



# Faculty of Engineering and Applied Science

## Chemical Engineering Seminar Series



### Solving BIG problems on a small scale

Dr. Robert Knobel, Dr. Graham Gibson, Mr. Dan Gale  
The Kingston Nano Fabrication Lab  
Thursday, September 29, 2016, 2:30pm  
Dupuis Hall, Room 215



#### **ABSTRACT**

The Kingston NanoFabrication Laboratory (KNFL) is an open facility for the design, fabrication, characterization and testing of devices and structures with nanometre to millimetre sizes. Located at Innovation Park, across from the Kingston Centre, the professionally staffed lab features a ~1500 square-foot cleanroom and offers access to state-of-the-art tools and extensive training. The lab is a partnership between Queen's University and CMC Microsystems, a not-for-profit corporation whose mandate is to help university researchers to advance micro- and nano-research across Canada.

In this talk we will introduce you to the capabilities of the lab, from depositing thin films to patterning at nanometre scales, from electron microscopy to laser micromachining. We will highlight some ongoing and successful projects—highlighting some from chemical engineers—such as making vibrating “drum” sensors from graphene, microfluidic batteries, and super-hydrophobic coatings.

Most importantly, we'll answer your questions about what can be done in the lab, and let you know how YOU can access the lab and other services provided by CMC.