NSERC CREATE **TOP-SET** Un programme *FONCER* du CRSNG

Séminaire

Le mercredi 5 décembre 2018, 14h45
Des rafraîchissements seront servis dès 14h15
Complexe de recherche avancée, pièce 233
Université d'Ottawa, 25, rue Templeton
Le séminaire se déroulera en anglais.

Seminar

Wednesday, December 5, 2018, 2:45 p.m.
Refreshments to be served starting at 2:15 p.m.
Advanced Research Complex, room 233
University of Ottawa, 25 Templeton Street

Power grid transformation and energy management trends

Kodjo Agbossou, Université du Québec à Trois-Rivières

Abstract: The power grid is nowadays in transformation, the climate and environmental concerns motivate in part the evolution of power systems toward a greener production, a sustainable operation and smart use of energy resources. The technological progress on power systems, energy conversion, telecom, computing and artificial intelligence, and in general the digital revolution will certainly favor the change all of us need. In this new scenario, the users of power networks play an ambivalent role as producers and consumers, and participate actively to the management on power. This presentation focuses on the assessment of some technical aspects of this transformation and the research activities and efforts of academia and industry to accomplish this change in a proper manner with the participation of residential users. We introduce specifically some concepts and provide some examples of the participation of residential users on smart grids, demand side management and transactive energy. Finally, we give a snapshot of recent research works at Université du Québec à Trois-Rivières and more specifically at the Hydrogen Research Institute and the Laboratoire d'Innovation et de Recherche en Énergie Intelligente.

Bio: Kodjo Agbossou received his PhD (1992) in Electronic Measurements from the Université de Nancy I, France. He is the Hydro-Québec Research Chair holder on Transactional management of power and energy residential demand and the chair of smart energy research and innovation laboratory at the Université du Québec à Trois-Rivières (UQTR). He was head of the UQTR Engineering School from 2011 to 2017 and of the department of Electrical and Computer Engineering from 2007 to 2011. His present research activities are in the area of renewable energy, the use of hydrogen, home demand side management, integration of energy production, storage and electrical energy generation system, connection of electrical vehicle to the grid and measurements. He is sub-committee chair on the IEEE Industrial Electronics Society Home and Building Energy Management of Smart Grid Technical Committee. He is the author of more than 315 publications and has 4 patents and 2 patents pending.

TOP-SET est un programme de formation FONCER du CRSNG en puissance optoélectronique ayant pour but de façonner une cohorte de personnel hautement qualifié détenant des connaissances approfondies en systèmes optoélectroniques pour joindre les rangs d'équipes de recherche et développement.

Pour de plus amples renseignements sur TOP-SET, veuillez consulter create-topset.eecs.uottawa.ca/fr.

NSERC CREATE Training in Optoelectronics for Power: from Science and Engineering to Technology (**TOP-SET**) is a training program that aims to form a cohort of highly qualified personnel with comprehensive understanding of optoelectronic systems, capable of joining advanced R&D teams.

For further details regarding TOP-SET, go to create-topset.eecs.uottawa.ca.

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