

ICEECC 2018 PROGRAM

Wednesday, 28 November 2018

	Ballroom 2, Level 7 KSL Johor Bahru						
0800 - 0900	Registration						
0900 - 0930	Welcoming Speech/Opening						
0930 - 1015	Keynote 1 <i>Wireless Energy Harvesting circuit for IOT</i> Speaker <i>Haruichi Kanaya</i> <i>Graduate School of Information Science and Electrical Engineering,</i> <i>Kyushu University, Japan</i>						
1015 -1045	Morning Break						
1045 - 1130	Keynote 2 <i>Solar Photovoltaic: Prospects and Challenges</i> Speaker <i>Zainal Salam</i> <i>Centre of Electrical Energy Systems</i> <i>Faculty of Electrical Engineering</i> <i>Universiti Teknologi Malaysia</i>						
1130 - 1215	Keynote 3 <i>Autonomous Vehicular Communication and Control for Smart City</i> Speaker <i>Hiroaki Morino</i> <i>Shibaura Institute of Technology</i> <i>Japan</i>						
1215 - 1300	Keynote 4 <i>Connected healthcare monitoring</i> Speaker <i>Toshiyo Tamura</i> <i>Future Robotics Organization</i> <i>Waseda University</i> <i>Tokyo, Japan</i>						
1300 -1400	Lunch						
	Room 1	Room 2	Room 3	Room 4	Room 5	Room 6	Room 7
1400 - 1540	CE 1	CE 2	CE 3	EPE1	ECE1	ECE2	CME1
1540 - 1600	Afternoon Break						
1600 - 1720	CE 1	CE 3	CE 3	EPE 1	ECE1	ECE2	CME1
1930 - 2330	Dinner						

Thursday, 29 November 2018							
	Hall, Level 7, KSL Johor Bahru						
0800 - 0900	Registration						
	Room 1	Room 2	Room 3	Room 4	Room 5	Room 6	Room 7
0900 - 1040	CE 4	CE 5	CE6	EPE2	ECE3	ECE4	CME2
1040 - 1100	Morning Break						
1100 - 1240	CE 4	CE 5	CE2	EPE2	ECE3	ECE4	CME2
1240 - 1400	Lunch						
	Room 1	Room 2	Room 3	Room 4	Room 5	Room 6	Room 7
1400 - 1540	CE 7	CE 8	EPE3	EPE4	ECE5	CME3	CE9
1540 - 1600	Afternoon Break						
1600 - 1720	CE 7	CE 8	EPE3	EPE4	ECE5	CME3	CE9

Wednesday, 28 November 2018

8:00 - 9:00

Registration

Room: Ballroom 2, KSL

9:00 - 9:30

Welcoming Speech/Opening

Room: Ballroom 2, KSL

9:30 - 10:15

Keynote 1

Wireless Energy Harvesting circuit for IOT
Haruichi Kanaya (Kyushu University, Japan)
Room: Ballroom 2, KSL

10:15 - 10:45

Morning Break

10:45 - 11:30

Keynote 2

Solar Photovoltaic: Prospects and Challenges
Zainal Salam (University Teknologi Malaysia)
Room: Ballroom 2, KSL

11:30 - 12:15

Keynote 3

Autonomous Vehicular Communication and Control for Smart City
Hiroaki Morino (Shibaura Institute of Technology Japan)
Room: Ballroom 2, KSL

12:15 - 13:00

Keynote 4

Connected healthcare monitoring
Toshiyo Tamura (Waseda University Tokyo, Japan)
Room: Ballroom 2, KSL

Wednesday, November 28 13:00 - 14:00

Lunch Break

Wednesday, November 28 14:00 - 15:40

CE 1

Communication Engineering 1
Room: Room1

14:00 Full-Duplex User-Centric Communication in Two Base Station Systems Using Non-Orthogonal Multiple Access

[Sock Theng Ooi](#), [Marwan H. Azmi](#) and [Razali Ngah](#)

14:20 Performance Evaluation of Software Defined Network Architecture

[Eberechukwu Numan Paulson](#), [Kamaludin Mohamad Yusof](#), [Elizabeth Onwuka](#), [Sharifah Kamilah Syed Yusof](#) and [Muhammad Nadzir Marsono](#)

14:40 Signal Modulation Techniques in Non-orthogonal Waveform for Future Wireless Communication System

[Siti Rosmaniza Ab Rashid](#), [Norulhusna Ahmad](#) and [Sharifah K. Syed-Yusof](#)

15:00 A Hybrid Predictive Technique for Lossless Image Compression

[Nur 'Aqilah Nor 'Azman](#), [Samura Ali](#), [Rozeza A. Rashid](#), [Faiz Asraf Saparudin](#) and [Mohd Adib Sarijari](#)

CE 2

Communication Engineering2
Room: Room2

14:00 Efficient Peer-to-Peer Data Dissemination with Mobile Ad Hoc Routing Optimization with Taguchi Method in Integrated Optical and Wireless Networks

[Adam Wong Yoon Khang](#), [Jamil Abedalrahim](#), [Jamil Alsayaydeh](#), [Sevia Mahdaliza Idrus](#), [Nadiatulhuda Zulkifli](#) and [Mohamed Elshaikh](#)

14:20 Afternoon Break

14:40 Characteristic Evaluation of 20-Bit Consecutive Codes in High Performance Optical Burst Mode Receiver Configuration

[Azura Hamzah](#), [Sevia Mahdaliza Idrus](#), [Adibah Binti Mazwar](#), [Atsushi Kanno](#) and [Norliza Mohamed](#)

15:00 Liquid Level Sensor Based on Fiber Splitter

[Muhammad Yusof Mohd Noor](#), [Ahmad Sharmi Abdullah](#), [Asrul Izam Azmi](#), [Mohd Haniff Ibrahim](#), [Mohd Rashidi Salim](#) and [Norazan Kassim](#)

15:20 Performance of Dynamic Bandwidth Allocation Based Comprehensive Bandwidth Utilization for XG-PON

[Nur Asfahani Ismail](#), [Sevia Mahdaliza Idrus](#), [Rizwan Aslam Butt](#), [Farabi Iqbal](#), [Nor Affida M. Zin](#) and [Fadila Mohd Atan](#)

15:40 Impact of Security Breach on the Upstream Delay Performance of Next Generation Gigabit Passive Optical Networks (XGPON)'s Dynamic Bandwidth Allocation Algorithm

[Fadila Mohd Atan](#), [Nadiatulhuda Zulkifli](#), [Sevia Mahdaliza Idrus](#), [Nor Affida M Zin](#) and [Nur Asfahani Ismail](#)

