

2011 International Conference on Electrical, Control and Computer Engineering

(INECCE 2011)

**Kuantan, Malaysia
21 – 22 June 2011**



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TECHNICAL PROGRAM

TUESDAY , (21ST JUNE 2011) – DAY 1

Room: Ballroom

Keynote Speaker 1 (9:00 am – 10:00 am)

Dr. M.O. Tokhi
University of Sheffield
Title: *Control of Noise and Vibration*

Parallel Session 1 (11:00 am – 1.00 pm)

B1: Biomedics

Room: Meranti 3A

Chairs: Gurpreet Singh (Chandigarh Group of Colleges, Punjab, India), Fahmi Samsuri (Universiti Malaysia Pahang, UMP)

11:00 am: INECCE2011- 71

Distributed Technique Applied for Classification of Human Protein Class

Shivani Kang, Amardeep Kang, Gurpreet Singh (Chandigarh Group of Colleges, Punjab, India)

11:20 am: INECCE2011- 81

Automatic Retinal Vessel Tortuosity Measurement using Curvature of Improved Chain Code

Danu Onkaew, Rashmi Turior, Bunyarit Uyyanonvara (International Institute of Technology Thammasat University, Pathum Thani, Thailand), Nishihara Akinori (The Center for Research and Development of Educational Technology, Meguro-ku, Tokyo, Japan), Chanjira Sinthanayothin (National Electronics and Computer Technology Center, Pathumthani, Thailand)

11:40 am: INECCE2011- 111

A UWB Imaging System to Detect Early Breast Cancer in Heterogeneous Breast Phantom

Saleh Alshehri, Adznan Jantan, R.S.A. Raja Abdullah, Rozi Mahmud (Universiti Putra Malaysia, UPM), Sabira Khatun (Universiti Malaysia Pahang, UMP), Zaiki Awang (Universiti Teknologi MARA, UITM)

12:00 pm: INECCE2011- 167

The Qualitative and Quantitative Evaluation of Enhanced Dental Radiographs

Siti Arpah Bt Ahmad, Mohd Nasir Taib, Noor Elaiza A. Khairi (Universiti Teknologi MARA, UITM), Haslina Taib (Universiti Sains Malaysia, USM)

12:20 pm: INECCE2011- 168

Biochip development using Nanoimprint Lithography (NIL) and metallic thermal evaporation techniques for biological cells manipulation using DEP

Fahmi Samsuri (Universiti Malaysia Pahang, UMP), Maan M Alkaisi (University of Canterbury, Christchurch, New Zealand), John J Evans (University of Otago, Christchurch, New Zealand)

12:40 pm: INECCE2011- 196

Preliminary Study of Pneumonia Symptoms Detection Method using Cellular Neural Network

Azian Azamimi Abdullah and Norafifah Md Posdzi (Universiti Malaysia Perlis, UniMAP), Yoshifumi Nishio (University of Tokushima, Japan)

PED1: Power Electronics and Drives

Room: Meranti 3B

Chairs: R. Baharom (Universiti Teknologi MARA, UITM), M.R.Ghazali (Universiti Malaysia Pahang, UMP)

11:00 am: INECCE2011- 20

Advanced Single-Phase AC-DC Converter Using Single-phase Matrix Converter Topology

R. Baharom, N.R. Hamzah, and M.K. Hamzah

11:20 am: INECCE2011-37

Special Designed Universal Power Switching Generator for Power Electronics Studies

Rosnazri Ali, Ismail Daut, T.M. Nizar T. Mansur, Nor Hanisah Baharudin, Irwanto Misrun (Universiti Malaysia Perlis, UniMAP), Soib Taib (Universiti Sains Malaysia, USM)

11:40 am: INECCE2011-65

Zig Zag Transformer performance analysis on harmonic reduction in distribution load

S. Ranjith Kumar, S. Surendhar, Ashish Negi and P. Raja (National Institute of Technology, Tiruchirappalli, TamilNadu, India)

12:00 pm: INECCE2011-118

A Voltage Controller in Photo-Voltaic System without Battery Storage for Stand-Alone Applications

S. Senthil Kumar, Ganesh Dharmireddy, P. Raja, S. Moorthi (National Institute of Technology, Tiruchirappalli, Tamil Nadu, India)

12:20 pm: INECCE2011- 145

Sensorless Current Sharing in Digitally Controlled Multiphase Buck DC-DC Converters

Wei Du, Yuanyuan Tao, Zhiyang Chen, Cong Wang (China University of Mining and Technology, Beijing, China)

12:40 pm: INECCE2011-176

Power Electronics Converter with Marx Generator Configuration based PEF for Liquid Food Sterilization

S.A. Ghani, W.I. Ibrahim, M.R. Ghazali (Universiti Malaysia Pahang, UMP), N.A. Azli (Universiti Teknologi Malaysia, UTM)

PS1: Power System Engineering

Room: Ramin 1

Chairs: Mohd Herwan Sulaiman (Universiti Malaysia Perlis, UNIMAP), Omar Aliman (Universiti Malaysia Pahang, UMP)

11:00 am: INECCE2011- 43

Power Quality Improvement of Bangladesh Power System Using Shunt Compensation Technique.

