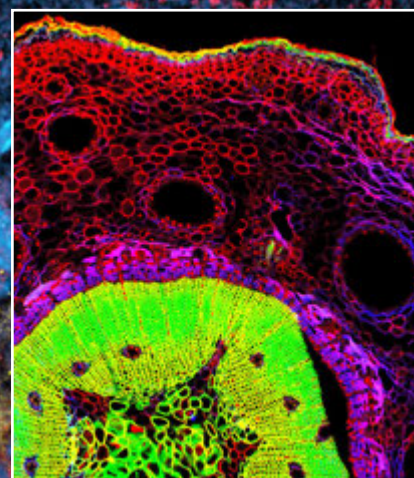
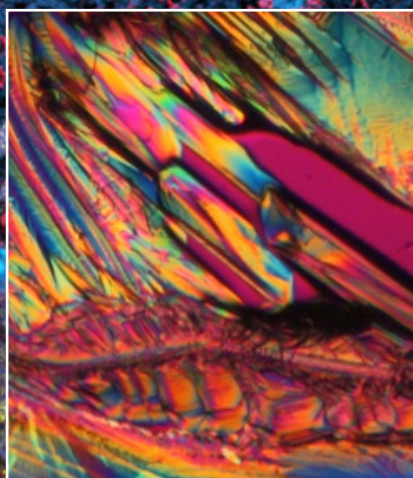




Schedule at a Glance

MM2026 **MICROSCOPY & MICROANALYSIS** August 2-6 • Milwaukee, WI



<https://mmconference.microscopy.org> for up-to-date meeting information

Saturday, August 1

Saturday Sessions will be held at the Hyatt Regency Milwaukee

8:00 AM – 5:30 PM

MSA Council

8:30 AM – 5:30 PM

Pre-Meeting Congress

X60 Annual Pre-Meeting Congress for Students, Post-Docs, and Early-Career Professionals in Microscopy & Microanalysis (*Organized by the MSA Student Council*)

Sunday, August 2

8:30 AM – 5:30 PM

Sunday Short Courses

X10 Electron Ptychography: Experimental Considerations and Data Analysis

X11 Nanobeam Diffraction and 4DSTEM Analysis of Crystalline and Disordered Materials

X12 Focused Ion Beam Theory & Methods

X13 SEM, EPMA, EDS, and WDS Best Practices for Quantitative Microanalysis

X14 Biological EM Sample Processing: From 2D to 3D

8:30 AM – 5:30 PM

Pre-Meeting Congress

X61 Atom Probe Tomography User's Meeting and Workshop Professionals in Microscopy and Microanalysis

X62 Interfaces in Action: Obtaining Reliable and Relevant Insights of Interfacial Reactions in Liquids and Gases with Operando and In Situ Microscopy and Spectroscopy

X63 Facilities and Operations Management: Skills, Strategies, and Best Practices

6:30 PM

M&M 2026 Welcome Reception

8:30 PM

Symposium Organizers' Reception

Offsite (by invitation only)

Monday, August 3

7:15 AM – 8:15 AM

Technologists' Forum Board

7:15 AM – 8:15 AM

Travel Awards Committee

7:15 AM – 8:15 AM

FIG: Low Temperature Electron Microscopy (LT-EM)

7:15 AM – 8:15 AM

FIG: Aberration Corrected EM (ACEM)

8:30 AM – 12:00 PM

M&M 2026 Plenary Sessions

Ballroom AB, Baird Center

Opening Welcome

Plenary Talk #1:

Thomas F. Kelly, PhD | Associate Professor, Founder and CEO, Steam Instruments
So Many Atoms and So Little Time

MAS Awards Presentation
MSA Awards Presentation
M&M Meeting Awards Presentation

Plenary Talk #2:

Wah Chiu, PhD | Wallenberg-Bienstock Professor and Bioimaging, SLAC National Accelerator Lab
Cryogenic Electron Imaging of Macromolecules and Cells

12:00 PM – 1:30 PM

Lunch Break in the Exhibit Hall

12:00 PM – 5:30 PM

Exhibit Hall Open

12:15 PM – 1:15 PM

MAS Meal with a Mentor

12:15 PM – 1:15 PM

Major Society Awards Committee

Monday, August 3 cont.