CE 3

Communication Engineering 3

Room 3

14:00 Planar Patch Array Antenna Design with Rectangular-Shaped Ring Slot and Coaxial Probe Feeding for 5G Technology

[Norhudah Seman](#), [Nur Ilham Aliyaa Ishak](#) and [Tien Han Chua](#)

14:20 A 2.45 GHz Semi-Flexible Wearable Antenna for Industrial, Scientific and Medical Band Applications

[Shaharil Mohd Shah](#), [Zuhairiah Zainal Abidin](#), [Fauziahanim Che Seman](#), [Shipun Anuar Hamzah](#) and [Norshidah Katiran](#)

14:40 Dual Element MIMO Planar Inverted-F Antenna (PIFA) for 5G Millimeter Wave Application

[Nurul Husna Mohd Rais](#), [Zuhanis Mansor](#) and [Mohamad Kamal A. Rahim](#)

15:00 Microstrip Antenna Design with Partial Ground at Frequencies Above 20 GHz for 5G Telecommunication Systems

[Norhudah Seman](#), [Muhammad Afiq Abdul Aziz](#) and [Tien Han Chua](#)

CME 1

Control and Mechatronic Engineering 1

Room 7

14:00 The Application of Artificial Neural Network for Modelling the Removal of Organic Pollutants, Azo Dyes and Heavy Metal: A Review

[Siti Fatimah](#) and [Wiharto Wiharto](#)

14:20 An Improved Co-Clustering Algorithm for the Identification of Cancer Subtypes to Identify Cancer Genes

[Logenthiran Machap](#), [Afnizanfaizal Abdullah](#) and [Zuraini Ali Shah](#)

14:40 Constructing Population of Initial University Timetable: Design and Analysis

[Juliana Wahid](#), [Syariza Abdul-Rahman](#), [Aniza Din](#) and [Naimah Mohd Hussin](#)

15:00 Modified Brute Force Algorithm to Solve the Closest Pair of Points Problem Based on Dynamic Warping

[Rhowel Dellosa](#), [Arnel Fajardo](#) and [Ruji Medina](#)

15:20 Radial Basis Function Neural Network for Head Roll Prediction Modelling in a Motion Sickness Study

[Sarah 'Atifah Saruchi](#), [Hatta Ariff](#), [Ibrahim Shapiai](#), [Nurhaffizah Hassan](#), [Nurbaiti Wahid](#), [Noor Jannah Zakaria](#), [Mohd Azizi Abdul Rahman](#) and [Hairi Zamzuri](#)

ECE 1

Electronic and Computer Engineering 1

Room 5

14:00 Simulated Evaluation of New Switching Based Median Filter for Suppressing SPN and RVIN

[Vorapoj Patanavijit](#), [Kornkamol Thakulsukanant](#) and [Wilaiporn Lee](#)

14:20 The Statistical Analysis of Random-Valued Impulse Noise Detection Techniques Based on the Local Image Characteristic: ROAD, ROLD and RORD

[Vorapoj Patanavijit](#) and [Kornkamol Thakulsukanant](#)

14:40 Low Energy HEVC 2D-DCT Architectures for FPGA and ASIC

[Ainy Haziyah Binti Awab](#), [Ab Al-Hadi Ab Rahman](#), [Mohd Shahrizal Rusli](#), [Usman Ullah Sheikh](#), [Izam Kamisian](#) and [Kam Meng Goh](#)

15:00 The Analysis of Facial Feature Deformation Using Optical Flow

[Hamimah Ujir](#), [Irwandi Hipiny](#), [Dayang A. Jesmi](#) and [Sarah Flora Samson Juan](#)

ECE 2

Electronic and Computer Engineering 2

Room 6

14:00 Road Crack Detection Using Adaptive Multi Resolution Thresholding Techniques

[Zuraini Othman](#)

14:20 Road Lane Markers Classification Using Binary Scanning and Slope Countours

[Zamani Md Sani](#), [Hadhrami Ab Ghani](#), [Rosli Besar](#) and [Azizul Azizan](#)

14:40 A Novel Approach for Self-tuning Hadoop-Spark Performance Using Machine Learning in Big Data Processing

[Md. Armanur Rahman](#), [Abid Hossen](#), [Md. Jakir Hossen](#), [Venkateshaiah C](#), [Bhuvaneswari Thangavel](#) and [Aziza Sultana](#)

15:00 Historical Document Image Binarization Using Pixel-Wise Classification

[Fauziah Kasmin](#)

EPE 1

Electric Power Engineering 1

Room 4

14:00 Fault Detection and Classification in Wind Turbine Using Artificial Neural Network

[Noor Fazliana Fadzail](#) and [Samila Mat Zali](#)

14:20 Comparative Analysis of a PV/Wind/Diesel Battery Hybrid Stand-Alone Microgrid System

[Ibim Sofimieari](#)

14:40 Study on Footstep Power Generation Using Piezoelectric Tile

[Anis Maisarah](#)

15:00 Solar Irradiance Uncertainty Management Based on Monte Carlo - Beta Probability Density Function for Case Study in Malaysia

[Norhafidzah Mohd Saad](#)

15:20 Device Simulation of Perovskite Solar Cells with Molybdenum Disulfide as Active Buffer Layer

[Ainon](#) [Shakila](#) [Shamsuddin](#), [Puteri Nor Aznie Fahsyar](#), [Norasikin Ahmad Ludin](#), [Ibrahim Burhan](#) and [Salina Mohmad](#)

Wednesday, November 28 15:40 - 16:00

Afternoon Break

Wednesday, November 28 16:00 - 17:40

CE 2

Communication Engineering2

Room: Room2

16:00 Zinc Oxide Nanoparticles Based Passive Saturable Absorber for Pulse Generation in Fiber Laser

[Nurul Alina Afifi Norizan](#), [Muhammad Quisar Lokman](#), [Hafizal Yahaya](#), [Sulaiman Wadi Harun](#) and [Fauzan Ahmad](#)

16:20 Graphene Slurry Based Passive Q-Switcher in Erbium Doped Fiber Laser

[Siti Nur Fatin Zuikafly](#), [Nor Farhah Razak](#), [Sulaiman Wadi Harun](#), [Rizuan Mohd Rosnan](#) and [Fauzan Ahmad](#)

16:40 Observation of Dark and Bright Pulses in Q-switched Erbium Doped Fiber Laser Using Graphene Nano-Platelets as Saturable Absorber

[Nur Hidayah Muhamad Apandi](#), [Siti Nur Fatin Zuikafly](#), [Nabilah Kasim](#), [Mohd Ambri Mohamed](#), [Sulaiman Wadi Harun](#) and [Fauzan Ahmad](#)

