# **Conference Program Schedule : ICEEICT 2014**

		Conferen	ce Kit Collection			
	9 <sup>th</sup> April 2014 13:00-06:00 pm	Central Conference Room Tower Bldg – 1 (2 <sup>nd</sup> Floor)				
	Day – 1 : Thursday, 10 <sup>th</sup> April 2014					
Т	ime		Program	Venue		
08:00-	09:30 am	Conference kit collection		Central Conference Room Tower Bldg – 1 (2 <sup>nd</sup> Floor)		
09:30-	10:30 am	Inau	ugural Ceremony	Multipurpose Hall Tower Bldg – 1 (10 <sup>th</sup> Floor)		
10:30-	11:00 am		Tea	Tower Bldg – 1 (2 <sup>nd</sup> Floor)		
11:05-	11:15 am	Opening o	of Technical Exhibition	Car Parking Tower Bldg - 1		
11:15-	12:45 pm	Video Pre	esentations by Sponsors	Venue: Multipurpose Hall Tower Bldg – 1 (10 <sup>th</sup> Floor)		
12:45-0	02:30 pm		Lunch	Tower Bldg – 1 (2 <sup>nd</sup> Floor)		
02:30-0	03:00 pm		g of Poster Session & Project Show	Tower Bldg - 1 (Ground Floor)		
	03:00-05:00 pm	Ple	enary Session-1	Multipurpose Hall Tower Bldg – 1 (10 <sup>th</sup> Floor)		
03:00-06:30 pm	05:00-05:15 pm		Tea	Venue: Tower Bldg – 1 (2 <sup>nd</sup> Floor)		
	03:30-06:30 pm		on Biometric Security Shaikh Anowarul Fattah	Room No : 304 (Tower Bldg -II) Multimedia & Graphics Lab		
	Day	y – 2 : Fri	day, 11 <sup>th</sup> April 201	4		
08:00-	08:30 am	Confe	rence kit collection	Central Conference Room Tower Bldg – 1 (2 <sup>nd</sup> Floor)		
08:30-	10:30 am	Тес	chnical Session-1	<ul> <li>— A1: Room: 402 (TB - I)     Artificial Intelligence Lab</li> <li>— B1: Room: 404 (TB - I)     Software Engineering Lab</li> <li>— C1: Room: 201 (TB - I)</li> </ul>		
10:30-	10:45 am	am Tea		Tower Bldg – 1 (2 <sup>nd</sup> Floor)		
10:45-	10:45-12:45 am Plenary Session-2		Multipurpose Hall Tower Bldg – 1 (10 <sup>th</sup> Floor)			
12:45-02:30 pm		Lunch		Tower Bldg – 1 (2 <sup>nd</sup> Floor)		
02:30-04:30 pm		Тес	Phnical Session-2	<ul> <li>— A2: Room: 402 (TB - I)     Artificial Intelligence Lab</li> <li>— B2: Room: 404 (TB - I)     Software Engineering Lab</li> <li>— C2: Room: 201 (TB - I)</li> </ul>		
03:00-0	03:00-04:30 pm Poster paper presentation		Tower Bldg – 1 (2 <sup>nd</sup> and 4 <sup>th</sup> Floor)			
04:30-0	04:45 pm		Tea	Tower Bldg – 1 (2 <sup>nd</sup> Floor)		

