

Conference Program – EICT 2017 at a Glance

Day 1: December 07, 2017 (Thursday)				
9:00 AM – 10:00 AM	Registration & Kit Distribution, SWC KUET			
10:00 AM – 10:45 AM	Inauguration ceremony			
10:45 AM – 11:15 AM	Refreshment			
11:15 AM – 12:00 PM	Keynote Session– I			
12:00 PM – 12:45 PM	Keynote Session –II			
12:45 PM – 1:15 PM	Session for Sponsors			
1:15 PM – 2:15 PM	Prayer & Lunch Break			
2:30 PM – 3:30 PM	Parallel Technical Session A			
	D1A1	D1A2	D1A3	D1A4
3:30PM – 4:15PM	Prayer & Tea Break			
4:15PM – 5:15PM	Parallel Technical Session B			
	D1B1	D1B2	D1B3	D1B4
END of DAY 1				
Day 2: December 08, 2017 (Friday)				
8:30AM – 9:30AM	Parallel Technical Session A			
	D2A1	D2A2	D2A3	D2A4
9:30AM – 10:30AM	Parallel Poster Session			
	D2P1	D2P2	D2P3	D2P4
10:30 AM -11:00 AM	Tea Break			
11:00 AM - 11:45 AM	Keynote Session – III			
11:45 AM – 12:45PM	Parallel Technical Session B			
	D2B1	D2B2	D2B3	D2B4
12:45 PM – 2:30PM	Prayer & Lunch Break			
2:30 PM – 3:30 PM	Parallel Technical Session C			
	D2C1 Invited Talk	D2C2	D2C3	D2C4
3:30PM – 4:15PM	Prayer & Tea Break			
4:15PM – 5:15PM	Parallel Technical Session D			
	D2D1	D2D2	D2D3	D2D4
5:15 PM – 6:00 PM	Break			
6:00 PM to 7:00 PM	Closing Ceremony			
7:00 PM to 9:30 PM	Conference Dinner			
END of DAY 2				
Day 3: December 09, 2017 (Saturday)				
8:30AM – 5:00PM	Sight Seeing Tour			
END of DAY 3				

Keynote and Invited Sessions

Keynote Session I

Date: 07 December 2017
Time: 11:15 AM – 12:00 PM
Title: Optical characterization of carrier dynamics in oxides and halides
Speaker: Dr. Takayuki Makino
Session Chair: Prof. Dr. M. M. A. Hashem

Venue: SWC, KUET

Keynote Session II

Date: 07 December 2017
Time: 12:00 PM – 12:45 PM
Title: Watermarking Schemes for Protection Against Digital Piracy
Speaker: Dr. Subir Kumar Sarkar
Session Chair: Prof. Dr. B. C. Ghosh

Venue: SWC, KUET

Keynote Session III

Date: 08 December 2017
Time: 11:15 AM – 12:00 PM
Title: Challenges in Biometric System Development
Speaker: Dr. Phalguni Gupta
Session Chair: Prof. Dr. Md. Nurunnabi Mollah

Venue: SWC, KUET

Invited Session

Date: 08 December 2017
Time: 2:30PM – 3:15 PM (Session: D2C1)
Title: Smart-Driving in a Partially Connected Vehicle Environment
Speaker: Dr. M. A. S. Kamal
Session Chair: Prof. Dr. Md. Rafiqul islam (1)

Venue: Seminar Room, CSE, KUET

Venue (Oral Session):

DLT (Distance Learning Theater, Science Building),
CSE-301 (CSE Seminar Room),
ECE-218 (ECE Seminar Room),
IEM-214 (IEM Seminar Room),
TE-410 (Textile Engg Seminar Room)

Venue (Poster Session):

Central Library Lobby (2nd Floor) – Session: D2P1, D2P2, D2P3, D2P4

Conference Program

Technical Session: Day 1 – Parallel Session A (D1A1) 7 December 2017		
Venue: CSE-301		Time: 2:30 PM–3:30 PM
Artificial Intelligence, Computer Networks and Security Session Chair: Prof. Dr. Kazi Raqibul Alam, Dept. of CSE, KUET		
D1A1 - 1	61477	Convolutional Recurrent Neural Network for Question Answering M.M. Arefin Zaman and Sadia Zaman Mishu
D1A1 - 2	61174	A Feature Fusion Based Optical Character Recognition of Bangla Characters Using Support Vector Machine Mst. Tasnim Pervin, Shyla Afroge, and Aminul Huq
D1A1 - 3	61517	Customer Segmentation Using Centroid Based and Density Based Clustering Algorithms A. S. M. Shahadat Hossain
D1A1 - 4	61186	Combined Zernike Moments, Binary Pixel and Histogram of Oriented Gradients Feature Extraction Technique for Recognizing Hand Written Bangla Characters Aminul Huq, Shyla Afroge, and Mst. Tasnim Pervin