Nahid-Al-Masood, S.R. Deeba, Hamidur Rahman (BUET, Dhaka, Bangladesh), Md. Nazmus Shahadat (IIUC, Dhaka, Bangladesh), Shahriar Ahmad, G.A.K. Biswas, A.U. Elahi, N.M. Zakaria (BRAC University, Dhaka, Bangladesh)

11:20 am: INECCE2011- 46

Tracing the Real Power Transfer of Individual Generators to Loads Using Least Squares Support Vector Machine with Continuous Genetic Algorithm.

Mohd Wazir Mustafa, Saifulnizam Abd. Khalid (Universiti Teknologi Malaysia, UTM), Herwan Sulaiman, Siti Rafidah Abd Rahim (Universiti Malaysia Perlis, UniMAP), Omar Aliman (Universiti Malaysia Pahang, UMP), Hussain Shareef (Universiti Kebangsaan Malaysia, UKM)

11:40 am: INECCE2011- 49

Power Systems Voltage Stability Enhancement Using Nonlinear Controller

Alireza Roosta (Shiraz University of Technology, Shiraz, Iran), Davood Amiri (Shiraz University of Technology, Shiraz, Iran) ~~XXXXX~~ I

12:00 pm: INECCE2011- 79

Determining Optimal Location of Static Var Compensator by Means of Genetic Algorithm

M. Karami, N. Mariun and M.Z.A. Ab Kadir (Universiti Putra Malaysia, UPM) ~~XXXXX~~ G

12:20 pm: INECCE2011- 86

Study on the Electromagnetic Force Affected by Short-Circuit Current in Vertical and Horizontal Arrangement of Busbar System

Farhana Mohamad Yusop, Mohamad Kamarol Mohd Jamil, Dahaman Ishak and Syafrudin Masri (Universiti Sains Malaysia, USM) ~~XXXXX~~ I

12:40 pm: INECCE2011- 115

Optimal Location of PSS Using Improved PSO with Chaotic Sequence

Mahdiyeh Eslami, Hussain Shareef, Azah Mohamed, Mohammad Khajezadeh (Universiti Kebangsaan Malaysia, UKM) ~~XXXXX~~ H

HVPG1: High Voltage and Power Generation

Room: Ramin 2

Chairs: H. Shareef (Universiti Kebangsaan Malaysia, UKM), W. I. Ibrahim (Universiti Malaysia Pahang, UMP)

11:00 am: INECCE2011- 38

The Studies of the Line-Lightning Performance of Unshielded Distribution Lines

Asnawi Mohd Busrah and Malik Mohamad (TNB Research Sdn. Bhd.) ~~XXXXX~~ J

11:20 am: INECCE2011- 97

Breakdown Characteristics of RBDPO and Soybean Oil Mixture for Transformer Application

Kiasatina and Mohamad Kamarol (Universiti Sains Malaysia, USM), M. Zuhilmey and Y.A. Arief (Universiti Teknologi Malaysia, UTM) ~~XXXXX~~ E

11:40 am: INECCE2011- 155

Measuring Temperature Rise at Transformer Core under Nonlinear Loading

Syafrudin Masri, Muhammad Mokhzaini Azizan, Mohamad Kamarol Mohd Jamil (Universiti Sains Malaysia, USM) ~~XXXXX~~ E

12:00 pm: INECCE2011- 163

Impact of System Parameters on the Penetration of Lightning Surges into Low Voltage Systems

H. Shareef, A. Mohamed (Universiti Kebangsaan Malaysia, UKM), S.N. Khalid, M.W. Mustafa (Universiti Teknologi Malaysia, UTM) ~~AWWFFH~~

12:20 pm: INECCE2011- 189

Measurement of Vertical Electric Fields from Lightning Flashes using Parallel Plate Antenna

W.I. Ibrahim, M.R. Ghazali, S.A. Ghani (Universiti Malaysia Pahang, UMP), Zulkurnain Abdul Malek (Universiti Teknologi Malaysia, UTM) ~~AWWFFJ~~

12:40 pm: INECCE2011- 203

Study on Temperature Uniformity of Thermal Spreader Integration with Microcombustor for Thermoelectric Power Generator

