

**TECHNICAL SESSIONS****DAY 1 – MONDAY, 13 DEC 2010**

Session 1 – 1 : RF and Microwaves  
 Date : Monday, 13 Dec 2010  
 Room : Putra 1  
 Session Chair : Assoc. Prof. Dr. Tiong Sieh Kiong

Time	Paper ID	Title
11.00 – 11.15	A2	<i>Dual-Band Bandpass Ring Filter</i>
11.15 – 11.30	A3	<i>Examination of Human Body Frequency Radiation</i>
11.30 – 11.45	A4	<i>Studies of Potential Carbon Coating for High Frequency Absorber</i>
11.45 – 12.00	A5	<i>A Free-Space Method for Measurement of Complex Permittivity of Double-Layer Dielectric Materials at Microwave Frequencies</i>
12.00 – 12.15	A6	<i>Sectorization of UHF RFID Tags using a Steerable Phased Antenna Array</i>
12.15 – 12.30	A7	<i>Loss Behavior of Microwave Transmission Line Structures on PZT Thin Films</i>

Session 2 – 1 : Computing  
 Date : Monday, 13 Dec 2010  
 Room : Putra 2  
 Session Chair : Dr. Johnny Koh Siaw Paw

Time	Paper ID	Title
11.00 – 11.15	C41	<i>The Impact of using IT in Pre-employment Screening</i>
11.15 – 11.30	C42	<i>A Framework for Improving the Effectiveness of IT in Employment Screening</i>
11.30 – 11.45	C43	<i>Enhanced Conjugate Gradient Methods for Training MLP-Networks</i>
11.45 – 12.00	C44	<i>Linguistic Stem Concatenation for Malay Large Vocabulary Continuous Speech Recognition</i>
12.00 – 12.15	C45	<i>TCP SYN Flood Detection based on Payload Analysis</i>
12.15 – 12.30	C46	<i>A Minimalist Approach in Creating a Guide for Visual Basic 2010</i>

Session 3 – 1 : Electronics and Circuit  
 Date : Monday, 13 Dec 2010  
 Room : Putra 3  
 Session Chair : Dr. Fazrena Azlee Bte. Hamid

Time	Paper ID	Title
11.00 – 11.15	G84	<i>Failure analysis using IDD current leakage and photo localization for gate oxide defect of CMOS VLSI</i>
11.15 – 11.30	G85	<i>Effect of Process Parameter Variations on Threshold Voltage in 45nm NMOS Device</i>
11.30 – 11.45	G87	<i>Innovative Ultrasonic Sensors-based 2D Keypad Using Chain Code Algorithm</i>
11.45 – 12.00	G88	<i>Design and Fabrication of Surface Acoustic Wave Resonators on Lithium Niobate</i>
12.00 – 12.15	G89	<i>Computation and Analysis of Output Error Probability for C17 Benchmark Circuit Using Bayesian Networks Error-Modeling</i>
12.15 – 12.30	G92	<i>Current Sensing Application by using Sigma Delta Modulator based in FPGA</i>

Session 1 – 2 : RF and Microwaves & Communication  
 Date : Monday, 13 Dec 2010  
 Room : Putra 1  
 Session Chair : Assoc. Prof. Dr. Norashidah Bte Md.Din

Time	Paper ID	Title
2.00 – 2.15	A8	<i>Frequency Shifting of Microstrip Ring Filter Using Open Stubs</i>
2.15 – 2.30	B9	<i>Investigation on Data Link Layer ARQ and HARQ Retransmission Rates</i>
2.30 – 2.45	B10	<i>Tail-Biting Massey Trellis Construction for Block Codes</i>
2.45 – 3.00	B12	<i>Performance Analysis of FEC/ARQ based on Convolutional Code</i>
3.00 – 3.15	B13	<i>Utilising MIMO for Location and Positioning in IMT-Advanced Systems</i>
3.15 – 3.30	B15	<i>Performance Comparison between Rectangular and Circular Patch Antenna Array</i>

Session 2 – 2 : Computing & Engineering Education  
 Date : Monday, 13 Dec 2010  
 Room : Putra 2  
 Session Chair : Dr. Yasmin Hanum Bte Md Thayoob

