

# MAY 4 – 5, 2022

## 14<sup>th</sup> ANNUAL FIB SEM MEETING SCHEDULE

### WEDNESDAY MAY 4<sup>TH</sup>

8:30 – 9:30 **EDT** Check-in + Breakfast

9:30 – 9:35 Welcome + Housekeeping

9:35 – 10:20 **Invited Tutorial:** The History of FIB Applications: From Novelty to Necessity

Lucille Giannuzzi  
*EXpressLO LLC*

[Abstract + Bio](#)

10:20 – 10:50 **Invited: (on-line)** Multi-Method Characterization Workflow for Advanced Si-based Anodes

Roland Brunner  
*Materials Center Leoben*

[Abstract](#)

10:50 – 11:20 Coffee Break

11:20 – 11:50 **Invited:** FIB preparation of low melting point metals

Joe Michael  
*Independent Consultant*

[Abstract](#)

11:50 – 12:05 Strategies for 3D FIB Tomography Data Acquisition to Enable Accurate Materials Modelling and Simulation

Stephen Kelly  
*Carl Zeiss Research Microscopy Solutions*

[Abstract](#)

12:05 – 12:20 Advanced 2D and 3D Characterization of Fiber Optic Nanoparticles using SEM/FIB/TEM

Rick Passey  
*Thermo Fisher Scientific*

[Abstract](#)

12:20 – 12:35 A Stack Alignment Toolbox for Serial Electron Microscopy

Alex Hall  
*Thermo Fisher Scientific*

[Abstract](#)

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## 14<sup>th</sup> ANNUAL FIB SEM MEETING SCHEDULE

WEDNESDAY MAY 4<sup>TH</sup>

12:35 – 13:30 **EDT** Lunch

13:30 – 14:00 **Invited: (on-line)** Ion Microscopy, Machining, and Elemental Analysis with the Cesium Low Temperature Ion Source (LoTIS)

Adam Steele  
*zeroK NanoTech*

[Abstract](#)

14:00 – 14:15 Novel FIB-nanofabrication strategies with Lithium and Bismuth ions from GaBiLi Liquid Metal Alloy Ion Sources

Yang Yu  
*Raith*

[Abstract](#)

14:15 – 14:30 Cryo-FIB/SEM for Micro-scale Analysis of Solid-state Li-Ion Battery Electrolytes

Fred Meisenkothen  
*NIST*

[Abstract](#)

14:30 – 14:45 EDS and EBSD Study of Battery Shell

Jiancun Rao  
*University of Maryland*

[Abstract](#)

14:45 – 15:00 Investigating Early HCoV-229E Virus Mediated Endocytosis Nanoscale Interactions with Focused Ion Beam Scanning Electron Microscopy

Alyssa Williams  
*McMaster University / FIBICS*

[Abstract](#)

15:00 – 15:30 Coffee Break

15:30 – 16:00 **Invited:** So You Bought a Cryo-Plasma FIB with ToF-SIMS. Now What?

Jamie Ford  
*University of Pennsylvania*

[Abstract](#)

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## 14<sup>th</sup> ANNUAL FIB SEM MEETING SCHEDULE

WEDNESDAY **MAY 4<sup>TH</sup>**

16:00 – 16:15 **EDT** Informing metallurgical issues related to additively manufacturing using FIB sample preparation for TKD and TEM analyses

Andy Iams  
NIST

[Abstract](#)

16:15 – 16:30 DeepLearning Segmentation of BioSEM Samples is Robust and High Throughput

Mike Marsh  
ORS

[Abstract](#)

16:30 – 16:45 **(on-line)** Imaging and understanding metal organic frameworks using advanced scanning electron microscopy techniques

Maadhav Kothari  
Carl Zeiss Microscopy

[Abstract](#)

16:45 – 17:00 Free

17:00 – 19:00 Happy Hour at the K-Center

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## 14<sup>th</sup> ANNUAL FIB SEM MEETING SCHEDULE

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THURSDAY MAY 5<sup>TH</sup>

8:30 – 9:30 **EDT** Check-in + Breakfast

9:30 – 9:35 Welcome + Housekeeping

9:35 – 10:05 **Invited: (on-line)** Solutions for Characterization of Semiconductors by Combining Plasma FIB Milling, Laser Ablation and Gas-Assisted Delayering

Lukáš Hladík  
*TESCAN ORSAY HOLDING a.s.*

[Abstract](#)

10:05 – 10:25 **(on-line)** Correlative Raman spectroscopy and electron microscopy studies of Ga FIB and post-FIB Ar ion milling of Si TEM specimens

Cecile Bonifacio  
*E.A. Fischione Instruments, Inc.*

[Abstract](#)

10:25 – 10:45 **(on-line)** FIB-Induced Unique Self-Organization for 3D Nanostructures on Germanium Surface

Bhaveshkumar Kamaliya  
*IIT (India Institute of Technology)*

[Abstract](#)

10:45 – 11:00 Build your own open-source web viewer for 3D FIB-SEM data

Joachim de Fourestier  
*FIBICS / McMaster University*

[Abstract](#)

11:00 – 11:30 Coffee Break

11:30 – 12:00 **Invited:** More than Moore: How focused ion beam microscopy is meeting the demands of the semiconductor Industry

Adam Stokes  
*Thermo Fisher Scientific*

[Abstract](#)



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THURSDAY MAY 5<sup>TH</sup>

12:00 – 12:30 **Invited:** FIB TEM Sample Preparation Artifacts in Semiconductors

Lynne Gignac  
IBM

[Abstract](#)



12:30 – 13:30 **EDT** Lunch

13:30 – 14:00 **Invited:** 3D tomography on semiconductor samples for defect detection and metrology

Thomas Korb  
Carl Zeiss SMT

[Abstract](#)



14:00 – 14:15 Novel Use of EXLO for Cryo-Manipulation of FIB Specimens

Lucille Giannuzzi  
EXpressLO LLC

[Abstract](#)



14:15 – 14:30 Reverse Engineering Alligator Gar Fish Scales: Where Biology Meets Materials Science Meets Mineralogy

Ken Livi  
Johns Hopkins University

[Abstract](#)



14:30 – 14:45 TEM sample preparation of diverse materials

Trevor Clark  
Pennsylvania State University

[Abstract](#)



14:45 – 15:15 Coffee Break



15:15 – 16:00 **Invited Tutorial:** An Introduction to the FIB as a Microchip Circuit Edit Tool

Steve Herschbein  
Independent Consultant

[Abstract + Bio](#)



16:00 Adjourn

