2016 International Conference on Advances in Electrical, Electronic and Systems Engineering (ICAEESE 2016)

Putrajaya, Malaysia
14-16 November 2016
Monday, November 14, 08:00 - 09:00

**Participant Registration**

Room: Putrajaya Ballroom

Monday, November 14, 09:00 - 10:45

**Opening Ceremony**

Room: Putrajaya Ballroom

Monday, November 14, 10:45 - 11:30

**KS-1: Keynote Speech 1: Super-Kamiokande Neutrino Experiment**

Prof. Dr. Takaaki Kajita

Room: Putrajaya Ballroom

The discovery and studies of neutrino oscillations in Super-Kamiokande will be discussed. In addition, some key technologies used in Super-Kamiokande will also be discussed.

**Biodata:** Takaaki Kajita was born in Higashimatsuyama, Saitama, Japan. He studied at Saitama University and at the University of Tokyo where he received his doctorate in 1983. His doctoral advisor was the future Nobel Laureate Masatoshi Koshiba. Since 1988 he is affiliated with the Institute for Cosmic Radiation Research, University of Tokyo, and in 2015 he became its director. He is also a professor at the University of Tokyo. In the Super-Kamiokande detector, an experimental facility in a mine in Japan in 1998, Takaaki Kajita detected neutrinos created in reactions between cosmic rays and the Earth's atmosphere. Measurements showed deviations, which were explained by the neutrinos switching between the different types. This means that they must have mass. The Standard Model, however, is based on neutrinos lacking mass and the model must be revised.

Monday, November 14, 11:30 - 12:15

**KS-2: Keynote Speech 2**

Dato' Seri Ivan Teh

Room: Putrajaya Ballroom

Monday, November 14, 12:15 - 13:00

**KS-3: Keynote Speech 3: ICTP and the Importance of Fundamental Science for Development**

Prof. Dr. Fernando Quevado

Room: Putrajaya Ballroom

For more than 50 years, the Abdus Salam International Centre for Theoretical Physics (ICTP) has been a driving force behind global efforts to advance scientific expertise in the developing world. Founded in 1964 by the late Nobel Laureate Abdus Salam, ICTP seeks to accomplish its mandate by providing scientists from developing countries with the continuing education and skills that they need to enjoy long and productive careers. ICTP has been a major force in stemming the scientific brain drain from the developing world.
**Biodata:** Dr. Fernando Quevedo, a Guatemalan national, was appointed director of ICTP in October 2009. Dr. Quevedo is a well-known theoretical particle physicist with wide-ranging research interests in string theory, phenomenology and cosmology. He was awarded the 1998 ICTP Prize in recognition of his important contributions to superstring theory. He was born in 1956 in Costa Rica and obtained early education in Guatemala. He obtained his PhD from the University of Texas at Austin in 1986 under the supervision of Nobel Laureate Steven Weinberg. Following a string of research appointments at CERN, Switzerland, McGill University in Canada, Institut de Physique Neuchatel, Switzerland, and the Los Alamos National Laboratory, USA, as well as a brief term as professor of physics at the UNAM (Mexican National Autonomous University), Mexico, Dr. Quevedo joined the Department of Applied Mathematics and Theoretical Physics at the University of Cambridge, UK, in 1998, where he is currently Professor of Theoretical Physics and Fellow of Gonville and Caius College.

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**Monday, November 14, 14:30 - 16:30**

**S1.1: Advanced Reconfigurable Instrumentation for Scientific Applications**

Room: Putrajaya Ballroom

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<td>Meeting the World's Scientific Challenges with FPGA Technologies</td>
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<td></td>
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<td>Nizar Abdallah</td>
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<td>3:00</td>
<td>Integrating FPGAs: A dynamically reconfigurable FPGA-based grid for High Performance Computing</td>
<td>Julio Dondo Gazzano</td>
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<td>3:30</td>
<td>Measuring UV LEDs Radiation Dose using EBT3 Film</td>
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<td>HiCCE-128: An Open Hardware FMC Module for High-Channel Count Electrophysiology</td>
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<td>Aneeza Pathan, Sharmeen Keerio, Tayab D Memon and Imtiaz Hussain Kalwar</td>
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<td>HyperFPGA: A possible general purpose reconfigurable hardware for custom supercomputing</td>
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**S1.2: Technology and Innovation for Society's Well-being - 1**