Othman Sidek, Mohammad Zulfikar Ishak, Muhamad Azman Miskam, Mohd Azmier Ahmad (Universiti Sains Malaysia, USM), Mohd Shawal Jadin (Universiti Malaysia Pahang, UMP) ~~AWWFG~~

Parallel Session 2 (2:00 pm – 3.40 pm)

PED2: Power Electronics and Drives

Room: Meranti 3A

Chairs: Sze Sing Leel (University Sains Malaysia, USM), M.S. Bakar (Universiti Malaysia Pahang, UMP)

2:00 pm: INECCE2011- 66

A Digitally Tuned Resonant Capacitance Control with Narrow Range Frequency Modulation for ZCS High Voltage X-ray Power Supply

Sze Sing Lee, Shahid Iqbal, and Mohamad Kamarol (University Sains Malaysia, USM) ~~AWWFHE~~

2:20 pm: INECCE2011-147

Torque Ripple Reduction of BLDC Motors by Modifying the Non-Commutating Phase Voltage

Y. Sangsefidi, S. Ziaeinejad, A. Shoulaie (Iran University of Science and Technology, Tehran, Iran) ~~AWWFH~~

2:40 pm: INECCE2011-148

Z-Source Inverter Pulse Width Modulation: A survey

M.S. Bakar, N.A. Rahim, K.H. Ghazali, A.H.M. Hanafi (Universiti Malaysia Pahang, UMP)

3:00 pm: INECCE2011-186

A High Power LED Driver with Class D ZVS Series Resonant Converter

Pakpoom Chansri, Nongnuch Noicharoen and Kritsada Phetphoi (King Mongkut's University of Technology Thonburi, Bangkok, Thailand)

3:20 pm: INECCE2011-191

Parameter Determination of 0.5 HP Induction Motor Based on Load Factor Test-A Case Study

I. Daut, N. Gomesh, M. Irwanto, Y. Yanawati, S. Nor Shafiqin, Y.M. Irwan (Universiti Malaysia Perlis, UniMAP)

AEPE1: Alternative Energy and Power Electronics

Room: Meranti 3B

Chairs: Mohammad Zulfikar Ishak (Universiti Sains Malaysia, USM), N. Jaalam (Universiti Malaysia Pahang, UMP)

2:00 pm: INECCE2011- 73

Renewable Energy from UTP Water Supply

T. H. Ching, T. Ibrahim, F.I.A. Aziz, N.M. Nor

2:20 pm: INECCE2011- 95

Design and Simulation of SOI-MEMS Electrostatic Vibration Energy Harvester for Micro Power Generation

Othman Sidek, Muhammad Afif Khalid, Mohammad Zulfikar Ishak, Muhamad Azman Miskam (Universiti Sains Malaysia, USM)

2:40 pm: INECCE2011- 112

Design of Smart Energy Level Controller for UMP Buildings

Nidzamuddeen Ishak, Ahmed N. Abdalla, Noraziah Ahmad, Tan Chien Siong, Hai Tao (Universiti Malaysia Pahang, UMP)

3:00 pm: INECCE2011- 170

A Neuro-fuzzy Approach for Stator Resistance Estimation of Induction Motor

N. Jaalam, A.M.A. Haidar, N.L. Ramli, N.L. Ismail, A.S.M. Sulaiman (Universiti Malaysia Pahang, UMP)

3:20 pm: INECCE2011- 190

Improvement of Induction Machine Performance using Power Factor Correction

I. Daut, Y.M. Irwan, M. Irwanto (Universiti Malaysia Perlis, UniMAP), I. Safwati, N. Gomesh, M. Ezzani, Risnidar C.B. (University Malaya, UM)

MR1: Mechatronics and Robotics

Room: Ramin 1

Chairs: Low Tang Jung (Universiti Teknologi Petronas, UTP), Hamzah Ahmad (Universiti Malaysia Pahang, UMP)

2:00 pm: INECCE2011- 34

Development of an Automatic Parallel Parking System for Nonholonomic Mobile Robot

Fairus M.A., Sy. Najib Sy. Salim, Irma Wani Jamaludin, M. Nizam Kamarudin (Universiti Teknikal Malaysia Melaka, UTeM)

2:20 pm: INECCE2011- 60

Detection and Following of Human legs using the SVDD (Support Vector Data Description) scheme for a Mobile Robot with a Single Laser Range Finder

Yoonkyu Yoo, Woojin Chung (Korea University, Seoul, Korea)

2:40 pm: INECCE2011- 72

Covariance Inflation Efficiency in H1 Filter Based SLAM

Hamzah Ahmad (Universiti Malaysia Pahang, UMP), Toru Namerikawa (Keio University, Kohoku-ku, Yokohama)

