

Saturday, 10 October 2020

9:00am-2:00pm IAS CMD Department Meeting Chair: Leslie Arakkal, by invitation only

Sunday, 11 October 2020

IAS Chapters Workshop Session Chair: Leslie Arakkal

10:00am-3:00pm IAS Chapters and Membership Development Department

Chapters Workshop by invitation only

4:00pm-6:00pm [PSP Main Committee Meeting](#) [CMTE]

Monday, 12 October 2020

8:30am-10:45am [ECCE Plenary Session](#)

[2020 IAS Annual Meeting Opening Session](#) Session Chair: Wei-Jen Lee

2020 IAS Annual Meeting Chair, Wei-Jen Lee, Opening Remarks, 10 minutes

IAS President, Georges Zissis, welcome remarks, 15 minutes

11:00am-11:45am

Presentation of 2020 Class of IAS Fellows, 10 minutes

CMD Awards, 10 minutes

6:00pm-8:00pm [ILDC Committee Meeting](#) Chair: Marco Dalla Costa **Meeting Postponed to November**

6:00pm-7:00pm [IACC Department Meeting](#) [CMTE]

Tuesday, 13 October 2020

	C&S	ESC	IACC	IACC	ILDC-1	Metals	Mining-1	PSEC-1	PSPC
	Codes and Standards #1	EPC-1	ESC-1	IACC-1 Control of Machines and Energy Sources I	IACC-3 Drives and Communication	Metals 1	Mining-1	PSEC-1	PSPC-1
	Session Chair: Steve Townsend	Session Chair: Kelly Robinson	Session Chair: Zhaohao Ding	Session Chair: Dr. Mahmoud Amin & Dr. Babak-Nahid Mobarekeh	Session Chair: Kayo Suzuki	Session Chair: C. T. Liu	Session Chair: Essam Elsahwi	Session Chair: Xiaodong Liang	Session Chair: S. A. Saleh
	2020-CSC-1071 A Comparative Study On Voltage Level Standard For Dc Residential Power Systems	2020-EPC-1097 Event Detection and Recognition With Electric Field Sensors	2020-ESC-1008 - Comparison of Communication-Based and Coordinated-Based Frequency Control Schemes For Hvdc-Connected Offshore Wind Farms	2020-IACC-1161 Mras-Based Super-Twisting Sliding-Mode Observer With Dtc of Six-Phase Induction Motor For Ship Propulsion Application	2020--1135 Generalized Analysis of Non-Isolated Integrated Led Drivers	2020-METC-1065 Catastrophic Failure Prediction For Phase Control Thyristors In Ac Pulsed Power Applications	2020-MIC-1069 A Luminaire Comparison Method	2020-PSEC-1077 Optimal Operation of A Real Power Hub Based On Pv/fc/genset/bess and Demand Response Under Uncertainty	2020-PSPC-0984 Effect of Stator Fault Currents On Rotor Permanent Magnets For A Spm-Type Bldc Motor
9:00am-10:25am	Liangzi Li, School of Electrical Engineering, Shandong University; Ke-Jun Li, School of Electrical	Maciej Noras, UNC Charlotte	Yuan-Kang Wu, National Chung-Cheng University; Guan-Liang Lu,	Kamaladadan	Jean Brand, Federal University of Santa Maria; Felipe Loose, Federal University of Santa Maria; Guirguis Abdelmessih, Universidad de Oviedo; Nelson	Fernando Amaral, Graduate Program in Electrical Engineering, UFMG; Sidelmo Silva, UFMG; Claudio Conceição,	John Sammarco, NIOSH	Mostafa Kermani, Sapienza University of Rome; Erfan Shirdare, Sapienza University of Rome; Arsalan	Adil Usman, Indian Institute of Technology Mandi; Bharat Singh Rajpurohit, Indian Institute of Technology Mandi

