

The 5th IET International Conference on Clean Energy and Technology 2018



5 – 6 September 2018 | Kuala Lumpur, Malaysia
Pullman Kuala Lumpur Bangsar Hotel

PROGRAMME

Time	5 September 2018 (Wednesday)
Opening Ceremony (Pullman Ballroom 2), Level 2	
08:00 – 09:00	Registration & Guest Arrival
09:00 – 09:05	National Anthem & Recital of Doa
09:05 – 09:15	Welcoming Remark by Professor Dr. Norazah Abd. Rahman <i>Honorary Chair ICGSCE</i> Dean, Faculty of Chemical Engineering Universiti Teknologi Mara
09:15 – 09:25	Welcoming Remark by Professor Ir. Dr. Nasrudin Abd. Rahim <i>Honorary Chair CEAT</i> Director UMPEDAC University of Malaya
09:25 – 09:45	Officiating Speech & Conference Launching Professor Dr. Noorsaadah Abd. Rahman Deputy Vice-Chancellor (Research & Innovation) University of Malaya
09.45 – 10:00	Coffee Break (Foyer Ballroom), Level 2
Keynotes (Pullman Ballroom 2), Level 2	
10:00 – 10:45	Keynote 1: Professor Hirofumi Akagi Tokyo Institute of Technology, Japan <i>Trends in Power Electronics for High-Power Applications</i>
10:45 – 11:30	Keynote 2: Professor Jun Xiang Huazhong University Of Science and Technology, China <i>Combustion and ignition characteristics of biomass/coal in a novel high heating rate plasma combustion system</i>
11:30 – 11:45	Networking Session
11:45 – 12:15	Keynote 3: Y. Bhg. Dato' Professor Ir. Dr. Abdul Wahab Mohammad Universiti Kebangsaan Malaysia <i>The Need for Technology Development for Water Security – Case Study for Qatar and Malaysia</i>

12:15 – 12:45	<p align="center">Keynote 4: Professor Song Hu Huazhong University Of Science and Technology, China <i>Tar decomposition on Ni-based catalyst to generate high purified hydrogen and CNTs</i></p>
12:45 – 14:00	Lunch (Link), Level G
Parallel Sessions (Studio 9, 10 & 11), Level 3	
14:00 – 15:20	<p align="center">Parallel Session 1A (Studio 9) 1B (Studio 10) 1C (Studio 11)</p>
15:20 – 15:40	Coffee Break (Foyer Studio), Level 3
15:40 – 17:00	<p align="center">Parallel Session 2A (Studio 9) 2B (Studio 10) 2C (Studio 11)</p>

Time	6 September 2018 (Thursday)
Parallel Sessions (Studio 9, 10 & 11), Level 3	
09:00 – 10:40	<p align="center">Parallel Session 3A (Studio 9) 3B (Studio 10) 3C (Studio 11)</p>
10:40 – 11:00	Coffee Break (Foyer Studio), Level 3
11:00 – 12:40	<p align="center">Parallel Session 4A (Studio 9) 4B (Studio 10) 4C (Studio 11)</p>
12:40 – 14:00	Lunch (Link), Level G
14:00 - 16:00	<p align="center">Parallel Session 5A (Studio 9) 5B (Studio 10) 5C (Studio 11)</p>
16:00 – 17:00	Coffee Break (Foyer Studio), Level 3
End of CEAT 2018	

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PARALLEL SESSIONS

	Time	Studio 9	Studio 10	Studio 11
5 Sep 2018 (Wednesday)	14:00 – 15:20	Session 1A Renewable and Sustainable Energy	Session 1B Power System and Smart Grid	Session 1C Energy Conversion, Delivery and Storage
	15:20 – 15:40	Coffee Break		
	15:40 – 17:00	Session 2A Renewable and Sustainable Energy	Session 2B Power System and Smart Grid	Session 2C Low Carbon Buildings and Cities
6 Sep 2018 (Thursday)	09:00 – 10:40	Session 3A Renewable and Sustainable Energy	Session 3B Power System and Smart Grid	Session 3C Energy Efficiency
	10:40 – 11:00	Coffee Break		
	11:00 – 12:40	Session 4A Renewable and Sustainable Energy	Session 4B Special Session on Electrical Machines and Drives	Session 4C Other Related Topics
	12:40 – 14:00	Lunch		
	14:00 – 16:00	Session 5A Energy Conversion, Delivery and Storage	Session 5B Special Session on Electrical Machines and Drives	Session 5C Other Related Topics
	16:00 – 17:00	Coffee Break/End of CEAT 2018		

