar on 17-18 August, 2017. ComSoc chair delivered an invited lecture on the topic “*Cognitive Radio a suitable Choice for IOT enabled WBAN Applications*”. The ComSoc dedicated lecture was delivered by Mr. Sumit Misra, Technology Head, Innovation and Practice, RS Software, Kolkata on “*Frequent-*



*pattern detection in data-stream for real life business decisions”* on for 5G Summit on 18<sup>th</sup> Dec, pre-lunch session.

- **Technical Lectures and Seminars:**
- On 9<sup>th</sup> September 2017, IEEE ComSoc and its MSIT SBC organized a one day workshop on “WBAN, Neural Network and Cybersecurity” in association with IEEE GRSS Kolkata Section at Meghnad Saha Institute of Technology, at the Seminar Hall of ECE Department.
- On 15<sup>th</sup> Sep 2017 IEEE ComSoc and CAS Chapter organized the one day seminar bringing leading Industry researcher at the Electronics and Communication Department of Narula Institute of Technology. The theme of this industrial seminar was the “Advancement in Artificial Intelligence and Security”. in which ComSoc chapter hosted the seminar lecture on “Discussion on Connected Threat Defence and fight against Targeted attacks”
  - The keynote speakers of the day were
    - Mr. Tapas Chakroborty, an experienced professional from TCS
    - Mr. Kanchan Mallick from XGEN security technology services
- Dr. Tamal Chakraborty, ETCE, Jadavpur University, India delivered a technical lecture on “Studies for the Design of Cognitive Radio Networks for QoS Guaranteed VoIP Communication”. on 24 March 2017.
- Dr. Kalyan Bhattacheryya, Assoc. Prof. ECE Amrita University, Coimbatore – 641112, India delivered a lecture on 5G Transceiver Design with Bulk Silicon and SoI CMOS on 22 Nov 2017
- **DL Programme**
- Prof. Dr. Ashutosh Dutta, Lead Member of Technical Staff at AT&T’s Chief Security Office in Middletown, New Jersey, USA, has delivered the DLT program on 16 March 2016 at the Seminar Hall , SMCC, Salk Lake Campus, Jadavpur University.
- **Out Reach Programmes**
- On May 5<sup>th</sup> 2017, at the ECE Department of NIT Shilchar, IEEE ComSoc membership aware program was held followed by motivational lecture to join IEEE. As an outcome few ComSoc members and a student branch will open in 2018.
- On May 19 2017 ComSoc Chairperson was Invited for the QIP Faculty Development Program on "Recent trends in antenna analysis and design" where about 40 faculties at Asst. Prof. and Assoc. Prof. level from different Institutes attended the program. She delivered a hours lecture on “Antenna :Fundamentals and Evolution for Mobile Communication”.
- **The Chapter Achievement Award -2016**
- IEEE ComSoc Kolkata Chapter is the Winner of the 2016 Chapter Achievement Award in Asia Pacific Region. With the active Involvement of organizing various events like DLT, IEEE Lecture meetings, Workshop, Industry participation technical seminars, International Conferences and membership drive, 5G Summit the ComSoc Kolkata Chapter obtained the CAA Award for 2016 activities.

## CSS-IMS

- **Technical Programme**
- National Seminar on “Renewable Energy Resources and Its penetration to the Grid” organized by Department of Applied Physics, University of Calcutta on March 25, 2017 at Meghnad Saha Auditorium, University of Calcutta, 92 APC Road, Kolkata-70009.
  - Speakers

Prof. (Dr.) Subrata Mukhopadhyay, Professor & Head, ECE & EEE Department GTBIT, GGS Indraprastha University, New Delhi.

Title of Lecture: “Various Aspects of Grid Integration of Renewable Energy Resources in India”.

Er. S. Chakraborty, Executive Director, WBSEDCL.

Title of Lecture: “Renewable Energy Integration with Grid in Large Scale – Pumped Storage Projects, the Best Partner”

Professor S. Duttagupta IIT, EE Dept, IIT Bombay.

Title of Lecture: “Performance Conditioning of Renewable Energy Micro □ Grids”.

Dr. Indradip Mitra, Senior Technical Advisor Indo □ German Energy Programme of the German International Cooperation (GIZ GmbH), India.

Title of Lecture: “An introduction to large scale grid integration of Renewable Energy”

Attendees: 220

- “National Seminar on Advancements in Science & Technology” on March 29, 2017 at Purulia Govt. Engineering College, Purulia District, West Bengal.

- Speakers

Professor Amitava Chatterjee, Jadavpur University (<http://ieee-ims.org/node/1415>)

Title of Lecture: Introduction to Sensors and Transducers

Dr Kaushik DasSharma, University of Calcutta (<https://sites.google.com/site/kdassharma/>) Chapter’s representative.

Title of Lecture: Mobile Robot Navigation.

Dr Rajarshi Gupta, University of Calcutta (<https://sites.google.com/site/rgapppy/>) and Chapter Secretary.

Title of lecture: “Measurement & Instrumentation in monitoring applications”.

Attendees: Students: 130, faculty members: 12

- RASEM 2017 on February 11-12, 2017 organized by “Bengal Institute of Technology and Management”, Santiniketan at Bengal Institute of Technology and Management, Santiniketan, Bankura District, West Bengal.
- Convolution 2017 organized By: Electrical Engineering Dept, Jadavpur University, Kolkata-700032, India at Jadavpur University, Kolkata-700032, India on March 03-15, 2017 Attendees: 150
- Two day seminar on “Computational Intelligence in Engineering Applications” organized by Future Institute of Engineering & Management on March 23-24, 2017 at Future Institute of Engineering & Management, Sonarpur Campus, Kolkata.

- Speakers

Dr Amitava Chatterjee, Jadavpur University (<http://ieee-ims.org/node/1415>)

Title of Lecture: Fuzzy Logic Applications in Control Systems

Dr Kaushik DasSharma, University of Calcutta (<https://sites.google.com/site/kdassharma/>) Chapter’s representative.

Title of Lecture: Optimization technique in System Identification.

Dr Tapan Kumar Basu, IIT Kharagpur

Title of Lecture: Application of signal Processing in Electrical Engineering applications

Dr Jayanta K. Chandra, Purulia Govt Engineering College, West Bengal

Title of Lecture: PCA in image Engineering

Dr Abhinanda De, IEST, Howrah, Shibpur, West Bengal

Title of Lecture: Application of Neural Networks in Power Systems

Dr Pratyusha Rakshit, Jadavpur University

Title of Lecture: Evolutionary Optimization in Robotics

- Workshop on “Android Based Systems development towards instrumentation & Signal Processing” organized by IEEE Joint CSS-IMS Kolkata Section in collaboration with Dept of Applied Physics, University of Calcutta at Computing Lab, Dept of Applied Physics, University of Calcutta on March 25-May 2017 (total 48 contact hours)
- Keynote speakers were
  - Dr Jayanta K. Chandra, Purulia Govt Engineering College, West Bengal
  - Mr Dhruba Roy, R&D Engineering, Ardent Computech Solutions, Kolkata.
- Lecture on Kalman Filter given by Abhik Mukherjee, Associate Professor, Computer Sc Department, IEST, Kolkata, India at Mechanical Engineering Dept Seminar Room, Jadavpur University, Kolkata-700032, India. Attendees: 30, Faculty members: 12.
- Special Lecture program organized by Department of Applied Physics, University of Calcutta at Seminar Room, Department of Applied Physics, University of Calcutta, Kolkata on October 16, 2017  
Speaker: Mr Biswarup Mukherjee, Research Intern, KTH-Royal Institute of Technology, Sweden.  
Title of Lecture: “An Overview of Electricity Market in Europe”
- Invited Lecture on “Assistive Technology: Main challenges in Hearing Rehabilitation” organised by Dept of Applied Physics, University of Calcutta on November 06, 2017, Seminar Room at Department of Applied Physics, University of Calcutta, 92 APC Road, Kolkata-700009. Speaker: Prof Christian Berger Vachon, Emeritus Professor, University of Lyon, France, Edouard-Herriot Hospital, Lyon, France, General Secretary of AMSE.
- **Out Reach Programme**
- At North Eastern Hill University, Shillong, Meghalaya, India on October 9-10, 2017.
  - Speakers were
    - Dr Rajarshi Gupta, University of Calcutta and Chapter Secretary.  
Title of lecture: “Cardiovascular Health Monitoring: An emerging technology for digital healthcare”.
    - Dr Kaushik DasSharma, University of Calcutta  
Title of Lecture: “CT Image Based Cancer Detection: A Computational Intelligence Based Approach”
    - Dr Jayanta K. Chandra, Purulia Govt Engineering College, West Bengal  
Title of Lecture: Application of Machine Intelligence in Biomedical Engineering: Feature Optimization and Classification”

## CIS

- **Technical Programme**
- The First International Seminar on Intelligent Computing (ISIC 2017) was organized at Department of Information Technology, Jadavpur University on December 16, 2017 in technical collaboration with IEEE Computational Intelligence Society Kolkata Chapter. Two eminent speakers on the seminar were Prof. Dipankar Dasgupta, FIEEE & ACM Distinguished Speaker, DPEBP of Computer Science, University of Memphis, USA, and Prof. Xin Yao, FIEEE and IEEE Distinguished Speaker, Chair Professor of Computer Science, Southern University of Science and Technology, Shenzhen, China. Their talk titles

were “Computational Intelligence in Identity Management”, and “Ensemble Approaches to Class Imbalance Learning”, respectively.

- IEEE Computational Intelligence Society sponsored lecture was organized in the CSCR Conference Room of the Indian Statistical Institute, Kolkata on December 13, 2017. Prof Xin Yao, Chair Professor, Department of Computer Science and Engineering, Southern University of Science and Technology, China, delivered the lecture on “Ensemble Approaches to Class Imbalance Learning”.
- The IEEE Computational Intelligence Society Summer School, RACI 2017, was organized by the Machine Intelligence Unit of Indian Statistical Institute in collaboration with the IEEE Kolkata Section, during September 18-22 at Indian Statistical Institute, Kolkata, India.

- Speaker

1. Prof. Lawrence O. Hall, Fellow IEEE, Department of Computer Science and Engineering, University of South Florida, USA.

Topic: Adapting Deep Learning for Medical Image Understanding I, II

2. Prof. HisaoIshibuchi, Fellow IEEE, Department of Computer Science and Engineering, Southern University of Science and Technology, China & Osaka Prefectural University, Japan.

Topic: Evolutionary Single-, Multi-, and Many-Objective Optimization I, II

3. Prof. Francesco Masulli, Chair, IEEE CIS Italy Chapter, DIBRIS, University of Genova, Genova, Italy.

Topic: Time Evolving Data Streams Unsupervised Tracking I, II

4. Prof. Marley B. Vellasco, Department of ELE, Pontifical Catholic University of Rio de Janeiro, Brazil (General Chair IEEE WCCI 2018).