Engineering, Shandong University; Kaiqi Sun, School of Electrical Engineering, Shandong University; Zhijie Liu, School of Electrical Engineering, Shandong University; Wen-Jen Lee, Energy Systems Research Center, University of Texas at Arlington 2020-CSC-1072 Concept of Universal Usb Charger Ishtiyaque Ahmad, Indian Institute of Technology Bombay; B. G. Fernandes, Indian Institute of Technology Bombay 2020-CSC-0981 Cyber-Attack Identification of Synchrophasor Data Via Vmd and Multi- Fusion Svm Wei Qiu, Hunan University, University of Tennessee; Kunzhi Zhu, Hunan University; Zhaosheng Teng, Hunan University; Qiu Tang, Hunan University; Wenxuan Yao, University of Tennessee, Oak Ridge National Laboratory; Yuqing Dong, University of Tennessee; Yilu Liu, University of Tennessee, Oak	ZhenDong Yuan , Tokyo City University; Kouta Suzuki, Tokyo City University; Yoshiyasu Ehara, Tokyo City University; Jun Ikeda, Fuji Electric CO.LTD; Keisuke Yamashiro, Fuji Electric CO.LTD; Tetsumi Takano, Fuji Electric CO.LTD 2020-EPC-1101 Experimental Study of Electrohydrodynamic Conduction Pumping Embedded In Micro- Scale Evaporator Masahito Nishikawara, Toyohashi University of Technology; Jamal Yagoobi, Worcester Polytechnic Institute 2020-EPC-1102 Features of Quantitative Verification of Numerical Models For Computing Electrohydrodynamic Processes In Two- Phase Immiscible Liquids Vladimir Chirkov, St. Petersburg State University; Grigorii Utiugov, St. Petersburg State University 2020-EPC-1103 Enhanced Thermal Properties of Silicone Composites With	National Chung- Cheng University 2020-ESC-1009 - Simultaneous Demand Response Program and Conservation Voltage Reduction For Optimal Operation of Distribution Systems Tohid Khalili, University of New Mexico; Amirreza Jafari, University of Tabriz; Seyed Mohammad Sajjadi Kalajahi, University of Tabriz; Behnam Mohammadi- Ivatloo, University of Tabriz; Ali Bidram, University of New Mexico 2020-ESC-1014 - Roles of Pumped Hydro Storages In Optimal Scheduling of Future Taiwan Power System With Highly Penetrated Renewable Energy Resources Heng-Yu Su, Feng Chia University; Jian-Hong Liu, Yuan Ze University; Chia- Chi Chu, National Tsing Hua University; Sheng- Huei Lee, Chung Yuan Christian University; Ying-Yi Hong, Chung Yuan Christian University; Yu-Jen	Youssef Bekbouti, ETS-Montréal; Miloud Rezkallah, Inergia, Cegep of Sept-iles; Ambrish Chandra, ETS- Montréal; Hussein Ibrahim, Inergia, Cegep of Sept-iles 2020-IACC-1194 Real-Time Power Management Strategy Based On Fuzzy Logic Controller and Human-Computer Interface For Dc Off-Grid System Taoufik SADEQ, ÉTS Montréal; Miloud Rezkallah , ÉTS Montréal 2020-IACC-1150 Energy Function Based Modified Integrated Control Architecture For Grid Connected Inverter Anuprabha Ravindran Nair, University of North Carolina at Charlotte; Rojan Bhattarai, Idaho National Laboratories; Michael Smith, University of North Carolina at Charlotte; Sukumar Kamalasadan, University of North Carolina at Charlotte 2020-IACC-1151 Inverter Angle Minimization Based Control	Research Institute; mahmoud amin, Manhattan College; Fayez El-Sousy, Prince Sattam bin Abdulaziz University; Khaled Gaber, Al-Azhar University 2020-IACC-1162 A Recursive Prediction Error Method With Effective Use of Gradient-Functions To Adapt Psm- Parameters Online Aravinda Perera, Norwegian University of Science and Technology; Roy Nilsen, Norwegian University of Science and Technology 2020-IACC-1163 A Direct Method To Calculate Capacity Value of Variable Energy Resources Mohammed Benidris, University of Nevada, Reno; Samer Sulaeman, Michigan State University; Joydeep Mitra, Michigan State University 2020-IACC-1164 Secure Data Centric Communication Approach For Iec 61850 Routable Goose Messages Mohammad Mahmoudian Esfahani, Florida	Spode, Federal University of Santa Maria; J. Marcos Alonso, Universidad de Oviedo; Marco Dalla Costa, Federal University of Santa Maria 2020-ILDC-1140 Photometric Flicker Metrics: Analysis Andperspectives Pascal Dupuis, Kawantech; Leos Kuckaka, T.U.Liberec; Mikal Vik, T.U.Liberec; Ales Richter, T.U.Liberec; Georges Zissis, Université de Toulouse, LAPLACE, UMR 5213 (CNRS, INPT, UPS) 2020-ILDC-1141 Electrolytic- Capacitor-Less Off- Line Led Driver Based On Integrated Parallel Buck-Boost and Boost Converter Guirguis Abdelmessih, University of Oviedo, Electrical Eng. Dept.; Jose Marcos Alonso, University of Oviedo, Electrical Eng. Dept.; Nelson Spode, University of Santa Maria; Marco Dalla Costa, University of Santa Maria	Petroleo Brasileiro S.A.; Gustavo Guimarães, FUNDEP; Cleber Inácio, Petroleo Brasileiro S.A.; Braz Cardoso, UFMG 2020-METC-1051 Automated Virtual Gauges For Dimensional Quality Control Ruben Usamentiaga, University of Oviedo; Daniel Garcia, University of Oviedo; Francisco delaCalle, University of Oviedo 2020-METC-1052 Rail Surface Inspection System Using Differential Topographic Images Francisco Javier delaCalle Herrero, University of Oviedo; Daniel Fernando García Martínez, University of Oviedo; Rubén Usamentiaga Fernández, University of Oviedo 2020-METC-1053 Structural Optimizations of High-Efficiency Direct-On-Line Synchronous Reluctance Motors	André Alzamora, Federal University of Uberlândia; Hélder Paula, Federal University of Uberlândia 2020-MIC-1087 Discussion On The Reliability of Inverters Operating In Hostile Environments Caio Silva, Federal University of Uberlândia; Hélder Paula, Federal University of Uberlândia; Francisco Dias, Federal University of Uberlândia; Luciano Gomes, Federal University of Uberlândia 2020-MIC-1088 Power Line Communication In Emergency Power Microgrids For Mining Industry Dmitry Miller, The University of Newcastle; Galina Mirzaeva, The University of Newcastle; Graham Goodwin, The University of Newcastle 2020-MIC-1089 The Use of Model Predictive Control In Ac Drives For Mining Applications Muslem Uddin, The University of Newcastle; Galina Mirzaeva, The	Najafi, Sepidan Branch, Islamic Azad University, Sepidan, Iran.; Domenico Luca Carnì, University of Calabria; Behin Adelmanesh, Sapienza University of Rome; Luigi Martirano, Sapienza University of Rome 2020-PSEC-0955 Suppression of Short-Circuit Fault Current Level In A Multi-Terminal Wind Farm Vsc- Hvdc System Using Resistive-Type Dc Superconducting Fault Current Limiters Mojtaba Shivaie, Shahrood University of Technology; Alireza Sadeghi, Shahrood University of Technology; Pourya Rezaei , Shahrood University of Technology; Meisam Ansari , Southern Illinois University Carbondale 2020-PSEC-0956 Pulsar Based Timing For Grid Synchronization Wei Qiu, Hunan University and Tennessee; He Yin, University of Tennessee;	2020-PSPC-0985 Ansi 87t-Based Differential Protection of \$3\phi\$ Solid-State Transformers Saleh Saleh, UNB; Emre Ozkop, KTU 2020-PSPC-0986 Seasonal Variations of Tower Footing Impedance In Various Transmission Line Grounding Systems Chenyang Wang, Manitoba Hydro; Xiaodong Liang, University of Saskatchewan; Emerson Adajar, Manitoba Hydro; Paul Loewen, Manitoba Hydro 2020-PSPC-0987 Enhancements of Protection Schemes For A Grid- Connected Industry Park With Ipps Wei-Nen Chang , Chang Gung University; Sheng- Huei Lee, Chien Hsin Univ. of Science and Technology; Yu- Jen Lin, I Shou University; Jian- Hong Liu, Yuan Ze University; Chia- Chi Chu, National Tsing Hua University 2020-PSPC-0988 Algorithm To Prevent Breaker- Failure Protection Mal-Operation Due
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Ridge National Laboratory 2020-CSC-0982 Sic-Based Wireless Power Transformation For Data Centers and Medium Voltage Applications	Hexagonal Boron Nitride Khadija Kanwal Khanum, University of Waterloo; Shesha Jayaram, University of Waterloo 2020-EPC-1104 Synergistic Effect of Nano-Silica and Micro-Silica Fillers On The Rheological Properties of Epoxy Resin Khadija Kanwal Khanum, University of Waterloo; Andreas Kostalas, Crosslink Technology Inc.; Shesha Jayaram, University of Waterloo; John Ulcar, Crosslink Technology Inc.	Lin, I Shou University 2020-ESC-1015 - Online Load Transfer Criterion Using Soft Normally-Open Points For Distribution Networks With Renewable Energies Integration Ning Tong, Huazhong University of Science and Technology; Kaiqi Sun, Shandong University; Ke-Jun Li, Shandong University; Xuhuan Zhu, Huazhong University of Science and Technology; Xiangning Lin, Huazhong University of Science and Technology; Weijen Li, University of Texas at Arlington 2020-ESC-1016 - Energy and Water Co-Optimization For The Resilient Neighborhood of Future Govind Joshi, Colorado School of Mines; Salman Mohagheghi,	Approach For Dispatch of Distributed Energy Resources With Hybrid Energy Storage System Aniket Joshi, University of North Carolina at Charlotte; Sukumar Kamalasan, University of North Carolina at Charlotte 2020-IACC-1152 An Angle Included Optimal Power Flow (opf) Model For Power Distribution Network Using Second Order Cone (socp) Md Mahmud-Ul-Tarik Chowdhury, University of North Carolina at Charlotte; Sukumar Kamalasan, University of North Carolina at Charlotte 2020-IACC-1154 Frame-Angle-Based Direct Torque Control For ϕ Induction Motor Drives Saleh Saleh, UNB; Emre Ozkop, KTU; Ahmed Rubaai, Howard University	International University; Tarek Youssef , University of West Florida; Osama Mohammed, Florida International University 2020-IACC-1166 Adaptive Sliding-Mode Control of Pmlsm Drive System Via Interval Type-2 Petri Fuzzy-Neural-Network For A Two-Dimensional X-Y Table Fayez El-Sousy, Prince Sattam bin Abdulaziz University; Mahmoud Amin, Manhattan College; Ghada Abdel Aziz, Electronics Research Institute; Osama Mohammed, Florida International University 2020-IACC-1167 Adaptive Super-Twisting Sliding-Mode Control Via Tsk-Petri Fuzzy-Neural-Network For Induction Motor Servo Drive System Fayez El-Sousy, Prince Sattam bin Abdulaziz University; Ghada Abdel Aziz, Electronics Research Institute;	2020-ILDC-1142 Stroboscopic Visibility Measure: Assessment of Pulsed Light Parameters Handi Apriyandi, PT PLN (Persero); Pascal Dupuis, Kawantech; Ngapuli I. Sinisuka, Bandung Institute of Technology; Georges Zissis, Université de Toulouse, LAPLACE, UMR 5213 (CNRS, INPT, UPS) 2020-ILDC-1143 Confidence Intervals For Luminous Flicker Measurements: Comparison of Various Approaches Leos Kukacka, Technical University of Liberec; Pascal Dupuis, Université de Toulouse, LAPLACE; Michal Vik, Technical University of Liberec; Ales Richter, Technical University of Liberec; Georges Zissis, Université de Toulouse, LAPLACE 2020-ILDC-1144 A Soft-Switching Transformer-Less Step-Down Converter Based On Resonant	For Metal Industry Applications Cheng-Tsung Liu, National Sun Yat-Sen University; Yu-Xuan Li, National Sun Yat-Sen University; Sheng-Chan Yen, Nidec Taiwan Corporation; Yu-Wei Hsu, Nidec Taiwan Corporation; Tai-Yin Luo, Nidec Taiwan Corporation; Pei-Chun Shih, Nidec Taiwan Corporation; Sheng-Yang Lin, China Steel Corporation 2020-METC-1054 Influence of Metal Shield On Electromagnetic Field and Losses In The End Region of Synchronous Condenser Guorui Xu, North China Electric Power University; Ran Liu, North China Electric Power University; Yang Zhan, North China Electric Power University; Haisen Zhao, North China Electric Power University	University of Newcastle; Graham Goodwin, The University of Newcastle; Maria Seron, The University of Newcastle 2020-MIC-1090 Matrix Converters With Input Resonance Suppression For Mobile Mining Vehicles Galina Mirzaeva, The University of Newcastle; Maria Seron, The University of Newcastle; Graham Goodwin, The University of Newcastle 2020-MIC-1091 Design of A Wireless Thermoelectrically-Powered Temperature Sensor For Industrial Electrochemical Systems Essam Elsahwi, University of Toronto; Benjamin Maxwell, Pulsenics Inc.; Harry Ruda, University of Toronto; Francis Dawson, University of Toronto	Weikang Wang, University of Tennessee; Yilu Liu, University of Tennessee and Oak Ridge National Laboratory; Wenxuan Yao, Oak Ridge National Laboratory; Liangwei Zhan, Oak Ridge National Laboratory; Peter Fuhr, Oak Ridge National Laboratory; Thomas King, Oak Ridge National Laboratory 2020-PSEC-0957 An Energy-Based Benchmark For Smart Grid Functions In Residential Loads Saleh Saleh, UNB; Julian Cardenas-Barrera, UNB; Eduardo Castillo-Guerra, UNB; Basim Alsayid, PTUK; Liuchen Chang, UNB 2020-PSEC-0958 Analytical Approach-Based Reactive Power Capability Curve For Dfig Wind Power Plants Md Nasmus Sakib Khan Shabbir, Memorial University of Newfoundland; Xiaodong Liang, University of Saskatchewan;	To Subsidence Current Soumitri Jena, Thapar Institute of Engineering and Technology, Patiala; Bhavesh R. Bhalja, Indian Institute of Technology Roorkee; Om. P. Malik, University of Calgary 2020-PSPC-0989 Applications of System Integrity Protection Scheme and Multi-Phase Reclosing of Transmission Lines For Stability Enhancements of Taiwan Power System Sheng-Huei Lee, Chien Hsin Univ. of Science and Technology; Wei-Chang Song, Ministry of Finance; Jian-Hong Liu, Yuan Ze University; Chia-Chi Chu, National Tsing Hua University 2020-PSPC-1249 A Novel Three-Phase Transformerless Cascaded Multilevel Inverter Topology For Grid-Connected Solar Pv Applications phanikumar chamarthi, Khalifa University; Ahmed Al Durra, Khalifa University; Saleh.
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Colorado School of Mines
[2020-ESC-1017-Sizing and Siting of Distributed Cloud Energy Storage Systems For A Shipboard Power System](#)
 Kexing Lai, Kansas State University; Mahesh Illindala, The Ohio State University

Mahmoud Amin, Manhattan College; Osama Mohammed
[Current Balance Module](#)
 Yueshi Guan, Harbin Institute of Technology; Hongye Cai, Harbin Institute of Technology; Xiangjun Zhang, Harbin Institute of Technology; Yijie Wang, Harbin Institute of Technology; Wei Wang, Harbin Institute of Technology; Dianguo Xu, Harbin Institute of Technology

Weixing Li, Harbin Institute of Technology; Nahidul Khan, Newfoundland and Labrador Hydro
[2020-PSEC-1073 Effect of High Penetrated Reactive Power Support Based Inverter-Based-Resources On The Power Stability of Microgrid Distribution System During Faults](#)
 Mayur Basu, Auburn University; Vincentius Raki Mahindara, Institut Teknologi Sepuluh Nopember; Jinho Kim, Auburn University; Eduard Muljadi, Auburn University
 A. Saleh, University of New Brunswick
[Hardware in the Loop Testing of a Protection Scheme for Microgrid using RTDS with IEC 61850 Protocol](#)
 Hany Habib, Nevin Fawzy, Sukumar Brahma

