



**2019 INTERNATIONAL
UNIMAS STEM
12th ENGINEERING CONFERENCE
ENCOR**

**'REVOLUTIONIZED INNOVATIVE ENGINEERING AND TECHNOLOGY
TOWARDS SUSTAINABLE DEVELOPMENT'**

TECHNICAL SESSION SCHEDULE

Co-Organizer



28 August 2019
(WEDNESDAY)

0830 - 0915	<p>KEYNOTE SPEAKER 1 (Venue: SARAWAK CHAMBER 3)</p> <p>TITLE:</p> <p>MONITORING AND CHANGE DETECTION OF DISASTERS IN JAPAN BY USING SYNTHETIC APERTURE RADAR</p> <p>Speaker: Associate Professor Dr Toshifumi Moriyama <i>Nagasaki University, Japan</i></p> <p>Session Chair: Professor Ir. Dr Law Puong Ling</p>
0930 - 1130	<p>OPENING CEREMONY</p>
0930 - 1130	<p>TEA BREAK (SARAWAK CHAMBER FOYER, LEVEL 3)</p>
1145 - 1230	<p>KEYNOTE SESSION 2 (Venue: SARAWAK CHAMBER 3)</p> <p>TITLE:</p> <p>HOW IMPORTANT IS SUSTAINABLE DESIGN IN DIGITAL IMAGING?</p> <p>Speaker: Professor Ts. Dr. M. Iqbal Saripan <i>Universiti Putra Malaysia (UPM)</i></p> <p>Session Chair: Dr Tengku Mohd Afendi Zulcaffle</p> <hr/> <p>KEYNOTE SESSION 3 (Venue: WIND SUITE, LEVEL 3)</p> <p>TITLE:</p> <p>STEM EDUCATION POLICY FROM MOE PERSPECTIVE: CURRENT OUTLOOK AND WAY FORWARD</p> <p>Speaker: Mr Raymond Maurice anak Stephan <i>Assistant Director, STEM Education Coordinator, Ministry of Education</i></p> <p>Session Chair: Professor Ir. Dr Andrew Ragai Henry Rigit</p>
1300 - 1400	<p>LUNCH (Café Majestic)</p>

28 August 2019
(WEDNESDAY)

POSTER PRESENTATION (SESSION I)

1400 - 1420

Lobby, Level 3

01	<p>Paper ID: 78</p> <p>Optimizing Machine Learning Algorithms for Improvement of Performance Metrics in Pepper Cultivation (EE)</p> <p><i>Nadia Aldrin, Hushairi Zen and Nabilah Omar</i></p>
02	<p>Paper ID: 84</p> <p>Accuracy and realibility of IoT system for Agriculture (EE)</p> <p><i>Nabilah Omar, Hushairi Zen and Nadia Nicole Aldrin</i></p>
03	<p>Paper ID: 54</p> <p>Smart Electrical Energy Meter (SEEMS) (EE)</p> <p><i>Azfar Satari Abdullah, Nur Faezah Abusamah, Mohd Hafiez Izzwan Saad, Hazmi Hijazi Abdul Halim, Abdul Rahman Kram, Abdul Hafiz Abdul Karim, Mohd Ridhuan Mohd Sharip and Abg Syafiqnurain Abg Shokeran</i></p>
04	<p>Paper ID: 55</p> <p>Distribution Voltage in DC Microgrid System based Solar PV Topologies Configuration in Sarawak, Malaysia (EE)</p> <p><i>Mohd Ridhuan Mohd Sharip, Dayangku Khairunesa Awg. Sakawi, Dyg Norkhairunnisa Abang Zaidel, Mohd Hafiez Izzwan Saad, Azfar Satari Abdullah, Abdul Hafiz Abdul Karim, Abdul Rahman Kram and Hazmi Hijazi Abdul Halim</i></p>
05	<p>Paper ID: 69</p> <p>Selection Combiner in Time-Varying Amplify Forward Cooperative Communication (EE)</p> <p><i>Sylvia Ong and Hushairi Zen</i></p>
06	<p>Paper ID: 76</p> <p>Design of a Data Logging System for a Small Scale Hydrokinetic Turbine (EE)</p> <p><i>Diana Ringgau, Martin Anyi and Kismet Hong Ping</i></p>
07	<p>Paper ID: 60</p> <p>Kinetic Study on Heavy Metal Divalent Ions Removal using Zirconium-Based Magnetic Sorbent (Chem.)</p> <p><i>Soh Fong Lim, A. Y. W. Lee, S. N. D. Chua and B. H. Lim</i></p>