Topic: Hybrid Intelligent Systems and Applications I, II

5. Prof. P. N. Suganthan, Fellow IEEE, School of EEE, College of Engineering, Nanyang Technological University, Singapore.

Topic: Non-iterative Methods for Classification and Forecasting I, II

6. Dr. Tinku Acharya, Fellow IEEE, Videonetics Technology Pvt. Ltd., Kolkata, India. Topic: Video IoT and its Application

7. Dr. L V Subramaniam, IBM, Delhi, India.

Topic: Cognitive Systems that Drive Decision Making in Industry I, II

8. Prof. SantanuChaudhury, Director, CSIR-Central EE Research Institute, Pilani, India. Topic: Learning in Non-Stationary Environment I, II

9. Prof. ShalabhBhatnagar, Dept of Computer Science and Automation, Indian Institute of Science, Bangalore, India.

Topic: Reinforcement Learning Algorithms with Function Approximation and Feature Adaptation I, II

10. Prof. C. A. Murthy, Machine Intelligence Unit, Indian Statistical Institute, Kolkata, India. Topic: Machine Learning and Pattern Recognition I, II

11. Prof. Amit Konar, Department of Electronics & Telecommunication Engineering, Jadavpur University, Kolkata, India. Topic: Brain Computer Interface

12. Dr. PabitraMitra, Department of Computer Science and Engineering, Indian Institute of Technology Kharagpur, India. Topic: Machine Learning for Climate Science I, II
  13. Dr. PradiptaMaji, Machine Intelligence Unit, Indian Statistical Institute, Kolkata, India. Topic: Granular Computing
  14. Prof. SushmitaMitra, Fellow IEEE, Chair, IEEE CIS Kolkata Chapter, Machine Intelligence Unit, Indian Statistical Institute, Kolkata, India  
Topic: From Learning to Deep Learning
  15. Prof. SanghamitraBandyopadhyay, Fellow IEEE, Director, Indian Statistical Institute, India. Inaugural Address
  16. Prof. Nikhil R. Pal, Fellow IEEE, President-Elect IEEE CIS 2018, Electronics & Communication Sciences Unit, Indian Statistical Institute, Kolkata, India. Introduction to IEEE CIS
  17. Prof. Sujit K. Biswas, Chair IEEE Kolkata Section, Dept. of Electrical Engineering, Jadavpur University, Kolkata, India. About IEEE Kolkata Section
  18. Prof. Pradipta K. Nanda, Vice Chair, IEEE CIS Kolkata Chapter, SOA University, Bhubaneswar, India. Vote of Thanks
- IEEE Computational Intelligence Society, Kolkata Chapter co-sponsored First International Conference (ICACCP 2017) held at Sikkim Manipal Institute of Technology, Rongpo, Sikkim, India on 8-10 September, 2017.
  - Faculty development programme on "Hybrid Computational Intelligence" at RCCIIT, Kolkata during July 17th to July 27th, 2017
    - Name of Speaker
      - Prof. Susanta Chakraborty, IEST, Shibpur
      - Dr. Swagatam Das, ISI Kolkata
      - Prof. Susmita Mitra, ISI Kolkata
      - Dr. S. D. Mondal, CET, IIT KGP
      - Prof. Siddhartha Bhattacharyya, RCCIIT
      - Prof. Paramartha Dutta, Visva-Bharati University
      - Prof. Debotosh Bhattacharjee, Jadavpur University
      - Dr. Anirban Mukhopadhyay, Kalyani University
      - Dr. Kousik Mondal, IIT Dhanbad
      - Dr. Kousik Dasgupta, KGEC
      - Prof. Anup Ray, IIT KGP
  - One day Symposium on "Computational Intelligence: Theories, Applications and Future Aspects" in the Department of Computer Science and Engineering of Assam University Silchar, India on 8 August 2017.
    - Speech delivered by two invited speakers
      - Prof. Paramartha Dutta of Visva Bharati University
      - Dr. Tandra Pal of National Institute of Technology, Durgapur.
  - On 15 June 2017 a one day National Symposium on "Recent Trends in Computational Intelligence" was held in the Department of Computer Science, Gour Banga University, Malda, India.
    - Speech delivered

Prof. Paramartha Dutta of Visva Bharati University

Prof. Jaya Sil of Indian Institute of Engineering Science and Technology, Shibpur

Dr. Anirban Mukhopadhyay of University of Kalyani, Kalyani

Dr. Jyoti Prakash Singh of National Institute of Technology, Patna.

- First International Conference on “Computational Intelligence, Business Analytics, and Communication (CICBA-2017) was organized during 24-25 March 2017 under the technical co-sponsorship of IEEE Computational Intelligence Society, Kolkata Chapter at the Calcutta Business School, Bishnupur, 24-Parganas, South, West Bengal, India.
- One day Symposium on "Machine Learning and its Applications" was held on 22 March 2017 in the Department of Computer Science and Engineering of National Institute of Technology, Durgapur, India. Funded by TEQIP and organized by Dr. D. R. Kisku.
  - Speech delivered by
    - Prof. Amitava Chatterjee, Jadavpur University
    - Prof. Siddhartha Bhattacharyya, RCCIT
    - Dr. Anirban Mukhopadhyay, Kalyani University
- One day National Level Seminar on "Evolutionary Multi-Objective Optimization” was held on 2 March 2017 in the Department of Information Technology of RCC Institute of Information Technology, Kolkata, India. Speech delivered by Dr. Tandra Pal of National Institute of Technology, Durgapur. Organized by Prof. Siddhartha Bhattacharyya.
- One day Symposium on "Some New Research Directions in Machine Learning and Machine Intelligence" was held on 25 February 2017 in the Department of Computer and System Sciences, Visva Bharati University, Santiniketan, India.
  - Speech delivered by four invited speakers
    - Prof. Sushmita Mitra of Indian Statistical Institute, Kolkata
    - Prof. Jaya Sil of Indian Institute of Engineering Science and Technology, Shibpur
    - Prof. Amit Konar of Jadavpur University, Kolkata
    - Dr. Tandra Pal of National Institute of Technology, Durgapur. Organized by Prof. Paramartha Dutta.

- **DL Programme**

- IEEE Computational Intelligence Society approved and sponsored Distinguished Lecture Programme, was delivered by Prof. Xin Yao at Siksha O Anusandhan Deemed University, Bhubaneswar on 15 December 2017. . Prof Xin Yao, Chair Professor, Department of Computer Science and Engineering, Southern University of Science and Technology, China, delivered the lecture on “Recent Advances in Many Objective Optimisation”. Besides funding from the IEEE CIS, the program was also supported by the Siksha O Anusandhan University.
- Technical Lecture Session on "Continuous Visual Learning with Limited Supervision by Exploiting Context" in the Department of Electronics and Telecommunication Engineering of Jadavpur University Kolkata, India. Speech delivered by Amit K. Roy-Chowdhury, Professor of Electrical and Computer Engineering and a Cooperating Faculty in the department of Computer Science and Engineering at University of California, Riverside, (UCR), USA On 18 August 2017.

**DEIS**

- **Technical Programme**

- Dr. Abhinandan De, Dept. of Electrical Engineering, IEST, Shibpur, India has given a lecture on “An Introduction of Digital Signal Processing and Fuzzy Logic in MATLAB” at Electrical and Electronics Engineering Department, Pailan College of Management of Technology, Kolkata-700104, on 25 March 2017. Participants:98.
- Mr. Arijit Basu Ray, Chairman, Dielectrics and Electrical Insulation Society, IEEE Kolkata Chapter, has given a lecture on “Industrial Application of Transducer in Making Circuit Breaker Analyser – Safety and Protection” at Electrical and Electronics Engineering Department, Pailan College of Management of Technology, Kolkata-700104, on 25 March 2017. Participants:98
- Prof. S. V. Kulkarni, IIT Bombay, Mumbai, India, has given a lecture on “Modeling of Transformers for Diagnostic and Transient Studies” at MP Hall, IIT Ropar, Rupnagar, Punjab, India, on 16 November 2017. Participants:155.
- Dr. Debangshu Dey, EE Dept., Jadavpur University, West Bengal India, has given a lecture on “Technical Workshop on LABVIEW” at Advanced Computing Laboratory, SKFGI, Mankundu, West Bengal, on 12 October 2017. Participants:45.
- Prof. L. Satish, IISc Bangalore, India, has given a lecture on “Frequency Response Analysis, Some Recent Advances” at MP Hall, IIT Ropar, Rupnagar, Punjab, India, on 17 November 2017. Participants:101.
- Prof. Sivaji Chakravorti, NIT Calicut, India, has given a lecture on “Moisture in Oil-Paper Insulation of Transformers” at MP Hall, IIT Ropar, Rupnagar, Punjab, India, on 18 November 2017. Participants:88
- Prof. Sarathi Ramanujam, IIT Madras, Chennai, India, has given a lecture on “Understanding the Dielectric Properties of Pressboard Material Thermally Aged in Dibenzyl Disulphide (DBDS) Included Transformer Oil” at MP Hall, IIT Ropar, Rupnagar, Punjab, India, on 18 November 2017. Participants:75
- Dr. Subrat Kumar Sahoo, ABB, Sweden, has given a lecture on “Asset Management in Renewable World: Challenges and Opportunities” at MP Hall, IIT Ropar, Rupnagar, Punjab, India, on 16 November 2017. Participants:138.
- Prof. Yasuhiro Tanaka, Tokyo City, has given a lecture on “Space Charge Accumulation in Insulating Materials for HVDC observed using PEA Method” at MP Hall, IIT Ropar, Rupnagar, Punjab, India, on 16 November 2017. Participants:134.
- Prof. Ayman Hassan El-Hag, American University of Sharjah, has given a lecture on “Smart Monitoring of Outdoor Insulators” at MP Hall, IIT Ropar, Rupnagar, Punjab, India, on 16 November 2017. Participants:146.
- Dr. Santanu Singha, ABB, Sweden, has given a lecture on “Recent Trends in Electrically Insulating Liquids and Their Application related Challenges” at MP Hall, IIT Ropar, Rupnagar, Punjab, India, on 16 November 2017. Participants:142.
- Prof. L. A. Dissado, University of Leicester, United Kingdom, has given a lecture on “Insulation Ageing; Unsolved Problems” at MP Hall, IIT Ropar, Rupnagar, Punjab, India, on 17 November 2017. Participants:116.
- Prof. Toan Phung, UNSW Sydney, Australia, has given a lecture on “Cavity Discharge Behaviour Under Trapezoid Based Voltage at Very Low Frequency” at MP Hall, IIT Ropar, Rupnagar, Punjab, India, on 17 November 2017. Participants:107.
- Prof. Tatsuki Okamoto, Tohoku University, Japan, has given a lecture on “ Partial Discharge Characteristics on Applied Sine Wave Voltage Frequency with Iec(b) Electrode



System” at MP Hall, IIT Ropar, Rupnagar, Punjab, India, on 18 November 2017.  
Participants:80.