Time	Paper ID	Title
2.00 – 2.15	C47	<i>Anywhere On-Keyboard Password Technique</i>
2.15 – 2.30	C48	<i>Breast Cancer Prediction Based On Backpropagation Algorithm</i>
2.30 – 2.45	C49	<i>The Implementation Elliptic Curve Binary Finite Field (<math>F_{(2^m)}</math>) for the Global Smart Card</i>
2.45 – 3.00	C50	<i>An improved Artificial Immune System based on Antibody Remainder method for Mathematical Function Optimization</i>
3.00 – 3.15	C52	<i>MINI 11 - Microcontroller Development Board for SCL Approach</i>
3.15 – 3.30	C53	<i>Finite Persisting Sphere Genetic Algorithm (FPSGA)</i>

Session 3 – 2 : Electronics and Circuits & Power and Energy  
 Date : Monday, 13 Dec 2010  
 Room : Putra 3  
 Session Chair : Prof.Dr. Ibrahim Bin Ahmad

Time	Paper ID	Title
2.00 – 2.15	G95	<i>Performance Comparison Different Thickness of Non Oriented Electrical Steel Material Using Performance Chart from FEM Software</i>
2.15 – 2.30	G96	<i>The Impacts Of Stator Outside Diameters On Induction Motor Nameplates: Analysis By Using A Finite Element Method Of The Stimulated Software</i>
2.30 – 2.45	G97	<i>The Impacts Of Stator Materials On Induction Motor Nameplate For High Performance Motor: Analysis By Using A Finite Element Method Of The Stimulated Software</i>
2.45 – 3.00	98	<i>Harnessing Photo Voltaic Energy for Thermal Heating System</i>
3.00 – 3.15	G99	<i>Texturisation of Single Crystalline Silicon</i>
3.15 – 3.30	G100	<i>Detection of Acoustic Emission Signals from Partial Discharge Sources in Oil-Pressboard Insulation System</i>

Session 1 – 3 : Communication  
 Date : Monday, 13 Dec 2010  
 Room : Putra 1  
 Session Chair : Mr. Fairuz bin Abdullah

Time	Paper ID	Title
3.45 – 4.00	B18	<i>Efficient Dynamic Bandwidth Allocation for Upstream EPON with Global Priority</i>
4.00 – 4.15	B20	<i>Live Monitoring System for Ethernet Passive Optical Network Health Using Fiber Bragg Grating</i>
4.15 – 4.30	B21	<i>Study on the effect of CBR on packet marking in assured forwarding</i>
4.30 – 4.45	B22	<i>Development of Simulation model and analysis of location accuracy for observed time difference of arrival (OTDOA) positioning technique in third generation system</i>
4.45 – 5.00	B24	<i>A Permutation Based Technique for Channel Assignment Problem</i>

Session 2 – 3 : Computing & Control and Robotics  
 Date : Monday, 13 Dec 2010  
 Room : Putra 2  
 Session Chair : Dr. Chong Kok Hen

Time	Paper ID	Title
3.45 – 4.00	C54	<i>Vision-Based Flame Detection: Motion Detection &amp; Fire Color Pixel Analysis</i>
4.00 – 4.15	C55	<i>Statistical and Entropy Based Abnormal Motion Detection</i>
4.15 – 4.30	C56	<i>Surface Reconstruction from the Point Cloud - A Considerable Framework</i>
4.30 – 4.45	C57	<i>NTL Detection of Electricity Theft and Abnormalities for Large Power Consumers In TNB Malaysia</i>
4.45 – 5.00	D58	<i>Observer Design for Active Suspension System Using Sliding Mode Control</i>

Session 3 – 3 : Electronics and Circuits, Engineering Education & Image Processing  
 Date : Monday, 13 Dec 2010  
 Room : Putra 3  
 Session Chair : Prof. Neelakantan Prabhakaran

Time	Paper ID	Title
3.45 – 4.00	G101	<i>Design of Automatic Soil Humidity Control using Maximum Power Point Tracking Controller</i>
4.00 – 4.15	G102	<i>Simulation of Cadmium Telluride Solar Cells Structure</i>
4.15 – 4.30	G103	<i>The Three Phase Rectifier with Harmonic Injection Current</i>
4.30 – 4.45	G104	<i>Simulation and Construction of Single Phase Flying Capacitor Multilevel Inverter</i>
4.45 – 5.00	H106	<i>Effect of Vermiculite on Fire Protectiveness of Water-based Acrylic Fire Retardant Coating</i>
5.00 – 5.15	I107	<i>Computed Tomography Soft Tissue Restoration using Wiener Filter</i>