10:35am-12:00pm

EPC
[EPC-2](#)
 Session Chair: Thami Zeghloul
[2020-EPC-1105 Signal Processing Technique For Ac Corona Pulses and Charge Computation](#)
 Aayush Suri Suri, Indian Institute of Technology Goa; John Leo, Indian Institute of Technology Goa; Saquib Khan, Indian Institute of Technology Goa; Shakthi Prasad, Indian Institute of Technology Goa
[2020-EPC-1106 Impact of Lightning Channel](#)

ESC
[ESC-2](#)
 Session Chair: Zhaohao Ding
[2020-Es-1018 Multi-TimEScale Active Distribution Network Scheduling Considering Demand-Side Response and User Comprehensive Satisfaction](#)
 Hongzhang Sheng, Shandong University; Chengfu Wang, Shandong University; Yunhui Dong, Shandong University; Jun Liang, Shandong University; Ming

IACC
[IACC-13: Other Advanced Control Applications](#)
 Session Chair: Dr. Ahmed Mohamed & Prof, Sukumar Kamalasan
[2020-IACC-1209 Control of Self-Excited Induction Generator-Based Micro-Hydro Power Feeding Single-Phase and Three-Phase Loads](#)
 Rajasekharareddy Chilipi, Sardar Vallabhbhai National Institute of

IACC
[IACC-2 Control of Energy Sources](#)
 Session Chair: Dr. Surya Doolla & Dr. Kashem Muttaqi
[2020-IACC-1156 Electric Spring Based On Sensor-Less Puc5 Converter With Reduced Capacitor Value](#)
 amirabbas kaymanesh, École de Technologie Supérieure (ÉTS); Miloud Rezkallah, École de Technologie Supérieure (ÉTS); Ambrish Chandra, École de Technologie

IACC
[IACC-4: Control of Machines and Energy Sources II](#)
 Session Chair: Dr. Deepak Fulwani & Dr, Fei Gao
[2020-IACC-1165 State-of-Charge Estimation of Li-Ion Battery At Variable Ambient Temperature With Gated Recurrent Unit Network](#)
 M Hannan, College of Engineering; Dickson Neoh Tze How, Universiti Tenaga Nasional; M S Hossain Lipu, Universiti

ILDC
[ILDC-2](#)
 Session Chair: Laurent Canale
[2020-ILDC-1145 Oled Luminance Prediction Using Impedance Measurements](#)
 Andrea Al Haddad, Laplace Université de Toulouse, INP, CNRS; Antoine Picot, Laplace Université de Toulouse, INP, CNRS; Laurent Canale, Laplace Université de Toulouse, UPS, CNRS; Georges Zissis, Laplace

Metals
[Metals-2](#)
 Session Chair: Ozgul Salor
[2020-METC-1056 Two-Dimensional Vector Hysteresis Modeling For Soft Magnetic Composite Materials Considering Anisotropic Property](#)
 Xiaojun Zhao, North China Electric Power University; Xiaona Liu, North China Electric Power University; Haisen Zhao, North China Electric Power University; Yongjian Li, Hebei University

PSEC
[PSEC-2](#)
 Session Chair: Kent Saylor
[2020-PSEC-0959 Optimal Design Method of Flexible Excitation System For Improving Power System Stability](#)
 Tiantian Zhang, Huazhong Univ. of Science and Technology; Liping Cheng, Huazhong Univ. of Science and Technology; Silin He, Huazhong Univ. of Science and Technology; Minghao Yu, Huazhong Univ.

PSPC
[PSPC-2](#)
 Session Chair: Carson Bates
[2020-PSPC-0990 Fractal-Based Approach For Evaluating The Shielding Design of High Voltage Substations Against Direct Lightning Strikes](#)
 Alexios I. Ioannidis, Aristotle University of Thessaloniki; Thomas E. Tsovilis, Aristotle University of Thessaloniki
[2020-PSPC-0991 Optimal Coordination](#)

Base Current (cbc) Function Modelling On Computed Lightning Induced Overvoltage Waveshapes	Shakthi Prasad, Indian Institute of Technology Goa; Prasoon Vishwakarma, Indian Institute of Technology Goa	Yang, Shandong University	Technology; Ameena Al Sumaiti, Khalifa University	Supérieure (ÉTS); Sadaf Rahimi Far, École de Technologie Supérieure (ÉTS)	Kebangsaan Malaysia; P Ker, Universiti Tenaga Nasional; M Mansor, Universiti Tenaga Nasional; K Muttaqi, University of Wollongong	Université de Toulouse, UPS, CNRS; Pascal Maussion, Laplace Université de Toulouse, INP, CNRS; Pascal Dupuis, Kawantech	of Technology; Yang Liu, Global Energy Interconnection Research Institute Co. Ltd; Dongwei Yuan, North China Electric Power University	of Science and Technology; Chengxiong Mao, Huazhong Univ. of Science and Technology; Dan Wang, Huazhong Univ. of Science and Technology;	of Directional Earth Fault Overcurrent Relays Ansi 67n In Interconnected Electric Power Systems
Corona Wind Induced In A Square Channel By A Two Stage Corona Wind Generator	A K M Monayem Mazumder, Saginaw Valley State University; Grace Trombley, Saginaw Valley State University; Brendon Cousino, Saginaw Valley State University	Shandong University; Chengfu Wang, School of Electrical Engineering, Shandong University; Yong Wang, School of Electrical Engineering, Shandong University; Xi Chen, School of Electrical Engineering, Shandong University; Zhenwei Zhang, School of Electrical Engineering, Shandong University	VIET THANG Tran, University of Wollongong; Md. Rabiul Islam, University of Wollongong; Kashem M. Muttaqi, University of Wollongong; Danny Sutanto, University of Wollongong	Novel Universal Magnetic Power Plug To Facilitate V2v/v2g/g2v/v2h Connectivity For Future Grid Infrastructure	Novel Design of Pr Controller With Anti-Windup Scheme For Single-Phase Interconnected Pv Systems	2020-IACC-1168 A Novel Application of Random Hysteresis Current Control Technique For Acoustic Noise and Vibration Reduction of Pmsm Drive	2020-ILDC-1148 An Analysis of Visible Light Communication Energy Cost	2020-METC-1057 Analysis and Solution of The Luminosity Variations In A Steelmaking Industry Caused By The Operation of A Flying Shear	2020-PSEC-0960 A Polynomial Chaos-Based Approach To Quantify Uncertainties of Correlated Renewable Energy Sources On Voltage Regulation Directly From Waveform Samples Using Deep Learning Framework
2020-EPC-1110 Study of The Effect of The Duration of The Cold Plasma Treatment On The Triboelectric Properties of Polymers	Omar Tilmatine, PPRIME Institute, CNRS - University of Poitiers - ISAE/ENSMA; Thami Zeghloul, PPRIME Institute, CNRS - University of Poitiers - ISAE/ENSMA; Aurelian Fatu, PPRIME Institute, CNRS - University of Poitiers - ISAE/ENSMA; Lucian DascaIESCu, PPRIME Institute, CNRS - University of Poitiers - ISAE/ENSMA	Shandong University 2020-ESC-1020 Sizing and Siting of Energy Storage Systems In A Military Based Vehicle-To-Grid Microgrid	2020-IACC-1222 Combined Variable Step Size Lms For Dvr With Error Regulator Gain Tuning Through Ant-Lion Optimization	2020-IACC-1158 Disturbance Observer-Based Control For Three-Phase Grid-Tied Inverter With Lcl Filter	2020-IACC-1169 Adaptive Neural-Network Optimal Tracking Control For Permanent-Magnet Synchronous Motor Drive System Via Adaptive Dynamic Programming	2020-ILDC-1149 An Optimization Control Method For Instantaneous Current Suppression of Dual Buck Led Driver	2020-METC-1058 Statistical Models of Eaf Harmonics Developed For Harmonic Estimation	2020-METC-1061 Assessment and Implementation of An Optimized Digital Hysteresis Current Control For A Low Cost Three-Level Boost Rectifier In Metal Industries	2020-PSPC-0992 Hardware-In-The-Loop Model-Based Testing of A Motor Relay With Secondary Injection
2020-EPC-1113 Experimental Characterization of A	Zhenwei Zhang, Shandon University; Chengfu Wang,	Kexing Lai, Kansas State University; Lin Zhang, American Electric Power	2020-IACC-1159 Dual Pwm Control For High Step-Up Dc-Dc Converters	2020-IACC-1157 A Novel Design of Pr Controller With Anti-Windup Scheme For Single-Phase Interconnected Pv Systems	2020-IACC-1159 Dual Pwm Control For High Step-Up Dc-Dc Converters	2020-ILDC-1149 An Optimization Control Method For Instantaneous Current Suppression of Dual Buck Led Driver	2020-METC-1061 Assessment and Implementation of An Optimized Digital Hysteresis Current Control For A Low Cost Three-Level Boost Rectifier In Metal Industries	2020-PSEC-0961 Inertial Response Identification Algorithm For Development of Dynamic Equivalent Model of Dfig-Based Wind Power Plant	2020-PSPC-0993 State-of-The-Art Microgrid Power Protective Relaying and Coordination Techniques