		— A3: Room : 402 (TB - I) Artificial Intelligence Lab
4:45-6:45 pm	Technical Session-3	— B3: Room : 404 (TB - I) Software Engineering Lab — C3: Room : 201 (TB - I)
Dov	– 3 : Saturday, 12 <sup>th</sup> April 20	` /
Day	– 5 : Saturday, 12 April 20	
08:30-10:30 am	Technical Session-4	<ul> <li>— A4: Room: 402 (TB - I)</li> <li>Artificial Intelligence Lab</li> <li>— B4: Room: 404 (TB - I)</li> <li>Software Engineering Lab</li> <li>— C4: Room: 201 (TB - I)</li> </ul>
08:30-11:30 am	WIE mini-Workshop Technical Co-sponsored by WIE Affinity Group, IEEE Bangladesh Section Coordinator: Dr. Celia Shahnaz	Room No – 408 Admin Building
10:30-10:45 am	Tea	Tower Bldg – 1 (2 <sup>nd</sup> Floor)
10:45-11:45 am	Technical Session- 5	<ul> <li>— A5: Room: 402 (TB - I)</li></ul>
11:45-12:45 pm	Plenary Session- 3	Multipurpose Hall Tower Bldg 1 (10 <sup>th</sup> Floor)
12:45-02:30 pm	Lunch	Tower Bldg – 1 (2 <sup>nd</sup> Floor)
02:30-04:30 pm	Technical Session-6	<ul> <li>— A6: Room: 402 (TB - I)</li> <li>Artificial Intelligence Lab</li> <li>— B6: Room: 404 (TB - I)</li> <li>Software Engineering Lab</li> <li>— C6: Room: 201 (TB - I)</li> </ul>
04:30-04:45 pm	Tea	Tower Bldg – 1 (2 <sup>nd</sup> Floor)
4:45-6:45 pm	Plenary Session-4	Multipurpose Hall Tower Bldg – 1 (10 <sup>th</sup> Floor)
6:45-7:15 pm	Br	eak
7:15-8:15 pm	Cultural Program	Multipurpose Hall Tower Bldg – 1 (10 <sup>th</sup> Floor)
8:15-8:30 pm	Award Giving Ceremony	Multipurpose Hall Tower Bldg – 1 (10 <sup>th</sup> Floor)
8:30-9:30 pm	Conference Dinner & Declaration of closing of ICEEICT 2014	Tower Bldg – 1 (2 <sup>nd</sup> Floor)

## **Technical Program**

## Plenary Session – 1, Day-1, Thursday, 10<sup>th</sup> April, 2014

Venue: Multipurpose Hall, Tower Building – I (10<sup>th</sup> floor) Time: 03:00 - 05:00 pm

Session Chair: Prof. Saiful Islam, Dept. of EEE, BUET

Keynote Session	Name of Keynote Speaker	Topic
Plenary Talk-1	Dr. Nowshad Amin	Renewable Energy
Plenary Talk-2	Dr. Mufti Mahmud	Demystifying Neuronal Networks In-Vivo: A Computational Approach

# Technical Sessions, Day – 2, Friday, 11<sup>th</sup> April, 2014

**Technical Session: A-1** 

**Session Title: Circuits and Systems / Control Theory and Applications** 

Venue: Room No: 402, Tower Building - I Time: 08:30 - 10:30am

Session Chair: Prof. Pran Kanai Saha, Dept. of EEE, BUET

Ser No	Paper ID	Title of the paper
1	150	Generalized Inverses of Periodic Matrix Pairs and Model Reduction for
1		Periodic Control Systems
2	180	Design and Implementation of a Robotic Vehicle With Real-Time Video
2	180	Feedback Control Via Internet
3	205	Co-ordinated Frequency Control of Power System with High Wind Power
3		Penetration
4	296	Implementation of a Driver Circuit in 65nm CMOS techonology for Body-
4	290	Coupled Communication
5	352	Case-Study:Performance Comparison of Classical and Intelligent
		Proportional Integral Controller

# Technical Session: B-1 Session Title: Satellite Navigation / Radar Engineering

Venue: Room No: 404, Tower Building - I Time: 08:30 - 10:30am

Session Chair: Gp Capt Atul Garg, VSM, Dept. of AE, MIST

Ser No	Paper ID	Title of the paper
1	151	Soil Moisture Observation Utilizing Reflected Global Navigation Satellite
1	131	System Signals
2	308	Side Lobe Level Reduction in Antenna Array Using Weighting Function
3	309	Comparison of Analog and Digital Pulse Compression Technique and
3		Reduction of Side lobes Using Transversal Filter
4	333	A Case Study of Satellite Navigation Reliability: Bangladesh Perspective
5	340	Implementation And Verification Of Simulation Methods To Determine
_	- 10	Radar Cross Section Of Simple Targets
6	383	A proposed model of aircraft direction finding and integrated architecture
		of theta-theta-DRDF
7	388	Comparison of DOP for GPS and Galileo in the South Asian Region