Technical Session: Day 1 – Parallel Session A (D1A2) 7 December 2017		
Venue: ECE-218		Time: 2:30 PM–3:30 PM
Signal Processing, Multimedia and Embedded Systems Session Chair: Prof. Dr. Md. Salah Uddin Yusuf, Dept. of EEE, KUET		
D1A2 - 1	61246	Developing a Pixel Value Ordering Based Reversible Data Hiding Scheme Sultan Abdul Hasib and Hussain Nyeem
D1A2 - 2	61493	Digital Electric Meter Reading Recognition Based on Horizontal and Vertical Binary Pattern Atif Anis, Md. Khaliluzzaman, Mohammad Yakub, Niloy Chakraborty, and Kaushik Deb
D1A2 - 3	61340	A New Approach to Color Image Watermarking Based on Joint DWT-SVD Domain in YIQ Color Space Emon Dey, Sharmin Majumder, and Arnab Neelim Mazumder
D1A2 - 4	61366	Modeling and Analysis of Interpolation based Adaptive Reversible Data Hiding Md. Abdul Wahed and Hussain Nyeem

Technical Session: Day 1 – Parallel Session A (D1A3) 7 December 2017		
Venue: IEM-214		Time: 2:30 PM–3:30 PM
Circuits, Power Electronics and Drives Session Chair: Prof. Dr. Sheikh Shariful Islam, Dept. of ECE, KUET		
D1A3 - 1	61106	Simulations of Threshold Logic Unit Problems Using Memristor Based Synapses and CMOS Neuron Anik Chowdhury, Afiya Ayman, Shovon Dey, Mrinmoy Sarker, and Aqeeb Iqbal Arka
D1A3 - 2	61109	High Voltage Conversion DC-DC Step up Converter for Fuel Cell Applications M. Al Mamun, Md. Ali Hasan, and Equb Khan
D1A3 - 3	61117	Speed Control of DC Motor with FZ-D Controller Abu Shakil Ahmed, Ahmed Imteaz Kabir, and Md. Shahjahan
D1A3 - 4	61134	Design of an FPGA Based System for High Speed Data Compression and Secured Transmission Mohammad Rakib and Md. Liakot Ali

Technical Session: Day 1– Parallel Session A (D1A4) 7 December 2017		
Venue: TE-410		Time: 2:30 PM–3:30 PM
Wireless and Optical Communication		
Session Chair: Prof. Dr. Md. Faruque Hossain, Dept. of ECE, KUET		
D1A4 - 1	61175	A Compact Planar Multiple-Input Multiple-Output(MIMO) Antenna for Ultra-wideband Applications Foez Ahmed, Nisab Hasan, and Aurangzib Md Abdur Rahman
D1A4 - 2	61180	Design and Analysis of Four Elements E, H and Combined E-H Shaped Microstrip Patch Array Antenna for Wireless Applications L. C. Paul, M. S. Akhter, M. A. Haque, M. R. Islam, M. F. Islam, and M. M. Rahman
D1A4 - 3	61195	Design and Performance Analysis of GaInNAsSb/GaAs MQW VCSEL Operating at 1550 nm Md. Rabiul Karim, Md. Asifur Rahman, Jobaida Akhtar, and Mohammad Istiaque Reja
D1A4 - 4	61181	Millimeter-Wave Hexagonal Grid Microstrip Array Antenna for 5G Communication Liton Chandra Paul and Md. Murshid Alam

Technical Session: Day 1– Parallel Session B (D1B1) 7 December 2017		
Venue: CSE-301		Time: 4:15 PM–5:15 PM
Materials and Nanotechnology		
Session Chair: Prof. Dr. Md. Rafiqul Islam (2), Dept. of EEE, KUET		
D1B1 - 1	61113	Electron Beam Ni-Layer Deposited LaTiO ₂ N Photoanodes for the Enhanced Photoelectrochemical Performance of Water Oxidation Md. Abdulla-Al-Mamun and Kazunari Domen
D1B1 - 2	61220	Substrate Effects on Channel Temperature Distribution of AlGaIn/GaN HEMT Amit Kumer Podder, A. S. M. Jannatul Islam, SM Hasanuzzaman, Md. Sherajul Islam, and A.G. Bhuiyan
D1B1 - 3	61221	Binding Energy of CNT-GNR Interface due to Different Orientation and Equilibrium Distance Nabil Ahmed, G.R. Ahmed Jamal, and Roman Ahmed
D1B1 - 4	61313	Silicon on Metal Technology Merged with Cylindrical Gate All Around FET for Enhanced Performance Abu Bakar Siddik, N. M. Mahmud Hossain, Sakib Quader, and Md. Iqbal Bahar Chowdhury

Technical Session: Day 1– Parallel Session B (D1B2) 7 December 2017		
Venue: ECE-218		Time: 4:15 PM–5:15 PM
Power System and Renewable Energy		
Session Chair: Dr. Naruttam Kumar Roy, Dept. of EEE, KUET		
D1B2 - 1	61138	Performance Improvement of Superconducting Magnetic Energy Storage Based ACO Controlled Hybrid Micro-Grid System Md. Asif-Ur Rahman Sarker and Md. Rafiqul Islam
D1B2 - 2	61217	Investigation on Parameters Performance of Zn/Cu Electrodes of PKL, AVL, Tomato and Lemon Juice Based Electrochemical Cells: A Comparative Study Md. Kamrul Alam Khan, Md. Siddikur Rahman, Tanmoy Das, and Muhammad Najebul Ahmed
D1B2 - 3	61276	Application of Energy Capacitor System with Minimum Energy Storage Capacity for Smoother Frequency and Output Power of a Grid Connected Wind Farm S. M. Shaikh, M. S. A. Hossain, T. B. Zaman, U. B. Tayab, and M. A. Humayun
D1B2 - 4	61305	Performance Comparison of Various Wavelets in Compression of PMU Generated Data in Smart Grid Baizeed Ahmed Bhuiyan, Md. Wasif Absar, and Ayon Roy

