



2019 5th International Conference on Advances in Electrical Engineering (ICAEE)

**26-28 September, 2019
Independent University, Bangladesh**

Technical Program Schedule



Organized by

Department of Electrical & Electronic Engineering
Independent University, Bangladesh



Technical Co-sponsor

The Institute of Electrical & Electronics Engineers

Day 1: Thursday, September 26, 2019

Registration & Conference Kit Distribution

Time: 8:00 AM – 8:30 AM

Venue: IUB Auditorium Lobby

Day 1: Thursday, September 26, 2019

Technical Session 1-1: Biomedical Engineering - I

Time: 8:30 AM – 9:30 AM

Venue: Room 6007, Level 6, Academic Block

Session Chair: Dr. Md. Kafiul Islam, Independent University, Bangladesh

- 4095 Non-Invasive Hemoglobin Concentration Measurement Using MGGP-Based Model
Md. Asaf-uddowla Golap and M. M. A. Hashem
- 4109 Numerical Modeling of Tumor Ablation Process by Localized Heating with Four Armed Electric Probe and a Comparative Study Between Human Liver and Renal Medulla Tissue
Md. Habibur Rahman, Hasib Ahmed Prince, Shailee Mitra, Enamul Hasan Rozin
- 4331 Identification of Potential Biomarker Using Combined Analysis of Differentially Expressed Genes and miRNAs for Alzheimers Disease
Utsha Das, Md. Al Mehedi Hasany, Julia Rahmans
- 4367 An Approach for Classifying Skin Diseases Using Texture Analysis
Tamal Chakroborty, Firoz Mahmud

Day 1: Thursday, September 26, 2019

Technical Session 1-2: Computer Vision & Signal Processing - I

Time: 8:30 AM – 9:30 AM

Venue: Room 6008, Level 6, Academic Block

Session Chair: Dr. A. K. M. Mahbubur Rahman, Independent University, Bangladesh

- 4221 Automated Detection and Classification of Liver Cancer from CT Images using HOG-SVM model
Al Sadeque, Tanvirul Islam Khan, Quazi Delwar Hossain, Mahbuba Yesmin Turaba
- 4227 Real Time Driver Drowsiness Monitoring System by Eye Tracking Using Mean Shift Algorithm
Lutfun Nahar, Ria palit, Aymun Kafil, Zinnia Sultana, Shamima Akter
- 4463 Proposed Blueprint of an Automated Smart Wardrobe Using Digital Image Processing
Nabila Shahnaz Khan, Sanjida Nasreen Tumpa, Radnor Salehin Shwapnil
- 4505 Performance-accuracy Optimization of Face Detection in Human Machine Interaction
Nuruzzaman Faruqui, Mohammad Abu Yousuf

Day 1: Thursday, September 26, 2019

Technical Session 1-3: Devices, Circuits & Systems - I

Time: 8:30 AM – 9:30 AM

Venue: Room 6009, Level 6, Academic Block

Session Chair: Prof. K. M. A. Salam, North South University, Bangladesh

- 4077 Quantum Transport Simulation and Performance Analysis of Sub-10 nm Graphene Nanoribbon Field Effect Transistor
Md. Azizul Hasan, Mainul Hossain, Sharnali Islam
- 4384 Analysis and Design of a 32nm FinFET Dynamic Latch Comparator
Mir Muntasir Hossain, Satyendra N. Biswas
- 4396 Effect of Zinc (Zn) Doping on Characteristics of Cadmium Telluride (CdTe) Thin Film
Md. Abu Sayeed, Mohd. Rezaul Hasan, Hasan Khaled Rouf, K.M.A. Hussain
- 4449 Performance Analysis of Nanoscale Carbon Nanotube Field Effect Transistor considering the impacts of Temperature and Gate Dielectrics
Md Faysal Nayan, Synthia Tahsin, Nahid-ur-Rahman Chowdhury

Day 1: Thursday, September 26, 2019

Technical Session 1-4: Photovoltaic & Renewable Energy - I

Time: 8:30 AM – 9:30 AM

Venue: Room 6013, Level 6, Academic Block

Session Chair: Dr. Alam Hossain Mondal, Daffodil International University, Bangladesh

- 4043 Modeling and Simulation of Solar Photovoltaic Cell for the Generation of Electricity in UAE
Shadman Sakib, Md. Abu Bakr Siddique
- 4154 Designing a Solar Powered DC Charging Station for Easy Bikes: Bangladesh Perspective
S. M. Monjur Siddique, Muhammad Tasneem Alam, Md. Sanwar Hossain
- 4358 Designing and Sizing of Standalone Solar Homes System Integrated Microgrid for Rural Electrification
Muhammad Taheruzzaman
- 4392 Design and Implementation of Hybrid Power Generation System for Electric Loads of Train
Abdullah Al Mamun Momen, Sonkor Kanti Nath, Sk. Md. Golam Mostafa

Day 1: Thursday, September 26, 2019

Technical Session 1-5: Power Electronics and Drives - I

Time: 8:30 AM – 9:30 AM

Venue: Room 5013, Level 5, Academic Block

Session Chair: Prof. Khosru M. Salim, Independent University, Bangladesh

- 4101 Improvement in Performance of Asymmetric Multilevel Inverter Used for Grid Integrated of Solar Photovoltaic System
Md. Tariqul Islam, Md. Rabiul Islam, Md. Sayead Bin Islam, Md. Shizer Rahman

- 4379 Harmonics Mitigation Approach by Using an Unconventional 48-Pulse Passive Rectifier
Md. Shoaib Akther, Md. Abdul Malek, Md. Shahidul Islam
- 4411 A New 36-Pulse Star Rectifier for Power Quality Improvement
Md. Abdul Malek, Muhammad Abdul Goffar Khan
- 4418 THD Reduction of Single-Phase to Single-Phase Step-Down Cycloconverter Using Multiwinding Transformer
Ashish Mahanta, Shuvra Prokash Biswas
- 4426 A Four-Phase DC-DC Interleaved Boost Converter Using Feedback Controller
Shuvra Prokash Biswas, Md. Halim Mondol, Md. Kamal Hosain, Ashish Mahanta, Md. Yah-Ya Ul Haque

Day 1: Thursday, September 26, 2019

Technical Session 1-6: Antenna & Wave Propagation- I

Time: 8:30 AM – 9:30 AM

Venue: Room 5014, Level 5, Academic Block

Session Chair: Prof. A. K. M. Baki, Ahsanullah University of Science & Technology, Bangladesh

