## Saturday, July 26

8:00 AM - 5:30 PM

**MSA Council** 

Salt Palace Convention Center

8:30 AM - 5:30 PM

**Pre-Meeting Congress** 

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

## Sunday, July 27

	Sund	day Short Courses	
8:30 AM – 5:00 PM	X10	EM Data Analysis with the HyperSpy Ecosystem	
	X11	Cryo-EM for Materials Sciences: Hardware, Applications and D	Data Acquisition
	X12	Focused Ion Beam Theory & Methods	
	X13	Machine Learning for Electron Microscopy: from Data Analysi	s to Active Experiments
	X14	From Obscure to Clear: A Dive into Tissue Clearing and Expan	nsion Microscopy
8:30 AM - 5:30 PM	Pre-Meeting Congress		
	X61	Transformative High-Resolution Cryo-Electron Microscop Organized by the 3D Electron Microscopy in Biological Sciences	
	X63	Management Training for Local Affiliated Society Leaders Organized by the MSA Local Affiliated Societies Focused Intere	•
	X64	Progress in Focused Ion Beam Technology and Practical and Beam-Matter Interactionsr Organized by the MSA Focused Ion Beam Focused Interest Group	•
6:30 PM - 8:30 PM	M&N	1 2025 Welcome Reception	Hyatt Regency, Salt Lake Ballroom
8:30 PM	Sym	posium Organizers' Reception	Offsite (by invitation only)

### Monday, July 28

7:15 AM - 8:15 AM	FIG FOM Meeting		
7:15 AM – 8:15 AM	Travel Awards Committee		
8:30 AM - 12:00 PM	Technologists' Forum Board		
8:30 AM - 12:00 PM	M&M 2025 Plenary Sessions	Ballroom, Salt Palace Convention Center	
	Opening Welcome		
	Plenary Talk #1:		
	Juan Carlos Idrobo, PhD Associate Professor, University of Washington, Materials So	cience and Engineering	
	Technicolor at the Nanoscale is Heating Up: How Monochromation and Liquid He/N <sub>2</sub> Cryogenic Holders are Revolutionizing STEM		
	MAS Awards Presentation MSA Awards Presentation		
	M&M Meeting Awards Presentation		
	Plenary Talk #2:		
	Bridget Carragher, PhD	atte de	
	Founding Technical Director, Chan Zuckerberg Imaging Ins Tools and Technologies for Cryo-EM and Cryo-ET	stitute	
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		