Technical Session: Day 1– Parallel Session B (D1B3)		
7 December 2017		
Venue: IEM-214		Time: 4:15 PM–5:15 PM
Knowledge and Data Engineering		
Session Chair: Prof. Dr. Muhammad Sheikh Sadi, Dept. of CSE, KUET		
D1B3 - 1	61480	GA-Based Adaptive Fuzzy Logic Controller for a Robotic Arm in the Presence of Moving Obstacle Soniya Yeasmin and Pintu Chandra Shill
D1B3 - 2	61245	Design and Construction of an Automatic Electric Wheelchair: An Economic Approach for Bangladesh Amit Sutradhar, Md. Samiul Haque Sunny, Manash Mandal, and Rubel Ahmed
D1B3 - 3	61386	A New Method for Smooth Trajectory Planning for 3R Robot Arm Using Enhanced Particle Swarm Optimization Algorithm Soniya Yeasmin, Fatematuzzohura Karima, Shahnaz Kabir, and Pintu Chandra Shill
D1B3 - 4	61306	Nose Tracking Cursor Control for the People with Disabilities: An Improved HCI Shadman Sakib Khan, Md. Samiul Haque Sunny, M. Shifat Hossain, Eklas Hossain, and Mohiuddin Ahmad

Technical Session: Day 1– Parallel Session B (D1B4)		
7 December 2017		
Venue: TE-410		Time: 4:15 PM–5:15 PM
Biomedical Engineering		
Session Chair: Prof. Dr. Celia Shahnaz, Dept. of EEE, BUET		
D1B4 - 1	61151	Determination of EM Parameters in Human Head Phantom by Transcranial Magnetic Stimulation Laila Khairunnahar, Md. Kamal Hosain, and Md. Rabiul Islam
D1B4 - 2	61379	SAR Reduction of Bio-tissue in Cellular Communication Siddhartha Dey, Sourin Dey, Abu Shakil Ahmed, and Md. Nurunnabi Mollah
D1B4 - 3	61474	Performance Analysis of a Modified Implantable PIFA Operates at MICS Band for Human Head Phantom Model Sadia Sultana, M Mohiuddin Miran, Sk Md Asif Uddin, Md. Mahmudun Naby, and Mahmudul Haque
D1B4 - 4	61148	Real Time Activity Recognition Framework for Health Monitoring Support in Home Environments Shaikh Farhad Hossain, Al-Mahmud, Ali Reza, Alvi Ataur Khalil, and Asif Ahmed

Technical Session: Day 2– Parallel Session A (D2A1)		
8 December 2017		
Venue: CSE-301		Time: 8:30AM–9:30AM
Artificial Intelligence, Computer Networks and Security		
Session Chair: Prof. Dr. Md. Shahjahan, Dept. of EEE, KUET		
D2A1 - 1	61296	Detection and Recognition of Bangladeshi Road Sign Based on Maximally Stable Extremal Region Mohammed Shahed, MD. Ahsan Ullah Khan, and Shayhan Ameen Chowdhury
D2A1 - 2	61514	Training Denoising Autoencoder Using Printed Text Image for Classification of Handwritten Numeral from Noisy Images Sudipta Singha Roy, Sk. Imran Hossain, Tajul Islam, Shaikh Akib Shahriyar, Md. Aminul Haque Akhand, and Kazuyuki Murase
D2A1 - 3	61178	Development of a Self-Navigating Algorithm for Library Book Finder Robot Md. Rezaur Rashid, Nahid Uzzaman, Sanzida Hossain, and Neel Kanto Das Shuvra
D2A1 - 4	61392	Enhancing Secure Cloud Computing Environment by Detecting DDoS Attack Using Fuzzy Logic Himadri Shekhar Mondal, Md. Tariq Hasan, Md. Bellal Hossain, Md. Ekhlaur Rahaman, and Rabita Hasan

Technical Session: Day 2— Parallel Session A (D2A2) 8 December 2017		
Venue: Distance Learning Theater		Time: 8:30 AM—9:30 AM
Signal Processing, Multimedia and Embedded Systems Session Chair: Prof. Dr. Md. Faisal Hossain, Dept. of ECE, KUET		
D2A2 - 1	61194	Frequency Component Grouping Based Sound Source Extraction from Mixed Audio Signals Using Spectral Analysis Shifat Hossain, Shadman Sakib Khan, Md Samiul Haque Sunny, and Mohiuddin Ahmad
D2A2 - 2	61358	A Saliency Based Approach for Foreground Extraction from a Video Sk. Md. Masudul Ahsan, Abu Naser Md. Nafew, and Rifat Haque Amit
D2A2 - 3	61144	Density Based Smart Traffic Control System Using Canny Edge Detection Algorithm for Congregating Traffic Information Taqi Tahmid, Eklas Hossain, and Kazi Mohammad Abidur Rahman
D2A2 - 4	61516	Bengali Sign Language to Text Conversion Using Artificial Neural Network and Support Vector Machine Anika Raisa Chowdhury, Akash Biswas, SM Farzana Hasan, Tanjina Mehnaz Rahman, and Jia Uddin