**DAY 2 – TUESDAY, 14 DEC 2010**

Session 1 – 4 : Communication & Computing  
 Date : Tuesday, 14 Dec 2010  
 Room : Putra 1  
 Session Chair : Assoc. Prof. Dr. Md Zaini Bin Jamaludin

Time	Paper ID	Title
9.00 – 9.15	B26	<i>A Framework for Automated Malcode Signatures Generation</i>
9.15 – 9.30	B27	<i>A Multidrop Optical Network Testbed for EPON Platform</i>
9.30 – 9.45	B28	<i>Coverage Performance Analysis of Genetic Algorithm Controlled Smart Antenna System</i>
9.45 – 10.00	B29	<i>Improving the Performance of Hierarchical Bandwidth Allocation for Upstream EPON</i>
10.00 – 10.15	B30	<i>A Feedforward Neural Network Compression with Near to Lossless Image Quality and Lossy Compression Ratio</i>
10.15 – 10.30	B31	<i>Enhancing Telemedicine Application: Feasible Solution from 802.16 MAC Layer</i>

Session 2 – 4 : Control and Robotics  
 Date : Tuesday, 14 Dec 2010  
 Room : Putra 2  
 Session Chair : Mr. Syed Khaleel Ahmed

Time	Paper ID	Title
9.00 – 9.15	D59	<i>Effect of Highway Ramp Separation on Traffic Flow: An Investigation Using Monte Carlo Simulation</i>
9.15 – 9.30	D60	<i>PID Controller Design for an Industrial Hydraulic Actuator with Servo System</i>
9.30 – 9.45	D61	<i>Application of particle swarm optimization approach to improve pid performance for a gas turbine temperature control system</i>
9.45 – 10.00	D62	<i>Stochastic subspace algorithm based on the orthogonal decomposition method for closed-loop system identification</i>
10.00 – 10.15	D63	<i>Discrete Time Sliding Mode Control using Multirate Output Feedback To Reduce Chattering</i>
10.15 – 10.30	D64	<i>Position Tracking Control of an Electro-hydraulic Servo System using Sliding Mode Control</i>

Session 3 – 4 : Image Processing & Power and Energy  
 Date : Tuesday, 14 Dec 2010  
 Room : Putra 3  
 Session Chair : Dr. Agileswari K. Ramasamy

Time	Paper ID	Title
9.00 – 9.15	I108	<i>Depth Image-Based Spatial Error Concealment for 3-D Video Transmission</i>
9.15 – 9.30	I109	<i>GLCM Texture Feature Reduction for EEG Spectrogram Image using PCA</i>
9.30 – 9.45	J110	<i>Control of High Voltage Direct Current (HVDC) Bridges for Power Transmission Systems</i>
9.45 – 10.00	J111	<i>Analysis of Fuzzy Logic Controller for Permanent Magnet Brushless DC Motor Drives</i>
10.00 – 10.15	J112	<i>A Hybrid PSO Technique for Damping Electro-Mechanical Oscillations in Large Power System</i>
10.15 – 10.30	J113	<i>Analysis of various PWM controls on single-phase Z-source inverter</i>

Session 1 – 5 : Communication  
 Date : Tuesday, 14 Dec 2010  
 Room : Putra 1  
 Session Chair : Mrs. Nurul Asyikin Binti Mohamed Radzi

Time	Paper ID	Title
11.00 – 11.15	B32	<i>Biphoton Generation Using Multistate Quantum Key Distribution Technique</i>
11.15 – 11.30	B35	<i>Fabrication of Optical Fiber Microprobe Using Electric Arc Heating and One-sided Pulling Technique</i>
11.30 – 11.45	B37	<i>3D RFID-Based Library Search System Application Development</i>
11.45 – 12.00	B38	<i>Stratiform and Convective Rain Discrimination for Equatorial Region</i>
12.00 – 12.15	B39	<i>Radio Frequency Radiation Evaluation of Transmitting Devices in VHF/UHF Band</i>
12.15 – 12.30	B40	<i>6GHz Coplanar Waveguide feeding T-Shape Slot Antenna using LTCC Technology</i>