**Technical Session: C-1** 

**Session Title: Optical Communication and Networks** 

Venue: Room No: 201, Tower Building - I Time: 08:30 - 10:30am

Session Chair: Prof. Md. Saiful Islam, IICT, BUET

Ser No	Paper ID	Title of the paper
1	148	Ultra High Speed Coherent Optical Communication Using Digital Signal
1		Processing Techniques Along With Advanced Modulation System
2	173	Performance of Different Modulation Formats in 40 Gb/s Optical Systems
2	173	in the Presence of Polarization Mode Dispersion and Nonlinear Effects
3	174	Performance of Multilevel Modulation Formats in 92 Gb/s Systems in the
3	1/4	Presence of PMD and Nonlinear Effects
4	212	Improvement of BER Performance in DS-OCDMA System using Chirped
4		Pulses under GVD Regime
5	235	OSNR Improvement of Coherent Uncompensated Optical Transmission
3	233	Systems for Various Commercial Optical Fiber Types
6	236	Evaluation of Nonlinear Propagation Effects on Coherent Optical
		Transmission Systems for Various Commercial Optical Fiber Types
7	243	Effect of Four Wave Mixing Nonlinearity in Wavelength Division
/		Multiplexing Radio over Fiber

### **Plenary Session-2**

Venue: Multipurpose Hall, Tower Building – I (10<sup>th</sup> floor) Time: 10:45 - 12:45 pm

Session Chair: Capt M Mahbubur Rahman, Dept of EECE, MIST

Keynote Session	Name of Keynote Speaker	Topic
		Indigenous Development of
Plenary Talk-3	Prof. Siddique-e Rabbani	Electro-Medical Devices at
		Dhaka University
Plenary Talk-4	Prof. Ranjan Gangopadhyay	DWDM Optical Network

## **Poster Paper Presentation**

Venue: Tower Building – I (2<sup>nd</sup> floor, 4<sup>th</sup> floor)

Time: 03:00 - 04:30 pm

Ser No	Paper ID	Title of the paper
1	147	Digital Land Management System : A new initiative for Bangladesh
2	154	Wireless Remote Switching System for Controlling Devices with an Algorithm based DTMF Detection
3	191	Utilization of Single Phase Inverters in Photovoltaic System
4	193	Novel FinFET Domino Logic Circuit Using Dual Keepers
5	194	Numeric Rating of Apps on Google Play Store by Sentiment Analysis on User Reviews
6	195	Nuclear Power as a Tool for Sustainable Development in Energy Sector in Bangladesh
7	214	A System for Bangla Community to Enhance English Capability through Web Browsing
8	215	Boosting Facial Expression Recognition Using LDGP - Local Distinctive Gradient Pattern
9	234	Design and Embodiment of larger Quaternary Multiplexer and Demultiplexer
10	238	A New Approach for Pattern Recognition with Neuro- Genetic System Using Microbial Genetic Algorithm
11	240	Bangla Word Clustering Based on N-gram Language Model
12	261	A Novel Color Sensor Based on Uniform Fiber Bragg Gratings
13	276	Automated Energy Saving & Safety System
14	281	Delaunay Triangulation and st-numbering in Wireless Sensor Network Topology
15	307	A signal processing approach of underwater network node estimation with three sensors
16	310	An Approach to Demand Side Load Curtailment for the Future Intelligent and Smart Power Grid of Bangladesh.
17	315	Performance Evaluation due to Crosstalk in a WDM System using Multi- stage Optical Cross-connect based on FBG-OC

18	322	Morphology-Based Exudates detection from color Fundus Images in diabetic retinopathy
		Proposal, for SZRP protocol with the establishment of the Salted SHA-
19	345	256 bit HMAC PBKDF2 advance security system in a MANET.
20	355	Line Follower Robot : Fabrication and accuracy measurement by data acquisition
21	370	A New Initiative for ERP System Architecture with Mobile Cloud: Aspects of Bangladesh
22	371	RFID Based Virtual Speed Breakers: Perspective Bangladesh
23	386	A New Approach for Road Networks - A Vehicle XML Device collaboration with Big Data
24	387	Autonomous Quadcopter for Product Home Delivery
25	391	Performance analysis of aerofoil for Unmanned Aerial Vehicle
26	398	Optimization of Apodization Profile of Chirped Fiber Bragg Grating for Chromatic Dispersion Compensation
27	401	Natural grape dye used as a sensitizer for solar cell applications
28	409	Measurement of Gate Delay in Armchair GrapheneNanoribbon Considering Degenerate Regime
29	412	Study of Ultra Wideband Wireless Sensors for Body Area Networks

