M&M 2025 - Week at a Glance

Saturday, July 26

MSA Council — *8:00 AM – 5:30 PM* — *Salt Palace Convention Center*

Pre-Meeting Congress **8:30 AM – 5:30 PM**

X60 - Annual Pre-Meeting Congress for Students, Post-Docs, and Early-Career Professionals in Microscopy & Microanalysis

(Organized by the MSA Student Council)

Sunday, July 27

Sunday Short Courses **8:30 AM – 5:00 PM**

X-10 EM Data Analysis with the HyperSpy Ecosystem
X-11 Cryo-EM for Materials Sciences: Hardware, Applications and Data Acquisition
X-12 Focused Ion Beam Theory & Methods
X-13 Machine Learning for Electron Microscopy: from Data Analysis to Active Experiments
X-14 From Obscure to Clear: A Dive into Tissue Clearing and Expansion Microscopy

Pre-Meeting Congresses **8:30 AM – 5:30 PM**

X61 - Transformative High-Resolution Cryo-Electron Microscopy
(Organized by the 3D Electron Microscopy in Biological Sciences (3DEM) Focused Interest Group)
X62 – Industrial Applications of Advanced Imaging and Deep Learning-based Image Analysis
(Organized by the MSA Pharmaceuticals Focused Interest Group)
X63 – Management Training for Local Affiliated Society Leadership
(Organized by the MSA Local Affiliated Societies Focused Interest Group)
X64 – Progress in Focused Ion Beam Technology and Practical Aspects for Cryo, Multi Modal, and Beam-Matter Interactions
(Organized by the MSA Focused Ion Beam Focused Interest Group)

M&M 2025 Welcome Reception — ***6:30 PM*** — ***Hyatt Regency, Salt Lake Ballroom***

Symposium Organizers' Reception (by invitation only) — *8:30 PM* — *Offsite*

Monday, July 28

Technologists' Forum Board *7:15 AM – 8:15 AM*
M&M Meeting Awards Committee *7:15 AM – 8:15 AM*

M&M 2025 Plenary Session **8:30 AM – 12:00 PM** ***Ballroom, Salt Palace Convention Center***
Opening Welcome

Plenary Talk #1:
Juan Carlos Idrobo, PhD
Associate Professor, University of Washington, Materials Science and Engineering

Technicolor at the Nanoscale is Heating Up: How Monochromation and Liquid He/N_2 Cryogenic Holders are Revolutionizing STEM

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

Plenary Talk #2:
Bridget Carragher, PhD
Founding Technical Director, Chan Zuckerberg Imaging Institute

Tools and Technologies for Cryo-EM and Cryo-ET

Lunch Break	**12:00 PM – 1:30 PM**	**Exhibit Hall**
Exhibit Hall Open	**12:00 PM – 5:30 PM**	**Exhibit Hall**

MAS Meal with a Mentor	*12:15 PM – 1:15 PM*
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	*12:15 PM – 1:15 PM*

P.M. Symposia & Sessions **1:30 PM – 3:00 PM**
A01.1 – Advances in Focused Ion Beam Instrumentation, Applications, and Techniques for Materials and Life Sciences
A02.1 – Frontiers of Electron Ptychography
A06.1 – Surface and Subsurface Microscopy and Microanalysis of Physical and Biological Specimens
B01.1 – 3D 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
P03.1 – Characterization of Collective Excitations by Electron Microscopy with High Spatial, Energy, Momentum, and Temporal Resolution
P04.1 – Energy Materials: Transport Pathways, Interfaces, & Durability for Performance
P05.1 – Advances in Imaging and Spectroscopy Beyond Ambient Conditions
P10.1 – Innovative in-situ Imaging Techniques for Material Characterization, Synthesis, and Processing
C01.1 – Microscopy and Microanalysis of Interfaces and/or Interactions Among Organic and Inorganic Matter
C07.1 – Towards Functional Imaging of Materials: Advances and Insights from Phase Contrast Techniques
X93 – STEM Workshop

