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

Séminaire

Le lundi 21 novembre 2022, 13h
ARC 233 et MS Teams
Le séminaire se déroulera en anglais.

Seminar

Monday, November 21, 2022, 1 p.m.
ARC 233 and MS Teams

Photovoltaic Research at the Wind Energy Institute of Canada

Marianne Rodgers and Scott Harper, Wind Energy Institute of Canada

Abstract: The Wind Energy Institute of Canada (WEICan), located in North Cape, PEI, has been leading the development of wind energy across Canada through research, testing, innovation, and collaboration since its formation in 1981. WEICan owns and operates a Wind R&D Park that consists of five 2 MW wind turbines, a 111.5 kW/223 kWh battery, 109 kW photovoltaic array that has a DC output split 66% to 33% between bifacial and monofacial panels and several well-instrumented meteorological masts. One of WEICan's meteorological masts supports PV research, is compliant with IEC-61724-1, and also contains additional characterization equipment including cameras to view the front of the solar panels, the ground beneath the panels, and the sky. WEICan views this infrastructure as a laboratory that is available for research and is open to collaboration with interested parties. This presentation will describe WEICan, its infrastructure, and some initial research projects being carried out using the photovoltaic array.

Bio: Marianne Rodgers has been the Scientific Director of the Wind Energy Institute of Canada since March 2014. She is also an Adjunct Professor at the University of Prince Edward Island. Marianne obtained her BSc from St. Francis Xavier University in Antigonish, Nova Scotia and her PhD from Simon Fraser University in Burnaby, British Columbia. While completing her doctoral studies, Marianne worked at the National Research Council in Vancouver, British Columbia, researching proton exchange membrane fuel cells. Prior to working with WEICan, Marianne worked at the Florida Solar Energy Center (FSEC), performing research on several types of energy conversion devices, including fuel cells, batteries, and photovoltaics. At FSEC she worked with industry to improve the performance of these systems and also managed several projects that concentrated on analysis and prediction of the reliability and durability of these systems. Marianne's research in alternative energy has resulted in more than 50 publications and more than 70 invited and conference presentations.

Scott Harper joined the Wind Energy Institute of Canada in the summer of 2007 and has overseen the development of the organization since that time. In his role as CEO, Scott works closely with the Board of Directors to develop the strategic direction for the organization which guides the development of the technical program at WEICan.Prior to working with WEICan Scott spent most of his career working for the Government of Canada with the Atlantic Canada Opportunities Agency (ACOA). As an Economic Development Officer, Scott worked in the renewable energy sector and was instrumental in the planning and establishment of WEICan. While employed by the Federal Government, Scott gained a great deal of experience in intergovernmental affairs and sector development planning. Scott also held a position as General Manager of a not-for-profit economic development corporation which was involved in tourism, information technology, business incubation and other initiatives. Scott holds a Bachelor of Business Administration Degree from the University of Prince Edward Island where he sat on the Board of Governors for several years.

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/accueil/.

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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Le financement pour TOP-SET est fourni par le Conseil de recherches en sciences naturelles et génie.
TOP-SET is funded by the Natural Sciences and Engineering Research Council of Canada.

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Le financement pour ce séminaire est fourni par l'Université d'Ottawa.
This seminar is funded by the University of Ottawa.