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	Time	Paper ID	Title	Topic	Authors/University/Country
Session 1A Studio 9 5 Sep 2018	14:00 – 14:20	1570444106	Analysis of Emitter Layer Diverse Effects on Electrical Performance for Prospective Si Hybrid Solar Cell	Renewable and Sustainable Energy	Bablu K. Ghosh (University Malaysia Sabah, Malaysia); Khairul Anuar Mohamad (Universiti Tun Hussein Onn Malaysia, Malaysia); Ismail Saad (Universiti Malaysia Sabah, Malaysia); Abdul Ismail Abdul Rani (University Malaysia Sabah, Malaysia); Afishah Alias (Universiti Malaysia Sabah, Malaysia)
	14:20 – 14:40	1570478188	Mathematical Modelling of PV Array in MATLAB/Simulink With Partial Shading Conditions	Renewable and Sustainable Energy	Chama Serenje (Asia Pacific University of Technology & Innovation, Malaysia); Freddy Tan Trigger (Asia Pacific University, Malaysia); Ravi Lakshmanan (Asia Pacific University of Technology & Innovation, Malaysia)
	14:40 – 15:00	1570450047	The Impact of Energy Yield of a Photovoltaic System under Partial Shading	Renewable and Sustainable Energy	Rodney H.G. Tan, JC Teo and Jimmy Vee Hoong Mok (UCSI University, Malaysia); Vigna Kumaran Ramachandaramurthy (Universiti Tenaga Nasional, Malaysia); ChiaKwang Tan (UM Power Energy Dedicated Advanced Centre (UMPEDAC), University of Malaya, Malaysia)
	15:00 – 15:20	1570452634	Conducting Polymers: New Arena in Dye-Sensitized Solar Cells	Renewable and Sustainable Energy	Nurul Aqilla Mazlan (Universiti Teknologi Mara, Malaysia); Syed Shahabuddin (Sunway University, Malaysia); Siti Nor Atika Baharin (Universiti Teknologi MARA, Cawangan Negeri Sembilan, Kampus Kuala Pilah, Malaysia); Adarsh Kumar Pandey and Saidur Rahman (Sunway University, Malaysia)

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	Time	Paper ID	Title	Topic	Authors/University/Country
Session 1B Studio 10 5 Sep 2018	14:00 – 14:20	1570438531	Optimization of relay coordination in distribution networks using grey wolf optimization method	Power System and Smart Grid	Noor Jamal and Mohd Herwan Sulaiman (Universiti Malaysia Pahang, Malaysia); Omar Aliman (UMP, Malaysia); Zuriani Mustaffa (Universiti Malaysia Pahang, Malaysia); Wazir Mustafa (Faculty of Electrical Engineering, Universiti Teknologi, Malaysia)
	14:20 – 14:40	1570448401	Classification of the Harmonic Load Types using Multi-Layer Extreme Learning Machine	Power System and Smart Grid	Shen Yuong Wong (Xiamen University Malaysia, Malaysia); Yap Keem Siah (Universiti Tenaga Nasional, Malaysia); Xiaochao Li (Xiamen University, P.R. China)
	14:40 – 15:00	1570449436	Impacts of Increasing Large-Scale Solar Photovoltaic Generation On Power System Frequency Response	Power System and Smart Grid	Khaldon Ahmed Qaid, Chin Kim Gan and Norhafiz Salim (Universiti Teknikal Malaysia Melaka, Malaysia); Meysam Shamshiri (Universiti Teknikal Malaysia Melaka & UTeM, Malaysia)
	15:00 – 15:20	1570458204	Modelling of Single Power Line by ATP-Draw for Partial Discharge Signal Measurement	Power System and Smart Grid	Afif Sukardi (University of Malaysia Perlis, Malaysia); M. N. K. H. Rohani (University Malaysia Perlis & UNIMAP, Malaysia); Muzamir Isa (Universiti Malaysia Perlis & UniMAP, Malaysia); Baharuddin Ismail (Universiti Malaysia Perlis, Malaysia); Afifah Shuhada (AMIENCE, School of Microelectronics, UniMAP, Malaysia); Wan Azani Mustafa (Universiti Malaysia Perlis, Malaysia)

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	Time	Paper ID	Title	Topic	Authors/University/Country
Session 1C Studio 11 5 Sep 2018	14:00 – 14:20	1570437866	Harmonic Minimization of A Single Phase Cascade H-Bridge Multilevel Inverter using Firefly Algorithm	Energy Conversion, Delivery and Storage	Mohammed Rasheed (University Teknikal Malaysia Melaka, Malaysia); Rosli Omar (Technical University of Malaysia Malacca, Malaysia); Marizan Sulaiman (Universiti Teknikal Malaysia Melaka, Malaysia); Nizam Mies (University Teknikal Malaysia Melaka, Malaysia)
	14:20 – 14:40	1570448873	Mathematical Model of Grid Connected Flyback Inverter in the Time Discrete Domain	Energy Conversion, Delivery and Storage	Radin Zaim Radin Umar (Universiti Kebangsaan Malaysia, Malaysia); Jafferi Jamaludin (University of Malaya, Malaysia); Nasrudin Abdul Rahim (University Malaya, Malaysia)
	14:40 – 15:00	1570452677	Single-ended Primary Inductor Converter (SEPIC) for LED Application	Energy Conversion, Delivery and Storage	Jabbar Yahaya (Universiti Tun Hussein Onn, Malaysia); Muhamad Mansor (Universiti Tenaga Nasioanal, Malaysia); Sabarina Jaafar (Universiti Tenaga Nasional, Malaysia)
	15:00 – 15:20	1570459049	Reduction of Switching Transients in CC/CV Mode of Electric Vehicles Battery Charging	Energy Conversion, Delivery and Storage	Sweety Arora (Thapar University, India); Mukesh Singh (Thapar University Patiala (Punjab), India)