12:15 PM – 1:15 PM	Early Career Committee
12:15 PM – 1:15 PM	FIG: 3D EM in Biological Sciences (3DEMBS)
12:15 PM – 1:15 PM	FIG: Focused Ion Beam (FIB)
1:30 PM – 3:00 PM	P.M. Symposia & Sessions
	A01.1 Advancements in Forensic Chemistry: Microscopy and Microanalysis Techniques
	A03.1 Advances in Atom Probe Tomography: Instrumentation, Reconstruction, and Novel Applications and Interpretation
	A09.1 Multi-dimensional and Multi-scale Imaging and Advanced Data Processing—Novel Opportunities in Material Science
	B01.1 3D Structures: from Macromolecular Assemblies to Whole Cells (3DEM FIG)
	B05.1 Smaller, Faster, Cheaper—Recent Advances in Super-resolution Microscopy
	C05.1 Innovative Approaches to Microstructural Analysis: EBSD, ECCI, and 3D Techniques Across Disciplines
	C06.1 Automation in Microscopy from Image Acquisition to Image Analysis, Data Visualization, and Management
	P03.1 Advanced TEM Analysis for Semiconductors
	P04.1 Advances in 4D-STEM and In Situ Electron Microscopy for Quantum Materials
	P05.1 Advances in Electron Microscopy for Defect and Crystallographic Structure Analysis
	P06.1 Technical and Application Advances in Liquid and Gas Phase TEM
	P08.1 Probing Emergent Phenomena in Functional and Quantum Materials with Advanced Electron Microscopy Methods
	P10.1 Quantitative Microanalysis of Terrestrial and Planetary Samples by Electrons, X-rays, Ions, and Lasers
3:00 PM – 5:00 PM	Monday Poster Presentations <i>Post-Deadline Posters will be presented on this day.</i>
	A01.P1 Advancements in Forensic Chemistry: Microscopy and Microanalysis Techniques
	A03.P1 Advances in Atom Probe Tomography: Instrumentation, Reconstruction, and Novel Applications and Interpretation
	A09.P1 Multi-dimensional and Multi-scale Imaging and Advanced Data Processing—Novel Opportunities in Material Science
	B01.P1 3D Structures: from Macromolecular Assemblies to Whole Cells (3DEM FIG)
	C05.P1 Innovative Approaches to Microstructural Analysis: EBSD, ECCI, and 3D Techniques Across Disciplines
	P03.P1 Advanced TEM analysis for Semiconductors
	P04.P1 Advances in 4D-STEM and In Situ Electron Microscopy for Quantum Materials
	P06.P1 Technical and Application Advances in Liquid and Gas Phase TEM
	P10.P1 Quantitative Microanalysis of Terrestrial and Planetary Samples by Electrons, X-rays, Ions, and Lasers
3:30 PM – 4:30 PM	Technologists' Forum Business Meeting
4:30 PM – 6:00 PM	MSA Elemental Microscopy
5:00 PM – 5:30 PM	Student Poster Awards
5:30 PM – 7:00 PM	Student, Early Career, and Post-Doc Mixer
5:45 PM – 6:45 PM	Vendor Tutorials <i>(Sign up at individual exhibitors' booths)</i>

