

**Annual Report 2017**  
IEEE Joint CSS-IMS Kolkata Chapter  
Kolkata Section, CS23/IM09 (CH10673)

**Event #1: National Seminar on “Renewable Energy Resources and Its penetration to the Grid”**

Organized by: department of Applied Physics, University of Calcutta.

Date, Venue: March 25, 2017, Meghnad Saha Auditorium, University of Calcutta, 92 APC Road, Kolkata-70009.

**Speakers:**

1. 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”.

2. Er. S. Chakraborty, Executive Director, WBSEDCL.

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

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

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

4. 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

Other sponsors: IEEE Joint CSS-IMS Kolkata Chapter, India, IET-UK, Kolkata LNIEEE PES, Kolkata.

Brief description: Dr. P. Mandal, Head, Department of Applied Physics welcomed the august gathering in the auditorium. As the context setting, Dr. K. Das Sharma, Department of Applied Physics, highlighted in brief the activities those have already been carried out by the Department under the SAP project. While discussing the future plans, he explained that the research team that is carrying out the activities of the project is in need of the awareness of the present day technology.

Inaugural Address was then delivered by Professor A. Ghosh, Hon’ble Vice Chancellor, University of Calcutta. In his deliberation, he mentioned since electricity is the prime mover of the society, it should be consumed judiciously. He also thanked all the industry experts for giving their time to educate the academia.

The inaugural session continued with the address of Guest of Honour, Professor Hiranmay Saha, Chair Professor and Project Coordinator, Centre of Excellence for Green Energy and Sensor Systems, IEST, Shibpur. Vote of Thanks was given by Dr. Rajarshi Gupta, Department of Applied Physics.



Inaugural Session



Section of audience



Address by Hon'ble Vice Chancellor



Felicitation of Dr Indradip Mitra



Felicitation of Dr Siddhartha DuttaGupta



Deliberation by DrK. Das Sharma

## Event #2: Chapter Outreach program

Venue, Date: March 29, 2017, Purulia Govt. Engineering College, Purulia District, West Bengal.  
Speakers Title of event "National Seminar on Advancements in Science & Technology".

### Speakers:

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

Title of Lecture: Introduction to Sensors and Transducers

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

Title of Lecture: Mobile Robot Navigation.

3. 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.

Financial Sponsors: (a) Maulana Abul Kalam Azad University of Technology (MAKAUT), West Bengal;

(b) Technical Education Quality Improvement program Phase II, West Bengal.

Technical Co-sponsors: IEEE Joint CSS-IMS Kolkata Chapter, India.



Talk about IEEE CSS-IMS Kolkata activities: Dr R. Gupta



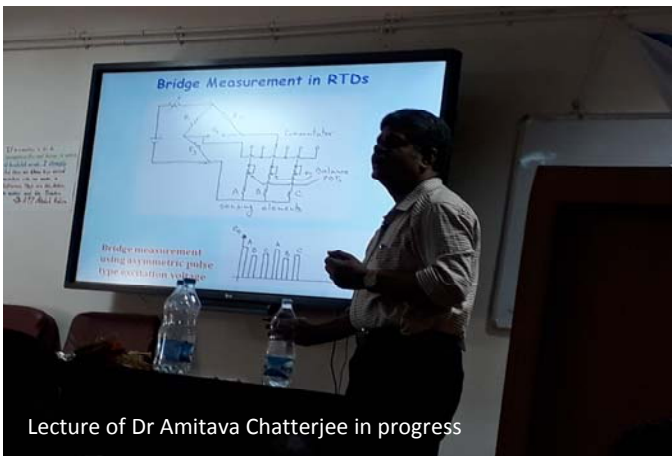
Section of the Audience



Inaugural Session of the program



Lecture by Dr Rajarshi Gupta in progress



Lecture of Dr Amitava Chatterjee in progress



Lecture of Dr Kaushik Das Sharma in progress

### Event #3: National Conference on Recent Advances in Science, Engineering & Management RASEM 2017

Venue and Date: February 11-12, 2017.

Bengal Institute of Technology and Management”, Santiniketan, Bankura District, West Bengal.

Brief Description:

The conference was organized by “**Bengal Institute of Technology and Management**”, Santiniketan under the patronization of **Camellia Group, Kolkata**, with the technical collaboration of **IEEE Joint CSS-IMS, Kolkata**

**Chapter.** The conference was three major tracks: *Track 1: Recent advances in Science; Track 2: Various fields of Engineering; Track 3: Management Science, Hospitality & Tourism Management.* Out of 145 number of research papers only 59 number of papers has been selected for the conference presentation, out of that two (02) papers from University of KwaZulu-Natal, South Africa, one (01) paper from University of Wisconsin at Milwaukee, USA, one (01) paper from IIT- Ropar, five (03) from Visva- Bharati University, two (02) from Aliah University, two (02) from RCCIIT and the rest are from Jadavpur University, HIT, NITTTR, CSIR Indian Institute of Chemical Biology, NIT- Agartala, NIT-Durgapur, IMS- Kolkata, CIT- Madhyamgram and BITM- Santiniketan.



Inaugural Session with dignitaries



Inaugural Session with dignitaries



Opening of Conference Digest



Paper presentation in progress

#### Event #4: Lecture on Kalman Filter

Organized By: Mechanical Engineering Department, Jadavpur University, Kolkata

Venue: Mechanical Engineering Dept Seminar Room, Jadavpur University, Kolkata-700032, India

Date: March 01, 2017

Speaker: Dr Abhik Mukherjee, Associate Professor, Computer Sc Department, IEST, Kolkata, India.

Attendees: 30, Faculty members: 12.