17:00 All Optical Millimeter-Wave Signal Generation and Transmission for Radio over Fiber (RoF) Link

[Norliza Mohamed](#), [Sevia Mahdaliza Idrus](#), [Azura Hamzah](#), [Suriani Mohd Sam](#), [Norulhusna Ahmad](#), [Hazilah Mad Kaidi](#) and [Rudzidatul Dziyauddin](#)

CE 3

Communication Engineering 3

Room 3

16:00 Compact U-Shaped Slotted Antenna with Conductor-Backed Plane for Ultra-Wideband (UWB) Applications

[Siti Zubaidah Aziz](#), [Faizal Jamlos](#), [M Norazizi Sham Mohd Sayuti](#) and [Marinah Othman](#)

16:20 Graphene Based Antenna Fabricated by Screen Printing Method for 5G Applications

[Siti Nor Hafizah Sa'don](#), [Mohd Haizal Jamaluddin](#), [Muhammad Ramlee Kamarudin](#) and [Fauzan Ahmad](#)

16:40 45 Degree Arrangement of Compact Array Antenna for MIMO Application

[Muhammad Faizal Ismail](#), [Huda A. Majid](#), [Mohd Nurul Al-Hafiz Sha'abani](#), [Mohd Sabani Mohd](#), [Farid Zubir](#), [Osman Bin Ayop](#) and [Muhammad Azfar Abdullah](#)

17:00 Wide-band Metamaterial Antenna Design Based on Transmission Line with Rectangular Rings

[Adamu Y Iliyasu](#), [Mohamad Rijal Hamid](#), [Mohamad Kamal A. Rahim](#), [Mohd Fairus Mohd Yusoff](#) and [Noor Asmawati Samsuri](#)

CE1

Communication Engineering 1

Room: Room1

16:00 Heterogeneous Modelling Framework for 5G Urban Macro Ultra Dense Networks

[Fayad Ghawbarr](#), [Faiz Asraf Saparudin](#), [Jumadi Abdul Sukor](#), [Aimi Syamimi Ab Ghafar](#) and [Norshidah Katiran](#)

16:20 Performance Evaluation of Video Streaming on LTE with Coexistence of WiFi Signal

[Yaqoob Yaghoubi](#), [Wai Leong Pang](#), [Siew Kin Wong](#) and [Chan Kah Yoong](#)

16:40 Modeling of Power Spectral Density of V2V Channel in the Presence of Moving Scatterers

[Wahyu Pamungkas](#), [Titiek Suryani](#), [Iwan Wirawan](#) and [Achmad Affandi](#)

17:00 Comparing Selected Mapping and Partial Transmit Sequence for PAPR Reduction in GFDM Systems

[Ari Endang Jayati](#), [Wirawan Wirawan](#), [Titiek Suryani](#) and [E Endroyono](#)

CME 1

Control and Mechatronic Engineering

Room 7

16:00 Performance Comparison of SVM and ANN for Aerobic Granular Sludge

[Nur Sakinah](#), [Norhaliza Abdul Wahab](#), [Aznah Nor Anuar](#) and [Mustafa Bob](#)

16:20 F-score and Rough Set Based Feature Selection for Breast Cancer Diagnosis

[Elvira Sukma Wahyuni](#), [Noor Akhmad Setiawan](#), [Hanung Adi Nugroho](#) and [Rafky Rifaldi](#)

16:40 Auto-CDD: Automatic Cleaning Dirty Data in Data Analytical Process Using Machine Learning Paradigm

[Jesmeen M. z. h.](#), [Abid Hossen](#), [Md. Jakir Hossen](#), [J. Emerson Raja](#), [Bhuvaneswari Thangavel](#), [Md. Shohef Sayeed](#) and [Chy. Mohammed Tawsif Khan](#)

17:00 Dimentionality Reduction Based on Binary Cooperative Particle Swarm Optimization

[Sharifah Sakinah Syed Ahmad](#)

ECE 1

Electronic and Computer Engineering 1

Room 5

16:00 Denoising Performance Analysis of Adaptive Decision Based Inverse Distance Weighted Interpolation (DBIDWI) Algorithm for Salt and Pepper Noise

[Vorapoj Patanavijit](#)

16:20 A Novel Elementary Spatial Expanding Scheme Form on SISR Method with Modifying Geman&Mcclure Function

[Darun Kesrarat](#), [Vorapoj Patanavijit](#) and [Kornkamol Thakulsukanant](#)

16:40 Energy Extraction Method for EEG Channel Selection

[Hilman Fauzi](#), [Masaki Kyoso](#), [Ibrahim Shapiai](#), [Tadayasu Komura](#), [Uswah Khairuddin](#) and [Muhammad Azzam](#)

17:00 MDSS-Stream: A Data Stream Clustering Algorithm for Multi-Dimensional Density Data

[Mayas Aljibawi](#), [Mohd Zakree Ahmad Nazri](#) and [Zalinda Othman](#)

ECE 2

Electronic and Computer Engineering 2

Room 6

16:00 A Texture Feature Analysis of Breast Thermogram Images for the Detection of Breast Cancer

[Surekha Kamath](#)

16:20 RTL Design of a Fast 2-D Hadamard Transform for HEVC Video Encoder

[Whit Ney Heh](#), [Ab Al-Hadi Ab Rahman](#), [Ainy Haziyah Binti Awab](#), [Mohd Shahrizal Rusli](#), [Usman Ullah Sheikh](#) and [Kam Meng Goh](#)

16:40 Online Video-Based Abnormal Detection Using Highly Motion Techniques and Different Statistical Measures

[Ahlam Al-Dhamari](#), [Rubita Sudirman](#), [Nasrul Humaimi Mahmood](#), [Nor Hisham Khamis](#) and [Azli Yahya](#)

17:00 Machine Vision Based Smart Parking System Using Internet of Things

[Yusmeeraz Yusof](#), [Suhaila Isahak](#) and [Norlina Paraman](#)

EPE 1

Electrical Power Engineering 1

Room 4

16:00 Comparative Study on the Accelerated Thermal Aging Behavior Between Palm and Rapeseed Natural Ester Oils

[Nur Lidiya Muhammad Ridzuan](#), [Norazhar Abu Bakar](#), [Sharin Ab Ghani](#), [Imran Sutan Chairul](#) and [Nur Hakimah Ab Aziz](#)

16:20 Top Oil Heat Distribution Pattern of ONAN Corn Oil-Based Transformer with Presence of Hot Spot Study Using FEMM

[Nordiana Azlin Othman](#), [Muhammad Azizi Husin](#), [Nor Asiah Muhamad](#), [Hanafiah Kamarden](#) and [Muhammad Saufi Kamarudin](#)

