

December 5th

ZOOM Session Information: (Zoom link is in the last page)

Room 1: Opening Session, Closing Session, Keynote Speakers:
Meeting ID: 812 2450 2471 **Password:** 039915

Room 2: WIE Panel, Best paper session:
Meeting ID: 890 5173 4858 **Password:** 672064

Room 3: Technical Session 10
Meeting ID: 862 5585 7923 **Password:** 776558

Room 4: Technical Session 5
Meeting ID: 810 7346 4094 **Password:** 310322

Room 5: Technical Session 8
Meeting ID: 859 0556 6617 **Password:** 573171

Room 6: Technical Session 9
Meeting ID: 884 8330 6531 **Password:** 654878

Room 7: Special Session 2
Meeting ID: 872 4839 7253 **Password:** 956089

Room 8: Industrial Panel:
Meeting ID: 863 0945 0398 **Password:** 515291

Room 9: Technical Session 13
Meeting ID: 817 5130 9210 **Password:** 654878

Room 10: Technical Session 14:
Meeting ID: 861 0522 3787 **Password:** 988600

Room 11: Technical Session 15
Meeting ID: 850 7252 2492 **Password:** 122048

Room 12: Technical Session 12
Meeting ID: 848 5250 9703 **Password:** 329153

Room 13: Technical Session 16
Meeting ID: 824 4197 2412 **Password:** 588270

Room 14: Technical Session 17
Meeting ID: 844 6113 7761 **Password:** 444767

Room 15: Technical Session 18
Meeting ID: 861 0522 3787 **Password:** 988600

7:30—8:00, PST Room 1	Opening Session	
8:10—9:00 Room 1	Keynote Speaker 1: Kamal Al-Haddad “Electric Energy Conversion New Challenges and Constraints”	
9:10—10:00 Room 1	Keynote Speaker 2: Youmin Zhang “Towards Smarter, Safer, More Reliable and More Resilient Energy and Autonomous Systems under the Framework of Cyber-Physical Systems”	
10:10—11:40 Room 2	WIE Panel: Speaker 1: Hadis Karimipour (University of Calgary, Calgary, Canada) Speaker 2: Himavarsha Dhulipati (Carleton University, Ottawa, Canada) Speaker 3: Shengrong Bu (Brock University, St. Catharines, Canada)	Coordinator Chair: Shichao Liu
11:50—13:30 Room 3	Technical Session 1: AC/DC Power Quality Session Chair: Walid Morsi 1. 1570852336 An Improved Z-Source Multilevel Converter with Fewer Number of Switches, Less THD, and High Efficiency -- <i>Abolfazl Babaei (University of Manitoba, Canada); Waldemar Ziomek (PTI Transformers LP,</i>	

	<p>Canada); Aniruddha Gole (University of Manitoba, Canada)</p> <ol style="list-style-type: none"> 2. 1570858713 A Novel Totem-Pole Buck LED Driver with Minimal Power Processing -- Sanchayan Das (National Institute of Technology, Warangal, India); Chinthamalla Ramulu (National Institute of Technology Warangal, India); Manikanta Kuraganti (National Institute of Technology Warangal, India) 3. 1570859292 Selective Harmonic Elimination in Cascade H-Bridge Multilevel Voltage Source Inverters Using A Hybrid Optimization Algorithm -- Hamed Madani (Islamic Azad University, Iran); Hamidreza Mosaddegh (University of Saskatchewan, Canada); Xiaodong Liang (University of Saskatchewan) 4. 1570866450 Study of the Bus Voltage Magnitude to Monitor Power Quality in the Distribution System -- Ramin Babazadeh Dizaji (Concordia University, Canada); Mohammad Hassan Ghaderi (University of Texas at Dallas, USA); Mohsen Ghafouri (Concordia University, Canada); Mohsen Hamzeh (University of Tehran, Iran) 5. 1570866465 A Dynamic Series Voltage Regulator for Load Protection in Bipolar DC Power System -- Christopher R Men (Wentworth Institute of Technology, USA); Douglas E Dow (Wentworth Institute of Technology, USA); Afsaneh Ghanavati (Wentworth Institute of Technology)
<p>11:50—13:50 Room 4</p>	<p>Technical Session 2-3: Cyber Security Session Chair: Chengcheng Zhao & Binyan Xu</p> <ol style="list-style-type: none"> 1. 1570860120 Virtualized Experiential Learning Platform for Substation Automation and Industrial Control Cyber security -- Moein Manbachi (British Columbia Institute of Technology, Canada); Jay Nayak; Mohamed Hammami (British Columbia Institute of Technology, Canada); Alejandro Gonzalez Bucio (British Columbia Institute of Technology, Canada) 2. 1570862503 On Propagation of Cyber-Attacks in Wide-Area Measurement Systems -- Hamed Sarjan (Lakehead University, Canada); Amir Ameli (Lakehead University, Canada); Mohsen Ghafouri (Concordia University, Canada) 3. 1570866343 Detection of FDI Attacks on Voltage Regulation of PV-Integrated Distribution Grids Using Machine Learning Methods -- Masoud Ahmadzadeh (Concordia University, Canada); Ahmadreza Abazari (Concordia University, Canada); Mohsen Ghafouri (Concordia University, Canada) 4. 1570866375 Cyber-Security Vulnerabilities of the Active Power Control Scheme in Large-Scale Wind-Integrated Power Systems -- Mostafa Ansari (Concordia University, Canada); Mohsen Ghafouri (Concordia University, Canada); Amir Ameli (Lakehead University, Canada) 5. 1570866426 Detection and Mitigation Methods of Attacks on Low-Inertia Hybrid Microgrids: A Short Survey -- Ahmadreza Abazari (Concordia University, Canada); Mohsen Ghafouri (Concordia University, Canada); Ribal Atallah (Hydro Quebec Research Institute, Canada); Chadi Assi (Concordia University, Canada)

