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

Joint Physics Colloquium – TOP-SET Seminar

Le jeudi 29 mars 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.

Thursday, March 29, 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

How to make a career out of floating, melting, counting and black tape

Jeff Dahn, Dalhousie University

Abstract: Many believe that "rocket science", complex mathematics, massive computers and "hot topics" like "nano" and "machine learning" are required for scientific breakthroughs. By contrast, I have made a career doing simple things which have led to over 60 patents and many breakthroughs. I will show how things that one learns in first year physics and first year chemistry have been applied to make major advances in lithium-ion battery technology.

Bio: Jeff Dahn is recognized as one of the pioneering developers of the lithium-ion battery that is now used worldwide in laptop computers and cell-phones. Dahn's recent work has concentrated on increasing the energy density, improving the lifetime and lowering the cost of lithium ion batteries. He is the author of over 640 refereed journal papers and co-inventor of 65 inventions with patents issued or filed. Jeff Dahn obtained his B.Sc. in Physics from Dalhousie University (1978) and his Ph.D. from the University of British Columbia in 1982. He then worked at the National Research Council of Canada (82-85) and at Moli Energy Limited (85-90) before taking up a faculty position in the Physics Department at Simon Fraser University in 1990. He returned to Dalhousie University in 1996. Jeff Dahn has always interacted strongly with industry. During his years at Simon Fraser University, he collaborated strongly with the R+D team at NEC/Moli Energy Canada (Now E-One/Moli Energy Canada). Dr. Dahn took up the NSERC/3M Canada Industrial Research Chair in Materials for Advanced Batteries at Dalhousie University in 1996 and held that position until 2016. In June 2016, Dr. Dahn began a 5-year research partnership with Tesla Motors/Energy as an NSERC/Tesla Canada Industrial Research Chair.

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.

NSERC CRSNG

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.