16:40 Dielectric Properties of Virgin Coconut Oil

[Nor Asiah Muhamad](#), [Siti Syafiqah Mat Sauki](#) and [Zawani Amirah Rasid](#)

17:00 Comparison of PI, PID and PI-FUZZY Controller in PEMFC Hydrogen Reformer

[Nor Aira Zambri](#), [Norhafiz Salim](#), [Faridah Hanim Mohd Noh](#) and [Sim Sy Yi](#)

Thursday, November 29 8:00 - 9:00

Registration 2

Thursday, November 29 9:00 - 10:40

CE 4

Communication Engineering 4

Room: Room1

9:00 Performance of Europium Aluminum Doped Polymer Optical Waveguide Amplifier

[Nur Najahatul Huda Saris](#), [Azura Hamzah](#), [Sumiaty Ambran](#), [Osamu Mikami](#) and [Takaaki Ishigure](#)

9:20 Simulation of Dual Stage Thulium-doped Fiber Amplifier Using Pump Power Distribution Technique

[Muhammad Syauqi Kusyairi Jamalus](#), [Abdul Hadi Sulaiman](#) and [Nelidya Md. Yusoff](#)

9:40 Single Mode Optical Fiber Tip Sensor for Glucose-Adulterated Honey Detection

[Nazirah Mohd Razali](#), [Aimi Najwa Mazlan](#) and [Sumiaty Ambran](#)

10:00 Pulse Train Stability in Passively Mode-Locked Erbium-Doped Fiber Laser with a Nonlinear Polarization Rotation

[Azura Hamzah](#), [Nur Ameelia Abdul Kadir](#) and [Nurul Alina Afifi Norizan](#)

CE 5

Communication Engineering 5

Room: Room2

9:00 Gain Enhancement of Dielectric Resonator Antenna for Millimeter Wave Applications

[Irfan Ali](#), [Mohd Haizal Jamaluddin](#), [Muhammad Ramlee Kamarudin](#), [Abinash Gaya](#) and [Muhammad Hashim Dahri](#)

9:20 Wideband and High Gain Dielectric Resonator Antenna for 5G Applications

[Irfan Ali](#), [Mohd Haizal Jamaluddin](#), [Muhammad Ramlee Kamarudin](#), [Abinash Gaya](#) and [Raghuraman Selvaraju](#)

9:40 Circularly Polarized Microstrip Patch Array Antenna for GPS Application

[Taher Khalifa](#), [Norsuzlin Bt Mohd Sahar](#), [Nurulazlina Ramli](#) and [Mohammad Tariqul Islam](#)

10:00 5G Beam- Steering Antenna with Slotted Waveguide Antenna Array

[Noorlindawaty Md Jizat](#), [Zubaida Yusoff](#), [Nazihah Ahmad](#), [Mursyidul idzam Sabran](#) and [Nuramirah Mohd Nor](#)

10:20 3D Printed Horn Antenna Using Direct Metal Laser Melting Technique for Millimetre Wave Applications

[Muataz Watheq Almeshehe](#), [Noor Asniza Murad](#), [Mohamad Kamal A. Rahim](#) and [Farid Zubir](#)

CE 6

Communication Engineering 6

Room 3

9:00 Non-radiative Wireless Energy Transfer with Single Layer Multiband Printed Spiral Resonator

[Lai Ly Pon](#), [Sharul Kamal A. Rahim](#), [Chee Yen Leow](#) and [Tien Han Chua](#)

9:20 Prediction of Ammonia Concentration in Water Based on Microwave Spectroscopy

[See Khee Yee](#)

9:40 Comparison Between Distilled and Zamzam Water of Dielectric Dense Patch Antenna for Wireless Communication Applications

[Nur hidayah Moktar](#)

10:00 4-Coils Magnetic Resonance Coupling for 5G Wireless Power Transfer Applications

[Saidatul Izyanie Kamarudin](#), [Alyani Ismail](#), [Aduwati Sali](#) and [Mohd Yazed Ahmad](#)

CME 2

Control and Mechatronics Engineering 2

Room 7

9:00 Modelling a Customized Mixed Model Assembly Line: A Case Study Using a Water Bottling Plant

[Rangith Baby Kuriakose](#) and [Hermanus Vermaak](#)

9:20 Parameters Optimization of Surface Grinding Process with Particles Swarm Optimization, Gravitational Search, and Sine Cosine Algorithms: A Comparative Analysis

[Teh Muy Shin](#), [Asrul Adam](#) and [Amar Faiz Zainal Abidin](#)

9:40 A Review on Graph Search Algorithms for Optimal Energy Efficient Path Planning for an Unmanned Air Vehicle

[Sanjoy Kumar Debnath](#), [Rosli Omar](#), [Nor Badariyah Abdul Latip](#), [Shasha Shelyna](#), [Elia Nadira](#), [Che Ku Nor Che Ku Melor](#), [Tapan Kumar Chakraborty](#) and [Elango Natarajan](#)

10:00 Real Time Object Customization in CAD System via Visual Basic Programming

[Muhammed Nafis Osman Zahid](#) and [Zainal Fahmi](#)

ECE 3

Electronic and Computer Engineering 3

Room 5

9:00 On-Chip Rectifier Recharges Energy to Radio Frequency Energy Harvesting Applications

[Mohammed Alseltwi](#), [Yan Chiew Wong](#) and [Zul Atfyi Fauzan Mohammed Napiah](#)

9:20 Simulation Study of Single Event Effects (SEE) Sensitivity on Power MOSFET with Single Heavy Ion Radiation

[Erman Yahya](#), [Ramani Kannan](#), [Lee Lini](#) and [Saranya Krishnamurthy](#)

9:40 Humidity Effect on Electrical Properties of Graphene Oxide Back-to-Back Schottky Diode

[Shaharin Fadzli Bin Abd Rahman](#), [Nurul Anati Salleh](#), [Mastura Shafinaz Zainal Abidin](#) and [Amirjan Nawabjan](#)

10:00 Graphene as Charge Storage Layer in Floating Gate Flash Memory: Comparison Between N-Channel and P-Channel

[Muhammad Hilman Ahmad](#), [Nurul Ezaila Alias](#), [Afiq Hamzah](#), [Razali Ismail](#), [Zaharah Johari](#), [Mastura Shafinaz Zainal Abidin](#) and [Norlina Paraman](#)

10:20 Reverse Biased NCG/p-Si Schottky Diode Sensor

[Azfar Abid Nawawi](#), [Suhana Mohamed Sultan](#), [Shaharin Fadzli Bin Abd Rahman](#), [Puspa Inayat Khalid](#) and [Suan Hui Pu](#)

