#### **REGISTRATION**

9:30 a.m. to 10:30 a.m. Place: Mini Auditorium Lobby

#### HI-TEA

10:30 a.m. to 11:00 a.m. Place: VIP Room Mini Auditorium

#### **INAUGURAL SESSION**

11:00 a.m. to 1:00 p.m. Place: Mini Auditorium

| SI. NO. | Details   | Duration                 |
|---------|---|--------------------------|
| 1.      | Inaugural Speech and Introduction by Prof. Sanghamitra<br>Poddar            | 11:00 a.m. to 11:10 a.m. |
| 2       | Walsome address his Duof V. V. Chash  | 11.10 a m to 11.20 a m   |
| 2.      | Welcome address by Prof. K.K.Ghosh  | 11:10 a.m to 11:20 a.m.  |
| 3.      | About the Institute by Prof. Satyajit Chakrabarti                           | 11:20 a.m. to 11:30 a.m. |
| 4.      | Speech by Honorable Minister In Charge of Technical                         | 11:30 a.m to 11:45 a.m.  |
|         | Education and Training, the Minister for Science and                        |                          |
|         | Technology and the Minister for Biotechnology in the Govt.                  |                          |
|         | Of West Bengal, Dr. Rabiranjan Chattopadhyay.                               |                          |
| 5.      | Speech by Vice Chancellor of B.E.S.U., Prof. Dr. Ajay Ray                   | 11:45 a.m to 12:00 p.m   |
| 6.      | Speech by Vice Chancellor of J.U., Prof. Dr. P. N. Ghosh.                   | 12:00 p.m to 12:05 p.m   |
| 7.      | Speech by Vice Chancellor of W.B.S.U., Prof. Dr. A. R.                      | 12:05 p.m to 12:10 p.m   |
|         | Thakur  |                          |
| 8.      | Speech by Vice Chancellor of C.U., Prof. Dr. Suranjan Das.                  | 12:10 p.m to 12:15 p.m   |
| 9.      | Speech by French Consul General, Mr. J. L. Rysto                            | 12:15 p.m to 12:20 p.m   |
| 10.     | Speech by Senior General Manager, Lodge Cottrell, D. Han.                   | 12:20 p.m to 12:25 p.m   |
| 11.     | Speech by chairman, IEEE Calcutta section, Prof. Dr. Sivaji<br>Chakraborty. | 12:25 p.m to 12:30 p.m   |
| 12.     | Speech by Sr. Consultant, T.C.S., Mr. Kushal Banerjee,                      | 12:30 p.m to 12:35 p.m   |
| 13.     | Keynote Speech by Director, IEM , Prof. Dr. Satyajit<br>Chakrabati,         | 12:35 p.m to 12:50 p.m   |
| 14.     | Vote of thanks by patron of the conference, Prof. Dr. B.B. Ghosh.           | 12:50 p.m to 1:00 p.m    |

#### **LUNCH**

1:00 p.m. to 2:00 p.m. Place: Seminar Hall Lounge

Name of the Session: MEDICAL ELECTRONICS

Date: 17th January, 2012

Hall Name : GURUKUL Time : 02:00 - 03:45 p.m.

Chairman: Prof. Monisha Chakraborty

Co-Chairman: Prof. Kamal Kanti Ghosh

Rapporter : Prof. Arunava Mukherjee

| Paper<br>ID | Paper Title  | Authors   |
|-------------|--|---|
| 1           | Total Quality Management in Health Sector  | Abhijit Chakraborty,Sudip Kumar<br>Deb and Ranjan Bhattacharya                  |
| 24          | Extraction of ECG Fiducial Points Using Discret Wavelet Transform                                      | Swati Banerjee and<br>Madhuchhanda Mitra  |
| 25          | Digital Filtering of Amino Acid Sequence For Prediction of Cancer Cell                                 | Suman Saha and Soma<br>Barmanmandal   |
| 30          | Detection Of Myocardial Infarction by Fourier<br>Co-Efficient Analysis of ECG                          | Deboleena Sadhukhan and<br>Madhuchhanda Mitra                                   |
| 60          | A Comparative Study on the Accuracy of ECG<br>Detection for Arrythmia By Different Wavelet<br>Families | Anandarup Mukherjee, Sanjukta<br>Chatterjee, Kajari Chattopadhyay,<br>K K Ghosh |

Name of the Session: COMPUTER COMMUNICATION & SYSTEMS

Date: 17th January, 2012

Hall Name: ASHRAM Time: 02:00 - 03:45 p.m.