Room: Pahang

Chair: Aini Hussain

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<td>Kok Beng Gan</td>
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<td>GPS/GSM Based Low Altitude Rotary Wing Aircraft Tracking System</td>
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<td>Md. Svedul Amin, A A M Mostafizur Rahman, Shartaz Hossain, Imtiaz Tuku and Mohammad Haider</td>
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<td>3:15</td>
<td>A Feasible QRS Detection Algorithm for Arrhythmia Diagnosis</td>
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<td>Seema Khadirnaikar and Aparna P</td>
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<td>3:30</td>
<td>Solar Powered Ferry Boat for the Rural Area of Bangladesh</td>
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<td>S. m. Kabir, Intekhab Alam and Nowshad Amin</td>
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<td>3:45</td>
<td>A comprehensive solution to road traffic accident detection and ambulance management</td>
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<td>Hari Sankar S, Jayadev K, Suraj B and Aparna P</td>
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<td>4:00</td>
<td>Challenges for technology innovation in health care</td>
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<td>Yngve Lamo, Fazle Rabbi and Rosaline Barendregt</td>
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### S1.3: Micro and Nano Electronics - 1

**Room:** Perak  
**Chair:** Iskandar Yahya

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<td>Suhairie Saleh, Noran Azizan Cholan, Abdul Hadi Sulaiman and Mohd. Adzir b. Mahdi</td>
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<td>3:45</td>
<td>A gm/ID Method Based 0.5V-Subthreshold Operational Amplifier with Current Subtractor Adaptive Biasing Circuit for Ultra-Low Power Application</td>
<td>Darryl Dave Ditucalan and Allenn C. Lowaton</td>
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<td>Low Power High-Speed Current Comparator Using 130nm CMOS Technology</td>
<td>Md Torikul Islam Badal, Mujahidun Bin Mashuri, Noorfazila Kamal, Fazida Hanim Hashim and Mamun Bin Ibne Reaz</td>
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<td>Low Cost MEMS Gyroscope and Accelerometer Implementation Without Kalman Filter For Angle Estimation</td>
<td>Nur Hazliza Ariffin, Norhana Arsad and Badariah Bais</td>
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### S1.4: Communication, Computer Engineering and Informatics - 1

**Room:** Kelantan  
**Chair:** Norbahiah Misran

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<td>A Quiz Management System Based on P2P Near-Field Communication On Android Platform for Smart Class Environments</td>
<td>Mohammed Salah Abood, Mahamod Ismail and Rosdiaeede Nordin</td>
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<td>A Comparative Study of Energy Detector Performance under AWGN and Fading Channels</td>
<td>Mohamoud Mohamoud, Elsheikh M A Elsheikh and Mohamed Hadi Habaebi</td>
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<td>Ensemble SVM classifiers based on PCA and LDA for IDS</td>
<td>Abdulla Aburomman and Mamun Bin Ibne Reaz</td>
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<td>4:15</td>
<td>An Experimental Study of Feature Reduction Using PCA in Multi-Biometric Systems Based on Feature Level Fusion</td>
<td>P. Aruna Kumari and G. Jaya Suma</td>
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<td>4:30</td>
<td>Design of Membership Functions for Fuzzy Power System Stabilizer Using Self Organized Mapping</td>
<td>V. S. Vakula</td>
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Tuesday, November 15, 09:00 - 09:45