Monday Poster Presentations **3:00 PM – 5:00 PM** **Exhibit Hall**
A01.P1 – Advances in Focused Ion Beam Instrumentation, Applications, and Techniques for Materials and Life Sciences
A02.P1 – Frontiers of Electron Ptychography
A06.P1 – Surface and Subsurface Microscopy and Microanalysis of Physical and Biological Specimens
B06.P1 – Microscopy in Cell and Molecular Biology across the Americas (CIASEM)
P01.P1 – Advanced Characterization of Nuclear Fuels and Materials
P03.P1 – Characterization of Collective Excitations by Electron Microscopy with High Spatial, Energy, Momentum, and Temporal Resolution
P04.P1 – Energy Materials: Transport Pathways, Interfaces, & Durability for Performance
P05.P1 – Advances in Imaging and Spectroscopy Beyond Ambient Conditions

C01.P1 – Microscopy and Microanalysis of Interfaces and/or Interactions Among Organic and Inorganic Matter
C02.P1 – Lens on Diversity: Empowering Engagement in the Microscopy Sciences
C07.P1 – Towards Functional Imaging of Materials: Advances and Insights from Phase Contrast Techniques

Post-Deadline Posters will be presented on this day

Technologists' Forum Business Meeting	*3:30 PM – 5:00 PM*	
MSA Elemental Microscopy	*4:30 PM – 6:00 PM*	
Student Poster Awards	***5:00 PM – 5:30 PM***	***Exhibit Hall Poster Stage***
Student Mixer	*5:30 PM – 7:00 PM*	
Vendor Tutorials	*5:45 PM – 6:45 PM*	*Exhibit Hall*
(Sign up at individual exhibitors' booths)		

Tuesday, July 29

MSA Local Affiliated Societies & MAS Affiliated Regional Societies	*7:15 AM – 8:15 AM*
Microscopy Today *Editorial Board Meeting*	*7:15 AM – 8:15 AM*
MSA Standards Committee Meeting	*7:15 AM – 8:15 AM*
FIG: Low Temperature Electron Microscopy	*7:15 AM – 8:15 AM*

A.M. Symposia & Sessions **8:30 AM – 10:00 AM**
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 – FIG Standards: Next Generation Microanalytical Standards for EPMA and SEM-EDS
A09.1 – Quantitative Electron Diffraction
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)
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 in-situ 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
C07.2 – Towards Functional Imaging of Materials: Advances and Insights from Phase Contrast Techniques
X93 – STEM Workshop

Exhibit Hall Open	**10:00 AM – 5:30 PM**	Exhibit Hall
Coffee Break	10:00 AM – 10:30 AM	Exhibit Hall

M&M 2026 –Symposium Organizers' Planning Meeting *10:00 AM – 12:00 PM*

A.M. Symposia & Sessions (Cont'd.) **10:30 AM – 12:00 PM**

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 AEM to Understanding Microstructural Evolution in Materials
A05.2 – Latest Advances in Atom Probe Tomography
A06.3 – Surface and Subsurface Microscopy and Microanalysis of Physical and Biological Specimens
A08.2 – FIG Standards: Next Generation Microanalytical Standards for EPMA and SEM-EDS
A09.2 – Quantitative Electron Diffraction
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
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
P08.1 – Advanced Imaging, Diffraction, and Spectroscopy of Structurally or Chemically Disordered Materials
P09.2 – Unconventional Electron Probes
P10.3 – Innovative in-situ 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

Lunch Break **12:00 PM – 1:30 PM**

MSA Distinguished Scientist Awardee Lecture ***12:15 PM – 1:00 PM***

P.M. Symposia & Sessions **1:30 PM – 3:00 PM**
A01.4 – Contributions of AEM to Understanding Microstructural Evolution in Materials
A02.4 – Frontiers of Electron Ptychography
A04.2 – Contributions of AEM to Understanding Microstructural Evolution in Materials
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
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 in-situ 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

Tuesday Poster Presentations **3:00 PM – 5:00 PM** **Exhibit Hall**

A04.P1 – Contributions of AEM to Understanding Microstructural Evolution in Materials
A05.P1 – Latest Advances in Atom Probe Tomography
A09.P1 – Quantitative Electron Diffraction
B05.P1 – Development, Challenges and Biomedical Applications of Tissue Clearing, Expansion Microscopy and Volumetric Imaging
B08.P1 – Advances in Cryo-EM technology
P04.P2 – Energy Materials: Transport Pathways, Interfaces, & Durability for Performance
P08.P1 – Advanced Imaging, Diffraction, and Spectroscopy of Structurally or Chemically Disordered Materials
P09.P1 – Unconventional Electron Probes
P10.P1 – Innovative in-situ Imaging Techniques for Material Characterization, Synthesis, and Processing
C03.P1 – Microscopy and Microanalysis in Industry

