

FIB SEM Program

April 8 - 9, 2026

Kossiakoff Center
Johns Hopkins Applied Physics Laboratory
11100 Johns Hopkins Road
Laurel, MD

ThermoFisher
SCIENTIFIC

HITACHI



RAITH
NANOFABRICATION



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nanotechnik

TED PELLA, INC.
Microscopy Products for Science and Industry

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INSTRUMENTS

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PERFORMANCE IN NANOSPACE

biolyst
SCIENTIFIC

OXFORD
INSTRUMENTS

CMMS
Chesapeake Microscopy
& Microanalysis Society

CCEM
Canadian Centre for Electron Microscopy

FULL MEETING OVERVIEW

Wednesday, April 8, 2026

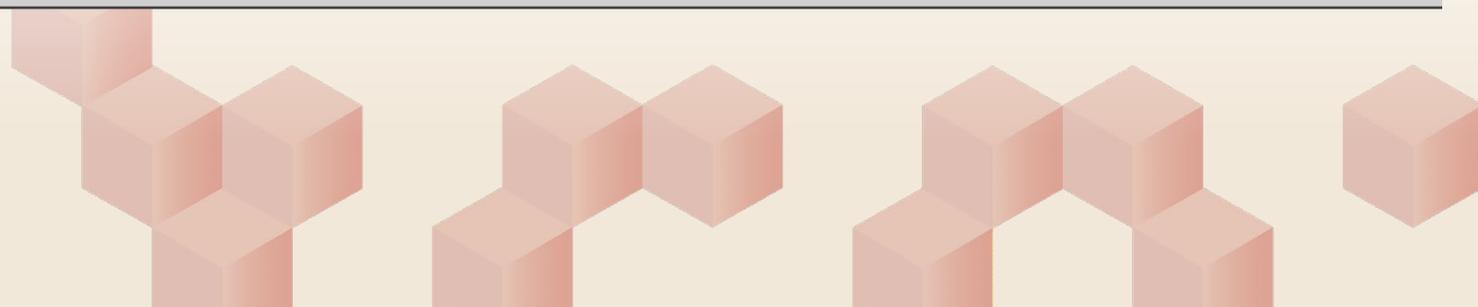
8:30 AM	Check-in and Breakfast
9:30 AM	Welcome and Housekeeping
9:40 AM	Plenary
10:20 AM	Material Sciences & Semiconductors
11:00 AM	Break
11:30 AM	Material Sciences & Semiconductors
12:30 PM	Lunch
1:30 PM	Material Sciences, Semiconductors & Poster Session
3:00 PM	Poster Session & Break
3:30 PM	Biology
4:35 PM	Happy Hour @ K-Center

Thursday, April 9, 2026

8:30 AM	Check-in and Breakfast
9:30 AM	Welcome and Housekeeping
9:40 AM	Material Sciences & Semiconductors
10:50 AM	Break
11:20 AM	Material Sciences & Instrumentation
12:20 PM	Lunch
1:30 PM	Automation, AI & Instrumentation
2:50 PM	Break
3:20 PM	Cryo
4:20 PM	Wrap-up