- **Student Activity:**

Circuistic of Convolution 2017 Organized by Students of the Department of Electrical Engineering, Jadavpur University in Collaboration with IEEE DEIS Kolkata Chapter at Electrical Engineering Department Jadavpur University, 3rd and 4th March, 2017.

- **Conference:**

The 3rd International Conference on Condition Assessment Techniques in Electrical Systems (CATCON) has been hosted by Department of Electrical Engineering, Indian Institute of Technology Ropar during 16th to 18th November 2017.

## EDS

- **Technical Programme**

- Lecture on “Security and Authentication in non-linear domain: Electronic Applications” by Prof. J. K. Mandal of Kalyani University on : 4th August, 2017 at KGEC.
- Lecture on “Searching New Possibilities of nano MOSFET structures” by Prof. Subir Kumar Sarkar, Jadavpur University on 28th July, 2017 at KGEC.
- Lecture on “Security and Authentication in non-linear domain: Electronic Applications” by Prof. Abhirup Das Barman of Institute of RadioPhysics & Electronics, University of Calcutta on 21st Sept., 2017 at KGEC.
- IEEE EDS Mini Colloquium on "Nano-Scale Device and Circuit Design" on Saturday, March 25, 2017 at Meghnad Saha inst. of Tech Auditorium, speakers are 1) Prof. C K Sarkar, Professor of Jadavpur University and IEEE EDS DL 2) Prof. Manoj Saxena, Associate Professor of Deen Dayal Upadhyaya College, University of Delhi and IEEE EDS DL 3) Prof. G N Dash, Professor of Sambalpur University and IEEE EDS DL 4) Prof. Ajit Kumar Panda, Professor of NIST Berhampur and IEEE EDS DL
- On Panel discussion on ‘Digital India, Make in India & Startup India - How to optimize a pragmatic growth path’ on April 06, 2017. Speakers are Dr. Nabarun Bhattacharyya, Director, C-DAC, Prof. Rajib Bandyopadhyay, Jadavpur University, Mr. Alokesh Ghosh, C-DAC, Dr. Subhrangshu Sanyal, CEO, IIMKolkata, Dr. Prabir Banerjee, HOD, ECE, Dr. Anindya Sen.
- **DL Programme**
- DL by Dr. Meyya Meyyappan ‘Nanomaterials in Nano electronics and Optoelectronics’ on 6th January 2017.
- Prof. Siben Dasgupta, Wentworth College, USA. on ‘Digital Controls’ ; 9th March 2017.
- Prof. Sanatan Chattopadhyay on ‘Challenges and Advantages of MOSFETs: A Journey of 60 years’ on 28th March 2017.
- Dr. Nabarun Bhattacharyya, Director, C-DAC ; Mr. Alokesh Ghosh, C-DAC ; And Dr. Subhrangshu Sanyal, CEO, IIM Kolkata on ‘Embedded Systems: Innovation, Leadership and Entrepreneurship’
- Prof. Samar Saha (DL), President, IEEE EDS and Adjunct Faculty, Santa Clara University on “Evolution of Semiconductor Devices in Enabling Smart Environments and Integrated Ecosystems” on 21.07.2017.
- Prof. M. Jagadesh Kumar (DL), Vice-Chancellor, Jawaharlal Nehru University and Professor, Dept. of EE, IIT Delhi on “Low Power Nanoscale MOSFETs: Innovations and Challenges” on 21.07.2017.

- Prof. Manoj Saxena (DL), Associate Professor, University of Delhi, IEEE EDS-Region 10 SRC Vice Chair on “Modeling and simulation of Gate Electrode Engineered Double Gate Junctionless Transistor” on 21.07.2017.
- Prof. Souvik Mahapatra (DL), Professor, Dept. of EE, IIT Bombay and Fellow, IEEE on “CMOS Transistors - Operation, Scaling, Reliability and Way Forward” on 21.07.2017.
- Dr. Writam Banerjee, Inst.of Microelectronics, PR China on 17-18th April, 2017 Verilog-A simulation.
- IEEE DL Talk by Prof. Samar K. Saha on 29th July, 2017 at MSIT
- **Conferences**
- 2nd International Conference on Devices for Integrated Circuits (DevIC 2017), Technical Sponsorship in International Conference, March 23-24, 2017. Venue: Kalyani Government Engineering College.
- **Student Activity collaboration**
- Green Window Project competition has been organized by IEEE EDS MSIT SBC, IEEE MSIT SB and Rotaract Club, MSIT on 29th April, 2017. Ten School teams and college school teams have participated. Experts from the industries were attended the events to evaluate the performances of the INNOVATION 2017 and the Green Window project competitions.
- **Membership awareness programme**
- Techno India Batanagar on 9th August , 2017
- MSIT tech Auditorium on 22nd February, 2017

## GRSS

- **Technical Programme**
- One day workshop on "NASA-ISRO synthetic aperture radar (NISAR) and the art of writing good papers". Speaker of the workshop was Prof. Paul Rosen & Prof. William Emery, NASA, USA & University of Colorado, USA on June 10, 2017 at ISI, Kolkata. Number of people in attendance 35.
- Dr. Arundhuti Roy Misra & Dr. Debojyoti Dhar, ISRO, delivered a talk on Noise removal in satellite imagery and SAR images at ISI, Kolkata on July 27, 2017. Number of people in attendance 30.
- One day seminar on "Key challenges and solutions to present and next generation cellular systems" at Kalyani Govt. College, Kalyani , India on Aug 21, 2017. Lecture was delivered by Prof. Abhirup Das Barman, Institute of Radio Physics & Electronics, CU. Number of people in attendance 80.
- Workshop on data science and machine learning 2017 was organized at Center for Soft Computing Research, ISI Kolkata during March 28-31, 2017. Prof. Soumya K. Ghosh, IIT KGP, has conducted the lectures. No of Participants 64.
- Workshop on neural networks, cyber security & wireless body area network at Meghnad Saha Institute of Technology, Kolkata on September 09, 2017.
  - Speakers :
    - Prof. Ashish Ghosh, Machine Intelligent Unit, ISI, Kolkata
    - Prof. Dr. Iti Saha Mishra, Jadavpur University, Kolkata
- Workshop on disaster management organized at Kolkata, West Bengal on March 29, 2017.
  - Speakers
    - Prof. Ashish Ghosh, Machine Intelligent Unit, ISI, Kolkata

Prof. P. K. Nanda, Siksha 'O' Anusandhan University, Bhubaneswar

- Workshop on remote sensing and signal processing organized at Guwahati, Assam during May 15-16, 2017.
  - Speakers
    - Prof. Ashish Ghosh, Machine Intelligent Unit
    - Prof. P. K. Nanda, ISI, Kolkata
    - Dr. Saurabh Das, Siksha 'O' Anusandhan University, Bhubaneswar,
    - Dr. Drubha Saharia, Center for Soft Computing Research
    - Prof. Anup Saikia, ISI Kolkata
    - Dr. Alope Datta, Guwahati University
    - Dr. Kandarpa Kumar Sarma, NIT Schillong
- International Conference On Communication, Devices And Networking organized at Guwahati, Assam during June 03-04 2017.
  - Speaker
    - Prof. Subir Kumar Sarkar, Jadavpur University, Kolkata
    - Prof. Ashish Ghosh, Machine Intelligence Unit, ISI Kolkata
- Workshop on Big Data In Earth Science organized at Kalinga Institute of Industrial Technology, Bhubaneswar during November 15-16, 2017.
  - Speakers
    - Prof. Ashish Ghosh, Machine Intelligent Unit, ISI, Kolkata
    - Dr. Saurabh Das, Center for Soft Computing, ISI, Kolkata
- **DL Programme**

Distinguished lecture of Dr. Shrutilipi Bhattacharjee, Technical University of Munich, Germany on “Semantically Enhanced Approach for Spatial Interpolation” was organized at ISI, Kolkata on April 20, 2017. Number of people in attendance 20.
- **Outreach programme**

National workshop on machine learning & remote sensing organized at Sikhsa O Anusandhan University, Orissa on March 14, 2017. No of Participants 150.

  - Speakers
    - Prof. Ashish Ghosh, Machine Intelligent Unit, ISI, Kolkata
    - Prof. Amlan Chakrabarty, Kolkata University
    - Dr. Saurabh Das, Center for Soft Computing, ISI, Kolkata

## IA

### Technical Programme

- on 1<sup>st</sup> April 2017 (3:30 pm to 4:30 pm) at the Seminar Hall, Department of Electrical Engineering, B. P. Poddar Institute of Management and Technology (Main Campus), Kolkata. The title of the lecture was “Carrier Based PWM Inverters: General Concepts” and it was delivered by Dr. Suvarun Dalapati, Assistant Professor, Department of Electrical Engineering, Indian Institute of Engineering Science and Technology, Shibpur, Howrah
- on 12th April, 2017 (3:00 pm to 4:15 pm) at the Seminar Hall, Department of Electrical Engineering, Indian Institute of Engineering Science and Technology (IEST), Shibpur, Howrah. The title of the lecture was “Rolling Mill - Large Motors with Variable Speed Drive (VSD)” and it was delivered by Mr. Paritosh Chatterjee, Supdt. Engineer, M. N. Dastur & Co. (P) Ltd., Kolkata, India.

- on 7th July, 2017, (11.30 am to 1 pm), at the Seminar Hall, Department of Electrical Engineering, Indian Institute of Engineering Science and Technology (IEST), Shibpur, Howrah. The title of the lecture was “Role of Smart Buildings in the Development of a Smart City” and it was delivered by Professor Saifur Rahman, Joseph R. Loring Professor of Electrical and Computer Engineering, Virginia Tech, USA.
- on 6th September, 2017, (4:00 pm - 5:00 pm), at the Seminar Hall, Department of Electrical Engineering, Indian Institute of Engineering Science and Technology (IEST), Shibpur, Howrah. The title of the lecture was “Permanent Magnet Direct Drive Generators: Scope of University Research” and it was delivered by Dr. Debmalya Banerjee, Research Engineer, Hella Electronics, Pune, India.
- on 15th November, 2017 (2:00 pm - 5:00 pm), at the Seminar Hall, Department of Electrical Engineering, Indian Institute of Engineering Science and Technology (IEST), Shibpur, Howrah. The title of the lecture was “Design, selection and application of AC motors followed by some practical examples” and it was delivered by Mr. Sabyasachi Roy, Ex-Chief Manager (Technical), WEG Electric India (P) Ltd. India.