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	Time	Paper ID	Title	Topic	Authors/University/Country
Session 2A Studio 9 5 Sep 2018	15:40 – 16:00	1570445384	Electrical Simulation of Different Photoactive Layer Thickness on Organic Heterojunction Solar Cell	Renewable and Sustainable Energy	Abdul Ismail Abdul Rani (University Malaysia Sabah, Malaysia); Khairul Anuar Mohamad (Universiti Tun Hussein Onn Malaysia, Malaysia); Bablu K. Ghosh (University Malaysia Sabah, Malaysia); Ismail Saad, Pungut Ibrahim, Afishah Alias and Abu Bakar Abd Rahman (Universiti Malaysia Sabah, Malaysia)
	16:00 – 16:20	1570458877	Fuel quality index of transesterified and nontransesterified oil samples of mustard and ricebran oil	Renewable and Sustainable Energy	Ak Pandey (RCNMET, Sunway University, Malaysia); Richa Kothari (Babasaheb Bhimrao Ambedkar University, India); Shamshad Ahmad (Babasaheb Bhimrao Ambedkar University, Lucknow, India); Vinayak Pathak (Gurukula Kangri Vishwavidyalya, Haridwar, (Uttarakhand), India); Saidur Rahman (Sunway University, Malaysia)
	16:20 – 16:40	1570459219	Recent advancement in heat pipe for stationary solar collectors	Renewable and Sustainable Energy	Kapil Chopra (School of Mechanical Engineering Shri Mata Vaishno Devi University Jammu Katra Jammu, India); Vineet Veer Tyagi (Shri Mata Vaishno Devi University, India); Prajjwal Gupta (School of Mechanical Engineering Shri Mata Vaishno Devi University Jammu Katra, India); Jeyraj Selvaraj (Universiti Malaya, Malaysia); Nasrudin Bin Abd Rahim (University of Malaya, Malaysia)
	16:40 – 17:00	1570459129	Latent Heat Retrieval Techniques in PV/T Collectors	Renewable and Sustainable Energy	Vineet Veer Tyagi (Shri Mata Vaishno Devi University, India); Sanjeev Anand and Aditya Chauhan (School of Energy Management Shri Mata Vaishno Devi University Jammu Katra Jammu, India); Jeyraj Selvaraj (Universiti Malaya, Malaysia); Ak Pandey (RCNMET, Sunway University, Malaysia)

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	Time	Paper ID	Title	Topic	Authors/University/Country
Session 2B Studio 10 5 Sep 2018	15:40 – 16:00	1570449822	Modeling of Campus Microgrid for off-grid Application	Power System and Smart Grid	Moslem Uddin (Universiti Teknologi PETRONAS, Malaysia); Mohd Fakhizan Romlie (Universiti Teknologi PETRONAS & Universiti Teknologi PETRONAS, Malaysia); Mohd Faris Abdullah and Khairul Nisak Md Hasan (Universiti Teknologi PETRONAS, Malaysia); ChiaKwang Tan (UM Power Energy Dedicated Advanced Centre (UMPEDAC), University of Malaya, Malaysia); A. B. Halim Abu Bakar (University of Malaya, Malaysia)
	16:00 – 16:20	1570449972	Optimal Placement and Sizing of Distributed Generation based on MVMO-SH	Power System and Smart Grid	Norhafidzah Mohd Saad, Muhamad Zahim Sujod, Mohammad Fadhil Abas, Mohd Herwan Sulaiman and Muhammad Ikram Mohd Rashid (Universiti Malaysia Pahang, Malaysia)
	16:20 – 16:40	1570482780	Integrated Renewable Energy Micro-Grid for Meeting Peak Hours Demand	Power System and Smart Grid	Khairil Azhar Aznan (International Islamic University Malaysia & IIUM, Malaysia); Sheraz Khan (International Islamic University Malaysia, Malaysia); Mashkuri Yaacob, Othman Omran Khalifa and Ezzidin Hassan Aboadla (International Islamic University Malaysia, Malaysia); Majdee Tohtayong (Princess of Naradhiwas University, Thailand); Ashraf Khalil (International Islamic University Malaysia, Malaysia); Naser Muhaisen (International Islamic University of Malaysia, Kuwait); Nadia Tan (Universiti Tenaga Nasional, Malaysia); Musse Mohamud Ahmed, Dr (Uninversiti Malaysia Sarawak (UNIMAS) & Faculty of Engineering, Malaysia)
	16:40 – 17:00	1570484521	Modern Load Profile for Standalone PV Rural Household in Malaysia	Power System and Smart Grid	Muhammad Izuan Fahmi Romli (University Malaysia Perlis, Malaysia); Rajprasad Kumar Rajkumar (University of Nottingham Malaysia Campus, Malaysia); Lee Wai Chong (The University of Nottingham Malaysia Campus, Malaysia)