ECE 4

Electronic and Computer Engineering 4

Room 6

9:00 Anomaly Detection for Elderly In-home Activity Monitoring

[Soon-Chang Poh](#), [Yi-Fei Tan](#), [Soon-Nyeon Cheong](#), [Chee Pun Ooi](#) and [Wooi Haw Tan](#)

9:20 A Simulation Study of Excitation Coil Design in Single-sided MPI Scanner for Human Body Application

[Nurmiza Othman](#), [Muhamad Fikri Shahkhirin Ibrahim](#), [Wan Nurshazwani Wan Zakaria](#), [Mohd Razali Md Tomari](#), [Md Nor Ramdon Bin Baharom](#) and [Luqman Hakim](#)

9:40 Obfuscated Computer Virus Detection Using Machine Learning Algorithm

[Ismahani Ismail](#), [Tan Hui Xin](#) and [Ban Khammas](#)

10:00 Machine Learning Approaches for Land-Use Images Classification

[Hela Elmannai](#), [Amina Salhi](#), [Monia Hamdi](#) and [Mohamed Sliti](#)

10:20 The Segmentation Analysis of Retinal Image Based on K-Means Algorithm for Computer-Aided Diagnosis of Hypertensive Retinopathy

[Wiharto Wiharto](#) and [E Suryani](#)

EPE 2

Electric Power Engineering 2

Room 4

9:00 Assessment of Capacity Benefit Margin Using Demand Side Management Approach

[Olatunji Obalowu Mohammed](#), [Mohd Wazir Mustafa](#), [Daw Mohammed](#), [Sani Salisu](#) and [Nabila Ahmad Rufa'i](#)

9:20 A Framework for Curbing Electricity Theft Based on Universal Anomaly Detection

[Abdulrahman Okino Otuoze](#), [Mohd Wazir Mustafa](#), [Ibim Sofimieari](#), [Abdulhakeem Mohd Dobi](#), [Aliyu Hamza Sule](#), [Abiodun E Abioye](#) and [Muhammad Saeed](#)

9:40 Conceptual Study of the Pool Based Market Model in Malaysia Electricity Supply Industry

[Zuraidah Ngadiron](#), [Nur Hanis Mohammad Radzi](#) and [Mohammad Yusri Hassan](#)

10:00 Integration of Time of Use (TOU) Tariff in Net Energy Metering (NEM) Scheme for Electricity Customers

[Md Pauzi Abdullah](#), [Abdul Hafiz Razali](#), [Mohammad Yusri Hassan](#), [Dalila Mat Said](#) and [Faridah Hussin](#)

Thursday, November 29 10:40 - 11:00

Morning Break

Thursday, November 29 11:00 - 12:40

CE 4

Communication Engineering 4

Room: Room1

11:00 User Clustering and Resource Allocation in Downlink CoMP with NOMA

[Norshidah Katiran](#), [Shaharil Mohd Shah](#), [Noorsaliza Abdullah](#), [Aimi Syamimi Ab Ghafar](#) and [Faiz Asraf Saparudin](#)

11:20 Pilot Reuse Sequences in Downlink Multi-cells to Improve Data Rates in Massive MIMO System

[Adeeb Salh](#), [Lukman Audah](#), [Nor Shahida Mohd Shah](#) and [Shipun Anuar Hamzah](#)

11:40 Implementation of Deep Learning Based Method for Optimizing Spatial Diversity MIMO Communication

[Mahdin Rohmatillah](#), [Sholeh Hadi Pramono](#) and [Rifa Asyari](#)

12:00 On the Impact of Routing and Network Size for Wireless Network-on-Chip Performance

[Asrani Lit](#), [Mohd Shahrizal Rusli](#) and [Muhammad Nadzir Marsono](#)

CE 5

Communication Engineering 5

Room: Room2

11:00 UHF Meander Bowtie Antenna for RFID Application

[Norsaidah Muhamad Nadzir](#), [Mohamad Kamal A. Rahim](#), [Farid Zubir](#) and [Huda A. Majid](#)

11:20 Designs of Rectangular-Shaped Planar Inverted-F Antennas at Mobile Operating Frequencies with Different Ground Plane Techniques

[Norhudah Seman](#), [Nurul Inshirah Mohd Razali](#) and [Tien Han Chua](#)

11:40 An Ultrawideband Band-Notched Metamaterial MIMO Antenna with SRR for Wireless Communication Systems

[Murtala Aminu-Baba](#), [Mohamad Kamal A. Rahim](#), [Farid Zubir](#), [Mohd Fairus Mohd Yusof](#), [Noor Asmawati Samsuri](#) and [Kabiru Ibrahim Jahun](#)

12:00 A Wideband Dielectric Resonator Antenna with a Cross Slot Aperture for 5G Communications

[Abinash Gaya](#), [Mohd Haizal Jamaluddin](#), [Muhammad Ramlee Kamarudin](#) and [Irfan Ali](#)

CE 6

Communication Engineering 6

Room 3

11:00 Estimation of Rain Attenuation on Terrestrial Millimeter Wave Links from Raindrop Size Distributions

[Manhal Alhilali](#), [Mustafa Ghanim](#), [Jafri Din](#) and [Hong Yin Lam](#)

11:20 Characterization of Concurrent Ku Band Tropospheric Scintillation and Rain Attenuation in Malaysia

[Ibtihal F Elshami](#), [Hong Yin Lam](#), [Jafri Din](#) and [Ali I Elgayar](#)

11:40 Wireless Network Planning Methodology for Rural Area in Indonesia

[Nazmia Kurniawati](#), [Achmad Affandi](#) and [Istas Pratomo](#)

12:00 Rain Attenuation in Broadband Satellite Service and Worst Month Rain Analysis for Abuja Nigeria

[Abubakar Idrissa](#), [Jafri Din](#), [Hong Yin Lam](#) and [Manhal Alhilali](#)

CME 2

Control and Mechatronics Engineering 2

Room 7

11:00 Optimization of PID Controller Parameter for Industrial Electro-Hydraulic Actuator System Using PSO GSA

[Mohd Fua'ad Rahmat](#), [Siti Marhainis Othman](#) and [Mohammed Alqadasi](#)

11:20 Remote Tending of Modern Broadcast Transmitters

[Gerino P Mappatao](#), [Isaiah Mari Zebedia Bautista](#), [Joseph Castillo](#), [Marc Kevin Orsos](#) and [Mark Aldrine Ribo](#)

11:40 Modified Fingerprinting Localization Technique of Indoor Positioning System Based on Coordinates