Tuesday, August 4

7:15 AM – 8:15 AM	Microscopy Today Editorial Board Meeting
7:15 AM – 8:15 AM	MSA Local Affiliated Societies & MAS Affiliated Regional Societies Breakfast
7:15 AM – 8:15 AM	Education Outreach Committee Meeting
7:15 AM – 8:15 AM	MSA Standards Committee Meeting
8:30 AM – 10:00 AM	Symposia & Sessions
	A02.1 Advances in 4DSTEM Experimentation, Analysis and Interpretation
	A03.2 Advances in Atom Probe Tomography: Instrumentation, Reconstruction, and Novel Applications and Interpretation
	A04.1 Advances in Cryogenic Electron Microscopy for Energy and Quantum Materials
	A06.1 Correlative, Multimodal Microscopy, Spectroscopy, and Imaging
	A09.2 Multi-dimensional and Multi-scale Imaging and Advanced Data Processing—Novel Opportunities in Material Science
	A10.1 Recent Developments and New Emergent Applications in Hardware, Accessories and Software Tools
	B01.2 3D Structures: from Macromolecular Assemblies to Whole Cells (<i>3DEM FIG</i>)
	B05.2 Smaller, Faster, Cheaper—Recent Advances in Super-resolution Microscopy
	B06.1 Integrative Imaging Approaches for Biological Structure-Function Relationships
	C05.2 Innovative Approaches to Microstructural Analysis: EBSD, ECCI, and 3D Techniques Across Disciplines
	C06.2 Automation in Microscopy from Image Acquisition to Image Analysis, Data Visualization, and Management
	C08.1 Vendor Symposia
	P03.2 Advanced TEM Analysis for Semiconductors
	P04.2 Advances in 4D-STEM and In Situ Electron Microscopy for Quantum Materials
	P05.2 Advances in Electron Microscopy for Defect and Crystallographic Structure Analysis
	P06.2 Technical and Application Advances in Liquid and Gas Phase TEM
	P08.2 Probing Emergent Phenomena in Functional and Quantum Materials with Advanced Electron Microscopy Methods
	P10.2 Quantitative Microanalysis of Terrestrial and Planetary Samples by Electrons, X-rays, Ions, and Lasers
10:00 AM – 10:30 AM	Coffee Break in the Exhibit Hall
10:00 AM – 5:30 PM	Exhibit Hall Open
10:00 AM – 12:00 PM	M&M 2027 Symposium Organizers' Planning Meeting
10:30 AM – 12:00 PM	Symposia & Sessions
	A02.2 Advances in 4DSTEM Experimentation, Analysis and Interpretation
	A03.3 Advances in Atom Probe Tomography: Instrumentation, Reconstruction, and Novel Applications and Interpretation
	A04.2 Advances in Cryogenic Electron Microscopy for Energy and Quantum Materials
	A06.2 Correlative, Multimodal Microscopy, Spectroscopy, and Imaging
	A09.3 Multi-dimensional and Multi-scale Imaging and Advanced Data Processing—Novel Opportunities in Material Science
	A10.2 Recent Developments and New Emergent Applications in Hardware, Accessories and Software Tools
	B01.3 3D Structures: from Macromolecular Assemblies to Whole Cells (<i>3DEM FIG</i>)
	B06.2 Integrative Imaging Approaches for Biological Structure-Function Relationships
	C05.3 Innovative Approaches to Microstructural Analysis: EBSD, ECCI, and 3D Techniques Across Disciplines

Tuesday, August 4 cont.

10:30 AM – 12:00 PM	Symposia & Sessions cont.
	C06.3 Automation in Microscopy from Image Acquisition to Image Analysis, Data Visualization, and Management
	C07.1 Lens on Engagement
	P03.3 Advanced TEM analysis for Semiconductors
	P04.3 Advances in 4D-STEM and In Situ Electron Microscopy for Quantum Materials
	P05.3 Advances in Electron Microscopy for Defect and Crystallographic Structure Analysis
	P06.3 Technical and Application Advances in Liquid and Gas Phase TEM
	P08.3 Probing Emergent Phenomena in Functional and Quantum Materials with Advanced Electron Microscopy Methods
11:00 AM – 12:00 PM	P10.3 Quantitative Microanalysis of Terrestrial and Planetary Samples by Electrons, X-rays, Ions, and Lasers
	Tutorial
	X40 Transmission Kikuchi Diffraction (TKD) Hardware, Sample Preparation and Data Acquisition
12:00 PM – 1:30 PM	Lunch Break in the Exhibit Hall
12:15 PM – 1:30 PM	MSA Distinguished Scientist Awardee Lecture
1:30 PM – 3:00 PM	Symposia & Sessions
	A02.3 Advances in 4DSTEM Experimentation, Analysis and Interpretation
	A03.4 Advances in Atom Probe Tomography: Instrumentation, Reconstruction, and Novel Applications and Interpretation
	A04.3 Advances in Cryogenic Electron Microscopy for Energy and Quantum Materials
	A05.1 Advances in Focused Ion Beam Instrumentation, Applications, and Techniques for Materials and Life Sciences
	A06.3 Correlative, Multimodal Microscopy, Spectroscopy, and Imaging
	A08.1 Microscopy and Microanalysis for Real World Problem Solving
	A09.4 Multi-dimensional and Multi-scale Imaging and Advanced Data Processing — Novel Opportunities in Material Science
	A10.3 Recent Developments and New Emergent Applications in Hardware, Accessories and Software Tools
	B01.4 3D Structures: from Macromolecular Assemblies to Whole Cells (3DEM FIG)
	B06.3 Integrative Imaging Approaches for Biological Structure-Function Relationships
	C05.4 Innovative Approaches to Microstructural Analysis: EBSD, ECCI, and 3D Techniques Across Disciplines
	C06.4 Automation in Microscopy from Image Acquisition to Image Analysis, Data Visualization, and Management
	C07.2 Lens on Engagement
	P03.4 Advanced TEM Analysis for Semiconductors
	P04.4 Advances in 4D-STEM and In Situ Electron Microscopy for Quantum Materials
	P05.4 Advances in Electron Microscopy for Defect and Crystallographic Structure Analysis
	P06.4 Technical and Application Advances in Liquid and Gas Phase TEM
	P08.4 Probing Emergent Phenomena in Functional and Quantum Materials with Advanced Electron Microscopy Methods
2:00 PM – 3:00 PM	Tutorial
	X41 Harmonizing Electron Microscopy Sample Preparation: Advances in Automated Sample Preparation