Technical Session: Day 2— Parallel Session A (D2A3) 8 December 2017		
Venue: IEM-214		Time: 8:30 AM—9:30 AM
Circuits, Power Electronics and Drives Session Chair: Prof. Dr. Md. Rabiul Islam, Dept. of EEE, RUET		
D2A3 - 1	61259	Discrete Time Model Predictive Controller Design for Voltage Control of an Islanded Microgrid Subroto K. Sarkar, Faisal R. Badal, Sajal K. Das, and Yuan Miao
D2A3 - 2	61260	Design and Construction of Product Separating Conveyor Based on Color Md. Mostafizur Rahman Komol and Amit Kumer Podder
D2A3 - 3	61270	Quantized Input Field Oriented Control of Sensorless Homopolar Synchronous Motor Drives Shantanu Bose, A. S. M. Zadid Shifat, and Md Abdur Rafiq
D2A3 - 4	61314	High Performance Parameter Observation of Induction Motor with Sensorless Vector Control Using Extended Kalman Filter Md. Samiul Haque Sunny, Manash Mandal, Eklas Hossain, and Md. Adbur Rafiq

Technical Session: Day 2— Parallel Session A (D2A4) 8 December 2017		
Venue: TE-410		Time: 8:30 AM—9:30 AM
Wireless and Optical Communication Session Chair: Prof. Dr. Md. Mostafizur Rahman, Dept. of ECE, KUET		
D2A4 - 1	61271	Design and Performance Analysis of a Novel Electromagnetic Bandgap Structure Assisted Phased Array Antenna Elora Nahid, Amit Kumer Podder, and Md. Nurunnabi Mollah
D2A4 - 2	61285	A Miniaturized On-Body Matched Antenna Design and Its Performance Evaluation at ISM Band Akash Biswas, Akib Jayed Islam, Khandoker Tanjim Ahammad, and Bithi Barua
D2A4 - 3	61307	Designing of a High Birefringent Octagonal Photonic Crystal Fiber for Sensing Applications Biplob Kumar Kundu, Selim Sheikh, and Ashraful Hossain Howlader
D2A4 - 4	61333	Compact Modified Antipodal Vivaldi Antenna for Imaging Application M. A. A. Syeed, M. Samsuzzaman, M. Z. Mahmud, and M. T. Islam

**Technical Session: Day 2— Poster Session P (D2P1)
8 December 2017**

Venue: Central Library Lobby – 2nd Floor Time: 9:30 AM–10:30 PM

Artificial Intelligence, Computer Networks and Security || Materials and Nanotechnology || Biomedical Engineering

**Session Chair:
Dr. Masudul Ashsan, Dept. of CSE, KUET**

**Session Co-Chairs:
Dr. Rabiul Islam, Dept. of ECE, KUET
Dr. Muhammad Muinul Islam, Dept. of BME, KUET
Dr. Nasrin Akhter, Dept. of BME, KUET**

D2P1 - 1	61375	Performance Appraisal of Wireless Energy Harvesting in IoT Shishir Mallick, Al-Zadid Sultan Bin Habib, Abu Shakil Ahmed, and Sk. Shariful Alam
D2P1 - 2	61499	Performance Evaluation of Seven Machine Learning Classification Techniques for Movie Box Office Success Prediction Nahid Quader, Md. Osman Gani, and Dipankar Chaki
D2P1 - 3	61150	National Digital Forensics Framework for Bangladesh Mohammad Mahfuzul Haque and Syed Akther Hossain
D2P1 - 4	61377	An Approach to Automate the Scorecard in Cricket with Computer Vision and Machine Learning Optic Dispersion and Optical Hard-Limiter Md. Asif Shahjalal, Zubaer Ahmad, Rushrukh Rayan, and Lamia Alam
D2P1 - 5	61376	Bangla Handwritten Digit Classification and Recognition Using SVM Algorithm with HOG Features Hasin Rehana
D2P1 - 6	61488	A New Approach to Image Classification by Convolutional Neural Network Shamim Ibne Shahid and Md. Shahjahan
D2P1 - 7	61254	Real-time Air Quality Monitoring System for Bangladesh's Perspective Based on Internet of Things Md. Mohiuddin Ahmed, Suraiya Banu, and Bijan Paul
D2P1 - 8	61309	Exciton-phonon Scattering Effects on Photoluminescence of Hybrid Lead Halide Perovskite Md. Masud Rana, Md. Sherajul Islam, and Takayuki Makino
D2P1 - 9	61443	A Non-Invasive Technique of Early Heart Diseases Prediction from Photoplethysmography Signal Monira Islam, Md. Ashikuzzaman, Tahmida Tabassum, and Md. Salah Uddin Yusuf
D2P1 - 10	61304	Epileptic Seizure Detection Based on Selected Features of Different Complexities Using ANN Dipayan Biswas and Md. Foisal Hossain