Multi-Needle Corona Electrode Mohamed Sofiane Bendilmi, PPRIME Institute, CNRS - University of Poitiers - ISAE/ENSMA; Thami Zegloul, PPRIME Institute, CNRS - University of Poitiers - ISAE/ENSMA; Zehira Ziari, University of Constantine 1; Karim Medles, PPRIME Institute, CNRS - University of Poitiers - ISAE/ENSMA; Lucian Dascalescu, PPRIME Institute, CNRS - University of Poitiers - ISAE/ENSMA 2020-EPC-1112 Simulation and Measurement of Particle Trajectory In An Electrostatic Precipitator With Multiple Wire Electrodes Ryota Tamura, Kanagawa Institute of Technology; Kohei Ito, Kanagawa Institute of Technology; Yuya Date, Kanagawa Institute of Technology; Akinori Zukeran, Kanagawa Institute of Technology; Yoshihiro Kawada, Kanagawa Institute of Technology; Tomohiro Taoka, Sumitomo Heavy Industries Ltd.	Shandon University; Ming Yang, Shandon University; Xi Chen, Shandon University; Huacan Lv, Shandon University 2020-ESC-1022 On The Performance of Data-Driven Reinforcement Learning For Commercial Hvac Control Samy Faddel, University Of Central Florida; Guanyu Tian, University Of Central Florida; Qun Zhou, University Of Central Florida; Haneen Aburub, Florida International University 2020-ESC-1010 Bulk Grid Frequency Support Using Electrolyzers Bikiran Guha, National Renewable Energy Laboratory; Rishabh Jain, National Renewable Energy Laboratory; Santosh Veda, National Renewable Energy Laboratory	University, Abu Dhabi-127788, United Arab Emirates 2020-IACC-1223 Performance Analysis and Design of Frequency Controlled Series-Series Compensated Inductive Power Transfer System For Electric Vehicle Battery Charging Kuseso Onai, Tennessee Technological University; Olorunfemi Ojo, Tennessee Technological University 2020-IACC-1239 Optimal Values of Unknown Parameters of Polymer Electrolyte Membrane Fuel Cells Using Improved Chaotic Electromagnetic Field Optimization Ahmed S. Menesy, Minia University; Hamdy Soltan, Minia University; Salah Kamel, Aswan University; Rania A. Turkey, Future University in Egypt; Hany M. Hasanien, Ain Shams University; Ahmed Al-Durra, Khalifa University of Science & Technology	2020-IACC-1160 Real Time Implementation of Fuzzy Based Charging-Discharging Controller For Lithium-Ion Battery In Microgrid Applications M Faisal, Universiti Tenaga Nasional; M Hannan, Universiti Tenaga Nasional; Pin Jern, Universiti Tenaga Nasional; M Hossain Lipu, Universiti Kebangsaan Malaysia; M Uddin, Lakehead University	2020-IACC-1174 Solar Photovoltaic Roof-Top System Design and Control Employing High Gain Dc Converter Pemendra Kumar Pardhi, Shri G. S. Institute of Technology & Science Indore; Shailendra Kumar Sharma, Shri G. S. Institute of Technology & Science Indore; Ambrish Chandra, Ecole de Technologie Superieure, Montreal, Canada 2020-IACC-1175 A Novel Nine-Level Boost Type Multilevel Inverter With Inductive Ability For Photovoltaic System rabhat Ranjan Bana, National Institute of Technology Meghalaya; Kaibalya Prasad Panda, National Institute of Technology Meghalaya; Pravat Kumar Ray, National Institute of Technology Rourkela; Gayadhar Panda, National Institute of Technology Meghalaya	Paulo Gomes, CEMIG 2020-METC-1063 The True Unity Power Factor Converter For Bof Charging Cranes Thiago Parreiras, Universidade Federal de Minas Gerais; Marcos Alves, Universidade Federal de Minas Gerais; Rodrigo Bastos, Universidade Federal de Minas Gerais; Igor Pires, Universidade Federal de Minas Gerais; Braz Cardoso Filho, Universidade Federal de Minas Gerais	In The Loop Testing of Island Microgrid Control Systems Jan Westman, Clemson University; Ramtin Hadidi, Clemson University; Curtiss Fox, Clemson University; Jesse Leonard, Clemson University 2020-PSEC-0963 Variable Harmonic Distortion In Electric Vehicle Charging Stations Luis Caro, Universidad de los Andes; Gustavo Ramos, University of the Andes; Davis Montenegro, Electric Power Research Institute; David Celeita, Universidad de los Andes 2020-PSEC-0964 The Role of Synthetic Inertia and Effective Load Modelling In Providing System Stability As Renewable Energy Penetration Increases Ashraf UI Haque, Teshmont Consultants LP; Ashikur Bhuiya, Teshmont Consultants LP	Nima Rezaei, Lakehead University; Mohammad Uddin, Lakehead University 2020-PSPC-0994 An Adaptive Grounding Scheme For Synchronous Based Dg To Prevent The Generator Damage During Ground Faults Under Different Operating Modes Muhammad Yousaf, University of Wollongong, Australia; Amin Jalilian, University of Wollongong, Australia; Kashem M. Muttaqi, University of Wollongong, Australia; Danny Sutanto, University of Wollongong, Australia 2020-PSPC-0997 Electric Power System Studies For A Multi-Mw Pv Farm and Large Rural Community With Net Zero Energy and Capabilities Evan S Jones, University of Kentucky; Oluwaseun M Akeyo, University of Kentucky; Keith Waters, Schneider Electric; Dan M Ionel, University of Kentucky
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12:00pm-1:00pm Metals Committee Meeting [CMTE]

6:00pm-7:00pm [MSDAD Department Meeting](#) [CMTE] Session Chair: Marco Dalla Costa

Wednesday, 14 October 2020

9:00am-10:25am

EPC	ESC	IACC	IACC	Metals	PSEC	PSPC
<p>EPC-3 Session Chair: Lucian Dascal 2020-EPC-1115 Factors Influencing The Triboelectric Charge of Granular Plastics In A New Multi-Cylinder Type Tribocharge Device Imed-Eddine Achouri, PPRIME Institute, CNRS - University of Poitiers - ISAE/ENSMA; Gontran Richard, CITF Dorgeville; Thami Zeghloul, PPRIME Institute, CNRS - University of Poitiers - ISAE/ENSMA; Karim Medles, PPRIME Institute, CNRS - University of Poitiers - ISAE/ENSMA; Lucian Dascal 2020-Ep-1118 Nox Abatement Using Dbd Nonthermal Plasma: Effect of Reactor Configurations Luigi Amato, Università degli studi di Napoli "Federico II"; Maysam Abbod, Brunel University; Nadarajah Manivannan, Brunel University; FrancESCO Di Natale, Università degli studi di Napoli "Federico II"; Amedeo Lancia, Università degli studi di Napoli "Federico II"; Wamadeva Balachandran, Brunel University 2020-EPC-1119 Experimental Observation of Charged Particle Trajectories In Roll-Type Electrostatic Separators Mohamed Maammar, PPRIME Institute, CNRS - University of Poitiers - ISAE/ENSMA; Thami Zeghloul, PPRIME Institute, CNRS - University of Poitiers - ISAE/ENSMA; Wessim Aksa, University of Sidi-Bel-Abbes;</p>	<p>ESC-3 Session Chair: Zhen-Yuan Zhang 2020-ESC-1024 Optimal Bidding Strategy of An Aggregator Based On Customers' Responsiveness Behaviors Modeling Xiaoxing Lu, North China Electric Power University; Kangping Li, North China Electric Power University; Fei Wang, North China Electric Power University; Zhao Zhen, North China Electric Power University; Jingang Lai, RWTH Aachen University; Miadreza Shafie-khah, University of Vaasa; João P. S Catalão, University of Porto 2020-ESC-1025 Ultra-Short-Term Solar Pv Power Forecasting Method Based On Frequency-Domain Decomposition and Deep Learning Lin Hu, North China Electric Power University; Zhao Zhen, North China Electric Power University; Fei Wang, North China Electric Power University; Gang Qiu, State Grid Xinjiang Electric Power Co., Ltd; Yu Li, State Grid Xinjiang Electric Power Co., Ltd; Miadreza Shafie-khah, University of Vaasa; João P. S Catalão, University of Porto 2020-ESC-1026 Convolutional Auto-Encoder Based Sky Image Prediction Model For Minutely Solar Pv Power Forecasting</p>	<p>IACC-5: Control of Machines and Energy Sources III Session Chair: Dr. Abdul R. Beig & Dr. Mohammad Uddin 2020-IACC-1173 Improved Rotor Position Estimation In Extended Back-Emf Based Position Sensorless Control For Ipmsms With Non-Sinusoidal Back-Emf Heonyoung Kim, North Carolina State University; Subhashish Bhattacharya, North Carolina State University 2020-IACC-1177 Transformerless Six-Switch (h6)-Based Single-Phase Inverter For Grid-Connected Photovoltaic System With Reduced Leakage Current Md. Rahman, University of Alberta; Shafayet Hossain, North South University; Shoriful Sumon, North South University; Mohammad Uddin, Lakehead University 2020-IACC-1179 Comprehensive Evaluation of Phase Current Reconstruction Strategies For Four-Phase Switched Reluctance Motor Drives Deepak Ronanki, Ryerson University; Apparao Dekka, Lakehead University; Abdul Rahiman Beig, Khalifa University 2020-IACC-1180 Fault Diagnosis and Tolerant Operation of Multi-Channel 3l-Npc Power Converter Fed Adjustable Speed Hydro-Generating Unit</p>	<p>IACC-7: Advances in Power Electronics and Microgrid I Session Chair: Dr. Arif Sarwat and Dr. Anurag Srivastava 2020-IACC-1190 A Combined Trade-Off and Optimization Approach For Microgrid Distributed Energy Resources Sizing Sumedh Puradbhat, Eaton Technologies Pvt. Ltd.; Suryanarayana Doolla, Department of Energy Science and Engineering, IIT Bombay; Vijay Bhavaraju, Eaton Corporation 2020-IACC-1191 Distributed Optimal Voltage Control For Three Phase Unbalanced Distribution Systems With Ders Niloy Patari, Washington State University; Anurag Srivastava, Washington State University; Guannan Qu, California Institute of Tech; Na Li, Harvard University 2020-PSEC-1193 Real-Time Zip Load Parameter Tracking Using Adaptive Window and Variable Elimination With Realistic Synthetic Synchronasor Data Syed M Hur Rizvi, Washington State University; Sajan K Sadanandan, Washington State University; Anurag Srivastava, Washington State University 2020-IACC-1195 Two-Stage On-Board Charger Using Bridgeless Pfc and</p>	<p>Metals 3 Session Chair: Professor Hisen Zhao 2020-METC-1059 Arc Flash Protection Library For Assessment of Elec-Trical Risk On Steel Manufacturer Users Carlos David Urrea Rojas , Universidad Nacional de Colombia Sede Manizales; Santiago Arias Guzman, Universidad Nacional de Colombia Sede Manizales; Juan Antonio Ocampo Wilches, Universidad Nacional de Colombia Sede Manizales; David Mateo Van Strahlen Gutierrez, Universidad Nacional de Colombia Sede Manizales; Armando Jaime Ustariz Farfan, Universidad Nacional de Colombia Sede Manizales; Eduardo Antonio Cano Plata, Universidad Nacional de Colombia Sede Manizales 2020-METC-1060 Steel Manufacturer Small-Scale Prototype Focused On Industry Application Research Juan Antonio Ocampo Wilches, Universidad Nacional de Colombia Sede Manizales; Carlos David Rojas Montano, Universidad Nacional de Colombia Sede Manizales; Carlos David Urrea Rojas, Universidad Nacional de Colombia Sede Manizales; Johan Lisandro Castiblanco Pasuy, Universidad Nacional de Colombia Sede Manizales; Ana Isabel Narvaez Villota,</p>	<p>PSEC-3 Session Chair: Claudio Mardegan 2020-PSEC-0965 Socially-and-Environmentally-Aware Power Management In A Residential Neighborhood Under Heat Wave Events Amin Dindar, Colorado School of Mines; Moein Choobineh, University of Denver; Salman Mohagheghi, Colorado School of Mines 2020-PSEC-0966 Dynamic Analysis and State Estimation of A Mixed Energy Source Microgrid Lin Zhang , American Electric Power; Kexing Lai, Kansas State University; Mahesh Illindala, The Ohio State University 2020-PSEC-0967 Weather-Dependent Ac Power Flow Algorithms Arif Ahmed, TUMCREATE Ltd; Tobias Massier, TUMCREATE Ltd; Fiona Stevens McFadden, Victoria University of Wellington; Ramesh Rayudu, Victoria University of Wellington 2020-PSEC-0968 Safety of Domestic Dwellings In Stressed Electrical Grids: A Case of Backfeed Hazard GIUSEPPE PARISE, Sapienza; SATISH CHAPARALA; LUIGI PARISE, Bambino Gesù Paediatric Hospital of Rome; MARCO ALLEGRI 2020-PSEC-0969 Impact of Evs On The Power Systems Design Criteria of Ev Parks As Uniformly Distributed Load Areas</p>	<p>PSPC-3 Session Chair: Gary Fox 2020-PSPC-0996 An Fpga-Based Cost-Effective Digital Differential Relay For Wind Farm Protection Mohammad Uddin, Lakehead University; Nima Rezaei, Lakehead University; Md. Hasan, Lakehead University 2020-PSPC-0999 Power Loop Busbars Design and Experimental Validation of 1 Kv, 5 Ka Solid State Circuit Breaker Using Parallel Connected Rb-Igcts Rostan Rodrigues, ABB Inc; Utkarsh Raheja, ABB Inc; Yuzhi Zhang, ABB Inc; Pietro Cairoli, ABB Inc; Antonello Antoniazzi, ABB S.p.A 2020-PSPC-1000 Systematically Encoded Polynomial Codes To Detect and Mitigate High-Status-Number Attacks In Inter-Substation Goose Communications Sree Subiksha Reshikeshan, Ohio State University; Mahesh Illindala, Ohio State University 2020-PSPC-1001 Turbo Electric Distributed Propulsion System Reconfiguration Under Extreme Conditions Balaji Guddanti Student, THE OHIO STATE UNIVERSITY; Jongchan Choi, Oak Ridge National Laboratory; Mahesh Illindala, THE OHIO STATE UNIVERSITY 2020-PSPC-1002 A Novel Voltage Clamping Based</p>

