

DAY 1, Friday, November 07

10:00 AM - Gallery • Keynote Lecture

Nanoelectronics as a Key Enabling Technology:

Peter Russer, *Institute for Nanoelectronics, Technische Universität München, Germany*

Chair: **Sivaji Chakravorti**, *Jadavpur University, Kolkata*

11:30 AM - Gallery 1 • Technical Session T1(EE): Invited Talk

Simple Method to Improve Power Quality

M. Ramamoorthy, *Distinguished Visiting Professor, VNR VJIET Hyderabad*

Reference Frame Transformations in Electric Power Quality Analysis

M. Chandorkar, *Dept. of Electrical Engg., Indian Institute of Technology, Bombay*

Chair: **Sujit K. Biswas**, *Jadavpur University, Kolkata*

11:30 AM - Gallery 2 • Technical Session T1(EC): Invited Talks

Optimal Signaling for Multi-Level Amplitude-Shift Keying with Single-Input Multiple-Output and Noncoherent Reception

Ranjan K. Mallik, *Dept. of Electrical Engg., Indian Institute of Technology, Delhi*

Role of Semiconductors in the Present Era

Sunanda Dhar, *Department of Electronic Science, University of Calcutta*

Chair: **P. K. Basu**, *Electronics & Electrical Communication Engineering, Indian Institute of Technology, Kharagpur*

11:30 AM- Studio • Technical Session T1(CS): Invited Talks

Introduction to Information Retrieval

P. Mitra, *Dept. of Computer Science & Engg., Indian Institute of Technology, Kharagpur*

Language Engineering

Utpal Garain, *Computer Vision & Pattern Recognition Unit, Indian Statistical Institute, Kolkata*

Chair: **Mita Nasipuri**, *Jadavpur University, Kolkata*

2:00 PM- Gallery 1 • Technical Session T2(EE): Contributory Papers
Chair: **Amitava Chatterjee**, *Jadavpur University, Kolkata*

EE10: Temperature Rise Estimation of a TEFC Motor

S. Kar Chowdhury, *Jadavpur University Kolkata*, Bikram Dutta, *Sabita Devi Education Trust- Brainware Group of Institution, Kolkata*, Diptarshi Bhowmik, *Swami Vivekananda Institute of Science and Technology, Kolkata*

EE31: Simulink Simulation and Experimental Verification of Magnetic Ballast driven Compact Fluorescent Lamps

Biswadeep Gupta Bakshi, *Birbhum Institute of Engineering & Technology, Suri, Birbhum*, Biswanath Roy, *Jadavpur University, Kolkata*

EE54: A Generalised Circuit Theory Based Approach to Power Flow Tracing on Converged AC Power Flow Solution

Santanu Banerjee, *Schneider Electric Infrastructure Limited, Samarjit Sengupta, University of Calcutta*

EE78: Design of PSO-Fuzzy Controller for D.C Motor Speed Control

Manas Sarkar, *Haldia Institute of Technology*, K. Das Sharma, G. Sarkar, *University of Calcutta*

EE102: An Efficiency optimization scheme for BLDC motor drive system

Tridibesh Nag, Arijit Acharya, *Netaji Subhash Engineering College, Kolkata*, Debasish Chatterjee, *Jadavpur University Kolkata*

2:00 PM - Gallery 2 • Technical Session T2(EC): Contributory Papers

Chair: **Bhaskar Gupta**, *Jadavpur University, Kolkata*

EC15: Circular Micro-strip Antenna Modeling using FDTD method and Design using Genetic Algorithms

Shibaji Chakraborty, Uddipan Mukherjee, *Institute of Engineering and Management, Kolkata*

EC44: Multiobjective Optimization of Ultra Wide Band Printed Square Monopole Antenna

Sharmin Shabnam, *Dumkal Institute of Engineering & Technology, Murshidabad, West Bengal*, Pinaki Mukherjee, *Jalpaiguri Govt. Engineering College, West Bengal*

EC79: Resonance Gain Antenna Using Nonengineered Surface: Compact Design with Broadband High Gain Characteristics

Koushik Dutta, *Netaji Subhash Engineering College, Kolkata*,
Debatosh Guha, *University of Calcutta*

EC111: Compact CPW Fed Rectangular Patch Antenna with T Slot for Wireless Communication Systems

Krishan Gopal Jangid, *Manipal University, Jaipur*, Vijay Sharma,
Government Mahila Engineering College, Ajmer, Ajay Tiwari, Brajraj
Sharma, V. K. Saxena, *University of Rajasthan, Jaipur*, V. S. Kulhar,
Manipal University, Jaipur, D. Bhatnagar, *University of Rajasthan,*
Jaipur

