

IEEE Green Technologies Conference Schedule - 2019

Thursday, 4/4/2019

From To

7:00 AM		5:00 PM		Registration - Portico Foyer							
8:30 AM		9:30 AM		Salon C							
				Welcome							
				An overview of the Solar Industry from the Past to the Future - Georges Antoun, Chief Commercial Officer, First Solar							
9:30 AM		10:20 AM		Power and Energy Management in Microgrids/Grids -Salon C		Power Generation & Storage - Salon E		Green Fuels and Other Products - Salon F		Sustainability, Green City, Smart City - Ashland	
9:30 AM	9:55 AM	Economic and Environmental Advantages of Renewable-Based Microgrids Over Conventional Microgrid (P1020)	(P1020) Sohad Abu-Elzait, Robert Parkin, University of Massachusetts	Utility Scale PV+Storage (PVS) Assets for Peaker Applications (P52)	(P52) Scott Rackey, Director of PV Plus Storage, First Solar	Production of Energy Products from the Digestion of Shrimp Processing Wastewaters (P53)	(P53) Mark E. Zappi, Emmanuelle Revellame, Dhan Lord Fortela, Wayne Sharp, Rafael Hernandez, William Holmes, Daniel Gang, Ashley Picou-Mikolajczyk, and Rakesh Bajpai, Energy Institute of Louisiana, University of Louisiana & Robbyn Cooper, Cleco	Production of Sustainable Adhesives from Microalgae (P54)	(P54) William Chirdon, Department of Chemical Engineering, University of Louisiana		
9:55 AM	10:20 AM	Robust Control and Optimal Operation of Multiple Microgrids with Configurable Interconnections (P1012)	(P1012) Maximiliano Lainfiesta Herrera, Sreelatha Aihloor Subramanyam, Xuewei Zhang, Texas A&M University-Kingsville	Project Mexico: Coyuchi Solar Power System (P1059)	(P1059) Nicholas Martinez, California State University, Los Angeles	Lignocellulosic Ethanol Production from Sugarcane Waste Using a Recombinant E. coli (AC3)	(AC3) Ramaraj Boopathy, Nicholls State University	Comparison of Recursive and Non-Recursive Buildings (P1070)	(P1070) Abdulaziz Almalqa, George Edwards, University of Denver		
10:20 AM		10:35 AM		Break - Salon A-D							
10:35 AM		12:15 PM		Power and Energy Management in Microgrids/Grids -Salon C		Power Generation & Storage - Salon E		Green Fuels and Other Products - Salon F		Sustainability, Green City, Smart City - Ashland	
10:35 AM	11:00 AM	Coordinated Active and Reactive Power Control of a SOFC System in Droop Controlled AC Microgrid (P1065)	(P1065) El Hassane Margoum(1), Hassan Mharzi(2), Samy Faddel(1), Osama Mohammed(1), (1)Florida International University, United States; (2)Ibn-Tofail University, Morocco	Field Testing of Manufacturable Advanced Low-Cost Receiver for Parabolic Trough Solar Power (AC1)	(AC1) Jonathan R. Raush, Assistant Professor, University of Louisiana at Lafayette	Sweet Corrosion Inhibition on Carbon Steel Using Waste Activated Sludge Extract (IA2)	(IA2) Rafael Hernandez, Liew Go, William Holmes, Energy Institute of Louisiana, University of Louisiana & Tre Bertrand, Coastal Chemical Corp.	Sustainability at Scale: Campus Initiatives (IA6)	(IA6) Gretchen LaCombe Vanicor, UL Director of Sustainability		
11:00 AM	11:25 AM	Networked Microgrid Security and Privacy Enhancement by the Blockchain-Enabled Internet of Things Approach (P1038)	(P1038) Morteza Dabbaghjamesh(1), Boyu Wang(1), Shahab Mehraeen(1), Peyman Khazaei(2), Abdollah Kavousi-Fard(3), (1)Louisiana State University, (2)Shiraz University of Technology, Iran; (3)University of Michigan	Design of a Smart City Utilizing Photovoltaic Panels (P1072)	(P1072) Michael Davis, Mohammad Madani, University of Louisiana at Lafayette	Applications of Deep Learning Algorithms in Energy Bioprocess Models (IA3)	(IA3) Dhan Lord Fortela, Mark E. Zappi, Wayne Sharp, Emmanuel Revellame, and Rafael Hernandez, Energy Institute of Louisiana, University of Louisiana & Robbyn Cooper, Cleco	Locally Attuned Alliances for Human-Ecological Innovation (AC11)	(AC11) Kari Smith, PhD, UL School of Architecture		
