

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

### Séminaire

Le mardi 11 février 2020, 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

Tuesday, February 11, 2020, 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

## Challenges and research in northern & remote electric power systems

Michael Ross, Yukon College

**Abstract:** There is a paradigm shift in the energy transition to reduce Canada's reliance on diesel fuel for electric power generation. However, there are unique challenges to meet this objective through the integration of renewables – not just through the electric power system operating constraints, but the realities that are faced by northern and remote communities in the Canadian territories. This presentation will outline some of the unique challenges faced by the northern electric power industry, demonstrate examples of how research projects pursued by the Yukon Research Centre address those needs, as well as provide insight into some realities of pursuing successful projects in northern Canada.

**Bio:** Dr. Michael Ross is the NSERC Industrial Research Chair in Northern Energy Innovation at the Yukon Research Centre, Yukon College. His applied research program addresses the needs of the northern energy industry through academic partnerships with all three colleges in the territories, and through industry-driven direction and support from all four territorial electric power utilities. The research areas for the program focus on integrating a high penetration of renewable generation in remote communities, diesel efficiencies, demand-side management, and market disruptors. Dr. Ross received his Master's and Ph.D. degrees in Electrical Engineering at McGill University, focusing on microgrid control and multi-objective optimization, and his Bachelors of Applied Science at the University of Toronto focusing on electric power systems. He is a registered Professional Engineer with Engineers Yukon, a member of the IEEE Power and Energy Society, a member of CIGRER Canada, the President and Director of the Yukon Science Institute, and is a Level 1 electrician apprentice.



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 rejoindre les rangs d'équipes de recherche et développement.

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.

Pour de plus amples renseignements sur TOP-SET, veuillez consulter [create-topset.eecs.uottawa.ca/fr](http://create-topset.eecs.uottawa.ca/fr).

For further details regarding TOP-SET, go to [create-topset.eecs.uottawa.ca](http://create-topset.eecs.uottawa.ca).



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