Technical Session: Day 2— Poster Session P (D2P2)**8 December 2017****Venue: Central Library Lobby – 2nd Floor****Time: 9:30 AM—10:30 AM****Signal Processing, Multimedia and Embedded Systems || Wireless and Optical Communication****Session Chair:****Prof. Dr. Mohiuddin Ahmad, Dept. of EEE, KUET****Session Co-Chairs:****Dr. Kalyan Kumar Halder, Dept. of EEE, KUET****Dr. Md. Masud Rana, Dept. of ECE, KUET****Dr. Md. Sazzad Hossain, Dept. of MSE, KUET**

D2P2 - 1	61317	Segmented FPCA for Hyperspectral Image Classification M. P. Uddin, M. A. Mamun, and M. A. Hossain
D2P2 - 2	61345	An Iterative Approach to Detect Region Boundary Eliminating Texts from Scanned Land Map Images Md. Omar Faruk Rokon, Md. Rayhanul Masud, and Md. Monirul Islam
D2P2 - 3	61350	Design and Implementation of Smart Taxi Fare Meter and Server Based Electronic Payment System Md. Shahabuddin, Mohammad Rubaiyat, Tanvir Hossain, and Mir Rifat Siyam
D2P2 - 4	61182	Antenna by Creating Three Dual Isosceles Triangular Slots on the Patch and Bandwidth Enhancement L. C. Paul, M. A. Haque, M. A. Haque, M. M. U. Rashid, M.F. Islam, and M. M. Rahman
D2P2 - 5	61353	Design of an Improved QPSK Modulation Technique in Wireless Communication Systems M. A. Noman Chowdhury, M. R. Ullah Mahfuz, S. Hoque Chowdhury, and Md. Monirul Kabir
D2P2 - 6	61349	Low Complexity Carrier-Phase Estimation Based on Sign-Error Modified CMA for 16-QAM Coherent Optical Receivers Md. Saifuddin Faruk
D2P2 - 7	61204	Compact Dual S Shaped Slotted Multiband Patch Antenna M. Samsuzzaman, M. A. Rahman, M. Z. Mahmud, M. Tarikul Islam, and M.T. Islam
D2P2 - 8	61421	Abnormal Event Detection in Crowded Scenarios Tahjid Ashfaque Mostafa, Jia Uddin, and Md. Haider Ali

Technical Session: Day 2— Poster Session P (D2P3)**8 December 2017****Venue: Central Library Lobby – 2nd Floor****Time: 9:30 AM—10:30AM****Circuits, Power Electronics and Drives || Knowledge and Data Engineering****Session Chair:****Prof. Dr. Moshiul Haque, Dept. of CSE, CUET****Session Co-Chairs:****Dr. Md. Sherajul Islam, Dept. of EEE, KUET****Dr. Md. Jahedul Islam, Dept. of EEE, KUET****Dr. Md. Parvez Mannan, Dept. of MSE, KUET**

D2P3 - 1	61346	Design, Kinematic and Performance Evaluation of a Dual Arm Bomb Disposal Robot Akib Jayed Islam, Sadman Shahriar Alam, Khandoker Tanjim Ahammad, Fazlul Karim Nadim, and Bithi Barua
D2P3 - 2	61211	A Comparative Analysis of PI and PID Controlled Bidirectional DC-DC Converter with Conventional Bidirectional DC-DC Converter Remon Das, Humayun Rashid, and Iftekhar Uddin Ahmed
D2P3 - 3	61301	Fuzzy Logic Based Sensorless Adaptive Direct Torque Control of Surface Permanent Magnet Synchronous Motor (SPMSM) Drives Shantanu Bose, Md. Rafiqul Islam, Tahmida Islam, and Md. Abdur Rafiq
D2P3 - 4	61521	Design and Implementation of a Robotic Technique Based Waiter Md. Kamruzzaman and Md. Tareq
D2P3 - 5	61459	Experimental Analysis of Harmonic and Power Factor for Various Lighting Loads Khan Mohd. Mostafa Hasan, Muhammad Saifur Rahman, and Md. Abdur Rafiq
D2P3 - 6	61316	Model Reference Adaptive Control for Surface Permanent Magnet Synchronous Machine Md. Kamal Hossain and S. M. Rakiul Islam
D2P3 - 7	61239	Word Sense Disambiguation of Bangla Sentences Using Statistical Approach Saiba Nazah, Mohammed Moshiul Hoque, and Md. Rajib Hossain
D2P3 - 8	61290	A Novel Design of an Intangible Hand Gesture Controlled Computer Mouse Using Vision Based Image Processing Rokhsana Titlee, Ashfaq Ur Rahman, Hasan U. Zaman, and Hafiz Abdur Rahman

**Technical Session: Day 2— Poster Session P (D2P4)
8 December 2017**

Venue: Central Library Lobby – 2nd Floor

Time: 9:30 AM–10:30AM

Power System and Renewable Energy

**Session Chair:
Prof. Dr. Md. Abdur Rafiq**

**Session Co-Chairs:
Dr. Md. Habibullah, Dept. of EEE, KUET
Dr. Md. Jahirul Islam, Dept. of EEE, KUET
Dr. Selim Hossain, Dept. of EEE, KUET**