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Session 2C Studio 11 5 Sep 2018	15:40 – 16:00	1570458819	Techno-Economic Analysis of Lighting System Retrofit At The Industrial Training Institute	Low Carbon Buildings and Cities	Khairul Rijal Wagiman (Industrial Training Institute Selandar, Malaysia); Mohd Noor Abdullah and Mohd Aifaa Mohd Ariff (Universiti Tun Hussein Onn Malaysia, Malaysia); Mohammad Yusri Hassan (University of Technology Malaysia(UTM), Malaysia)
	16:00 – 16:20	1570463895	Cost Benefit Analysis for ZEB: Optimal Capacity Based on Reliability, Economy and Diversification	Low Carbon Buildings and Cities	Shoki Kosai (Ritsumeikan University, Japan); ChiaKwang Tan (UM Power Energy Dedicated Advanced Centre (UMPEDAC), University of Malaya, Malaysia)
	16:20 – 16:40	1570459134	Calibration of A Commercial Building Energy Simulation Models Using Energy and Weather Data	Energy Efficiency	Nor Azuana Ramli (Universiti Kuala Lumpur & International College, Malaysia); Nuran Nadhirah Noor Azmi (Universiti Kuala Lumpur British Malaysian Institute, Malaysia); Azizah Kassim (Green 3 Sdn Bhd, Malaysia); Saiful Adib Abdul Munaff (Green Buildings Asia, Malaysia)
	16:40 – 17:00	1570448914	Investigation on the load factor performance at Wisma R&D Universiti Malaya building	Energy Efficiency	Siti Birkha Mohd Ali (UM Power Energy Dedicated Centre & Universiti Selangor, Malaysia); Md. Hasanuzzaman (University of Malaya & UM Power Energy Dedicated Advanced Centre (UMPEDAC), Malaysia); Nasrudin Abdul Rahim (University Malaya, Malaysia)

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Session 3A Studio 9 6 Sep 2018	09:00 – 09:20	1570452404	Numerical and Experimental Investigation of the Effect of Tilt Angle on the Performance of PV Systems	Renewable and Sustainable Energy	Mohammad Abdullah Al Mamun (University of Malaya, Malaysia); Md. Hasanuzzaman (University of Malaya & UM Power Energy Dedicated Advanced Centre (UMPEDAC), Malaysia); Jeyraj Selvaraj (Universiti Malaya, Malaysia); Rehena Nasrin (Bangladesh University of Engineering and Technology, Bangladesh)
	09:20 – 09:40	1570462009	Process Simulation of Bioethanol Production from Empty Fruit Bunch via Acid Hydrolysis Pretreatment	Renewable and Sustainable Energy	Lupete Bhullar, Zulfan Adi Putra, Muhammad Roil Bilad and Nik Abdul Hadi Md Nordin (Universiti Teknologi PETRONAS, Malaysia); Mohd Dzul Hakim Wirzal (Universiti Teknologi Petronas, Malaysia)
	09:40 – 10:00	1570459147	SnO ₂ and TiO ₂ Coatings Toward Decreasing the Surface Temperature of Solar Cells	Renewable and Sustainable Energy	Farah Khaleda Farah (University of Malaya, Malaysia); Vengadaesvaran Balakrishnan (Universiti Malaya, Malaysia); Adarsh Kumar Pandey (Research Centre for Nano-Materials and Energy Technology, School of Science and Technology, Sunway University,); Nasrudin Abdul Rahim (University Malaya, Malaysia)
	10:00 – 10:20	1570458950	A review of global current techniques and evaluation methods of photocatalytic CO ₂ reduction	Renewable and Sustainable Energy	Yudai Tanaka (University of Malaya & Kyoto University, Japan); Md. Hasanuzzaman (University of Malaya & UM Power Energy Dedicated Advanced Centre (UMPEDAC), Malaysia)
	10:20 – 10:40	1570458818	Influence of Concentration of Polyaniline (PANI) As Counter Electrode In Dye Sensitized Solar Cell	Renewable and Sustainable Energy	Usman Ahmed (University of Malaya & University Malaya Power Energy Dedicated Advance Centre, Malaysia); Nasrudin Abdul Rahim (University Malaya, Malaysia); Syed Shahabuddin (Sunway University, Malaysia); Mahdi Alizadeh (UMPEDAC, Malaysia); Adarsh Kumar Pandey (University of Malaya, Malaysia)

