

Keynote Panelists Schedule

Panel 1

Topics: Education and Innovation in Energy Systems Engineering, Challenges, Quality Controls, Standards, Ethics, Education Chain, and Graduate Studies

Panel 2

Topics: Smart Energy Systems and Technologies, and their Applications on Utility Substations, Communities, Micro Energy Grids, Transportation Electrification, Internet of Energy

Name	Panel	Time
Dr. Hossam Gaber	Panel 1, 2	11:15 - 12:15 (Room UA1350) 14:55 - 15:55 (Room UA1120)
Dr. Elna Holmberg	Panel 1	11:15 - 12:15 (Room UA1350)
Dr. Mohamed Safiuddin	Panel 1	11:15 - 12:15 (Room UA1350)
Dr. Miguel F. Anjos	Panel 1	11:15 - 12:15 (Room UA1350)
Dr. Prasanta Ghosh	Panel 1	11:15 - 12:15 (Room UA1350)
Dr. Bingyin Xu	Panel 2	14:55 - 15:55 (Room UA1120)
Dr. Katherine Sparkes	Panel 2	14:55 - 15:55 (Room UA1120)
Dr. Huimin Li	Panel 2	14:55 - 15:55 (Room UA1120)
Dr. Loi Lai	Panel 2	14:55 - 15:55 (Room UA1120)
Mr. Stephen Brown	Panel 2	14:55 - 15:55 (Room UA1120)

Note: UA1350 is the Dr. Peter Zakarow Auditorium in the Science Building

Panelist Biographies

Dr. Mohamed Safiuddin

Dr. Mohammed Safiuddin received B.E. (Electrical) degree from Osmania University, Hyderabad, India in 1959 and MSEE degree from the University of Illinois in 1960. Later he received MBA and Ph.D. degrees from the University at Buffalo [SUNY], in 1971 and 1982 respectively.

Having worked as Junior Engineer in Andhra Pradesh State Electricity Board (India) for over a year before arriving in the USA, he joined the Systems Control Department of Westinghouse Electric Corporation, Buffalo, New York in June of 1960 as an Associate Engineer. He progressed through the ranks of Engineer, Senior Engineer and Fellow Engineer positions to become Manager, Product/Strategic Planning in 1982 in the Power Electronics and Drive Systems Division and was later appointed Technical Advisor in the Marketing Department of the same Division. His interests in continuing education has kept him in close contact with the University at Buffalo (SUNY), where he did part-time teaching in early sixties and then served as Adjunct Associate Professor ('77-'91), and Research Professor ['91-'10]. He is currently Research Professor Emeritus [Advanced Technology Applications] in the Electrical Engineering Department of University at Buffalo [UB]. He is also President of STS International, a technology service firm he established in September 1985. His areas of technical interests cover static power conversion and optimal control systems as applied to industrial processes, renewable energy, and Smart Grid power systems. He has been awarded 10 patents in this field and has dozens of technical papers and conference presentations to his credit.



He is a Life Fellow ('93) of the IEEE and has served as Chairman of Industrial Controls Committee of IAS (1985-87), Chairman of Education Committee (1978-88), Director of the IEEE Buffalo Section (1983- 86), and Chairman of the Industrial Utilization Systems Department of IAS (1990-91). He was awarded the Roscoe Allen Gold Medal in 1957 by Osmania University, and was nominated for the prestigious B.G. Lamme scholarship of Westinghouse by his Division in 1968 and 1980. He was awarded "IUSD Award of Merit" in 1992 by the IEEE-Industry Applications Society for his contributions to industrial control technologies, and service to the IAS. He was recognized for meritorious achievement in continuing education by the IEEE-EAB award for the year 2000. He is a member of the Pi Mu Epsilon (Mathematics), Beta Gamma Sigma (Business) honor societies and an "Eminent Engineer" member of Tau Beta Pi (Engineering).

Dr. Miguel F. Anjos

Miguel F. Anjos is Full Professor in the Department of Mathematics and Industrial Engineering of Polytechnique Montreal, where he holds the NSERC-Hydro-Quebec-Schneider Electric Industrial Research Chair on Optimization for the Smart Grid, and the Inria International Chair on Power Peak Minimization for the Smart Grid. He received the B.Sc. degree from McGill University, the M.S. from Stanford University, and the Ph.D. degree from the University of Waterloo, and is a Licensed Professional Engineer in Ontario, Canada. His research interests are in the theory, algorithms and applications of mathematical optimization. He is particularly interested in the application of optimization to problems in power systems management and smart grid design. He is the Founding Academic Director of the Trottier Institute for Energy at Polytechnique, which he led from its inauguration in May 2013 until August 2016. Under his leadership, the Institute published several White Papers on the Canadian energy landscape. He is a former Editor-in-Chief of Optimization and Engineering, and serves on several other editorial boards. He was elected to three-year terms on the Council of the Mathematical Optimization Society and as Program Director for the SIAM Activity Group on Optimization, and to a two-year term as Vice-Chair of the INFORMS Optimization Society. He has served on the Mitacs Research Council since its creation in 2011. His accolades include a Canada Research Chair, the Méritas Teaching Award, a Humboldt Research Fellowship, the title of EUROPT Fellow, and the Queen Elizabeth II Diamond Jubilee Medal. He is a fellow of the Canadian Academy of Engineering.