Imed-Eddine Achouri, PPRIME Institute, CNRS - University of Poitiers - ISAE/ENSMA; Karim Medles, PPRIME Institute, CNRS - University of Poitiers - ISAE/ENSMA; Ahlem Benabderrahmane, PPRIME Institute, CNRS - University of Poitiers - ISAE/ENSMA; Lucian DascalESCu, PPRIME Institute, CNRS - University of Poitiers - ISAE/ENSMA 2020-EPC-1120 Water Film Formation On Collection Plate and Cleaning of Ionizer For Maintaining Pm Removal Efficiency of Two-Stage Esp Using Different Geometries	Hua Chai, North China Electric Power University; Zhao Zhen, North China Electric Power University; Kangping Li, North China Electric Power University; Fei Wang, North China Electric Power University; Payman Dehghanian, George Washington University; Miadreza Shafie-khah, University of Vaasa; João P. S Catalão, University of Porto 2020-ESC-1027 Optimal Planning of Distributed Generation In Distribution Networks Using The Differential Evolutionary Algorithm	Raghu Selvaraj, INDIAN INSTITUTE OF TECHNOLOGY ROORKEE; Karthik Desingu, INDIAN INSTITUTE OF TECHNOLOGY ROORKEE; Thanga Raj Chelliah, INDIAN INSTITUTE OF TECHNOLOGY ROORKEE 2020-IACC-1205 Virtual Impedance Based Second Order Ripple Control For Non-Inverting Buck-Boost Converter	Half-Bridge Llc Resonant Converter With Synchronous Rectification For 48v E-Mobility	Universidad Nacional de Colombia Sede Manizales; David Mateo Van Strahlen Gutierrez, Universidad Nacional de Colombia Sede Manizales; Santiago Arias Guzman, Universidad Nacional de Colombia Sede Manizales; Juan David Lugo Vergara, Universidad Nacional de Colombia Sede Manizales; Andres Felipe Guerrero Guerrero, Universidad Nacional de Colombia Sede Manizales; Luis Fernando Diaz Cadavid, Universidad Nacional de Colombia Sede Manizales; Armando Jaime Ustariz Farfan, Universidad Nacional de Colombia Sede Manizales; Eduardo Antonio Cano Plata, Universidad Nacional de Colombia Sede Manizales 2020-METC-1062 An Improved Core Loss Model of Ferromagnetic Materials Considering High-Frequency and Non-Sinusoidal Supply	GIUSEPPE PARISE, Sapienza; LUIGI PARISE, Bambino Gesù Paediatric Hospital of Rome; MARCO ALLEGRI Forensic Implications In The Continuous Discontinuity of Iot Innovations	Overvoltage Protection Strategy To Avoid Spurious Trip of Inverter Based Resources and Eliminate The Risk of Bushfires Following The Refcl Operation
Jin-Ho Sung, Korea Institute of Machinery & Materials; Sumin Kim, Korea Institute of Machinery & Materials; Yeawan Lee, Korea Institute of Machinery & Materials; Yong-Jin Kim, Korea Institute of Machinery & Materials; Bangwoo Han, Korea Institute of Machinery & Materials; Hak-Joon Kim, Korea Institute of Machinery & Materials 2020-EPC-1121 Development of Electrostatic Precipitator Type Air Conditioner For Reduction of Fine Particulate Matter In Subway	Jin-Ho Sung, Korea Institute of Machinery & Materials; Ye-Sle Kim, Korea Institute of Machinery & Materials; Yeawan Lee, Korea Institute of Machinery & Materials; Yong-Jin Kim, Korea Institute of Machinery & Materials; Bangwoo Han, Korea Institute of Machinery & Materials; Hak-Joon Kim, Korea Institute of Machinery & Materials	Shivam Chaturvedi, Indian Institute of Technology, Jodhpur; Deepak Fulwani, Indian Institute of Technology, Jodhpur 2020-IACC-1178 Adjustable Speed Induction Motor Drive Fed By 13 Level Cascaded Inverter and 54-Pulse Converter	Pramila S. Nirbhavane, New York ISO; Leslie Corson, Douglas County PUD; Syed M Hur Rizvi, Washington State University; Anurag Srivastava, Washington State University 2020-IACC-1210 Soft-Switching, Self-Tuning and Optimization Technique For Solid State Transformers Based On Direct Ac-Ac Matrix Converter Topology	Luis Fernando Diaz Cadavid, Universidad Nacional de Colombia Sede Manizales; Armando Jaime Ustariz Farfan, Universidad Nacional de Colombia Sede Manizales; Eduardo Antonio Cano Plata, Universidad Nacional de Colombia Sede Manizales 2020-METC-1062 An Improved Core Loss Model of Ferromagnetic Materials Considering High-Frequency and Non-Sinusoidal Supply	GIUSEPPE PARISE, Sapienza; DALEEP MOHLA, DCM Electrical Consulting Services, Inc., Missouri City, TX; LUIGI PARISE, Bambino Gesù Paediatric Hospital of Rome; MARA LOMBARDI, SAPIENZA	AMIN JALILIAN, University of Wollongong; KASHEM MUTTAQI, University of Wollongong; Danny Sutanto, University of Wollongong 2020-PSPC-1003 A Control Strategy To Mitigate The Sensitivity Deterioration of Overcurrent Protection In Distribution Networks With The Higher Concentration of Synchronous and Inverter Based Dg Units
	Osório, University of Beira Interior; Miadreza Shafie-khah, University of Vaasa; Fei Wang, North China Electric Power University; João P. S Catalão, University of Porto 2020-ESC-1028 Combining Genetic and Gravitational Search Algorithms For The Optimal Management of Battery Energy Storage Systems In Real-Time Pricing Markets	Bhim Singh , Indian Institute of Technology Delhi; Rohit Kumar, Indian Institute of Technology Delhi; Piyush Kant, Indian Institute of Technology Delhi	Temitayo Olowu, Florida International University; Masood Moghaddami, Acuity Brands; Arif Sarwat, Florida International University	Haisen Zhao, North China Electric Power University; Hassan H. Eldeeb, Florida International University; Yanli Zhang, Shenyang University of Technology; Yang Zhan, North China Electric Power University; Guorui Xu, North China Electric Power University; Osama A. Mohammed, Florida International University		
	Juan M Lujano-Rojas, University of Zaragoza; José M Yusta, University of Zaragoza; José A Domínguez-Navarro, University of Zaragoza; Gerardo J Osório,					

