The Japanese Society of Microscopy

4th Annual Joint Workshop
Microscopical Society of Canada
&
Japanese Society for Microscopy

MSC·SMC

Canada (Edmonton): June 11, 2023
日本 **(virtual)**: 2023 年 6 月 12 日
Hybrid meeting: virtual and in-person.

registration not required for virtual attendees.
ZOOM Meeting ID: 812 8134 4380
Passcode: 102697

Limits of electron and ion beam analysis and their application to nanoscience

Electrons and ions allow imaging, chemical and structural analysis at sub-nanometer scale in many materials of interest to physical and biological sciences. The practical limits can arise from the instrumentation, the interactions responsible for the measured signal and, ultimately, by radiation damage inflicted on the studied sample by the incident beam. Presentations in this year's symposium discuss the practical aspects of pushing the boundaries of electron and ion microscopy instrumentation, and the practical problems applying the electron and ion beam analysis to real-world samples in physical and biological sciences.

The 4th joint workshop of the Japanese and Canadian microscopy societies will be held on Sunday, June 11th, 2023 (Canada time) corresponding to Monday June 12th 2023 (Japan time) in Edmonton, Alberta, Canada.
The MSC-JSM workshop is a satellite meeting of the 8th IUMAS meeting held in Banff, Alberta on June 12 – 15, 2023.

time Edmonton Sunday June 11, 2023	time 東京 Monday June 12, 2023	Presenting author	MSC·SMC / The Japanese Society of Microscopy / JP / CA
4:55 – 5 pm	7:55 – 8 am	Ken Harada Marek Malac	Opening remarks
5 – 5:30 pm	8 – 8:30 am	Takehito Seki	Direct Electromagnetic Field Imaging at Defects by Differential Phase Contrast Scanning Transmission Electron Microscopy
5:30 – 6 pm	8:30 – 9 am	Nadi Braidy	Encapsulation of dyes in carbon nanohorns
6 – 6:30 pm	9 – 9:30 am	Cathal Cassidy	Gas-based charge compensation measured by off-axis holography in environmental TEM
6:30 – 7 pm	9:30 – 10 am	Martin Coulliard	Disentangling EELS signals from optical modes in photonic and plasmonic nanoparticle dimers and trimers
7 – 7:30 pm	10 – 10:30 am	Kodai Niitsu	Magnetic configurations of a skyrmionic vortex stabilized in FeGe nanoparticles
7:30 – 8 pm	10:30 – 11 am	Nabil Bassim	Insights about Atomic-Scale Heteroepitaxy based on Correlative Electron Microscopy of Van der Waals Heterostructures
8 – 8:30 pm	11 – 11:30 am	Makoto Schreiber	Lensing charged particles with the magnetic vector potential
8:30 – 9 pm	11:30 – 12 noon	Makoto Kuwahara	Time-Resolved Measurement in TEM Using Semiconductor Photocathode
9 – 9:30 pm	12 – 12:30 pm	Alyssa Williams	Improved Visualization of Bone Ultrastructure in 3D FIB-SEM
9:30 – 10 pm	12:30 – 13 pm	Natalie Reznikov	The ultrastructure of bone in 3D: A twist of twists
10 – 10:10 pm	13 – 13:10 pm	Shigeo Mori, Misa Hayashida	Closing remarks