11:25 AM	11:50 AM	Artificial Neural Network Trained with Complementary Quadratic Programming for Realtime Unit Commitment and Dispatch Optimization (P1052)	(P1052) Nadia Panossian, Dustin McLarty, Matthew Taylor, Washington State University	Baseline Control Strategy for Maximum Power Tracking for a 5MW Offshore Wind Turbine (P1054)	(P1054) Afef Fekih, Sina Ameli, Mohamad Javad Morshed, University of Louisiana at Lafayette	Torrefaction of biomass and non-lignocellulosic waste to produce biocoal (AC4)	(AC4) Prashanth Buchireddy, Prithvi Morampudi, Timothy Boudreaux, Stephen Dufreche, and Mark Zappi, Energy Institute of Louisiana, University of Louisiana	Holistic Computational Design: A Biomimetic Investigation of the Natural Cellular Structures (AC12)	(AC12) BoSheng Liu, UL School of Architecture		
11:50 AM	12:15 PM	Optimal Scheduling of Reconfigurable Hybrid AC/DC Microgrid Under DLR Security Constraint (P1036)	(P1036) Farzad Ferdowsi(3), Morteza Dabbaghjamesh(1), Shahab Mehraeen(1), Mohammad Rastegar(2), (1)Louisiana State University; (2)Shiraz University, Iran; (3)University of Louisiana	Emerging False Estimates of Solar Integration Impacts on Power Distribution Feeders Due to Inappropriate Time Resolution (P1037)	(P1037) Farzad Ferdowsi(2), Shahab Mehraeen(1), Gregory B Upton(1), (1)Louisiana State University; (2)University of Louisiana at Lafayette	Oxygen enriched air gasification of pine using a 3 ton/day bubbling fluidized bed gasification system (AC5)	(AC5) John Guillory, Stephen Dufreche, Prashanth Buchireddy, and Mark Zappi, Energy Institute of Louisiana, University of Louisiana	Materials Sustainability Standards and Energy (AC13)	(AC13) Liane Hancock, PhD, University of Louisiana Lafayette School of Architecture		
12:15 PM		1:30 PM		Lunch - Salon B							
				Smart Villages - Joe Lillie, IEEE Foundation Liaison to IEEE Smart Villages							

1:30 PM	2:20 PM	Salon C	Salon E	Salon F	Ashland				
		Microgrids Big Data and Grid Future - Robert Hebner, PhD, Director of the Center for Electromechanics at the University of Texas at Austin.		Challenges and Suggestions toward Developing Full-Scale Commercialization of Transportation Biofuels in the United States - Mark E. Zappi, Dhan Lord Fortela, Rafael Hernandez, and Daniel Gang, Energy Institute of Louisiana, University of Louisiana					
2:20 PM	3:35 PM	Power and Energy Management in Microgrids/Grids -Salon C	Power Generation & Storage - Salon E	Green Fuels and Other Products - Salon F	Sustainability, Green City, Smart City - Ashland				
2:20 PM	2:45 PM	Voltage and Frequency Regulation on Isolated AC Three-Phase microgrids via S-DEs (P1014)	(P1014) William Amin(1), Oscar Montoya(1), Victor Garrido(1), Walter Gil(2), Alejandro Garces(2), (1)Universidad Tecnologica de Bolavar, Colombia; (2)Universidad Tecnologica de Pereira, Colombia	Sustainable Small-Scale Photovoltaic Technology for Poverty Alleviation Case Study in Bangladesh (P1055)	(P1055) Kala Meah(2), Md. Hasan Ali(1), (1)Local Government Engineering Department, Bangladesh; (2)York College of Pennsylvania	Volatile Acid Platform Using a Combination of Anaerobic and Aerobic Bioprocessing for Microbial Lipids Production (AC6)	(AC6) Emmanuel Revellame, Dhan Lord Fortela, Rafael Hernandez, William Holmes, and Mark E. Zappi, Energy Institute of Louisiana, University of Louisiana	Distributed Model Predictive Control Based on Goal Coordination for Multi-Zone Building Temperature Control (P1006)	(P1006) Roja Eini, Sherif Abdelwahed, Virginia Commonwealth University