#### Event #5: Convolution 2017

Organized By: Electrical Engineering Dept, Jadavpur University, Kolkata-700032, India

Venue: Jadavpur University, Kolkata-700032, India

Date: March 03-05, 2017

Attendees: 150



Technical session under progress



Technical session under progress

## Event #6: Two day seminar on “Computational Intelligence in Engineering Applications” organized by Future Institute of Engineering & Management:

Venue and date: March 23-24, 2017, Future Institute of Engineering & Management, Sonarpur Campus, Kolkata.  
The resource persons:

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

Title of Lecture: Fuzzy Logic Applications in Control Systems

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

Title of Lecture: Optimization technique in System Identification.

3. Dr Tapan Kumar Basu, IIT Kharagpur

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

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

Title of Lecture: PCA in image Engineering

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

Title of Lecture: Application of Neural Networks in Power Systems

6. Dr Pratyusha Rakshit, Jadavpur University (<https://scholar.google.co.in/citations?user=00rPoQEAAAAJ&hl=en> )

Title of Lecture: Evolutionary Optimization in Robotics



Dr Amitava Chatterjee delivering Lecture



Dr Jayanta K  
Chandra  
delivering  
Lecture



Dr Kaushik Das Sharma delivering Lecture



Section of audience with organizers

**Event #7: 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**

Venue and date: Computing Lab, Dept of Applied Physics, University of Calcutta  
 March 25-May 2017 (total 48 contact hours)

Resource Persons:

1. Dr Jayanta K. Chandra, Purulia Govt Engineering College, West Bengal
2. Mr Dhruba Roy, R&D Engineering, Ardent Computech Solutions, Kolkata



Dr Jayanta K Chandra delivering lecture on “Introduction to Java programming”



Technical session under progress”

**Event #8: Chapter Outreach program:**

Venue and date: North Eastern Hill University, Shillong, Meghalaya, India  
 October 9-10, 2017.

Resource Persons:

1. Dr Rajarshi Gupta, University of Calcutta (<https://sites.google.com/site/rgapppy/>) and Chapter Secretary.  
 Title of lecture: “Cardiovascular Health Monitoring: An emerging technology for digital healthcare”.
2. Dr Kaushik DasSharma, University of Calcutta (<https://sites.google.com/site/kdassharma/>).  
 Title of Lecture: “CT Image Based Cancer Detection: A Computational Intelligence Based Approach”
3. Dr Jayanta K. Chandra, Purulia Govt Engineering College, West Bengal

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



The IEEE Kolkata section and IEEE Joint CSS-IMS Chapter Kolkata organized a one-day IEEE Outreach Program in collaboration with the Department of Biomedical Engineering, North Eastern Hill University (NEHU), Shillong on 9th October, 2017 at the University. This was first of its kind and the programme provided a platform to young faculty members, scholars and students working in different fields to acquire knowledge and skills from esteemed speakers of the IEEE Community. The various theme areas of the program were Cardiovascular Health Monitoring; CT Image based Cancer Detection, Medical Imaging & Image Processing, Machine Learning Tools for Signal processing, Artificial neural network and Bioinstrumentation. The targeted audiences of the outreach program were UG students, PG students, researchers (from physics, chemistry, mathematics, statistics and life sciences), engineers and faculty members (M.Sc./M.Tech/Ph.D in related fields of biomedical engineering, computer engineering and electronics engineering). The program was also open for young faculty/scientists with demonstrated interests in the field. Thirty participants registered for the IEEE outreach program from various Institutes in the North-Eastern region of the country.

The program marked its start with the inaugural session which was highlighted by the presence of Prof. H. Lamin, Pro Vice Chancellor of NEHU, Shillong as the Chief guest of the day, Prof. Goutam Saha, Dean School of Technology, NEHU, Shillong as the Guest of honor of the day and the three key speakers namely Dr. Rajarshi Gupta, Associate Professor, Department of Applied Physics, University of Calcutta currently he is Secretary of Joint IEEE Control Systems Society -Instrumentation & Measurement Society (CSS-IMS) Chapter Kolkata, and a member of Executive committee in IEEE Kolkata Section, Dr. Kaushik Das Sharma, Associate Professor, Department of Applied Physics, University of Calcutta, presently he also serves as Executive Committee Members of IEEE Kolkata Section, IEEE Joint CSS-IMS Kolkata Chapter and IET (UK) Kolkata Local Network and Dr. Jayanta K. Chandra, Associate Professor & Head, Department of Electrical Engineering, Purulia Govt. Engineering College, West Bengal. Along with them Dr. Dinesh Bhatia, Convener and Head, Biomedical Engineering Department, NEHU, Shillong and Mr. G.K. Mourya and Mr. Shyamal Mandal as Coordinators of the IEEE Outreach programme were also present.

### **Event #9: Special Lecture program organized by Department of Applied Physics, University of Calcutta**

Venue: Seminar Room, Department of Applied Physics, University of Calcutta, Kolkata

Date: October 16, 2017

Speaker: Mr Biswarup Mukherjee, Research Intern, KTH-Royal Insitute of Technology, Sweden.

Title of Lecture: “An Overview of Electricity Market in Europe”

Other sponsors: IEEE Joint CSS-IMS Kolkata, UGC SAP DRS II, Applied Physics, CU, IET UK Kolkata Netork.



Felicitation of speaker



Lecture under progress



Section of the audience

**Event #10: Invited Lecture on “Assistive Technology: Main challenges in Hearing Rehabilitation” organised by Dept of Applied Physics, University of Calcutta.**

Date and Venue: November 06, 2017, Seminar Room, 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.

Other sponsors: IEEE Joint CSS-IMS Kolkata, UGC SAP DRS II, Applied Physics, CU, IET UK Kolkata Netork.

Attendees: 37



Lecture in progress



Inaugural session