Chairman: Prof. Anup Kumar Bandyopadhyay

Co-Chairman: Prof.S.Chakrabarti

Rapporter : Prof. Sukanya Mukherjee

| Paper<br>ID | Paper Title  | Authors   |
|-------------|--|---|
| 5           | Processing Delay Analysis of MLFFA based on Queuing Model  | Boudhayan<br>Bhattacharya,Sharmistha<br>Bhattacharjee and Dwijesh Dutta<br>Majumder |
| 37          | Speech De-noising by Adaptive Filter and Wavelet Transform   | Abhinaba Banerjee and Dulal<br>Mandal   |
| 49          | Fear and Risk Issues In Cloud Computing  | Sarasij Majumdar, Hemanta Dey,<br>Soumen Santra and Rakhi<br>Bhattacharjee          |
| 64          | Design and Implementation of Real Time AES-128 on Real Time Operating System for Multiple FPGA Communication | Rourab Paul, Sangeet Saha, Suman<br>Sau, Amlan Chakrabarti                          |

Name of the Session : PATTERN RECOGNITION IN ELECTRICAL & OPTIMAL DOMAIN

Date: 17th January, 2012

Hall Name: NIRBAHA Time: 02:00 - 03:45 p.m.

Chairman: Prof. Somnath Sarkar

Co-Chairman: Prof. P.K.Sinha Roy

Rapporter : Prof. Parna Guha Bhattacharya

| Paper<br>ID | Paper Title   | Authors   |
|-------------|---|---|
| 23          | Bidirectional Pattern Matching for DNA Sequences  | Tamal Chkrabarti and Devadatta Sinha  |
| 28          | PAPR Reduction of an Optically Converted Pre-coded OFDM signal by SOA   | Abhirup Das Barman and Ipsita Sengupta                                      |
| 38          | An Efficient Method For Error Correction in Digital Signal Processiing Perspective  | Dr.Asok Kumar, Rupam Das and Dr. Anup Kumar<br>Bhattacharjee Mrinmoy Sarkar |
| 48          | Reduction of Power consumption with the Incrementation of LED   | Sourav Sarkar and Amitava Sengupta  |
| 50          | Effect of Conduction Band Nonparabolicity on<br>Transmission Coefficient of Double Quantum Well<br>Tripple Barrier Structure with Parrabolic Geometry | Souvik Mukherjee, Rajit Karmakar, Arindam Biswas and Arpan Deyasi           |
| 51          | An Efficient NLP Based Approach To Personalized Information Retrieval In Web Mining   | Subhabrata Sengupta, Sourav Saha, Sukalyan<br>Goswami                       |

#### **TEA SESSION**

3:45 p.m. to 4:00 p.m. Place : Seminar Hall Lounge

# **TECHNICAL SESSION - 4**

Name of the Session: MEDICAL ELECTRONICS

Date: 17th January, 2012

Hall Name: GURUKUL Time: 04:00 - 06:00 p.m.

Chairman: Prof. Monisha Chakraborty

Co-Chairman: Prof. Kamal Kanti Ghosh

Rapporter: Prof. Arunava Mukherjee

| Paper<br>ID | Paper Title  | Authors  |
|-------------|--|--|
| 78          | Design of Tele-healthcare Interactivity: A Semi Formal Approach                        | Imon Banerjee, Shrutilipi<br>Bhattacharjee                               |
| 88          | Electrocardiografic Data Compression Using Wavelet                                     | Aritra Basu, Amit Shankar Sinha,<br>Arighna Deb and Tejendra Nath<br>Sen |
| 80          | A Mathematical Analysis Of Blood Flow Through Stenosed Arteries: A Non-Newtonian Model | B.Basu Mallik , Saktipada Nanda  |

Name of the Session: COMPUTER COMMUNICATION & SYSTEMS

Date: 17th January, 2012

Hall Name: ASHRAM Time: 04:00 - 06:00 p.m.