2:45 PM	3:10 PM	Determination of the Voltage Stability Index in DC Networks with CPLs: a Gams Implementation (P1013)	(P1013) William Amin, Oscar Montoya, Universidad Tecnologica de Bolavar, Colombia	Implementing "R" Programming for Time Series Analysis and Forecasting of Electricity Demand for Texas, USA (P1025)	(P1025) Robert Ngabesong, Lifford McLauchlan, Texas A&M University - Kingsville	Anaerobic Biotreatment of Food Processing Wastes for Production of Biogas (IA4)	(IA4) Jonathan Trahan, Fourrier and de Abreu Engineers, LLC. & Mark E. Zappi, Dhan Lord Fortela, Wayne Sharp, Rafael Hernandez, and Daniel Gang, Energy Institute of Louisiana, University of Louisiana & Robbyn Cooper, Cleco	Innovative Approach Towards Sustainable External Wall System (P1048)	(P1048) Fereynet Amha, Ethiopian Construction Design and Supervision Works Corporation, Addis Ababa University
3:10 PM	3:35 PM	Transactive Energy Pricing in Power Distribution Systems (P1062)	(P1062) Arun-Karthick Manoharan, Anton Hettiarachchige Don, Visvakumar Aravinthan, University of Louisiana at Lafayette	Chaos Control in Quasi-Periodicity to Period-Doubling Parallel-Connected DC-DC Buck-Boost Converters (P1019)	(P1019) Ammar Natsheh, Higher Colleges of Technology, U.A.E.	Thermal Pretreatment of Sugarcane Bagasse Makes an Attractive Renewable Fuel: Experience from a Small Commercial Plant (IA5)	(IA5) Anders Borg, American BioCarbon	Micro Climatic Analysis of Sustainable Agricultural Greenhouse with Built-in Roof Solar Stills (P1007)	(P1007) Kabir Abdullahi Muhammad(2), Alaa H. Salah(1), Hassan El-Banna Fath(2), (1)Department Informatics Research Institute, City of Scientific Research and Technological Application, Egypt; (2)Egypt-Japan University of Science and Technology, Egypt
3:35 AM	4:00 PM	Break - Salon A-D							
4:00 PM	5:15 PM	Power and Energy Management in Microgrids/Grids -Salon C	Power Generation & Storage - Salon E	Green Fuels and Other Products - Salon F	Sustainability, Green City, Smart City - Ashland				
4:00 PM	4:25 PM	Real-Time Resiliency Assessment of Control Systems in Microgrids Using the Complexity Metric (P1035)	(P1035) Farzad Ferdowsi(2), Masoud Barati(3), Chris S. Edrington(1), (1)Center for Advanced Power Systems, Florida State University; (2)University of Louisiana at Lafayette; (3)University of Pittsburgh	Wave Excitation Force Prediction Methodology Based on Autoregressive Filters for Real Time Control (P1005)	(P1005) Md Rakib Hasan Khan(2), Bora Karayaka(2), Yanjun Yan(2), Peter Tay(2), Yi-Hsiang Yu(1), (1)National Renewable Energy Laboratory; (2)Western Carolina University	Breakthrough Energy Efficiency Technologies for the 21st Century Sugar Industry (IA6)	(IA6) Jeff LeBlanc and Chung Chi Chou, Dr. Chou Technologies, Inc.	Synthesizing Energy Consumption Data Using a Mixture Density Network Integrated with Long Short Term Memory (P1026)	(P1026) Jonathan Sarochar, Ipsita Acharya, Hugo Riggs, Aditya Sundararajan, Longfei Wei, Temitayo Olowu, Arif Sarwat, Florida International University
4:25 PM	4:50 PM	Smart Rural Framework Using IoT Devices and Cloud Computing (P1051)	(P1051) Shristi Shrestha, Benjamin Drozdenko, Louisiana Tech University	Current State of Wind Turbine's Health Monitoring (P1069)	(P1069) Majdi Chaari, Abdennour Seibi, University of Louisiana at Lafayette	Analytical Methods for Tracking Biofuels Conversion During Processing (AC7)	(AC7) William Holmes, Energy Institute of Louisiana, University of Louisiana	Developing Sustainable, Biomass-Based Water Treatment Adsorbents (AC14)	(AC14) Ashley Picou-Mikolajczyk, Department of Chemical Engineering, University of Louisiana
