

## A) LIST OF PAPER PRESENTATION

## Track: Energy System

Code	Paper#	Title	Time	Session
ES 1	1569961031	Steady State and Generalized State Space Averaging Analysis of the Series Resonant	11:40 -12:00	1-A-1 24 <sup>th</sup> November 2014
ES 2	1569978843	Single-Phase Shunt Active Power Filter with Simplified ADALINE Neural Network	12:00 - 12:20	
ES 3	1569979383	Clean Energy for Rural Development: Optimization of Hybrid Energy System for Electrifying Rural Health Clinic	12:20 - 12:40	
ES 4	1569979507	Performance of Different Topologies for Three Level Inverter Based on Space Vector Pulse Width Modulation Technique	12:40 - 13:00	
ES 5	1569993385	Selective Harmonic Elimination of a Seven-level Cascaded Inverters Using Particle Swarm Optimization	14:00 - 14:20	1-B-1 24 <sup>th</sup> November 2014
ES 6	1569993949	Techno-Economic Analysis of Rooftop PV System in UTeM, Malaysia	14:20 - 14:40	
ES 7	1569999889	An Improved Three-Phase Transformerless Photovoltaic Inverter with Reduced Leakage Currents	14:40 - 15:00	
ES 8	1569999899	Improvement of hill climbing method by introducing simple irradiance detection method	15:00 - 15:20	
ES 9	1570008921	Control Techniques for power converters in photovoltaic hybrid energy storage system	15:40 - 16:00	1-C-1 24 <sup>th</sup> November 2014
ES 10	1570013387	Online Adaptive Power Factor Correction Controller for DC-DC Converters	16:00 - 16:20	
ES 11	1570015471	Solar PV System for Off-Grid Electrification in Rural Area	16:20 - 16:40	
ES 12	1570019101	Optimization and Non-Optimization of H-Bridge Cascaded Multilevel Inverter	16:40 - 17:00	
ES 13	1570019325	Comparative Study of Cascaded H-Bridge Multilevel Inverter Model based on Power Electronic Simulator (PSIM)	17:00 - 17:20	
ES 14	1570019419	A Development of Low-Power Acoustic Energy Transfer System Using Push-Pull Power Converter	8:40 -9:00	2-A-1 25 <sup>th</sup> November 2014
ES 15	1570020349	Design of Series-Parallel Compensation for Loosely Coupled Inductive Power Transfer System	9:00 - 9:20	
ES 16	1570020767	Data acquisition system for on-track performance analysis of a mini fuel cell vehicle	9:20 - 9:40	
ES 17	1570022453	Experimental Investigation on Air Breakdown under Lightning Impulses with Various Electrode Configurations	9:40 - 10:00	
ES 18	1570028725	Matlab/Simulink Modelling to study the effect of partially shaded condition on Photovoltaic array's Maximum Power Point	10:00 -10:20	
ES 19	1570029111	Transformerless Power Converter for Grid-Connected PV System, with No-Ripple Input Current and Low Ground-Leakage Current	10:20 - 10:40	

**Track: Renewable & Sustainable Sources**

Code	Paper#	Title	Time	Session
RS 1	1569994001	Effect Of Activated Carbon As Microwave Absorbance On The Yields Of Microwave Assisted Pyrolysis Of Palm Oil Mill Effluent	11:40 - 12:00	1-A-2 24 <sup>th</sup> November 2014
RS 2	1569994605	Optimal Generation Scheduling in Microgrids by Cuckoo Search Algorithm	12:00 - 12:20	
RS 3	1570006927	Harmonic Mitigation of Grid Connected 5MW Solar PV Using LCL Filter	12:20 - 12:40	
RS 4	1570007549	Effect of Annealing Temperature on Photoelectrochemical Properties of WO <sub>3</sub> /Fe <sub>2</sub> O <sub>3</sub> Photoelectrodes	12:40 - 13:00	
RS 5	1570007563	Photocatalytic Degradation of Bromothymol Blue by Novel Ruthenium(II) complex	14:00 - 14:20	1-B-2 24 <sup>th</sup> November 2014
RS 6	1570007991	Photoelectrochemical Activity of WO <sub>3</sub> /Au in Aqueous Electrolyte with Addition of Methanol	14:20 - 14:40	
RS 7	1570008063	Improvement of photoelectrochemical water splitting with natural dye of pitaya peel	14:40 - 15:00	
RS 8	1570018901	Electricity Generated, Cost and Eco Impact Resulting From Solar Photovoltaic Plants in Different Cities in Malaysia	15:00 - 15:20	
RS 9	1570017771	Averaging Model of Pulse-Width Modulated Embedded Impedance Source Converter Used in Renewable Energy Applications	15:40 - 16:00	1-C-2 24 <sup>th</sup> November 2014
RS 10	1570019057	Bio-ethanol as an Alternative Fuel from Palm Oil EFB and Environmental Benefits	16:00 - 16:20	
RS 11	1570019343	Design and Numerical Study of the Integration of Omni-directional Shroud with Vertical Axis Wind Turbine	16:20 - 16:40	
RS 12	1570020789	Mathematical modelling and simulation analysis of PEM electrolyzer system for hydrogen production	16:40 - 17:00	
RS 13	1570022179	Factors affecting the PV based power generation	17:00 - 17:20	