Wednesday, April 8, 2026

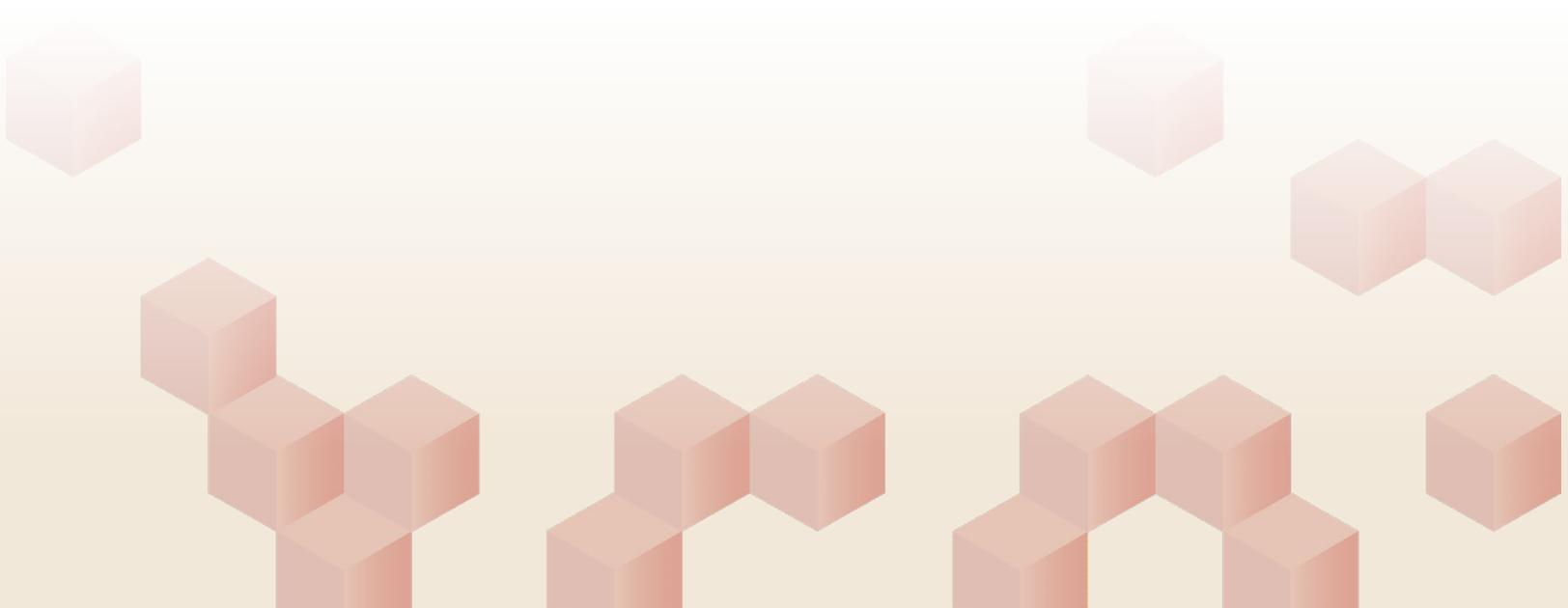
Time (UTC-4)	Presenter	Title
8:30 AM		Check-in and Breakfast
9:30 AM		Welcome and Housekeeping
9:40 AM	Sina Shahbazmohamadi, Uconn/Tescan	(Plenary) High throughput Sample Preparation in Microscopy 4.0: Intelligent, Automated and Connected Solutions (Abstract)
10:20 AM	José-Manuel Tapia-Cáceres, ASU	A Co-Mounted Lamellae Mounting Strategy for Integrated SPM and STEM Correlative Metrology in Gate-All-Around Devices (Abstract)
10:40 AM	Jemima Gonsalves, IBM	Integrating conventional and contemporary sample preparation methods for the analysis of deeply buried regions of interest in 3D stacked microelectronic devices (Abstract)
11:00 AM		Break
11:30 AM	Paul Jacob, RIT	In-situ Observation of Channel Formation in MOSFETs using Electron Beam Induced Current Technique (Abstract)
11:50 AM	Will Osborn, NIST	(Invited) Advancing Metrology for Leading-Edge Node Semiconductor Devices with Atypical FIB Workflows
12:20 PM		Group Photo
12:30 PM		Lunch
1:30 PM	Andy Herzing, NIST	Three-dimensional Imaging of Multiple Gate All Around Transistors via Plan-view Electron Tomography
1:50 PM	Patrick Callahan, NRL	EBSD at Lower Accelerating Voltages for Phase Detection in Martensitic Steels (Abstract)
2:10 PM	Poster Presenters	Lightning Talks
2:20 PM		Poster Session
3:00 PM		Poster Session Continued with Coffee



Wednesday, April 8, 2026

Continued

Time	Presenter	Title
3:30 PM	Kedar Narayan, NIH	Towards (truly) quantitative volume EM (Abstract)
3:50 PM	Matthew Maier, Pitt	Preparation of Archival Human Brain Tissue for Nanoscale Volumetric FIB-SEM (Abstract)
4:10 PM	Jenesis Kozel, Pitt	3D Characterization of Myelin Ultrastructure in Postmortem Human Tissue via Focused Ion Beam Scanning Electron Microscopy (FIBSEM) (Abstract)
4:30 PM	Wrap-up	
4:35 PM	Happy Hour @ K-Center	