FIG Business Meeting	*3:30 PM – 4:30 PM*	
Student Poster Awards	***5:00 PM – 5:30 PM***	***Exhibit Hall Poster Stage***
PostDoc & Early Career Development Event		*6:00 PM – 7:30 PM*
Vendor Tutorials (Sign up at exhibitors' booths)		*5:45 PM – 6:45 PM*
Presidents' Reception	*By Invitation Only*	*Offsite*

Wednesday, July 30

MSA Certification Board	*7:15 AM – 8:15 AM*
MaM Editorial Board	*7:15 AM – 8:15 AM*

A.M. Symposia & Sessions **8:30 AM – 10:00 AM**
A02.5 – Frontiers of Electron Ptychography
A03.1 – When 4D-STEM Meets More Dimensions: Deepening Materials Insights with Efficient Experimental Design and Smart Computational Microscopy
A04.3 – Contributions of AEM to Understanding Microstructural Evolution in Materials
A06.5 – Surface and Subsurface Microscopy and Microanalysis of Physical and Biological Specimens
A07.1 – Advances in SEM Instrumentation, Application and Techniques
A09.4 – Quantitative Electron Diffraction
B01.5 – 3D Structures: from Macromolecular Assemblies to Whole Cells (3DEM FIG)
B02.1 – Biological Soft X-ray Tomography
B04.1 – Emerging Advances in Light Microscopy of Fixed and Live Samples Below the Diffraction Limit
B07.2 – Cryo-electron tomography: Progress and Potential
P04.5 – Energy Materials: Transport Pathways, Interfaces, & Durability for Performance
P05.5 – Advances in Imaging and Spectroscopy Beyond Ambient Conditions
P06.1 – Multimodal Data Acquisition and Analysis of Materials Under Real-Word Conditions Using Advanced Electron Microscope
P08.3 – Advanced Imaging, Diffraction, and Spectroscopy of Structurally or Chemically Disordered Materials
P10.5 – Innovative in-situ Imaging Techniques for Material Characterization, Synthesis, and Processing
C05.1 – The Relevance and Advancement of Microscopy across the Americas (CIASEM)
C06.2 – Advancements in Generative Artificial Intelligence and Automation for Electron Microscopy
C08.1 – Vendor Symposia
TF | X30 – Team of One

Exhibit Hall Open	**10:00 AM – 5:30 PM**	**Exhibit Hall**
Coffee Break	10:00 AM – 10:30 AM	

A.M. Symposia & Sessions (Cont'd.) **10:30 AM – 12:00 PM**

A03.2 – When 4D-STEM Meets More Dimensions: Deepening Materials Insights with Efficient Experimental Design and Smart Computational Microscopy
A04.4 – Contributions of AEM to Understanding Microstructural Evolution in Materials
A06.6 – Surface and Subsurface Microscopy and Microanalysis of Physical and Biological Specimens
A07.2 – Advances in SEM Instrumentation, Application and Techniques
A09.5 – Quantitative Electron Diffraction
A10.1 – Advances in Cryogenic Transmission Electron Microscopy and Spectroscopy for Energy and Quantum Materials and Technologies
B02.2 – Biological Soft X-ray Tomography
B04.2 – Emerging Advances in Light Microscopy of Fixed and Live Samples Below the Diffraction Limit
B08.1 – Advances in Cryo-EM technology
P02.1 – Electron Microscopy for Ferroic Materials: From Atomic-scale Imaging to in-situ Control
P04.6 – Energy Materials: Transport Pathways, Interfaces, & Durability for Performance
P05.6 – Advances in Imaging and Spectroscopy Beyond Ambient Conditions
P06.2 – Multimodal Data Acquisition and Analysis of Materials Under Real-Word Conditions Using Advanced Electron Microscope
P07.1 – High-Resolution Microscopy and Microanalysis of Materials subjected to Extreme Environments
P08.4 – Advanced Imaging, Diffraction, and Spectroscopy of Structurally or Chemically Disordered Materials
P10.6 – Innovative in-situ 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 Symposia
TF | X31 – Working with Image Data