EC112: Dual Mode Dual Band Dielectric Resonator Antenna: A New Design Concept

Poulomi Gupta, *Debatosh Guha, University of Calcutta*,
Chandrakanta Kumar, *ISRO Satellite Centre, Bangalore*

EC113: Capacitively Coupled Shorted Patch Antenna at C-band

Satyajit Chakrabarti, *Gourab Barman, SAMEER- Kolkata Centre*

2:00 PM- Studio • Technical Session T2(CS): Contributory Papers

Chair: **Pabitra Mitra**, *Indian Institute of Technology Kharagpur*

CS02: System Design Using Visual Information Hiding

Mandira Chowdhury, Abhishek Basu, *RCC Institute of
Information Technology, Beliaghata Kolkata*, Subir Kumar Sarkar,
Jadavpur University Kolkata

CS30: Molecular Docking Study for Functional Annotation of a Plant Protein

Anamika Basu, *Gurudas College, Kolkata*, Anasua Sarkar,
Government College of Engineering and Leather Technology, Kolkata

CS42: Effect of Data Availability at Different Resolutions on Air Quality Monitoring

Rajrup Ghosh, Dipanjan Ghosh, Abhik Mukherjee, *IEST,
Shibpur, West Bengal*, Sreemoyee Roy, *Ericsson India Global Services,*
Kolkata

CS48: Automatic Segmentation of Different Brain Tissue from MR Image

Subrata Jana, *Calcutta Institute of Technology, Kolkata*, Rohit K.
Chatterjee, *Birla Institute of Technology, Mesra, Ranchi*

CS61: GPU based Parsing and Searching of XML Document for Multimedia data using Map Reduce Approach

Abhaya Kumar Sahoo, Kshira Sagar Sahoo, Mayank Tiwary,
C.V. Raman College of Engineering

CS67: Internet of Things based Physical Activity Monitoring (PAMIoT): An Architectural Framework to Monitor Human Physical Activity

Partha P. Ray, *Sikkim University*

4:00 PM - Gallery 1 • Technical Session T3(EE): Contributory Papers

Chair: **Biswarup Basak**, *IIST, Kolkata*

EE22: Voltage Sag Mitigation by Dynamic Voltage Restorer

Gagari Deb, Abhishek Das, Moumita Deb, *Tripura University*,
Rikta Majumder, *Gurunanak Institute of Technology, Kolkata*

EE26: An Approach for on Line Power System Fault Diagnosis using Current Samples

S. Samanta, *MCKV Institute of Engineering, Liluah, Howrah*, J.N. Bera, *University College of Science and Technology, Kolkata*, G. Sarkar, *University College of Science and Technology, Kolkata*

EE52: Electrical Transport of $\text{Ag}_2\text{O}-\text{SeO}_2-\text{MoO}_3$ Glass-nanocomposite-semiconductor

Sanjib Bhattacharya, *Siliguri Institute of Technology, Darjeeling, West Bengal*, Ranadip Kundu, *Jadavpur University, Kolkata*, Anindya Sundar Das, *Regent Education and Research Foundation, Barrackpore, Kolkata*, Debasish Roy, *Jadavpur University, Kolkata*

EE56: Studies on the Effects of Supply Voltage Harmonics on Discharge Lamp Performance

Smita Sinha, *Pailan College of Management and Technology, Kolkata*, Biswanath Roy, *Jadavpur University, Kolkata*

EE100: Renewable Energy for Reducing Peak Demand - Availability and Prospective

Arindam Kumar Sil, *Jadavpur University, Kolkata*, Arpita Basu, *Camellia Institute of Technology, Kolkata, West Bengal*, N K Deb, *Jadavpur University, Kolkata*, Ashok Kumar Maitra, *BESU, Howrah, West Bengal*

4:00 PM - Gallery 2 • Technical Session T3(EC): Contributory Papers

Chair: **Ranjan K. Mallik**, *Indian Institute of Technology, Delhi*

EC122: An Inductive Power Transfer Highway System for Electric Vehicles

Johannes A. Russer, *Institute for Nanoelectronics, Technische Universit  at M nchen, Germany*, Marco Dionigi, Mauro Mongiardo, *Universit  di Perugia, Italy*, Alessandra Johannes, *Universit  di Bologna, Italy*, Peter Russer, *Institute for Nanoelectronics, Technische Universit  at M nchen, Germany*

EC05: A Study of The Effect of Diversity Order on The Capacity of an SC Receiver Over TWDP Fading

A. Dinamani Singh, Anindita Das, Lalchhantluanga, L. Bisanta Khuman, *NERIST*

EC45: Microwave Holographic Imaging

Debesh Choudhury, Santosh Kumar Chowdhury, *Neotia Institute of Technology, Management and Science, Diamond Harbour Road, West Bengal*