[Rhowel Dellosa](#), [Arnel Fajardo](#) and [Ruji Medina](#)

12:00 A New Technique to Reduce Overshoot in Pneumatic Actuator Positioning System

[Mohd Fua'ad Rahmat](#), [Siti Fatimah Sulaiman](#), [Ahmad `Athif Mohd Faudzi](#) and [Khairuddin Osman](#)

ECE 3

Electronic and Computer Engineering 3

Room 5

11:00 Graphene Field-Effect Transistor Simulation with TCAD on Top-gate Dielectric Influences

[Muhamad Amri Ismail](#), [Khairil Mazwan Mohd Zaini](#) and [Syono Mohd. Ismahadi](#)

11:20 Evaluating IoT Based Passive Water Catchment Monitoring System Data Acquisition and Analysis

[Mohammad Fadhil Abas](#)

11:40 Adaptive Control of Nonlinear System Based on QFT Application to 3-DOF Flight Control System

[Rounaql Islam Bobby](#), [Khaizuran Abdullah](#), [Ahmad Jusoh](#), [Nagma Parveen](#) and [Md Mahmud](#)

12:00 Automatic Smoke Detection System with Favoriot Platform Using Internet of Things (IoT)

[Siat Ling Jong](#) and [Mohd Alif Suparman](#)

12:20 An Open Source LoRa Based Vehicle Tracking System

[Norhafizah Ramli](#), [Anuar Ahmad](#), [Ivin Amri Musliman](#) and [Muhammad Mun'im A Zabidi](#)

ECE 4

Electronic and Computer Engineering 4

Room 6

11:00 Portable Cardiac Self-Stress Test Device Development Based on Metabolic Equivalent (METS)

[Whomaira Abdul Samad](#), [Mohd Afzan Othman](#), [Norlaili Mat Safri](#) and [Mohd Azhar Abdul Razak](#)

11:20 Analysis of Surface Electromyography for Hand Gesture Classification

[Najla Ab Majid](#), [Noraini Zakaria](#), [Sharvin Ramachandran](#) and [Norlaili Mat Safri](#)

11:40 Emotion Recognition Feature Selection Using End-part Segmented Speech on Energy Feature

[Noor Aina](#) and [Md Sah Salam](#)

12:00 Model-based Method in Assessing Breathing Effort in Mechanically Ventilated Patients in Malaysian ICU Hospital

[Nor Salwa Damanhuri](#), [J. Geoffrey Chase](#), [Chiew Yeong Shiong](#), [Azrina Ralib](#), [Mohd Basri Mat Nor](#), [Nor Azlan Othman](#), [Paul Docherty](#) and [Noor Najwa Noor Ariffin](#)

12:20 Optimization of 16 nm DG-FinFET Using L18 Orthogonal Array of Taguchi Statistical Method

[Fauziyah Salehuddin](#), [Ameer Farhan Roslan](#), [Khairil Ezwan Kaharudin](#), [Anis Suhaila Mohd Zain](#), [Hanim Abdul Razak](#), [Hazura Haroon](#), [Siti Idris](#) and [Ibrahim Ahmad](#)

EPE 2

Electric Power Engineering 2

Room 4

11:00 Time Series Data Measurement on Electricity Consumption for Selected Domestic Appliances in Typical Terrace House in Malaysia

[Naja Aqilah Hisham](#), [Sheikh Ahmad Zaki Shaikh Salim](#), [Aya Hagishima](#), [Nelidya Md. Yusoff](#) and [Fitri Yakub](#)

11:20 Improved Load Flow Formulation for Radial Distribution Networks

[Dahaman Ishak](#) and [Norainon Mohamed](#)

11:40 Energy Efficiency Index by Considering Number of Occupants: A Study on the Lecture Rooms in a University Building

[Noor Ameera Zakaria](#), [Mohammad Yusri Hassan](#), [Hayati Abdullah](#), [Md Pauzi Abdullah](#), [Faridah Hussin](#), [Siti Maherah Hussin](#), [SMH](#) and [Nur Najihah Abu Bakar](#)

12:00 Comparison Between Fast Fourier and Discrete Wavelet Transform for Fault Location Identification of Double Circuit Transmission Line

[Faridah Hanim Mohd Noh](#), [Rohaiza Hamdan](#), [Marlia Morsin](#), [Mohd Hafiz Abd Jalil Zainuddin](#) and [Nor Aira Zambri](#)

Thursday, November 29 12:40 - 14:00

Lunch

Thursday, November 29 14:00 - 15:40

CE 7

Communication Engineering 8

Room: Room1

14:00 A Novel Autonomous Wireless Sensor Node for IoT Applications

[Ngan Nguyen](#), [Quoc Cuong Nguyen](#) and [Minh Thuy Le](#)

14:20 An Energy Efficient Void Avoidance Opportunistic Routing (EEVA-OR) Protocol for Underwater Sensor Networks

[Azlina Kamaruddin](#), [Hafizah Harun](#) and [Md Asri Ngadi](#)

14:40 Internet of Things in Strawberry Production: A Review

[Olakunle Elijah](#), [Abdelmoneim Ahmed bakhit](#), [Tharek Abdul Rahman](#), [Siti Fatimah Ausordin](#), [Tien Han Chua](#) and [Rifhan Narrissa Razali](#)

15:00 IoT-based Smart Irrigation Management and Monitoring System Using Arduino

[Firdaus Kamaruddin](#), [Nik Noordini Nik Abd Malik](#), [Noor Asniza Murad](#), [Nurul Mu'azzah Abdul Latiff](#), [Sharifah Kamilah Syed Yusof](#) and [Shipun Anuar Hamzah](#)

CE 8

Communication Engineering 8

Room: Room2

14:00 Analysis of Wave Propagation for Wireless Implantable Body Area Network Application

[Nur Hidayah Ramli](#), [Haryati Jaafar](#), [Lee Yeng Seng](#) and [O. Hazila](#)

14:20 Size Miniaturization of Chipless RFID Based Metamaterial Structure Using Modified Complementary Split Ring Resonator

[Mohd Ezwan Jalil](#), [Mohamad Kamal A. Rahim](#), [Osman Bin Ayop](#) and [Noor Asmawati Samsuri](#)

14:40 Dual Band Low Loss Metamaterial Structure at Millimetre Wave Band

[Bashar Esmail](#), [Huda A. Majid](#), [Muhammad Faizal Ismail](#), [Samsul Haimi Dahlan](#), [Zuhairiah Zainal Abidin](#) and [Mohamad Kamal A. Rahim](#)

15:00 Multiband Hairpin-Line Bandpass Filters by Using Metamaterial Complimentary Split Ring Resonator (CSRR)