## PES

- **Technical Programme**
- Technical Lecture Session on “Renewable Energy and Grid Integration “in the Department of Electrical Engineering of Jadavpur University Kolkata,India. Speech delivered by Mr. Abhijit Bose, Chief Adviser, WBSERC, Kolkata on September 13, 2017
- Mr. Jiban K. Chaudhury, Director, DCPL, Kolkata has given a lecture on “Layout of Plant Electricals” at Seminar Hall, Electrical Engg. Dept, Jadavpur University, November 07, 2017
- **Industrial Visit Programme**
- One day industry visit to Sothern Generating Station of CESC Ltd. was jointly organized by PES chapter, Kolkata section and Department of Electrical Engineering, Jadavpur University on 9th September, 2017. The visit was co-ordinated by Sri Susanta Ray, Assistant Professor, Department of Electrical Engineering.
- **Outreach activity**
- Algomaniac, organized by the Students of the Department of Electrical Engineering, Jadavpur University, Kolkata, India, in collaboration with PES Kolkata Chapter, was a competition where students from various institutions in groups took part in coding on 3rd-4th March, 2017.
- Mr. Sanjay Kar Chowdhury, Sr. Manager, HRD, CESC Ltd. delivered lecture in a programme titled "An Introduction to Advance Transformer Diagnostics" on May 8, 2017 at Meghnad Saha Inst. of Technology.
- Mr. Sanjay Kar Chowdhury, Sr. Manager, HRD, CESC Ltd. delivered lecture in a programme titled " An Introduction to Perspective & Challenges in Energy Sector in India" on September 8, 2017 at UEM, Newtown Kolkata.
- Mr. Sanjay Kar Chowdhury Sr. Manager, HRD, CESC Ltd. delivered lecture in a programme titled " An Introduction to Past, Present & Future of Energy Sector in India. " on September 18, 2017 at Dr. S.C.Sur Degree Engg. College.
- Prof. Kesab Bhattacharya Department of Electrical Engineering, Jadavpur University,Kolkata-700032. delivered lecture in a programme titled " An Introduction to the Basics of High Voltage Engineering" on September 18, 2017.

- Mr. Sanjay Kar Chowdhury Sr. Manager, HRD, CESC Ltd. delivered lecture in a programme titled " On Role and Responsibility of a Power Engineers " on October 18, 2017 at RCCIT, Kolkata.

## Photonics

- **Technical Programme**
- Technical Lecture Session on "Semiconductor Nanowires for Optoelectronics and Energy Applications " at Centre for Research in Nanoscience and Nanotechnology (CRNN). Speech delivered by Prof. C. Jagadish The Australian University, Caberra, Australia.09.03.2017.
- Prof. Asim Ray (DSc, C. Eng. FInstP, FIET, FRSA) The Brunel University, London, UK.has given a lecture on "Liquid Crystalline Phthalocyanine for Plastic Electronics" at Institute of Radio Physics and Electronics ,15.03.2017.
- Dr. Jayanta Sarma, University of Bath, UK, has given a lecture on "Effective index analysis of 2D photonic crystal (surface emitting laser) resonances"at Institute of Radio Physics and Electronics,05.07.2017.
- Dr. Samik Mukherjee, Department of Engineering Physics,Ecole Poly Technique Montreal, Canada, has given a lecture on " Novel Semiconductor Nanomaterials for Group IV based thermoelectrics, photonics and nanoelectronics" at Institute of Radio Physics and Electronics,11.08.2017.
- Dr. Tapas Mondal, Associate Professor of Pediatrics (Cardiology), McMaster University, Canada, has given a lecture on "a Social Awareness Workshop on 'BYSTANDER CPR'" at M.N. Saha Auditorium , UCST, University of Calcutta,11.12.2017

## Signal Processing

- **Technical Programme**
- Technical Lecture Session on "Some Aspects of Biomedical Image Conditioning and Processing Techniques" at Electrical Engineering Department Netaji Subhash Engineering College, Garia, Kolkata. Speech delivered by Dr. Debangshu Dey , EE Dept., Jadavpur University, West Bengal India, 01 September 2017.
- Technical Lecture Session on "Partial Discharge Source Detection using Advanced Signal " Speech delivered by Dr. Subrata Biswas, Electrical Engineering Department, Netaji Subhash Engineering College at High Voltage Seminar Hall, Electrical Engineering Department, Jadavpur University on 10 October 2017
- Technical Lecture Session on "Fuzzy Logic Aided Speed Control of BLDC Motor" Speech delivered by Dr. Tridibesh Nag, Electrical Engineering Department, Netaji Subhash Engineering college at High Voltage Seminar Hall, Electrical Engineering Department, Jadavpur University on 15 November 2017
- Technical Lecture Session on "Rough Set Baset Power Quality event identification Technique" by Dr. Sovan Dalai, EE Dept., Jadavpur University, West Bengal India, at Seminar Hall, Electrical Engineering Department Netaji Subhash Engineering College, Garia, Kolkata on 12 December 2017

## SSCS

- **Technical Programme**

- SoC Design using Verilog by Dr. Indranil Hatai , Assistant Professor, School VLSI Technology, Indian Institute of Engineering Science and Technology, Shibpur, Howrah India on 20th June, 2017 at MCKV Institute of Engineering, Howrah, India.
- SoC Design using Verilog by Dr. Swarup Kumar Mitra, MCKV Institute of Engineering, Howrah, India 20th June, 2017 at MCKV Institute of Engineering, Howrah, India.
- The IEEE Solid-State Circuits Society Kolkata Chapter held a one month summer training session on “VLSI & Embedded System” on 27 June to 19 July 2017 at the MCKV Institute of Engineering, Howrah, West Bengal, India.
- The Six-Day National Workshop on Nanoelectronics and Related Disciplines was organized from 1<sup>st</sup> August 2017, at the Deptt. of Electronics & Communication Technology, Gauhati University, Assam, India. The workshop was organized by the Deptt. of Electronics & Communication Technology, Gauhati University, in collaboration with IEEE Kolkata chapter of Solid State Circuit Society (SSCS).
- Student paper contest “PRAYAS-2017” on 18th February, 2017  
27 participant from different engineering colleges presented 17 papers in the students paper contest. The event was judged by Prof. (Dr.) Siddhartha Bhattachayra, Dean (R&D), RCCIT, Kolkata and Dr. Ipsita Sengupta, Asst. Prof., Dept. of Electronics, Govt. College of Engineering and Leather Technology.
- Workshop on Circuit Design using LT-SPICE on 15th November, 2017  
A Circuit Design workshop was organised for students. 17 participants participated in the event. In the event a hands on session was organised in which students designed Analog and Digital VLSI circuits using LT-SPICE. Subhasish Banerjee and Sagar Mukherjee were the resource person of the event.
- **DL programme**
- DL Talk on “Advanced CMOS Device “ Jointly with IEEE EDS Kolkata Chapter, IEEE EDS MSIT Student branch Chapter, by Prof. Samar K. Saha, Santa Clara University on 21st July, 2017 at Meghnad Saha Institute of Technology, Kolkata, India

## IEEE India Council CEDA Chapter

- Executive Committee Meeting with the IEEE CEDA President Dr. Shishpal Rawat at Delhi. The meeting was attended by IEEE CEDA members from IIT Delhi and professionals from industry.
- Executive Committee Meeting with the IEEE CEDA President Dr. Shishpal Rawat at IIT Kharagpur, Kolkata Campus, Kolkata.
- One-day program for Women in EDA at Cadence Design Systems (I) Pvt. Ltd., Noida. The one day program had lectures by Padma Panda, Alok Jain and Kanwarpal Singh, from Cadence India, Rashna Seli Zaroo, STMicroelectronics, Sakshi Gupta, NXP Noida.
- Lectures on Evolution of Logic Design Techniques by Prof. Bhargab B Bhattacharya, Indian Statistical Institute at Department of Computer Science and Engineering, Jadavpur University.
- 10-day summer school on algorithms and optimization techniques comprised lectures on basics in linear algebra, modeling optimization problems, linear programming including



primal dual techniques, integer linear programming, nonlinear programming, semidefinite programming, use of mathematical solvers in optimization. Lectures were delivered by the faculty members of the ACM Unit. About 40 participants including faculty, Ph.D. scholars and M. Tech. students and even a couple of B. Stat. students from academic institutions in and around Kolkata participated in the program. Participation certificates were given to the candidates who completed this summer school successfully.

- A distinguished lecture program titled Symmetry and Combinatorial Optimization by Prof. Anuj Dawar, Department of Computer Science and Technology, University of Cambridge will be organized on December 23, 2017 at CRNN, University of Calcutta, Salt lake.

### **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.

#### **IEEE India Council Face to Face Meeting**

Kolkata Section is honored to host the India Council Face-to-Face Meeting at Kolkata on Sunday the 16th of April 2017.

The venue of the meeting is:

VSNL Auditorium, IETE Kolkata Center ,Plot no. J1-7, EP Block, Salt Lake Electronics Complex Sector V, Salt Lake, Kolkata 700091

#### **CALCON 2017**

2017 IEEE Calcutta Conference (CALCON 2017), a triennial event of IEEE Kolkata Section was organized at the Lalit Great Eastern, Kolkata, India during December 2-3, 2017.

CALCON 2017 received 203 paper submissions across all the 3 tracks of the conference from countries across the globe. Each paper underwent a rigorous multi-tier review process and received multiple independent reviews. After a careful selection phase, 97 papers were accepted and presented in the main conference program. The acceptance ratio for the conference was 47.7%. These papers have been organized into 15 technical sessions. The CALCON 2017 Conference Proceedings will be published with the IEEE Xplore Catalog No. CFP17O01-CDR, ISBN:978-1-5386-3744-9 and IEEE Conference Record No. #43198.

Keynote address in CALCON 2017 was delivered by Dr. Héctor J. De Los Santos, President and Chief Technical Officer of Nano MEMS Research, LLC, Irvine, California, U.S.A. The plenary speaker for CALCON 2017 was Prof. Sivaji Chakravorti, Chair IEEE, India Council, Director, NIT Calicut. A panel discussion has been organized in CALCON with world-renowned personalities from industry and academia to bridge the gap between industry and academia. The total number of paid registration was 102 and total attendee was 170.

##### **a) Technical Lecture**

1. IEEE Kolkata Section has arranged a Lecture Meeting on 29th March 2017 in the K.P.Basu Memorial Auditorium, Jadavpur University,

Speakers

A) Professor Satish K. Sharma



Director, Antenna and Microwave Lab (AML) Department of Electrical and Computer Engineering San Diego State University, 5500 Campanile Drive, San Diego, CA

Title of Lecture Design and Investigations of Some Novel Phased Arrays and Massive MIMO Array Antennas

B) Dr. Sudhakar Rao

Technical Fellow, Engineering & Global Products Division Northrop Grumman Aerospace Systems CA 90278, USA.