3:00 pm: INECCE2011- 80

Underwater Wireless Network Energy Efficiency and Optimal Data Packet Size

Low Tang Jung, Azween B. Abdullah (Universiti Teknologi Petronas, UTP)

3:20 pm: INECCE2011- 182

Design and Simulation of Magnetic Coil for Steering of Cyclotron Proton Beam

Maslina Mohd Ibrahim (Malaysian Nuclear Agency, Kajang, Malaysia)

IP1: Image Processing

Room: Ramin 2

Chairs: Eng Swee Kheng (University Sains Malaysia, USM), Y. Abdul Wahab (Universiti Malaysia Pahang, UMP)

2:00 pm: INECCE2011- 68

Application of Transmission-Mode Ultrasonic Tomography to Identify Multiphase Flow Regime

Y. Abdul Wahab, M.A. Ahmad (Universiti Malaysia Pahang, UMP), R. Abdul Rahim, M.H. Fazalul Rahiman (Universiti Teknologi Malaysia, UTM) ~~WWW~~

2:20 pm: INECCE2011- 83

A Fast and Reliable Algorithm for Video Noise Estimation Based on Spatio-Temporal Sobel Gradients

Shih-Ming Yang, Shen-Chuan Tai (National Cheng Kung University, Taiwan) ~~WWW~~FG

2:40 pm: INECCE2011- 96

Road Sign Detection and Recognition System for Real-Time Embedded Applications

Siti Sarah Md Sallah, Fawnizu Azmadi Hussin, Mohd Zuki Yusoff (Universiti Teknologi Petronas, UTP) ~~WWW~~CF

3:00 pm: INECCE2011- 109

Fabric Authenticity Method using Fast Fourier Transformation Detection

Norislina Ismail, W. Md. Syahrir, Jasni M. Zain, Hai Tao (Universiti Malaysia Pahang, UMP) ~~WWW~~GH

3:20 pm: INECCE2011- 119

Range Estimation for Robot arm Applications using Image Segmentation and Curve Fitting Tool

Eng Swee Kheng , Anwar Hasni Abu Hassan, Ali Ranjbaran, Ting Shyue Siong (Universiti Sains Malaysia, USM) ~~WWW~~GG

Parallel Session 3 (4:00 pm – 5.40 pm)

AEPE2: Alternative Energy and Power Electronics

Room: Meranti 3A

Chairs: M. Irwanto (Universiti Malaysia Perlis, UniMAP), M.I.M. Rashid (Universiti Malaysia Pahang, UMP)

4:00 pm: INECCE2011- 117

Photovoltaic Power System Simulation for Small Industry Area

M. Anwari (Umm Al-Qura University, Saudi Arabia), M.I.M. Rashid (Universiti Malaysia Pahang, UMP), H.I. Hui, T.W. Yee, C.K. Wee (Universiti Teknologi Malaysia, UTM) ~~WWW~~GH

4:20 pm: INECCE2011- 166

Study on Improving Electric Vehicle drive range using Solar Energy

Mohamad Azlan Hussin, Ahmed N. Abdalla, Ruhaizad Ishak, Rosmadi Abdullah, Zailini Mohd Ali (Universiti Malaysia Pahang, UMP) ~~XXXX~~ G

4:40 pm: INECCE2011- 178

Multi-Frequency Energy Harvesting Using Thick-Film Piezoelectric Cantilever

Kok Swee-Leong, Norizan Mohamad, David Yap Fook Weng (Universiti Teknikal Malaysia Melaka, UTeM), Chen Soo Kien (Universiti Putra Malaysia, UPM), Dee Chang Fu (Universiti Kebangsaan Malaysia, UKM) ~~XXXX~~ G

5:00 pm: INECCE2011- 184

Clear Sky Global Solar Irradiance on Tilt Angles of Photovoltaic Module in Perlis, Northern Malaysia

I. Daut, M. Irwanto, Y.M. Irwan, N. Gomesh, N.S. Ahmad (Universiti Malaysia Perlis, UniMAP) ~~XXXX~~ G

5:20 pm: INECCE2011- 197

Study of Inverter Design and Topologies for Photovoltaic System

S.S. Shema, I. Daut, M. Irwanto, Shatri C., N. Syafawati, N. Ashbahani (Universiti Malaysia Perlis, UniMAP) ~~XXXX~~ G

I1: Instrumentations

Room: Meranti 3B

Chairs: Najidah Hambali (Universiti Teknologi MARA, UITM)), Muhammad Sharfi Najib (Universiti Malaysia Pahang, UMP)

4:00 pm: INECCE2011- 7

Non-Intrusive Electrodynamic Characteristic Measurement for Circular Shape Electrode

