

# Midwest Microscopy and Microanalysis Spring Meeting



## "Advances in Multi-Dimensional Electron Microscopy"

**March 24, 2023**  
**8:00 am - 4:00 pm**

McCormick Auditorium, Norris Center  
Northwestern University, Evanston Campus  
Evanston, IL

**REGISTER NOW!**

\*Directions and Parking Information can be found [here](#).\*

### Program Schedule

8:00 – 9:00 AM	Registration, Continental Breakfast & Coffee
9:00 – 9:05 AM	<b>Vinayak P. Dravid &amp; Chris Gilpin</b> Welcome and Opening Remarks
9:05 – 9:50 AM	<b>Prof. Jian-Min Zuo, Ph.D., University of Illinois Urbana-Champaign</b> <i>Renaissance in Electron Diffraction and Imaging of Materials Structural Properties</i> * <b>Virtual Presentation</b>
9:50 - 10:15 AM	<b>Matthew Tamadoni Saray, Ph.D. candidate, University of Illinois Chicago</b> <i>Investigating Metal Salt Decomposition Using In-Situ S/TEM</i>
10:15 – 10:30 AM	Break & Visit with Vendors
10:30 - 11:15 AM	<b>Haihua Liu, Ph.D., Electron Microscopy Assistant Scientist, Argonne National Laboratory</b> <i>Nanoscale plasmons study by ultrafast electron microscopy</i>
11:15 - 11:45 AM	<b>Akshay Murthy, Ph.D., Fermilab</b> <i>Identifying imperfections in superconducting qubits through TEM hardware advancements</i>
11:45 – 12:10 PM	<b>Yukun Liu, Ph.D. candidate, Northwestern University</b> <i>Probing the "order" in complexity: Entropy-engineered Thermoelectric Materials</i>
12:10 – 12:30 PM	<b>M3S Business Meeting</b>
12:30 – 2:00 PM	<b>Lunch &amp; Visit with Vendors</b>
2:00 – 2:45 PM	<b>Roberto dos Reis, Ph.D., Research Assistant Professor, Northwestern University</b> <i>Challenges and opportunities in machine learning for 4D-STEM data interpretation</i>
2:45 – 3:10 PM	<b>Francisco Lagunas, Ph.D. candidate, University of Illinois Chicago</b> <i>In-Situ Cooling STEM Studies of Low Dimension Materials</i>
3:10 – 3:40 PM	<b>Yingjie Yang, Ph.D., University of Illinois Chicago</b> <i>Benchmarking of in-situ electrochemistry and heating liquid-cell instrumentation and its potential for battery research</i>
3:40 – 3:50 PM	<b>Closing Remarks</b>

\*Optional tour of NUANCE's facilities in the Technological Institute, AB-Wing

### M<sup>3</sup>S Annual Membership Fee:

FREE for students / \$20 for academic/government/corporate