## Track: Power System

Code	Paper#	Title	Time	Session
PS 1	1569959769	Power System Dynamic Study for Distributed Generation Interconnection to Distribution Network- A Case Study in Malaysia	11:00 - 11:20	2-B-1 25 <sup>th</sup> November 2014
PS 2	1569959865	Differential Evolution Algorithm for Multistage Transmission Expansion Planning Based on AC Load Flow Model	11:20 - 11:40	
PS 3	1569976001	Artificial Neural Network based Islanding Detection Technique for Mini hydro type distributed generation	11:40 - 12:00	
PS 4	1569977593	Under-Voltage Load Shedding Based on Voltage Stability Index	12:00 - 12:20	
PS 5	1569978765	Comparative performance analysis of Firefly Algorithm for Load Frequency Control in Automatic Generation Control of interconnected reheat thermal power system	12:20 - 12:40	
PS 6	1569978885	Fast Initialization of Population Based Methods for Solving Economic Dispatch Problems	12:40 - 13:00	
PS 7	1569979045	Discrete Artificial Bee Colony Algorithm for Solving Network Reconfiguration Problem	14:00 - 14:20	2-C-1 25 <sup>th</sup> November 2014
PS 8	1569979523	Analysis of Ferro-resonance Suppression and Transient Response Performances for Various Ferro-resonance Suppression Circuits in Capacitive Voltage Transformers	14:20 - 14:40	
PS 9	1569987739	Transmission Network Expansion Planning under Wind Farm Uncertainties Using Cuckoo Search Algorithm	14:40 -15:00	
PS 10	1569987923	Subspace Identification of Supercritical Power Generation Process	15:00 - 15:20	
PS 11	1569992655	Optimum Distributed Generation Allocation Using PSO in Order to Reduce Losses and Voltage Improvement	15:40 -16:00	2-D-1 25 <sup>th</sup> November 2014
PS 12	1570019467	Assessment of Flicker Emission for DFIG Wind Turbine Connected to Malaysian Distribution System	16:00 - 16:20	
PS 13	1570019777	Voltage stability of Borneo power grid under contingencies	16:20 - 16:40	
PS 14	1570020255	Investigation of Power Swing Phenomenon and Verification of Critical Clearing Time through Theoretical Calculations and Simulated Studies	16:40 - 17:00	
PS 15	1570035325	Loss Minimization by Optimal Reactive Power Dispatch Using Cuckoo Search Algorithm	17:00 - 17:20	

**Track: Electrical Machine and Drives**

Code	Paper#	Title	Time	Session
EM 1	1569953191	Implementation of IEC 60870-5-101 Protocol on Condition Monitoring of Water Pump System	8:20 - 8:40	2-A-2 25 <sup>th</sup> November 2014
EM 2	1569993779	Design and Characteristic Investigations of 12Slot-8Pole and 12Slot-10Pole Wound Field Three-Phase Switched-Flux Machines	8:40 - 9:00	
EM 3	1570008127	New Structure of Single-Phase Field Excitation Flux Switching Machine for High Density Air Conditioner with Segmental rotor	9:00 - 9:20	
EM 4	1570008313	Three-Phase Variable Speed Drive using ARM Cortex-M3	9:20 - 9:40	
EM 5	1570008907	Online Adaptive Continuous Wavelet Transform and Fuzzy Logic Based High Precision Fault Detection of IM with Broken Rotor Bars	9:40 - 10:00	
EM 6	1570020859	Sensors Fault Detection and Accommodation for Solar-Powered Unmanned Aircraft	10:00 - 10:20	
EM 7	1570022951	Mathematical Modelling and Realization of Flight Trajectories for an Intelligent Fixed-Wing Solar-Powered UAV	10:20 - 10:40	

**Track: Energy Conversion**

Code	Paper#	Title	Time	Session
EC 1	1570007757	Numerical study of freezing of cu-water nanofluid in a trapezoidal cavity	11:00 - 11:20	2-B-2 25 <sup>th</sup> November 2014
EC 2	1570019569	Comparative Study on Photovoltaic (PV) and Photovoltaic thermal water collector (PVTw)	11:20 - 11:40	
EC 3	1570019629	Techno-Economic Analysis of Evacuated Tube Solar Water Heater Using F-Chart	11:40 - 12:00	
EC 4	1570019659	Enhance Photovoltaic/ Thermal System Performance by Using Nanofluid	12:00 - 12:20	
EC 5	1570022203	Thermal and electrical experimental characterization of ethylene glycol and water mixture nanofluids for a 400 w proton exchange membrane fuel cell	12:20 - 12:40	