University of Beira Interior;
 Miadreza Shafie-khah,
 University of Vaasa; Fei
 Wang, North China Electric
 Power University; João P. S
 Catalão, University of Porto
[2020-ESC-1029 Big Data
 Compression In Smart Grids
 Via Optimal Singular Value
 Decomposition](#)
 Seyed Naser Hashemipour,
 SUTech; Jamshid Aghaei,
 SUTech; Abdullah Kavousi-
 fard, SUTech; Taher
 Niknam, SUTech; Ladan
 Salimi, Razi University;
 Pedro Crespo del Granado,
 Norwegian University of
 Science and Technology;
 Miadreza Shafie-khah,
 University of Vaasa; Fei
 Wang, North China Electric
 Power University; João P. S
 Catalão, University of Porto
[2020-ESC-1037 Robust
 Decentralized Coordination
 of Transmission and Active
 Distribution Networks](#)
 Peng Li, Shandong
 University; Ming Yang,
 Shandong University

10:35am-
 12:00pm

EPC

[EPC-4](#)

Session Chair: Hak-Joon Lee
[2020-EPC-1122 Extremely Low Ozone
 Emission Electrostatic Compact Air
 Purifier Using Carbon Fiber Ionizers and
 Carbon Film Collection Stage](#)
 Yeawan Lee, Korea Institute of
 Machinery & Materials; Ye-Sle Kim,
 Korea Institute of Machinery &
 Materials; Yong-Jin Kim, Korea Institute
 of Machinery & Materials; Bangwoo
 Han, Korea Institute of Machinery &
 Materials; Hak-Joon Kim, Korea
 Institute of Machinery & Materials
[2020-EPC-1123 Particle Removal
 Performance of A Two Stage](#)

ESC

[ESC-4](#)

Session Chair: Zhen-Yuan Zhang
[2020-ESC-1030 Design and
 Implementation of Multi-Port Energy
 Routers Towards Future Energy Internet](#)
 Bin Liu, State Key Laboratory of
 Advanced Electromagnetic Engineering
 and Technology, HUST; Yuwei Peng,
 State Key Laboratory of Advanced
 Electromagnetic Engineering and
 Technology, HUST; Jiachao Xu, China
 Railway Siyuan Survey and Design
 Group Co.,Ltd; Chengxiong Mao, State
 Key Laboratory of Advanced
 Electromagnetic Engineering and
 Technology, HUST; Dan Wang, State

IACC

[IACC-6: Advances in Power Electronics
 and Microgrid II](#)

Session Chair: Dr. Hua Geng & Dr.
 Akshay Rathore
[2020-IACC-1182 Synchronization
 Stability Analysis and Enhancement of
 Grid-Tied Multi-Converter Systems](#)
 Xiuqiang He, Tsinghua University; Hua
 Geng, Tsinghua University
[2020-IACC-1185 A High Efficiency
 Modular Ev Charger Using Bridgeless
 and Resonant Converters](#)
 Rahul Pandey, Indian Institute of
 Technology, Delhi, New Delhi, India;
 Bhim Singh, Indian Institute of
 Technology, Delhi, New Delhi, India

IACC

[IACC-8: Advances in Power Electronics
 and Microgrid I](#)

Session Chair: Dr. Jingbo Liu and Dr.
 Lijun He
[2020-IACC-1197 An Isolated Bridgeless
 Cuk-Sepic Converter Fed Electric
 Vehicle Charger](#)
 radha kushwaha, indian institute of
 technology delhi; bhim singh, indian
 institute of technology delhi
[2020-IACC-1198 Calculation of Model
 Based Capacitances of A Two-Winding
 High-Frequency Transformer To Predict
 Its Natural Resonance Frequencies](#)
 Annoy Das, Indian Institute of
 Technology, Bombay, India; Baylon G.

[PSEC-4](#)

Session Chair: Payman Dehghanian
[2020-PSEC-0974 Preemptive Medium-
 Low Voltage Arc Flash Detection With
 Geometric Distribution Analysis On
 Magnetic Field](#)
 Zhenyuan Zhang, University of
 Electronic Science and Technology of
 China; Xiaotian Tang, University of
 Electronic Science and Technology of
 China; Wei-Jen Lee, University of Texas
 at Arlington
[2020-PSEC-0976 "Characteristic"
 Currents and Countercurrents. For Short-
 Circuits Diagnosis](#)
 GIUSEPPE PARISE, Sapienza

[Electrostatic Precipitator With Carbon Based Non-Metallic Collection Plates For Oil Mist](#)

Yeawan Lee, Korea Institute of Machinery & Materials; Jin-Ho Sung, Korea Institute of Machinery & Materials; Yong-Jin Kim, Korea Institute of Machinery & Materials; Bangwoo Han, Korea Institute of Machinery & Materials; Hak-Joon Kim, Korea Institute of Machinery & Materials
[2020-EPC-1124 Electrostatically Induced Voltage In Metal Box When Charged Object Like Hand Moves Away From The Box To Three Directions](#)
Norimitsu Ichikawa, Kogakuin University; Petru Notingher, Université de Montpellier; Nicholas G. Paulter, National Institute of Standards and Technology
[2020-EPC-1125 Particle Charging and Levitation Using Uv Irradiation and Electrostatic Field](#)
Mizuki Shoyama, Kyoto University; Hironobu Yoshioka, Kyoto University; Shuji Matsusaka, Kyoto University
[2020-EPC-1127 Collection of Carbon Particles Using The Attractive Force Created By Surface Charging](#)
Keiichiro Yoshida, Osaka Institute of Technology
[2020-EPC-1128 Numerical Study of Corona Jet Produced From A Circular Tube Fitted With A Nozzle](#)
Yilma T. Birhane, Addis Ababa University; M. W. Woldemariam, Addis Ababa University; Feng C. Lai, University of Oklahoma

Key Laboratory of Advanced Electromagnetic Engineering and Technology, HUST; Qing Duan, Power Distribution Department, China Electric Power Research Institute
[2020-ESC-1032 Dynamic Reactive Droop Control Strategy For The Mmc-Hvdc System Integrating The Suburban Wind Farms Into The Urban Power Grid](#)
Jin Zhang, School of Electrical Engineering, Shandong University; Ke-Jun Li, School of Electrical Engineering, Shandong University; Kaiqi Sun, School of Electrical Engineering, Shandong University
[2020-ESC-1033 Bilevel Information-Aware Distributed Resilient Control For Heterogeneous Microgrid Clusters](#)
Jingang Lai, RWTH Aachen University; Xiaoqing Lu, Wuhan University; Fei Wang, North China Electric Power University
[2020-ESC-1034 A Novel Hierarchical Demand Response Strategy For Residential Microgrid With Time-Varying Price](#)
Zhenyuan Zhang, University of Electronic Science and Technology of China; Yuxiang Huang, University of Electronic Science and Technology of China; Qi Huang, University of Electronic Science and Technology of China; Wei-Jen Lee, University of Texas at Arlington
[2020-ESC-1035 Strategic Prosumers Based Peer-To-Peer Energy Market Design For Residential Microgrids](#)
Zhenyuan Zhang, University of Electronic Science and Technology of China; Haoyue Tang, University of Electronic Science and Technology of China; Qi Huang, University of Electronic Science and Technology of China; Wei-Jen Lee, University of Texas at Arlington
[2020-ESC-1041 Tariff and Optimum Demand-Side Load Management Considering Battery Efficiency](#)

[2020-IACC-1186 A New Hybrid Multilevel Inverter With Level Shifted Multi-Carrier Pwm Technique For Harvesting Renewable Energy](#)
Md. Halim Mondol, Rajshahi University of Engineering & Technology; Shuvra Prokash Biswas, Rajshahi University of Engineering & Technology; Md. Rabiul Islam, University of Wollongong; A. M. Mahfuz-Ur- Rahman, University of Wollongong; Kashem M. Muttaqi, University of Wollongong
[2020-IACC-1187 Characteristic Analysis of Partial Demagnetization Faults In Surface Mounted Bldc Motors](#)
Adil Usman, Indian Institute of Technology Mandi; Bharat Singh Rajpurohit, Indian Institute of Technology Mandi
[2020-IACC-1188 High-Efficient G2v Battery Charger For 48v Local E-Transportation](#)
Abhinandan Dixit, Concordia University; Akshay Rathore, Concordia University
[2020-IACC-1189 Control of Interleaved Converters With Constant Power Load For Dc Microgrid Application](#)
Shengrong Zhuo, University of Technology of Belfort-Montbéliard; Arnaud Gaillard, University of Technology of Belfort-Montbéliard; Damien Paire, University of Technology of Belfort-Montbéliard; Fei Gao, University of Technology of Belfort-Montbéliard

Fernandes, Indian Institute of Technology, Bombay, India
[2020-IACC-1199 A Novel Bilateral Fuzzy Adaptive Unscented Kalman Filter and Its Implementation To Nonlinear Systems With Additive Noise](#)
Sohrab Mokhtari, Florida International University; Kang K Yen, Florida International University
[2020-IACC-1200 Modeling and Design of A Multiport Magnetic Bus Based Novel Wind-Wave Hybrid Ocean Energy Generation Technology](#)
Md. Ashib Rahman, University of Wollongong; Md. Rabiul Islam, University of Wollongong; Kashem M. Muttaqi, University of Wollongong; Danny Sutanto, University of Wollongong
[2020-IACC-1201 A Second Order High Performance Resonant Controller For A Three-Phase Islanded Microgrid](#)
Md. Masudur Rahman, Rajshahi University of Engineering and Technology; Shuvra Prokash Biswas, Rajshahi University of Engineering and Technology; Md. Ashib Rahman, University of Wollongong; Md. Rabiul Islam, University of Wollongong; Kashem M. Muttaqi, University of Wollongong
[2020-IACC-1232 Online Stator Flux Estimation For A Wound Rotor Synchronous Machine \(wrsn\)](#)
Peyman Haghgooei, University of Lorraine; Babak Nahid-Mobarakeh, University of Lorraine; Noureddine Takorabet, University of Lorraine; Davood Arab-Khaburi, Iran University of Science and Technology

[2020-PSEC-0977 Implementation of Grid Interactive and Islanded Controlled Pv System For Residential Applications](#)
Shailendra Kumar, S. V. National Institute of Technology Surat Gujarat; Bhim Singh, Indian Institute of Technology Delhi
[2020-PSEC-0978 Joint Operation Optimization of The Interdependent Water and Electricity Networks](#)
Mohannad Alhazmi, The George Washington University; Payman Dehghanian, The George Washington University; Mostafa Nazemi, The George Washington University; Massimo Mitolo, Irvine Valley College
[Portable Device For Transformer Oil Inhibitor Content Analysis Using Near-Infrared Spectroscopy Wavelength](#)
Yang Sing Leong, Universiti Tenaga Nasional; Pin Jern Ker, Universiti Tenaga Nasional; Md Zaini Jamaludin, Universiti Tenaga Nasional; Muhamad Haziq Hasnul Had, Universiti Tenaga Nasional; Mahdi All Khamis, Universiti Tenaga Nasional; M. A. Hannan, Universiti Tenaga Nasional; Hui Mun Looe, TNB Research Sdn. Bhd.