- 4407 Bandwidth-Enhanced Metamaterial Integrated Antenna for Wireless Applications
Nipa Dhar, Muhammad Asad Rahman, Md. Azad Hossain, and Ahmed Toaha Mobashsher
- 4421 Design of Compact Circular Patch Antennas using Slots and Defective Ground Structure (DGS)
Susmita Bala, R. P Ghosh, Partha Pratim Sarkar, Sushanta Sarkar
- 4437 Design and Performance Studies of a MIMO Antenna with Circular Polarization Diversity for 5G Applications
Swarup Chakraborty, Muhammad Asad Rahman, Md. Azad Hossain, Ahmed Toaha Mobashsher, Eisuke Nishiyama, Ichihiko Toyoda
- 4472 Design of an ITO Based CNT Coated Transparent Nano Patch Antenna Assisted by Characteristic Mode Analysis
Md. Sarwar Uddin Chowdhury, Muhammad Asad Rahman, Md. Azad Hossain, and Ahmed Toaha Mobashsher

Tea Break

Time: 9:30 AM - 10:00 AM, **Venue:** Multipurpose Hall

Official Inauguration Session

Time: 10:00 AM - 11:00 AM

Venue: IUB Auditorium

- 09:45 AM Guests take seats
- 10:00 AM Welcome address by Prof. Mohammed Anwer, Chair, Advisory Committee, ICAEE 2019 and Dean, School of Engineering & Computer Science, Independent University, Bangladesh
- 10:05 AM Addressing theme of the conference by Dr. Md. Abdur Razzak, Conference General Chair, ICAEE 2019
- 10:10 AM Address by Dr. Celia Shahnaz, Chair, IEEE Bangladesh Section and Professor, Bangladesh University of Engineering & Technology

10:15 AM Address by Prof. Milan Pagon, Patron, ICAEE 2019 and Vice Chancellor (Acting), Independent University, Bangladesh

10:20 AM Address by Mr. A. Matin Chowdhury, Chief Patron, ICAEE 2019 and Chairman, Board of Trustees, Independent University, Bangladesh

10:30 AM Address and Official Inauguration by the Chief Guest, Dr. Saifur Rahman, President, IEEE Power and Energy Society & Professor of Electrical and Computer Engineering, Virginia Tech, USA

10:35 AM Handing over of crests to the honorable guests of ICAEE 2019

10:45 AM Vote of Thanks by Dr. Mustafa Habib Chowdhury, Organizing Chair, ICAEE 2019

10:50 AM End of official inauguration

Day 1: Thursday, September 26, 2019

Keynote Session - I

Time: 11:00 AM - 12:20 PM

Venue: Auditorium

Session Chair: Prof. Md. Abdul Mottalib, Brac University, Bangladesh

Keynote Speech 1

Time: 11:00 AM - 11:40 AM

Title: An Open-Architecture Platform for Sensor Integration in Smart Buildings

Speaker: Professor Dr. Saifur Rahman, IEEE Life Fellow

President, IEEE Power and Energy Society (PES)

Director, Virginia Tech Advanced Research Institute, USA

Joseph R. Loring Professor of Electrical and Computer Engineering,

Virginia Tech, USA

Keynote Speech 2

Time: 11:40 AM - 12:20 PM

Title: Artificial Intelligence in Cloud Computing and Internet-of-Things

Speaker: Prof. Vincenzo Piuri, IEEE Fellow

University of Milan, Italy

Day 1: Thursday, September 26, 2019

IEEE PES Session - Panel Discussion

Time: 12:20 PM - 1:00 PM

Venue: Auditorium

Panel Moderator: Professor Dr. Saifur Rahman, IEEE Life Fellow

President, IEEE Power and Energy Society (PES)

Director, Virginia Tech Advanced Research Institute, USA

Joseph R. Loring Professor of Electrical and Computer Engineering,

Virginia Tech, USA

Title: Energy Challenges of Bangladesh in the 21st Century

Theme 1: Electricity for All

Theme 2: Power Quality

Theme 3: Challenges of Generation and Integration of Renewable Energy to the National Grid

Theme 4: Charging Issues of Battery Driven 3-Wheelers and Other Electric Vehicles

Theme 5: Effect of Fossil-Fuel Based Energy Generation on Climate Change and Global Warming

Panel Members:

1. **Prof. Joyashree Roy**, Bangabondhu Chair Professor, Asian Institute of Technology, Thailand & 2007-IPCC Nobel Peace Prize winning team member

2. **Prof. Akthar Kalam**, Head of External Engagement & Leader – Smart Energy Research Unit, College of Engineering and Science, Victoria University, Australia
3. **Prof. D. P. Kothari**, Director Research, Waingangā College of Engineering & Management, Nagpur
4. **Engr. Rezwanul Kabir**, Director, Energypac Power Generation Ltd.

Lunch

Time: 1:00 PM - 2:00 PM, **Venue:** Multipurpose Hall

Day 1: Thursday, September 26, 2019

Keynote Session - II

Time: 2:00 PM - 2:40 PM

Venue: Lecture Gallery 5002, Level 5, Academic Block

Session Chair: **Prof. Shaikh Anowarul Fattah**, Bangladesh University of Engineering & Technology

Keynote Speech 3

Title: Cyber Security of Critical Infrastructures

Speaker: **Prof. Sandeep K. Shukla, IEEE Fellow**

Department Head and Professor,
Department of Computer Science and Engineering,
Indian Institute of Technology Kanpur, India

Day 1: Thursday, September 26, 2019

Technical Session 2-1: Biomedical Engineering - II

Time: 2:45 PM – 4:15 PM

Venue: Room 6007, Level 6, Academic Block

Session Prof. Md. Enamul Hoque, Military Institute of Science & Technology, Bangladesh

- 4117 Inactivation Techniques of Algae Water by Generation of High Voltage Discharge Plasma
Md. Abdul Halim, Ruma
- 4132 Robust Control of Hand Protheses by Feature Extraction and Classification Method from Surface EMG Signal for Transradial Amputees
Anika Nastarin, Ashrina Akter, Md. Abdul Awal
- 4216 DenseNet Based Speech Imagery EEG Signal Classification using Gramian Angular Field
Md. Monirul Islam, Md. Maruf Hossain Shuvo
- 4388 Dimensionality Reduction in Predicting Hospital Readmissions of Diabetics
Mohiuddin Ahmed, Mir Md. Jahangir Kabiry
- 4408 Deep Residual Network based Melanocytic Lesion Classification with Transfer Learning
Murtaza Saad, Sheikh Md. Rabiul Islam, Fahmida Binte Fazal
- 4436 Age based Mood Swing Analysis and Brain Mapping for Music Genre
Shidhartho Roy, Md. Salah Uddin Yusuf, Monira Islam and Tanbin Islam Rohan

Day 1: Thursday, September 26, 2019

Technical Session 2-2: Computer Vision & Signal Processing - II

Time: 2:45 PM – 4:15 PM

Venue: Room 6008, Level 6, Academic Block

Session Chair: **Prof. Mohammed Moshikul Haque, Chittagong University of Engineering & Technology, Bangladesh**