Chairman: Prof. Anup Kumar Bandyopadhyay

Co-Chairman: Prof.S.Chakrabarti

Rapporter : Prof. Sukanya Mukherjee

| Paper<br>ID | Paper Title   | Authors   |
|-------------|---|---|
| 92          | Microstrip Antenna For Hispeed WLANs                          | Priyanarayan Misra and Debasis<br>Mishra                    |
| 95          | Energy Efficient Administrator Based Secure Routing For Manet | Aniruddha Bhattacharyya, Arnab<br>Banerjee and Dipayan Bose |

Name of the Session : PATTERN RECOGNITION IN ELECTRICAL & OPTICAL DOMAIN

Date: 17th January, 2012

Hall Name: NIRBAHA Time: 04:00 - 06:00 p.m.

Chairman: Prof. Somnath Sarkar

Co-Chairman: Prof. P.K.Sinha Roy

Rapporter: Prof. Sourav Saha

| Paper<br>ID | Paper Title  | Authors  |
|-------------|--|--|
| 55          | Automatic Schema Matching and Mapping  | Soumi Dutta, Deepsikha<br>Mullick and Moumita<br>Roy                           |
| 87          | Key Frame Detection Using Two-Step Corner Selection  | Monika Agarwal,<br>Satyabrata Maity, Amlan<br>Chakrabarti                      |
| 90          | Fiber Optics Laser Systems in Cardio Vascular Diseases   | Debadyoti Ghosh, Md.<br>Niyaz Mallick, Farha<br>Serin Naaz, Alok Kumar<br>Das. |
| 99          | Multi-Sensor Data Fusion Using Particle Filter to Estimate Nonlinear Recursive Bayesian Model for Object Tracking        | Aninda Mondal,Moloy<br>Kumar Chowdhury   |
| 102         | Harmonics and Interharmonics Estimation Of A Passive Magnetic Fault Current Limiter Using Biorthogonal Wavelet Transform | Raju Patwary,<br>A.B.Choudhury, D.Roy,<br>S.Rudra                              |

Name of the Session: NEURAL & ARTIFICIAL NETWORKS

Date: 18th January, 2012

Hall Name: GURUKUL Time: 10:00 - 11:30 a.m.

Chairman: Prof. B.N.Roy

Co-Chairman : Prof. Dipak Chatterjee

Rapporter: Prof. Sourav Saha

| Paper<br>ID | Paper Title  | Authors   |
|-------------|--|---|
| 19          | Benefit Based Artificial Intelligence Regulated Stability<br>Goverannce of a Practical Power Network | Saptarshi Bhattacharya, Rumna<br>Kuthial, Partha Pratim Das and<br>Sawan Sen            |
| 41          | Artificial Neural Network Modeling of Instrusion Detection and Prevention System                     | Tanusree Chatterjee, Indraneel<br>Mukhopadhyay and Mohuya<br>Chakraborty                |
| 42          | Intrusion Detection In Wireless Sensor Networks Using Fuzzy Logic                                    | Moutushi Singh, Abdur Rahaman<br>Sardar and Subir Kumar Sarkar                          |
| 44          | Artificial Neural Network Based Automatic Mobile<br>Radio Signal Classifier                          | Swagata Roy Chaterjee, Indranil<br>Banerjee, Soma Bhattacharyya and<br>Mohua Chakrobory |
| 72          | Study The Nonlinear Behaviour of PFC Boost<br>Converter  | Arnab Ghosh   |
| 98          | A Review of Secure Routing in Mobile ad hoc<br>Network   | Abari Bhattacharya, Himadri Nath<br>Saha  |
| 103         | Leader-Follower Formation Control Using Artificial Potential Functions                               | Kishorekumar H Kowdiki, Ranjit<br>Kumar Barai, Samar M Battacharya.                     |

Name of the Session: SOCIAL ENGINEERING & SOCIAL SCIENCE

Date: 18th January, 2012

Hall Name: ASHRAM Time: 10:00 - 11:30 a.m.