**KS-4: Keynote Speech 4: MEMS and Microfluidics: Interfacing Macro and Nano World**

Prof. Dato’ Dr. Burhanuddin Yeop Majlis

Room: Putrajaya Ballroom

Rapid development of microelectronic technology in past four decade is closely related to remarkable progress of technological tools. These new tools may be used for fabrication of MEMS (Micro-Electro-Mechanical-System) which integrate microelectronic and micromechanical structures in one system enabling interdisciplinary application. Although MEMS have grown from microelectronics, they are different in technological approach. Using MEMS approach, called microfluidic, small volume of fluid down to less than pico liters can be handled. The scaling of single or multiple lab process down to chip-format known as Lab-on-a-Chip(LOC). Micro and nanoparticles handling can be done using LOC which combines several laboratory functions on a single chip that is only a few millimeters to a few square centimeters in size. MEMS is used to perform chemical analysis by combining laboratory processes on a single chip. The basis for most LOC fabrication processes is photolithography directly derived from microelectronic fabrication. For specific optical characteristics, bio- or chemical compatibility, lower production costs and faster prototyping, new processes have been developed such as glass, ceramics and metal etching, deposition and bonding, PDMS process or soft lithography, as well as fast replication methods via electroplating, injection molding and embossing. This talk also discusses several research activities related to the development of LOC conducted at IMEN, UKM Malaysia to handle biological process for medical applications.

**Biodata:** Prof Dato’ Dr. Burhanuddin Yeop Majlis is a professor of microelectronics at the Institute of Microengineering and Nanoelectronics. He received his Ph.D. in microelectronics from University of Durham, United Kingdom in 1988, MSc in microelectronics from University of Wales, UK in 1980, and BSc(Hons.) in Physics from UKM in 1979. He was a Deputy Dean of Engineering Faculty from 1995 until 1997. He is also a Research Fellow of Telecom Malaysia Research & Development Division, and he was the director of UKM-IMEN Microelectronics Research Centre at the Faculty of Engineering, UKM. He was responsible in developing and planning the setting up of the clean room for research at UKM. He had attended intensive industrial training in GaAs MMIC design and manufacture at GEC-Marconi Material Technology Ltd. United Kingdom. He is a senior member of the Institution of Electrical and Electronics Engineer (IEEE) and the Chairman of IEEE Electron Devices Malaysia Chapter from 1994 to 2006. He also Fellow of Malaysian Solid State Science and Technology (FMSSS), Fellow of Institute of Engineering and Technology (FIET), Fellow Malaysia Academy of Sciences (FASC) He is the founder president of Malaysia Nantechology Association (MNA). He initiated research in microfabrication and microsensors at UKM in 1995 and has also initiated research in GaAs technology with Telekom Malaysia. In 2001 he initiated research in MEMS with substantial research funding of US$10 million from Ministry of Science, Technology and Innovation. His current interest are design and fabrication of MEMS sensor, RFMEMS, BIOMEMS. Lab on Chip and microenergy and now is the program leader for MEMS research, a National Strategic Research Program. Now he is the director of Institute of Microengineering and Nanoelectronics(IMEN).

Tuesday, November 15, 09:45 - 10:30

**KS-5: Keynote Speech 5: Silicon Photovoltaic Technology: Moving Up The Value Chain And A Sustainable Solution To Future Energy Generation**

Prof. Dato’ Dr. Kamaruzzaman Sopian

Room: Putrajaya Ballroom

Silicon is one of the ten most abundant element in the earth’s crust. At present, almost 90 % of PV technology is based on crystalline silicon in its mono and poly forms. Polycrystalline Silicon is slightly cheaper than mono albeit at the cost of lower efficiency; its applicability is limited to solar cells only. Crystalline silicon photovoltaic (PV) or solar cell technology represents the most economically and environmentally sustainable solution to burgeoning energy demands. Malaysian government has recognized this through significant investments in several segments of this industry and it is reflected in emergence of strong domestic industry in solar cell manufacturing companies. At present, critical PV related technologies are almost entirely owned by multi-national companies focused on the nation competitive labor market and raw materials (quartz, sand) with the goal of serving international markets without any interest in indigenous technology development. This has led to fully-automated solar cell manufacturing industries with extremely high capital investment, low labor utilization, and worse no technology sharing. The contents of presentation are as follows (a) the solar resources (b) status of world photovoltaic panel production and applications, (c) issues in moving up the value change in the silicon industry and (d) the R&D aspects.