D2P4 - 1	61102	Barriers of Biomass Energy and Their Potential Solutions for Remote Areas of Bangladesh Jitu Prakash Dhar and Adharaa Neelim Dewanjee
D2P4 - 2	61291	ATP-EMTP Modeling and Performance Test of Different Type Lightning Arrester on 132kv Overhead Transmission Tower Md. Zoyheroul Islam, Md. Rasheduzzaman Rashed, and Md. Salah Uddin Yusuf
D2P4 - 3	61321	Optimal Design of a Standalone Hybrid System for Supporting Sajek Valley, a Remote Tourist Spot of Bangladesh Faisal Bin Kashem and Md. Didarul Alam
D2P4 - 4	61383	Optimal Design of Hybrid Microgrids for Readymade Garments Industry of Bangladesh: A Case Study Udoy Paul, Md Mehedi Hasan, Labib Labib, and Naruttam Kumar Roy
D2P4 - 5	61441	Design and Analysis of Grid Connected Biomass System Utilizing Chittagong Municipal Food Waste Kazi Meharajul Kabir, Mahmud Abdul Matin Bhuiyan, Md. Sarwar Uddin Chowdhury, and Riku Chowdhury
D2P4 - 6	61396	Modeling of High Efficient Perovskite-Si Tandem Solar Cell M. N. Hasan, M. M. Habib, M. A. Matin, and N. Amin
D2P4 - 7	61511	Numerical Analysis of Efficient Cadmium Selenide Solar Cell Mrinmoy Dey, Mahmudul Hasan, Rahat Amin, Rishita Chakma, Maitry Dey, N. K. Das, A. K. Sen Gupta, M. A. Matin and Nowshad Amin
D2P4 - 8	61507	Numerical Investigation on the Performance of New Ultra-Thin CZTS Solar Cell Using SCAPS Sudipto Saha, Sourav Kumar Ukil, and Muhammad Rashedul Haq Rashed

Technical Session: Day 2— Parallel Session B (D2B1) 8 December 2017		
Venue: CSE-301		Time: 11:45 AM—12:45 PM
Materials and Nanotechnology		
Session Chair: Prof. Dr. Sibendra Shekhar Sikder, Dept. of Physics, KUET		
D2B1 - 1	61326	3D Simulation of Impact Ionization Induced Kink Effect in AlGa _N /Ga _N HEMTs: A Novel Split Channel Design with Asymmetric Double Gate for Kink Suppression Sharadindu Gopal Kirtania, Muhammad Navid Anjum Aadit, and Md. Kawsar Alam
D2B1 - 2	61475	Numerical Simulation of Vibrational Properties of AGNR with Vacancy and Stone Wales Defects A. S. M. Jannatul Islam, Md. Rasidul Islam, Md. Sherajul Islam, and A. G. Bhuiyan
D2B1 - 3	61504	Study and Suppression of Ambipolar Effect in Multilayer Phosphorene Tunnel Field Effect Transistors Using Double Gate Structure Muhammad Navid Anjum Aadit, Shamima Nasrin Juthi, and Sharadindu Gopal Kirtania
D2B1 - 4	61439	Phonon Transmission of Vacancy Defected (10,0) Carbon Nanotube Ashraful Hossain Howlader and Md. Sherajul Islam

Technical Session: Day 2— Parallel Session B (D2B2) 8 December 2017		
Venue: Distance Learning Theater		Time: 11:45 AM—12:45 PM
Power System and Renewable Energy		
Session Chair: Prof. Dr. Md. Ariful Islam, Dept. of ESE, KUET		
D2B2 - 1	61368	Supplementary Frequency Control Mechanism to Ensure Reliability of Power System: Based on an International Comparison Md Saleh Ebn Sharif, Mahmud-UI-Tarik Chowdhury, Md. Moniruzzaman, and Masud Reza
D2B2 - 2	61371	A Probabilistic LOLE Based Method to Determine Optimal Reserve and Control Power System Frequency Md. Saleh Ebn Sharif, Mahmud-UI-Tarik Chowdhury, Md. Moniruzzaman, and Abdullah-Al-Mohit
D2B2 - 3	61380	Power Quality Analysis of Distributed Wind Generation Systems A. Das, N. K. Roy, and H. R. Pota
D2B2 - 4	61417	A Comparative Study of LQR, LQG, and Integral LQG Controller for Frequency Control of Interconnected Smart Grid Mizanur Rahman, Subroto K. Sarkar, Sajal K. Das, and Yuan Miao

Technical Session: Day 2— Parallel Session B (D2B3) 8 December 2017		
Venue: IEM-214		Time: 11:45 AM—12:45 PM
Knowledge and Data Engineering		
Session Chair: Pintu Chandra Shill, Dept. of CSE, KUET		
D2B3 - 1	61382	Multi-label Sentence Classification Using Bengali Word Embedding Model Md. Nowshad Hasan, Sourav Bhowmik, and Md. Mahfuzur Rahaman
D2B3 - 2	61397	Ranking of Bangla Word Graph Using Graph Based Ranking Algorithms S. M. Rafiuddin
D2B3 - 3	61454	Towards Developing a Tool for UX Evaluation Using Facial Expression Kazi Md. Munim, Iyolita Islam, Mahmuda Khatun, Md. Mahboob Karim, and Muhammad Nazrul Islam
D2B3 - 4	61461	Developing a Multi-Channel Military Application Using Interactive Dialogue Model (IDM) Muhammad Nazrul Islam, Sahrma Jannat Oishwee, Shifat Zaman Mayem, A S M Nur Mocarrom