EC 6	1570028719	Green hydrogen production from palm oil mill effluent (POME) by photocatalysis reaction	12:40 - 13:00	
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**Track: Smart Grid**

Code	Paper#	Title	Time	Session
SG 1	1569966857	Impact of Charging PHEV at Different Penetration Levels on Power System Network	14:00 - 14:20	2-C-2 25 <sup>th</sup> November 2014
SG 2	1569979275	A Novel Power Smoothing Index for Dispatching of Battery Energy Storage Plant in Smart Microgrid	14:20 - 14:40	
SG 3	1569979549	New Algorithms to Size and Protect Battery Energy Storage Plant in Smart Microgrid Considering Intermittency in Load and Generation	14:40 -15:00	
SG 4	1569989517	Distributed Photovoltaic Inverter performing Maximum power point Tracking and Dispatching unity power factor	15:00 - 15:20	
SG 5	1569991879	Smart Electricity Demand Side Controller	15:40 -16:00	2-D-2 25 <sup>th</sup> November 2014
SG 6	1570004163	Controlling Methods for Power Factor Correction of Storage Devices Connected into Smart Grid	16:00 - 16:20	
SG 7	1570007769	Optimal Operation of Microgrid Systems	16:20 - 16:40	
SG 8	1570019733	Roadmap of smart grid for Bangladesh based on functions and technological challenges	16:40 - 17:00	
SG 9	1570020093	Performance Evaluation of Multicarrier PWM Methods for Cascaded H-Brige Multilevel Inverter	17:00 - 17:20	

**Track: Photovoltaic Technology**

Code	Paper#	Title	Time	Session
PV 1	1569979713	A Comprehensive Modelling, Simulation and Computational Implementation of Photovoltaic Module in MATLAB/Simulink	8:40 -9:00	2-A-3 25 <sup>th</sup> November 2014
PV 2	1569993803	Performance Analysis Based on Different Indium Content for InGaN/Si Hetero-Junction Solar Cell	9:00 - 9:20	
PV 3	1570008229	Chemically grown ZnO nanorods for dye-sensitized solar cells	9:20 - 9:40	
PV 4	1570008419	Ge/TiO <sub>2</sub> composite thin films prepared by RF magnetron sputtering for Photovoltaic applications	9:40 - 10:00	

PV 5	1570009987	Grid-connected photovoltaic system: Monitoring insights	10:00 -10:20	2-B-3 25 <sup>th</sup> November 2014
PV 6	1570019331	GUI for Photovoltaic (PV) array Monitoring System	10:20 - 10:40	
PV 7	1570022173	Temperature effect of photovoltaic module under partial shading operation condition	11:00 - 11:20	
PV 8	1570024837	Feasibility study of Energy Saving Glass for Malaysian market	11:20 - 11:40	

### Track: Energy Storage

Code	Paper#	Title	Time	Session
ET 1	1570008015	Fast Charger for Li-ion Batteries Based on Battery Temperature	11:40 - 12:00	2-B-3 25 <sup>th</sup> November 2014
ET 2	1570018113	Single current sensor solar battery charger with MPPT and over current protection	12:00 - 12:20	

### Track: Low Energy Building & Architecture

Code	Paper#	Title	Time	Session
LE 1	1569960571	The efficiency of electricity usage and the prospective of energy conservation at three residential colleges	12:20 - 12:40	2-B-3 25 <sup>th</sup> November 2014
LE 2	1570032573	Building envelope simulation for sustainable built environment	12:40 - 13:00	

### Track: Energy Policy & Efficiency

Code	Paper#	Title	Time	Session
EP 1	1569961585	Hybrid Diesel/PV System Sizing and Cost Estimation	14:00 - 14:20	2-C-3 25 <sup>th</sup> November 2014
EP 2	1569963253	Case for Promoting LED lighting as Energy Management Tool through Correlation Analysis of Daily Electricity Demand and Supply Curve	14:20 - 14:40	
EP 3	1570013381	Performance of General Lighting Service Lamps	14:40 -15:00	

EP 4	1569979725	Impact of LED Lighting as Equivalent to Large Power Generation Plant	15:00 - 15:20	2-D-3 25 <sup>th</sup> November 2014
EP 5	1570007923	Development of Visual Basic GUI for Option C Energy Saving of IPMVP	15:40 - 16:00	
EP 6	1570007937	Development of Energy Management System GUI for Office Building	16:00 - 16:20	
EP 7	1569979575	Modified Iteration Particle Swarm optimization procedure for economic dispatch solving with Non-smooth and Non-convex fuel cost function	16:20 - 16:40	
EP 8	1570018967	Review on Issues Related to Electric Energy Demand in Distribution System for Developing Countries	16:40 - 17:00	
EP 9	1570019503	Researching Social Acceptability of Renewable-Energy Technology in Malaysia	17:00 - 17:20	