**Dr. Prasanta Ghosh**

Dr. Ghosh is a professor in the Electrical Engineering & Computer Science Department at Syracuse university in New York state. He is actively developing several research projects in Smart Grid systems, including Distributed Resources, EVs, Microgrid Design and Analysis. Other projects include the design and analysis of FinFET, as well as the development of Thin Film Sensors.



Dr. Bingyin Xu

Professor Bingyin Xu received the BSc and MSc degrees in Power System Protection and Automation from Shandong University in 1982 and 1987 respectively, and the PhD in Power System Automation from Xian Jiaotong University in 1991.

Currently, he is Professor at the Shandong University of Technology (SDUT), Zibo, China. He is Director of the Smart Grid Research Centre, SDUT, Zibo, China, the Chairman of the board of Shandong Kehui Automation Co. Ltd, Member of Advisory Group to Smart Grids Projects of High Tech Development (863) Program of China, Member of Technical Committee of CIRED of China, Member of Advisory group to the Operation, Control and Protection Session of CIRED.



His research interests are in smart grid, electrical power distribution, electrical power automation and protection and traveling wave fault location. Dr Xu is Taishan Scholars of Shandong Province, Recognized National Young and Middle-aged Expert with Outstanding Contribution by State Council of China. Dr. Xu won Returned Overseas Students Achievement Award by six ministries and committee of China. Dr. Xu also won second prize in National Technology Invention Award from The State Council of the People's Republic of China in 2007, second prize in Science and Technology Progress Award from Ministry of Education of the People's Republic of China in 2012 and fourth prize in National Technology Invention Award from the State Council of the People's Republic of China in 1993.

Dr. Hossam Gaber

Dr. Gabbar is a full Professor in the University of Ontario Institute of Technology (UOIT) in the Faculty of Energy Systems and Nuclear Science, and cross appointed in the Faculty of Engineering and Applied Science, where he has established both the Energy Safety and Control Lab (ESCL) and Advanced Plasma Engineering Lab. He is the recipient of the Senior Research Excellence Award for 2016, UOIT. He is leading national and international research in the areas of smart energy grids, safety and control systems, advanced plasma systems and their applications on nuclear, clean energy and production systems. He is leading research in Canada with international recognition in energy safety and control for nuclear and energy production facilities. Dr. Gabbar obtained his B.Sc. degree in 1988 with first class of honor from the Faculty of Engineering, Alexandria University (Egypt). In 2001, he obtained his Ph.D. degree from Okayama University (Japan) in the area of Safety Engineering. From 2001 till 2004, he joined Tokyo Institute of Technology (Japan), as a research associate in the area of process systems engineering. From 2004 till 2008, he joined Okayama University (Japan) as a tenured Associate Professor, in the Division of Industrial Innovation Sciences. From 2007 till 2008, he was a Visiting Professor at the University of Toronto, in the Mechanical Engineering Department.



He has more than 220 publications, including patents, books / chapters, journal and conference papers. He been invited and participated in world-known conferences and delivered plenary talks on number of scientific events and invitations to international universities. He has supervised and hosted undergraduate, graduate, postdocs, visiting researchers and scholars from different countries including: Japan, India, Qatar, Egypt, Mexico, Malaysia, China, Brazil, Chile, UAE, and Colombia.

He participated and led several large scale national and international projects, in Japan, China, Middle East, and Canada, related to smart energy grids, intelligent control systems and safety design and operation synthesis and optimization of energy systems, micro energy grids, and integrated gas-power grids. He developed novel solutions for risk-based smart energy grid design, protection, and control and hybrid energy supply systems. He proposed new integrated energy storage system based on flywheel and battery, and applied on power substations, transportation electrification, and urban infrastructures. Dr. Hossam Gaber has scholarly research in the area of smart energy grids, and control optimization of micro grid and transportation electrification technologies, and his recent book on Smart Energy Grid Engineering was published with national and international recognition. Dr. Gaber is regularly consulted and provide technical support for advanced energy systems in China, Middle East, Japan, and Canada, and invited to give lectures in number of national and international events in the area of smart energy grids. He is leading a research team for a funded project by Chinese government to design and deploy hybrid energy storage systems. He is the founding general chair of the annual IEEE Smart Energy Grid Engineering Conference, which is held in Canada.