Session 2 – 5 : Control and Robotics  
 Date : Tuesday, 14 Dec 2010  
 Room : Putra 2  
 Session Chair : Assoc. Prof. Dr. Farrukh Hafiz Nagi

Time	Paper ID	Title
11.00 – 11.15	D65	<i>Comparison Study in Various Controllers in Single Phase Inverter</i>
11.15 – 11.30	D67	<i>Path Optimization of Gantry Robot Using Genetic Algorithm Evolution</i>
11.30 – 11.45	D68	<i>Hybrid Artificial Immune System-Genetic Algorithm optimization based on mathematical test functions</i>
11.45 – 12.00	D69	<i>Aircraft Control Using Neural Network</i>
12.00 – 12.15	D71	<i>Algorithmic Precision Liquid Dispensing (APLD) System</i>
12.15 – 12.30	D72	<i>Simple Boost Converter using Timer IC 555 for Charging Capacitor Banks</i>

Session 3 – 5 : Power and Energy  
 Date : Tuesday, 14 Dec 2010  
 Room : Putra 3  
 Session Chair : Assoc. Prof. Dr. Izham Bin Zainal Abidin

Time	Paper ID	Title
11.00 – 11.15	J114	<i>An Improved Solar PV System for Malaysian Rural Electrification. Part I: Design And Testing Of Solar PV With Tracker And Reflectors</i>
11.15 – 11.30	J115	<i>Power Management Using Boost Converter for Wireless Sensor Network Application</i>
11.30 – 11.45	J116	<i>An Improved Solar PV System for Malaysian Rural Electrification. Part II: Implementation and Economic Analysis of Solar PV System With Tracker and Reflectors</i>
11.45 – 12.00	J117	<i>Optimal Placement of Voltage Sag Monitors Based on Monitor Reach Area and Sag Severity Index</i>
12.00 – 12.15	J18	<i>Considering on Return Stroke Current Wave Shape for Tall Objective Cases</i>
12.15 – 12.30	J119	<i>Fourier analysis of motor current for diagnosis of broken bars in squirrel-cage induction machines</i>

Session 2 – 6 : Control & Robotics  
 Date : Tuesday, 14 Dec 2010  
 Room : Putra 1  
 Session Chair : Dr. Cheah Cheng Lai

Time	Paper ID	Title
2.00 – 2.15	D73	<i>Identification of Co Current Plate Heat Exchanger Model HE158C</i>
2.15 – 2.30	D74	<i>Computer Vision Approach for Robotic Polishing Application using Artificial Neural Networks</i>
2.30 – 2.45	D75	<i>Modeling of Heat and Moisture Transfer in Building Using RLF Method</i>
2.45 – 3.00	D76	<i>Effect of Magnet Size on Torque Characteristic of Three Phase Permanent Magnet Brushless DC Motor</i>
3.00 – 3.15	D77	<i>Effects of Mechanical Power Fluctuation on Power System Stability</i>
3.15 – 3.30	E78	<i>Investigation on the Nonlinear Parameters of a Photonic Crystal Fiber By Four-wave Mixing</i>

Session 2 – 7 : Lasers and Optics & Signal Processing  
 Date : Tuesday, 14 Dec 2010  
 Room : Putra 2  
 Session Chair : Dr. Yap Keem Siah

Time	Paper ID	Title
2.00 – 2.15	E79	<i>A Stable Single-line Erbium-doped Fiber Laser for High Pressure Measurement using Fiber Bragg Grating</i>
2.15 – 2.30	F80	<i>Fast and noise-tolerant method of ECG beats classification using wavelet features and fractal dimension</i>
2.30 – 2.45	F81	<i>Online PD Detection Counting System Using Real Time ADC in Microcontroller PIC 16F877A and FPGA Technology</i>
2.45 – 3.00	F82	<i>EEG Pattern of Smokers for Theta, Alpha and Beta Band Frequencies</i>
3.00 – 3.15	F83	<i>Real-Time Implementation of a Fuzzy Inference System for Banana Grading using DSP TMS320C6713 Platform</i>