4:50 PM	5:15 PM	Resilient Hybrid Energy System (RHES) for Powering Cellular Base Transceiver Station (BTS) During Natural Disasters (P1039)	(P1039) Md Rakib Ur Rahman, Payam Niknejad, M.R. Barzegaran, Lamar University	An Adaptive HelioStat Control Strategy Responding to Transient Thermal Flux Using Gossip Algorithm (P1021)	(P1021) Chengwei Lei(1), Weisong Tian(3), Fernando Herrera(1), Guodong Wang(2), (1)California State University Bakersfield; (2)Massachusetts College of Liberal Arts; (3)Widener University	A Review of Technologies to Convert Biogas and Landfill Gas into Renewable Natural Gas (AC8)	(AC8) Dr. José Ramón Laines-Canepa, Biological Sciences Division, Autonomous University of Juarez, Tabasco, Mexico	The Future of Wastes to Green Products from Urban Areas – Envisioning Biorefineries of the Future(AC15)	(AC15) Mark E. Zappi and Rafael Hernandez, Department of Chemical Engineering, University of Louisiana
5:15 PM	6:30 PM	Free Time							
6:30 PM	9:00 PM	Geaux Green Fais DoDo							

Friday, 4/5/2019

From To

7:00 AM		9:00 AM		Registration - Portico Foyer							
8:30 AM		9:15 AM		Salon C							
				Sustainable Energy and Transportation Engineering: A Global Perspective - Mehrdad (Mark) Ehsani, Texas A&M College of Engineering							
9:15 AM		10:05 AM		Power System Operation and Control - Salon C		Power Generation & Storage - Salon E		Green Fuels and Other Products - Salon F		Sustainability, Green City, Smart City - Ashland	
9:15 AM	9:40 AM	An Approach for Nodal Admittance Matrix Real-Time Estimation on DC Microgrids (P1041)	(P1041) Alejandro Garcas(2), Luis Rodriguez-Garcia(1), (1)Universidad de La Salle, Colombia; (2)Universidad Tecnologica de Pereira, Colombia	New Materials and Technology Development for Lithium Ion Batteries (AC2)	(AC2) Dr. Ling Fei, Department of Chemical Engineering, University of Louisiana	Lignocellulosic Biomass from the Field to the Plate to the Engine (AC9)	(AC9) Todd French, Mississippi State University	Optimal Planning of Battery-Powered Electric Vehicle Charging Station Networks (P1011)	(P1011) Hassan Hayajneh, Muath Naser Bani Salim, Srikanth Bassetty, Xuewei Zhang, Texas A&M University-Kingsville		
9:40 AM	10:05 AM	A Fast Method to Model the Effect of Series Impedance Changes of Transmission Lines on Bus Impedance Matrix (P1002)	(P1002) Al-Motasem Aldaoudeyeh, Di Wu, North Dakota State University	Electrical Equivalent Model of Vanadium Redox Flow Battery (P1018)	(P1018) Yaswanth Reddy Challapuram(2), Gina Muatoz Quintero(2), Stephen B Bayne(2), Anitha Sarah Subburaj(3), Mark A Harral(1), (1)Group NIRE; (2)Texas Tech University; (3)West Texas A&M University	Evaluation of a novel Nickel-Ceramic filter for hot gas removal of tars and particulates from biomass syngas (AC10)	(AC10) Devin Peck, Prashanth Buchireddy, John Guillory and Mark Zappi, University of Louisiana	Development of a Green, Fully Sustainable Water, Air, and Waste Management System for a Human Camp on Mars (AC16)	(AC16) Devin Peck, Prashanth Buchireddy, John Guillory and Mark Zappi, University of Louisiana		
10:05 AM		10:35 AM		Break - Salon A-D							
10:35 AM		12:15 PM		Power System Operation and Control - Salon C		Power Generation & Storage - Salon E		Green Computing and Communications - Salon F		Sustainability, Green City, Smart City - Ashland	
10:35 AM	11:00 AM	The Importance of Utilizing the Current's Physical Components Power Theory in Nonsinusoidal Power Systems (P1043)	(P1043) Abdurraheem Alobaidi(2), Hamzeh Davarikia(1), (1)Louisiana State University; (2)Southern Methodist University	Fuzzy Inference System for Large Scale Lithium-Ion Battery Management Systems (P1044)	(P1044) Timothy Transue, Antonio Maldonado, Taylor Santre, California State University Northridge	Sensor Sequential Data-Stream Classification Using Deep Gated Hybrid Architecture (P1049)	(P1049) Nelly Elsayed, Anthony S. Maida, Magdy Bayoumi, University of Louisiana	Cyber-Physical System Security of Vehicle Charging Stations (P1071)	(P1071) Raju Gottumukkala, Rizwan Merchant, Adam Tauzin, Kaleb Leon, Andrew Roche, Paul Darby, University of Louisiana at Lafayette		