- 4140 Comparison Analysis of Watermarking Scheme Based on Prediction Error Expansion, Interpolation & Segmentation towards an Optimum Technique
Majeza Begum Shama, Tasnim Azad Abir
- 4156 Addressing the Detection Capability for Scalable Energy Consumption using Primary Data Acquisition System of Embedded Ultrasonic Sensors in SHM
Joyraj Chakraborty, Marek Stolinski, Andrzej Katunin
- 4163 Photo Annotation: A Study on Automatic Photo Management Based on Contextual Information
Md. Alvee Noor, Umma Habiba
- 4208 A Novel Feature Extraction and Selection Technique for Chest X-ray Image View Classification
Sakib Reza, Ohida Binte Amin, and M. M. A. Hashem
- 4242 A Unified Analysis of Proposed Wavelet Transform Domain LMS-algorithm for ARMA Process
Suryaia Rahman, Md Mamunur Rahman, Md Zahangir Alam
- 4243 Efficient Energy Allocation in Wireless Sensor Networks Based on Non-cooperative Game over Gaussian fading Channel
Suryaia Rahman, Md Mamunur Rahman, Md Zahangir Alam
- 4371 Analysis and 3D Representation of Visual Information from fMRI of Ventral Temporal Cortex Using Neural Network and Support Vector Machine
Md Tanzim Reza, Md Sakib Zaman, Iftekharul Mobin, Md Ashrafal Alam

Day 1: Thursday, September 26, 2019

Technical Session 2-3: Photovoltaic and Renewable Energy - II

Time: 2:45 PM – 4:15 PM

Venue: Room 6009, Level 6, Academic Block

Session Chair: **Dr. Md. Rifat Hazari, American International University-Bangladesh**

- 4085 Design of MPPT mounted Solar Based Double Coil DC Electric Cooker with Smart Temperature Control Device
Arghya Saha, Fahmida Sultana, Md. Asrarul Haque, Dr. S. M. Nasif Shams
- 4125 Performance Analysis of Monthly Averages Solar Radiation Estimation Models for Teknaf, Bangladesh
Mohammad Nurul Absar, Md. Fokhrul Islam
- 4136 A Review of Geothermal Energy for Future Power Generation
Hasal Kulasekara, Vaithehi Seynulaabdee
- 4138 Design and Simulation Based Stand-alone Solar Micro Grid System for Island Areas
Apu Saha, Somnath Misra, Partita Majumder Progya

- 4150 Design of an Automatic High Precision Solar Tracking System with an Integrated Solar Sensor
Taslim Ahmed, Imran Chowdhury
- 4433 A Case Study on Efficient Grid Connected Hybrid Energy System for Rohingya Refugees
Mohammad Nurul Absar, Md. Fokhrul Islam

Day 1: Thursday, September 26, 2019

Technical Session 2-4: Power Systems - I

Time: 2:45 PM – 4:15 PM

Venue: Room 6013, Level 6, Academic Block

Session Chair: Prof. Kazi Khairul Islam, Uttara University, Bangladesh

- 4068 Transmission Reliability Margin Calculation by Modified DC Load Flow Method
Awatif Nadia, Abdul Hasib Chowdhury
- 4069 Correlation between Transmission Reliability Margin and Standard Deviation of Uncertainty
Awatif Nadia, Abdul Hasib Chowdhury
- 4074 A Study on Bangladesh Power System Fault Level Management
Md. Arifur Kabir, Md. Samsul Alam, Md. Khurshed Alam
- 4103 Study of Frequency Variant Tan Delta Diagnosis for MV Cables Insulation Status Assessment
Md Zulfiker Heider, Mohammad Mominur Rahman, A. A. Al-Arainy
- 4105 Simulation Study of a Multi Terminal HVDC Network
Md. Shamim Hasan, Sayeed Shafayet Chowdhury, Mahdi Zulfikar
- 4368 Design and Simulation of SOFC and Steam Turbine based Integrated Power Plant at Ashuganj Power Station Company Limited
Khandakar Abdulla Al Mamun, Naeemul Islam, Ekramul Haider Raju, Shadman Aousaf Abir, Md. Anis Uz Zaman, Shafait Ahmed

Day 1: Thursday, September 26, 2019

Technical Session 2-5: Robotics, Control, Automation & IoT

Time: 2:45 PM – 4:15 PM

Venue: Room 5013, Level 5, Academic Block

Session Chair: Dr. Lafifa Jamal, University of Dhaka, Bangladesh

- 4083 Development of a QR-Code Based Smart Car Parking System
Enamul Hoq, Sahib Paul, Md. Tarek Ur Rahman Erin
- 4273 A Review of IoT Application in a Smart Traffic Management System
Md Khurram Monir Rabby, Muhammad Mobaidul Islam, Salman Monowar Imon
- 4313 IoT Based Pilot Wireless Differential Relay
Md. Fatin Ishraque, Md. Mamunur Rashid, Sk.A. Shezan
- 4326 Riccati based optimal control for linear quadratic regulator problems
Mahtab Uddiny, M. A. Hakim Khan and, M. Morin Uddin

- 4401 Design and Implementation of an IoT Based Air Pollution Detection and Monitoring System
Shahed uz zaman Chowdhury, Md. Shahedul Islam, Md. Kaiser Raihan, Mohammed Shahriar Arefin
- 4415 Smart Irrigation System with Solar Power and GSM Technology
Abu Shufian, Md. Mominur Rahman, Riadul Islam, Shimul Kumar Dey
- 4425 Design and Development of based Supervisory Control and Data Acquisition System
Naeem Mohammad, Md. Shahjahan

Day 1: Thursday, September 26, 2019

Technical Session 2-6: Wireless Communications - I

Time: 2:45 PM – 4:15 PM

Venue: Room 5014, Level 5, Academic Block

Session Chair: Prof. A. K. M. Muzahidul Islam, United International University, Bangladesh

- 4058 Improving the Energy Efficiency in a Single-Cell Cellular System by Adapting User Equipment LNA Stages and Base Station Transmit Power
Md. Forkan Uddin
- 4082 BER Performance of 2-D WH/TS OCDMA over FSO Link
Bithi Mitra, Md. Jahedul Islam
- 4178 A New Routing Scheme for Multi-cluster Flying Ad hoc Networks
Sampad Banik, Md Munjure Mowla, Protic Sarkar
- 4181 The Impact of Linear Polarization on Channel Modeling in 5G Cellular Communications: A Statistical Approach
Rifat Hasan, Md Munjure Mowlay, Mahfuza Khatun
- 4470 A Location Aware Communication Mode Selection Mechanism for M2M Communications over Cellular Networks
Sree Krishna Das, Md Farhad Hossain
- 4479 A New MAC Protocol for Improving Energy Efficiency and Reducing End-to-end Packet Delay in Wireless Sensor Networks
Farha Zakaria Crystal, Morin Hessen