Technical Session : A-2
Session Title : Renewable Energy

Venue: Room No: 402, Tower Building - I Time: 02:30 - 04:30pm

Session Chair: Dr. Md. Nurunnabi Mollah, Dept. of EEE, KUET

Ser No	Paper ID	Title of the paper
1	170	Design and Fabrication of Solar Powered Toy Car
2	176	Hydro-PV-Wind-Battery-Diesel Based Stand-Alone Hybrid Power System
3	201	Impact of Supercapacitor Placement in Renewable Integrated Microgrid to Minimize Post-fault Frequency Fluctuation
4	274	Parametric Analysis of Carbon Nanotube Organic Solar Cells
5	344	Tidal Energy: A Solution to Energy Crisis in Coastal Area of Bangladesh
6	357	Heterogeneous Arrays of Storage Devices: An Approach to Get Linear Output with Maximum Efficiency from Energy Systems
7	360	Design and Integrate Dual Renewable Energy in A Residential Building of Urban Area: A Step towards the Self–Sustained Smart Energy System for Bangladesh
8	378	Modeling and Performance Analysis of Germanium Based p-i-n Solar Cells
9	411	Challenges and Prospects of Cost-Effective Si-based Solar Cells Fabrication in Bangladesh

# Technical Session: B-2 Session Title: Electromagnetics / Microwave

Venue: Room No: 404, Tower Building - I Time: 02:30 - 04:30pm

Session Chair: Prof. M A Matin, Dept. of EEE, BUET

Ser No	Paper ID	Title of the paper
1	227	Design of a Circular Polarization Array Antenna Using Linear
1	227	Polarization Patches
2	231	Distinguishing Performance of 60-GHz Microstrip Patch Antenna for
2	231	Different Dielectric Materials
3	263	Rain Attenuation Prediction for Satellite Communications Link at Ku and
3	203	Ka Bands Over Bangladesh
4	286	EM Scattering from Conducting Bodies using Non-Orthogonal Locally-
4		One-Dimensional FDTD
5	288	Time Dependent Force Outside a Complex Magneto-Dielectric Particle:
3		Abraham-Minkowski Controversy
6	363	Comparative Study of Rectangular and Circular Microstrip Patch
0	303	Antennas in X Band
7	395	Segmentation Technique with ADI-FDTD for EM Propagation Modeling
/		in Electrically Large Structure
8	407	Comprehensive Study of On-Body Radio Channels at 2.45 GHz for
8	407	Different Human Test Subjects

#### **Technical Session: C-2**

**Session Title: RF and Wireless / Communications Networks** 

Venue: Room No: 201, Tower Building - I Time: 02:30 - 04:30pm

Session Chair: Prof. Mohammad Mahfuzul Islam, Dept. of CSE, BUET

Ser No	Paper ID	Title of the paper
1	141	An Eigen value and Superposition-Based Cooperative Spectrum Sensing for Cognitive Radio Networks
2	186	A Secure Communication Suite for Cluster-based Underwater Surveillance Networks
3	188	A Novel Idea of Spectrum Management (SM) using Spectrum Load Balancing (SLB) Algorithm
4	229	Delivery Likelihood Based Spraying in Delay Tolerant Networks
5	268	Performance Evaluation of Energy Efficient Routing Algorithm for Ad Hoc Network
6	329	Transport Layer Mobility Protocols: Issues, Challenges and a Comparitive Study
7	368	Multi-Priority and Trusted Multi-Path Selection Algorithm for Ad Hoc Network
8	375	Improvement of RFID tag detection using smart antenna for tag based school monitoring system

# Technical Session : A-3 Session Title : Digital Signal and Image Processing

Venue: Room No: 402, Tower Building - I Time: 04:45 - 06:45pm

Session Chair: Prof. Md. Saidur Rahman, Dept. of CSE, MIST

Ser No	Paper ID	Title of the paper
1	206	Response of Different Window Methods in Speech Recognition by Using
1	200	Dynamic Programming
2	244	Apodization Method in UWB SAR imaging
3	349	A novel robust blind digital watermarking scheme based on blocking
3	349	probability
4	399	Image Forgery Detection Using Gabor Filters And Dct
5	408	Removal of High Density Impulse Noise from Color Images Using an
3		Adaptive Fuzzy Filter
6	415	Speech Enhancement Based on Noise-Compensated Phase Spectrum
7	418	A Hierarchical Approach of Speech Emotion Recognition Based on
/		Entropy of Enhanced Wavelet Coefficients
8	419	Lip Contour Extraction Scheme Using Morphological Reconstruction
8		Based Segmentation