Tuesday, August 4 cont.

3:00 PM – 5:00 PM	Tuesday Poster Presentations	<i>Exhibit Hall</i>
	A02.P1 Advances in 4DSTEM Experimentation, Analysis and Interpretation	
	A04.P1 Advances in Cryogenic Electron Microscopy for Energy and Quantum Materials	
	A05.P1 Advances in Focused Ion Beam Instrumentation, Applications, and Techniques for Materials and Life Sciences	
	A06.P1 Correlative, Multimodal Microscopy, Spectroscopy, and Imaging	
	B06.P1 Integrative Imaging Approaches for Biological Structure-Function Relationships	
	C07.P1 Lens on Engagement	
	C08.P1 Vendor Symposia	
3:30 PM – 4:30 PM	P05.P1 Advances in Electron Microscopy for Defect and Crystallographic Structure Analysis	
	P08.P1 Probing Emergent Phenomena in Functional and Quantum Materials with Advanced Electron Microscopy Methods	
3:30 PM – 4:30 PM	FIG Business Meeting	
5:00 PM – 5:30 PM	Student Poster Awards	<i>Exhibit Hall Poster Stage</i>
5:30 PM – 6:30 PM	PostDoc & Early Career Development Event	
5:45 PM – 6:45 PM	Vendor Tutorials (<i>Sign up at exhibitors' booths</i>)	
6:30 PM	Presidents' Reception (<i>Invitation Only</i>)	<i>Offsite</i>

Wednesday, August 5

7:15 AM – 8:15 AM	MaM Editorial Board	
7:15 AM – 8:15 AM	BEES Committee	
7:15 AM – 8:15 AM	FIG: EM in Liquids and Gases (EMLG)	
7:15 AM – 8:15 AM	FIG: MicroAnalytical Standards (MAS)	
8:30 AM – 10:00 AM	Symposia & Sessions	
	A02.4 Advances in 4DSTEM Experimentation, Analysis and Interpretation	
	A03.5 Advances in Atom Probe Tomography: Instrumentation, Reconstruction, and Novel Applications and Interpretation	
	A05.2 Advances in Focused Ion Beam Instrumentation, Applications, and Techniques for Materials and Life Sciences	
	A06.4 Correlative, Multimodal Microscopy, Spectroscopy, and Imaging	
	A07.1 Electronic and Thermal Characterization of Devices with Electron Microscopy	
	A08.2 Microscopy and Microanalysis for Real World Problem Solving	
	A10.4 Recent Developments and New Emergent Applications in Hardware, Accessories and Software Tools	
	B03.1 Microscopy in Action: Advancing Disease Research and Diagnosis in Humans, Animals, and Plants	
	B04.1 Technical Advances and Transformative Applications of CryoEMB07:1 AI-Driven Microanalysis: Transforming Industrial Innovation and Discovery	
	B07.1 AI-Driven Microanalysis: Transforming Industrial Innovation and Discovery	
	C01.1 Transmission Electron Microscopy for Beam-Sensitive Materials	
	C06.5 Automation in Microscopy from Image Acquisition to Image Analysis, Data Visualization, and Management	
	P02.1 Probing Phase Transitions from Atomic-Scale Imaging to In Situ Control	
	P03.5 Advanced TEM analysis for Semiconductors	
	P05.5 Advances in Electron Microscopy for Defect and Crystallographic Structure Analysis	