Day 1: Thursday, September 26, 2019

IEEE Bangladesh Section WePowerTrack: A World Bank Initiative

Time: 2:00 PM – 4:00 PM

Venue: Room 5012, Level 5, Academic Block

Session Chair: Dr. Celia Shahnaz, Lead of, Strategic Partners (IEEE PES Women in Power and IEEE Bangladesh Section), WePower

Speakers

1. **Jorifa Khatun**, Deputy Director (XEN), System Planning, Bangladesh Power Development Board
2. **Nafisa Zarrin Tasnim**, Senior Engineer, R & D Division, Energypac Engineering Limited
3. **Shoilie Chakma**, Lecturer, Department of EEE, Bangladesh University of Engineering and Technology

Panelists:

1. **Tanuja Bhattacharjee**, Energy Specialist, The World Bank
2. **Nasheeba Selim**, Sr. Social Development Specialist (Gender), Asian Development Bank
3. **Farzana Rahman**, Unit Head (Investment), Renewable Energy, IDCOL

Moderator: Dr. Lamia Iftekhar, Vice Chair, WIE Affinity Group, IEEE Bangladesh Section

Tea Break

Time: 4:15 PM - 4:30 PM, **Venue:** Lecture Gallery 5002 Lobby

Day 1: Thursday, September 26, 2019

Invited Speech - I

Time: 4:30 PM – 5:00 PM

Venue: Lecture Gallery 5002, Level 5, Academic Block

Session Chair: **Dr. Mustafa Habib Chowdhury, Independent University, Bangladesh**

Title: Abnormality Detection in Musculoskeletal Radiographs based on Capsule Network

Speaker: **Dr. Celia Shahnaz, SMIEEE, FIEB**

Chair, IEEE Bangladesh Section,
Professor, Department of Electrical & Electronic Engineering,
Bangladesh University of Engineering & Technology

Day 1: Thursday, September 26, 2019

Technical Session 3-1: Biomedical Engineering - III

Time: 5:00 PM – 6:30 PM

Venue: Room 6007, Level 6, Academic Block

Session Chair: **Prof. Mohammed Imamul Hassan Bhuiyan, Bangladesh University of Engineering & Technology**

- 4047 Safety Assistant and Harassment Prevention for Women
Md. Rased uz zaman Ruman, Joybrota Kumar Badhon, Saikat Saha
- 4087 Deep Neural Network Based Continuous Blood Pressure Estimation with Data Mining Techniques
Dola Das, Nawshin Tabassum, Mahmudul Hasan and M.M.A Hashem
- 4134 A Bayesian Optimization Framework for the Prediction of Diabetes Mellitus
Md. Abdur Rahman, S. M. Shoab, ¹Md. Al Amin, Rafia Nishat Toma, Mohammad Ali Moni, Md. Abdul Awal
- 4135 A Dynamic Attribute Based Logical Approach for Identifying and Controlling the Inconsistency of Organization Access Control Data
Jinat Ara, Kanij Fatima Akter Marzia, Hanif Bhuiyan
- 4241 Home Medication for Elderly Sick People
Asif Ahmed, Md. Rased uz zaman Ruma, Amit Barua
- 4262 Building Prediction Models for Maternal Mortality Rate in Bangladesh
Mst. Irin Sultana, Md. Mahmudul Hasan

Day 1: Thursday, September 26, 2019

Technical Session 3-2: Computer Vision & Signal Processing - III

Time: 5:00 PM – 6:30 PM

Venue: Room 6008, Level 6, Academic Block

Session Chair: **Dr. Mosabber Uddin Ahmed, University of Dhaka, Bangladesh**

- 4026 Analysis of Online Marketplace Data on Social Network Using LSTM
Alpana Akhi Prova, Tania Akter, Md Rafiqul Islam, Md Rakib Uddin, Tanvir Hossain, Md Hannan, Md Safaet Hossain
- 4063 Handwritten Changma Numerals Recognition Using Capsule Networks
Md. Zahid Hasan, K.M. Zubair Hasan, Shakhawat Hossain, Abdullah Al Mamun, Md. Assaduzzaman
- 4086 Deep CNN-Based Ensemble CADx Model for Musculoskeletal Abnormality Detection from Radiographs
Tusher Chandra Mondol, Hasib Iqbal, and MMA Hashem
- 4220 Classification of Motor Imaginary EEG Signals with multi-input Convolutional Neural Network by augmenting STFT
Tanvir Hasan Shovony, Zabir Al Naziy, Shovon Dash, Md. Foisal Hossain
- 4489 Classification Based Inter-Frame Prediction in Video Compression
Zahirul Islam, Md. Eimran Hossain Eimon, Boshir Ahmed, Md. Al Mehedi Hasan
- 4494 Superpixel Based Inter-Frame Prediction for Video Coding
Hossain Eimon, Md. Zahirul Islam, Md. Shahid Uz Zaman, Md. Al Mehedi Hasan, Boshir Ahmed

Day 1: Thursday, September 26, 2019

Technical Session 3-3: Devices, Circuits & Systems – II

Time: 5:00 PM – 6:30 PM

Venue: Room 6009, Level 6, Academic Block

Session Chair: **Prof. Khairul Alam, East West University, Bangladesh**

- 4099 A Proposed System for Fare Measurement for Rickshaws of Bangladesh
Sadia Akter, Tania Tahmina Jui, Tasbiraha Athaya, Afsana Zaman, Suzzana Rafi
- 4322 Millimeter-Wave Circuit Parameters Optimization for Designing CMOS On-Chip Transformer Coupled Amplifiers
Md. Sazzad Hossain, Minoru Fujishima, Takeshi Yoshida, Shuhei Amakawa, Md. Mamunur Rashid
- 4369 Transportation in Between the Earth and Space by Using Carbon Nanotubes as the Elevator Cable
Koushik Ahmed, Shuva Dasgupta Avi, Md Shahnewaz Tanvir, Md. Mominur Rahman, Abu Shufian, Md. Mohaimanul Islam Sagor, Omar Farrok
- 4380 Vacancy Induced Structural and Electronic Properties of Two Dimensional Stanene: A First Principles Investigation
Chayan Halder, Naim Ferdous, A. S. M. Jannatul Islam, Ashraful Hossain
- 4381 Quick Fire Sensing Model and Extinguishing by Using an Arduino Based Fire Protection Device
Md. Rawshan Habib, Naureen Khan, Koushik Ahmed, Mahbubur Rahman Kiran, A.K.M. Asif, Mohaiminul Islam Bhuiyan, and Omar Farrok

