

# FIB SEM

## Program

May 6 - 7, 2025

Science and Engineering Hall  
George Washington University  
Washington, DC



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# FULL MEETING OVERVIEW

**Tuesday, May 6, 2025**

10:20 AM	Biological/Organic Sciences
11:30 AM	
2:45 PM	CryoFIB and Specimen Prep
4:00 PM	Material Sciences

**Wednesday, May 7, 2025**

8:30 AM EDT (UTC-4)	Check-in and Breakfast
9:30 AM	Welcome and Housekeeping
9:40 AM	Material Sciences
11:00 AM	Break
11:30 AM	Material Sciences
12:30 PM	Lunch and Poster Session
2:00 PM	Semiconductors
2:40 PM	Break
3:10 PM	Roundtable Discussion: Semiconductors
5:00 PM	Wrap-up

# Tuesday, May 6, 2025

Time	Presenter	Title
8:30 AM EDT		Check-in and Breakfast
9:30 AM		Welcome and Housekeeping
9:40 AM	Alex deMarco, NYSBC	<a href="#">OpenFIBSEM</a>
10:20 AM	Anastas Popratiloff, GWU	<a href="#">Integration of scalable 2D and serial FIBSEM block face imaging for precise targeting and co-registration of 2D and 3D data for systemic reconstruction of synaptic architecture</a>
10:40 AM	Eran Ittah, McGill University	<a href="#">FIB-SEM Enables a Nanoscale 3D Reconstruction of the Zebrafish Cornea Across Its Full Thickness</a>
11:00 AM		Break
11:30 AM	Geoff Perumal, TFS	<a href="#">Generating the highest quality cryo-lamellae with the Arctis cryo PFIB</a>
12:00 PM	Valerie Brogden, U of OR	<a href="#">Increasing TEM Prep Throughput with an Extendable Manipulator Tip</a>
12:20 PM	Lucille A. Giannuzzi, TESCAN	<a href="#">Automated and Semi-Automated Methods and Applications For S/TEM Specimen Preparation</a>
12:40 PM		<b>Group Photo</b> , Lunch and Poster Session
2:00 PM	Guillaume Audoit, Carl Zeiss	<a href="#">Cryo FIB-SEM Processing For Artifact-Free Sample Preparation of Beam-Sensitive Materials</a>
2:30 PM	Joe Durk, ConnectomX	<a href="#">Complementary Use of FIB-SEM and Serial Block-Face SEM: Quantifying Sectioning Limits and Targeting Regions of Interest in a CLEM Workflow</a>
2:50 PM	Rick Passey, TFS	<a href="#">Automatic for the People: Addressing the TEM Lamella Preparation Needs of Diverse FIB Users</a>
3:10 PM	Parham Kabirifar, UMD	<a href="#">A Novel FIB Milling Technique for Micromechanical Characterization of Shape Memory Alloys</a>
3:30 PM		Break

# Tuesday, May 6, 2025

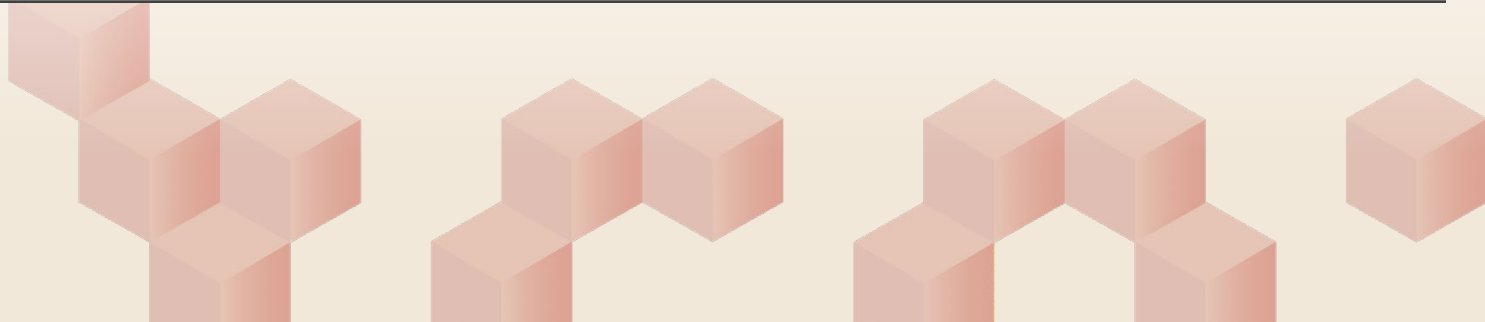
## Continued

Time	Presenter	Title
4:00 PM	Joseph Deering, McMaster	<a href="#">Tomography and 3D EDS of Meteorite Microstructure: Insights from a Correlative Workflow</a>
4:20 PM	Vladimir P. Oleshko, NIST	<a href="#">Integrated Model-Based SEM/STEM Metrology Platform for Future Microelectronics Manufacturing</a>
4:40 PM	Sebastian Lech, JHU	<a href="#">3D FIB-SEM Tomography as a Characterization Method for Corrosion Science</a>
5:00 PM	Wrap-up	
5:00 PM	Happy Hour @ CIRCA Foggy Bottom	