Title of Lecture Antenna Systems for Next Generation Navigational and High Frequency Satellites

2. IEEE Kolkata section in association with Institute of Engineering and Management (IEM), Kolkata organizes lectures at Auditorium, IEM, Salt Lake, Kolkata on Thursday, April 13, 2017

Speakers

A) Professor Tapan K. Sarkar

College of Engineering & Computer Science, Syracuse University, USA

How to Radiate Maximum Energy from an Antenna

B) Professor Magdalena Salazar-Palma

Signal Theory and Communications Department, Charles III University of Madrid, Madrid, Spain

Analysis of the Improvement of Radiation Behavior for THz Devices

3. The IEEE Kolkata section has planned to organize milestone lectures every year to commemorate this occasion by inviting reputed scientist and academicians in the field of physical sciences and engineering. Accordingly, IEEE C. V. Raman Milestone Lecture was organized by IEEE Kolkata section on 18th December, 2017 at 3PM at Dr. Mahendra Lal Sircar Hall in Indian Association for the Cultivation of Science, Jadavpur. Lecture, titled "Meta-atoms--the Building Blocks of Future Materials for Electromagnetic Devices", was delivered by Prof. Raj Mittra, Pennsylvania State University, USA.

4. IEEE Kolkata section has organized a lecture on 17th April, 2017 on educational and researcher activity. Prof. Sivaji Chakroborty has delivered the first lecture on Ethical issue in Research and Publication and Prof. Debatosh Guha has delivered the second lecture on Art and challenges of writing paper for high impact journals

5. IEEE Kolkata section has organized a lecture on Friday August 4, 2017 on 'On the Art of Setting a Good Question Paper' by Prof. S. C. Dutta Roy, Retired Professor, Department of Electrical Engineering IIT Delhi at A. N. Daw Conference Room Sisir Mitra Bhavan, Institute of Radio Physics and Electronics, University of Calcutta

6. IEEE Kolkata section has organized a lecture on August 3, 2017 on 'On the Art of Setting a Good Question Paper' by Prof. S. C. Dutta Roy, Retired Professor, Department of Electrical Engineering IIT Delhi at Dept. of Electrical Engineering, Jadavpur University.

7. The IEEE Computational Intelligence Society Summer School, RACI 2017, was organized by the Machine Intelligence Unit of Indian Statistical Institute in collaboration with the IEEE Kolkata Section, during September 18-22 at Indian Statistical Institute, Kolkata, India.

8. Keynote address in CALCON 2017 was delivered by Dr. Héctor J. De Los Santos, President and Chief Technical Officer of Nano MEMS Research, LLC, Irvine, California, U.S.A. The plenary speaker for CALCON 2017 was Prof. Sivaji Chakravorti, Chair IEEE, India Council, Director, NIT Calicut.

## b) Technical Co-Sponsorship

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

No.	Organizer	Event name
1.	IEEE Kolkata Section	CALCON -2017 on 2 <sup>nd</sup> -3 <sup>rd</sup> December, 2017. at Lalit Great Eastern, 1,2,3 Old Court House Street, Dalhousie Square, Kolkata 700069. Kolkata, India
2	ISI- Kolkata	Seventh International Conference on Pattern Recognition and Machine Intelligence – ( PReMI-17) , December 5-8 , 2017
3	Silicon Institute of Technology, Bhubaneswar	International Conference on Information Technology 21 <sup>st</sup> -23 <sup>rd</sup> December, 2017
4	Institute of Engineering and Management, Kolkata	International Conference on Electronics Material Engineering and Nano-Technology (IEMENTech-2017) 28-29th April, 2017
5	R.V.S. College of Engineering and Technology, Jharkhand	International Conference on recent trend in Computer Science and Technology ( ICRTCST-17) , 20-21 <sup>st</sup> April-2017
6	NIT Durgapur	ISED - 7th International symposium on embedded computing and system design 18.12.2017 to 20.12.2017.
7	RCC Institute of Information Technology	ICRCICN - 2017 Third international Conference on Research in Computational Intelligence and Communication Networks (ICRCICN-2017) 03.11.2017 to 05.11.2017.
8	University of Engineering and Management, Kolkata	4 <sup>th</sup> International conference Optronix -2017, 2-3 <sup>rd</sup> November, 2017
9	Techno India University, Kolkata	International Conference on Computer, Electrical and Communication Engineering, 22 <sup>nd</sup> -23 <sup>rd</sup> December, 2017
10	ISI, Kolkata , jointly with IEEE CIS chapter	IEEE CIS summer school “Recent Advances in Computational Intelligence (RACI) , 12-22 <sup>th</sup> September, 2017
11	IEST Shibpur 11 <sup>th</sup> -13 <sup>th</sup> January , 2018	Emerging application of information technology
12	Sikkim Manipal University	Second International conference on Computing and communications 23-24 <sup>th</sup> March 2018
13	Guru Nanak Institute of Technology	Emerging trends in Electronics Devices and Computational Techniques 8 <sup>th</sup> -9 <sup>th</sup> March, 2018
14	NIT Durgapur	ISED - 7th International symposium on embedded computing and system design 18.12.2017 to 20.12.2017.
15	RCC Institute of Information Technology	ICRCICN - 2017 Third international Conference on Research in Computational Intelligence and Communication Networks (ICRCICN-2017) 03.11.2017 to 05.11.2017.

16	IEEE ComSoc Kolkata Chapter jointly with IEEE CAS Kolkata Chapter	IEEE Int. 5G Summit and 28 <sup>th</sup> GISFI Standardization Series Meeting (GSSM) during March 17-18, 2017 at SENSES Hotel, Sector V, Salt Lake, Kolkata- 700091
17	IEEE AP/MTT Kolkata chapter	IAW 2017 was organized during 5 <sup>th</sup> - 9 <sup>th</sup> June, 2017 at the Defense Institute of Advanced Technology (DIAT), Pune.
18	IEEE AP/MTT Kolkata chapter	International conference, “Applied Electromagnetic Conference (AEMC) 2017” was held during 19 <sup>th</sup> - 22 <sup>nd</sup> Dec 2017 at Maharashtra Institute of Technology, Aurangaband, Maharashtra, India

### C) Educational Activity

- A lecture program was organized by the Chapter on 6th March 2017 at the Institute of Radio Physics and Electronics, University of Calcutta. Prof. Kazuya Kobayashi, Chuo University, Tokyo, Japan delivered the talk on “Radar Cross Section of a Finite Parallel Plate-Waveguide with Material Loading”. Total participants 24 (IEEE members 10).
- An IEEE APS Distinguished Lecture Program was organized by this Chapter, at the Institute of Radio Physics and Electronics, University of Calcutta, on 30th March 2017. The speaker, Dr. Sudhakar Rao (Northrop Grumman Aerospace), delivered the DL talk on “Advanced Antenna System for 21st century Satellite Communication Payloads”. Total participants 36 (IEEE members 16).
- VHDL Modeling and Efficient FPGA Implementation of some Interleavers for applications in OFDM based Wireless Communication Systems delivered by Mr. B. K. Upadhyay, TIT, Narsingharh, Agartala on 21 April 2017 at ETCE Deptt. JU, Kolkata
- IEEE CAS Activities through Student Branch delivered by Dr. S. K. Sanyal, Deptt. of ETCE, JU (Retd.), Kolkata on 07 September 2017 at IEM, Salt Lake, Kolkata.
- The Institute of Engineering & Management (IEM), IEEE Circuits and Systems Society (CASS) Student Branch was formally inaugurated on September 7, 2017 at IEM Gurukul Campus Language Lab , Salt Lake, Sector V by Prof. S.K.Sanyal, Chairman of CAS Chapter of IEEE Kolkata Section.
- Dr. Chandreyee Chowdhury, Dept. of CSE, Jadavpur University has delivered a lecture on 2-Day Seminar on Image Processing and Advanced Computing organized by Finishing School under Student Support, TEQIP II, in technical collaboration with Computer Chapter, IEEE Kolkata section, at MAKAUT, W.B on 16th March 2017, 2PM to 3 PM.
- Prof Sanjoy Kumar Saha, Dept. of CSE, Jadavpur University has delivered a lecture on 2-Day Seminar on Image Processing and Advanced Computing organized by Finishing School under Student Support, TEQIP II, in technical collaboration with Computer Chapter, IEEE Kolkata section, at MAKAUT, W.B on 16th March 2017, 11:30AM to 12:30 PM.
- Dr. Sarbani Roy, Dept. of CSE, Jadavpur University has delivered a lecture on 2-Day Seminar on Image Processing and Advanced Computing organized by Finishing School under Student Support, TEQIP II, in technical collaboration with Computer Chapter, IEEE Kolkata section, at MAKAUT, W.B on 16th March 2017, 1PM to 2 PM.
- Dr. Tamal Chakraborty, ETCE, Jadavpur University, India delivered a technical lecture on “Studies for the Design of Cognitive Radio Networks for QoS Guaranteed VoIP Communication”. on 24 March 2017.

- Prof. Dr. Ashutosh Dutta, Lead Member of Technical Staff at AT&T's Chief Security Office in Middletown, New Jersey, USA, has delivered the DLT program on 16 March 2016 at the Seminar Hall , SMCC, Salk Lake Campus, Jadavpur University.
- Convolution 2017 organaized By: Electrical Engineering Dept, Jadavpur University, Kolkata-700032, India at Jadavpur University, Kolkata-700032, India on March 03-15, 2017 Attendees: 150
- The IEEE Computational Intelligence Society Summer School, RACI 2017, was organized by the Machine Intelligence Unit of Indian Statistical Institute in collaboration with the IEEE Kolkata Section, during September 18-22 at Indian Statistical Institute, Kolkata, India.
- Circuistic of Convolution 2017 Organized by Students of the Department of Electrical Engineering, Jadavpur University in Collaboration with IEEE DEIS Kolkata Chapter at Electrical Engineering Department Jadavpur University, 3rd and 4th March, 2017.
- Green Window Project competition has been organized by IEEE EDS MSIT SBC, IEEE MSIT SB and Rotaract Club, MSIT on 29th April, 2017. Ten School teams and college school teams have participated. Experts from the industries were attended the events to evaluate the performances of the INNOVATION 2017 and the Green Window project competitions.
- One day seminar on "Key challenges and solutions to present and next generation cellular systems" at Kalyani Govt. College, Kalyani , India on Aug 21, 2017. Lecture was delivered by Prof. Abhirup Das Barman, Institute of Radio Physics & Electronics, CU. Number of people in attendance 80.
- Prof. Kesab Bhattacharya Department of Electrical Engineering, Jadavpur University,Kolkata-700032. delivered lecture in a programme titled " An Introduction to the Basics of High Voltage Engineering" on September 18, 2017
- The IEEE Solid-State Circuits Society Kolkata Chapter held a one month summer training session on "VLSI & Embedded System" on 27 June to 19 July 2017 at the MCKV Institute of Engineering, Howrah, West Bengal, India.
- Student paper contest "PRAYAS-2017" on 18th February, 2017. 27 participant from different engineering colleges presented 17 papers in the students paper contest. The event was judged by Prof. (Dr.) Siddhartha Bhattachayyra, Dean (R&D), RCCIIT, Kolkata and Dr. Ipsita Sengupta, Asst. Prof., Dept. of Electronics, Govt. College of Engineering and Leather Technology.
- Workshop on Circuit Design using LT-SPICE on 15th November, 2017. A Circuit Design workshop was organised for students. 17 participants participated in the event. In the event a hands on session was organised in which students designed Analog and Digital VLSI circuits using LT-SPICE.
- 10-day summer school on algorithms and optimization techniques comprised lectures on basics in linear algebra, modeling optimization problems, linear programming including primal dual techniques, integer linear programming, nonlinear programming, semidefinite programming, use of mathematical solvers in optimization. Lectures were delivered by the faculty members of the ACM Unit. About 40 participants including faculty, Ph.D. scholars and M. Tech. students and even a couple of B. Stat. students from academic institutions in and around Kolkata participated in the program. Participation certificates were given to the candidates who completed this summer school successfully.
- On March 21st, the chapter in collaboration with IEEE-WIE Kolkata Section, jointly organized a hands-on training session for Elenco Snap Circuits kits as part of the Engineers Demonstrating Science: an Engineer Teacher Connection (EDS-ETC) program.