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	Time	Paper ID	Title	Topic	Authors/University/Country
Session 3B Studio 10 6 Sep 2018	09:00 – 09:20	1570449728	Buck-boost converter with q-ZSC topology	Power System and Smart Grid	Muhammad Ado (Universiti Teknologi Malaysia, Malaysia & Bayero University, Kano, Nigeria); Awang Jusoh (Universiti Teknologi Malaysia, Malaysia); Muntari Ali and Garba Galadanchi (Bayero University Kano, Nigeria); Shahrin Md. Ayob (Universiti Teknologi Malaysia, Malaysia)
	09:20 – 09:40	1570449755	PLL-less SRF Technique for Operation of SAPF under Unbalanced and Distorted Supply Voltage	Power System and Smart Grid	Yap Hoon, Mohd Amran Mohd Radzi, Mohd Khair Hassan and Nashiren Farzilah Mailah (Universiti Putra Malaysia, Malaysia)
	09:40 – 10:00	1570464515	Islanding Detection Technique based on Rate of Change of Reactive Power(dq/dt)	Power System and Smart Grid	Muhammad Sufyan (University of Malaya, Malaysia); Siti Rohani Sheikh Raihan (Universiti Malaya, Malaysia)
	10:00 – 10:20	1570449685	Smart Energy Meter Using Telegram Bot	Power System and Smart Grid	Sufi Sulaiman (Universiti Teknologi Petronas, Malaysia); Zuhairi Baharudin (Universiti Teknologi PETRONAS, Malaysia); Nursyarizal Bin Mohd Nor (Universiti Teknologi Petronas, Malaysia); Idris bin Ismail (Universiti Teknologi PETRONAS, Malaysia); Norshidah Baharuddin and Hamidah Sidek (SIRIM, Malaysia)
	10:20 – 10:40	1570473269	A flexible microgrid through overcurrent protection	Power System and Smart Grid	Jorinda Yuh Ru Wong (University of Malaya, Malaysia); ChiaKwang Tan (UM Power Energy Dedicated Advanced Centre (UMPEDAC), University of Malaya, Malaysia); A. B. Halim Abu Bakar and Yann Peng Voon (University of Malaya, Malaysia); Oon Kheng Heong (University Malaya, Malaysia)

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Session 3C Studio 11 6 Sep 2018	09:00 – 09:20	1570477967	Hill Climbing Maximum Power Point Tracking on Four Stage Switch Capacitor Based Boost Converter	Renewable and Sustainable Energy	Hang Seng Che (UMPEDAC & University of Malaya, Malaysia); Asim Amir Solangi (Universiti Malaya, Malaysia); Nasrudin Abdul Rahim (University Malaya, Malaysia); Aamir Amir (UMPEDAC & University of Malaya, Malaysia); Ahmad Elkhateb (Queen's University Belfast, United Kingdom (Great Britain))
	09:20 – 09:40	1570448830	Forecasting of Solar Radiation in Malaysia Using the Artificial Neural Network and Wavelet Transform	Renewable and Sustainable Energy	Nor Azliana Abdullah (University of Malaya, Malaysia); Sam Koohi-Kamali (Institute of Electrical and Electronics Engineers (IEEE) & IEEE Power & Energy Society (PES), Canada); Nasrudin Abdul Rahim (University Malaya, Malaysia)
	09:40 – 10:00	1570449834	Recent studies in Concentrated Photovoltaic System (CPV): A Review	Energy Efficiency	Mathew George (University of Malaya, Malaysia); Ak Pandey (RCNMET, Sunway University, Malaysia); Nasrudin Abd. Rahim (University of Malaya, Malaysia); Saidur Rahman (Sunway University, Malaysia)
	10:00 – 10:20	1570461659	Maximum Energy Extraction Based on Closed Bracket Technique	Energy Efficiency	Jeyraj Selvaraj (Universiti Malaya, Malaysia); Aamir Amir (UMPEDAC & University of Malaya, Malaysia); Asim Amir Solangi (Universiti Malaya, Malaysia); Nasrudin Abdul Rahim (University Malaya, Malaysia)
	10:20 – 10:40	1570449199	ANN back-propagation based decision support system for ship fuel consumption prediction	Energy Efficiency	Keh-Kim Kee (University College of Technology Sarawak, Malaysia); Simon Lau Boun Yew (Xiamen University Malaysia, Malaysia); Renco Yong (GimHawk Enterprise Sdn Bhd, Malaysia)