**Biodata:** He obtained his BSc in Mechanical Engineering from the University of Wisconsin-Madison in 1985, MSc in Energy Resources from the University of Pittsburgh in 1989 and PhD. in Mechanical Engineering from the Dorgan Solar Laboratory, University of Miami in 1997. He is presently the Professor in Renewable Energy at the Department of Mechanical and Material Engineering, Universiti Kebangsaan Malaysia and the Director of the Solar Energy Research Institute. His main contributions are solar cooling, solar assisted drying systems, grid-connected photovoltaic system, thin film silicon solar cells, and photovoltaic thermal collectors. He has published in journals and conferences and delivered keynotes speeches at national and international conferences on renewable energy. His
Tuesday, November 15, 10:45 - 12:45

S2.1: Information Processing and Automation - 1

Room: Putrajaya Ballroom  
Chair: Anuar Mikdad Muad

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S2.2: Applied Electronics & System Engineering - 1

Room: Pahang  
Chair: W Mimi Difyana W Zaki

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## S2.3: Micro and Nano Electronics - 2

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## S2.4: Communication, Computer Engineering and Informatics - 2

**Room: Kelantan**

**Chair:** Nasharuddin Zainal

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<td>An improvement of Backbone Network security using DMVPN over an EZVPN structure</td>
<td>Hongru Li, P. W.C. Prasad, Abeer Alsadoon, Linh Pham and Amr Elchouemi</td>
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<td>Development of the Wireless Cisco Networking Laboratory Pod</td>
<td>Anim Shakya, P. W.C. Prasad, Abeer Alsadoon and Amr Elchouemi</td>
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<td>Mohamoud Mohamoud, Elsheikh M A Elsheikh and Mohamed Hadi Habaebi</td>
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<td>Wheel Alignment Parameters Based on Laser Angle of Reflection with TCP/IP Protocol</td>
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**Tuesday, November 15, 14:00 - 16:15**

## S3.1: Technology and Innovation for Society's Well-being - 2

**Room: Putrajaya Ballroom**

**Chair:** Norbahiah Misran

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S3.2: Power and Energy - 1

Room: Pahang
Chair: Ramizi Mohamed

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Room: Perak
Chair: M. Mofazzal Hossain

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2:30 Optical Interconnect Performances in Two Stage CMOS Buffer  Siti Sarah Md Sallah, Sawal Hamid Md Ali, P. Sushitha Menon, Md. Shabiul Islam and Nurjuliana Juhari

2:45 Analysis and Simulation of Time Domain Multiplexed (TDM) Fiber Bragg Grating Sensing Array Using OptiSystem and OptiGrating  Mohamed Elgaud, Saiful Dzulkefly Zan, Abdulfatah Abushagur Ghaith Abushagur, Ahmad Ashrif A. Bakar and Ahmed Mohamed Elshirkasi

3:00 Design of a high efficiency ultrathin CdTe/CdS p-i-n solar cell with optimized thickness and doping density of different layers  M. Mofazzal Hossain, Md. Minhaz Ul Karim, S. Banik, Nahid A. Jahan and Mohammad A Matin

3:15 Resistorless self-biased curvature compensated sub- 1V CMOS bandgap reference  Khairuddin Jaafar, Noorfazila Kamal, Mamun Bin Ibne Reaz and Jahariah Sampe

3:30 From biological fish cupula to artificial micro fluidic based flow sensors: One side electrode type micro fluidic flow sensor with high robustness performance  Asrulnizam Abd Manaf

Tuesday, November 15, 14:00 - 16:15

S3.4: Communication, Computer Engineering and Informatics - 3

Room: Kelantan
Chair: Maria Liz Crespo

2:00 The Influence of Fiber Parameters to the Fiber Optical Parametric Amplifier Gain Spectrum  Nurulanati Othman, Nor Shahida Mohd Shah, Kim Gaik Tay and Noran Azizan Cholan

2:15 Rectenna for RF Energy Harvesting  Noorsaliza Abdullah, Abdirahman Mohamud Shire and Ezri Mohd

2:30 Harmonic Suppression using Rectangular Defected Ground Structure  Puteri Ilyana, Syarfa Zahirah Sapuan and Mohd Zarar Mohd Jenu

2:45 Unequally Spaced Linear Microstrip Array Antenna for 5G Applications  Muhammad Ramlee Kamarudin

3:15 Accurate Radio-Based Moving Object Tracking and Its Application to Sports Analysis  Koichi Ichige, Nobuya Arakawa and Osamu Shibata

3:30 Sum and Difference Composite Co-Array: An Extended Array Configuration toward Higher Degree of Freedom  Sho Iwazaki and Koichi Ichige