	<p>6. 1570866451 A Secure Time-Based Bad Data Detection Algorithm for State Estimation -- Roy McCann (<i>University of Arkansas, USA</i>); Hamdi Albusnashee (<i>Open Systems International</i>)</p>
<p>11:50—13:50 Room 5</p>	<p>Technical Session 4: Data Analytics, Artificial Intelligence, and Machine Learning Session Chair: Shichao Liu</p> <ol style="list-style-type: none"> 1. 1570854413 An Android-Based Application to Detect COVID-19 and Pneumonia Using Deep Learning -- Shuva Chowdhury (<i>North South University, Bangladesh</i>); Fajjul Abedin (<i>North South University, Bangladesh</i>); Istiak Ahamed Saif (<i>North South University, Bangladesh</i>); Amirul Ahsan Simon (<i>North South University, Bangladesh</i>); Riasat Khan (<i>North South University, Bangladesh & New Mexico State University, USA</i>) 2. 1570854740 An Accelerated and Risk-Free AC Power Flow Method with Machine Learning Based Initiation -- Ming Dong (<i>Alberta Electric System Operator</i>); Daniel Wiebe (<i>Alberta Electric System Operator, Canada</i>); Jian Shi (<i>University of Houston, USA</i>) 3. 1570858695 Forecasting of Solar Energy Generation via Dynamic Model Ensemble -- Xijuan Sun (<i>McGill University, Canada</i>); Di Wu (<i>McGill University, Canada</i>); Menghan Jia (<i>Zhejiang University, China</i>); Yuxuan Xiao (<i>College of Letters and Science, USA</i>); Benoit Boulet (<i>McGill University, Canada</i>) 4. 1570858696 Power System Anomaly Detection via Ensemble of Encoder and Decoder Networks -- Xijuan Sun (<i>McGill University, Canada</i>); Di Wu (<i>McGill University, Canada</i>); Arnaud Zinflou (<i>Hydro-Quebec, Canada</i>); Benoit Boulet (<i>McGill University, Canada</i>) 5. 1570861086 Electric Vehicle Charing Behavior Prediction Using Machine Learning Models – Prashanth Rajagopalan (<i>University of North Dakota, USA</i>); Prakash Ranganathan (<i>University of North Dakota, United Kingdom</i>) 6. 1570865213 Minimalistic LSTM Models for Next Day Hourly Residential HVAC Energy Usage Forecasting -- Rahman Heidarykiany (<i>Marquette University, USA</i>); Cristinel Ababei (<i>Marquette University, USA</i>)

11:50—13:50
Room 6

Technical Session 6-7: Power System Protection and Wide Area Protection
Session Chair: Balakumar Balasingam