Wednesday, August 5 cont.

8:30 AM – 10:00 AM	Symposia & Sessions cont.
	P06.5 Technical and Application Advances in Liquid and Gas Phase TEM
	P07.1 High-Resolution Microscopy and Microanalysis of Materials Subjected to Extreme Environments
	P08.5 Probing Emergent Phenomena in Functional and Quantum Materials with Advanced Electron Microscopy Methods
	P11.1 Unveiling Quantum Order: Cryo-EELS, 4D STEM, and Ptychography at the Nanoscale
	X30 Career Paths in Microscopy Roundtable
10:00 AM – 10:30 AM	Coffee Break in the Exhibit Hall
10:00 AM – 5:30 PM	Exhibit Hall Open
10:30 AM – 12:00 PM	Symposia & Sessions
	A02.5 Advances in 4DSTEM Experimentation, Analysis and Interpretation
	A03.6 Advances in Atom Probe Tomography: Instrumentation, Reconstruction, and Novel Applications and Interpretation
	A05.3 Advances in Focused Ion Beam Instrumentation, Applications, and Techniques for Materials and Life Sciences
	A06.5 Correlative, Multimodal Microscopy, Spectroscopy, and Imaging
	A07.2 Electronic and Thermal Characterization of Devices with Electron Microscopy
	A08.3 Microscopy and Microanalysis for Real World Problem Solving
	A10.5 Recent Developments and New Emergent Applications in Hardware, Accessories and Software Tools
	B02.1 Development, Challenges, and Biomedical Applications of Tissue Clearing, Expansion Microscopy, and Volumetric Imaging
	B03.2 Microscopy in Action: Advancing Disease Research and Diagnosis in Humans, Animals, and Plants
	B04.2 Technical Advances and Transformative Applications of CryoEM
	C01.2 Transmission Electron Microscopy for Beam-Sensitive Materials
	C04.1 Living on the Edge: Real-Time Processing and Decision Making at the Microscope
	C06.6 Automation in Microscopy from Image Acquisition to Image Analysis, Data Visualization, and Management
	P02.2 Probing Phase Transitions from Atomic-Scale Imaging to In Situ Control
	P03.6 Advanced TEM analysis for Semiconductors
	P05.6 Advances in Electron Microscopy for Defect and Crystallographic Structure Analysis
	P07.2 High-Resolution Microscopy and Microanalysis of Materials subjected to Extreme Environments
	P08.6 Probing Emergent Phenomena in Functional and Quantum Materials with Advanced Electron Microscopy Methods
	P11.2 Unveiling Quantum Order: Cryo-EELS, 4D STEM, and Ptychography at the Nanoscale
	X31 Professional Development Opportunities for Microscopy Lab Technologists
11:00 AM – 12:00 PM	Tutorial
	X42 A Practical Guide to Electron Channeling Contrast Imaging
12:00 PM – 1:30 PM	Lunch Break in the Exhibit Hall
12:15 PM – 1:15 PM	MSA Members' Meeting

Wednesday, August 5 cont.