# Monday, July 28 (Cont.)

12:15 PM - 1:15 PM	MSA Int	cornational Committee	
	MSA International Committee		
12:15 PM – 1:15 PM	FIG: 3D EM in Biological Sciences		
12:15 PM – 1:15 PM	FIG: Atom Probe Ion Microscopy		
12:15 PM – 1:15 PM	FIG: EM in Liquids and Gases		
1:30 PM - 3:00 PM	P.M. Symposia & Sessions		
		Advances in Focused Ion Beam Instrumentation, Applications, and Techniques for Materials and Life Sciences	
	<b>A02.1</b> F	Frontiers of Electron Ptychography	
	<b>A06.1</b> S	Surface and Subsurface Microscopy and Microanalysis of Physical and Biological Specimens	
	<b>B01.1</b> 3	BD Structures: from Macromolecular Assemblies to Whole Cells (3DEM FIG)	
	B06.1	Microscopy in Cell and Molecular Biology across the Americas (CIASEM)	
	P01.1	Advanced Characterization of Nuclear Fuels and Materials	
		Characterization of Collective Excitations by Electron Microscopy with High Spatial, Energy, Momentum, and Temporal Resolution	
	P04.1 E	Energy Materials: Transport Pathways, Interfaces, & Durability for Performance	
	P05.1 A	Advances in Imaging and Spectroscopy Beyond Ambient Conditions	
	P10.1 II	nnovative In situ Imaging Techniques for Material Characterization, Synthesis, and Processing	
		Microscopy and Microanalysis of Interfaces and/or Interactions Among Organic and Inorganic Matter	
	<b>C07.1</b> T	Towards Functional Imaging of Materials: Advances and Insights from Phase Contrast Techniques	
	<b>X93</b> S	STEM Workshop	
3:00 PM - 5:00 PM	Monday	Poster Presentations Post-Deadline Posters will be presented on this day.	
3:00 PM - 5:00 PM	A01.P1 A	Poster Presentations  Post-Deadline Posters will be presented on this day.  Advances in Focused Ion Beam Instrumentation, Applications, and Techniques for Materials and Life Sciences	
3:00 PM - 5:00 PM	A01.P1 /	Advances in Focused Ion Beam Instrumentation, Applications, and Techniques for Materials	
3:00 PM - 5:00 PM	A01.P1 / 6	Advances in Focused Ion Beam Instrumentation, Applications, and Techniques for Materials and Life Sciences	
3:00 PM - 5:00 PM	A01.P1 A  A02.P1 F  A06.P1 S	Advances in Focused Ion Beam Instrumentation, Applications, and Techniques for Materials and Life Sciences Frontiers of Electron Ptychography	
3:00 PM - 5:00 PM	A01.P1 / a A02.P1 F A06.P1 S B06.P1 N	Advances in Focused Ion Beam Instrumentation, Applications, and Techniques for Materials and Life Sciences  Frontiers of Electron Ptychography  Surface and Subsurface Microscopy and Microanalysis of Physical and Biological Specimens	
3:00 PM - 5:00 PM	A01.P1 // 6 A02.P1 F A06.P1 S B06.P1 M P01.P1 // P03.P1 (	Advances in Focused Ion Beam Instrumentation, Applications, and Techniques for Materials and Life Sciences  Frontiers of Electron Ptychography  Surface and Subsurface Microscopy and Microanalysis of Physical and Biological Specimens  Microscopy in Cell and Molecular Biology across the Americas (CIASEM)	
3:00 PM - 5:00 PM	A01.P1 / 6 A02.P1 F A06.P1 S B06.P1 M P01.P1 / P03.P1 (	Advances in Focused Ion Beam Instrumentation, Applications, and Techniques for Materials and Life Sciences  Frontiers of Electron Ptychography  Surface and Subsurface Microscopy and Microanalysis of Physical and Biological Specimens  Microscopy in Cell and Molecular Biology across the Americas (CIASEM)  Advanced Characterization of Nuclear Fuels and Materials  Characterization of Collective Excitations by Electron Microscopy with High Spatial, Energy,	
3:00 PM - 5:00 PM	A01.P1 / 6 A02.P1 F A06.P1 S B06.P1 M P01.P1 / P P03.P1 C	Advances in Focused Ion Beam Instrumentation, Applications, and Techniques for Materials and Life Sciences  Frontiers of Electron Ptychography  Surface and Subsurface Microscopy and Microanalysis of Physical and Biological Specimens  Microscopy in Cell and Molecular Biology across the Americas (CIASEM)  Advanced Characterization of Nuclear Fuels and Materials  Characterization of Collective Excitations by Electron Microscopy with High Spatial, Energy,  Momentum, and Temporal Resolution	
3:00 PM - 5:00 PM	A01.P1 / 6 A02.P1 F A06.P1 S B06.P1 M P01.P1 / 6 P03.P1 C P04.P1 E P04.P2 E	Advances in Focused Ion Beam Instrumentation, Applications, and Techniques for Materials and Life Sciences  Frontiers of Electron Ptychography  Surface and Subsurface Microscopy and Microanalysis of Physical and Biological Specimens  Microscopy in Cell and Molecular Biology across the Americas (CIASEM)  Advanced Characterization of Nuclear Fuels and Materials  Characterization of Collective Excitations by Electron Microscopy with High Spatial, Energy,  Momentum, and Temporal Resolution  Energy Materials: Transport Pathways, Interfaces, & Durability for Performance	
3:00 PM - 5:00 PM	A01.P1 // 6 A02.P1 F A06.P1 S B06.P1 M P01.P1 // M P03.P1 C P04.P1 E P04.P2 E P05.P1 // C01.P1 M	Advances in Focused Ion Beam Instrumentation, Applications, and Techniques for Materials and Life Sciences  Frontiers of Electron Ptychography  Surface and Subsurface Microscopy and Microanalysis of Physical and Biological Specimens  Microscopy in Cell and Molecular Biology across the Americas (CIASEM)  Advanced Characterization of Nuclear Fuels and Materials  Characterization of Collective Excitations by Electron Microscopy with High Spatial, Energy,  Momentum, and Temporal Resolution  Energy Materials: Transport Pathways, Interfaces, & Durability for Performance  Energy Materials: Transport Pathways, Interfaces, & Durability for Performance	