1. [1570858979 A Novel Zero-Crossing Point Calibration-Based Data Synchronization Approach for an Underground Cable Fault Localization Platform](#) -- Md Salauddin (University of Saskatchewan, Canada); Tongkun Lan (University of Saskatchewan, Canada); Chi Yung Chung (The Hong Kong Polytechnic University, China); Seok-Bum Ko (University of Saskatchewan, Canada); Seyed Mahdi Mazhari (University of Tehran, Iran)
2. [1570862227 Comparative Study of Phasor Estimation Techniques Applied on Distance Protection](#) -- Fillipe de Almeida Andrade (UFRB); Huilman Sanca Sanca (Federal University of the Recôncavo of Bahia & UFRB, Brazil); Francisco das Chagas Souza Junior (IFRN, Brazil); Pedro Henrique Aquino Barra (UFRB)
3. [1570866326 Fast and Reliable Load-Shedding Scheme for Wastewater Treatment Plant - A Case Study](#) -- G. M. Asim Akhtar (Schweitzer Engineering Laboratories, Inc., USA); Muhammad Waqar Ahmed (Schweitzer Engineering Laboratories Inc, USA); Will Allen (Schweitzer Engineering Laboratories Inc, USA); Perry Zhang (The City of Calgary, Canada); Kyle Jensen (Stantec Inc, USA); Sujay Dasgupta (Schweitzer Engineering Laboratories Inc, USA)
4. [1570866331 Bay Control Unit in an IEC 61850 Environment: A Generalized and Systematic Process Flow for Optimized Configuration](#) -- G. M. Asim Akhtar (Schweitzer Engineering Laboratories, Inc., USA); Muhammad Sheraz (Schweitzer Engineering Laboratories Inc, USA); Muhammad Waqar Ahmed (Schweitzer Engineering Laboratories, Inc., USA)
5. [1570866474 A Routine to Compute Current Distribution in Short Cables Directly in the Time Domain on Complex Structures During Fault Conditions Using CST Studio Suite and ATP-EMTP](#) -- Pablo Torrez Caballero (Sao Paulo State University); Antonio Roberto Panicali (CPQD, Brazil); Eduardo F Costa (CPqD - Research and Development Center in Telecommunications, Brazil); Ricardo Hiroshi Minoda (Fundação CPqD & Unicamp, Brazil); Felipe Ricordi Gismoti Guimaraes (PETROBRAS, Brazil); Carlos Andre Carreiro Cavaliere (PETROBRAS, Brazil); Vinicius Zimmermann Silva (PETROBRAS, Brazil); Marcos Leonardo Ramos (PETROBRAS, Brazil)
6. [1570870074 Shunt Capacitor Bank Fault Detection and Localization Using Sub-Cycle Algorithm](#) -- Mohsen Tajdinian (Shiraz University, Iran); Behzad Behdani (Delft University of Technology, The Netherlands); Ali Goodarzi (Fars Electricity Distribution Company); Harold R. Chamorro (RTH Royal Institute of Technology, Colombia); Vijay K. Sood (Ontario Tech University, Canada)