- 4501 Performance Analysis of Cache Size and Set-Associativity using simple Scalar Benchmark
Zahid Ulla, Nasru Minallah, Safdar Nawaz Khan Marwat, Abdul Hafeez, Tama Fouzder

Day 1: Thursday, September 26, 2019

Technical Session 3-4: Photovoltaic & Renewable Energy - III

Time: 5:00 PM – 6:30 PM

Venue: Room 6013, Level 6, Academic Block

Session Chair: Prof. Md. Fayzur Rahman, Green University of Bangladesh

- 4166 Wind and Solar Powered Bicycle: Lessening the Dependency over Grid Electricity
Ajmayen Fayek, Shah Md. Salimullah, Md. Shadman Hasan Shakib, Ariful Islam Anik, Moynul Hossen Khan
- 4168 Assessing the Power Quality in Micro-Grid Embedded with Renewable Energy
G. M. Sharif Ulla Al- Mamun, Arpita Hoque, Md Shamim Rana, Sultan Ahmed, Md. Imran Hossain, Al Jubair Hossain, Md. Rokib Hasan
- 4193 Assessment of a Microgrid Hybrid Wind-Diesel-Battery Alternative Energy System Applicable for Offshore Islands
S.K. A. Shezan, Md. Fatin Ishraque
- 4201 Design and Control of a Standalone Microgrid System for Saint Martins Island in Bangladesh
Shahinur Rahman, Tanim Tasmin Chowdhury
- 4393 A computational design approach on KFM based modified NACA-4415 for better aerodynamic efficiency
Asif Kabir, Yeasir Mohammad Akib, Ahsan Hafiz, Avijit Mallik

Day 1: Thursday, September 26, 2019

Technical Session 3-5: Power Systems - II

Time: 5:00 PM – 6:30 PM

Venue: Room 5013, Level 5, Academic Block

Session Chair: Prof. Saradindu Ghosh, National Institute of Technology Durgapur, India

- 4317 Forecasting-Aided State Estimation for Power Distribution System Application: Case Study
Shahid Jaman, Md. Rezwanur Rashid Mazumder, Md. Istiak Ahmed, Abdullah Al Mahfazur Rahman
- 4339 Application of PID and Fuzzy based Controllers for Load Frequency Control of a Single - Area and Double - Area Power Systems
Rinku Doley, Saradindu Ghosh
- 4352 Simplified Artificial Neural Network based Fault Classification and Location for Transmission Line
Shihab Ahmed, Md. Rashidul Islam
- 4377 An Approach to Imbalance Power Management Using Demand Response in an Electricity Balancing Market
Md. Ahsan Kabir, Mahmood Reaz Sunny, Chi Zhang

- 4410 Terminal Voltage Control of Multi-area Power Systems Using Optimal Control Approach
Fariya Tabassum, M. S. Rana
- 4493 Stability Enhancement of a Smart Power Generation System Suitable for Bangladesh
Md. Raju Ahmed, Subir Ranjan Hazra

Day 1: Thursday, September 26, 2019

Technical Session 3-6: Photonics & Fiber Optics

Time: 5:00 PM – 6:30 PM

Venue: Room 5014, Level 5, Academic Block

Session Chair: Prof. Morin Hessen, Khulna University of Engineering & Technology, Bangladesh

- 4055 Low Loss High Core Power Fraction Silicon Based Photonic Crystal Fiber for Efficient Wave Propagation in THz Regime
Mohammad Saiful Islam, Md. Anwar Sadath, Shahadat Hossain, Sabbir Ahmed Khan, Chinmoy Das, Tanvir Ahmed
- 4155 Design and Performance Analysis of a Silver Coated Microstructure Optical Fiber Plasmonic Sensor
Mohammad Al Mahfuz, Md. Nazmus Sakib, Mohammad Hasibul Hasan Hasib, Hasanul Banna, Muzahidul Islam, Md. Nasir Uddin
- 4254 Topas Based Low Loss Suspended Porous Core Single Mode Photonic Crystal Fiber for THz Wave Propagation
Md. Anwar Sadath, Mohammad Saiful Islam, Dr. Mohammad Faisal
- 4306 Impact of Non-linear Spectral Processes on NIR and Visible Emission Characteristics in Bismuth Doped Silicate Fibres
Md. Bulbul Ahmed, Zinat M. Sathi
- 4319 Gain optimization of erbium doped fiber amplifier under dual pumping at 830 nm and 980 nm
S. M. Rezwanul Islam, Ariful Islam, Md. Abdul Kader, Zinat M. Sathi
- 4533 Modified Dodecagonal PCF Sensor with High sensitivity for Detecting Harmful Chemical Compounds used in poultry feed
Meher Niger, Mohammad Istiaque Reja, Jobaida Akhtar, Nishat Jahan, Rubaya Absar, Saleha Fatima

Day 1: Thursday, September 26, 2019

Invited Speech - II

Time: 5:00 PM – 5:30 PM

Venue: Lecture Gallery 5002, Level 5, Academic Block

Session Chair: Dr. Lamia Iftekhar, North South University, Bangladesh

Title: The Ethics of Representations: A Case Study of the Representations of Female Acid Attack Survivors in India

Speaker: Dr. Gisele Carder De Limos
Texas A&M University, USA

Day 2: Friday, September 27, 2019

Registration & Conference Kit Distribution

Time: 08:00 AM – 8:30 AM

Venue: Lecture Gallery 5002 Lobby, Academic Block

Day 2: Friday, September 27, 2019

Technical Session 4-1: Computer Vision & Signal Processing - IV

Time: 8:30 AM – 10:30 AM

Venue: Room 6007, Level 6, Academic Block

Session Chair: Dr. Md. Shamim Kaiser, Jahangir Nagar University, Bangladesh

- 4091 Time and Computation Efficient Malicious Android Application Detection Using Machine Learning Techniques
Sabbir Ahmed Saladin, Navix Bin Mahmud, Maher Kumar Paul, A.H.M. Sarowar Sattar
- 4113 Handwritten Digit Recognition using Convolutional Neural Network in Python with Tensor flow and Observe the Variation of Accuracies for Various Hidden Layers
Fatima Siddique, Shadman Sakib, Md. Abu Bakr Siddique
- 4189 A Framework for Disease Identification from Unstructured Data Using Text Classification and Disease Knowledge Base
Fahim Faisal, Shafkat Ahmed Bhuiyan, Faisal Bin Ashraf, Abu Raihan Mostofa Kamal
- 4280 Region Based Convolutional Neural Network for Smart Driving Monitoring System
Fahim Faisal, Shafkat Ahmed Bhuiyan, Faisal Bin Ashraf, Abu Raihan Mostofa Kamal
- 4284 Human Activity Recognition Using Multichannel Convolutional Neural Network
Niloy Sikder, Md. Sanaullah Chowdhury, Abu Shamim Mohammad Arif, Abdullah-Al Nahid
- 4299 Speaker Identification System Under Noisy Conditions
Md. Sharifu lAlam, Muhammad S.A. Zilany
- 4459 A Computational Approach of Recognizing Emotion from Bengali Texts
Hasan Abid Ruposh, Mohammed Moshikul Hoque
- 4462 Emotion Detection from Tweets using AIT-2018 Dataset
Faisal Muhammad Shah, Abdus Sayef Reyadh, Asif Imtiaz Shaafi, Sift Ahmed, Fatima Tabsun Sithil