3:00 PM - 5:00 PM	A01.P1 / 6 A02.P1 F A06.P1 S B06.P1 M P01.P1 / 6 P03.P1 G P04.P1 E P04.P2 E P05.P1 / 6 C01.P1 M	Advances in Focused Ion Beam Instrumentation, Applications, and Techniques for Materials and Life Sciences  Frontiers of Electron Ptychography  Surface and Subsurface Microscopy and Microanalysis of Physical and Biological Specimens  Microscopy in Cell and Molecular Biology across the Americas (CIASEM)  Advanced Characterization of Nuclear Fuels and Materials  Characterization of Collective Excitations by Electron Microscopy with High Spatial, Energy,  Momentum, and Temporal Resolution  Energy Materials: Transport Pathways, Interfaces, & Durability for Performance  Energy Materials: Transport Pathways, Interfaces, & Durability for Performance  Advances in Imaging and Spectroscopy Beyond Ambient Conditions  Microscopy and Microanalysis of Interfaces and/or Interactions Among Organic and	
3:00 PM - 5:00 PM	A01.P1 // 6 A02.P1 F A06.P1 N P01.P1 // P03.P1 C P04.P2 E P05.P1 // C01.P1 N C02.P1 I C07.P1 T	Advances in Focused Ion Beam Instrumentation, Applications, and Techniques for Materials and Life Sciences  Frontiers of Electron Ptychography  Surface and Subsurface Microscopy and Microanalysis of Physical and Biological Specimens  Microscopy in Cell and Molecular Biology across the Americas (CIASEM)  Advanced Characterization of Nuclear Fuels and Materials  Characterization of Collective Excitations by Electron Microscopy with High Spatial, Energy,  Momentum, and Temporal Resolution  Energy Materials: Transport Pathways, Interfaces, & Durability for Performance  Energy Materials: Transport Pathways, Interfaces, & Durability for Performance  Advances in Imaging and Spectroscopy Beyond Ambient Conditions  Microscopy and Microanalysis of Interfaces and/or Interactions Among Organic and  norganic Matter	
3:30 PM - 5:00 PM	A01.P1 // 6 A02.P1 F A06.P1 S B06.P1 M P01.P1 // M P03.P1 G P04.P1 E P04.P2 E P05.P1 // C01.P1 M C02.P1 L	Advances in Focused Ion Beam Instrumentation, Applications, and Techniques for Materials and Life Sciences  Frontiers of Electron Ptychography  Surface and Subsurface Microscopy and Microanalysis of Physical and Biological Specimens  Microscopy in Cell and Molecular Biology across the Americas (CIASEM)  Advanced Characterization of Nuclear Fuels and Materials  Characterization of Collective Excitations by Electron Microscopy with High Spatial, Energy,  Momentum, and Temporal Resolution  Energy Materials: Transport Pathways, Interfaces, & Durability for Performance  Energy Materials: Transport Pathways, Interfaces, & Durability for Performance  Advances in Imaging and Spectroscopy Beyond Ambient Conditions  Microscopy and Microanalysis of Interfaces and/or Interactions Among Organic and norganic Matter  Lens on Diversity: Empowering Engagement in the Microscopy Sciences  Towards Functional Imaging of Materials: Advances and Insights from Phase	
	A01.P1 / 6 A02.P1 F A06.P1 S B06.P1 M P01.P1 / 6 P03.P1 G P04.P2 E P05.P1 / 6 C01.P1 M C02.P1 I C07.P1 T	Advances in Focused Ion Beam Instrumentation, Applications, and Techniques for Materials and Life Sciences  Frontiers of Electron Ptychography  Surface and Subsurface Microscopy and Microanalysis of Physical and Biological Specimens  Microscopy in Cell and Molecular Biology across the Americas (CIASEM)  Advanced Characterization of Nuclear Fuels and Materials  Characterization of Collective Excitations by Electron Microscopy with High Spatial, Energy,  Momentum, and Temporal Resolution  Energy Materials: Transport Pathways, Interfaces, & Durability for Performance  Advances in Imaging and Spectroscopy Beyond Ambient Conditions  Microscopy and Microanalysis of Interfaces and/or Interactions Among Organic and  norganic Matter  Lens on Diversity: Empowering Engagement in the Microscopy Sciences  Towards Functional Imaging of Materials: Advances and Insights from Phase  Contrast Techniques	
3:30 PM - 5:00 PM	A01.P1 / 6 A02.P1 F A06.P1 S B06.P1 M P01.P1 / 6 P03.P1 C P04.P2 E P05.P1 / 6 C01.P1 M C02.P1 I C07.P1 T CMSA Electronic	Advances in Focused Ion Beam Instrumentation, Applications, and Techniques for Materials and Life Sciences  Frontiers of Electron Ptychography  Surface and Subsurface Microscopy and Microanalysis of Physical and Biological Specimens  Microscopy in Cell and Molecular Biology across the Americas (CIASEM)  Advanced Characterization of Nuclear Fuels and Materials  Characterization of Collective Excitations by Electron Microscopy with High Spatial, Energy, Momentum, and Temporal Resolution  Energy Materials: Transport Pathways, Interfaces, & Durability for Performance Energy Materials: Transport Pathways, Interfaces, & Durability for Performance  Advances in Imaging and Spectroscopy Beyond Ambient Conditions  Microscopy and Microanalysis of Interfaces and/or Interactions Among Organic and norganic Matter  Lens on Diversity: Empowering Engagement in the Microscopy Sciences  Towards Functional Imaging of Materials: Advances and Insights from Phase  Contrast Techniques  logists' Forum Business Meeting	
3:30 PM - 5:00 PM 4:30 PM - 6:00 PM	A01.P1 / 6 A02.P1 F A06.P1 S B06.P1 M P01.P1 / 6 P03.P1 C P04.P2 E P05.P1 / 6 C01.P1 M C02.P1 I C07.P1 T CMSA Electronic	Advances in Focused Ion Beam Instrumentation, Applications, and Techniques for Materials and Life Sciences  Frontiers of Electron Ptychography  Surface and Subsurface Microscopy and Microanalysis of Physical and Biological Specimens  Microscopy in Cell and Molecular Biology across the Americas (CIASEM)  Advanced Characterization of Nuclear Fuels and Materials  Characterization of Collective Excitations by Electron Microscopy with High Spatial, Energy,  Momentum, and Temporal Resolution  Energy Materials: Transport Pathways, Interfaces, & Durability for Performance  Energy Materials: Transport Pathways, Interfaces, & Durability for Performance  Advances in Imaging and Spectroscopy Beyond Ambient Conditions  Microscopy and Microanalysis of Interfaces and/or Interactions Among Organic and  norganic Matter  Lens on Diversity: Empowering Engagement in the Microscopy Sciences  Towards Functional Imaging of Materials: Advances and Insights from Phase  Contrast Techniques  logists' Forum Business Meeting  emental Microscopy  t Poster Awards	