Chairman: Prof. Jyoti Banerjee

Co-Chairman: Prof. Mohuya Chakraborty

Rapporter : Prof. Arighna Deb

| Paper ID | Paper Title  | Authors  |
|----------|--|--|
| 4        | "Is Emerging Green Technology Poses Threat of Trade Wars-Some Solutions?-A Survey"           | Subro S. Thakur, Somasree Bhadra and Sougata Dey           |
| 14       | Computational Optimization of Speed in an Unplanned Lane Traffic                             | Prasun Ghosal, Arijit Chakraborty and Sabyasachee Banerjee |
| 32       | PREMASA MODEL:-An Intgrated Approach to Customer Relationship Management                     | Debabrata Das  |
| 36       | Energy Conservation In Buildings   | Avijit Bandopadhyay  |
| 53       | Design Of a Universal Solar Power Driven<br>Mobile Phone Charger For Rural Areas Of<br>India | Priyanka Roy, Swati Dey and Dr.<br>Madhurima Chattopadhyay |
| 79       | Energy Consumption Modeling for<br>Maintenance Cost Evaluation in RFID<br>Inventory Tracking | Tanvi Agrawal, Pradip K Biswas,<br>A.D.Raoot               |
| 104      | Soil Fertility: Can We Estimate? Assessment of techniques of soil fertility measurement      | Ritam Sanyal, N. G. Shah                                   |

Name of the Session: APPLICATION FOR IT IN INDUSTRY

Date: 18th January, 2012

Hall Name: NIRBAHA Time: 10:00 - 11:30 a.m.

Chairman: Prof. Tapan Kr. Chatterjee

Co-Chairman: Prof. B.B.Ghosh

Rapporter : Prof. Panchali Bhattacharya

| Paper ID | Paper Title  | Authors   |
|----------|--|---|
| 16       | Accelerating Electrical Fields in Radio Frequency Standing Wave Linacs                               | Vinod Babu Pusuluri and Rajat Roy   |
| 20       | Mathematical Modeling of a Cylindrical Pipe<br>Structure by Bessel Filter                            | Paritosh Bhattacharya, Sabyasachi<br>Mukhopadhyay and Bankim Bihari<br>Ghosh                    |
| 22       | A Study on Optimal Reactive Power Dispatch Using Artificial Bee Colony Algorithm                     | Tanmoy Malakar and Ashoke Kumar<br>Sinha  |
| 27       | A Novel Control Algorithm for Self Supported Dynamic Voltage Restorer                                | Himadri Ghosh,Pradip Kumar Saha<br>and Goutm Kumar Panda  |
| 31       | Study The Nonlinear Behaviour of PFC Boost Converter   | Arnab Ghosh, Abhisek Pal, Pradip<br>Saha and Gautam Panda                                       |
| 35       | Control of Chaos in DC-DC Boost Converter with Non-smooth DC Supply                                  | Subhankar Dam, Abhrajit Saha, Dr.<br>Pradip Kumar Saha and Dr. Goutam<br>Kumar Panda            |
| 73       | Understanding some Physico-Chemical Components for Estimation of Eutrophication of an Aquatic System | Susmita Bhattacharya, Prabir Kumar<br>Das, Dr. Phani Bhusan Ghosh                               |
| 96       | Two-level Secure Re-routing (TSR) in Mobile Ad Hoc Networks  | Himadri Nath Saha , Dr. Debika<br>Bhattacharyya , Dr A.K.<br>Bandhyopadhyay, Dr. P. K. Banerjee |
| 100      | Degumming Jatropha to Make It Fit for Use<br>As Biofuel  | S.K.Das,Prabir Kumar Das, Dr.<br>B.B.Ghosh, Dr. Satyajit Chakrabarti                            |
| 101      | Impact Of Bio-disel on The Transport Sector of Kolkata Megacity                                      | S.K.Das,Prabir Kumar Das, Dr.<br>B.B.Ghosh, Dr. Satyajit Chakrabarti                            |

#### TEA SESSION

11:30 a.m. to 12:00 p.m. Place: Seminar Hall Lounge

#### **TECHNICAL SESSION - 10**

Name of the Session: ANALOG & DIGITAL COMMUNICATION

Date: 18th January,2012

Hall Name: ASHRAM Time: 12:00 - 01:30 p.m.

