



# Advanced electron and ion microscopy workshopp

A Microscopical Society of Canada (MSC) event  
held at

**Taylor room** (public access area)  
**National Institute for Nanotechnology**  
11421 Saskatchewan Drive, Edmonton  
GPS lat: 53.528498 long: -113.528017



**Nov 5<sup>th</sup>** 2014 presentations Coffee and donuts will be provided  
**Nov 6<sup>th</sup>** 2014 demos and tours

---

## Presentations, November 5<sup>th</sup> 2014

**9 am** Coffee and opening, Marie D'Iorio, NINT.

**9:15 am – 10 am**

**Accuracy and applications of electron-beam deposited nano-dot fiducial markers in electron tomography of rod-shaped specimens.**

Misa Hayashida

National Institute of Advanced Industrial Science and Technology, Tsukuba, Japan.

**10:15 – 11 am**

**The late breaking news about TEM application software**

Hiromitsu Furukawa

Systems in Frontier Inc., Tokyo, Japan.

**11:15 am – 12 noon**

**Characterization for materials structures on an atomic scale with an aberration optimized TEM/STEM**

Masahiro Kawasaki

JEOL USA Inc. Peabody, USA.

**12 noon – 1:15 pm** lunch break

**1:15 pm – 2 pm**

**The Orion Nanofab Helium Ion Microscopy (HiM) – imaging, nanofabrication, and applications**

Diane Stewart,

Carl Zeiss USA.

**2:15 pm – 3 pm**

**Cleaning up the Microscope world**

David Hoyle

Hitachi High Technologies Canada, Toronto, Canada

**3:15 pm – 4 pm**

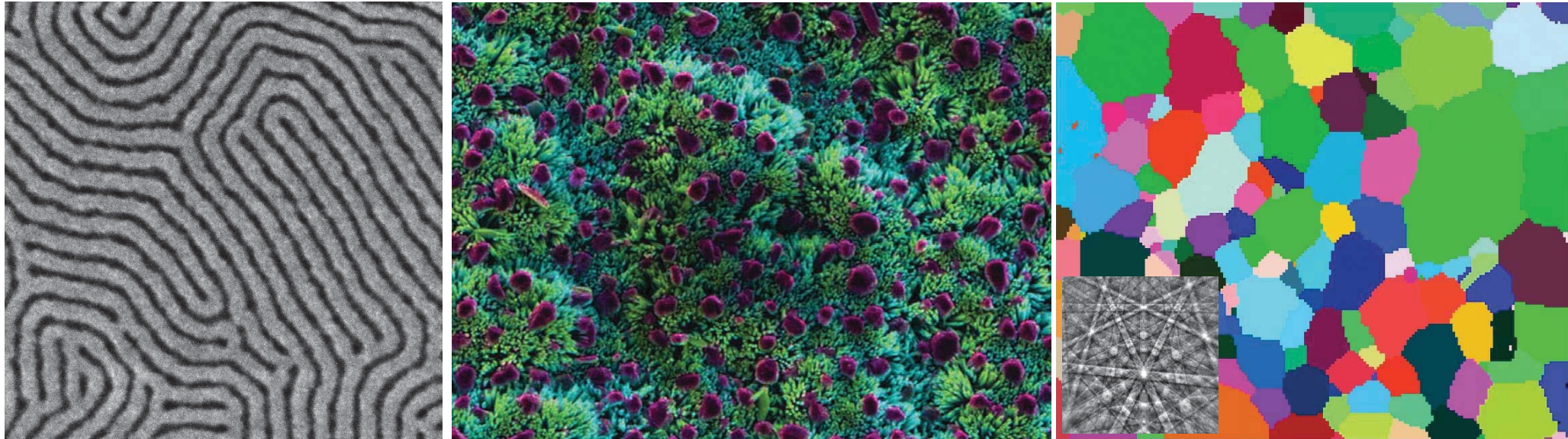
**Very large solid Angle Silicon Drift Detectors for EDS Analysis on both SEM and TEM**

Neil Rowlands,

Oxford Instruments, Canada

## Tour/Demonstration, November 6<sup>th</sup> 2014

University of Alberta nanoFAB Facility, W1-060 ECERF Building, 116 Street & 85 Avenue



- 1. Tour of nanoFAB cleanroom and Helium Ion Microscopy (HiM) lab**
- 2. Demo of Zeiss Sigma FESEM (6 sessions, 10 spots each session)**
  - Low Voltage SEM imaging: 9-10 am, 1-2 pm**
  - EDX: 10-11 am, 2-3 pm**
  - EBSD: 11-12 pm, 3-4 pm**

nanoFAB will be pleased to offer user sample runs if arrangement is made prior to the workshop and time permits.  
Please contact Peng Li ([peng.li@ualberta.ca](mailto:peng.li@ualberta.ca)) if interested.