## **Tuesday, July 29**

7:15 AM – 8:15 AM	MSA Local Affiliated Societies & MAS Affiliated Regional Societies		
7:15 AM – 8:15 AM	Microscopy Today Editorial Board		
7:15 AM – 8:15 AM	MSA Standards Committee		
7:15 AM – 8:15 AM	FIG: Low Temperature Electron Microscopy		
7:15 AM – 8:15 AM	MSA Standards Committee		
8:30 AM - 10:00 AM	A.M. Symposia & Sessions		
	A01.2 Advances in Focused Ion Beam Instrumentation, Applications, and Techniques for Materials and Life Sciences		
	A02.2 Frontiers of Electron Ptychography		
	A05.1 Latest Advances in Atom Probe Tomography		
	A06.2 Surface and Subsurface Microscopy and Microanalysis of Physical and Biological Specimens		
	A08.1 Next Generation Microanalysis Standards For EPMA and SEM-EDS Calibration		
	A09.1 Quantitative Electron Diffraction for Materials Analysis, From Transmission Electron Diffraction to EBSD and ECCI		
	B01.2 3D Structures: from Macromolecular Assemblies to Whole Cells (3DEM FIG)		
	B05.1 Development, Challenges and Biomedical Applications of Tissue Clearing, Expansion Microscopy and Volumetric Imaging		
	B06.2 Microscopy in Cell and Molecular Biology across the Americas (CIASEM)		
	B08.2 Advances in Cryo-EM technology		
	P01.2 Advanced Characterization of Nuclear Fuels and Materials		
	P03.2 Characterization of Collective Excitations by Electron Microscopy with High Spatial, Energy, Momentum, and Temporal Resolution		
	P04.2 Energy Materials: Transport Pathways, Interfaces, & Durability for Performance		
	P05.2 Advances in Imaging and Spectroscopy Beyond Ambient Conditions		
	P09.1 Unconventional Electron Probes		
	P10.2 Innovative <i>In situ</i> Imaging Techniques for Material Characterization, Synthesis, and Processing		
	C01.2 Microscopy and Microanalysis of Interfaces and/or Interactions Among Organic and Inorganic Matter		
	C03.1 Microscopy and Microanalysis in Industry		
	<b>C07.2</b> Towards Functional Imaging of Materials: Advances and Insights from Phase Contrast Techniques		
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	M&M 2026 Symposium Organizers' Planning Meeting		
10:30 AM - 12:00 PM	A.M. Symposia & Sessions		
	A01.3 Advances in Focused Ion Beam Instrumentation, Applications, and Techniques for Materials and Life Sciences		
-	A02.3 Frontiers of Electron Ptychography		
	A04.1 Contributions of Analytical Electron Microscopy to Understanding Microstructural Evolution in Materials: James Bentley Memorial Symposium		
	A05.2 Latest Advances in Atom Probe Tomography		
	A06.3 Surface and Subsurface Microscopy and Microanalysis of Physical and Biological Specimens		
	A08.2 Next Generation Microanalysis Standards For EPMA and SEM-EDS Calibration		
	A09.2 Quantitative Electron Diffraction for Materials Analysis, From Transmission Electron Diffraction to EBSD and ECCI		
	B01.3 3D Structures: from Macromolecular Assemblies to Whole Cells (3DEM FIG)		
	B05.2 Development, Challenges and Biomedical Applications of Tissue Clearing, Expansion Microscopy and Volumetric Imaging		