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Session 4A Studio 9 6 Sep 2018	11:00 – 11:20	1570448714	Energy management system employing harmony search algorithm for hybrid cogeneration	Renewable and Sustainable Energy	Normazlina Mat Isa (UTM, Malaysia)
	11:20 – 11:40	1570450146	Optimization for the Planning of Distributed Renewable Generators using Genetic Algorithm	Renewable and Sustainable Energy	Abid Ali (Universiti Teknologi PETRONAS (UTP), Malaysia); Nursyarizal Bin Mohd Nor and Taib Ibrahim (Universiti Teknologi Petronas, Malaysia); Mohd Fakhizan Romlie (Universiti Teknologi PETRONAS & Universiti Teknologi PETRONAS, Malaysia)
	11:40 – 12:00	1570473013	Techno-economic study of an innovative PV-Hydrogen-Biomasssystem for off-grid power supply	Renewable and Sustainable Energy	Hooman Farzaneh (Kyushu University, Japan)
	12:00 – 12:20	1570454235	Biodiesel Impact on Cost, Fuel Saving and Emission Reduction for Power Generation in Malaysia	Energy Policy and Education	Ee Sann Tan and Afiqah Fauzan (Uniten, Malaysia); Kunio Yoshikawa (Tokyo Institute of Technology, Japan)
	12:20 – 12:40	1570473258	Public opinions towards acceptance and awareness of renewable energy technologies	Energy Policy and Education	Atika Qazi (University of Malaya, Malaysia); Nasrudin Abdul Rahim (University Malaya, Malaysia)

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Session 4B Studio 10 6 Sep 2018	11:00 – 11:20	1570458941	Reduction of Unbalanced Armature Magnetic Flux in Segmental Rotor FEFSM Using Rotor Span Refinement	Special Session on Electrical Machines and Drives: design, control and applications	Mohd Fairoz Omar (Universiti Tun Hussien Onn Malaysia, Malaysia); Erwan Sulaiman (Universiti Tun Hussein Onn Malaysia, Malaysia); Peng Liew (Eclimo Sdn Bhd, Malaysia)
	11:20 – 11:40	1570485730	Design of Multiphase Transformer using Phasor Method	Special Session on Electrical Machines and Drives: design, control and applications	Kasrul Abdul Karim, Nor azizah Mohd yusoff and Norfaezah Abdullah (Universiti Teknikal Malaysia Melaka, Malaysia); Raja Nor Firdaus Kashfi Raja Othman (Universiti Teknikal Malaysia Melaka & Universiti of Putra Malaysia, Malaysia); Auzani Jidin and Mohd Luqman Mohd Jamil (Universiti Teknikal Malaysia Melaka, Malaysia)
	11:40 – 12:00	1570458958	Analysis and Performance of 4s-8p Permanent Magnet Flux Switching Motors (PMFSM) for Electric Bicycle Applications	Special Session on Electrical Machines and Drives: design, control and applications	Erwan Sulaiman and Laili Iwani Jusoh (Universiti Tun Hussein Onn Malaysia, Malaysia)
	12:00 – 12:20	1570476189	Design of Double Stator Slotted Rotor for Large Ceiling Fan Application	Energy Conversion, Delivery and Storage	Raja Nor Firdaus Kashfi Raja Othman (Universiti Teknikal Malaysia Melaka & Universiti of Putra Malaysia, Malaysia); Nurfaezah Abdullah and Farina Sulaiman (Universiti Teknikal Malaysia Melaka, Malaysia); Nor Aishah Md Zuki (M. Z. Aishah, Malaysia); Fairul Azhar Abdul Shukor and Kasrul Abdul Karim (Universiti Teknikal Malaysia Melaka, Malaysia)
	12:20 – 12:40	1570458960	Design Investigation of High Reliable HE-FSM for Electromechanical Actuator Used In Aircrafts	Special Session on Electrical Machines and Drives: design, control and applications	Erwan Sulaiman (Universiti Tun Hussein Onn Malaysia, Malaysia); Hassan Soomro (UTHM, Malaysia)