Chairman: Prof. Tapan Kumar Chatterjee

Co-Chairman: Prof. Asim Kar

Rapporter: Prof. Moumita Chakraborty

| Paper ID | Paper Title   | Authors  |
|----------|---|--|
| 7        | Performance Analysis of Transistor Level<br>Adder Circuits by Varrying Number of<br>Transistors and Implementing Different<br>Logic Style of Addition | Subhadeep Nandy and Rajib Pal                              |
| 15       | A Binary Adaptive Differential Evolutionary<br>Approach for Multi_User Detection in<br>Multi_Carrier Code Division Multiple Access                    | Jubin Hazra and Arindam Chakraborty                        |
| 21       | Design Of Sequential Circuits Using Single Electron Encoded Logic   | Mili Sarkar  |
| 34       | Implementing Security Measurement on qa<br>Lifetime Enhancing Routing Protocol of<br>WSN  | Avik Modak and Anuran<br>Roychowdhury                      |
| 45       | A Novel Multiplexer and Demultiplexer<br>Design and Permissable Fault Analysis Using<br>Quantum Cellular Automata                                     | Ratna chakroborty, Kamal Kumar<br>Ghosh and Debashis De    |
| 58       | Hairpin model of CRLH Transmission Line and Floating Slot Approch for Wide -Band Bandpass Filter  | Pratik Mondal,Bhupesh Mukherjee<br>and Susanta Kumar Parui |
| 61       | Programmable Array Logic Design Using Quantum Dot Cellular Automata   | Ratna Chakrabarty, Arnab Sarkar and Debashis De            |

Name of the Session: FINANCE & MANAGEMENT

Date: 18th January, 2012

Hall Name : GURUKUL Time : 12:00 - 01:30 p.m.

Chairman: Prof. D.K.Banwet

Co-Chairman : Prof. Rahul Gupta

Rapporter: Prof. Paramita Mukherjee

| Paper ID | Paper Title   | Authors   |
|----------|---|---|
| 3        | A Study on Common Finance Engineering in India  | N.Singha Roy, S.S. Roy,<br>S.B.Chowdhury and Dr. Subhamoy<br>singha Roy |
| 6        | Analysing Existing Online Business Models and Suggesting an Ideally Secured and Integrated Website Layout   | Reetwika Banerjee and Tamal Kanti<br>Mukherjee                          |
| 10       | Fuzzy Mixed Integer Linear Programming for Air Vehicles Operations Optimization                             | Dr Arindam Chaudhuri, Dr Dipak<br>Chatterjee and Ritesh Rajput          |
| 82       | Cloud Computing: emphasizing its possible roles and importance in Information Systems and Centers           | Prantosh Kumar Paul, Dr. Dipok<br>Chatterjee and Bhaskar Karn           |
| 83       | Information Science Education and Research  | Prantosh Kumar Paul, Dr. Dipok<br>Chatterjee and Bhaskar Karn           |
| 85       | A Simple Approach of Building a Learning<br>Managemnt System(LMS) to Expeiment with<br>Intelligent Tutoring | Lopa Mandal, Avik Dutta, Rahul Roy<br>and Mohit Daga                    |
| 89       | FIIs and Indian Stock Markets- Emeging Issues<br>From A Literatur Review Post-2000                          | Ranjan Dasgupta and Sujit Dutta   |

Name of the Session: ANTENNA & PROPAGATION

Date: 18th January, 2012

Hall Name: NIRBAHA Time: 12:00 - 01:30 p.m.