Day 2: Friday, September 27, 2019

Technical Session 4-2: Fuel Cell & Solar Cell - I

Time: 8:30 AM – 10:30 AM

Venue: Room 6008, Level 6, Academic Block

Session Chair: Prof. M. Mofazzal Hossain, University of Liberal Arts Bangladesh

- 4370 Structural Properties of Cads thin-films deposited by RF Magnetron Sputtering
E.M.K. Iqbal Ahamed, A.K.S.Gupta, M.N.I. Khan, M.A. Matin, N. Amin

- 4414 Influence of CdCl₂ Treatment Temperature on Structural and Optical Properties of CdTe Thin Films
A. Razi, N. K. Das, S. F. U. Farhad, M. A. Matin
- 4427 Behavior of the Proton Exchange Membrane Fuel Cell Around Critical Fuel and Air Supply Pressure
Koushik Ahmed, Md. Rawshan Habib, Shuva Dasgupta Avi, Md. Mohaimanul Islam
- 4480 Simulation and Modeling of Graded Band-Gap Perovskite Solar Cells
Md.Saad Ul Haque, Samiul Alam, Parama Sridevi, Md. Shafiqul Islam
- 4481 Structural properties of bi-layer Molybdenum Thin-film deposited by RF magnetron sputtering for CZTS solar cells
A.K.S.Gupta, E.M.K.I.Ahamed, M. Quamruzzaman, M. A. Matin, K.S. Rahaman, N. Amin
- 4535 Effect of Thermally Evaporated n-CdTe Thin Film for Homojunction CdTe Solar Cell
Maitry Dey, N. K. Das and M. A. Matin
- 4542 Modeling and Simulation of Highly Efficient Single Junction GaInP Solar Cell
Maitry Dey, Sarzina Akther, Ahmad Ulla Rummy, Mrinmoy Dey, M. A. Matin, Mohammad
- 4543 Highly Efficient ZnTe Solar Cell with PbTe BSF
Mrinmoy Dey, Ismad Ahmad Asha, Zarin Tasnim Smita, Maitry Dey and Nipu Kumar Das

Day 2: Friday, September 27, 2019

Technical Session 4-3: Antenna & Wave Propagation - II

Time: 8:30 AM – 10:30 AM

Venue: Room 6009, Level 6, Academic Block

Session Chair: Prof. Md. Mostafizur Rahman, Khulna University of Engineering & Technology, Bangladesh

- 4139 Design and Performance Analysis of a Compact Implantable PIFA Antenna for Biomedical Applications
Mariha Siddika Ahmad, Md. Mostafizur Rahman, Khaled Mahbub Morshed
- 4147 Performance Analysis of New Variable Loading based Robust Rectangular Antenna Array Beamformer
M. M. Rashid, M. S. Hossain, M. F. Reza
- 4161 Performance Enhancement of Active Sonar System in Under Water Environment Using Spherical Hydrophone Array
Imteaz Rahaman, Md. Selim Hossain, Md. Yousuf Hossain, Nadim Hosen
- 4308 Design and Simulation of an UWB Microstrip Patch Antenna for Cancer Detection and Treatment
Antora Hossain, Md. Kamal Hosain
- 4345 Design and Analysis of Suspended Core Topas Based Photonic Crystal Fiber for Efficient Wave Propagation in THz Regime
Mohammad Saiful Islam, Shahadat Hossain, Md. Hafijur Rahman, Sabbir Ahmed Khan, Nazia Parvin Ruma, Oudud Ahmí

- 4475 Polypropylene Sheet Reinforced Textile Antenna with Reduced Bending Effects
Methila Biswas Raya, Tama Fouzder, M. Morazán Hossain, Khaleda Ali
- 4499 Linearly-arranged Concentric Circular Antenna Array Beamformer Using Tapering Technique
Imteaz Rahaman, Md. Selim Hossain, Md. Farhamdur Reza, Pallab Kumar Sarkar
- 4507 A Low Profile UWB Antenna for Biomedical Application
Jawad Mahmud Chowdhury, Mohammad Anisur Rahaman

Day 2: Friday, September 27, 2019

Technical Session 4-4: Telecommunication Systems & Networks -I

Time: 8:30 AM – 10:30 AM

Venue: Room 6013, Level 6, Academic Block

Session Chair: Prof. Salekul Islam, United International University, Bangladesh

- 4054 Keyword Extraction from Bengali News
Md. Imran Hossain Showrov, Masrur Sobhan
- 4104 Weight-based Bandwidth Allocation Algorithm for Improving the QoSs of Multi-OLT PON in Downstream Direction
Md. Saklain Mustak, Morin Hessen, Shuvashis Saha
- 4197 Gateway Node-based Clustering Hierarchy for Improving Energy Efficiency of Wireless Body Area Networks
Amniotes Roy Akashi, Morin Hessen, Md. Rakibul Hassan, Md. Imran Hossain
- 4198 A Sorted-Frame MTP Scheme for Alleviating the Over-Granting Problem in LR-PON
Muhsin Bakhtiar Mafaz, Shuvashis Saha, Morin Hessen
- 4287 Calculation of Client Similarities in Large-Scale on Social Network Using Recommendation Framework
Md. Amirul Islam, Linta Islam
- 4354 Demographic Factors of Cybersecurity Awareness in Bangladesh
Nadeen Ahmed, Md. Rashedul Islam, Umme Kulsum, Md. Rajibul Islam, M. Ershadul Haque, Mohammad Shahriar Rahman
- 4362 Performance Analysis of SDN Based Firewalls POX vs. ODL
Ryhan Uddin, Md. Fahad Morin
- 4448 Real Time Sentiment Analysis and Opinion Mining on Refugee Crisis
Md. Mahiuddin

Day 2: Friday, September 27, 2019

Technical Session 4-5: Devices, Circuits & Systems - III

Time: 8:30 AM – 10:30 AM

Venue: Room 5013, Level 6, Academic Block

Session Chair: Dr. Subir Chandra Ghosh, North South University, Bangladesh

- 4080 Toward a Generic Event Management System for Academia
Sanjatul Islam, Rajashree Majumder, Subrina Sultana, Sumaiya Nasrin, Rubyeat Islam