<p>11:50—13:30 Room 7</p>	<p>Technical Session 11: HVDC, FACTS, and High-Power Converters Session Chair: Vijay K. Sood</p> <ol style="list-style-type: none"> 1. 1570862625 Robust PID Controller Design for DC-DC Converters: The Buck Converter -- Siddhartha Vishwanatha (CVR College of Engineering, India); Yogesh Vijay Hote (Indian Institute of Technology Roorkee, India) 2. 1570866379 Hybrid CPU-GPU-Based Electromagnetic Transient Simulation of Modular Multilevel Converter for HVDC Application -- Walid Ali Hatahet (University of British Columbia, Canada); Liwei Wang (University of British Columbia, Canada) 3. 1570866433 Comparison of Different Types of FCLs Effect on the Transient of VSC MT-HVDC System -- Jalal Sahebkar Farkhani (Aalborg, Denmark); Kaiqi Ma (University of Aalborg, Denmark); Zhe Chen (Aalborg University, Denmark); Claus Bak (Aalborg University, Denmark) 4. 1570869323 A Modified Modulation of WE-Type Multilevel Inverter for Enhanced Output Voltage Capability -- Mohammad Ali (King Fahd University of Petroleum & Minerals, Saudi Arabia); Muhammad Khalid (King Fahd University of Petroleum and Minerals, Saudi Arabia)
<p>11:50—13:30 Room 8</p>	<p>Special Session 1: Approaches for Robust Battery Management Systems Session Chair: Seyed Masoud Mohseni-Bonab</p> <ol style="list-style-type: none"> 1. 1570866234 Approach for Rigorous Evaluation of a Battery Fuel Gauge -- Prarthana Pillai (University of Windsor, Canada); Balakumar Balasingam (University of Windsor, Canada) 2. 1570866384 Open-Circuit Voltage Modelling Toolbox for Battery Management Systems -- Prarthana Pillai (University of Windsor, Canada); Balakumar Balasingam (University of Windsor, Canada) 3. 1570866417 Fast Offline Battery Capacity Estimation Approach with Performance Bounds -- Sneha Sundaresan (University of Windsor, Canada); Sooraj Sunil (University of Windsor, Canada); Balakumar Balasingam (University of Windsor, Canada); Krishna R Pattipati (University of Connecticut, USA) 4. 1570866420 Fast OCV Characterization Approach for Battery Reuse Applications -- James Vu Nguyen (University of Windsor, Canada); Prarthana Pillai (University of Windsor, Canada); Balakumar Balasingam (University of Windsor, Canada) 5. 1570866471 Novel Table-Based Kalman Filter for State of Charge Estimation of Batteries -- Sooraj Sunil (University of Windsor, Canada); Sneha Sundaresan (University of Windsor, Canada); Balakumar Balasingam (University of Windsor, Canada); Krishna R Pattipati (University of Connecticut, USA)

December 6th	
7:00—8:00 Room 1	Keynote 3: Huazhen Fang “What Can We Make Out of Control and Learning for Batteries and Electrification?”
8:10—9:40 Room 3	<p>Technical Session 10: Electric Mobility Session Chair: Xianke Lin</p> <ol style="list-style-type: none"> 1. 1570859527 Identifying Degradation Indicators for Electric Vehicle Battery Based on Field Testing Data -- Kei Long Wong (Macao Polytechnic University, Macao); Ka Seng Chou (Macao Polytechnic University & University of Bologna, Macao); Davide Aguiari (Università di Bologna, Italy); Rita Tse (Macao Polytechnic University, Macao); Su-Kit Tang (Macao Polytechnic University, Macao); Giovanni Pau (Technology Innovation Institute - ARRC). 2. 1570862501 Voltage Oriented Control for Electric Vehicle Regenerative Power Regulation -- Shibajee Nath (Nottingham University Malaysia); Aaruththiran Manoharan (University of Nottingham Malaysia Campus, Malaysia); Mumtaj Begam Kasim Rawthar (University of Nottingham Malaysia Campus, Malaysia). 3. 1570866373 Comparative Economic Analysis of Conventional and Plug-In Battery Electric Vehicles in Canada -- Muhammad Rehman (Ontario Tech University, Canada); Walid Morsi (Ontario Tech University (UOIT)).
8:10—10:10 Room 4	<p>Technical Session 5: Data Analytics, Artificial Intelligence, and Machine Learning Session Chair: Tianxiang Lu</p> <ol style="list-style-type: none"> 1. 1570862084 Phase Identification of Smart Meters Using a Fourier Series Compression and a Statistical Clustering Algorithm -- Jeremy J Chiu (Langara College); Albert Wong (Langara College); James Park (Langara College, Canada); Joe Mahony (Harris SmartWorks, Canada); Michael Ferri (Harris SmartWorks, Canada); Tim Berson (Harris SmartWorks, Canada). 2. 1570865926 Application of Reinforcement Learning to Wind Farm Active Power Control Design -- Xuanhe Zhang (Nanjing University of Aeronautics and Astronautics, China); Hamed Badihi (Nanjing University of Aeronautics and Astronautics, China); Ziquan Yu (Nanjing University of Aeronautics and Astronautics, China); Mohamed Benbouzid (University of Brest, France); Ningyun Lu (Nanjing Univ of Aeronautics and Astronautics, China); Youmin Zhang (Concordia University, Canada). 3. 1570866257 Detection of Key Component Defect for Electric Transmission Tower by Deep Texture Analogy -- Jinze Li (North China Electric Power University & School of Control and Computer Engineering, China); Hua Wu (North China Electric Power University, China); Fang Fang (North China Electric Power University, China). 4. 1570866356 Deep Learning for Segmentation of Critical Electrical Infrastructure from Vehicle-Based Images -- Yasmina Souley Dosso (Carleton University, Canada); Ethan Rizcallah (Carleton University); Rafik Goubran (Carleton University, Canada);