Technical Session: B-3
Session Title: Biomedical Engineering

Venue: Room No: 404, Tower Building - I Time: 04:45 - 06:45pm

Session Chair: Prof. Subrata Kumar Aditya, Dept. of APECE, DU

Ser No	Paper ID	Title of the paper
1	185	Design & Implementation of a Low Cost Blood Glucose Meter with High Accuracy
2	199	Implementation of Stimulating Environment for Lateral External Disability and Autism Treatment by Using Hand Grippers
3	223	Removing Power Line Interference from ECG Signal Using Adaptive Filter and Notch Filter
4	289	Optical Extraction of Unwanted Biological Cells at Gas-Liquid Interface Using Linearly Polarized Light Wave
5	300	Subband Correlation For EEG Data in the Dual Tree Complex Wavelet Transform Domain For the Detection of Epilepsy and Seizure
6	410	Neuromuscular Disease Classification Based on Mel Frequency Cepstrum of Motor Unit Action Potential
7	416	Motor Imagery EEG Signal Classification Scheme Based on Wavelet Domain Statistical Features
8	417	Automatic Bleeding Detection in Wireless Capsule Endoscopy Based on RGB Pixel Intensity Ratio

#### **Technical Session: C-3**

Session Title: Algorithms and Computation / Computer Graphics, Virtual
Reality / Computer Security / Security & Cryptography / Software Engineering

Venue: Room No: 201, Tower Building - I Time: 04:45 - 06:45pm

Session Chair: Gp Capt Md Afzal Hossain, Dept. of CSE, MIST

Ser No	Paper ID	Title of the paper
1	189	Implementation of Computer Vision to Detect Driver Fatigue or Drowsiness to Reduce the Chances of Vehicle Accident
2	198	Error Detection & Correction using Horizontal-Vertical-Diagonal-Shift Parity Method
3	216	Orthogonal Grid PointsetEmbeddings of Maximal Outerplanar Graphs
4	291	Improving the Non-filtering Steganographic Algorithm using LSB Verification Method
5	305	A Compare between Shor's Quantum Factoring Algorithm and General Number Field Sieve
6	377	An Easier Approach to Visible Edge Determination from Moving Viewpoint
7	374	Patients Management System using Fuzzy Logic: An easier and dynamic appointment system

## Technical Sessions, Day – 3, Saturday, 12th April, 2014

**Technical Session: A-4** 

Session Title: Nanodevices, Nanotechnology, and MEMS / VLSI Design and Fabrication

Venue: Room No: 402, Tower Building - I Time: 08:30 - 10:30am

Session Chair: Dr. Anisul Haque, Dept. of EEE, EWU

Ser No	Paper ID	Title of the paper
1	168	A Semi –Analytical Model for III-V Semiconductor Quantum Well Field Effect Transistors
2	190	Optical characterization of Intrinsic Poly Silicon Film for Photovoltaic Application on Sapphire and TiO2 Substrate by HWCVD
3	242	First-principles Calculations of Electronic, Optical and Elastic Properties of Y8CoIn3
4	312	A Novel Presentation of Reversible Logic Gate in Quantum-dot Cellular Automata (QCA)
5	317	Dependency of Heterojunction Transistors' Speed on Various Physical Parameters: A Comparative Study of SiGe&AlGaAs HBTs
6	394	Fabrication of Digitalized Spin Coater for Deposition of ZnO Thin Films
7	406	Simulation of Quantum Capacitance in Graphene Nanoribbons Considering Channel Width Variation