Wednesday, November 16

Wednesday, November 16, 08:30 - 10:30

S4.1: Technology and Innovation for Society's Well-being - 3

Room: Putrajaya Ballroom
Chair: Siti Rozaimah Sheikh Abdullah
S4.2: Information Processing and Automation - 2

Room: Pahang
Chair: Sawal Hamid Md Ali

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Roshahliza M. Ramli, Ali O. Abid Noor and Salina Abdul Samad

9:00 Survey of learning methods in intrusion detection systems 362
Abdulla Aburomman and Mamun Bin Ibne Reaz

9:15 Aggregate of HMAXs for Image Classification 366
Kean Hong Lau, Yong Haur Tay and Fook Loong Lo

9:30 Human Emotion Classifications for Automotive Driver using Skin Conductance Response Signal 371
Khairun Nisa' Minhad, Sawal Hamid Md Ali, Jonathan Shi Khai Ooi and Siti Anom Ahmad

9:45 A Study of Scattered Particles Removal based on Contrast Recovery 376
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10:00 Analysis of Success Factors of Technology Transfer Process of the Information and Communication Technology 382
Ali Hassan and Yusof Jamaluddin

S4.3: Micro and Nano Electronics - 4

Room: Perak
Chair: Saiful Dzulkefly Zan

8:30 Thin Layer Graphene for Biomedical Applications N/A
Azlan Hamzah

9:00 Numerical Optimization of Absorber and Buffer Layers of CZTS Thin Film Solar Cells 388
Mohammad Wahidur Rahman, Quazi Nafees Ul Islam, Saad Abdullah, Mohammed Bakth and Md. Ashraf Tal Hoque

9:15 Design of Cascoded Switch for DC/DC Buck Converter Using 0.13µm Low Power CMOS 393
Eric Chew Choon Yeap and Norlaili Mohd. Noh

Abu Bakar Md. Ismail
10:00 An Investigation on Copper Doping to CdTe Absorber Layers in CdTe Thin Film Solar Cells
Kamarul Azrul Aris, Kazi Sajedur Rahman, Farazi Mohammad Tahzib Enam, Mohamad Ibrahim Bin Kamaruzzaman, Iskandar Yahya and Nowshad Amin

10:15 Numerical Analysis of CdTe Thin Film Solar Cells with CdS:O Window Layer and ZnO Buffer Layer
Mohammad Wahidur Rahman, Shafayat Ahmed, Sheikh Ifatur Rahman and Md. Ashraful Hoque

S4.4: Communication, Computer Engineering and Informatics - 4

Room: Kelantan
Chair: Mahamod Ismail

8:30 A New Network Slicing Framework for Multi-Tenant Heterogeneous Cloud Radio Access Networks
Ying Loong Lee, Jonathan Loo and Teong Chee Chuah

8:45 A Scheduling Scheme for Smart Grid and Mobile Users over LTE Networks
Ayman Hajjawi, Mahamod Ismail and Nor Fadzilah Abdullah

9:00 Atmospheric Attenuation - Effect Towards Communication Links
Mandeep Singh

9:30 Locally Supported Bivariate Splines in Piecewise Constant Tension
Masaru Kamada and Kunimitsu Takahashi

9:45 Design of Planar Slot-Loaded Antenna for Energy Harvesting
Tan Yee Mun, Mohammad Tariqul Islam, Norbahiah Misran and Rezaul Azim

10:00 Improve the Decoding Process of Rateless Erasure Code and Network Coding with Graphics Processing Unit in IoT
Sin Ran Chong, An Chow Lai and Zan-Kai Chong

10:15 Enhanced Cellular Systems for Cooperative Communication in 5G Networks
Abubakar Miyim, Mahamod Ismail and Rosdiadee Nordin

Wednesday, November 16, 10:45 - 12:45


Room: Putrajaya Ballroom
Chair: Fazida Hanim Hashim

10:45 Industrial Approach for Dependable Computing in the Recent Decade
Nobuyasu Kanekawa

11:15 Effect of different memristor window function with variable random resistance on the performance of memristor-based RO-PUF
Julius Teo, Khairul Anwar Syahmi Che Ismail and Fazrena Hamid