1:30 PM – 3:00 PM	Symposia & Sessions
	A02.6 Advances in 4DSTEM Experimentation, Analysis and Interpretation
	A03.7 Advances in Atom Probe Tomography: Instrumentation, Reconstruction, and Novel Applications and Interpretation
	A05.4 Advances in Focused Ion Beam Instrumentation, Applications, and Techniques for Materials and Life Sciences
	A06.6 Correlative, Multimodal Microscopy, Spectroscopy, and Imaging
	A07.3 Electronic and Thermal Characterization of Devices with Electron Microscopy
	A08.4 Microscopy and Microanalysis for Real World Problem Solving
	A10.6 Recent Developments and New Emergent Applications in Hardware, Accessories and Software Tools
	B02.2 Development, Challenges, and Biomedical Applications of Tissue Clearing, Expansion Microscopy, and Volumetric Imaging
	B03.3 Microscopy in Action: Advancing Disease Research and Diagnosis in Humans, Animals, and Plants
	B04.3 Technical Advances and Transformative Applications of CryoEM.
	C01.3 Transmission Electron Microscopy for Beam-Sensitive Materials
	C04.2 Living on the Edge: Real-Time Processing and Decision Making at the Microscope
	P02.3 Probing Phase Transitions from Atomic-Scale Imaging to In Situ Control
	P05.7 Advances in Electron Microscopy for Defect and Crystallographic Structure Analysis
	P07.3 High-Resolution Microscopy and Microanalysis of Materials subjected to Extreme Environments
	P08.7 Probing Emergent Phenomena in Functional and Quantum Materials with Advanced Electron Microscopy Methods
	P09.1 Spatiotemporal Optical Response Using Electron Spectroscopies for Nano-optics
	P11.3 Unveiling Quantum Order: Cryo-EELS, 4D STEM, and Ptychography at the Nanoscale
	X32 A Technologists' Guide to Communication and Funding Skills
2:00 PM – 3:00 PM	Tutorial
	X43 Don't Break the Ice!
3:00 PM – 5:00 PM	Wednesday Poster Presentations <i>Exhibit Hall</i>
	A07.P1 Electronic and Thermal Characterization of Devices with Electron Microscopy
	A08.P1 Microscopy and Microanalysis for Real World Problem Solving
	B02.P1 Development, Challenges, and Biomedical Applications of Tissue Clearing, Expansion Microscopy, and Volumetric Imaging
	B03.P1 Microscopy in Action: Advancing Disease Research and Diagnosis in Humans, Animals, and Plants
	B04.P1 Technical Advances and Transformative Applications of CryoEM
	B07.P1 AI-Driven Microanalysis: Transforming Industrial Innovation and Discovery
	C06.P1 Automation in Microscopy from Image Acquisition to Image Analysis, Data Visualization, and Management
	P02.P1 Probing Phase Transitions from Atomic-Scale Imaging to In Situ Control
	P05.P2 Advances in Electron Microscopy for Defect and Crystallographic Structure Analysis
5:00 PM – 5:30 PM	Student Poster Awards <i>Exhibit Hall - Poster Area Stage</i>
5:30 PM – 6:30 PM	MAS Business Meeting
5:30 PM – 6:30 PM	BEES Reception
5:45 PM – 6:45 PM	Vendor Tutorials <i>(Sign up at exhibitors' booths)</i>
6:30 PM – 8:30 PM	MAS Members' Social <i>(See MAS Booth for Details—Offsite)</i>