In this program the students of Victoria Institution School from class IX and X participated.

#### d) Outreach Activities

- Workshop (the 2nd outreach program) on “Microwave Antennas in Present-days Communication” was arranged by the chapter at KIIT University, Bhubaneswar during 28th – 29th Oct 2017. Total participants 50 (IEEE members 12).
  - o Speakers
    - Prof. D. Guha (Calcutta University)
    - Prof. R K Misra (Berhampur University, Oddisha)
    - Prof. Susanto Parui (IEST Kolkata)
    - Dr. Koushik Dutta (NCSM Kolkata)
    - Mr. Satyajit Chakrabarti (SAMEER Kolkata Centre)
    - Prof. J Y Siddiqui (Calcutta University)
- Study of Thermal instability of Geographical region before Earthquake using Remote Sensing Network delivered Mr. S. K. Guha, VECC, Salt Lake. Kolkata on 19 May 2017 at VECC, Salt Lake, Kolkata
- Development of Low Current Measurement module by Mr. N. Chadda, VECC, Salt Lake. Kolkata on 19 May 2017 at VECC, Salt Lake, Kolkata
- The IEM IEEE Circuits and Systems Society (CASS) Student Branch has also organized one Workshop on IC Fabrication Technology on November 18 , 2017 from 11 am to 5.00 pm at IC Design & Fabrication Centre, Jadavpur University.
- The 2017 Outreach Activity of the CAS Chapter was held on September 15, 2017 at the Department of Electronics and Communication Engineering (ECE) of Narula Institute of Technology (NIT), Agarpara, Kolkata. The speaker was Dr. T. Chakravarty, Principal Scientist, TCS Research, Tata Consultancy Services, New Town, Kolkata and the topic was “Affordable & Non-Invasive Sensing Augments Human Intelligence”.
- On May 5th 2017, at the ECE Department of NIT Shilchar, IEEE ComSoc membership aware program was held followed by motivational lecture to join IEEE. As an outcome few ComSoc members and a student branch will open in 2018.
- On May 19 2017 ComSoc Chairperson was Invited for the QIP Faculty Development Program on "Recent trends in antenna analysis and design" where about 40 faculties at Asst. Prof. and Assoc. Prof. level from different Institutes attended the program. She delivered a hours lecture on “Antenna :Fundamentals and Evolution for Mobile Communication”.
- At North Eastern Hill University, Shillong, Meghalaya, India on October 9-10, 2017.
  - o Speakers
    - Dr Rajarshi Gupta, University of Calcutta and Chapter Secretary.  
Title of lecture: “Cardiovascular Health Monitoring: An emerging technology for digital healthcare”.
    - Dr Kaushik DasSharma, University of Calcutta  
Title of Lecture: “CT Image Based Cancer Detection: A Computational Intelligence Based Approach”
    - Dr Jayanta K. Chandra, Purulia Govt Engineering College, West Bengal

Title of Lecture: Application of Machine Intelligence in Biomedical Engineering: Feature Optimization and Classification”

- Prof. Tatsuki Okamoto, Tohoku University, Japan, has given a lecture on “ Partial Discharge Characteristics on Applied Sine Wave Voltage Frequency with Iec(b) Electrode System” at MP Hall, IIT Ropar, Rupnagar, Punjab, India, on 18 November 2017. Participants:80.
- National workshop on machine learning & remote sensing organized at Siksha O Anusandhan University, Orissa on March 14, 2017. No of Participants 150.
  - o Speakers  
Prof. Ashish Ghosh, Machine Intelligent Unit, ISI, Kolkata  
Prof. Amlan Chakrabarty, Kolkata University  
Dr. Saurabh Das, Center for Soft Computing, ISI, Kolkata
- One day industry visit to Southern Generating Station of CESC Ltd. was jointly organized by PES chapter, Kolkata section and Department of Electrical Engineering, Jadavpur University on 9th September, 2017. The visit was co-ordinated by Sri Susanta Ray, Assistant Professor, Department of Electrical Engineering.
- Algomaniac, organized by the Students of the Department of Electrical Engineering, Jadavpur University, Kolkata, India, in collaboration with PES Kolkata Chapter, was a competition where students from various institutions in groups took part in coding on 3rd-4th March, 2017.
- Mr. Sanjay Kar Chowdhury, Sr. Manager, HRD, CESC Ltd. delivered lecture in a programme titled "An Introduction to Advance Transformer Diagnostics" on May 8, 2017 at Meghnad Saha Inst. of Technology.
- Mr. Sanjay Kar Chowdhury, Sr. Manager, HRD, CESC Ltd. delivered lecture in a programme titled " An Introduction to Perspective & Challenges in Energy Sector in India" on September 8, 2017 at UEM, Newtown Kolkata.
- Mr. Sanjay Kar Chowdhury Sr. Manager, HRD, CESC Ltd. delivered lecture in a programme titled " An Introduction to Past, Present & Future of Energy Sector in India. " on September 18, 2017 at Dr. S.C.Sur Degree Engg. College.
- Prof. Kesab Bhattacharya Department of Electrical Engineering, Jadavpur University, Kolkata-700032. delivered lecture in a programme titled " An Introduction to the Basics of High Voltage Engineering" on September 18, 2017.
- Mr. Sanjay Kar Chowdhury Sr. Manager, HRD, CESC Ltd. delivered lecture in a programme titled " On Role and Responsibility of a Power Engineers " on October 18, 2017 at RCCIIT, Kolkata.
- Student paper contest “PRAYAS-2017” on 18th February, 2017 27 participant from different engineering colleges presented 17 papers in the students paper contest. The event was judged by Prof. (Dr.) Siddhartha Bhattachayyra, Dean (R&D), RCCIIT, Kolkata and Dr. Ipsita Sengupta, Asst. Prof., Dept. of Electronics, Govt. College of Engineering and Leather Technology.

## **B.4 Student Activities**

### **Student Branches/ chapter activity**

### ➤ **Kalyani Government Engineering College ( EDS Student chapter)**

- 2nd international conference “2017 Devices for Integrated Circuit (DevIC)”, in BCKV Lake Hall, Kalyani on March 23-24, 2017, Organized by IEEE KGEC Student Branch Chapter in association with Department of ECE, KGEC, technically co-sponsored by IEEE EDS Kolkata Chapter
- EDS Distinguished Lecture (DL) on “Searching New Possibilities of nano MOSFET structures” by Dr. Subir Kumar Sarkar, Professor, Jadavpur University, Kolkata on 28th July, 2017, Organized by IEEE EDS Kalyani Government Engineering College Student Branch Chapter and Department of ECE, KGEC.
- Lecture talk on “Security and Authentication in non-linear domain: Electronic Applications” by Professor J. K. MANDAL of Kalyani University at Language Lab of Kalyani Govt. Engg. College on 04th August, 2017 from 12.00 to 2.00 P.M. Organized by: IEEE EDS KGEC Student Branch Chapter
- Lecture talk on " Key Challenges and Solutions to Present and Next Generation Cellular Systems " by Professor Abhirup Das Barman of Institute of RadioPhysics & Electronics, University of Calcutta at language Lab of Kalyani Govt. Engg. College on 21st-sept-17 from 11.00 to 1.00 P.M. Organized by: IEEE EDS KGEC Student Branch Chapter

### ➤ **Heritage Institute of technology Student Branch Chapter (EDS chapter)**

- DL by Dr. Meyya Meyyappan ‘Nanomaterials in Nano electronics and Optoelectronics’ on 6th January 2017.
- Prof. Samar Saha (DL), President, IEEE EDS and Adjunct Faculty, Santa Clara University on “Evolution of Semiconductor Devices in Enabling Smart Environments and Integrated Ecosystems” on 21.07.2017.
- Prof. M. Jagadesh Kumar (DL), Vice-Chancellor, Jawaharlal Nehru University and Professor, Dept. of EE, IIT Delhi on “Low Power Nanoscale MOSFETs: Innovations and Challenges” on 21.07.2017.
- Prof. Souvik Mahapatra (DL), Professor, Dept. of EE, IIT Bombay and Fellow, IEEE on “CMOS Transistors - Operation, Scaling, Reliability and Way Forward” on 21.07.2017.
- Prof. Manoj Saxena (DL), Associate Professor, University of Delhi, IEEE EDS-Region 10 SRC Vice Chair on “Modeling and simulation of Gate Electrode Engineered Double Gate Junctionless Transistor” on 21.07.2017.
- Prof. Siben Dasgupta, Wentworth College, USA. on ‘Digital Controls’ , 9th March 2017.
- Prof. Sanatan Chattopadhyay on ‘Challenges and Advantages of MOSFETs: A Journey of 60 years’ on 28th March 2017.
- Dr. Nabarun Bhattacharyya, Director, C-DAC ; Mr. Alokesh Ghosh, C-DAC And Dr. Subhrangshu Sanyal, CEO, IIM Kolkata on ‘Embedded Systems: Innovation, Leadership and Entrepreneurship’
- Dr. Nabarun Bhattacharyya, Director, C-DAC , Prof. Rajib Bandyopadhyay, Jadavpur University , Mr. Alokesh Ghosh, C-DAC , Dr. Subhrangshu Sanyal, CEO, IIM Kolkata



- Dr. Prabir Banerjee, HOD, ECE, Dr. Anindya Sen , ON Panel discussion on ‘Digital India, Make in India & Startup India - How to optimize a pragmatic growth path’ on April 06, 2017

### ➤ **Netaji Subhash Engineering College**

- One Day National Workshop on Remote Sensing & Applications (RSA-2017, 7<sup>th</sup> September, 2017) Organized by Department of Electronics and Communication Engineering & IEEE Student Branch Netaji Subhash Engineering College In Association with IEEE GRSS Kolkata Chapter on 7<sup>th</sup> September 2017.