(WEDNESDAY)

POSTER PRESENTATION (SESSION II)

1430 - 1450

Lobby, Level 3

01	<p>Paper ID: 52</p> <p>Visual Odometry Trajectory Curve Analysis for Lane-Changing Detection (EE)</p> <p><i>Dayang Nur Salmi Dharmiza Awang Salleh and Emmanuel Seignez</i></p>
02	<p>Paper ID: 57</p> <p>Predictive Current Control of Three Level Neutral Point Clamped Based Indirect Matrix Converter (EE)</p> <p><i>Hazrul Mohamed Basri and Kasumawati Lias</i></p>
03	<p>Paper ID: 89</p> <p>Wearable Coaching System using Body Area Network System (EE)</p> <p><i>Nur Alia Athirah Mohtadzar, Dyg Norkhairunnisa Abang Zaidel, Abdul Rahman Kram, Kasumawati Lias, Shahrol Mohamaddan, Mohamad Shaiful Abdul Karim, Yon Syafni Samat, and Takayama Shigeru</i></p>
04	<p>Paper ID: 61</p> <p>Development of a Web-Based Industrial Revolution 4.0 Implementation Monitoring System Prototype for Academic Programmes in Universiti Malaysia Sarawak (EE)</p> <p><i>Rohana Sapawi, Rafeah Wahi, Azzahrah Anuar, Nabaahah Isa, Hamimah Ujir, Hashimatul Fatma Hashim, Ade Syaheda Wani Marzuki, Shanti Faridah Salleh and Wan Hashim Wan Ibrahim</i></p>
05	<p>Paper ID: 65</p> <p>Fabrication and Characterization of Titanium Dioxide (TiO₂) with Different Synthesizing Temperature for Solar Cell Application (EE)</p> <p><i>Siti Kudnie Sahari, Andre Anding Tedong, Afiqah Bahrin, Rafidah Kemat, Kuryati Kipli and Marini Sawawi</i></p>
06	<p>Paper ID: 6</p> <p>Digital Predictive Current Control Fed by Three-Level Indirect Matrix Converter under Unbalanced Power Supply Condition (EE)</p> <p><i>Hazrul Mohamed Basri, Kasumawati Lias and Saad Mekhilef</i></p>
07	<p>Paper ID: 72</p> <p>Exploration of CMOS Class AB Power Amplifier Design in Gigahertz Frequencies (EE)</p> <p><i>Rohana Sapawi, Dzatul A'Qidah Sa'Ahmad, Sharifah Masniah Wan Masra, Siti Kudnie Sahari, Kuryati Kipli and Marini Sawawi</i></p>
08	<p>Paper ID: 79</p> <p>A Study of Deep Learning Algorithm in Solar Photovoltaic Power Forecasting (EE)</p> <p><i>Lee Chin Kho, Sze Song Ngu, Annie Joseph, Hushairi Zen and Kai Lung Chai</i></p>
09	<p>Paper ID: 81</p> <p>Online Person Identification based on Multitask Learning (EE)</p> <p><i>Annie Joseph, Edward Ijau Anak Pelias Pog, Kho Lee Chin, David Bong Boon Liang, Dyg Azra Awang Mat and Ngu Sze Song</i></p>

28 August 2019
(WEDNESDAY)

POSTER PRESENTATION (SESSION III)