EC47: Easy Synthesis of Amorphous Carbon Nanotube and Their possible Use as Electrodes of Supercapacitor

Sourav Sarkar, *Siliguri Institute of Technology, Darjeeling, West Bengal*, Diptonil Banerjee, *Academy of Technology, Hooghly, West Bengal*, Kalyan Kumar Chattopadhyay, *Jadavpur University, Kolkata*

EC60: A Comparative Analysis of Dynamic Location Update (LU) Techniques for handling Diurnal Mobility in Wireless Cellular Networks

Samir K Sadhukhan, Debashis Saha, *Indian Institute of Management Calcutta, Kolkata*

EC65: Cost Minimization Using Particle Swarm Optimization for Cellular Network

S. Parija, P. K. Sahu, *National Institute of Technology, Rourkela, S.S Singh, KIIT University, Bhubaneswar, Odisha*

4:00 PM - Studio • Technical Session T3(CS): Special Presentation

Chair: **Utpal Garain**, *Computer Vision & Pattern Recognition Unit, Indian Statistical Institute, Kolkata*

Pattern Classification

C.A. Murthy, *Indian Statistical Institution, Kolkata*

DAY 2, Saturday, November 08

10:00 AM- Studio • Student Paper Contest SP(EE)

Chair: **Debangshu Dey**, *Jadavpur University, Kolkata*

EE09: Development of a Control Strategy for Energy Efficient Dampers in Automobile Sector using Simulink™

Debanjan Chatterjee, Vikram Bhattacharjee, *Jadavpur University Kolkata*

EE24: Measurement of Flash Over Voltage and Surface Leakage Current of Pin Insulator Contaminated with NaCl

A. Banik, T. Chatterjee, A. K. Pradhan, S. Dalai, B. Chatterjee, *Jadavpur University, Kolkata*

EE49: Study of an asymmetrically excited Induction generator for Micro-generation application

Arunava Chatterjee, Debashis Chatterjee, *Jadavpur University, Kolkata*

EE53: Wavelet Aided Fuzzy Clustering Based Transmission Line Fault Classification

G. Jain, S. Dalai, *Jadavpur University, Kolkata*

EE55: Determination Of Transformer Leakage Inductances By Markov Linear Unbiased Estimator (MLUE)

Satrajit Chakrabarty, Pramit Saha, Soumya Goswami, *Jadavpur University, Kolkata*

EE76: Study of Single Phase Rectifier Circuits with Power Factor Correction

Sounak Biswas, *St. Thomas' College of Engineering & Technology, Kidderpore, Kolkata*, Koustuv Sarkar, *Jadavpur University, Kolkata*

10:00 AM- Gallery 2 • Student Paper Contest SP(EC)

Chair: **Chinmoy Saha**, *Indian Institute of Space Science and Technology, Thiruvananthapuram*

EC03: Si₃C-SiC Multiquantum Well IMPATT Diodes

S. Banerjee, *University of Calcutta*, A. Acharyya, B. Banerjee, A. Tripathi, A. Das, A. Singh, *Supreme Knowledge Foundation Group of Institutions, Mankundu, Hooghly, West Bengal*, J. P. Banerjee, *University of Calcutta*

EC29: Hadamard Walsh and Paley Ordered DFWHT: A Study and Implementation on FPGA

Sudip Ghosh, Arijit Biswas, Santi P Maity, Hafizur Rahaman, *IEST, Shibpur*

EC34: Simulation and analysis of interface properties Of Au/n-GaSb Schottky diode

Farida A. Ali, Gouranga Bose, Sushanta K. Kamilla, *Siksha O Anusandhan University, Bhubaneswar, Orissa*

EC43: Investigation on Microstrip Antennas with Truncated Corners and U-Slot

Rituparna Bhowmick, Dipanwita Dey, Sarbshresth Verma, Santosh Kumar Chowdhury, *Neotia Institute of Technology, Management and Science, Diamond Harbour Road, West Bengal*

EC57: Square Fractal Ring Loaded CPW-Fed Antenna For Multiband Applications With Circular Polarization

Satyadeep Das, Sudhakar Sahu, *KIIT University, Bhubaneswar*

EC66: A Compact UWB Antenna with WLAN band notch characteristics using Fractal Geometry

Shrivishal Tripathi, *Indian Institute of Technology Jodhpur, Rajasthan*, Akhilesh Mohan, *Indian Institute of Technology Kharagpur, West Bengal*, Sandeep Yadav, *Indian Institute of Technology Jodhpur, Rajasthan*

EC75: Design of CPW Bandpass Filter for C-Band Application

Pratik Mondal, Amit Ghosh, Susanta Kumar Parui, *Indian Institute of Engineering Science and Technology, Shibpur, Howrah*