11:30 Design and Implementation of Electronic Chess Set
Siti Zarina Binti Mohd. mujil, Mohd Helmy Abd Wahab, Radzi Ambar and Kian Loo Wong

11:45 Low Power Consumption Techniques of Quartz Crystal Oscillator
Md Torikul Islam Badal, Labonnah F Rahman, Mohammad Abdul Mukit, Mamun Bin Ibne Reaz and Mohammad Marufuzzaman

12:00 New Small-Signal Amplifying System with Sziklai Pairs in Triple-Transistor Topology
Sachchida Nand Shukla
Wednesday, November 16, 10:45 - 12:30

**S5.2: Power and Energy - 2**

**Room:** Pahang

**Chair:** Mahmoud A. M. Albreem

- **10:45** Location Of Multi-Type Facts Devices Under Contingency: An Intelligent Approach Using Modified ABC 477
  
  Archana Naganathan, N and Vidhyapriya R

- **11:00** Dynamic Model of Distribution Network Cell Using Artificial Neural Network Approach 484
  
  Noor Fazliana Fadzail, Samila Mat Zali, Norfadilah Rosie and Mohd Alif Ismail

- **11:15** Modeling and Dynamics Study of Large Scale PV System Connected Malaysian Grid under Different Fault Conditions 488
  
  Ali Q. Al-Shetwi and Muhamad Zahim Sujod

- **11:30** Designing a low voltage energy harvesting interface circuit utilizing piezoelectric vibration transducer 495
  
  Mahidur Sarker, Ramizi Mohamed and Azah Mohamed

- **11:45** Design of Indirect AC-AC Converter Based on Linear Controller for Power Systems 500
  
  Mahmoud A. M. Albreem, Hassan Naser and Mustafa Abofaresh, JR

- **12:00** Artificial Neural Network Based Controller for Home Energy Management Considering Demand Response Events 506
  
  Maytham S. Ahmed, Azah Mohamed, Hussain Shareef, Raad Z. Homod and Jamal Abd Ali

- **12:15** Simulation of Shielding Failure Flash-over of Transmission Line Based on Leader Progression Model 510
  
  Wenxiong Mo, Guojun Lu, Zezhong Wang, Rong Zeng and Zhanqing Yu

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Wednesday, November 16, 10:45 - 13:00

**S5.3: Micro and Nano Electronics - 5**

**Room:** Perak

**Chair:** Norazreen Abd Aziz

- **10:45** Effect of temperature on the etching rate of nitride and oxide layer using Buffered Oxide Etch 516
  
  Norhafizah Burham, Gandi Sugandi, Mimiwaty Mohd Noor and Burhanuddin Yeop Majlis

- **11:00** A Programmable System-on-Chip Based Digital Pulse Processing for High Resolution X-Ray Spectroscopy 520
  
11:15 Materialization of MEMS in a Collaborative AMBIENCE  Yufridin Wahab, Zul Azhar Zahid Jamal and Mazlee Mazalan

11:45 New Scalable Digit-Serial Inverter Over GF(2^m) for Embedded Applications  Atef Ibrahim, Turki Al-Somani and Fayez Gebali

12:00 Performance Analysis of Wavelength Specific Transmission in Turbulent Medium for Free Space Optical Communication Systems  Adib Kabir Chowdhury and Mamun Bin Ibne Reaz

12:15 Single Cell Analysis in Microfluidics Devices  Mohd Ridzuan Ahmad

12:45 Low Power and High Speed CMOS Current Comparators  Wan Irma Idayu Restu Wan Mohd Nasir and Mamun Bin Ibne Reaz

S5.4: Communication, Computer Engineering and Informatics - 5

Room: Kelantan
Chair: Mahamod Ismail

10:45 Design of Ultra Wideband Phase Shifter with Improved Scattering Parameter Performances  Dyg Norkhairunnisa Abang Zaidel, Sharul Kamal A. Rahim, Norhudah Seman and Raimi Dewan

11:15 Narrow Dual Bandpass Filter Using Microstrip Coupled Line with Bell Shaped Resonator  Azman Ahmad and Abdul Rani Othman

11:30 Bandwidth Performance Analysis of Different Glass's Dielectric Permittivity on Reflectarray Radiating Element  Arshad Selamat, Norbahiah Misran, Mohd Fais Mansor, Kamarulzaman Mat and Mohammad Tariqul Islam