M.R. Ghazali, W.I. Ibrahim (Universiti Malaysia Pahang, UMP), M.F. Rahmat (Universiti Teknologi Malaysia, UTM) ~~XXXX~~ G

4:20 pm: INECCE2011- 61

Inhomogeneous Mass Flow Rate Measurement of Solid Particles Using a Single Electrostatic Sensor

Mohd Fua'ad bin Rahmat, Teimour Tajdari (Universiti Teknologi Malaysia, UTM) ~~XXXX~~ F

4:40 pm: INECCE2011- 74

Measurement of Particle Size Using Electrostatic Sensors

Fahisal Abdullah (Universiti Malaysia Perlis, UniMAP), Mohd Fua'ad bin Rahmat (Universiti Teknologi Malaysia, UTM) ~~XXXX~~ G

5:00 pm: INECCE2011- 78

Automatic Detection Computer-based (ADCob) System for Temperature Measurement Calibration of RTD

Najidah Hambali, Shahrizal Saat, Mohd Syakirin Ramli, Mustaqim Hazmi (Universiti Malaysia Pahang, UMP) ~~XXXX~~ F

5:20 pm: INECCE2011- 164

Classification of Agarwood Grades Using ANN

Muhammad Sharfi Najib (Universiti Malaysia Pahang, UMP), Mohd Nasir Taib (Universiti Teknologi MARA, UITM), Nor Azah Mohd Ali, Mohd Nasir Mat Arip, Abd. Majid Jalil (Forest Research Institute Malaysia) ~~XXXX~~ I

CSP1: Communications and Signal Processing

Room: Ramin 1

Chairs: Muhammad Arshad (Universiti Teknologi Petronas, UTP), N.W. Arshad (Universiti Malaysia Pahang, UMP)

4:00 pm: INECCE2011- 15

Adaptive Sub-Optimal Energy Detection Based Wideband Spectrum Sensing for Cognitive Radios

Sajjad Imani, Amin Banitalebi Dehkordi, Mahmoud Kamarei (University of Tehran, Tehran, Iran) ~~XXXX~~ H

4:20 pm: INECCE2011- 42

Routing Strategies in Hierarchical Cluster Based Mobile Wireless Sensor Networks

Muhammad Arshad, Naufal M. Saad, Nidal Kamel, Nasrullah Armi (Universiti Teknologi Petronas, UTP) ~~XXXX~~ I

4:40 pm: INECCE2011- 76

Wave Propagation and Energy Model for Dynamic Wireless Body Area Networks

Muhammad Shuja Uddin, Noohul Basheer Zain Ali, Nor Hisham Hamid (Universiti Teknologi Petronas, UTP) ~~XXXX~~ JH

5:00 pm: INECCE2011- 151

Speech Processing for Makhraj Recognition The Design of Adaptive Filter for Noise Removal

N.W. Arshad, S.N. Abdul Aziz, R. Hamid, R. Abdul Karim, F. Naim, N.F. Zakaria (Universiti Malaysia Pahang, UMP) ~~XXXX~~ JJ

5:20 pm: INECCE2011- 161

Adaptive Neuro-controller based on HMLP Network for InnoSAT Attitude Control

S.M. Sharun, M.Y. Mashor, M.N. Norhayati, Sazali Yaacob, Muhyi Yaakob, Wan Nurhadani Wan Jaafar (Universiti Malaysia Perlis, UniMAP) ~~XXXX~~ E

SD1: Software Development

Room: Ramin 2

Chairs: Mohammad Moshee Uddin (International Islamic University Malaysia, UIAM), S. Khatun (Universiti Malaysia Pahang, UMP)

4:00 pm: INECCE2011- 128

A Random Search Based Effective Algorithm for Pairwise Test Data Generation

S. Khatun, K.F. Rabbi (Universiti Malaysia Pahang, UMP), C.Y. Yaakub, M.F.J. Klaib (Jadara University Jordan) ~~XXXX~~ F€

4:20 pm: INECCE2011- 150

Pseudocode Programming of Human-Computer Interaction in Collaborative Designing

Petr Sosnin (Ulyanovsk State Technical University, Severny Venetc, Ulyanovsk, Russia) ~~XXXX~~ FÍ

4:40 pm: INECCE2011- 169

Comprehensive QoS Analysis of MIPL Based Mobile IPv6 Using Single VS. Dual Interfaces

Mohammad Moshee Uddin, Al-Sakib Khan Pathan (International Islamic University Malaysia, UIAM), Shariq Haseeb (MIMOS Berhad), Mohiuddin Ahmed (Jazan University, Saudia Arabia) ~~XXXX~~ GF