EC110: Compact Design of Floating Patch for Extraordinary Broadband Operation with High Gain

Sumitra Dey, Chandreyee Sarkar, Debatosh Guha, *University of Calcutta*

10:00 AM- Gallery1 • Student Paper Contest SP(CS)

Chair: Jamuna K. Sing, *Jadavpur University, Kolkata*

CS04: A Novel approach to find Shortest Path of a Network using A* Search Algorithm

Dhrubajyoti Ghosh, Saibal Majumder, Anita Pal, *National Institute of Technology Durgapur, West Bengal*

CS14: A novel Multi Agent System based Homeopathic Medical Diagnosis System

Sougata Chakraborty, Shibakali Gupta, *The University of Burdwan, West Bengal*

CS58: Robust admissible Wavelet Packet Features for Phoneme Classification

Astik Biswas, P.K.Sahu, *National Institute of Technology, Rourkela*,
Anirban Bhowmick, Mahesh Chandra, *Birla Institute of Technology, Mesra*

CS69: A review report on divide and conquer sorting algorithm

Smita Paira, Sourabh Chandra, Sk Safikul Alam, *Calcutta Institute of Technology*, Partha Sarthi Dey, *Indian Institute of Technology, Kharagpur*

CS70: Design Approaches on Auto Computational Guidance for Maintained Sugar Level with Proposed IDPC Unit Model

Sayanti Roy, *Greater Kolkata College of Engineering and Management, Baruipur, WestBengal*, Biswarup Neogi, *JISCE, Kalyani, WestBengal*

11:30 AM- Studio • Technical Session T4(EE): Tutorial

Issues and Challenges in Smart Grid Implementations

Sri Niwas Singh, *Dept. of Electrical Engg., Indian Institute of Technology Kanpur, India*

Chair: **Samarjit Sengupta**, *University of Calcutta*

11:30 AM- Gallery 2 • Technical Session T4(EC): Tutorial

Electromagnetic Compatibility Engineering for Electronic Circuits and Devices

Peter Russer, *Institute for Nanoelectronics, Technische Universität München, Germany*

Chair: **Debatosh Guha**, *University of Calcutta*

11:30 AM- Gallery 1 • Technical Session T4(CS): Tutorial

Soft Granular Mining: Concepts, Applications and Big Data Issues

Sankar K. Pal, *Center for Soft Computing Research, Indian Statistical Institute, Kolkata*

Chair: **Sivaji Chakravorti**, *Jadavpur University, Kolkata*

2:00 PM- Gallery 1 • Technical Session T5(EE): Contributory Papers

Chair: **J. N. Bera**, *University of Calcutta*

EE18: Improvement of Power System Stability by using Power System Stabilizer

Gagari Deb, *Tripura University*

EE40: Power System Harmonic Parameter Estimation Using Complex-NLMS Algorithm

Nilotpal Sinha, Ajit Gupta, Santosh Kumar Singh, N Sinha, Arup Kumar Goswami, *National Institute of Technology, Silchar, Assam*

EE41: Design and implementation of low cost radio frequency energy harvesting technique

Suprosanna Shit, Sayak Mukherjee, Soumyadip Ghosh, Kaustav Dey, Biswendu Chatterjee, *Jadavpur University, Kolkata*

EE68: Influence of CuI doping on the Dielectric relaxation of Glassy Nanocomposites

Arun Kr. Bar, *Institute of Engineering & Management, Kolkata*, Debasish Roy, *Jadavpur University, Kolkata*, Sanjib Bhattacharya, *Siliguri Institute of Technology, Darjeeling, West Bengal*

2:00 PM- Gallery 2 • Technical Session T5(EC): Contributory Papers

Chair: **Animesh Maitra**, *University of Calcutta*

EC01: Multidimensional Encoding Based Evolutionary Exploration Approach: Adaptive Methodology for Parametric Trade-offs in High Level Synthesis for Control flow Graphs

Anirban Sengupta, Vipul Kumar Mishra, *Indian Institute of Technology, Indore, MP*

EC59: Efficient Design of 4-Bit Binary Adder Using Reversible Logic Gates

Abinash Ku. Pala, Jagamohan Das, M. Suresh, Ajit Ku. Panda, *National Institute of Science and Technology, Berhampur, Odisha*

EC114: Design of a Tunable Band Notch Filter Using Varactor loaded Split Ring Resonator

Latheef Ahmed Shaik, Chinmoy Saha, *Indian Institute of Space Science & Technology, Thiruvananthapuram*

EC116: Shorted Stacked Patch Antenna at L-band

Satyajit Chakrabarti, *SAMEER- Kolkata Centre, Amitabha Hens, BSNL Kolkata*