- 4108 Thermal Performance Analysis of a Silicon Chip (IC) Mounted on Printed Circuit Board for Different Substrate Materials Based on the Convection Heat Transfer by 3D Finite Element Method
Hasib Ahmed Prince, Md. Habibur Rahman, Enamul Hasan Rozin, Shailee Mitra
- 4318 Evaluation of proposed pH meter in determining the amount of soil supplement needed for IRRI-28
Setu Basak, Joy onto Kumar Roy, Md. Rakybuzzaman Ratan, Syed Akhter Hossain
- 4276 TempNet: Application of Wireless Sensor Network for Industrial Temperature Monitoring with Integration
Nafize Ishtiaque Hossain, Sakib Reza
- 4417 Halogen Doped Electronic Properties of 2D ZnO: A First Principles Study
Hossain Mansur Resalat Faruque, Kamal Hosen, A. S. M. Jannatul Islam, and Md. Sherajul Islam
- 4439 Surface Impedance Analysis of Graphene Nanoribbon for High Frequency Applications
Turja Nandy, Manish Debnath
- 4476 Modeling of an Efficient 4 to 1 Multiplexer for Quantum-Dot Cellular Automata
Saif Hannan, Mohammad Ishtiaque Khan
- 4498 Rate Equation-based Modeling of Steady-state and Transient Performance Characteristics and High Frequency Modulation Response of Single Layer Transition metal Dichalcogenide Excitonic Lasers
Md. Asaduz Zaman Mamun, MD. Shakil Mahmud Jiban, Md. Shariful Islam, Abdullah Al Mohaimen

Tea Break

Time: 10:30 AM - 11:00 AM, **Venue:** Lecture Gallery 5002 Lobby

Day 2: Friday, September 27, 2019

Keynote Session - III

Time: 11:00 AM - 12:30 PM

Venue: Gallery 5002, Level 5, Academic Block

Session Chair: Prof. Anisul Haque, East West University, Bangladesh

Keynote Speech 4

Time: 11:00 AM - 11:45 AM

Title: Smart Power Grid in the 21st Century

Speaker: Professor Akhtar Kalam, IET Fellow

Head of External Engagement & Leader – Smart Energy Research Unit,
College of Engineering and Science, Victoria University, Australia

Keynote Speech 5

Time: 11:45 AM - 12:30 PM

Venue: Lecture Gallery 5002, Academic Block

Title: Strengthening Global Climate Response: What is in it for Bangladesh

Speaker: Prof. Joyashree Roy, ICSSR Fellow

Bangabondhu Chair Professor, Asian Institute of Technology, Thailand
2007-IPCC Nobel Peace Prize winning team member

Lunch & Prayer

Time: 12:30 PM - 2:00 PM, **Venue:** Food Court, Ground Floor

Day 2: Friday, September 27, 2019

Keynote Session - IV

Time: 2:00PM - 4:00 PM

Venue: Gallery 5002, Level 5, Academic Block

Session Chair: **Prof. Ashraful Hoque, Islamic University of Technology, Bangladesh**

Keynote Speech 6

Time: 2:00PM - 2:40 PM

Venue: Lecture Gallery 5002, Academic Block

Title: **Energy & Environmental Problems Facing Bangladesh and India and Their Probable Solutions for Sustainable Development**

Speaker: **Prof. D. P. Kothari, IEEE Fellow**

Director Research,
Waingangā College of Engineering & Management, Nagpur
Former Vice Chancellor, Vellore Institute of Technology, India

Keynote Speech 7

Time: 2:40 PM - 3:20 PM

Venue: Lecture Gallery 5002, Academic Block

Title: **Thevenin’s Theorem: Generalization, Extension and Examples**

Speaker: **Prof. Shankar P. Bhattacharyya, IEEE Fellow**

Professor, Department of Electrical & Computer Engineering,
Texas A&M University, College Station, USA

Keynote Speech 8

Time: 3:20 PM - 4:00 PM

Venue: Lecture Gallery 5002, Academic Block

Title: **System Integration of Variable Renewable Energy – Challenges According to Penetration Levels**

Speaker: **Prof. Takeyoshi Kato, Member IEEE**

Institute of Materials and Systems for Sustainability,
Department of Electrical Engineering, Nagoya University, Japan

Tea Break

Time: 4:00 PM - 4:30 PM, **Venue:** Lecturer Gallery 5002 Lobby

Day 2: Friday, September 27, 2019

Technical Session 5-1: Wireless Communications - II

Time: 4:30 PM – 6:15 PM

Venue: Room 6007, Level 6, Academic Block

Session Chair: **Dr. Nafees Mansoor, University of Liberal Arts Bangladesh**

4184 Power Delay Profile Characteristics of Intra Train Millimeter Wave Statistical Channel Modeling for 5G Networks
Muhosina Aktar Mou, Md. Munjure Mowla

- 4246 Near-Optimal Hybrid Precoding Analysis in 5G mm Wave massive MIMO Systems with Large Antenna Arrays
Sawkat Osman, Md. Munjure Mowla
- 4289 Energy Harvesting from Dual Tone RF signal using a Double Stage Voltage Rectifier for Wireless Power Transmission
Sadman Shahriar Alam, Akib Jayed Islam, Md. Mahmudul Hasan, Fazllul Karim Nadim
- 4304 Investigation of Power Delay Profiles for 5G Millimeter Wave Railway Communications
Muhosina Aktar Mou, Md. Munjure Mowla
- 4321 Channel Modeling at Unlicensed Millimeter Wave V Band for 5G Backhaul Networks
Hussnin Binte Hamid Dutty, Md. Munjure Mowla
- 4350 Low-Complexity Hybrid Precoding Analysis in 5G Massive Multiuser MIMO Systems.
Sawkat Osman, Md. Munjure Mowla
- 4390 Indoor mm Wave Statistical Channel Model at V-Band for 5G Networks
Muhosina Aktar Mou, Md. Munjure Mowla

Day 2: Friday, September 27, 2019

Technical Session 5-2: Power Electronics & Drives - II

Time: 4:30 PM – 6:00 PM

Venue: Room 6008, Level 6, Academic Block

Session Chair: Prof. Mohammad Abdul Mannan, American International University, Bangladesh

- 4210 Comparative Studies of Different Transformerless Inverter Topologies for Grid-Tied Photovoltaic System
Arghya Saha, Shameem Ahmad, Saad Mekhilef, Umme Kulsum Jhuma, Haidar Islam, Zahirul Amin Chowdhury, Monirul Islam
- 4423 Design and Evaluation of a MATLAB SIMULINK Block of Permanent Magnet Brushless DC Motor
MD. Jahangir Alam Hasan, Protik Chandra Biswas
- 4466 Seven-Level Cascaded H-Bridge Multilevel Inverter and Fault-Tolerant Control Strategy
Md. Mizanur Rahman, Shafayet Hossain, Sift Rezwan
- 4492 A Modified 3-Level & 5-Level Cascaded NPC Inverter Topology for Grid Connected Solar PV Systems
Shafayet Hossain, Md. Mizanur Rahman, Shoriful Islam
- 4525 Power Factor Analysis of an Energy Efficient Single Phase VFD for Industrial Sewing Machines
Mehadi Hassan Khan, Mohammad Rejwan Uddin, Zaima Tasneem, Khosru M Salim