Dr. Gabbar has been active in leading national and international scientific and community events and activities, including: Nuclear Safety Standards within CSA – Canadian Standard Association, IEEE Annual Conference on Smart Energy Grid Engineering (SEGE), IEEE Nuclear and Plasma Sciences Society (NPSS) Symposium on Real Time Measurement, Instrumentation, and Control (RTMIC), IEEE Nuclear and Plasma Sciences Society Symposium on Plasma and Nuclear Systems (SPANS), and other international events. He is the Editor-in-Chief of the International Journal of Process Systems Engineering (IJPSE), and member of IEEE Smart Grid Committees.

Dr. Katherine Sparkes

Katherine Sparkes is the Director of Innovation, Research and Development team within the IESO where she is responsible for driving initiatives in support of grid modernization and the removal of barriers to private sector investment in solutions that support the reliability, adequacy and affordability of Ontario's electricity supply.

Her team works with partners across the energy sector and beyond to understand emerging technologies, services, practices and policies that will help meet Ontario's current and future electricity needs. Katherine previously held various leadership roles in Conservation and Demand Management leading the design of award-winning Conservation and Demand Management (CDM) programs. Katherine has worked in the consulting and non-profit sectors and taught at the Energy & Infrastructure Program at Osgoode Hall Law School. Katherine is an Urban Planner by training.



Dr. Huimin Li

Professor Huimin Li received the BSc and MSc degrees in Electrical Power Engineering from Xian Jiaotong University, Xian, China in 1984 and 1987 respectively, and the PhD in Electronic and Electrical Engineering from Strathclyde University, Glasgow, UK.

Currently, he is distinguished professor at the Shandong University of Technology (SDUT), Zibo, China, distinguished visiting professor at the Shandong University, Jinan, China and Chairman of board of GridNT Inc, Jinan, China. Dr Li worked as Member of Technical Staff for Nortel Networks in 1995-1998, Member of Scientific Staff in Bell Labs, Lucent Technologies in 1998-2000. Dr Li served as general managers for China subsidiaries of USA companies of BigBand Networks and Camiant Inc. in 2005-2008.



Dr Li's research interests are in smart grid, especially in smart grid protocols and communications. Dr Li applies state of art information and communication technologies in smart substation, metropolitan railway electrical automation and smart energy grid. Dr Li's main contribution in smart grid includes real-time big data processing, visualization of electrical power automation configuration, standard based modeling of electrical power systems and power system analysis using artificial intelligence. Dr Li is Distinguished Overseas Returnees Expert of Jinan City, Taishan Scholars of Shandong Province, and selected as an expert in the national Thousand Talents plan in 2016.

Dr. Loi L. Lai

Professor Loi Lei Lai received the BSc (first class Hons., the only one) degree in electrical and electronic engineering and the PhD degree in electrical and electronic engineering from the University of Aston, Birmingham, UK in 1980 and 1984 respectively, and the DSc degree in electrical, electronic, and information engineering from City, University of London, UK in 2005. Currently, he is University Distinguished Professor at the Guangdong University of Technology, Guangzhou, China. He was Director of the Research and Development Centre, Beijing, China, the Pao Yue Kong Chair Professor, Guest Professor, the Vice President and Professor and Chair in Electrical Engineering for the State Grid Energy Research Institute, Beijing, China; Zhejiang University, Hangzhou, China; Fudan University, Shanghai, China; IEEE Systems, Man, and Cybernetics Society (IEEE/SMCS), USA; and City, University of London, respectively.



He conducted high-level consultancy for major international projects such as the Channel Tunnel between UK and France. His research interests are in smart grid, clean energy, and computational intelligence applications in power engineering. Dr Lai is a Fellow of IEEE, IET, Distinguished Expert in State Grid Corporation of China, National Distinguished Expert in China, Member of IEEE Smart Grid Steering Committee, Member of IEEE Smart City Steering Committee and IEEE Industrial Electronics Society Fellow Evaluation Committee evaluator. He was the recipient of an IEEE Third Millennium Medal, IEEE Power and Energy Society (IEEE/PES) Power Chapter Outstanding Engineer Award in 2000, IEEE/PES Energy Development and Power Generation Committee Prize Paper in 2006 and 2009, People of the 2012 Scientific Chinese Prize, IEEE/SMCS Outstanding Contribution Award in 2013 and 2014, and is listed in the honor list of the 2014 the Thousand Talents Plan, China.

Stephen Brown

Stephen has over 30 years of experience in the Technologies industry. Throughout that period, he has been responsible for standards development, product planning and management, regulatory affairs, international business development, and strategic planning.

Stephen joined CSA Group in 2002 and was responsible for over 2500 codes and standards within the Electrotechnical sector. In 2012, Stephen was appointed to a new role at CSA Group with a global mandate regarding Emerging Technologies and their “game changing” effects on safety, certification, standards, and international applicability for specific markets. This area includes Intelligent Buildings, Connected Homes and Interoperability, Nanotechnologies, Energy Storage, Alternative Energy and connected Vehicles, infrastructure, and cybersecurity. In 2016, Stephen was appointed as Director, Innovation.