	<p><i>Felix Kwamena (Carleton University, Canada); James R Green (Carleton University, Canada).</i></p> <p>5. 1570866430 A New Data Mining Application in Smart Monitoring Systems Using Self Organizing Map Neural Network to Distinguish Disk Space Variations in Distribution Transformers -- <i>Omid Elahi (Amirkabir University of Technology); Reza Behkam (Amirkabir University of Technology); Gevork Gharehpetian (Amirkabir University of Technology); Morteza Nazari Heris (Lawrence Technological University).</i></p> <p>6. 1570860703 Electrical Power Consumption Forecasting with Transformers -- <i>Jun Wei Chan (Nanyang Technological University, Singapore); Chai Kiat Yeo (Nanyang Technological University, Singapore).</i></p>
<p>8:10—10:10 Room 5</p>	<p>Technical Session 8: Renewable Sources of Energy and Cogeneration Session Chair: Ziyong Song</p> <p>1. 1570853316 A Regression Model-Based Short-Term PV Power Generation Forecasting -- <i>Shahab Karamdel (University of Saskatchewan, Canada); Xiaodong Liang (University of Saskatchewan); Sherif Faried (University of Saskatchewan, Canada); MD Nasmus Sakib Khan Shabbir (University of Saskatchewan, Canada).</i></p> <p>2. 1570865675 A Novel Hybrid Control Strategy with Gain Scheduling for Photovoltaic Emulators -- <i>Imasha Dilshani Balahewa (University of Moratuwa, Sri Lanka); Sathira Tennakoon (University of Moratuwa, Sri Lanka); Hasitha Perera (University of Moratuwa); S Kumarawadu (University of Moratuwa, Sri Lanka).</i></p> <p>3. 1570866359 An Improved Droop Controller for Virtual Synchronous Generators -- <i>Mingjun Wang (University of British Columbia, Canada); Erfan Mostajeran (The University of British Columbia, Canada); Seyyedmilad Ebrahimi (University of British Columbia, Canada); Juri Jatskevich (University of British Columbia, Canada).</i></p> <p>4. 1570866403 Challenges in Adopting Successful Waste-To-Energy Policies in EU Countries: Indonesia Study Case -- <i>Subkhi Abdul Aziz (National Research and Innovation Agency); Nidya Judhi Astrini (National Research and Innovation Agency, Indonesia); Elisabeth Rianawati (Institut Teknologi Bandung & Resilience Development Initiative, Indonesia); Anthony Halog (University of Queensland); M Indra Al irsyad (National Research and Innovation Agency).</i></p> <p>5. 1570866444 Optimized Hybrid Neural Network for Wind Speed Forecasting -- <i>T. M. Rubaith Bashir (Rajshahi University of Engineering & Technology); Mohammad Munem (Rajshahi University of Engineering & Technology); Tasnim Shawkat (Rajshahi University of Engineering and Technology); Md. Habibur Rahaman (Memorial University of Newfoundland, Canada); MD. Safayet Islam (Rajshahi University of Engineering & Technology, Bangladesh); Murad Hossain (Rajshahi University of Engineering & Technology, Bangladesh).</i></p>