# Technical Session: B-4 Session Title: Power Electronics and Drives

Venue: Room No: 404, Tower Building - I Time: 08:30 - 10:30am

Session Chair: Prof. Abdur Rahim Mollah, Dept. of EEE, AUST

Ser No	Paper ID	Title of the paper
1	157	Implementation and Derivation of Working Formula of Three Phase AC Side Switched Active Filter Based Boost Rectifier
2	182	Design of a Brushless DC (BLDC) Motor Controller
3	184	Smoothening the Output Power of a Fixed Speed IG Based Wind Farm by Using Storage Device along with PMSG
4	237	Design and Implementation of One kilowatt Capacity Single Phase Grid Tie Photovoltaic Inverter
5	292	Design and Analysis of a Transformer-Less Single-Phase Grid-Tie Photovoltaic Inverter Using Boost Converter with Immittance Conversion Topology
6	304	Assessment and Performance Evaluation of Capacitive Property of Inductor and Inductive Property of Capacitor in Linear Circuit
7	328	Power Factor Corrected and Output Voltage Regulated Ĉuk Topology based AC-DC Converter
8	354	Performance Evaluation of a Micro-controller based Solar Powered Auto-rickshaw

#### **Technical Session: C-4**

Session Title: Artificial Intelligence and Machine Learning / Database Systems / Internet and Web Applications / ICT

Venue: Room No: 201, Tower Building - I Time: 08:30 - 10:30am

Session Chair: Prof. Muhammad Masroor Ali, Dept. of CSE, BUET

Ser No	Paper ID	Title of the paper
1	187	Learning and Evaluation of Blended Learning Approach for ICT
1	107	Undergraduate Students
2	192	A Probabilistic Approach to Support Self-Organizing Map(SOM)
2	192	Driven Facial Expression Recognition
3	246	Integrated land Information system to ensure the transparency and
3		availability of Information, in context of Bangladesh
4	248	Distributed Cache management architecture to reduce the internet
4		traffic by integrating browser and proxy caches
5	250	HELPING HAND -An efficient donation procedure based on mobile
3		banking
6	273	Proposed System Design for Deployment of an e-Learning System
0		in Rural Bangladesh
7	311	Web, Mobile and Computer Related Model to Bridging the

		Disability Digital Divide in Sri Lanka
8	341	A Robust Approach To The Recognition Of Text Based Bangla Road Sign
9	373	ICT in Sri Lankan Cinnamon Industry: Impact of Language Barriers and Digital Divide

Technical Session : A-5
Session Title : Bio-informatics

Venue: Room No: 402, Tower Building - I Time: 10:45 - 11:45 am

Session Chair: Dr. S. M. Mahbubur Rahman, Dept. of EEE, BUET

Ser No	Paper ID	Title of the paper
1	178	Human Face Recognition Using PCA based Genetic Algorithm
2	298	Face Recognition System using PCA-ANN Technique with Feature Fusion Method
3	324	Optimizing DNA Sequences using Tetra-nucleotide RankList
4	414	Palm-print Recognition Based on DCT Domain Statistical Features Extracted from Enhanced Image

### **Technical Session: B-5**

Session Title: Energy Conversion / High Voltage Engineering and Protection

Venue: Room No: 404, Tower Building - I Time: 10:45 - 11:45 am

Session Chair: Prof. Enamul Bashar, Dept. of EEE, BUET

Ser No	Paper ID	Title of the paper
1	196	Prospect of Combined Cycle Power Plant over Conventional Single
1		Cycle Power Plants in Bangladesh: A Case Study
2	211	HVDC over HVAC Power Transmission System : Fault Current
2	211	Analysis and Effect Comparison
	302	Impact study on a generation rich island and development of
3		frequency based auto load shedding scheme to improve service
		reliability of the island
4	303	The study of dependency of power system stability on system inertia
		constant for various contingencies

# Technical Session: C-5 Session Title: Smart Power Grid / Power Line Communication

Venue: Room No: 201, Tower Building - I Time: 10:45 - 11:45 am

Session Chair: Dr. Abdul Hasib Chowdhury, Dept. of EEE, BUET

Ser No	Paper ID	Title of the paper
1	278	Performance Analysis of a Power Line Communication System
1		with Multi-Carrier DS-CDMA
2.	279	Performance Analysis of a OFDM SISO Powerline Communication
2	219	System with Non-white Gaussian Channel Noise
3	361	Performance Analysis of Different Search Algorithms in
		Optimization of Power System Operation
	367	Performance Analysis of a Space-Frequency Block Coded OFDM
4		Wireless Communication System with MSK and GMSK
		Modulation
5	290	Performance Analysis of an OFDM Broadband Power Line
3	389	Communication (BPLC) System using Multipath Channel Models