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<p>Session 4C Studio 11 6 Sep 2018</p>	11:00 – 11:20	1570449629	Evaluation of Five Compensation Circuits for Electric Vehicle Inductively Coupled Power Transfer	Energy Efficiency	Ahmad Fuad Abdul Aziz (Universiti Teknologi PETRONAS, Malaysia); Mohd Fakhizan Romlie (Universiti Teknologi PETRONAS & Universiti Teknologi PETRONAS, Malaysia); Tun Zainal Azni Zulkifli and Zuhairi Baharudin (Universiti Teknologi PETRONAS, Malaysia)
	11:20 – 11:40	1570443890	4-coils Magnetic Resonance Coupling Wireless Power Transfer with Varying Rotational Angle	Other Related Topics	Shun Yao Tan and Hui Jing Lee (Universiti Tenaga Nasional, Malaysia); Pin Jern Ker (University Tenaga Nasional, Malaysia)
	11:40 – 12:00	1570458980	Design and Implementation of Wireless-power Monitoring System for Micro-Inverter	Other Related Topics	Oon Erixno, Nasrudin Abd. Rahim and Ahmad Rivai (University of Malaya, Malaysia); Febry Yadi Zainal (JMPEDAC & University of Malaya, Malaysia)
	12:00 – 12:20	1570458275	Experimental Analysis on Defect Power Cable with TDR Technique Application	Other Related Topics	Tze Mei Kuan and Azrul Mohd Ariffin (Universiti Tenaga Nasional, Malaysia)
	12:20 – 12:40	1570458555	Locally available material as adsorbent to treat arsenic contaminated water	Other Related Topics	Dikshya Dhakal (Thammasat University, Thailand)

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	Time	Paper ID	Title	Topic	Authors/University/Country
Session 5A Studio 9 6 Sep 2018	14:00 – 14:20	1570473263	Solar energy transition in Malaysia through implementation of PV and PVT technologies	Renewable and Sustainable Energy	Fayaz Hussain (University of Malaya, Malaysia); Md. Hasanuzzaman (University of Malaya & UM Power Energy Dedicated Advanced Centre (UMPEDAC), Malaysia); Nasrudin Abd. Rahim (University of Malaya, Malaysia)
	14:20 – 14:40	1570441580	Gasification of Refinery Sludge using Coal Fly Ash and Refinery Sludge Ash as Catalysts	Renewable and Sustainable Energy	Reem Ahmed (Academic of Engineering Science (SUDAN), Sudan); Chandra Mohan Sinnathambi (Universiti Teknologi PETRONAS, Malaysia)
	14:40 – 15:00	1570436948	Growth and Characterization of Al-AlN Films by Plasma-Assisted Reactive Evaporation	Energy Conversion, Delivery and Storage	Mahdi Alizadeh (University of Malaya, Malaysia); Babak Shokri (Laser-Plasma Research Institute, Iran); Nasrudin Abdul Rahim (University Malaya, Malaysia)
	15:00 – 15:20	1570449852	Binary nanocomposite of Co ₃ O ₄ nanocubes supported on carbon matrix for supercapattery	Energy Conversion, Delivery and Storage	Numan Arshid (Graphene & Advance 2D Materials Research Group, Malaysia); Khalid Mohammad (Sunway University, Malaysia); Sohail Ahmad (Faculty of Science, University of Haripur, Malaysia); Priyanka Jagadish (Graphene & Advance 2D Materials Research Group, Malaysia); S Ramesh and K Ramesh (Centre for Ionics, Faculty of Science, University of Malaya, Malaysia); Naqash Khan (Comsats University, Wah, Malaysia)
	15:20 – 15:40	1570449981	Investigation on the Effect of MWCNT On Microstructural and Thermal Properties of Paraffin based PCM	Energy Conversion, Delivery and Storage	Mohammed Moinul Islam (UM Power Energy Dedicated Advanced Center (UMPEDAC), University of Malaya, Malaysia); Ak Pandey (RCNMET, Sunway University, Malaysia); Md. Hasanuzzaman (University of Malaya & UM Power Energy Dedicated Advanced Centre (UMPEDAC), Malaysia); Nasrudin Abdul Rahim (University Malaya, Malaysia); Mohammed Razaul Karim (Crown Cement Group, Bangladesh)