## Tuesday, July 29 (Cont.)

	, cary 20 (cont.)
10:30 AM - 12:00 PM	A.M. Symposia & Sessions cont.
	P01.3 Advanced Characterization of Nuclear Fuels and Materials
	P03.3 Characterization of Collective Excitations by Electron Microscopy with High Spatial, Energy, Momentum, and Temporal Resolution
	P04.3 Energy Materials: Transport Pathways, Interfaces, & Durability for Performance
	P05.3 Advances in Imaging and Spectroscopy Beyond Ambient Conditions
	<b>P08.1</b> Advanced Imaging, Diffraction, and Spectroscopy of Structurally or Chemically Disordered Materials
	P09.2 Unconventional Electron Probes
	P10.3 Innovative <i>In situ</i> Imaging Techniques for Material Characterization, Synthesis, and Processing
	C01.3 Microscopy and Microanalysis of Interfaces and/or Interactions Among Organic and Inorganic Matter
	C03.2 Microscopy and Microanalysis in Industry
	C07.3 Towards Functional Imaging of Materials: Advances and Insights from Phase Contrast Techniques
12:00 РМ – 1:30 РМ	Lunch Break in the Exhibit Hall
12:15 PM - 1:00 PM	MSA Distinguished Scientist Awardee Lecture
1:30 PM – 3:00 PM	P.M. Symposia & Sessions
	A01.4 Advances in Focused Ion Beam Instrumentation, Applications, and Techniques for Materials and Life Sciences
	A02.4 Frontiers of Electron Ptychography
	A04.2 Contributions of Analytical Electron Microscopy to Understanding Microstructural Evolution in Materials: James Bentley Memorial Symposium
	A05.3 Latest Advances in Atom Probe Tomography
	A06.4 Surface and Subsurface Microscopy and Microanalysis of Physical and Biological Specimens
	A09.3 Quantitative Electron Diffraction for Materials Analysis, From Transmission Electron Diffraction to EBSD and ECCI
	B01.4 3D Structures: from Macromolecular Assemblies to Whole Cells (3DEM FIG)
	B07.1 Cryo-Electron Tomography: Progress and Potential
	P01.4 Advanced Characterization of Nuclear Fuels and Materials
	P03.4 Characterization of Collective Excitations by Electron Microscopy with High Spatial, Energy, Momentum, and Temporal Resolution
	P04.4 Energy Materials: Transport Pathways, Interfaces, & Durability for Performance
	P05.4 Advances in Imaging and Spectroscopy Beyond Ambient Conditions
	P08.2 Advanced Imaging, Diffraction, and Spectroscopy of Structurally or Chemically Disordered Materials
	P09.3 Unconventional Electron Probes
	P10.4 Innovative <i>In situ</i> Imaging Techniques for Material Characterization, Synthesis, and Processing
	C01.4 Microscopy and Microanalysis of Interfaces and/or Interactions Among Organic and Inorganic Matter
	C03.3 Microscopy and Microanalysis in Industry
	C06.1 Advancements in Generative Artificial Intelligence and Automation for Electron Microscopy
	C07.4 Towards Functional Imaging of Materials: Advances and Insights from Phase Contrast Techniques
3:00 PM - 5:00 PM	Tuesday Poster Presentations Exhibit Hall
	A04.P1 Contributions of Analytical Electron Microscopy to Understanding Microstructural Evolution in Materials: James Bentley Memorial Symposium
	A05.P1 Latest Advances in Atom Probe Tomography
	A09.P1 Quantitative Electron Diffraction for Materials Analysis, From Transmission Electron Diffraction to EBSD and ECCI

# Tuesday, July 29 (Cont.)

3:00 PM - 5:00 PM	Tuesday Poster Presentations (Cont.)	Exhibit Hall
	B05.P1 Development, Challenges and Biomedical Applications of Microscopy and Volumetric Imaging	Tissue Clearing, Expansion
	B08.P1 Advances in Cryo-EM Technology	
	P04.P4 Energy Materials: Transport Pathways, Interfaces, & Durab P04.P5	ility for Performance
	P08.P1 Advanced Imaging, Diffraction, and Spectroscopy of Struct Disordered Materials P08.P2	urally or Chemically
	P09.P1 Unconventional Electron Probes	
	P10.P1 Innovative In situ Imaging Techniques for Material Characte	erization, Synthesis, and Processing
	CO3.P1 Microscopy and Microanalysis in Industry	
3:30 PM - 4:30 PM	FIG Business Meeting	
5:00 PM - 5:30 PM	Student Poster Awards	Exhibit Hall Poster Stage
5:45 PM - 6:45 PM	Vendor Tutorials (Sign up at exhibitors' booths)	
6:00 PM - 7:30 PM	PostDoc & Early Career Development Event	
6:30 PM	Presidents' Reception (Invitation Only)	Offsite