5:00 pm: INECCE2011- 193

New Code for Spectral-amplitude Coding Optical Code-division Multiple-access Systems

Thanaa H. Abd, S.A. Aljunid, Hilal A. Fadhil, R.B. Ahmad, M.A. Rashid (Universiti Malaysia Perlis, UniMAP) ~~XXXX~~ G

5:20 pm: INECCE2011- 198

On the PAPR Reduction: A ZCMT Precoding Based Distributed-OFDMA Uplink System

Imran Baig and Varun Jeoti (Universiti Teknologi Petronas, UTP) ~~XXXX~~ HG

Keynote Speaker 2 (8:30 am – 9:30 am)

Prof. David Zhang
Chair Professor, Hong Kong Polytechnic University
Title: *Biometrics : New Challenges and Developments*

Keynote Speaker 3 (9:30 am – 10:30 am)

Prof Datuk Ir (Dr)Hj Ahmad Zaidee Laidin
Visiting Professor, Universiti Malaysia Pahang
Title: *Alternative Energy : Nuclear Plant Issues*

Parallel Session 4 (11:00 am – 1.00 pm)

ISO1: Intelligent Systems and Optimization

Room: Meranti 3A

Chairs: Ai Hui Tan (Multimedia University, MMU), Reza Ezuan Samin (Universiti Malaysia Pahang, UMP)

11:00 am: INECCE2011- 2

Forecasting Sunspot Numbers with Feedforward Neural Networks (FNN) using ‘Sunspot NeuralForecaster’ System

Reza Ezuan Samin, Muhammad Salihin Saealal (Universiti Malaysia Pahang, UMP), Azme Khamis, Syahirbanun Isa (Universiti Tun Hussein Onn Malaysia, UTHM)

11:20 am: INECCE2011- 6

Solutions to the Well-posedness Problem in Direction-dependent Systems

Ai Hui Tan (Multimedia University, MMU)

11:40 am: INECCE2011- 19

On the Equilibrium Points, Boundedness and Positivity of a SVEIRS Epidemic Model Under Constant Regular Vaccination

M. De la Sen, S. Alonso-Quesada, R. Nistal (UPV/EHU Campus of Leioa, Bizkaia, Spain), A. Ibeas (Universitat Autònoma de Barcelona, Barcelona, Spain)

12:00 pm: INECCE2011- 28

Identification of the Static Characteristics of a Multizone Furnace

Timothy Tzen Vun Yap, Ai Hui Tan (Multimedia University, MMU)

12:20 pm: INECCE2011- 75

DNA Words Based on an Enhanced Algorithm of Multi-objective Particle Swarm Optimization in a Continuous Search Space

Krishna Veni Selvan, Mohd Saufee Muhammad, Sharifah Masniah Wan Masra (Universiti Malaysia Sarawak, UNIMAS), Zuwairie Ibrahim, Kian Sheng Lim (Universiti Teknologi Malaysia, UTM) ~~XXXXX~~ F

12:40 pm: INECCE2011- 116

Predicting Material Removal Rate of Electrical Discharge Machining (EDM) using Artificial Neural Network for High Igap current

Trias Andromeda, Azli Yahya, Nor Hisham, Kamal Khalil, Ade Erawan (Universiti Teknologi Malaysia, UTM) ~~XXXXX~~ F

MR2: Mechatronics and Robotics

Room: Meranti 3B

Chairs: Abdul Rashid Husain (Universiti Teknologi Malaysia, UTM), Maziyah Mat Noh (Universiti Malaysia Pahang, UMP)

11:00 am: INECCE2011- 153

Eigenspace Technique in Stereo Vision Matching Processing for Autonomous Navigation

Ali Ranjbaran, Anwar Hasni Abu Hassan, Eng Swee Kheng (Universiti Sains Malaysia, USM) ~~XXXXX~~ F

11:20 am: INECCE2011- 172

A Review on Control Strategies for Passenger Car Intelligent Suspension System

Noor H. Amer, Rahizar Ramli, Wan Nor Liza Mahadi (University of Malaya, UM), Mohd.Azman ZainulAbidin (PROTON Headquarters, Shah Alam, Malaysia) ~~XXXXX~~ F

11:40 am: INECCE2011- 181

Modeling of USM Underwater Glider (USMUG)

Maziyah Mat Noh, Mohd Rizal Arshad, Rosmiwati Mohd Mokhtar, USM Robotics Research (Universiti Sains Malaysia, USM) ~~XXXXX~~ G

12:00 pm: INECCE2011- 201

PID Implementation of Heating Tank in Mini Automation Plant Using Programmable Logic Controller (PLC)

Reza Ezuan Samin, Lee Ming Jie, Mohd. Anwar Zawawi (Universiti Malaysia Pahang, UMP) ~~XXXXX~~ F