11:45 Dual band resonance of millimeter-wave frequencies antennas on LTCC  Mohamad Khairani Mohamed Amin, Mohd Fais Mansor, Norbahiah Misran and Mohammad Tariqul Islam

12:00 Analysis of EM Absorption Reduction Using Paper Based Negative Indexed Metamaterial Shielding  Touhidul Alam, Mohammed Shamsul Alam, Norbahiah Misran, Mohd Fais Mansor and Mohammad Tariqul Islam

12:15 Efficient Routing Algorithm for VANETs based on Distance Factor  Yusor AL-Mayouf, Nor Fadzilah Abdullah, Mahamod Ismail, Ainuddin Wahid Bin Abdul Wahab and Omar Adil Mahdi

12:30 Low SAR Planar Inverted-F Antenna for Mobile Phone  Md Ikbal Hossain, MIH, Mohammad Rashed Iqbal Faruque and Mohammad Tariqul Islam

Wednesday, November 16, 14:00 - 16:15


Room: Putrajaya Ballroom

2:00 Taming IoT: The Practical Aspects and Tradeoffs in Implementing IOT Systems  Royan Ong
Wednesday, November 16, 14:00 - 16:00

S6.2: Information Processing and Automation - 3 / Power and Energy - 3

Room: Pahang
Chair: Ramizi Mohamed

2:00 An Investigation of Passive and Active Noise Reduction using Commercial and Standard TDH-49 Headphones 606
Abdulkarim Shalool, Nasharuddin Zainal, Kok Beng Gan and Cila Umat

2:15 Study of Deep-learning Phenomenon in Multi-Modal Comprehension by A Computational model of Episodic Semantic Network Growth N/A
Javed Khan

2:45 Optimal CC-CV charging of lithium-ion battery for charge equalization controller 610
Md. Murshadul Hoque, M Hannan and Azah Mohamed

3:00 Power Quality Impacts of Plug-in Hybrid Electric Vehicles on Distribution Network 616
Ahmad Al-janad and Azah Mohamed

3:15 Time Dependent Indoor Power Line Background Noise: Analysis, Simulation and Effect on Communication System 621
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3:30 A Comparative Assessment of the LWR-IM Traffic Model using Linear Regression 626
Kok Mun Ng, Mamun Bin Ibne Reaz, Mam Ali and Na Razak

S6.3: Technology and Innovation for Society's Well-being - 4

Room: Perak
Chair: Kok Beng Gan

2:00 Enhancing Small Medium Enterprises Opportunity Through Online Portal System 631
Norngainy Mohd. Tawil, Alissyazmim Abd Halim, Shamshubaridah Ramlee and Norhana Arsad

2:30 A Study of Retinal Vascular Tortuosity in Diabetic Retinopathy 636
N. Badariah A. Mustafa, W Mimi Divana W Zaki, Aini Hussain and Jemaima Che Hamzah
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<th>Authors</th>
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<td>2:45</td>
<td>Development of Automated Triage System for Emergency Medical Service</td>
<td>Ha Chong and Kok Beng Gan</td>
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<tr>
<td>3:00</td>
<td>Evolution of Solar Power Rickshaw Technology vis-à-vis Economic Feasibility</td>
<td>Rajesh Kumar</td>
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<td>3:15</td>
<td>Determination of ethanol concentration of ethanol/water mixture solutions with open ended coaxial method</td>
<td>Norashikin Khalid, Mohamad Faiz Zainuddin, Zulkifly Abbas, Tity Nazleen Mohamed and Nordin Sabli</td>
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<td>3:30</td>
<td>Growth of microtissues in microencapsules formed using microextrusion and vibration</td>
<td>Nurul Hamizah Md Sai'aan, Chin Fhong Soon, Mohd Khairul Ahmad, Kian Sek Tee, Mansour Youseffi and Seyed Ali Khaghani</td>
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<td>3:45</td>
<td>Design and Development of Beam Position Monitoring Electronics for Booster Synchrotron</td>
<td>Bhupendra Shrivastava, Manish Chouhan, Raja Khan and Tushar Puntambekar</td>
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