Lunch Break **12:00 PM – 1:30 PM**

MSA Members' Meeting *12:15 PM – 1:15 PM*

P.M. Sessions & Symposia **1:30 PM – 3:00 PM**

A03.3 – When 4D-STEM Meets More Dimensions: Deepening Materials Insights with Efficient Experimental Design and Smart Computational Microscopy
A04.5 – Contributions of AEM to Understanding Microstructural Evolution in Materials
A07.3 – Advances in SEM Instrumentation, Application and Techniques
A09.6 – Quantitative Electron Diffraction
A10.2 – Advances in Cryogenic Transmission Electron Microscopy and Spectroscopy for Energy and Quantum Materials and Technologies
B02.3 – Biological Soft X-ray Tomography
B04.3 – Emerging Advances in Light Microscopy of Fixed and Live Samples Below the Diffraction Limit
B08.2 – Advances in Cryo-EM Technology
P02.2 – Electron Microscopy for Ferroic Materials: From Atomic-scale Imaging to in-situ Control
P04.7 – Energy Materials: Transport Pathways, Interfaces, & Durability for Performance
P05.7 – Advances in Imaging and Spectroscopy Beyond Ambient Conditions
P06.3 – Multimodal Data Acquisition and Analysis of Materials Under Real-Word Conditions Using Advanced Electron Microscope
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 in-situ 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

Wednesday Poster Presentations **3:00 PM – 5:00 PM** **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 Microscope
P07.P1 – High-Resolution Microscopy and Microanalysis of Materials subjected to Extreme Environments
P08.P2 – Advanced Imaging, Diffraction, and Spectroscopy of Structurally or Chemically Disordered Materials
P09.P1 – Unconventional Electron Probes
P10.P2 – 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

Student Poster Awards ***5:00 PM*** ***Exhibit Hall Poster Stage***
Diversity & Inclusion Mixer *5:30 PM – 6:30 PM*
MAS Business Meeting *5:30 PM – 6:30 PM*
MAS Members' Social *See MAS Booth for Details Offsite*
Vendor Tutorials (Sign up at exhibitors' booths) *5:45 PM – 6:45 PM*

Thursday, July 31

M&M Sustaining Members *8:30 AM – 9:30 AM*

A.M. Symposia & Sessions **8:30 AM – 10:00 AM**

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
A10.3 – Advances in Cryogenic Transmission Electron Microscopy and Spectroscopy for Energy and Quantum Materials and Technologies
B03.1 – Application of Microscopy Techniques for Research and Diagnosis of Diseases in Humans, Plants and Animals
B08.3 – Advances in Cryo-EM Technology
C02.1 – Lens on Diversity: Empowering Engagement in the Microscopy Sciences
P02.3 – Electron Microscopy for Ferroic Materials: From Atomic-scale Imaging to in-situ 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 Microscope
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 in-situ Imaging Techniques for Material Characterization, Synthesis, and Processing
C06.5 – Advancements in Generative Artificial Intelligence and Automation for Electron Microscopy

Exhibit Hall Open **10:00 AM – 2:00 PM** **Exhibit Hall**
Coffee Break + Poster Session **10:00 AM – 12:00 PM** **Exhibit Hall**

Thursday Poster Sessions **10:00 AM – 12:00 PM** **Exhibit Hall**

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 – FIG Standards: Next Generation Microanalytical Standards for EPMA and SEM-EDS
A10.P1 – Advances in Cryogenic Transmission Electron Microscopy and Spectroscopy for Energy and Quantum Materials and Technologies
B03.P1 – Application of Microscopy Techniques for Research and Diagnosis of Diseases in Humans, Plants and Animals
P10.P3 – 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

Post-Deadline Posters will be presented on this day

Student Poster Awards ***12:00 PM*** ***Exhibit Hall Poster Stage***

Lunch Break	12:00 PM - 1:30 PM
DBM FIG Meeting	12:00 PM – 1:30 PM
FIG: Microanalytical Standards	12:15 PM – 1:15 PM

P.M. Symposia **1:30 PM - 3:00 PM**

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
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
B08.4 – Advances in Cryo-EM Technology
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 Microscope
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

Coffee Break 3:00 PM - 3:30 PM

Late P.M. Symposia (Cont'd.) **3:30 PM - 5:00 PM**

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
B03.3 – 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 Microscope

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 – Towards Functional Imaging of Materials: Advances and Insights from Phase Contrast Techniques