

**Presentation Schedule for Day 2**  
**Melbourne Function Centre**  
**Tuesday, November 21, 2017**

**Session 10: Wind Energy System**

Time: 10:30- 12:30

Room: Melbourne Function Centre 1

Session Chair: A/Prof S. M. Muyeen

<b>Time</b>	<b>Author(s)</b>	<b>Paper Title</b>
10:30-10:48	Sk. A. Shezan and Chow Yin Lai	Optimisation of Hybrid Wind-Diesel-Battery Energy System for Remote Areas of Malaysia
10:49-11:06	Huajie Gu	Wake Effect in Wind Farm Dynamic Modelling
11:07-11:24	Tapash Das and Jingxin Zhang	Mitigating the Impact of Voltage Sags and Swells on Type IV Wind Generator Systems
11:25-11:42	Adarsh Kumar and Shawkat Ali	Prospects of Wind Energy Production in the Western Fiji- An Empirical Study Using Machine Learning Forecasting Algorithms
11:43-12:00	Seyed Morteza Alizadeh, Cagil Ozansoy and Akhtar Kalam	Investigation into the Impact of PCC Parameters on Voltage Stability in a DFIG Wind Farm
12:01-12:18	Sudarshan Dahal, Ralph Martin and Sumit Paudyal	Impact of Lightning Strikes on Substation Grounding Systems

**Session 11: Photovoltaic Energy System - 1**

Time: 10:30- 12:30

Room: Tennis HQ Level 2 Room 2

Session Chair: Dr. Sarah Lyden

<b>Time</b>	<b>Author(s)</b>	<b>Paper Title</b>
10:30-10:48	Umme Mumtahina and Peter Wolfs	PV Module Integrated LLC Resonant Converter with an Extended Input Voltage Range
10:49-11:06	Md Mejbaul Haque, Peter Wolfs and Sanath Alahakoon	Dual Active Bridge and Matrix Converter Based Three-Port Converter Topology for Grid Interactive PV-Battery System
11:07-11:24	Ahmad Zahedi	Large scale solar PV generation for Southeast Asian Countries
11:25-11:42	Lei Liu, Mehdi Shafiei, Gerard Ledwich, Wendy Miller and Ghavameddin Nourbakhsh	Correlation Study of Residential Community Demand with High PV Penetration
11:43-12:00	Zhenning Jiang, Georgios Konstantinou, Zhaoyu Zhong and Pablo Acuna	Real-Time Digital Simulation based Laboratory Test-bench Development for Research and Education on Solar PV Systems
12:01-12:18	Joydip Jana, Konika Das Bhattacharya and Hiranmay Saha	Trends and challenges of next generation grid connected photovoltaic inverter – an overview
12:19- 12:36	Muslem Uddin, Galina Mirzaeva and Graham Goodwin	Recent Advances in Common Mode Voltage Mitigation Techniques Based on MPC

**Session 12: Energy storage & Electric vehicle-3**

Time: 10:30- 12:30

Room: Tennis HQ Level 2 Room 3

Session Chair: Dr GM Shafiullah

Time	Author(s)	Paper Title
10:30-10:48	Ujjwal Datta, Akhtar Kalam and Juan Shi	Battery Energy Storage System for Transient Frequency Stability Enhancement of a Large-Scale Power System
10:49-11:06	Rasoul Garmabdari, Mojtaba Moghimi, Fuwen Yang, Evan Gray and Junwei Lu	Battery Energy Storage Capacity Optimisation for Grid-Connected Microgrids with Distributed Generators
11:07- 11:24	Piyali Ganguly, Akhtar Kalam and Aladin Zayegh	Design an Optimum Standalone Hybrid Renewable Energy System for a Small Town at Portland, Victoria using iHOGA
11:25-11:42	Vanika Sharma, Mohammed H. Haque and Syed Mahfuzul Aziz	Optimal Battery Size for Grid Connected Rooftop Solar Photo-voltaic Systems in South Australia
11:43-12:00	Milos Pantos, Shariq Riaz, Archie Chapman and Gregor Verbic	Capacity Firming of Intermittent Generation by Dispersed Energy Storage
12:01-12:18	Ali Kharrazi, Victor Sreeram and Yateendra Msihra	Power Admission Control of Plug-in Electric Vehicles using Supervisory Control of Discrete Event System
12:19-12:36	Nasif Mahmud, Ahmad Zahedi and Md Shamiur Rahman	An event-triggered distributed coordinated voltage control strategy for large grid-tied PV system with battery energy storage

