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Technical Sessions : ICECE 2010

Plenary Session: P1 Saturday (3:00PM-4:00PM), 18 December 2010

Venue: Council Bhaban, BUET

Renewable Energy Technologies: Photovoltaics

Speaker: Prof. Miroslav M. Begovic, Georgia Institute of Technology, Atlanta, USA

**Session Chair: Prof. Md. Saifur Rahman, Head, EEE Dept., BUET, Dhaka, Bangladesh
and Chair, Organizing Committee, ICECE 2010**

Plenary Session: P2 Saturday (4:15PM-5:15PM), 18 December 2010

Venue: Council Bhaban, BUET

Smart Power Grid

Speaker: Prof. Saifur Rahman, Virginia Tech, Arlington, Virginia, USA

Session Chair: Prof. S. Shahnawaz Ahmed, BUET, Dhaka, Bangladesh

Session: 1A1 Sunday (9:00AM-11:00AM), 19 December 2010, Room: Surma

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Session Chair: Prof. Satya Prasad Majumder, EEE Dept., BUET, Bangladesh

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Session Chair: Prof. Md. Aynal Haque, EEE Dept., BUET, Bangladesh

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Next Generation Mobile Communication System

Speaker: Prof. Ramjee Prasad, Aalborg University, Denmark

Session Chair: Prof. Satya Prasad Majumder, BUET, Dhaka, Bangladesh

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Control Theory and Applications

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

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Session Chair: Prof. S. Shahnawaz Ahmed, EEE Dept., BUET, Bangladesh

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Session Chair: Prof. Syed Kamrul Islam, The University of Tennessee, USA

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Session Chair: Prof. Md. Quamrul Ahsan, EEE Dept., BUET, Bangladesh

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

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Session Chair: Prof. M. Rusop, Universiti Teknologi MARA (UiTM), Malaysia

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Session Chair: Prof. M. Saif Islam, University of California, Davis, USA

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Session Chair: Prof. Kazi Mujibur Rahman, EEE Dept., BUET, Bangladesh

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Electrical Machines and Drives

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

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Session Chair: Prof. Md. Aynal Haque, EEE Dept., BUET, Bangladesh

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Session Chair: Prof. Mohammad Ali Choudhury, EEE Dept., BUET, Bangladesh

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Graph Theory and Computing
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Session Chair: Prof. M. Rezwan Khan, UIU, Bangladesh

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p221	Sensitivity Analysis of a Circularly Polarized U-Slot Microstrip Antenna	Md. Gaffar, Sajid Muhaimin Choudhury, Mohammad Asif Zaman, Md. Imran Momtaz, M. Shah Alam, and Md. Abdul Matin	546
p432	Design of an X band Aperture Matched Horn Antenna by Optimization of Back-lobe and Cross-Polarization Level	Sajid Muhaimin Choudhury, Md. Gaffar, Mohammad Asif Zaman and Md. Abdul Matin	550
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Information Technology

Session Chair: Prof. Md. Monirul Islam, CSE Dept., BUET, Bangladesh

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p355	Development of Morphological Rules for Bangla Root, Verbal Suffix and Primary Suffix for Universal Networking Language	Muhammad Firoz Mridha, Mohammad Nurul Huda, Chowdhury Mofizur Rahman, Jugal Krishna Das	570
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High-Mobility Semiconductor MOSFETs

Speaker: Prof. Anisul Haque, East West University, Dhaka, Bangladesh

Session Chair: Prof. M. M. Shahidul Hassan, BUET, Dhaka, Bangladesh

Session: 2A3 Monday (2:15PM-4:15PM), 20 December 2010, Room: Surma

Nanodevices, Nanotechnology and MEMS-III

Session Chair: Prof. Q. D. M. Khosru, EEE Dept., BUET, Bangladesh

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p123	Memristors Based on an Organic Monolayer of Molecules and a Thin Film of Solid Electrolytes	M. Saif Islam, Chad Johns, Long Do, Doug A. A. Ohlberg, Shih-Yuan Wang and R. Stanley Williams	761
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Communication and Wireless Systems-IV
Session Chair: Prof. B. M. Azizur Rahman, City University London, UK**

