

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

Séminaire

Le vendredi 19 janvier 2018, 15h30
Des rafraîchissements seront servis dès 15h
Complexe de recherche avancée, pièce 233
Université d'Ottawa, 25, rue Templeton

Seminar

Friday, January 19, 2018, 3:30 p.m.
Refreshments to be served starting at 3 p.m.
Advanced Research Complex, room 233
University of Ottawa, 25 Templeton Street

Le séminaire se déroulera en anglais et sera suivi d'une période de questions bilingue.

The seminar will be in English followed by a bilingual question period.

High efficiency solar cell fabrication for CPV applications at Université de Sherbrooke
Maxime Darnon, Université de Sherbrooke

Abstract: Concentrated photovoltaics systems rely on high efficiency solar cells that convert the concentrated sunlight into electricity. Highest efficiency solar cells embed complex stacks of materials and reach more than 40% of efficiency. Their fabrication uses epitaxial growth of III-V materials and micro technologies to transform the materials into an actual solar cell. In this presentation, I will give a brief description of the research activities performed at LN2 (Université de Sherbrooke) on high efficiency solar cells fabrication for concentrated photovoltaics applications. I will describe the micro/nano fabrication methods that we use to improve the multijunction solar cell efficiency and discuss innovative cell architectures that are enabled by micro/nanofabrication methods.

Bio: Maxime Darnon received his Ph.D. from Grenoble University, France, in 2007. He worked then as a research engineer at IMEC, Leuven, Belgium, and as a research staff member in the advanced plasma group of IBM Research in the T. J. Watson Research Center in Yorktown Heights, NY, USA, before joining CNRS in 2009. His work mostly focused on plasma processes for microelectronics interconnects. Since 2015, he has worked at CNRS/LN2 (Laboratory of Nanotechnologies and Nanosystems) at Université de Sherbrooke, where he works on microfabrication processes for high efficiency solar cells fabrication, advanced transistors monolithic integration and integrated circuits packaging.



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.

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



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