

# SEMINAR NOTICE

*Department of Physics and Engineering Physics  
University of Saskatchewan*

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**SPEAKER:** Dr. Tim Kelly, Department of Chemistry  
University of Saskatchewan

**TOPIC:** *Perovskite Solar Cells: From Device Fabrication to Device Degradation*

**DATE:** Tuesday, September 15, 2015

**TIME:** 3:30-4:30pm.

**PLACE:** Rm. 103, Physics Building

## **ABSTRACT:**

Solar cells based on the perovskite-structured semiconductor  $\text{CH}_3\text{NH}_3\text{PbI}_3$  have recently emerged at the forefront of solution-processable photovoltaic devices, with power conversion efficiencies as high as 20.1% having now been certified. In this presentation, I will discuss our research group's work in the area of perovskite solar cells. Our early work demonstrated that room temperature solution-processing techniques can be used to prepare devices on flexible substrates while retaining excellent power conversion efficiencies. Since then, we have examined issues related to charge carrier diffusion, interfacial contacts, and device flexibility, with our most recent efforts focusing on probing device failure mechanisms using *in situ* synchrotron-based techniques.

Coffee and Cookies will be served in the Physics lounge at 3:00 pm. for those attending the seminar.