1545 - 1605

Lobby, Level 3

01	<p>Paper ID: 41</p> <p>Breast Tumor Identification Based on Overset Grid Generation Method with Biquadratic Spline Interpolation in Forward-Backward Time-Stepping (EE)</p> <p><i>Bong Siaw Wee, Kismet Hong Ping and Shafrida Sahrani</i></p>
02	<p>Paper ID: 21</p> <p>Review on Feasibility of Gravity Power Generation Mechanism in Malaysia's Sustainable Energy Program (EE)</p> <p><i>Hadi Nabipour Afrouzi, Hari Prashanth P.V.S, Hegaindran Sundram, Ausgustin Pierre Jean Girod, Jean-Roch Spigolis, Siingkieh Tiong and Kamyar Mehranzamir</i></p>
03	<p>Paper ID: 75</p> <p>Optimization of Hybrid Renewable Energy in Sarawak Remote Rural Area Using HOMER Software (EE)</p> <p><i>Yanuar Z. Arief, Nur Anisah Aziera Abdul Halim and Mohd Hafiez Izzwan Saad</i></p>
04	<p>Paper ID: 87</p> <p>Evaluation of Abnormalities on Induction Motor Using Power Systems Computer Aided Design (PSCAD) (EE)</p> <p><i>Yanuar Z. Arief, Mohamad Nursalam Ibrahim and Mohd Hafiez Izzwan Saad</i></p>
05	<p>Paper ID: 85</p> <p>A Comprehensive Low Wind Speed Prediction and Data Analysis For Studying Wind Energy Potential at Two Locations of Sarawak (EE)</p> <p><i>Salisu Muhammad Lawan, Wan Azlan Wan Zainal Abidin and Sj Kawu</i></p>
06	<p>Paper ID: 86</p> <p>Hybrid Wind Speed Prediction Model Based on Intrinsic Mode Function (IMF) and Gradient Boosted Machine (GBM) (EE)</p> <p><i>Salisu Muhammad Lawan, Wan Azlan Wan Zainal Abidin and Thelaha Masri</i></p>
07	<p>Paper ID: 9</p> <p>The Study on Behaviour of Stone Columns and Pile Foundations in Soft Soils when Placed under Rigid Raft Foundation (Civil)</p> <p><i>Danish Ahmed, Siti Noor Linda Bt Taib, Tahar Ayadat and Alsidqi Hasan</i></p>

08	<p>Paper ID: 71</p> <p>Assessment of Potential Rainwater Volume Reduction Optimization Using Permeable Pavement with Subsurface Precast Micro Detention Pond (Civil)</p> <p><i>Norazlina Bateni, Sai Hin Lai, Putuhena Fj, Yau Seng Mah, Md Abdul Manan, Melfrid Manegild Michael, Zulfadli Bujang, and Jethro Henry Adam</i></p>
09	<p>Paper ID: 66</p> <p>A Review of MRI Acute Ischemic Stroke Lesion Segmentation (EE)</p> <p><i>Abang Mohd Arif Anaqi Abang Isa, Kuryati Kipli, Muhammad Hamdi Mahmood, Ahmad Tirmizi Jobli, Siti Kudnie Sahari and Mohd Saufee Muhammad</i></p>

28 August 2019
(WEDNESDAY)

ORAL PRESENTATION SESSION 1 (Electrical, Electronic)

Wind Suite II, Level 3

Session Chair: Dr Lee Yee Yong

1400 - 1415	<p>Paper ID: 5</p> <p>Experimental Studies on Continuous Electrocoagulation Treatment of Peat Water in Sarawak with Copper Electrodes (Chem.)</p> <p><i>Nazeri Abdul Rahman, Allene Albania Linus, Elisa Elizebeth Jihed, Umang Jata Gilan, Nurhidayah Kumar Muhd Firdaus Kumar and Abdullah Yassin</i></p>
1415 - 1430	<p>Paper ID: 7</p> <p>Basic Home Automation Using Smart Sockets With Power Management System (EE)</p> <p><i>Noufal Asif, Yi Lung Then and Jubaer Ahmed</i></p>
1430 - 1445	<p>Paper ID: 10</p> <p>The Study of the Impact of Environmental Condition to the Photometric Performance of HPSV and LED Street Lighting Technologies (EE)</p> <p><i>Nor Diana, Khairuddin Abdullah, and Hafiz Daud</i></p>
1445 - 1500	<p>Paper ID: 14</p> <p>Segmentation of Retinal Microvasculature Based on Iterative Self-Organizing Data Analysis Technique (ISODATA) (EE)</p> <p><i>Mohammed Enamul Hoque, Kuryati Kipli, Dayang Azra Awang Mat, Tengku Afendi Zulcaffle, Rohana Sapawi, Annie Joseph, Nurdiani Zamhari and Mohammad Yasin Arafat</i></p>
1500 - 1515	<p>Paper ID: 16</p> <p>A Deep Learning Approach to Prognostics of Rolling Element Bearings (EE)</p> <p><i>Jank-Wook Hur and Ugochukwu Ejike Akpudo</i></p>
1515 - 1530	<p>Paper ID: 17</p> <p>LED-Based Insect Trap for Commercial Agriculture (EE)</p> <p><i>Chung Wei Bryan Wee, Yi Lung Then, Fei Siang Tay and Dyg Norkhairunnisa Abang Zaidel</i></p>
1530 - 1545	<p>TEA BREAK (SARAWAK CHAMBER FOYER, LEVEL 3)</p>