Technical Session: Day 2— Parallel Session B (D2B4)		
8 December 2017		
Venue: TE-410		Time: 11:45 AM—12:45 PM
Biomedical Engineering		
Session Chair: Prof. Dr. A. B. M. Aowlad Hossain, Dept. of ECE, KUET		
D2B4 - 1	61468	Fuzzy Logic Based Algorithm to Classify Tumor Categories with Position from Brain MRI Images Rasel Ahmmed, Md. Asadur Rahman, and Md. Foisal Hossain
D2B4 - 2	61434	Implementation of Biochip on Multirate System for EEG signal on ALTERA Cyclone Device Nazifa Tabassum, Sheikh Md. Rabiul Islam, and Xu Huang
D2B4 - 3	61261	Baseline Wandering Removal from ECG Signal by Wandering Path Finding Algorithm Md. Asadur Rahman, Md. Mahmudul Haque Milu, Anika Anjum, Farzana Khanam, and Mohiuddin Ahmad
D2B4 - 4	61501	Spinal Cord Injured (SCI) Patients' Length of Stay (LOS) Prediction Based on Hospital Admission Data Tabib Ibne Mahzar, Nusrat Jahan Suha, Dipankar Chaki, and Md. Haider Ali

Technical Session: Day 2— Parallel Session C (D2C2)		
8 December 2017		
Venue: ECE-218		Time: 2:30 PM—3:30 PM
Signal Processing, Multimedia and Embedded Systems		
Session Chair: Prof. Dr. Mohammed Imamul Hasan Bhuiyan, Dept. of EEE, BUET		
D2C2 - 1	61293	Bangla Sign Language Interpretation Using Bag of Features and Support Vector Machine Jia Uddin, Fahmid Nasif Arko, Nujhat Tabassum, Taposhi Rabeya Trisha, and Fariha Ahmed
D2C2 - 2	61167	Cataract Detection Using Smartphone Juyel Rana and Syed Md. Galib
D2C2 - 3	61172	Reconstruction Algorithm for Pigeon Hole Imaging (PHI) Rushdi Zahid Rusho and M Abdul Kadir
D2C2- 4	61343	A New Approach of Brain MRI Analysis for Identifying Creutzfeldt-Jakob Disease (CJD) Akib Jayed Islam, Khandoker Tanjim Ahammad, Bithi Barua, Sadman Shahriar Alam, and Akash Biswas

Technical Session: Day 2— Parallel Session C (D2C3)		
8 December 2017		
Venue: IEM-214		Time: 2:30 PM—3:30 PM
Circuits, Power Electronics and Drives		
Session Chair: Prof. Dr. Subir Kumar Sarkar, India		
D2C3 - 1	61331	Modified High Frequency Phase Disposition Pulse Width Modulation for Modular Cascaded H-bridge Multilevel Converters Md. Ashib Rahman and Md. Rabiul Islam
D2C3 - 2	61465	A Novel Flux Estimation Algorithm Based Position Sensorless Field Oriented Vector Controlled Permanent Magnet Brushless DC Motor Drive Protik Chandra Biswas and Bashudeb Chandra Ghosh
D2C3 - 3	61449	A Study of THD Minimization of Three Phase Inverter Using Modified THPWM Airin Rahman, Md. Moshir Rahman, and Md. Rabiul Islam
D2C3 - 4	61470	Comparative Analysis and Simulation of Active Inductors for RF Applications in 90 nm CMOS Omar Faruqe, Md. M. M. Saikat, Md. A. K. Bulbul and Md. Tawfiq Amin

Technical Session: Day 2— Parallel Session C (D2C4) 8 December 2017		
Venue: TE-410		Time: 2:30 PM—3:30 PM
Wireless and Optical Communication Session Chair: Dr. Monir Hossen, Dept. of ECE, KUET		
D2C4 - 1	61201	Design and Performance Analysis of 0.6Tb/s VCSEL Based Optical Link Mohammad Tanvir Hannan, Mohammad Istiaque Reja, and Jobaida Akhtar
D2C4 - 2	61218	Nonlinear Coupling of Whispering Gallery Mode Silica Microcavity for Sensing Application Shovasis Kumar Biswas, Abdullah al Noman, S. M. Rakibul Islam, Md. Rubayet Islam
D2C4 - 3	61231	Design of a Compact Triple-band Antenna for WLAN/WiMAX Applications Mohammad Shuhrawardy, Md. Halim Miah Chowdhury and Rezaul Azim
D2C4 - 4	61235	Performance Analysis of Cognitive Radio: Netsim Viewpoint Khaled Mohammed Saifuddin, Abu Shakil Ahmed, Kazi Fahid Reza, Sk Shariful Alam, and Sharmina Rahman