<p>8:10--9:40 Room 6</p>	<p>Technical Session 9: Microgrids and Isolated Grids Session Chair: Xinxin Shang</p> <ol style="list-style-type: none"> 1. 1570866348 A Cooperative Robust Fractional-Order PID Controller for Frequency Control in Isolated Microgrids -- Masoud Babaei Vavdareh (Concordia University, Canada); Mohsen Ghafouri (Concordia University, Canada); Amir Ameli (Lakehead University, Canada) 2. 1570866425 Evaluation of Multifunctional PV Inverters Operation During Faults -- Alexandre Hugo da Silveira (Universidade Federal do Rio Grande do Sul & Pontificia Universidade Católica do Rio Grande do Sul, Brazil); Fausto Libano (Universidade Federal do Rio Grande do Sul); Roberto Chouhy Leborgne (Universidade Federal do Rio Grande do Sul, Brazil); Maicon Jaderson Silveira Ramos (Universidade Federal do Rio Grande do Sul, Brazil) 3. 1570866462 Coordinated Energy-Sharing Scheme for DC Electric Spring and Hybrid Battery Energy Storage Source in Modern DC Microgrids -- Danial Moeini (ETS, Canada)
<p>8:10--9:40 Room 7</p>	<p>Special Session 2: Estimation and Control in Industrial Cyber-Physical Energy Systems under Uncertainties Session Chair: Binyan Xu</p> <ol style="list-style-type: none"> 1. 1570861627 Design Optimization of Hybrid Battery Based Gensets -- Abba Muhammad Abdulazeez (Carleton University, Canada); Hicham Chaoui (Carleton University, Canada); Shichao Liu (Carleton University, Canada) 2. 1570866093 Power System State Fusion Estimation Based on Maximum Correntropy Criterion -- Changsheng Wu (Shanghai Dianzi University); Xiaoliang Feng (Henan University of Technology, China); Yaguang Guo (Henan University of Technology, China); Jingjing Yan (Henan University of Technology, China) 3. 1570866389 Outlier-Detection-Based EKF for Power Systems -- Haoli Gu (Zhejiang University of Technology, China); Zhongyao Hu (Zhejiang University of Technology, China); Jianbin Wang (Zhejiang University of Technology, China); Bo Chen (Zhejiang University of Technology, China); Li Yu (Zhejiang University of Technology, China)
<p>10:00--12:00 Room 8</p>	<p>Industrial Panel: Speaker 1: Alexandre Nassif (LUMA Energy) Speaker 2: Daniel Prowse (Manitoba Hydro) Speaker 3: Maike Luiken (Carbovate Development Inc./Western University) Speaker 4: Edward Brost (Bowman Centre for Sustainable Energy)</p>

December 7th	
7:00—8:00 Room 1	Keynote Speaker 4: Sheldon S. Williamson “Smart Fast Charging and Wireless Charging Strategies for Electrified Transportation and Autonomous E-mobility”
8:00—10:00 Room 2	<p>Best paper session:</p> <ol style="list-style-type: none"> 1. 1570854711 A Flexible System-Level Hydrogen Transportation System Operating Structure Interacting with Urban Transportation System -- Elahe Sahraie (Université Laval, Canada); Innocent Kamwa (University Laval, Canada) 2. 1570856359 Small-Signal Stability Assessment with Transfer Learning-Based Convolutional Neural Networks -- Miguel Ramirez-Gonzalez (ZHAW Zurich University of Applied Sciences, Switzerland); Lukas Nösberger (ZHAW, Switzerland); Felix Rafael Segundo Sevilla and Petr Korba (Zurich University of Applied Sciences, Switzerland) 3. 1570866427 Direct Interfacing of Average-Value Models of VSCs in PSCAD/EMTDC -- Seyyedmilad Ebrahimi (University of British Columbia, Canada); Taleb Vahabzadeh (The University of British Columbia, Canada); Juri Jatskevich (University of British Columbia, Canada) 4. 1570866378 Negative-Sequence Current Control with a Hybrid Three-Level Modular Multilevel Converter -- Levi Bieber (University of British Columbia, Okanagan, Canada); Paul Yoo (University of British Columbia Okanagan, Canada); Liwei Wang and Juri Jatskevich (University of British Columbia, Canada) 5. 1570861556 An Adaptive Event-Triggered Distributed PID Control for State of Charge Balancing of Multiple Batteries Based Electric Vehicles -- Pengcheng Chen, Shichao Liu and Hicham Chaoui (Carleton University, Canada) 6. 1570849821 Analysis of Different Latencies and Time Delays in a Coupled Power-Hardware-In-The-Loop Laboratory -- Timo Wagner (Friedrich-Alexander Universität Erlangen- Nürnberg, Germany); Julian Richter (FAU Erlangen-Nürnberg, Germany); Christian Scheibe (Friedrich-Alexander-Universität Erlangen Nürnberg (FAU) & Siemens AG, Germany); Simon Resch and Gert Mehlmann (Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany); Matthias Luther (University of Erlangen-Nürnberg, Germany)
8:00—9:30 Room 9	<p>Technical Session 13: Distributed Systems and Energy Resources Session Chair: Xinxin Shang</p> <ol style="list-style-type: none"> 1. 1570866367 Distributed Cooperative Control of Flywheel Energy Storage Systems for Power Distribution -- Zikang Ding (North China Electric Power University).