[Mohd Fairus Mohd Yusof](#), [Muhammad Akram Mohd Sobri](#), [Farid Zubir](#) and [Zaharah Johari](#)

CE 9

Communication Engineering 9

Room 7

14:00 A Wireless Precoding Technique for mm-Wave MIMO System Based on SIC-MMSE

[Rounaqul Islam Bobby](#), [Khaizuran Abdullah](#), [Ahmad Jusoh](#), [Nagma Parveen](#) and [Ani Liza Asnawi](#)

14:20 Performance Enhancement of a Hybrid Optical CDMA-DWDM System Against ISI and FWM

[Naif Alsowaidi](#), [Tawfig A Eltaif](#) and [Mohd Ridzuan Mokhtar](#)

14:40 Performance Investigation of MD-SAC OCDMA in FSO Communication Using Different Line Codings

[Sholeh Hadi Pramono](#) and [Mahdin Rohmatillah](#)

15:00 Development of Android-based Apps for Last Mile Route Tracking in Courier Service

[Alias Mohd](#), [Rozeza A. Rashid](#), [Abdul Hadi Fikri Abdul Hamid](#), [Mohd Adib Sarijari](#) and [Mohd. Rozaini Abd. Rahim](#)

CME 3

Control and Mechatronic Engineering 3

Room 6

14:00 Velocity Control of a Two-Wheeled Inverted Pendulum Mobile Robot a Fuzzy Model-Based Approach

[Salinda Buyamin](#), [Mustapha Muhammad](#), [Amir A. Bature](#) and [Anita Ahmad](#)

14:20 Sliding Mode Control for Altitude and Attitude Stabilization of Quadrotor UAV with External Disturbance

[Aminurrashid Noordin](#), [Mohd Ariffanan Mohd Basri](#) and [Zaharuddin Mohamed](#)

14:40 Detection of Foreign Objects in Milk Using an Ultrasonic System

[Sallehuddin Ibrahim](#), [Mohd Amri Bin Md Yunus](#), [Mohd Taufiq Md Khairi](#) and [Ahmad Ridhwan Wahap](#)

15:00 Solenoid Actuated Five-Fingered Robotic Hand Design: Evaluating the Capability of Solenoid Actuators in Generating Basic Finger Motions

[Syed Zainal Abidin Syed Kamarul Bahrin](#) and [Khairul Salleh Mohamed Sahari](#)

ECE 5

Electronic and Computer Engineering 5

Room 5

14:00 A Low Cost Experimental Assesment of Soil Macronutrient Spectroscopy Utilizing Raspberry-Pi Imaging Module

[Suhaila Isahak](#), [Yusmeeraz Yusof](#), [Mu Wen Chuan](#), [Nor Hafizah Ngajikin](#) and [Norhafizah Ramli](#)

14:20 Performance Analysis of Ultrathin Junctionless Double Gate Vertical MOSFETs

[Fauziyah Salehuddin](#), [Zul Atfyi Fauzan Mohammed Napiah](#), [Khairil Ezwan Kaharudin](#), [Ameer Farhan Roslan](#) and [Anis Suhaila Mohd Zain](#)

14:40 Performance Analysis Comparison Between Non Mixed-Criticality and Mixed-Criticality System in Microcontroller

[Siti Maidin](#), [Noor Azurati Ahmad](#), [Sharizal Fadlie Sabri](#), [Salwani Mohd. Daud](#), [Kamilia Kamardin](#) and [Yusnaldi Md Yusof](#)

15:00 Automated Library Booktruck for Traditional Libraries

[Jan Spies, JJ](#) and [Benjamin Kotze](#)

EPE 3

Electric Power Engineering 3

14:00 Single Phase Multilevel Inverter Topology with Asymmetrical DC Sources and Reduced Number of Semiconductor Switches Operating at High Switching Frequency

[Saifullah Kakar](#), [Shahrin Md. Ayob](#), [Norjulia Mohamad Nordin](#) and [M Saad Bin Arif](#)

14:20 Comparison on Space Charge and Voltage Distribution of High Voltage Insulator Subjected to Different Contamination Levels

[Nordiana Azlin Othman](#), [Nurul Samuri](#), [M. Afendi M. Piah](#), [Nor Akmal Mohd Jamail](#) and [Hanan Rosli](#)

14:40 A Study of Cascaded H-Bridge Converter and Modular Multilevel Converter as a Recuperating Converter in DC Railway Electrification System

[Chuen Ling Toh](#), [Zhen Hang Choi](#) and [Muhammad Hairi Zainol Hilmi](#)

15:00 Bridgeless PFC Single Ended Primary Inductance Converter (SEPIC) in Continuous Current Mode (CCM)

[Nor Akmal Raj](#), [Mohd Junaidi Abd Aziz](#), [Mohd Rodhi Sahid](#) and [Shahrin Md. Ayob](#)

EPE 4

Electric Power Engineering 4

Room 4

14:00 Surface Roughness Condition of Field-Aged High Voltage Polymer Insulators at Different Installation Area

[Asri Din](#), [M. Afendi M. Piah](#), [Abdul Rahim Abdullah](#) and [Nur Faizal](#)

14:20 Comparison of Lightning Return Stroke Channel-Base Current Models with Measured Lightning Current

[Chin-Leong Wooi](#), [Zulkurnain Abdul-Malek](#), [M. N. K. H. Rohani](#), [Ahmad Muhyiddin Bin Yusof](#), [Ali I Elgayar](#) and [Syahrin Nizam Md Arshad Hashim](#)

14:40 AC Breakdown Behavior of SF₆/N₂ Gas Mixtures Under Non-Uniform Field Electrode Configurations

[Nur Farhani Ambo](#), [Hidayat Zainuddin](#), [Muhammad Saufi Kamarudin](#), [Jamaludin Mohd Wari](#) and [Ayuamira Zahari](#)

15:00 Electromagnetic Pollution near by Warehouse Caused by Power Transmission Lines by Considering the Soil Resistivity

[Ali I Elgayar](#), [Zulkurnain Abdul-Malek](#), [Mohammed Imran Mousa](#), [Visa Musa Ibrahim](#), [Chin-Leong Wooi](#), [Ruqayyah Othman](#) and [Ibtihal F Elshami](#)

Thursday, November 29 15:40 - 16:00

Afternoon Break

Thursday, November 29 16:00 - 17:40

CE 7

Communication Engineering 7

Room: Room1

16:00 Measuring the Underwater Received Power Behavior for 433 MHz Radio Frequency Based on Different Distance and Depth for the Development of an Underwater Wireless Sensor Network (UWSN)