Wednes	day, July 30		
7:15 AM – 8:15 AM	MaM Editorial Board		
7:15 AM – 8:15 AM	MSA Certification Board		
8:30 AM – 10:00 AM	A.M. Symposia & Sessions		
0.00741	A02.5 Frontiers of Electron Ptychography		
	When 4D-STEM Meets More Dimensions: Deepening Materials Insights with Efficient Experimental Design and Smart Computational Microscopy		
	A04.3 Contributions of Analytical Electron Microscopy to Understanding Microstructural Evolutio Materials: James Bentley Memorial Symposium	n in	
	A06.5 Surface and Subsurface Microscopy and Microanalysis of Physical and Biological Specime	ns	
	A07.1 Advances in SEM Instrumentation, Application and Techniques		
	Quantitative Electron Diffraction for Materials Analysis, From Transmission Electron Diffracto EBSD and ECCI	tion	
	3D Structures: from Macromolecular Assemblies to Whole Cells (3DEM FIG)		
	Biological Soft X-ray Tomography		
	804.1 Emerging Advances in Light Microscopy of Fixed and Live Samples Below the Diffraction I	Limit	
	307.2 Cryo-electron tomography: Progress and Potential		
	203.5 Characterization of Collective Excitations by Electron Microscopy with High Spatial, Energy Momentum, and Temporal Resolutions	у,	
	204.5 Energy Materials: Transport Pathways, Interfaces, & Durability for Performance		
	205.5 Advances in Imaging and Spectroscopy Beyond Ambient Conditions		
	P06.1 Multimodal Data Acquisition and Analysis of Materials Under Real-Word Conditions Usin Advanced Electron Microscopy	ıg	
	P08.3 Advanced Imaging, Diffraction, and Spectroscopy of Structurally or Chemically Disordered Materials		
	210.5 Innovative In situ Imaging Techniques for Material Characterization, Synthesis, and Proces	ssing	
	The Relevance and Advancement of Microscopy across the Americas (CIASEM)		
	Advancements in Generative Artificial Intelligence and Automation for Electron Microscopy	У	
	CO8.1 Vendor Symposia		
	TF X30 Team of One		

# Week at-a-glance

# Wednesday, July 30 (Cont.)

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	A.M. Symposia & Sessions		
10.00 AM 12.00 FM		Meets More Dimensions: Deepening Materials Insights with Efficient esign and Smart Computational Microscopy	
		f Analytical Electron Microscopy to Understanding Microstructural Evolution in s Bentley Memorial Symposium	
	A06.6 Surface and Su	osurface Microscopy and Microanalysis of Physical and Biological Specimens	
	A07.2 Advances in SE	M Instrumentation, Application and Techniques	
	A09.5 Quantitative Ele to EBSD and EC	ctron Diffraction for Materials Analysis, From Transmission Electron Diffraction	
		yogenic Transmission Electron Microscopy and Spectroscopy for Energy and ials and Technologies	
	B02.2 Biological Soft >	C-ray Tomography	
	B04.2 Emerging Advar	nces in Light Microscopy of Fixed and Live Samples Below the Diffraction Lim	
	B08.1 Advances in Cry	o-EM technology	
	P02.1 Electron Micros	copy for Ferroic Materials: From Atomic-scale Imaging to <i>In situ</i> Control	
	P04.6 Energy Material	s: Transport Pathways, Interfaces, & Durability for Performance	
	P05.6 Advances in Im-	aging and Spectroscopy Beyond Ambient Conditions	
	P06.2 Multimodal Data Advanced Elect	a Acquisition and Analysis of Materials Under Real-Word Conditions Using ron Microscopy	
	P07.1 High-Resolution	Microscopy and Microanalysis of Materials subjected to Extreme Environment	
	P08.4 Advanced Imag Disordered Mat	ing, Diffraction, and Spectroscopy of Structurally or Chemically erials	
	P10.6 Innovative In site	u Imaging Techniques for Material Characterization, Synthesis, and Processing	
	C05.2 The Relevance	and Advancement of Microscopy across the Americas (CIASEM)	
	C06.3 Advancements	in Generative Artificial Intelligence and Automation for Electron Microscopy	
	C08.2 Vendor Sympos	ia	
	TF X31 Working with In	nage Data	
12:00 PM - 1:30 PM	Lunch Break in the Ex	hibit Hall	
12:15 PM – 1:15 PM	MSA Members' Meeting		
1:30 PM – 3:00 PM	P.M. Symposia & Sess	sions	
		Meets More Dimensions: Deepening Materials Insights with Efficient esign and Smart Computational Microscopy	
		Analytical Electron Microscopy to Understanding Microstructural Evolution in s Bentley Memorial Symposium	
	A07.3 Advances in SE	M Instrumentation, Application and Techniques	
	A09.6 Quantitative Ele	ctron Diffraction	
		rogenic Transmission Electron Microscopy and Spectroscopy for Energy and ials and Technologies	
	<b>B02.3</b> Biological Soft X	-ray Tomography	
	B04.3 Emerging Advar	nces in Light Microscopy of Fixed and Live Samples Below the Diffraction Lim	
	B08.2 Advances in Cry	o-EM Technology	
	P02.2 Electron Micros	copy for Ferroic Materials: From Atomic-scale Imaging to <i>In situ</i> Control	
	P04.7 Energy Material	s: Transport Pathways, Interfaces, & Durability for Performance	
	P05.7 Advances in Ima	aging and Spectroscopy Beyond Ambient Conditions	