# Wednesday, May 7, 2025

Time	Presenter	Title
8:30 AM EDT		Check-in and Breakfast
9:30 AM		Welcome and Housekeeping
9:40 AM	Peter Gnauck, Raith	<a href="#">Advanced FIB-SIMS for High-Resolution Chemical Imaging for Materials and Life Science Applications</a>
10:00 AM	Bitu Pourbahari, McMaster	<a href="#">3D-Advanced Correlative Microscopy for Crack Analysis: Bridging the Centimeter to Atomic Scales</a>
10:20 AM	Mike Marsh, Math2Market	<a href="#">FIB-SEM for 3D Digital Twins and Digital “Siblings” Explores Critical Material Properties</a>
10:40 AM	J. Luis Carrillo, NRL	<a href="#">Investigating Chemo-mechanical Degradation in V2O5 Positive Electrodes</a>
11:00 AM		Break
11:30 AM	Robert Brandom, Bruker	<a href="#">eWARP – The fastest, most signal efficient EBSD detector ever</a>
11:50 AM	Mark E. Twigg, NRL	<a href="#">EBSD and ECCI analysis of boundaries in CsPbBr3 inorganic halide perovskite</a>
12:10 PM	Oytun Tasgit, 3D Micromac	<a href="#">Advancing FIB-SEM Sample Preparation with Laser Technology for Semiconductor and Materials Applications</a>
12:30 PM		Lunch and Poster Session
2:00 PM	David MacMahon, Micron	<a href="#">To the Moon: Failure analysis of issues in Bipolar Junction Transistors circuit using Electron Beam Induced Current technique</a>
2:20 PM	Steve Herschbein, Retired	<a href="#">The CHIPS Act and its Impact on the Semiconductor Industry and Analytical Labs – An Update</a>
2:40 PM		Break



# Wednesday, May 7, 2025

## Continued

Time

### **Roundtable Discussion on instrumentation and analysis needs for Failure Analysis**

Moderator: Nabil Bassim, CCEM, McMaster University

Panelists:

3:10 PM

Umberto Celano, Arizona State University (On-line)

Lynne Gignac, IBM T. J. Watson Research Center (On-line)

Steve Herschbein, Retired, GlobalFoundries

David McMahon, Micron Technology

Will Osborn, NIST

Comments from panelists followed by general discussions

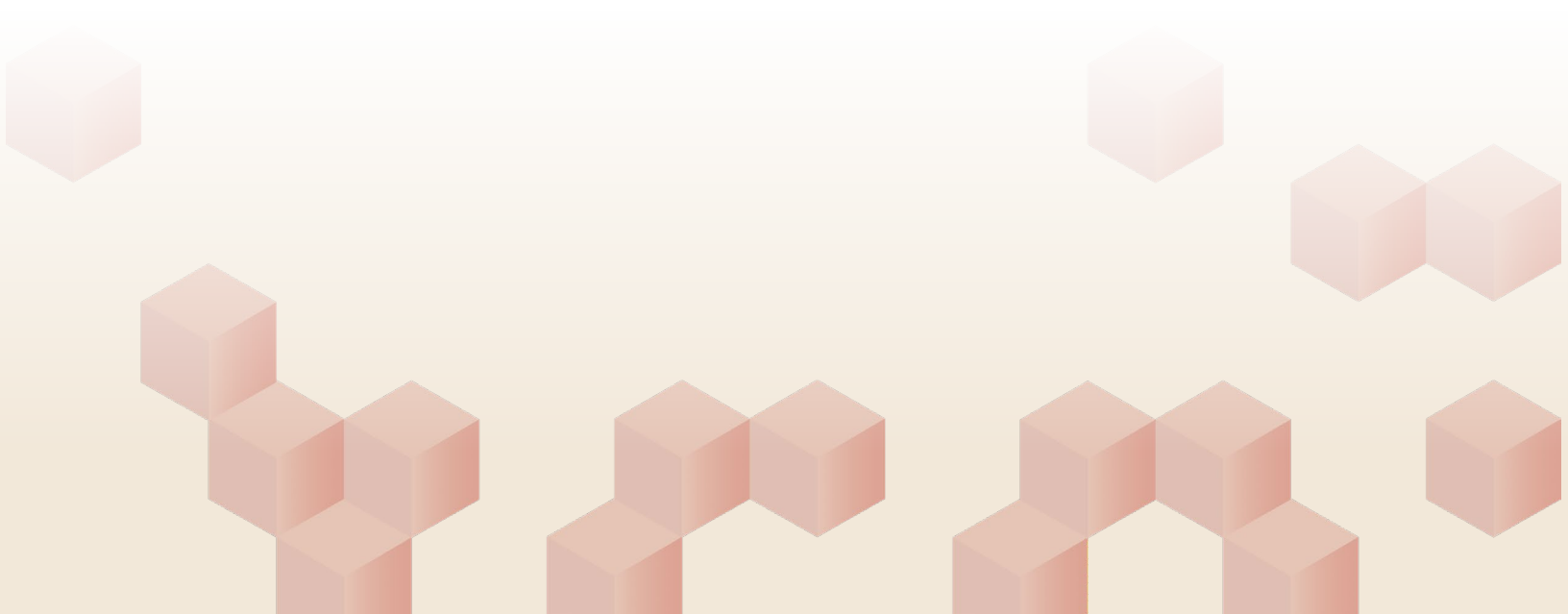
5:00 PM

Wrap-up



# Posters

Session	Presenter	Title
Mat Sci	Shweta Joshi. GWU	<a href="#">FIB-SEM Benefits for Research and Education in CMOS + X integration</a>
Mat Sci	Nabil Bassim, McMaster	<a href="#">Dopant Distribution in Ga-Implanted CdO – A Correlative Microcopy and Molecular Dynamics Study</a>
Mat Sci	Bradley T De Gregorio, NRL	<a href="#">Metalens Fabrication for Vertical-Cavity Surface-Emitting Laser Design for Neural Therapeutics</a>
Mat Sci	Matt Nowell, Gatan	<a href="#">3D Plasma FIB-based EBSD-EDS Characterization of Additively Manufactured Inconel 718 Microstructure</a>



# Meeting Notes





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