**Session 13: Distributed Energy Resources**

Time: 15:30- 18:00

Room: Tennis HQ Level 2 Room 1

Session Chair: A/Prof Jahangir Hossain

Time	Author(s)	Paper Title
15:30-15:48	Laith M. Halabi, Saad Mekhilef, Mehdi Seyedmahmoudian and Ben Horan	Energy management for a grid connected hybrid renewable energy system
15:49-16:06	Nithya Saiprasad, Akhtar Kalam and Aladin Zayegh	Optimal Sizing of Renewable Energy System for a University in Australia
16:07-16:24	Piyali Ganguly, Akhtar Kalam and Aladin Zayegh	Optimum standalone hybrid renewable energy system design using homer for a small community of Portland, Victoria
16:25-16:42	Brendan Banfield, Philip Ciufo and Duane Robinson	The Technical and Economic Benefits of Utility Sponsored Renewable Energy Integration
16:43-17:00	Sammy Aiau, Kandasamy Pirapaharan and Paul Hoole	Renewable Energy Resources Mapping in Papua New Guinea: Solar & Wind Power, Case Study in Markham Valley, Morobe Province, Papua New Guinea.
17:01-17:18	Han Wang, Nicholas Good and Pierluigi Mancarella	Modelling and Valuing Multi-Energy Flexibility from Community Energy Systems
17:19-17:36	Farhad Shahnia, Roberta Fornarelli, Martin Anda and Parisa A. Bahri	A Renewable Energy-driven Water Treatment System in Regional Western Australia
17:37-17:54	Effat Jahan, Md. Rifat Hazari, S. M. Muyeen, Atsushi Umemura, Rion Takahashi and Junji Tamura	Coordinated Power System Frequency Regulation by PMSG-based Offshore Wind Farm

## Session 14: Photovoltaic Energy System - 2

Time: 15:30 -18:00

Room: Tennis HQ Level 2 Room 2

Session Chair: Prof Konika Das Bhattacharya and Dr Narottam Das

Time	Author(s)	Paper Title
15:30-15:48	Berhane Gebreslassie, Akhtar Kalam and Aladin Zayegh	Energy saving, in Commercial Building by Improving Photovoltaic Cell Efficiency
15:49-16:06	Babak Jeddi, Yateendra Mishra and Gerard Ledwich	Network Impact of Multiple HEMUs with PVs and BESS in a Low Voltage Distribution Feeder
16:07-16:24	Ali Kharrazi, Victor Sreeram and Yateendra Mishra	Assessment of Voltage Unbalance Due to single phase Rooftop Photovoltaic Panels in Residential Low Voltage Distribution Network
16:25-16:42	Sudipta Basu Pal, Rahul Kumar, Konika Das Bhattacharya and Dipankar Mukherjee	A Reliability Estimate for a Roof-Top PV during early monsoon in Eastern India
16:43-17:00	Zhe Wang, Narottam Das, Andreas Helwig and Tony Ahfock	Modeling of Multi-Junction Solar Cells for Maximum Power Point Tracking to Improve the Conversion Efficiency
17:01-17:18	Aamir Amir, Asim Amir, Jeyraj Selvaraj and Nasrudin Abd Rahim	DMPPT by Hybrid Techniques Based on Modified Classical Numerical Methods for Photovoltaic Systems
17:19-17:36	Amit Dhoke and Adrian Mengede	Degradation Analysis of PV Modules Operating in Australian Environment
17:37-17:54	SM Ferdous, GM Shafiullah, Mohammad Oninda, Md Asaduzzaman Shoeb and Taskin Jamal	Close Loop Compensation Technique for High Performance MPPT using Ripple Correlation Control

## Session 15: Power Electronics and Motor Drives

Time: 15:30 - 18:00

Room: Tennis HQ Level 2 Room 3

Session Chair: Prof Faz Rahman

Time	Author(s)	Paper Title
15:30-15:48	Saad Ul Hasan, Yuba Raj Kafle and Graham E. Town	Simple Spread-Spectrum Pulse-Modulation Technique for EMI Mitigation in Power Converters
15:49-16:06	Vladislav Kaliyev, Helwig Andreas and Tony Ahfock	Axial Flux PM Coreless Stator Machine Development for Low Speed Wind Generator
16:07-16:24	C. A Teixeira, D. G Holmes, B. P. McGrath and R.H Wilkinson	A Hardware/Software Co-simulation Platform for Power Converter Firmware Design and Debugging
16:25-16:42	A. A Nazib, D. G Holmes and B.P Mcgrath	High Bandwidth Sensorless Synchronisation Strategies for Current Regulated Grid Connected Converters
16:43-17:00	K. S Islam, D Xiao and M. F Rahman	Simplified Model Predictive Control (MPC) with Extended Voltage Vectors for Grid Connected Converters
17:01-17:18	Ilham Osman, D Xiao, M. F Rahman and Md Habibullah	A Two-Stage Optimal Vector Selection Method for Predictive Torque Control of a Three-level VSI driven Induction Motor
17:19-17:36	Jack Connor, Mehdi Seyedmahmoudian and Ben Horan	Using PSO Optimize a PID for Altitude control on a Quadrotor
17:37-17:54	Farhad Shahnia and Hadi Hosseiniyan Yengejeh	Enhancing the Learning Experience in the Power Electronic Unit by Different Tutorial Activities