11:00 AM	11:25 AM	Uncertainty Mitigation in Feeder Level Power Loss Reduction with Distributed Generation (P1061)	(P1061) Arun-Karthick Manoharan, Anton Hettiarachchige Don, Visvakumar Aravinthan, Wichita State University	Comparing Values of Second Life Batteries to Different Classes of Prosumers in California (P1057)	(P1057) Carmen Bas Domenech, Miguel Heleno, Lawrence Berkeley National Laboratory	Serverless Edge Computing for Green Oil and Gas Industry (P1068)	(P1068) Razin Hussain, Mohsen Salehi, Omid Semiari	The Role of Unmanned Aerial Vehicles in Revolutionizing Green Energy (P1042)	(P1042) Seema Mallavalli, Afef Fekih, University of Louisiana at Lafayette		
11:25 AM	11:50 AM	Non-Overparametrized Adaptive Backstepping Control of PWM DC-DC Non-Inverting Buck-Boost Power Converter (P1031)	(P1031) Khalid Alharbi, University of Arkansas	A Comparative Study on VRLA and Li-Ion Battery for Use in Frequency Modulation (FM) Station (P1050)	(P1050) Prakash Thapa, Gye Choon Park, Mokpo National University, Korea	A Review of Quantum Computers Energy Efficiency (P1056)	(P1056) Nelly Elsayed, Anthony S. Maida, Magdy Bayoumi, University of Louisiana	Aerial Survey of Nonstandard Firewood Consumption in Urban Areas (P1045)	(P1045) Otacilio Santana, Raquel Melo, Carla Duarte, Clodoaldo Lima, Federal University of Pernambuco, Brazil		
11:50 AM	12:15 PM	H2 Control Approach for Automatic Generation Control with Solar Energy Under BAL-003-1 Standard (P1030)	(P1030) Muthanna Alarray, University of Arkansas	Leveraging Energy Storage to Solve Grid Problems (IA1)	(IA1) Chris Melly, Microgrid and Energy Storage Regional Manager ABB, Inc.	Towards Green Mobile Networks: Concurrent User Association and Dynamic Switching in Cells (P1040)	(P1040) Luhao Wang, Wenling Yang, Massoud Pedram	Geospatial and Economic Analysis on the Potential of Urban Food Waste for Biogas Production (AC17)	(AC17) Dhan Lord B. Fortela, Kyle Farmer, Nicholas Marcil, Jonathan Trahan, Wayne Sharp, Ashley Mikolajczyk, and Mark Zappi, Energy Institute of Louisiana, University of		
12:15 PM		1:30 PM		Lunch - Salon B							
				IEEE-USA Energy Policy, Aline McNaull, IEEE-USA Legislative Representative							
1:30 PM		3:10 PM		Salon E		Artificial Intelligence & Cybersecurity - Salon F		Sustainability, Green City, Smart City - Ashland			
1:30 PM	1:55 PM	Moderator, Terry Chambers, PhD, University of Louisiana College of Engineering				Microsoft Artificial Intelligence (PS5)	(PS5) David Elizondo, Principal Program Manager, Microsoft	Constructing Durability: Contemporary Innovations in Load-Bearing Masonry Wall Assemblies (AC18)	(AC18) Cisco Gomes, School of Architecture, University of Texas at Austin		
1:55 PM	2:20 PM	Jeffrey Stewart, Interim Director, Lafayette Utilities System; Gregory B. Upton, Jr. LSU Energy Center; Jeff Cantin, Director, Gulf States Renewable Energy Industries Association; & Simon Mahan, Executive Director Southern Renewable Energy Association						Improving Building Performance: Efficiencies in Museum and Hotel Design (IA7)	(IA7) Lorey Flick, Flick Engineering Professionals		
2:20 PM	2:45 PM					Cybersecurity Protection for Green Technologies (PS6)	(PS6) Jeffry Handal, Consulting Systems Engineer, Cisco Meraki	Sustainable Building Design for US Coastal Environments: Stainless Steel Structural Lattice Envelope (AC19)	(AC19) Robert Holton, School of Architecture, Louisiana State University		
2:45 PM	3:10 PM					Decentralized Computing Techniques in Support of Cyber-Physical Security for Electric and Autonomous Vehicles (P1024)	(P1024) Paul Darby, Raju Gottumukkala, University of Louisiana	Foam Plastics: Norming insulation to protect the interior environment (AC20)	(AC20) Aleksandra Jaeschke, School of Architecture, University of Texas at Austin		