Roghieh A. Biroon, Clemson University;
Zoleikha Abdollahi, University of
Florida; Ramtin Hadidi, Clemson
University

Thursday, 15 October 2020

9:00am-
10:25am

EPC

[EPC-5](#)

Session Chair: Nouredine Zouzou
[2020-EPC-1131 A Two-Stage Ehd Gas Pump In A Square Channel With Electrodes Mounted On Two Opposite Facing Walls](#)

S. C. Lin, National Taiwan University of Science and Technology; C. Y. Wu, National Taiwan University of Science and Technology; Y. J. Chang, National Taiwan University of Science and Technology; Feng C. Lai, University of Oklahoma

[2020-EPC-1126 Ice Needle Nucleation and Dendrite Growth Under An Electric Field](#)

Leandra Santos, GG & FG Associated Consulting; Douglas S. da Silva, University of Campinas; Andre Galembeck, Federal University of Pernambuco; Fernando Galembeck, University of Campinas
[2020-EPC-1100 Study of The Electrostatic Separation of A Metal/polymer Mixture Based On Electro-Adhesive Force](#)

Hamza Louati, Institut Pprime, CNRS, Université de Poitiers, ISAE-ENSMA; Rabah Ouiddir, Mohamed Boudiaf University, USTMB; Nouredine Zouzou, Institut Pprime, CNRS, Université de Poitiers, ISAE-ENSMA; Amar Tilmatine, APELEC Laboratory, Djillali Liabes University

[2020-EPC-1099 Submicrometer Particles Penetration In A Miniature Dielectric Barrier Discharge Type Electrostatic Precipitator](#)

Ayyoub Zouaghi, Institut Pprime, CNRS, Université de Poitiers, ISAE-ENSMA; Nouredine Zouzou, Institut Pprime, CNRS, Université de Poitiers, ISAE-ENSMA

ESC

[ESC-5](#)

Session Chair: Mahesh S. Illindala
[2020-ESC-1036 Increasing Grid-Connected Capacity of Offshore Wind Farms For Isolated Power Systems-A Case Study of The Taiwan Power System](#)

Ming-Tse Kuo, National Taiwan University of Science and Technology
[2020-ESC-1039 A Multi-Time Scale Response Capability Evaluation Model of Ev Aggregator Considering Customers' Response Willingness](#)

Xiangchu Xu, North China Electric Power University; Kangping Li, North China Electric Power University; Fei Wang, North China Electric Power University; Zengqiang Mi, North China Electric Power University; Yulong Jia, North China Electric Power University; Yanwei Jing, HECIC New Energy Co., Ltd.

[2020-ESC-1040 Multi-Stage Coordination Volt/var Control With Cvr In Active Distribution Network In Presence of Inverter-Based Dg Units and Soft Open Points](#)

Vijay Babu Pamshetti, Indian Institute of Technology (BHU) Varanasi; Shiv Pujan Singh, Indian Institute of Technology (BHU) Varanasi

[2020-ESC-1042 Techno-Economic Analysis and Performance Evaluation of Rooftop Solar Pv Systems Using Actual Data In Australian Context](#)

Masood Ul Hassan, Renewable Energy and Electric Vehicle (REEV) Lab, School of Engineering, Deakin University, Waurin Ponds; Sajeeb Saha, Renewable Energy and Electric Vehicle (REEV) Lab, School of Engineering, Deakin University, Waurin Ponds; Md.

IACC

[IACC-11: MICrogrid Management and Control II](#)

Session Chair: Dr. Jeevanand Seshadrinath & Dr. Vinod Khadkikar
[2020-IACC-1217 An Accurate and Fast Device-Level Real-Time Simulation of Modular Multi-Level Converter](#)
Hao Bai, FEMTO-ST Institute, Univ. Bourgogne Franche-Comté, UTBM; Chen Liu, Zhengzhou University; Qian Li, FEMTO-ST Institute, Univ. Bourgogne Franche-Comté, UTBM; Elena Breaz, FEMTO-ST Institute, Univ. Bourgogne Franche-Comté, UTBM; Fei Gao, FEMTO-ST Institute, Univ. Bourgogne Franche-Comté, UTBM

[2020-IACC-1218 Design and Implementation of A Smart Solid-State Transformer Based Power Converter For Solar Pv System](#)

Cameron Smith, Deakin University; Md Enamul Haque, Deakin University
[2020-IACC-1220 A Novel Eps Architecture For 1u/2u Cubesats With Enhanced Fault-Tolerant Capability](#)

Amarendra Edpuganti, Khalifa University; Vinod Khadkikar, Khalifa University; Mohamed Elmoursi, Khalifa University; Hatem Zeineldin, Khalifa University; Mohamed Al Hosani, ADDC

[2020-IACC-1221 A Pv-Battery System Operating In Islanded and Grid Connected Modes With Shunt Active Filter Capability](#)

Syed Bilal Qaiser Naqvi, Indian Institute of Technology Delhi, India; Shailendra Kumar, Indian Institute of Technology Delhi, India; Bhim Singh, Indian Institute of Technology Delhi, India
[2020-IACC-1224 Partial Series Lc Resonance-Pulse Assisted Zero Current](#)

IACC

[IACC-9: Advances in Power Electronics and MICro Grid III](#)

Session Chair: Dr. Ahmed Al-Durra & Dr. Braz Cardoso Filho
[2020-IACC-1202 An Accurate Accelerated Steady-State Model For Modular Multilevel Converters With Very High Voltage Levels](#)
Ramadhani Kurniawan Subroto, NTUST; Yi Chun Chen, NTUST; Kuo Lung Lian, NTUST; Chia Chi Chu, NTHU

[2020-IACC-1203 Continuous Model Predictive Control of Current-Fed Half-Bridge Isolated Dc/dc Converter](#)

Zehua Liang, School of Automation, Northwestern Polytechnical University; Dongdong Zhao, School of Automation, Northwestern Polytechnical University; Rui Ma, School of Automation, Northwestern Polytechnical University; Haiyan Li, School of Automation, Northwestern Polytechnical University; Yigeng Huangfu, School of Automation, Northwestern Polytechnical University
[2020-IACC-1204 A Novel High Gain Bidirectional Switched Converter](#)

Anish Ahmad, Tezpur University; Balanthi Beig, Khalifa University of Science and Technology; Jamal Alsawalhi, Khalifa University of Science and Technology; Khaled Al Jaafari, Khalifa University of Science and Technology

[2020-IACC-1206 Adaptive Finite-Time Control of Dc-Dc Converter Feeding Constant Power Load For Fuel Cell Vehicle](#)

Cong Yuan, Northwestern Polytechnical University; Yigeng Huangfu, Northwestern Polytechnical University;

PSEC

[PSEC-5](#)

Session Chair: Luigi Martirano
[2020-PSEC-1074 Analysis of Power Grid Voltage Stability With High Penetration of Solar Pv Systems](#)

Sharmin Rahman, Deakin University; Sajeeb Saha, Deakin University; Shama Islam, Deakin University; Mohammad Taufiqul Arif, Deakin University; Mehdi Mosadeghy, NOJA Power; Aman Oo, Deakin University; Enamul Haque, Deakin University

[2020-PSEC-1075 A Smart MICrogrid For Buildings of The Public Administration](#)

Luigi Martirano, University of Rome, DIAEE; Sara Rotondo, University of Rome, DIAEE; Matteo Manganelli, University of Rome, DIAEE; Mostafa Kermani, University of Rome, DIAEE
[2020-PSEC-1076 A Case Study of High Efficiency Lighting System With Advanced Control System](#)

Luigi Martirano, University of Rome, DIAEE; Alessandro Ruvio, University of Rome, DIAEE; Matteo Manganelli, University of Rome, DIAEE; Federico Lettina, University of Rome, DIAEE; Andrea Venditti, University of Rome, DIAEE; Gianluca Zori, University of Rome, DIAEE

[2020-PSEC-1078 A Spanning Tree-Based Genetic Algorithm For Distribution Network Reconfiguration](#)

Mukesh Gautam, University of Nevada, Reno; Narayan Bhusal, University of Nevada, Reno; Mohammed Benidris, University of Nevada, Reno; Sushil J. Louis, University of Nevada, Reno
[2020-PSEC-1079 Electric Vehicle Charging With Reactive Power Compensation To Distribution Systems](#)

[2020-EPC-1129 The Effect of Surface Conductivity On The Characteristics of The Dielectric Barrier Discharge Actuator](#)

Afshin Shaygani, Western University;
Kazimierz Adamiak, Western University

Enamul Haque, Renewable Energy and Electric Vehicle (REEV) Lab, School of Engineering, Deakin University, Waurn Ponds

[2020-ESC-1043 Stochastic Multi-Objective Low-Carbon Generation Dispatch Considering Carbon Capture Plants](#)

Alireza Akbari-Dibavar, University of Tabriz; Behnam Mohammadi-Ivatloo, University of Tabriz; Kazem Zare, University of Tabriz; Tohid Khalili, University of New Mexico; Ali Bidram, University of New Mexico

[2020-ESC-1044 A Game-Theoretic Approach For Enabling Transactive Energy Frameworks Among Networked Microgrids](#)

Jorge Orrego, The Ohio State University; Kexing Lai, Kansas State University; Mahesh Illindala, The Ohio State University

[Switching Current-Fed Push-Pull Converter](#)

Swati Tandon, Concordia University; Akshay Rathore, Concordia University
[2020-IACC-1225 Analysis and Design of Current-Fed Lcl Series Resonant Converter With Capacitive Doubler](#)

