A TWO-DAY MEETING, showcasing the use of and advances in electron microscopy with a featured symposium on in situ electron microscopy. International speakers have been invited with content including liquid-cell microscopy, environmental SEM, advanced microscopy of materials including steels, energy materials, and biological samples. Hosted as part of the Annual CCEM User Group Scientific Meeting, this gathering will inform new and regular users of the CCEM of new potential characterization techniques. Other highlights include round-table discussions with the CCEM staff and invited microscopy specialists, CCEM tours/demonstrations of new equipment, and poster sessions/vendor interactions. Students are encouraged to submit abstracts for a chance to win best presentation awards.

Registration is FREE but space is limited. Register by visiting the website:

ccem.mcmaster.ca/outreach-courses-and-events/

TOPICS
- Advanced electron microscopy in biology
- Atom Probe tomography
- Beyond plasmonics and microscopy of 2D materials
- Direct electron detectors
- Dynamic TEM
- High-resolution microscopy of alloys
- Focused Ion Beam microscopy
- High-resolution SEM and low voltage STEM/EELS
- In-situ deposition of noble metals and electrochemistry
- In-situ electron microscopy of electrochemical processes
- In-situ SEM and growth of graphene on metal surfaces
- Liquid-cell microscopy and ultrafast diffraction
- Structure of interfaces and in-situ TEM
- Strain mapping and microscopy of battery materials

CONFIRMED SPEAKERS
- Nabil Bassim, McMaster University
- Martin Couillard, National Research Council Canada
- Raynald Gauvin, McGill University
- Deborah Kelly, Carilion Research Institute
- Maureen Joel Lagos, McMaster University
- Brian Langelier, Canadian Centre for Electron Microscopy
- Alan Maigne, University of British Columbia
- German Sciaini, University of Waterloo
- Leyla Soleymani, McMaster University
- Raymond Unocic, Oak Ridge National Laboratory
- James Wittig, Vanderbilt University
- Marc Willinger, ETH Zürich
- Aycan Yurtsever, INRS-Énergie Matériaux
- Guozhen Zhu, University of Manitoba

ROUND TABLE DISCUSSIONS
- Analytical EM for electronic and energy materials
- In-situ EM, biological and soft materials
- Sample preparation (FIB included)
- Steels/metals