#### Speakers

Prof. B. Umashankar, Professor, Indian Statistical Institute, Kolkata  
 Prof. AnimeshMaitra, Professor, University of Calcutta, Kolkata.  
 Dr. Koushik Dutta , Assistant Professor, Netaji Subhash Engineering College, Kolkata  
 Prof. Abhirup Das Barman, Professor, University of Calcutta, Kolkata  
 Dr. Saurabh Das, Assistant Professor, Indian Statistical Institute, Kolkata

- One-Day Seminar On Circuits and Devices 2017 Organized by Department of Electronics and Communication Engineering & IEEE Student Branch Netaji Subhash Engineering College In association with IEEE EDS Kolkata Chapter Event: Two invited lectures on 22<sup>nd</sup> September, 2017

#### Speakers

Dr. Jawad Yaseen Siddiqui,  
 Dr. Debaprasad Das, Professor and Head, Department of ECE, Assam University, Silchar.  
 Dr. Atanu Kundu, Chair, IEEE EDS Kolkata Chapter, Assistant Professor, Heritage Institute of Technology, Kolkata

- Value Added Training Program on Satellite Communication (9-20 June, 2017) Organized by Department of Electronics and Communication Engineering & IEEE Student Branch Netaji Subhash Engineering College. Prof. Parameswar Banarjee, Ex-Scientist, ISRO, Ex- Sr. Deputy Director, NPL, India has delivered valuable lecture in this event.
- Value Added Training Program on Optimization Techniques (3-8 July, 2017) Organized by Department of Electronics and Communication Engineering & IEEE Student Branch Netaji Subhash Engineering College. Prof. Damodar Prasad Goswami, Professor, ISI, Kolkata has delivered lecture on Optimization Technique.

### ➤ **Jadvpur University**

- **Convolution-2017** – 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 2017 Organized by Students of the Department of Electrical Engineering, Jadavpur University in Collaboration with IEEE DEIS Kolkata Chapter at Electrical Engineering Department Jadavpur University, 3rd and 4th March, 2017.

- **Jadavpur University Engineering in Medicine and Biology IEEE Student Branch Chapter**

IEEE EMBS student chapter of SBSE, JU has organized an invited lecture on ‘Recent Trends on Designing Patient Specific Implant’ by Dr. Amit Roy Chowdhury (HOD Centre for healthcare Science & Technology, IEST Shibpur) on 18<sup>th</sup> September, 2017.

- **EDS Student Branch Chapter University of Calcutta**

- On March 21st, the chapter in collaboration with IEEE-WIE Kolkata Section, jointly organized a hands-on training session for Elenco Snap Circuits kits as part of the Engineers Demonstrating Science: an Engineer Teacher Connection (EDS-ETC) program. In this program the students of Victoria Institution School from class IX and X participated.
- A technical talk was organized by the chapter on “Micro-Scale Power Management Interface Circuits for IoT Node”. The lecture was held on 3rd July, 2017. The speaker was Dr. Saroj Mandal, Birla Institute of Technology, Hyderabad, India.
- On 12th December, 2017, the chapter in collaboration with IEEE-WIE Calcutta Section, jointly organized a technical talk on “VLSI Design of Cellular Automata (CA) based Coding”. The speaker was Dr. Joydeb Bhaumik from Jadavpur University, Kolkata, India.
- The chapter organized a Distinguished Lecture (DL) Program on 24th August, 2017, at Institute of Radio Physics and Electronics, University of Calcutta. The DL was given by Prof. Anisul Haque, Chairperson, Department of Electrical and Electronic Engineering at East West University.
- A DL talk was organized by the Chapter (SBC28561A) on “Negative Capacitance MOSFETs for Future Technology Nodes”. The lecture was held on 9th November, 2017. The speaker was Prof. Yogesh Chauhan from Indian Institute of Technology, Kanpur, India.
- On 19th August, 2017, the chapter in collaboration with IEEE-WIE Calcutta Section, jointly organized an outreach program on “Magic of Mathematics” as a part of humanitarian activity. The program was held at Sadhanpur Uludanga Tulsi Ram High School, Amdanga, North 24 Paraganas.

- **IEM Student Branch**

- IEEE CAS Activities through Student Branch delivered by Dr. S. K. Sanyal, Deptt. of ETCE, JU (Retd.), Kolkata on 07 September 2017 at IEM, Salt Lake, Kolkata
- The Institute of Engineering & Management (IEM), IEEE Circuits and Systems Society (CASS) Student Branch was formally inaugurated on September 7, 2017 at IEM Gurukul Campus Language Lab, Salt Lake, Sector V by Prof. S.K.Sanyal, Chairman of CAS Chapter of IEEE Kolkata Section.

- The IEM IEEE Circuits and Systems Society (CASS) Student Branch has also organized one Workshop on IC Fabrication Technology on November 18, 2017 from 11 am to 5.00 pm at IC Design & Fabrication Centre, Jadavpur University.
- The Student branch of IEEE at Institute of Engineering & Management organized a Technology Awareness Programme during September 8 – 10, 2017 in collaboration with IEEE Region Ten and IEEE Computer Society and IEEE Kolkata Section.

### ➤ **EDS NIT Silchar Student Branch Chapter, Assam**

- Prof. Durgamadhab Misra, Professor at NJIT, USA and IEEE EDS Distinguished Lecturer (DL) delivered a DL Talk on 09<sup>th</sup> Jan 2017 at ED NIT Silchar Student Branch Chapter, Assam, India after completion of Global Initiative of Academic Networks (GIAN) Course on “*Nanoelectronics Challenges for Internet of Things*” by Prof. Misra which was sponsored by MHRD, Govt. of India and hosted by Dr. T. R. Lenka, Course Coordinator.
- The ED NIT Silchar Student Branch Chapter in association with Dept. of ECE, NIT Silchar organized 3 Days Workshop on Nanoscience and Technology during 2-4 March 2017.
- The ED NIT Silchar Student Branch Chapter organized an EDS Distinguished Lecture (DL) by Dr. Yogesh S. Chauhan on 08<sup>th</sup> Nov, 2017 in association with Dept. of ECE, NIT Silchar. Dr. Chauhan from Indian Institute of Technology Kanpur presented his research work entitled: “*Compact Modeling of GaN HEMTs for High Frequency and High Power Applications*”.
- The ED NIT Silchar Student Branch Chapter organized an EDS Distinguished Lecture (DL) by Prof. Vijay K. Arora on 20<sup>th</sup> Dec, 2017 in association with Dept. of ECE, NIT Silchar. Prof. Arora from Wilkes University, USA presented his research work entitled: “*Research Methodology in Nanoscience*”.

### ➤ **EDS NIST Student Chapter**

- Half-Day Lecture on Scientist and Engineers: Innovation and Technology by Mr. Uttam Kumar Sahu, Scientist “E”, DRDO-Hydrabad at TIFAC Seminar Hall, NIST Campus on 1<sup>st</sup> June, 2017. 45 participants have attended the talk.
- Half-Day Lecture on Product Development using Embedded Systems by Dr. Aurobinda Routray, Professor, IIT Kharagpur on 5<sup>th</sup> June. 80 students and faculties have attended this.
- 7<sup>th</sup> IEEE ED Mini-Colloquium on “Quantum Devices” on 6<sup>th</sup> March, 2017 on Quantum Devices. 81 participants have attended from different institutes.
  - DL-1: Dr. Subir Kumar Sarkar, Jadavpur University, Kolkata
  - DL-2: Dr. G N Dash, Sambalpur University, Odisha
  - DL-3: Dr. C K Sarkar, Jadavpur University, Kolkata
  - DL-4: Dr. Manoj Saxena, Delhi University
- 4 Weeks- Workshops on VLSI Design and Automation Tools by NIST VLSI Group leading by Dr. A K Panda for 60 under graduate students from 24<sup>th</sup> May – 20<sup>th</sup> June, 2017 at NIST Campus.

- 4 Weeks-Workshop on IC Layout Design using EDA Tools by NIST VLSI Group leading by Dr. A K Panda for 22 Diploma finishing students at NIST Campus from 5<sup>th</sup> June – 30<sup>th</sup> June, 2017.
- 3 Days Workshop on TIIC Tools by Texas Instrument from 19<sup>th</sup> December to 21<sup>st</sup> December, 2017 at NIST Campus.
- 3<sup>rd</sup> National Conference on Devices and Circuits-2017 on 7<sup>th</sup> March, 2017 at NIST, Berhampur, Odisha.

- **Formation of New Student Branch**

New Student Branch

- Sikkim Manipal Institute
- IEEE Techno India-Batanagar Student Branch

New Student Branch under chapter

- IEM IEEE Circuits and Systems Society (CASS) Student Branch
- KIIT University, Bhubaneswar AP/MTT Branch chapter
- Institute of Radio Physics and Electronics, University of Calcutta AP/MTT Branch chapter.
- Jadavpur University Engineering in Medicine and Biology IEEE Student Branch Chapter
- Kalinga Inst Of Industrial Technology Industrial Electronics Society Student Branch Chapter

## **B.5 Affinity Group Activities**

**Total Affinity Groups: 03**

### **YP- AG**

- On 23<sup>th</sup> January, 2017, IEEE Young Professionals Affinity Group Social meet Eco Park, Rajarhat.
- During 16<sup>th</sup>-17<sup>th</sup> March, 2017, National Conference on Advance Computing, Communication and Devices; NCACCD-2017 has been organized at Department of Computer Science and Engineering, Narula Institute of Technology, Agarpara, Kolkata.
- During 24<sup>th</sup> -25<sup>th</sup> March, 2017 International Conference on Computational Intelligence, Communications, and Business Analytics (CICBA - 2017) has been organized in association with Computer Society of India at Calcutta Business School, India
- On 29<sup>th</sup> March, 2017 One Day Workshop on Disaster Management has been organized at Cooch Behar Government Engineering College, Cooch Behar. Prof. (Dr.) U. K. Mandal, HOD, Civil Engineering Department Jalpaiguri Government Engineering College and Mr. Ranjan Kumar Ghosh, Officer in Charge, Fire Station, Cooch Behar District has delivered invited lecture.