12:20 pm: INECCE2011- 202

Static Sliding Mode Controller For Permanent Magnet Stepper Motor With Disturbances

Mohd Badril Nor Shah, Abdul Rashid Husain, Mohamad Noh Ahmad (Universiti Teknologi Malaysia, UTM) ~~XXXX~~ HJ

CS1: Control Systems

Room: Ramin 1

Chairs: Dmitry S. Biryukov (Saint-Petersburg State University of Information Technologies, Mechanics and Optics, Saint-Petersburg, Russia), M.A. Ahmad (Universiti Malaysia Pahang, UMP)

11:00 am: INECCE2011- 40

Fuzzy Logic based Cycle-to-Cycle Control of FESinduced Swinging Motion

B.S.K.K. Ibrahim (University Tun Hussein Onn, UTHM), M.O. Tokhi, M.S. Huq and S.C. Gharooni (University of Sheffield, Sheffield, United Kingdom) ~~XXXX~~ UI

11:20 am: INECCE2011- 47

Classical Angular Tracking and Intelligent Anti-sway Control for Rotary Crane System

M.A. Ahmad, M.S. Saealal, M.A. Zawawi, R.M.T. Raja Ismail (Universiti Malaysia Pahang, UMP) ~~XXXX~~ EH

11:40 am: INECCE2011- 53

Gramian Approach for Control Costs Estimation

Dmitry S. Biryukov, Anatoly V. Ushakov (Saint-Petersburg State University of Information Technologies, Mechanics and Optics, Saint-Petersburg, Russia) ~~XXXX~~ EJ

12:00 pm: INECCE2011- 101

Robust control and modeling a 2-DOF Inertial Stabilized Platform

Hamed Khodadadi (Islamic Azad University, Khomeini Shahr Branch, Isfahan, Iran), Mohammad Reza Jahed Motlagh, Mohammad Gorji (Iran University of Science and Technology, Tehran, Iran) ~~XXXX~~ FG

12:20 pm: INECCE2011- 103

Design of an Autonomous Unmanned Aircraft Flight Path Controller

B.M. Albaker, N.A. Rahim (UMPEDAC Research Centre, University of Malaya, UM) ~~XXXX~~ FI

12:40 pm: INECCE2011- 113

Improved Coupled Tank Liquid Levels System Based on Hybrid Genetic-Immune Adaptive tuning of PI Controller

S.M. Nawaj, A.N. Abdalla, M.S. Ramli (Universiti Malaysia Pahang, UMP) ~~XXXX~~ GG

E1: Electronics

Room: Ramin 2

Chairs: Ruzali Rustam (Universiti Teknologi Petronas, UTP), F.R.M. Rashidi (Universiti Malaysia Pahang, UMP)

11:00 am: INECCE2011- 69

An FPGA Hardware Architecture of Nilsimsa Fingerprinting Algorithm

Alireza Monemi, Muhidin Abdullahi Mohamed, Muhammad Nadzir Marsono (Universiti Teknologi Malaysia, UTM) ~~XXXX~~ G

11:20 am: INECCE2011- 120

A Gradient Coprocessor of Optical Flow: A hardware co-simulation using FPGA based on MAC-DA

Ruzali Rustam, Nor Hisham Hamid, Fawnizu Azmadi Hussin (Universiti Teknologi Petronas, UTP) ~~XXXX~~ H

11:40 am: INECCE2011- 126

Learning Embedded Systems with Multi-Microcontroller Evaluation Tool

R.S.K. Selvakumar, K.H. Ghazali, N.M.K. Nik Yusoff, H. Abdul Aziz (Universiti Malaysia Pahang, UMP) ~~XXXX~~ HJ

12:00 pm: INECCE2011- 140

PC Based Kenwood TS-570D Transceiver Controller

Airul Sharizli Abdullah, M. Falfazli MJ (Universiti Malaysia Pahang, UMP) ~~XXXX~~ I I

12:20 pm: INECCE2011- 180

Car Monitoring using Bluetooth Security System

F.R.M. Rashidi, M.H. Ariff, M.Z. Ibrahim (Universiti Malaysia Pahang, UMP) ~~XXXX~~ I I

12:40 pm: INECCE2011- 187

Implementing GIS in Bus Identification and Monitoring System

Aishah Mahani Mustapha, MA Hannan, Aini Hussain, Hassan Basri (Universiti Kebangsaan Malaysia, UKM) ~~XXXX~~ I H

Parallel Session 5 (2:00 pm – 3.40 pm)

MR3: Mechatronics and Robotics

Room: Meranti 3A

Chairs: Matzaini Katon, (Universiti Teknologi MARA, UITM), A.M. Kassim (Universiti Teknikal Malaysia Melaka, UTeM)