Day 2: Friday, September 27, 2019

Technical Session 5-3: Biomedical Engineering - IV

Time: 4:30 PM – 6:00 PM

Venue: Room 6009, Level 6, Academic Block

Session Chair: Dr. Mohammad Hasan Imam, American International University-Bangladesh

- 4177 Prediction of Breast Cancer Using Ensemble Learning
Sunanda Das, Dipayan Biswas
- 4375 Predicting N1- and N6-methyladenosine RNA Modifications using Hybrid Feature Selection Approach
Tasfin Jayed, Md. Al Mehedi Hasan, Tahsin Masrur
- 4395 Design and Impementation of Bangla Sign Language Translator
Md. Yeasin, Sonkor Kanti Nath, Md.Iquebal Hossain Patwary, Shafayat Hossain, Shahadat Hossain, Rubel Ahmed Shah, Ridwan Ahmed, Md Hossain Azad
- 4457 Low Cost 3D Printed Prosthetic for Congenital Amputation using Flex Sensor
JafrinaJabin, Md. Ehtesham Adnan, Saad Salman Mahmud, Ahmed Masud Chowdhury, Mohammad Rezaul Islam
- 4496 Surface Electromyographic Signal Based Finger Prosthesis Control Using ANN
Jahedul Islam, Dhiman Kumar Sarker, Piyas Das
- 4532 Identification of genetic association of Thyroid Cancer with Parkinsons disease, Osteoporosis, Chronic kidney disease, chronic heart failure, Type 1 diabetes and Type 2 diabetes
Md. Ali Hossain, Tania Akter Asa, Sheikh Muhammad Saiful Islam, Muhammad Sajjad Hussain, Mohammad Ali Moni

Day 2: Friday, September 27, 2019

Technical Session 5-4: Fuel Cell & Solar Cell - II

Time: 4:30 PM – 6:00 PM

Venue: Room 6013, Level 6, Academic Block

Session Chair: Dr. Nahid Akther Jahan, Southeast University, Bangladesh

- 4112 Crystallite structure estimation of TiO₂ doped ZnO nano particles from X-ray diffraction data
Md Mizanul Islam, Mohammad Shahidul Alam, Md. Shamimul Haque Choudhury, Tetsuo Soga, Abu Yousuf, Amr Attia Abuelwafa
- 4199 Analysis of Photovoltaic Characteristics of Carbon Nanotube Incorporated Perovskite Solar Cell with CNT Chirality Variation
M. Nahid Reza, Sharif Mohammad Mominuzzaman
- 4355 Study on the Strain Dependent Performance of CdTe: Te-based Multijunction Solar Cells
Md Shahedul Islam Sium, Md Jahirul Islam, Md Rejvi Kaysir, Md Aminur Rahman
- 4547 State-of-Charge Analysis of Super-Capacitor for 40F & 400F for Small Scale Off-Grid Energy Storage
Md.Shahrukh Adnan Khan, Md.Khairul Alam, Shoaib Mahmud, Md. Pabel Sikder, Md. Nahid Hasan, Md. Arifur Rahman, Md. Ariful Islam

Day 2: Friday, September 27, 2019

Technical Session 5-5: Artificial Intelligence& Neural Network

Time: 4:30 PM – 6:00 PM

Venue: Room 5013, Level 5, Academic Block

Session Chair: Dr. Lamia Iftekhar, North South University, Bangladesh

- 4292 Melanoma Diagnosis from Dermoscopy Images Using Artificial Neural Network
Sharmin Majumder, Muhammad Ahsan Ulla, Jitu Prakash Dhar
- 4467 An Artificial Neural Network Model for Epileptic Seizure Detection
Md. Zainal Abedin, Sharmin Akther, Mohammad Shahadat Hossain
- 4485 Deep Convolutional Neural Network for Microscopic Bacteria Image Classification
Md. Ferdous Wahid, Md. Jahid Hasan, Md. Shahin Alom
- 4486 Deep Convolutional Neural Networks Exploiting Transfer Learning for Country Recognition by Classifying Passport Cover
Md. Ferdous Wahid, Md. Jahid Hasan, Md. Shahin Alom
- 4521 Predicting the Probability of Landslide using Artificial Neural Network
Animesh Chandra Roy, Md. Mominul Islam
- 4536 A Human-computer Interaction System Utilizing Inertial Measurement Unit and Convolutional Neural Network
Shahriar Rahman Fahim, Yeahia Sarker, Md. Rashiduzzaman, Omar Kamrul Islam, Subrato K. Sarker, Sajal K. Das

Day 2: Friday, September 27, 2019

Technical Session 5-6: Photovoltaic & Renewable Energy - IV

Time: 4:30 PM – 6:00 PM

Venue: Room 5014, Level 5, Academic Block

Session Chair: Prof. Shahriar Khan, Independent University, Bangladesh

- 4282 Feasibility Study of Optimized Off-Grid Hybrid Power System to Overcome Power Crisis of Khamarullahpara Village, Bangladesh
Nafize Ishtiaque Hossain, Rajib Ghose
- 4298 Effect of Partial Shading on the Performance of Solar PV Module and Impact of Bypass Diode in Performance Enhancement
Avijit Saha, Naznin Nahar Nipu, Md. Fayyaz Khan
- 4217 Design and Implementation of an Energy-Efficient Smart Lighting System
Md. Mominur Rahman, Abu Shufian, Koushik Ahmed, Md. Najibullah, Md. Momin Miah Hridoy, Md. Tarif Hossen
- 4248 An Optimal Time-of-Use Electricity Pricing Scheme for Residential Loads in Bangladesh
Md. Moktadir Rahman, Izaz Zunnurain, Munia Patwary
- 4353 Future of Renewable Energy in Bangladesh as a Potential Solution to Energy Crisis
Animesh Kumar Bosu, Md. Abdur Rafiq

Conference Dinner, Dr. Fatima Rashid Best Paper Award & Closing Ceremony

Date: 27 September 2019, Friday

Time: 7:00 PM-10:00 PM

Venue: Garlic 'n Ginger Restaurant, 1st Floor, Jamuna Future Park, Dhaka

Contact: Phone: 01913397202, Website: www.garlic-n-ginger.com

Day 3: Saturday, September 28, 2019

City Tour

Time: 9:00 AM – 2:30 PM

Venue: 1. National Pariliament 2. Ahsan Monjil