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p470	Impact of Inter-Carrier Interference (ICI) on SIMO OFDM System over Rayleigh Fading Channel	Tamanna Haque Nipa, Satya Prasad Majumder	598
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p486	Performance Proposition of Limited-Wavelength- Interchange Cross-Connects Considering Coherent and Incoherent Crosstalk	Md. Asif Iqbal, Md. Manzoor-E-Elahee, Abu Jahid, S.P. Majumder	610
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p494	Reduction of ICI in MIMO-OFDM System Using Self-Cancellation with Space Frequency Block Code	S. R. Sabuj and M. S. Islam	618
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Biomedical Engineering and Bioinformatics-II

Session Chair: Prof. A. B. M. Harun-Ur-Rashid, EEE Dept., BUET, Bangladesh

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p320	Smartphone-based low cost oximeter photoplethysmography	Ahsan H. Khandoker, Jim Black, Marimuthu Palaniswami	634
p399	Removal of Ring Artifacts in X-ray Micro Tomography using Polyphase Decomposition and Spline Interpolation	Emran Mohammad Abu Anas , Soo Yeol Lee and Md. Kamrul Hasan	638
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Networking

Session Chair: Prof. Md. Saidur Rahman, CSE Dept., BUET, Bangladesh

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p310	Finding the Performance Bottleneck of the IEEE802.11e EDCA Mechanism on Single Access Point (AP) Based WLAN Systems	N. M. Shafiu Kabir Chowdhury, Md. Shahriar Hussain, Farruk Ahmed	666
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Multimedia Systems and Applications

Session Chair: Prof. Abul Kashem Mia, ICT, BUET, Bangladesh

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p199	Automatic Extractions of Road Intersections from Satellite Imagery in Urban Area	Hossain Md. Ali, Ahmed Boshir, Islam Md. Ariful	686
p304	Investigating the Impact of Multimedia Applications on Multicore Cache Memory Subsystems	Manira S. Rani, Muhammad F. Mridha, Abu S. Asaduzzaman	690
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Communication and Wireless Systems-V

Session Chair: Prof. Md. Abdul Matin, EEE Dept., BUET, Bangladesh

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p539	Influence of XPM in Periodically Dispersion- Managed WDM Transmission Systems	Mohammad Faisal	710

p568	Analysis of Propagation Model Performance in WiMAX (IEEE 802.16e)-based Wireless Mobile Vehicular Networks	Nargis Begam, Fahim Rahman, Khawza I. Ahmed	714
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Neural Network and Fuzzy Logic

Session Chair: Dr. Shaikh Anowarul Fattah, EEE Dept., BUET, Bangladesh

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p159	STLF Using Neural Networks and Fuzzy for Anomalous Load Scenarios – A Case Study for Hajj	Suman Ahmmmed, Mohammad Asif Ashraf Khan, Md. Khairul Hasan, Ahmed Yousuf Saber, Mohammad Nurul Huda, Mohammad Zahidur Rahman	722
p361	Using Artificial Neural Network to Predict the Particle Characteristics of an Atmospheric Plasma Spray Process	T. A. Choudhury, N. Hosseinzadeh, C. C. Berndt	726

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Photovoltaic Devices

Session Chair: Prof. Shahidul Islam Khan, EEE Dept., BUET, Bangladesh

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p388	A Double Gate MOS Structure for Solar Photovoltaic Application	Mahmudur Rahman Siddiqui, Md. Ryyan Khan, Md. Rezwan Khan	734
p389	High Efficiency In _x Ga _{1-x} N-Based Quantum Well Solar Cell	Md. Sherajul Islam, Md. Shahid Iqbal, Md. Rejvi Kaysir, S. M. Hassan Muhmud, A. N. M Enamul Kabir, Ashraful G. Bhuiyan, A. Yamamoto	738
P595	Photoconductivity of Copper (I) Iodide (CuI) Thin Films for Dye-Sensitized Solar Cells	M.N. Amalina, A.R. Zainun, M. Rusop	757

Tutorial: Tuesday (9:30AM-1:00PM), 21 December 2010

By Prof. A. F. M. Anwar, University of Connecticut, USA

Heterostructure FETs: Modeling, Characterization and Analysis

Venue: Seminar Hall, CE Building (1st floor), BUET

Organizer: ICECE 2010 and IEEE EDS Bangladesh Chapter