Thursday, August 6

7:15 AM – 8:15 AM	FIG: Diagnostic & Biomedical Microscopy (DBM)
8:30 AM – 9:30 AM	M&M Sustaining Members Meeting
8:30 AM – 10:00 AM	Symposia & Sessions A03.8 Advances in Atom Probe Tomography: Instrumentation, Reconstruction, and Novel Applications and Interpretation A06.7 Correlative, Multimodal Microscopy, Spectroscopy, and Imaging A08.5 Microscopy and Microanalysis for Real World Problem Solving A10.7 Recent Developments and New Emergent Applications in Hardware, Accessories and Software Tools C01.4 Transmission Electron Microscopy for Beam-Sensitive Materials C02.1 Atomic-Scale Hyperspectral Imaging for Materials Characterization C03.1 Preservation and Validation of Electron Microscopy Data Across the Biological and Physical Sciences C04.3 Living on the Edge: Real-Time Processing and Decision Making at the Microscope P05.8 Advances in Electron Microscopy for Defect and Crystallographic Structure Analysis P07.4 High-Resolution Microscopy and Microanalysis of Materials subjected to Extreme Environments P09.2 Spatiotemporal Optical Response Using Electron Spectroscopies for Nano-optics P11.4 Unveiling Quantum Order: Cryo-EELS, 4D STEM, and Ptychography at the Nanoscale
10:00 AM – 12:00 PM	Coffee Break and Poster Session in the Exhibit Hall
10:00 AM – 2:00 PM	Exhibit Hall Open
10:00 AM – 12:00 PM	Poster Presentations <i>Post-Deadline Posters will be presented on this day</i> A08.P2 Microscopy and Microanalysis for Real World Problem Solving A10.P1 Recent Developments and New Emergent Applications in Hardware, Accessories and Software Tools C01.P1 Transmission Electron Microscopy for Beam-Sensitive Materials C02.P1 Atomic-Scale Hyperspectral Imaging for Materials Characterization C03.P1 Preservation and Validation of Electron Microscopy Data Across the Biological and Physical Sciences C04.P1 Living on the Edge: Real-Time Processing and Decision Making at the Microscope P01.P1 'Nothing is Perfect': Order and Disorder in the Functional Responses of Molecular Materials P05.P3 Advances in Electron Microscopy for Defect and Crystallographic Structure Analysis P07.P1 High-Resolution Microscopy and Microanalysis of Materials Subjected to Extreme Environments P09.P1 Spatiotemporal Optical Response Using Electron Spectroscopies for Nano-optics
12:00 PM – 12:30 PM	Student Poster Awards <i>Exhibit Hall - Poster Area Stage</i>
12:00 PM – 1:30 PM	Lunch Break
1:30 PM – 3:00 PM	Symposia & Sessions A08.6 Microscopy and Microanalysis for Real World Problem Solving C01.5 Transmission Electron Microscopy for Beam-Sensitive Materials C02.2 Atomic-Scale Hyperspectral Imaging for Materials Characterization C03.2 Preservation and Validation of Electron Microscopy Data Across the Biological and Physical Sciences C04.4 Living on the Edge: Real-Time Processing and Decision Making at the Microscope P01.1 'Nothing is Perfect': Order and Disorder in the Functional Responses of Molecular Materials P05.9 Advances in Electron Microscopy for Defect and Crystallographic Structure Analysis

Thursday, August 6 cont.

1:30 PM – 3:00 PM	Symposia & Sessions cont.
	P07.5 High-Resolution Microscopy and Microanalysis of Materials Subjected to Extreme Environments
	P09.3 Spatiotemporal Optical Response Using Electron Spectroscopies for Nano-optics
3:00 PM – 3:30 PM	Coffee Break
3:30 PM – 5:30 PM	Symposia & Sessions
	A08.7 Microscopy and Microanalysis for Real World Problem Solving
	C01.6 Transmission Electron Microscopy for Beam-Sensitive Materials
	C02.3 Atomic-Scale Hyperspectral Imaging for Materials Characterization
	P01.2 'Nothing is Perfect': Order and Disorder in the Functional Responses of Molecular Materials
	P05.10 Advances in Electron Microscopy for Defect and Crystallographic Structure Analysis
	P07.6 High-Resolution Microscopy and Microanalysis of Materials Subjected to Extreme Environments

ON THE FRONT COVER

BACKGROUND IMAGE:

Mouse brain. Cryosection of mouse brainstem showing Purkinje neurons. Irreversible loss of Purkinje cells is a hallmark of various neurological conditions, leading to significant impairments in coordination, balance, and speech. Fluorescence microscopy.

Image by Ksenia Longrin, University of Edinburgh, United Kingdom

LEFT TO RIGHT:

Arc. Electric arc between pencil lead and copper wire. The purple glow around the wire at the bottom is corona emission. The green color is due to ionized copper from the wire. The orange glow is probably from calcium in the pencil lead. Light microscopy.

Image by Marce Clemen, independent microscopist, Veron, Italy

Epson Salt. Recrystallization of magnesium sulfate, a compound with medical uses as a laxative and a soaking solution to relieve muscle and joint soreness. Polarized light microscopy.

Image by Albert Wang, Monta Vista High School, Cupertino, CA

Pine tree. Transverse section of a common pine stem showing the cork (red), the primary xylem and pith (green), and the phloem (blue). Fluorescence microscopy.

Image by Daniel Han, Diatoms Australia, Sydney, Australia