[Muhammad Ramdhan Mohd Suhaili](#), [Kamaludin Mohamad Yusof](#), [Muhammad Ali](#), [Nurzal Effiyana Ghazali](#) and [Samura Ali](#)

16:20 The Dynamics of Traffic Congestion: A Specific Look into Malaysian Scenario and the Plausible Solutions to Eradicate It Using Machine Learning

[Muhammad Ali](#), [Kamaludin Mohamad Yusof](#), [Tee Kok Sheng](#), [Muhammad Ramdhan Mohd Suhaili](#), [Nurzal Effiyana Ghazali](#) and [Samura Ali](#)

16:40 Indoor Positioning System Based on WLAN Fingerprint and User Orientations with Minimum Computation Time

[Firdaus Firdaus](#), [Noor Azurati Ahmad](#) and [Shamsul Sahibuddin](#)

17:00 Geometric Sensitivity and Trajectory of Airborne Mobile Anchors

[Izanoordina Ahmad](#), [Neil W Bergmann](#), [Raja Jurdak](#) and [Branislav Kusy](#)

CE 8

Communication Engineering 8

Room: Room2

16:00 A 28 GHz 0.18 μ m CMOS Cascade Power Amplifier with Reverse Body Bias Technique

[Ahmad Fariz Hasan](#), [Sohiful Anuar Bin Zainol Murad](#) and [Faizah Abu Bakar](#)

16:20 Entire X-band Region Metamaterial Absorber and Reflector with a Microstrip Patch Switch for X-band Applications

[mohammed mustapha gajibo](#), [Noor Asniza Murad](#), [Osman Bin Ayop](#), [Huda A. Majid](#), [Murtala Aminu](#) and [Raimi Dewan](#)

16:40 Floral Structure for Textile-based Metamaterial Absorber

[Siti Nurzulaiha Isa](#), [Osman Bin Ayop](#), [Farid Zubir](#), [Noor Asniza Murad](#) and [Mohamad Kamal A Rahim](#)

17:00 Circular Polarization Folded Reflectarray Antenna for 5G Applications

[Mohd Fairus Mohd Yusof](#), [Lim Jit Min](#), [Mohamad Rijal Hamid](#) and [Zaharah Johari](#)

CE 9

Communication Engineering 9

Room 7

16:00 Wide to Multiband Elliptical Monopole Reconfigurable Antenna for Multimode Systems Applications

[Izni Husna Idris](#), [Mohamad Rijal Hamid](#), [Kamilia Kamardin](#) and [Mohamad Kamal A. Rahim](#)

16:20 Fractal Yagi-Uda Antenna for WLAN Applications

[Amerrul Zabri](#), [Mohamad Kamal A. Rahim](#), [Norsaidah Muhamad Nadzir](#), [Huda A. Majid](#) and [Farid Zubir](#)

16:40 26 GHz Phase Shifters for Multi-Beam Nolen Matrix Towards Fifth Generation (5G) Technology

[Norhudah Seman](#), [Nazleen Syahira Mohd Suhaimi](#) and [Tien Han Chua](#)

CME 3

Control and Mechatronic Engineering 3

Room 6

16:00 Advancement of a Smart Fibrous Capillary Irrigation Management System with an Internet of Things Integration

[Muhammad Khairie Idham Abd Rahman](#), [Mohamad Shukri Zainal Abidin](#), [Mohd Saiful Azimi Mahmud](#), [Salinda Buyamin](#), [Mohamad Hafis Izran Ishak](#) and [Abiodun E Abioye](#)

16:20 Electronics System Thermal Management Optimization Using Finite Element and Nelder-Mead Method

[Fatimah Sham Ismail](#) and [Nurul Kausar Ab Majid](#)

16:40 Development of a Remote Tending System for Analog Broadcast Transmitters

[Gerino P Mappatao](#)

17:00 Modeling and Simulation of a Wirelessly-Powered Thermopneumatic Micropump for Drug Delivery Applications

[Marwan Nafea](#), [Jeevananthan Baliah](#) and [Mohamed Sultan Mohamed Ali](#)

ECE 5

Electronic and Computer Engineering 5

Room 5

16:00 High Power Supply Rejection Ratio (PSRR) at High Frequency Low Dropout Regulator

[Astrie Nurasyeila Fifie Asli](#) and [Yan Chiew Wong](#)

16:20 High Voltage Conversion Differential-drive Rectifier for RF Energy Harvesting System

[Astrie Nurasyeila Fifie Asli](#) and [Yan Chiew Wong](#)

16:40 Noise and PSRR Design Consideration in Low Dropout LDO Voltage Regulator for Energy Harvesting Power Management Unit

[Mohamad Khairul Mohd Kamel](#) and [Yan Chiew Wong](#)

17:00 A 1.2V Miniature On-Chip Battery-less Power Management System

[Jim Hui Yap](#) and [Yan Chiew Wong](#)

EPE 3

Electric Power Engineering 3

Room 3

16:00 Breakdown Characteristics of Polyethylene/Silicon Nitride Nanocomposites

[Aizat Azmi](#), [Kwan Yiew Lau](#) and [Khairull Amrey Abu Seman](#)

16:20 Space Charges Analysis on Cross-Linked Polyethylene (XLPE) Insulator with Effect of Uniform Layer Contamination

[Mohd Haris Asyraf Shee Kandar](#), [Nor Akmal Mohd Jamail](#), [Nordiana Azlin Othman](#), [Qamarul Ezani Kamarudin](#) and [Nor Asiah Muhamad](#)

16:40 Minimizing Harmonic Distortion Impact Cause by Charging Station Using Meta Heuristic Technique

[Syed Norazizul Syed Nasir](#), [Jasrul Jamani Jamian](#) and [Wazir Mustafa](#)

17:00 Factors That Affects the Dielectric Properties of Natural Fibre Reinforced Hybrid Composite

[Nishanthi Sunthrasakaran](#), [Nor Akmal Mohd Jamail](#), [Rahisham Abd. Rahman](#), [Md Nor Ramdon Bin Baharom](#), [Qamarul Ezani Kamarudin](#), [Mohamad Farid Sies](#) and [W. Muhammad W. N. Azrina](#)

EPE 4

Electric Power Engineering 4

Room 4

16:00 Computation of Current-Resistor Photovoltaic Model Using Reverse Triangular Number for Photovoltaic Emulator Application

[Razman Ayop](#), [Chee Wei Tan](#) and [Kwan Yiew Lau](#)

16:20 High Performance Multi-Phase Permanent Magnet Synchronous Machine with Different Winding Configurations and Magnetization Patterns

[Dahaman Ishak](#) and [Mohd Reza](#)