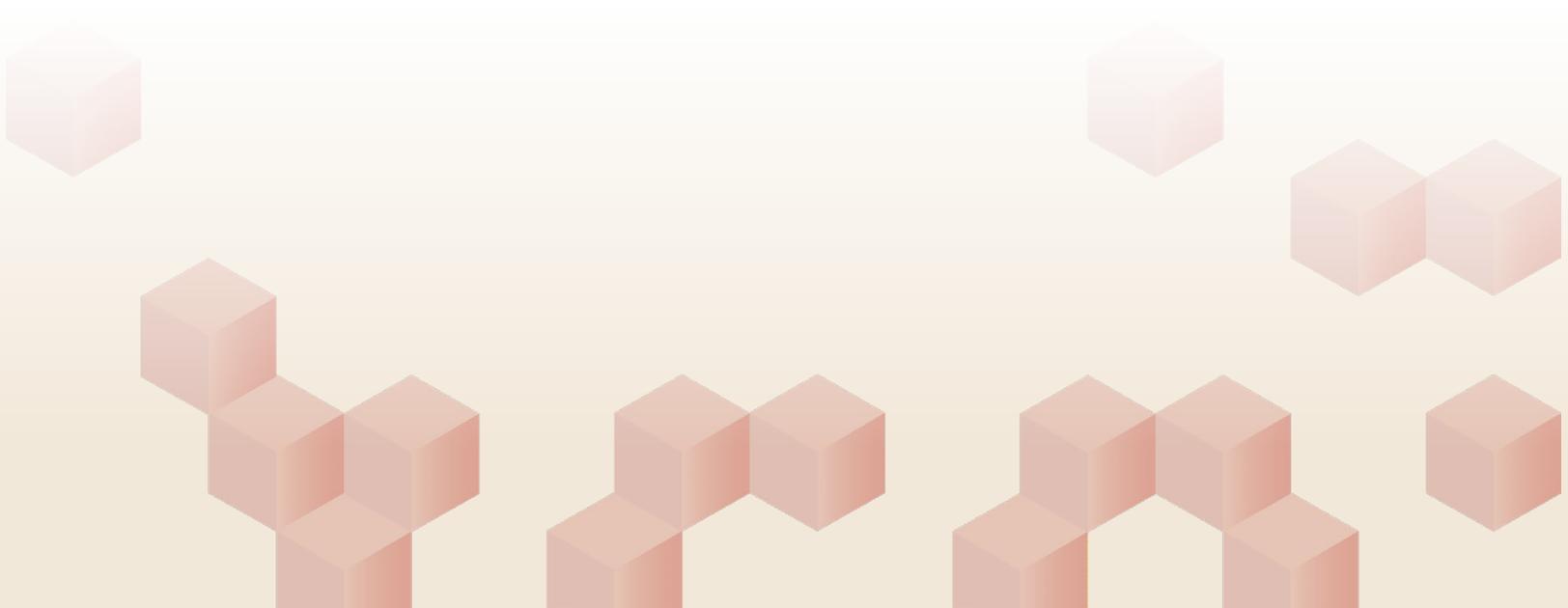
Thursday, April 9, 2026

Time	Presenter	Title
8:30 AM	Check-in and Breakfast	
9:30 AM	Welcome and Housekeeping	
9:40 AM	Henri Lezec, NIST	(Invited) Plasma-source FIB fabrication of metasurfaces on trapped-ion quantum computer chips
10:10 AM	Ewelina Gacka, HZDR	(On-line) Advanced Focused Ion Beam System for Quantum Technology Applications (Abstract)
10:30 AM	Alex Johnson, NenoVision	Site-Selective Xe Plasma FIB Device Deprocessing with In-Situ Conductive AFM Characterization of NAND Memory Structures (Abstract)
10:50 AM	Break	
11:20 AM	Sharang Sharang, Tescan	Enhanced S/TEM Specimen Preparation FIB and EXLO (Abstract)
11:40 AM	Peter Gnauck, Raith	High-Resolution Magnetic-Sector SIMS for Advanced Semiconductor and Materials Science Applications (Abstract)
12:00 PM	Satyam Ladva, Quantum Design	AFSEM
12:20 PM	Lunch	
1:30 PM	Rick Passey, TFS	The Path to the Autonomous Lab: Scaling FIB-SEM Workflows from Scripting to Full Autonomy (Abstract)
1:50 PM	Andras Vladar, NIST	AI-driven Scanning Electron Microscopy
2:10 PM	Lorenz Lechner, Kleindiek	Automating Nanoprobing and Lift-Out Workflows Using Robust Deep Learning Models (Abstract)
2:30 PM	Cheryl Hartfield, Waviks	Adding Light to Your Microscope: A Review of Applications Enabled by Optical Delivery in FIB-SEM (Abstract)
2:50 PM	Break	

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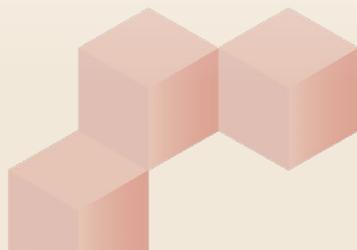
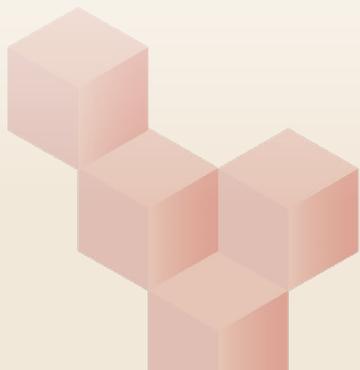
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Time	Presenter	Title
3:20 PM	Yulia Trenikhina, Zeiss	Cryogenic FIB-SEM Preparation of Lithium Metal for Solid-State Battery Research (Abstract)
3:40 PM	Seth Villarreal, Leica	The Waffle Method (Abstract)
4:00 PM	Geoff Perumal, TFS	Innovative Solutions for Higher Efficiency and Throughput in Cryo-Electron Tomography (Abstract)
4:20 PM	Wrap-up	