<p>8:00—9:30 Room 10</p>	<p>Technical Session 14: Energy Management and Energy-Aware Control Session Chair: Xianke Lin</p> <ol style="list-style-type: none"> 1. 1570863392 An Efficient Energy-Aware Controller for Small-Scale Solar-Worked Devices Using Ratioed Pro-Energy Predictor -- Murad Al-Omary (German Jordanian University, Jordan); Aiman Albatayneh (German Jordanian University, Jordan); Mustafa Jaradat (German Jordanian University, Jordan); Rafat Aljarrah (Princess Sumaya University for Technology, Jordan). 2. 1570866243 Day-Ahead Scheduling of Integrated Energy Systems Considering Carbon Emissions -- Weiyu Wang (North China Electric Power University); Yuanye Chen (North China Electric Power University); Fang Fang (North China Electric Power University, China).
<p>8:00—9:30 Room 11</p>	<p>Technical Session 15: Transactive Energy and Electricity Markets Session Chair: Seyed Masoud Mohseni-Bonab & Yue Song</p> <ol style="list-style-type: none"> 1. 1570853127 Coordinated Trading of Capacity and Balancing Products in Multi-Area Local Flexibility Markets -- Ángel Paredes (University of Malaga, Spain); Jose Aguado (University of Malaga, Spain). 2. 1570860362 A Novel V2V Charging Scheme to Optimize Cost and Alleviate Range Anxiety -- Samira Hosseini (Lakehead University, Canada).
<p>8:00—9:30 Room 12</p>	<p>Technical Session 12: Smart Grids Session Chair: Chengcheng Zhao</p> <ol style="list-style-type: none"> 1. 1570866436 Time-Synchronization Attack on Data Aggregation in Wide-Area Damping Controllers -- Masoud Zadsar (Concordia University, Canada); Mohsen Ghafouri (Concordia University, Canada); Amir Ameli (Lakehead University, Canada); Bassam Moussa (Hitachi ABB Power Grids, Canada). 2. 1570866464 UKF-Based State Estimation for Smart Grids Under FDI Attacks -- Jin Li (Concordia University, Canada); Youmin Zhang (Concordia University, Canada).
<p>9:30—11:10 Room 13</p>	<p>Technical Session 16: Power System Stability and Control & Demand Response Session Chair: Songlin Zhuang</p> <ol style="list-style-type: none"> 1. 1570866418 Impact of PV Variability Towards the Frequency Response in Deloaded Mode -- Azazul Islam (Bangladesh University of Engineering and Technology); Atik Jawad (Bangladesh University of Engineering and Technology & University of Liberal Arts Bangladesh, Bangladesh); Nahid-Al- Masood (Bangladesh University of Engineering and Technology, Bangladesh). 2. 1570866423 Large Signal Stability of Grid-Tied Virtual Synchronous Generator Using Trajectory Reversing -- Ahmed

	<p><i>Sheir (UOIT, Canada); Ruth Milman (UOIT, Canada); Vijay K. Sood (Ontario Tech University, Canada).</i></p> <p>3. 1570858511 Advanced Contextual-Targeted Building Flexibility Based on Signature Labelling for Demand Response -- <i>Petros Tzallas (Centre for Research Technology (CERTH), Greece); Alexios Papaioannou (Information Technologies Institute / Centre of Research and Technology Hellas, Greece); Asimina Dimara (Centre for Research and Technology Hellas); Stelios Krinidis (Centre for Research and Technology Hellas, Greece); George Pavlidis (Centre for Research Technology (CERTH), Greece); Christos Nikolaos Anagnostopoulos (University of the Aegean, Greece).</i></p>
<p>9:30—11:10 Room 14</p>	<p>Technical Session 17: Wireless Power Transmissions & Active Distribution Systems & Efficiency and Conservation & Digital Transformation of Power and Energy Systems</p> <p>Session Chair: Chao Shen</p> <p>1. 1570862534 Analyzing the Impacts of High Voltage Insulators on Equivalent Parameters of Wireless Power Transfer: Simulation and Experimental Studies -- <i>Sadjad Shafiei (Nazarbayev University, Kazakhstan); Seyed Saeid Heidari Yazdi (Nazarbayev University, Kazakhstan); Tleukhan Mussin (Nazarbayev University, Kazakhstan); Yussuf Shakhin (Nazarbayev University, Kazakhstan); Alireza Namadmolan (University of Galway, Ireland); Mehdi Bagheri (Nazarbayev University, Kazakhstan).</i></p> <p>2. 1570866076 Grey Wolf Optimizer for Optimal Distribution Network Reconfiguration -- <i>Haifa Souifi (ClairiTech Innovations); Hsan Hadj Abdallah (University of Sfax, Tunisia).</i></p> <p>3. 1570862758 Survey-Based Policies to Integrate Local Lamp Manufacturer Interests and Energy Efficiency in Indonesia -- <i>Vetri Nurliyanti (National Research and Innovation Agency); M Indra Al irsyad (National Research and Innovation Agency); Tri Anggono (Ministry of Energy and Mineral Resources, Indonesia); Qatro Romandhi (Ministry of Energy and Mineral Resources); Nidya Judhi Astrini (National Research and Innovation Agency, Indonesia).</i></p> <p>4. 1570866300 A Digital Twin Model for COP Prediction in Refrigeration System Using Combined Machine Learning Method -- <i>Dongxu Zhou (State Grid Jiangsu Electric Power Co., Ltd. Nanjing Power Supply Branch); Zhengyi Zhu (State Grid Jiangsu Electric Power Co., Ltd. Nanjing Power Supply Branch).</i></p>