Technical Session: Day 2— Parallel Session D (D2D1) 8 December 2017		
Venue: CSE-301		Time: 4:15 PM—5:30 PM
Artificial Intelligence, Computer Networks and Security Session Chair: Prof. Dr. Azharul Hasan, Dept. of CSE, KUET		
D2D1 - 1	61244	A User Rating Based Collaborative Filtering Approach to Predict Movie Preferences Md. Asif Shahjalal, Zubaer Ahmad, Mohammad Shamsul Arefin, and Mohammad Rubaiyat Tanvir Hossain
D2D1 - 2	61437	Improved Optimum Dynamic Time Slicing Round Robin Algorithm Mohammad Shihab Ullah
D2D1 - 3	61456	A New Approach to Hide Data in Color Image Using LSB Steganography Technique Zinia Sultana, Fatima Jannat, Sadman Sakib Saumik, Niloy Roy, Nishith Kumar Datta, and Muhammad Nazrul Islam
D2D1 - 4	61274	A Model for Ensuring Data Security to Distributed Financial System in Cloud Storage Miraj Hossain and Md. Rafiqul Islam
D2D1 - 5	61413	An Adaptive Flower Pollination Algorithm for Minimizing Software Testing Redundancy Muhammad Nomani Kabir, Jahan Ali, Abdul Rahman A. Alsewari, and Kamal Z. Zamli

Technical Session: Day 2— Parallel Session D (D2D2) 8 December 2017		
Venue: ECE-218		Time: 4:15 PM—5:15 PM
Power System and Renewable Energy Session Chair: Prof. Dr. Ashraful Ghani Bhuiyan, Dept. of EEE, KUET		
D2D2 - 1	61446	Estimation of Energy Potential of Point Absorber Buoy Type Wave Energy Converter Abdullah Al Mahfazur Rahman, Md. Moniruzzaman, and M. Al Mamun
D2D2 - 2	61451	Energy-Cost Aware Hybrid Power System for Off-Grid Base Stations Under Green Cellular Networks Abu Jahid and Md. Sanwar Hossain
D2D2 - 3	61483	Design of Efficient Triple-junction Organic Solar Cell Md Sharjis Ibne Wadud and Md. Rafiqul Islam

D2D2 - 4	61500	Device Modeling and Numerical Simulation of Highly Efficient Gallium Arsenide Solar Cells Mrinmoy Dey, Nazia Rahman, Iffat Tasnim, Rishita Chakma, Maitry Dey, N. K. Das, A. K. Sen Gupta, M. A. Matin and Nowshad Amin
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**Technical Session: Day 2— Parallel Session D (D2D3)
8 December 2017**

Venue: IEM-214		Time: 4:15 PM—5:15 PM
Power System and Renewable Energy Session Chair: Muhammad Abdul Goffar Khan, EEE, RUET		
D2D3 - 1	61165	Design and Implementation of Protective Relay Testing Device Using Microcontroller and Servo-Motor Md. Shamim Rahman, Nazmus Saqib, Sarafat Hussain Abhi, and S. M. Ishraqul Huq
D2D3 - 2	61238	Modeling and Comparative Analysis of Cost Effective Hybrid AC/DC Micro-grid in Coastal Area of Bangladesh Using AVR and LFC System Afsana Hossain Rima and Rezwan Mohammad Sayeed
D2D3 - 3	61284	Assessment of the Health Condition of Oil-Immersed Transformers Using Logistic Regression and Poisson Distribution Sultanul Arefin, Mohammed Imamul Hasan Bhuiyan, and Aongti Chowdhury
D2D3 - 4	61485	Feasibility Analysis of Grid Connected Mini Hybrid Energy System in Coastal Region of Chittagong, Bangladesh Faisal Bin Kashem and Mohammed Shahriar Arefin

**Technical Session: Day 2— Parallel Session D (D2D4)
8 December 2017**

Venue: TE-410		Time: 4:15 PM—5:30 PM
Wireless and Optical Communication Session Chair: Prof. Dr. Pallab Kumar Chowdhury, Dept. of ECE, KUET		
D2D4 - 1	61336	Measurement of Weak Low Frequency Pressure Signal Using Stretchable Polyurethane Fiber Sensor for Application in Wearables Md Rejvi Kaysir, Alessio Stefani, Richard Lwin, and Simon Fleming
D2D4 - 2	61362	Performance of Chip-Synchronous and Chip-Asynchronous OCDMA in Presence of Fiber Optic Dispersion and Optical Hard-Limiter Saptami Rani, Md. Jahedul Islam, and Md. Rafiqul Islam
D2D4 - 3	61388	Access Point Management in Overcrowded WLANs Sadia Sultana, Anirban Sarkar, Md. Mezbahul Islam, Md. Ezharul Islam, and M. Ariffuzzaman
D2D4 - 4	61393	Circularly Polarized Broadband Patch Antenna for Wireless Communication M. Tarikul Islam, M. Samsuzzaman, M. Z. Mahmud, and M. T. Islam
D2D4 - 5	61447	Design of a 2x1 MIMO Antenna for Multiband Wireless Applications Kaushik Bhadra, Abu Shakil Ahmed, and Md. Nurunnabi Mollah