Venkata Ratnam Vakacharla, Concordia University; Akshay Rathore, Concordia University

Rui Ma, Northwestern Polytechnical University

[2020-IACC-1207 A Novel Energy Management Strategy Based On Efficiency Optimization For Fuel Cell Electric Vehicle](#)

Yuxiang Zhang, Northwestern Polytechnical University; Yigeng Huangfu, Northwestern Polytechnical University; Rui Ma, Northwestern Polytechnical University

[2020-IACC-1208 Establishing Realistic Testbeds For Dc MICrogrids Studies Validation: Needs and Challenges](#)

Mahdi Debouza, Khalifa University; Ahmed Al-Durra, Khalifa University; Tarek EL-Fouly, Khalifa University; Hatem Zeineldin, Khalifa University

Khalil sinjari, MICHigan State University; Joydeep Mitra, MICHigan State University

[2020-PSEC-1080 Co-Optimization Planning Strategy of Ess and Transmission Lines To Accommodate High Wind Power Integration](#)

Fahad Alismail, KFUPM

ESC

[ESC-6](#)

Session Chair: Mahesh S. Illindala

[2020-ESC-1023 The Impact Analysis of The Multi-Energy Storage In The Integrated Energy System Planning Considering Uncertain Wind Power](#)

Bowen Li, Shandong University; Chengfu Wang, Shandong University; Hongzhang Sheng, Shandong University

[2020-ESC-1036 Assessment of Available Ocean Energy Resources and The Selection of The Conversion Technology For A Hybrid Wind-Wave Farm In A Coastal Site of Australia](#)

Safdar Rasool, University of Wollongong; Kashem M. Muttaqi, University of Wollongong; Danny Sutanto, University of Wollongong

[2020-ESC-1047 A Saturated Amorphous Alloy Core Based Smart Fault Current Limiter For Improving The Low Voltage Ride Through Capability of Distributed Generation Units](#)

Md. Minarul Islam, University of Wollongong; Kashem Muttaqi, University of Wollongong; Danny Sutanto, University of Wollongong

[2020-ESC-1096 Adaptive and Predictive Energy Management Strategy For Online Optimal Power](#)

IACC

[IACC-10: MICrogrid Management and Control III](#)

Session Chair: Dr. Rajeev Kumar Singh & Prof. Bhim Singh

[2020-IACC-1181 Accurate Voltage-To-Frequency Sensor With Galvanic Isolation and Bandwidth of 375 Khz](#)

Decheng Yan, Georgia Institute of Technology; Liran Zheng, Georgia Institute of Technology; Rajendra Prasad Kandula, Georgia Institute of Technology; Deepak Divan, Georgia Institute of Technology

[2020-IACC-1212 Sensor Fault Resilient Control of Electronically Coupled Distributed Energy Resources In Islanded MICrogrids](#)

Sajeeb Saha, Deakin University; Sasan Gholami, AEMO

[2020-IACC-1213 DynaMIC Derivative-droop Control For Supercapacitor Synthetic Inertial Support](#)

Umer Akram, The University of Queensland; Mithulanathan Nadarajah, The University of Queensland; Rakibuzzaman Shah, Federation University Australia; Rabiul Islam, University of Wollongong

[IACC-12: Control of Energy Sources II](#)

Session Chair: Dr. Ranjit Mahanty & Prof. Amrish Chandra

[2020-IACC-1226 A Saturated Amorphous Alloy Core-Based Inrush Current Limiter](#)

Md. Minarul Islam, University of Wollongong; Kashem Muttaqi, University of Wollongong; Danny Sutanto, University of Wollongong
[2020-IACC-1227 Shunt Active Dc Filter To Reduce The Dc Link Ripple Current Caused By Power Converters To Improve The Lifetime of Aluminium Electrolytic Capacitor](#)

Md Nafiz Musarrat; Md Rabiul Islam, University of Wollongong Australia; Kashem Muttaqi, University of Wollongong Australia; Danny Sutanto, University of Wollongong Australia
[2020-IACC-1228 Application of A Dual-Slope Delta Modulated Current Source Inverter In A Dynamic Voltage Restorer To Mitigate Voltage Sags](#)

Sumaiya Hasan, University of Wollongong; Kashem Muttaqi, University of Wollongong; Danny Sutanto, University of Wollongong
[2020-IACC-1229 High Frequency Ripple Injection Signals For The Effective Utilization of](#)

PSEC

[PSEC-6](#)

Session Chair: Sergio Panetta

[2020-PSEC-1081 Reliability Improvement of Wind Integrated Power Systems Using Energy Storage & Aggregation](#)

Atri Bera, Michigan State University; Joydeep Mitra, Michigan State University

[2020-PSEC-1082 Renewable Energy Based Microgrid: Role of The Architecture In Grid Enhancement Towards Sustainable Energy](#)

Abir Muhtadi, University of Wyoming; Dilip Pandit, University of Wyoming; Nga Nguyen, University of Wyoming; Joydeep Mitra, Michigan State University

[2020-PSEC-1083 Power Quality and Stability In A Cluster of Microgrids With Coordinated Power and Energy Management](#)

Prithwiraj Roy Chowdhury, University of North Carolina at Charlotte; Prasanth Sahu, University of North Carolina at Charlotte; Somasundaram Essakiappan, University of North Carolina at Charlotte; Madhav Manjrekar, University of North Carolina at Charlotte; Kevin Schneider, Pacific Northwest National Laboratory; Stuart Laval, Duke Energy Corporation

10:35am-12:00pm

[Dispatch From Vpps With Renewable Energy and Energy Storage](#)

Ghulam Mohy-ud-din, Australian Power Quality and Reliability Centre, School of Electrical Computer and Telecommunications Engineering, University of Wollongong, NSW 2522,; Kashem M. Muttaqi, Australian Power Quality and Reliability Centre, School of Electrical Computer and Telecommunications Engineering, University of Wollongong, NSW 2522,; Danny Sutanto, Australian Power Quality and Reliability Centre, School of Electrical Computer and Telecommunications Engineering, University of Wollongong, NSW 2522,

[2020-ESC-1241 Power Quality Improvements In Spv System Operating With Weak Ac Network](#)

GAURAV MODI, INDIAN INSTITUTE OF TECHNOLOGY, DELHI; BHIM SINGH, INDIAN INSTITUTE OF TECHNOLOGY, DELHI

[2020-ESC-1013 Application of Multisynchrosqueezing Transform For Subsynchronous Oscillation Detection Using Pmu Data](#)

Yue Ma, University of Electronic Science and Technology of China; Qi Huang, University of Electronic Science and Technology of China

[2020-IACC-1214 \$\ell_p\$ -Norm Proportionate Based Approach With Mode Transition Between Grid Interactive and Standalone of Solar- Bes Three Phase Four Wire MICrogrid](#)

Shailendra Kumar, S.V. National Institute of Technology Surat, Gujarat-395007, India; Bhim Singh, Indian Institute of Technology Delhi; Ahmed Al Durra, Khalifa University

[2020-IACC-1215 An Energy Management Strategy With Advanced Power Electronic Converter and Control To Achieve Energy Resiliency and Minimum Operating Cost](#)

A. M. Mahfuz-Ur- Rahman, University of Wollongong; Md. Rabiul Islam, University of Wollongong; Kashem M. Muttaqi, University of Wollongong; Danny Sutanto , University of Wollongong

[2020-IACC-1216 Design and Experimental Results of Three-Phase Interleaved Dcm Buck-Boost-Derived Pfc Converter For Mea and Comparison With Single-Cell Converter](#)

Sivanagaraju Gangavarapu, Concordia University; Akshay Rathore, Concordia University

[Residential Ev Storage In Future Power Grids With Rooftop Pv System](#)

Obaidur Rahman, University of Wollongong; Kashem Muttaqi, University of Wollongong; Danny Sutanto, University of Wollongong

[2020-IACC-1230 Rooftop Photovoltaic System With Battery Storage To Supply Power In A Sewage Water Pumping Station Based Industrial Microgrid With Zero Grid Power](#)

A. M. Mahfuz-Ur- Rahman, University of Wollongong; Ashif Buksh, University of Wollongong; Md. Rabiul Islam, University of Wollongong; Kashem M. Muttaqi, University of Wollongong; Danny Sutanto , University of Wollongong

[2020-IACC-1231 A Novel State of Charge Dependent Equivalent Circuit Model Parameter Offline Estimation For Lithium-Ion Batteries In Grid Energy Storage Applications](#)

Jean Marcos Lobo da Fonseca, University of Houston; Gnana Sambandam Kulothungan, University of Houston; Krishna Raj Ramachandran Potti, University of Houston; Kaushik Rajashekar, University of Houston

[2020-PSEC-1084 Evaluation of Harmonic Distortion In The Cigre Residential Low Voltage Network With Photovoltaic Penetration](#)

Johanna Castellanos, Pontificia Universidad Javeriana; Diego Patino, Pontificia Universidad Javeriana; Carlos Adrian Correa-Florez, Pontificia Universidad Javeriana; Gabriel Ordóñez-Plata, Universidad Industrial de Santander

[2020-PSEC-1085 Machine Learning-Based Strategy For Demand Response In Distribution Systems Using Thermostatically Controlled Loads](#)

BILAL KHAN, King Fahd University of Petroleum and Minerals; Saifullah Shafiq, Prince Mohammed Bin Fahd University; Ali Taleb Al-Awami, King Fahd University of Petroleum and Minerals

[2020-PSEC-0973 Modeling and Application of Complex Soil Structure Influenced by Grounding Device of Tower](#)

Authors(s): Dong Zhang, Lijun Zhou, Lin Huang, Tongshuai Wu, Chen Hu, Xintong Liu, Sixiang Chen

[2020-PSEC-0975 A Method for Discriminating the Moisture Status of OIP Bushing based on Dissado-Hill and GWO-HMM Model](#)

Authors(s): Wei Liao, Lijun Zhou, Chuanhui Zhang, Dong Wang, Jun Zhang, Lei Guo

Friday, 16 October 2020

1:00pm-3:00pm Publications Department Meeting [CMTE]Session Chair: Andy Knight