Chairman: Prof. Bhaskar Gupta

Co-Chairman: Prof. Ajoy Chakraborty

Rapporter: Prof. Asima Sarkar

| Paper ID | Paper Title  | Authors  |
|----------|--|--|
| 26       | Elliptical Zeroth Order Resonant Antenna   | Sheeja K.L , P.K Sahu and S.K<br>Behera                        |
| 54       | Design and Development of E-Shaped Array<br>Antenna using Deffected Ground Structure at<br>5.25GHZ Band  | Chandan Kumar Ghosh, Biswarup<br>Rana and Susanata Kumar Parui |
| 59       | Hybrid Dielectric Resonator antenna with hexagonal patch for UWB applications  | Kumari Padmawati, D.K.Bisoy, S.K<br>Behera                     |
| 67       | Miniaturization of a Rectangular Microstrip Patch Antenna with Slots and Defected Ground Structure   | Mrinmoy Chakraborty and<br>Biswarup Rana                       |
| 68       | Design of a CPW-Fed Circular Shaped Slot<br>Antenna for Wireless Application   | Mrinmoy Chakraborty and Biswarup Rana                          |
| 69       | Non-Linear Analysis Using MATLAB and<br>Assembly Language Programming to<br>Investigate Possible Cause of Breakdown in<br>power System Network | Swarnankur Ghosh,Pradip Kumar<br>Saha,Gautam Kumar Panda       |
| 71       | A 3-D Box Parity Model for Error Detection and Correction in Digital Communication Systems   | Avisek lahiri, Manashi Chakraborty                             |

#### LUNCH

01:30 p.m. to 02:00 p.m. Place: Seminar Hall Lounge

### **TECHNICAL SESSION - 13**

Name of the Session: SIGNAL PROCESSING & MOBILE COMMUNICATIONS

Date: 18th January, 2012

Hall Name : ASHRAM Time : 02:00 - 03:30 p.m.

Chairman: Prof. P.K.Banerjee

Co-Chairman: Prof. Debika Bhattacharyya

Rapporter : Prof. Nilanjana Dutta Roy

| Paper ID | Paper Title   | Authors  |
|----------|---|--|
| 65       | Study of Different Attacks in Manet with its Detection and Mitigation Schemes                                     | Aniruddha Bhattacharyya, Arnab<br>Banerjee and Dipayan Bose    |
| 66       | An Inverse Cell Breathing Based Power<br>Management for Conjested Mobile Network                                  | Anwesha Mukherjee,Debashis De                                  |
| 93       | An Efficient Approach for Deigning High<br>Performanance Squaring Circuit using Vedic<br>Algorithms               | Jubin Hazra, Saptrshi Mallick,Joydeep<br>Saha and Biswajit Das |
| 94       | Voronoi Coverage in Swarm Robot Position<br>Control: A New Approach   | Paramita Mandal,Rangit Kumar Barai<br>and Madhubanti Maitra    |
| 97       | Modeling of Multirate 3-Stage Cascaded-<br>Integrator-Comb Filter for GSM Networks<br>and its FPGA Implementation | Saikat Dutta, Moloy Kumar Chowdhury                            |

#### **INVITED TALK**

Place: GURUKUL Time: 03:30-04:00 P.M.

| Speaker              | Topic  |
|----------------------|--|
| Prof. Chandan Sarkar | Nano-crystal Embedded MOS Nonvolatile Memory |
| Prof. Chandan Sarkar | Devices                                      |

Time: 04:00-04:30 P.M.

| Speaker              | Topic                                |
|----------------------|--------------------------------------|
| Dr. Avijit Choudhury | Healthcare Solution In Social Sector |

#### **TEA SESSION**

04:30-04:45 P.M. Place: Seminar Hall Lounge

#### **VALIDICTORY SESSION**

Time:- 04:45-05:45 P.M. Place: GURUKUL

Welcome and Brief Summary Of the Conference Validictory Address by Prof. Ranjan Ghosh Prize Giving Ceremony by Prof. Ranjan Ghosh Thanks Giving by Prof. D. Chatterjee