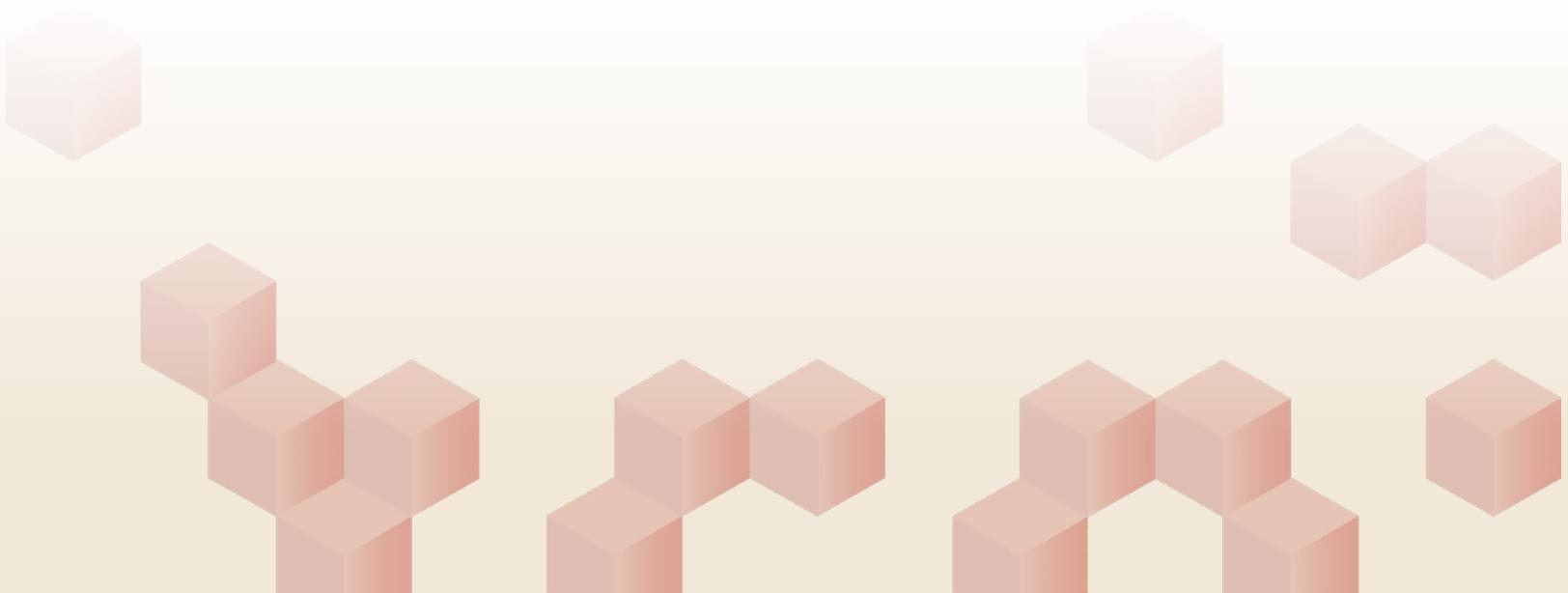


Posters

Session	Presenter	Title
Mat Sci	Nicholas Antoniou, KLA	Throughput Enhancement for High Resolution Sample Preparation Workflows (Abstract)
Mat Sci	Matt Nowell, Gatan	High-Confidence EBSD from Lower-Quality Patterns Enabled by Spherical Indexing (Abstract)
Mat Sci	James Tordiff, NRC-NANO	Ion Beam Lithography using the ScanoMi Open Source Scan Generator (Abstract)
Mat Sci	Sandip Basu, Zeiss	Seeing While Milling: Overcoming Low-kV FIB Endpointing Challenges in Advanced Semiconductor TEM Sample Preparation (Abstract)
Bio	Melissa R Mikolaj, NIH	Empanada, a napari plugin for automated segmentation of sub-cellular features imaged by volume electron microscopy (Abstract)
Bio	Shweta Bhushan	Sample Preparation and Scanning Electron Microscopy of Brain Organoids (Abstract)



Meeting Notes



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