2:00 pm: INECCE2011- 82

BWB Baseline II-E2 UAV Structural Finite Element Model and Analysis

Matzaini Katon, Wahyu Kuntjoro (Universiti Teknologi MARA, UITM) ~~XXXXXXXXXX~~ I Ì

2:20 pm: INECCE2011- 125

Moving Motion Control System On Developed Tripod Hopping Robot

A.M. Kassim, M.F. Miskon, N.H.A. Rahim (Universiti Teknikal Malaysia Melaka, UTeM), T. Yasuno (University of Tokushima, Tokushima, Japan) ~~XXXXXXXXXX~~ Î G

2:40 pm: INECCE2011- 160

A Genetically Trained Simplified ANFIS Controller to Control Nonlinear MIMO Systems

Omar F. Lutfy, Samsul B. Mohd Noor, Mohammad H. Marhaban (Universiti Putra Malaysia, UPM) ~~XXXXXXXXXX~~ Î Î

3:00 pm: INECCE2011- 171

A Review On Electromagnetic Suspension Systems For Passenger Vehicle

Hazril M. Isa, Wan Nor Liza Mahadi, Rahizar Ramli (University of Malaya, UM), Mohd. Azman Zainul Abidin (PROTON Headquarters, Shah Alam, Malaysia) ~~XXXXXXXXXX~~ Î G

3:20 pm: INECCE2011- 195

A Region Boundary-Based Geometric Formation Control Scheme for Multiple Autonomous Underwater Vehicles

Z.H. Ismail (Universiti Teknologi Malaysia, UTM), M.W. Dunnigan (Heriot-Watt University, UK) ~~XXXXXXXXXX~~ Î Î

CSP2: Communication and Signal Processing

Room: Ramin 1

Chairs: Azmi B. Mohamed (German Malaysian Institute, GMI), Chuah Heng keow (Universiti Teknologi Petronas, UTP)

2:00 pm: INECCE2011- 89

A De-noising Scheme for Enhancing Power Quality Problem Classification System Based on Wavelet Transform and Rule-Based Method

Chuah Heng Keow, Perumal Nallagownden, K.S. Rama Rao ~~XXXXXXXXXX~~ Î H

Petronas, UTP)

2:20 pm: INECCE2011- 158

Data Smoothing Using Gaussian Scale-space and Discrete Wavelet Transform

Samsul Ariffin Abdul Karim (Universiti Teknologi Petronas, UTP), Kong Voon Pang (Universiti Sains Malaysia, USM)

2:40 pm: INECCE2011- 173

Efficient localization via Middle-node cooperation in wireless sensor networks

Javad Rezazadeh, Marjan Moradi, Abdul Samad Ismail (Universiti Teknologi Malaysia, UTM)

3:00 pm: INECCE2011- 183

FPGA Based Processing of Digital Signals using Walsh Analysis

Zulfikar, Shuja A. Abbasi, A.R.M. Alamoud (King Saud University, Riyadh, Saudi Arabia)

3:20 pm: INECCE2011-194

Roundness Measurement of Cylindrical Part by Machine Vision

Azmi B. Mohamed (German Malaysian Institute, GMI), Abdul Halim Esa, Muhammad Azmi Ayub (Faculty of Mechanical Engineering, Universiti Teknologi MARA, UiTM)

CSP3: Communication and Signal Processing

Room: Ramin 2

Chairs: M.N. Norhayati (Universiti Malaysia Perlis, UniMAP), Nasir Ahmed Algeelani (Universiti Teknologi Malaysia, UTM)

2:00 pm: INECCE2011- 9

EM Absorption Reduction of Helix with Shielding Material for Mobile phone Applications

Mohammad Rashed Iqbal Faruque, Norbahiah Misran, Mohammad Tariqul Islam (Universiti Kebangsaan Malaysia, UKM)

2:20 pm: INECCE2011- 157

Facial Gesture Recognition Using Two-Channel Bio-Sensors Configuration and Fuzzy Classifier: A Pilot Study

Mahyar Hamedi, Iman Mohammad Rezazadeh, Mohammad Firoozabadi (Islamic Azad University Tehran, Iran)

2:40 pm: INECCE2011- 185

Internal Model Control for InnoSAT Attitude Control

M.N. Norhayati, M.Y. Mashor, S.M. Sharun, A.A. Azamimi, Wan Nur Hadani
(Universiti Malaysia Perlis, UniMAP)

3:00 pm: INECCE2011- 199

Identification of acoustic signals of surface discharges on glass insulator under different contamination levels

Nasir Ahmed Algeelani, M. Afendi M. Piah