	15:40 – 16:00	1570456661	Syntheses of azomethine-thiophene monomers for potential application in energy storage devices	Energy Conversion, Delivery and Storage	Siti Nor Atika Baharin (Universiti Teknologi MARA, Cawangan Negeri Sembilan, Kampus Kuala Pilah, Malaysia); Syed Shahabuddin (Sunway University, Malaysia); Nurul Aqilla Mazlan (Universiti Teknologi Mara, Malaysia); Norazilawati Muhamad Sarih (University of Malaya, Malaysia); Saidur Rahman (Sunway University, Malaysia); Nurul Hafawati Hashim (Universiti Teknologi MARA, Cawangan Negeri Sembilan, Kuala Pilah, Malaysia)
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	Time	Paper ID	Title	Topic	Authors/University/Country
Session 5B Studio 10 6 Sep 2018	14:00 – 14:20	1570458978	The Direct Power Control for Three-phase of ac-dc converter	Special Session on Electrical Machines and Drives: design, control and applications	Nor azizah Mohd yusoff, Azziddin Mohamad Razali, Kasrul Abdul Karim, Zulhani Rasin and Masitah Muhammad (Universiti Teknikal Malaysia Melaka, Malaysia)
	14:20 – 14:40	1570464010	Steady State Performance Analysis of One Switched Inductor Series Z-Source Inverter	Special Session on Electrical Machines and Drives: design, control and applications	Nafis Subhani (Universiti Teknologi PETRONAS, Malaysia); Ramani Kannan (Universiti Tecknologi PETRONAS Malaysia, Malaysia); Mohd Fakhizan Romlie (Universiti Teknologi PETRONAS & Universiti Teknologi PETRONAS, Malaysia)
	14:40 – 15:00	1570464329	Investigation On Quasi-Z-Source Inverter with Hybrid Energy Storage for PMSM Drive System	Special Session on Electrical Machines and Drives: design, control and applications	Zulhani Rasin, Masitah Muhammad, Auzani Jidin, Azziddin Mohamad Razali and Nor azizah Mohd yusoff (Universiti Teknikal Malaysia Melaka, Malaysia)
	15:00 – 15:20	1570474172	Control Development Using TMS320F28335 Microcontroller for Inverter and DC Motor Drive Application	Energy Policy and Education	Shamsul Zulkifli (Universiti Tun Hussein Onn Malaysia, Malaysia)
	15:20 – 15:40	1570465040	Self-Tuning Fuzzy Logic Control Based on MRAS For Induction Motor Drives	Other Related Topics	Nabil Farah, farah and Md Hairul Nizam Talib (UTeM, Malaysia); Zulkifilie Bin Ibrahim (Universiti Teknikal Malaysia Melaka, Malaysia); Maaspaliza Azri (Faculty of Engineering & UTeM Malacca, Malaysia); Jurifa Mat Lazi and Zulhani Rasin (Universiti Teknikal Malaysia Melaka, Malaysia)
	15:40 – 16:00	1570473300	Impact of intermittency towards microgrid protection & reliability considering grid codes	Power System and Smart Grid	Oon Kheng Heong (University Malaya, Malaysia); ChiaKwang Tan (UM Power Energy Dedicated Advanced Centre (UMPEDAC), University of Malaya, Malaysia); A. B. Halim Abu Bakar and Jorinda Yuh Ru Wong (University of Malaya, Malaysia)

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	Time	Paper ID	Title	Topic	Authors/University/Country
Session 5C Studio 11 6 Sep 2018	14:00 – 14:20	1570449417	Optimization Of Neural Network Hyperparameters For Gas Turbine Modelling Using Bayesian Optimization	Energy Conversion, Delivery and Storage	Mohammad Haizad Mohd Tarik, Madiah Binti Omar, Mohd Faris Abdullah and Rosdiazli Ibrahim (Universiti Teknologi PETRONAS, Malaysia)
	14:20 – 14:40	1570466970	Optimizing PEMFC Model Parameters Using Dragonfly Algorithm: A Performance Study	Other Related Topics	Zainuddin Mat Isa (Universiti Malaysia Perlis, Malaysia); Mohd Hafiz Arshad (University Malaysia Perlis, Malaysia)
	14:40 – 15:00	1570449326	Remote Desktop Power Management System Using Single-board Computer	Other Related Topics	Muhammad Badri Mhd Noor, Saaidal Razalli Azzuhri and Jafferi Jamaludin (University of Malaya, Malaysia); Nik Muhammad Izwan Nik Mohd Kamel (Ifcon Technology Sdn Bhd, Malaysia); Ahmad Aliff A S Ahmad Shariffuddin (Ifcon Technology Sdn Bhd, Malaysia)
	15:00 – 15:20	1570448547	Superior Self-cleaning Glass Through Hydrophobic and Superhydrophilic Coating	Other Related Topics	Amirul Syafiq (University of Malaya, Malaysia); Vengadaesvaran Balakrishnan (Universiti Malaya, Malaysia); Nasrudin Abdul Rahim (University Malaya, Malaysia); Adarsh Kumar Pandey (University of Malaya, Malaysia)
	15:20 – 15:40	1570449989	Energy saving potential through energy conservation of office equipment in Malaysia Polytechnic	Other Related Topics	Muhammad Firdaus Mohd Zublie (University of Malaya & Power Energy Dedicated Advanced Centre University of Malaya, Malaysia); Md. Hasanuzzaman (University of Malaya & UM Power Energy Dedicated Advanced Centre (UMPEDAC), Malaysia); Nasrudin Abdul Rahim (University Malaya, Malaysia)
	15:40 – 16:00	1570449995	Ionic Conductivity and Molecular Vibration Analysis of PMMA/ENR 50-NH ₄ SCN Polymer Blend Electrolytes	Other Related Topics	Nik Abdul Aziz B. Nik Abd. Rahman Aziz (Universiti Teknologi MARA (UiTM), Malaysia); Siti Zafirah Zainal Abidin and Shanti K. Navaratnam (UiTM, Malaysia)