<p>9:30—11:10 Room 15</p>	<p>Technical Session 18: Electrical Machines & Drivers & Real-Time Simulation Session Chair: Tao Yang</p> <ol style="list-style-type: none"> 1570866443 Reducing Dependency on Rotor Time Constant in a Rotor Flux Oriented Vector Controlled Induction Motor Drive Based on Its Static Model -- <i>Himanshu Swami (Indian Institute of Technology Delhi, India); Amit Kumar Jain (IIT Delhi, India).</i> 1570866472 Type 4 Wind Turbine Design and Development of Grid Code Algorithms -- <i>Hakkı Gülcü (ASELSAN Inc., Turkey); Bunyamin Tamyurek (Gazi University).</i>
<p>11:10—12:00 Room 1</p>	<p style="text-align: center;">Closing Session</p>

ZOOM Session Link:

Room 1: <https://uvic.zoom.us/j/81224502471?pwd=V3JQbmw3NHcxeFlySDJHOGRMQ1JLdz09>

Room 2: <https://uvic.zoom.us/j/89051734858?pwd=clhyYzl5Qnh0NEUvMGRrSEw4QUoxdz09>

Room 3: <https://uvic.zoom.us/j/86255857923?pwd=SmR3bWliM3d4dzNGU3pmcHFqUGVzQT09>

Room 4: <https://uvic.zoom.us/j/81073464094?pwd=bXdsTDk2Y21hZTN2bFZudGhQWGHbUT09>

Room 5: <https://uvic.zoom.us/j/85905566617?pwd=Y204emRuNUdKanRJY2pVV1dUbFloUT09>

Room 6: <https://uvic.zoom.us/j/88483306531?pwd=cnJPNG1jdlpJT0RBdGJtUFM1ZEFDdz09>

Room 7: <https://uvic.zoom.us/j/87248397253?pwd=cGJBQnFiVDJxOEIzQIBaVzFENVhOQT09>

Room 8: <https://uvic.zoom.us/j/86309450398?pwd=NVIzbkFGUkxJeXRVOENyRVpXZUNDdz09>

Room 9: <https://uvic.zoom.us/j/81751309210?pwd=VlhnSWg3Wki0QWQ1anltUWN4YzE2Zz09>

Room 10: <https://uvic.zoom.us/j/86105223787?pwd=aFh1MXIwaVdxTjZ6YVVBeWlFVkp2Zz09>

Room 11: <https://uvic.zoom.us/j/85072522492?pwd=Q2lCamhtdzVBNGlTQzVVUTd3UGN5dz09>

Room 12: <https://uvic.zoom.us/j/84852509703?pwd=d2JsOFMxaHhwNXNHb3NYQ3hpVVhjQT09>

Room 13: <https://uvic.zoom.us/j/82441972412?pwd=bC9NWFdPZjhlQ3ZCODJaNHg2Zkdsdz09>

Room 14: <https://uvic.zoom.us/j/84461137761?pwd=K1BRWkRkaTcwaHdQbWZRRGVjZnRQQT09>

Room 15: <https://uvic.zoom.us/j/86105223787?pwd=aFh1MXIwaVdxTjZ6YVVBeWlFVkp2Zz09>