## Advanced Electron Microscopy Conference:  
### From Steels to DNA  
**Monday 4 June 2018**  
Room LRW B1007, McMaster University

<table>
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<tr>
<th>Time</th>
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<tr>
<td>9:30</td>
<td><em>Registration</em></td>
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| 10:00  | *Welcome words*  
Kathryn Grandfield                                                  |
| 10:00  | *Liquid Cell Imaging for Biomedical Applications*  
Deborah Kelly, Virginia Tech Carilion Research Institute |
| 10:45  | *Break*  
**Session chair: Dakota Binkley, Student Representative, CCEM User Executive Committee** |
| 11:00  | *Insight into Atomic Scale Transformations in 2D Materials Using In-situ Aberration Corrected STEM*  
Raymond Unocic, Oak Ridge National Laboratory |
| 11:45  | *In-situ Liquid Cell TEM for Studying Reaction Dynamics in Solution*  
Leyla Soleymani, McMaster University |
| 12:15  | *Lunch*  
**Session chair: Christopher Thomsen, Student Representative, CCEM User Executive Committee** |
| 13:15  | *Developments at the Ultrafast Electron Imaging Lab*  
Germán Sciaini, University of Waterloo |
| 13:45  | *Characterization of Deformation Mechanisms in High-Mn Austenitic Steels Using Aberration-Corrected Electron Microscopy*  
James Wittig, Vanderbilt University |
| 14:30  | *Break*  
**Session Chair: Samuel Norris, Student Representative, CCEM User Executive Committee** |
| 15:00  | *Ultrafast Electron Microscopy Infrastructure at INRS*  
Aycan Yurtsever, INRS-Énergie Matériaux |
| 15:30  | *FIB-SEM - A Versatile Tool for Characterizing Materials*  
Nabil Bassim, McMaster University |
| 15:45  | *Recent Developments at the CCEM*  
Andreas Korinek, Canadian Centre for Electron Microscopy |
| 16:00  | *User Group Meeting*                                                   |
| 16:30  | *Reception and poster session - LRW basement lobby*                    |
Advanced Electron Microscopy Conference: From Steels to DNA
Tuesday 5 June 2018
Room LRW B1007, McMaster University

Session Chair: Gianluigi Botton, CCEM Scientific Director
10:00    Analytical STEM at 30 keV
         Raynald Gauvin, McGill University
10:45    Break
11:15    Moving from Imaging in Vacuum to Observation Under Relevant Conditions: In-situ Electron Microscopy of Gas-Phase Induced Dynamics
         Marc Willinger, ETH Zürich
12:00    Phonon Spectroscopy in Nanostructures using an Electron Probe
         Maureen Joel Lagos, McMaster University
12:30    Lunch
Session Chair: Andreas Korinek, CCEM Facility Manager
13:30    Electron Microscopy at the National Research Council Canada - Atomic-level Insights in Process Optimization
         Martin Couillard, National Research Council Canada
14:00    Introduction to the New Electron Microscopy Center for Quantum Material at UBC: Complementing X-ray spectroscopy with EELS to get a Better Understanding of Quantum Material
         Alan Maigné, University of British Columbia
14:15    Nano-structured Materials: The Confined States Stabled by Interfaces and Dislocations
         Guozhen Zhu, University of Manitoba
14:30    Atom Probe Tomography at the CCEM: Applications in 3D Nanoscale Material Analysis
         Brian Langelier, Canadian Centre for Electron Microscopy
14:45    Closing remarks and award presentation
15:00    Break
15:15    Round table discussions/CCEM tours
In-situ EM, biological and soft materials, steel/metals, Sample preparation (FIB included), Analytical EM for electronic and energy materials
Rooms: LRW B1007, MDCL 3023, MDCL 3024, MDCL 3022
Advanced Electron Microscopy Conference: From Steels to DNA
June 4 & 5, 2018

Paid parking available in Lots B, C, D & Underground Stadium and LRW - Enter campus from Sterling Street
Paid parking available in Lot I - Enter campus from Main Street