### **Plenary Session-3**

Venue: Multipurpose Hall, Tower Building – I (10<sup>th</sup> floor) Time: 11:45 - 12:45 pm

Session Chair: Dr. Shah Alam, Dept. of EEE, BUET

<b>Keynote Session</b>	Name of Keynote Speaker	Topic
Plenary Talk-5	Prof. A B M Harun ur-Rashid	VLSI Technology

**Technical Session: A-6** 

Session Title: Embedded Systems / Robotics & Automation

Venue: Room No: 402, Tower Building - I Time: 2:30 - 4:30 pm

Session Chair: Dr. Kaushik Deb, Dept. of CSE, CUET

Ser No	Paper ID	Title of the paper
1	159	Automated Walk-in Assistant for the Blinds
2	177	Microcontroller Based Robotic Arm
3	225	Design of a Low Cost PC interface Six DOF Robotic Arm Utilizing Recycled Materials
4	230	Design and Implementation of SPI Bus Protocol with BuilTB - In- Self-Test Capability over FPGA
5	255	Vibration Data Acquisition and Visualization System using MEMS Accelerometer

6	Smart Meter Assisted Electric Energy Management Sch Power Distribution and Residential Customer Usage		
7	362	AHRS Based Stationary Detection Detection	

Technical Session: B-6
Session Title: Opto-electronics and Photonics

Venue: Room No: 404, Tower Building - I Time: 2:30 - 4:30 pm

Session Chair: Prof. Quazi Deen Mohd Khosru, Dept. of EEE, BUET

Ser No	Paper ID	Title of the paper	
1	166	Phase Modulated Circles in a Sunflower-type Circular Photonic	
		Crystal with Ultra-small Mode Area and High-Q Cavity	
2	169	Analysis of Dispersion and Confinement Loss in Photonic Crystal	
		Fiber	
3	221	Performance Analysis of a Designed 635nm Compressively Strained	
		Red Laser under Variant Temperature Condition	
4	262	Highly Birefringence Elliptical Hole Photonic Crystal Fiber for	
		Pressure Sensing	
5	265	Design Analysis of InN/InGaN Quantum Well Laser with GaN	
		Layers at 1320-1350 nm Wavelength	
6	284	Optimized Characteristics of a Designed Oxide Confied 420nm	
		MQW Blue-Violet Laser by Varying Differential Gain	
7	295	A square lattice photonic crystal fiber based surface plasmon	
		resonance sensor with high sensitivity	
8	369	Low Dispersion Nonlinear Polarization Maintaining Photonic Crystal	
		Fiber Using Hybrid Cladding	

### **Technical Session: C-6**

**Session Title: Wireless / Optical Communication** 

Venue: Room No: 201, Tower Building - I Time: 2:30 - 4:30 pm

Session Chair: Prof. A B M Siddique Hossain, Dept. of EEE, AIUB

Ser No	Paper ID	Title of the paper	
1	143	Analytical Error Rate Performance Evaluation of a Multi-Keyhole	
		Wireless MIMO Channel based on Largest Eigenvalue Distribution	
2	145	Performance Analysis of OFDM based Decode-and-Forward relay	
		over Nakagami fading channel	
3	346	Low-Complexity Blind Phase Noise Compensation in OFDM	
		Systems	
4	336	Crosstalk Analysis of a DWDM System with FBG-based Optical	
		Multi/De-multiplexer	
5	348	A New Modified Prime Codes for Higher User Capacity in Smart	
		Synchronous OCDMA Network	
6	422	Performance Analysis of a Free Space Optical Link in the Presence	
		of Pointing Errors with Space Diversity	

### **Plenary Session-4**

Venue: Multipurpose Hall, Tower Building – I (10<sup>th</sup> floor) Time: 04:45 - 06:30 pm

Session Chair: Dr. Farruk Ahmed, IUB

Keynote Session	Name of Keynote Speaker	Topic
Plenary Talk-6	Prof. Zhang Qishan	GNSS Overview
Plenary Talk-7	Prof. Md. Shorif Uddin	Enabling Biological Discoveries
3		Through Bio-Imaging Informatics