- On 12<sup>th</sup> April, 2017 a Seminar on “Internet of Things in Cloud platform” has been organized at Cooch Behar Government Engineering College, Cooch Behar. Dr. Jyotirmoy Karjee, TCS Research & Innovation, Bangalore has delivered lecture.
- On 25<sup>th</sup> August, 2017 a Technical workshop on Data Science has been organized at Language LAB, Kalyani Government Engineering College, Kalyani. Mr. Jayanta Adhikary Business Analytics Practice Enterprise Solutions has delivered lecture
- On 16<sup>th</sup> September, 2017 One Day Seminar on “Quantum Computers – The Future of Computing (QCFC 2017)” has been organized at Department of Computer Science and Engineering, Techno India – Batanagar. Prof. Atal Chaudhuri, Jadavpur University, Prof. Amlan Chakraborty, University of Calcutta. Prof. Paramartha Dutta, Visva Bharati University and Prof. Debashis De, Maulana Adul Kalam Azad University of Technology has delivered lecture.

## WIE

- WIE IEEE, Kolkata Section, handed over Cash Awards and Certificates of Appreciation at “National Conference on Technology and Society – NCTS 2K17” (February 23 & 24, 2017) held at Camellia Institute of Technology (Badu Road, Madhyamgram self financed private college) in semi urban area to promote research amongst students and Research Scholars. Research Scholars and students from Jadavpur University, IEST Shibpur, Kalyani Govt. Engineering College, Rajabazar Science College and Narula Institute of Technology had attended the conference and presented their research work.
- A one-day Workshop titled “Fun of Circuit Building” was jointly organized by IEEE WIE AG, Kolkata Section and IEEE EDS, University of Calcutta Student Branch Chapter, at the CAS building, Institute of Radio Physics and Electronics, University of Calcutta on 21.04.2017 for the students of class IX & X (most of them from economically backward section) of Victoria Institution, Kolkata.
- A one-day Workshop on “MATLAB: Concepts to Applications” was organized by IEEE WIE AG, Kolkata Section at the Digital Signal Processing Laboratory, Department of Electronics & Telecommunication Engineering, Jadavpur University on 19.07.2017. Eighteen students from the Jodhpur Park Womens’ Polytechnic, Kolkata, attended the said workshop.
- On 19<sup>th</sup> August, 2017, a programme has been organized in rural Educational Institutions at North 24Paraganas in West Bengal. “Sadhanpur Uludanga Tulsi Ram High School”, located at Sadhanpur IV, Amdanga, North 24Paraganas, West Bengal, was identified as a fecund platform where one could disseminate the seeds of Mathematics in a thought-provoking manner.
- A Two-day Workshop on “FPGA for Digital Circuits & Systems Design” was organized by IEEE WIE, Kolkata Section, at the VLSI Laboratory (Ground Floor) in the Department of Radio Physics and Electronics (RPE), University of Calcutta on November 16 & 17, 2017. Fifteen students (third year and final year) from the Camellia Institute of Technology participated in the said workshop.
- IEEE WIE, Kolkata Section jointly with Electron Device Student Branch Chapter, University of Calcutta, organized a Technical Lecture on “VLSI Design of Cellular Automata (CA) based Coding” on December 12, 2017. The Technical Lecture took place at A K Choudhury Auditorium, CAS Building, Dept. of Radio Physics and

Electronics, University of Calcutta, India at 12:00 noon. Dr. Jaydeb Bhaumik, Associate Professor, Dept. of Electronics & Telecommunication Engineering, Jadavpur University, Kolkata, India, was the speaker of this technical talk.

## SIGHT

- IEEE AP/MTT-S Kolkata Chapter in association with the Maharashtra Institute of Technology, Aurangabad, IEEE Bombay Section, and PIET, Nagpur has organized the 6<sup>th</sup> edition of Applied Electromagnetic Conference (AEMC 2017) in Aurangabad, a historical city of India located near the world heritage sites of Ajanta and Ellora Caves from December 19-22, 2017. In this forum, IEEE SIGHT Chapter of Kolkata Section had arranged for a one day special program for the students.
- A Student Design Contest was organized on Dec. 20, 2017 under the SIGHT Program. 12 groups of students from different local schools presented their models and schemes addressing simple and viable solutions towards day to day issues in rural and urban areas faced by common people. The top three projects were – Lorry Management System (1<sup>st</sup> Prize), Step Climbing Vehicle (2<sup>nd</sup> Prize), and New Scheme of Renewable Energy (3<sup>rd</sup> Prize).

## B.6 Awards & Accolades

- IEEE CoMSoc Kolkata Chapter received CAA - 2017 Chapter Achievement Award
- Winners of "IEEE MTT-S Outstanding Chapter Award, 2017" , IEEE Kolkata section has received IEEE MTT-S Outstanding Chapter Award, 2017.
- Prof. Sanghamitra Bandyopadhyay, Director ISI, Kolkata has been awarded Infosys Prize 2017 in Engineering and Computer Science.
- Dr. Subhransu Ranjan Samantaray, Secretary, IEEE Bhubaneswar Subsection, has been awarded IEEE India Council Outstanding Volunteer Award - 2017.
- Prof. Nikhil R. Pal of ECSU, Indian Statistical Institute has been elected as President-Elect (2017) for IEEE Computational Intelligence Society.
- Prof Sanghamitra Bandyopadhyay has been awarded prestigious J. C. Bose fellowship from Department of Science and Technology, Government of India.
- Prof. Debatosh Guha has been conferred IEEE Fellow.
- WIE received an award of \$300 as WIE Support Fund. for the project ID: WIE-2017--3 Outreach Program on "Magic of Mathematics" .
- Obtained USD 20,000 for EDS Center of Excellence at the Heritage Institute of Technology, IEEE EDS Kolkata Chapter.

## 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](http://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

- On Panel discussion on ‘Digital India, Make in India & Startup India - How to optimize a pragmatic growth path’ on April 06, 2017. Speakers are Dr. Nabarun Bhattacharyya, Director, C-DAC, Prof. Rajib Bandyopadhyay, Jadavpur University, Mr. Alokesh Ghosh, C-DAC, Dr. Subhrangshu Sanyal, CEO, IIMKolkata, Dr. Prabir Banerjee, HOD, ECE, Dr. Anindya Sen.
- One day industry visit to Sothern Generating Station was jointly organized by PES chapter, Kolkata section and Department of Electrical Engineering, Jadavpur University on 9th September, 2017. The visit was co-ordinated by Sri Susanta Ray, Assistant Professor, Department of Electrical Engineering.
- A panel discussion has been organized in CALCON with world-renowned personalities from industry and academia to bridge the gap between industry and academia. The total number of paid registration was 102 and total attendee was 170.

## B.9 Community Activities

- Kolkata Section is honored to host the India Council Face-to-Face Meeting at Kolkata on Sunday the 16th of April 2017 at VSNL Auditorium, IETE Kolkata Center ,Plot no. J1-7, EP Block, Salt Lake Electronics Complex Sector V, Salt Lake, Kolkata 700091
- IEEE C. V. Raman Milestone Lecture has been delivered by Prof. Raj Mitra, Pennsylvania State University, USA. on 18th December, 2017 at 3PM at Dr. Mahendra Lal Sircar Hall in Indian Association for the Cultivation of Science, Jadavpur. Dr. Santanu Bhattacharya, Director, IACS inaugurated the occasion and briefly talked about Sir C.V. Raman and his contribution related to his work in IACS.
- Prof. Debatosh Guha, Diector, Centre for Research in Nanoscience and Nanotechnology, HoD, Institute of Radio Physics and Electronics and Former Chair, IEEE Kolkata Section introduced Dr. Mitra to the audience. A medallion inscribed with Sir C.V. Raman’s image was offered to Prof. Mitra. The vote of thanks was offered by Dr. Suparna Kar Chowdhury, Treasurer, IEEE Kolkata Section.
- IEEE Kolkata section Social Meet has been organized at Khardah Jute Mill on Sunday, 19th. February 2017.
- On December 14<sup>th</sup>, 2017 at DKS Hall, Desapriya Park, Kolkata, Computer Chapter, IEEE Kolkata Section celebrated its 25 years.

## Activities of IEEE Bhubaneswar Sub-Section

### Technical Activities

1. Internet of Things: Information Analytics, Energy-Efficiency and Hardware Security, Prof. Keshab K. Parhi, Dept. of Electrical & Computer Engineering, University of Minnesota, Minneapolis, Date: 06:01:2017, Time: 4.15 PM, Venue: ECE Seminar Hall, ITER, SOA University, Bhubaneswar



2. Discrete optimization, Speaker: Dr. Sanjeeb Dash, IBM T. J. Watson Research Center, New York, USA, Date: 05/01/2017, Time: 4:30 PM, Venue: 220, SES Building, IIT Bhubaneswar
3. Cognitive Computing: From Neuron to Brain, Dr Amit Mishra, Department of Electrical Engineering, University of Cape Town, South Africa, Date: 19:01:2017, Time: 4.15 PM, Venue: EIE Seminar Hall, ITER, SOA University, Bhubaneswar
4. XPS Study on (i) anomalous diffusion of Ga & As on MOCVD grown ZnO films and (ii) ZnO passivated GaAs high-k devices, , Dr. T. SHRIPATHI, Honorary Emeritus Professor, UGC-DAE Consortium for Scientific Research, University Campus, Khandwa Road, Indore, Date: 06:2:2017, Time: 4.15 PM, Venue: ECE Seminar Hall, ITER, SOA University, Bhubaneswar
5. Signal Processing methods for Advanced Radar System design, Professor John Soraghan, Director of the Sensor Signal Processing Research Groups & Texas Instruments Chair in Signal Processing. Centre for Signal and Image Processing (CeSIP) Department of Electronic and Electrical Engineering, University of Strathclyde, 204 George Street, Glasgow G1 1XW, Date: 11:03:2017, Time: 11.00 AM, Venue: ECE Seminar Hall, ITER, SOA University, Bhubaneswar
6. Advanced Communication Networks, Prof. Manjunath, IIT Bombay, Date: 18:08:2017, Time: 4:30 AM Venue: Room no-014, School of Electrical Sciences, IIT Bhubaneswar
7. Non-Invasive Monitoring of Transformer Insulation by Time and Frequency Domain Spectroscopy, Prof. Sivaji Chakravorti, Director NIT Calicut, Date: 04:09:2017, Time: 4:00 PM, Venue: Room no-116, School of Electrical Sciences, IIT Bhubaneswar
8. Speaker: A.I. For Assessing the Intelligent , Mr Rashmi Ranjan Acharya, Director – Product development in mRoads (mroads.com), Date: 17:10:2017, Time: 3.30 PM, Venue: ECE Seminar Hall, ITER, SOA University, Bhubaneswar.

## **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.