# Wednesday, July 30 (Cont.)

1:30 PM - 3:00 PM	P.M. Symposia & Sessions (Cont.)
	P07.2 High-Resolution Microscopy and Microanalysis of Materials subjected to Extreme Environments
	P08.5 Advanced Imaging, Diffraction, and Spectroscopy of Structurally or Chemically Disordered Materials
	P10.7 Innovative <i>In situ</i> Imaging Techniques for Material Characterization, Synthesis, and Processing
	C05.3 The Relevance and Advancement of Microscopy across the Americas (CIASEM)
	C06.4 Advancements in Generative Artificial Intelligence and Automation for Electron Microscopy
	C08.3 Vendor Symposia
	TF X32 Mental Health in Microscopy
3:00 PM - 5:00 PM	Wednesday Poster Presentations Exhibit Hall
	A07.P1 Advances in SEM Instrumentation, Application and Techniques
	B01.P1 3D Structures: from Macromolecular Assemblies to Whole Cells (3DEM FIG)
	B02.P1 Biological Soft X-ray Tomography
	B07.P1 Cryo-electron tomography: Progress and Potential
	P02.P1 Electron Microscopy for Ferroic Materials: From Atomic-scale Imaging to In situ Control
	P06.P1 Multimodal Data Acquisition and Analysis of Materials Under Real-Word Conditions Using Advanced Electron Microscop7
	P07.P1 High-Resolution Microscopy and Microanalysis of Materials subjected to Extreme Environments
	P08.P3 Advanced Imaging, Diffraction, and Spectroscopy of Structurally or Chemically Disordered Materials
	P10.P1 Innovative In situ Imaging Techniques for Material Characterization, Synthesis, and Processing
	C05.P1 The Relevance and Advancement of Microscopy across the Americas (CIASEM)
	C06.P1 Advancements in Generative Artificial Intelligence and Automation for Electron Microscopy
5:00 PM - 5:30 PM	Student Poster Awards Exhibit Hall - Poster Area Stage
5:30 PM - 6:30 PM	MAS Business Meeting
5:30 PM - 6:30 PM	Diversity and Inclusion Mixer
5:45 PM - 6:45 PM	Vendor Tutorials (Sign up at exhibitors' booths)
6:30 PM - 8:00 PM	CIASEM General Assembly
6:30 PM - 8:30 PM	MAS Members' Social (See MAS Booth for Details—Offsite)
8:30 PM	CIASEM Social Reception (Offsite)
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## **Thursday, July 31**

8:30 AM - 9:30 AM	M&M Sustaining Members Meeting		
8:30 AM - 10:00 AM	A.M. Symposia & Sessions		
	A03.4 When 4D-STEM Meets More Dimensions: Deepening Materials Insights with Efficient Experimental Design and Smart Computational Microscopy		
	A07.4 Advances in SEM Instrumentation, Application and Techniques		
	A09.7 Quantitative Electron Diffraction for Materials Analysis, From Transmission Electron Diffraction to EBSD and ECCI		
	A10.3 Advances in Cryogenic Transmission Electron Microscopy and Spectroscopy for Energy and Quantum Materials and Technologies		
	BO3.1 Application of Microscopy Techniques for Research and Diagnosis of Diseases in Humans, Plants and Animals		

