Agenda: Workshop on Analytical Transmission Scanning Electron Microscopy

Sept. 15-16, 2015

Tuesday, 15 September, 2015

7:45 AM Millennium Harvest House Hotel guests board shuttle to NIST
8:00-9:00 AM Check-in at NIST Visitor Center and Continental Breakfast in meeting room (photo ID required for entrance to NIST site)

Session I: Welcome/Keynote

9:00 AM Workshop Welcome - Bob Keller, NIST
9:15 AM Keynote – STEM: It has all been done before! (well maybe not everything) - Joseph Michael, Sandia National Laboratory
10:15 AM Coffee/Poster Setup

Session II: Diffraction

10:45 AM Nanomaterials characterization using transmission Kikuchi diffraction: a breakthrough or a curiosity? - Patrick Trimby, University of Sydney
11:45 AM Electron Imaging using an EBSD Detector – Applications for Reflection and Transmission EBSD Geometries - Matt Nowell, EDAX/Ametek
12:45 PM Lunch in meeting room/Brief NIST Welcome - Jim Fekete, NIST Applied Chemicals & Materials Division Chief
1:45 PM Diffraction Discussion Session
2:30 PM Poster Introductions (up to 4 minutes each)
3:15 PM Coffee/Poster Session

Session III: Imaging

3:45 PM Transmission diffraction, spectroscopy, imaging in the SEM - Raynald Gauvin, McGill University
4:45 PM From Bragg Diffraction to HAADF Imaging: Extending the Capabilities of a Conventional SEM Using an Off-the-Shelf Transmission Detector - Jason Holm, NIST
5:45 PM Imaging Discussion
6:30 PM End of Day 1 – Millennium Harvest House guests board shuttle to hotel
7:00 PM Plenary speaker group dinner at Zolo Southwestern Grill in Boulder – reservation made for 10 people

Wednesday, 16 September, 2015

7:45 AM Millennium Harvest House Hotel guests board shuttle to NIST
8:00 AM Continental Breakfast in meeting room
8:15 AM Housekeeping

Session IV: Spectroscopy

8:30 AM Silicon Drift Detector Energy Dispersive X-ray Spectrometry (SDD-EDS): A Transformative Technology for Electron-Excited Elemental Analysis - Nicholas Ritchie, NIST
9:30 AM EELS in the SEM - Ray Twesten, Gatan
10:30 AM Coffee/Poster Session
11:00 AM Spectroscopy Discussion Session
11:45 AM Lunch in meeting room

Session V: Complementary Technologies

12:45 PM Application of Low Voltage Electron Microscopy for New Science and Materials - David Bell, Harvard University
1:45 PM Transmission Imaging with a Focused Helium Ion Beam - John Notte, Carl Zeiss
2:45 PM Coffee/Poster Session
3:15 PM Tour of the NIST Precision Imaging Facility (AC-TEM, FIB, HIM, APT) – Aric Sanders, NIST

Session VI: Roadmapping and Collaboration

4:15 PM Summary Discussions of the Future of Transmission SEM, Routes for Strategic Collaboration
5:45 PM Closing Remarks and Departure
6:00 PM Meeting ends

Updated 9/9/15