# Thursday, July 31 (Cont.)

8:30 AM - 10:00 AM	A.M. Symposia & Sessions		
	B08.3 Advances in Cryo-EM technology		
	P02.3 Electron Microscopy for Ferroic Materials: From Atomic-scale Imaging to <i>In situ</i> Control		
	P04.8 Energy Materials: Transport Pathways, Interfaces, & Durability for Performance		
	P05.8 Advances in Imaging and Spectroscopy Beyond Ambient Conditions		
	P06.4 Multimodal Data Acquisition and Analysis of Materials Under Real-Word Conditions Using Advanced Electron Microscopy		
	P07.3 High-Resolution Microscopy and Microanalysis of Materials Subjected to Extreme Environments		
	P08.6 Advanced Imaging, Diffraction, and Spectroscopy of Structurally or Chemically Disordered Materials		
	P10.8 Innovative <i>In situ</i> Imaging Techniques for Material Characterization, Synthesis, and Processing		
	C02.1 Lens on Diversity: Empowering Engagement in the Microscopy Sciences		
	C06.5 Advancements in Generative Artificial Intelligence and Automation for Electron Microscopy		
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	Thursday Poster Presentations Post-Deadline Posters will be presented on this day		
	A03.P1 When 4D-STEM Meets More Dimensions: Deepening Materials Insights with Efficient Experimental Design and Smart Computational Microscopy		
	A07.P2 Surface and Subsurface Microscopy and Microanalysis of Physical and Biological Specimens		
	A08.P1 Next Generation Microanalysis Standards For EPMA and SEM-EDS Calibration		
	A10.P1 Advances in Cryogenic Transmission Electron Microscopy and Spectroscopy for Energy and Quantum Materials and Technologies		
	BO3.P1 Application of Microscopy Techniques for Research and Diagnosis of Diseases in Humans, Plants and Animals		
	P10.P2 Innovative In situ Imaging Techniques for Material Characterization, Synthesis, and Processing		
	C05.P2 The Relevance and Advancement of Microscopy across the Americas (CIASEM)		
	C06.P2 Advancements in Generative Artificial Intelligence and Automation for Electron Microscopy		
12:00 PM	Student Poster Awards Exhibit Hall - Poster Area Stage		
12:15 PM - 1:15 PM	FIG: Microanalytical Standards		
12:15 PM - 1:15 PM	FIG: Aberration Corrected EM (ACEM)		
12:00 РМ – 1:30 РМ	Lunch Break		
1:30 РМ – 3:00 РМ	P.M. Symposia & Sessions		
	A03.5 When 4D-STEM Meets More Dimensions: Deepening Materials Insights with Efficient Experimental Design and Smart Computational Microscopy		
	A07.5 Advances in SEM Instrumentation, Application and Techniques		
	A09.8 Quantitative Electron Diffraction for Materials Analysis, From Transmission Electron Diffraction to EBSD and ECCI		
	A10.4 Advances in Cryogenic Transmission Electron Microscopy and Spectroscopy for Energy and Quantum Materials and Technologies		
	B03.2 Application of Microscopy Techniques for Research and Diagnosis of Diseases in Humans, Plants and Animals		

## Thursday, July 31 (Cont.)

400-11 000-11	P.M. St	ymposia & Sessions
1:30 PM – 3:00 PM	P02.4	Electron Microscopy for Ferroic Materials: From Atomic-scale Imaging to In situ Control
	P06.5	Multimodal Data Acquisition and Analysis of Materials Under Real-Word Conditions Using Advanced Electron Microscopy
	P07.4	High-Resolution Microscopy and Microanalysis of Materials Subjected to Extreme Environments
	P08.7	Advanced Imaging, Diffraction, and Spectroscopy of Structurally or Chemically Disordered Materials
	P10.9	Innovative In situ Imaging Techniques for Material Characterization, Synthesis, and Processing
	C06.6	Advancements in Generative Artificial Intelligence and Automation for Electron Microscopy
3:00 PM - 3:30 PM	Coffee	Break
3:30 PM - 5:30 PM	Late P.	M. Symposia & Sessions
3.30 FIVI 3.30 FIVI	A03.6	When 4D-STEM Meets More Dimensions: Deepening Materials Insights with Efficient Experimental Design and Smart Computational Microscopy
	A10.5	Advances in Cryogenic Transmission Electron Microscopy and Spectroscopy for Energy and Quantum Materials and Technologies
	воз.з	Application of Microscopy Techniques for Research and Diagnosis of Diseases in Humans, Plants and Animals
	B08.5	Advances in Cryo-EM Technology
	P02.5	Electron Microscopy for Ferroic Materials: From Atomic-scale Imaging to in-situ Control
	P06.6	Multimodal Data Acquisition and Analysis of Materials Under Real-Word Conditions Using Advanced Electron Microscopy
	P07.5	High-Resolution Microscopy and Microanalysis of Materials subjected to Extreme Environments
	P08.8	Advanced Imaging, Diffraction, and Spectroscopy of Structurally or Chemically Disordered Materials
	C06.7	Advancements in Generative Artificial Intelligence and Automation for Electron Microscopy