

Central States Microscopy and Microanalysis Society

Fall 2019 Meeting

Wednesday October 16th, 2019
University of Missouri Science & Technology
Carver Turner Room • 1346 North Bishop Avenue • Rolla, Missouri

- 8:00 - 8:50 **REGISTRATION:** REFRESHMENTS
- 8:50 - 9:00 **WELCOME AND OPENING REMARKS:** DEANA GRANT, PRESIDENT OF CSMMS
- 9:00 - 9:20 **David Stalla, MU ELECTRON MICROSCOPY CORE, "Wrangling Quant from Qual: An Introduction to Image Analysis Techniques"**
- 9:20 - 9:40 **Tommi White, MU ELECTRON MICROSCOPY CORE, "Cryo-Electron Microscopy"**
- 9:40 - 10:00 **Mandy Paz, MU BIOCHEMISTRY, "Comparing EM Approaches for Studying Viral Glycoproteins"**
- 10:00 - 10:20 **Ahmed Jasim, MU CHEMICAL ENGINEERING, "Studying the Local Atomic Structure of Al₂O₃ Nano Layer on Carbon Nanotubes Under Cryogenic TEM Conditions"**
- 10:20 - 10:30 **BREAK:** REFRESHMENTS GRACIOUSLY SPONSORED BY NCI & LEICA (THANKS DUSTIN MAXWELL!)
- 10:30 - 10:50 **Xiaoqing He, MU ELECTRON MICROSCOPY CORE, "TEM Data Processing: Common Applications"**
- 10:50 - 11:10 **Alireza Pourhassan, MISSOURI SCIENCE AND TECHNOLOGY, "Crumb Rubber Modified Asphalt Mixtures"**
- 11:10 - 11:30 **Andrew Hoffman, MISSOURI SCIENCE AND TECHNOLOGY, "Advanced Characterization of Irradiation Resistant Nanostructured Steels"**
- 11:30 - 11:50 **Hossein Sehat, MISSOURI SCIENCE AND TECHNOLOGY, "Investigation of Plasma Spheroidized Stainless Steel 304L Powder Using Scanning Electron Microscopy"**
- 11:50 - 12:10 **Nguyen Nguyen, MU Computer Science, "Deep regression for object detection and segmentation in EM images"**
- 12:10 - 1:30 **LUNCH:** GRACIOUSLY SPONSORED BY THERMOFISHER SCIENTIFIC (THANKS CICERON TANEZ, JIM SMITH)
- 1:30 - 2:15 **Rengarajan Pelapur, Product Applications Specialist, ThermoFisher Scientific, "3D/2D image analysis for EM data"**
- 2:15 - 2:35 **Sukanta Kumar Mondal, MISSOURI SCIENCE AND TECHNOLOGY, "Synthesis of Ca-Al nano-LDH utilizing dodecylsulfate as a surfactant"**
- 2:35 - 2:50 **BREAK:** GRACIOUSLY SPONSORED BY HITACHI HIGH TECHNOLOGIES- AMERICA (THANKS BOB PASSERI!)
- 2:50 - 3:10 **Tom Strader, Microscopy Innovations, "Automated Biological Specimen Prep with the ASP-1000"**
- 3:10 - 3:30 **Sean McKinney, Stowers Institute, "Segmenting Serial Block Face Imaged Planaria Using Deep Learning Based U-nets"**
- 3:30 - 3:50 **Paul Carpenter, WASHINGTON UNIVERSITY, "Quantitative Compositional Mapping of Lunar Meteorite NWA 12384"**
- 3:50 - 4:00 **CLOSING:** ANNOUNCEMENT OF STUDENT AWARD WINNER - CSMMS LEADERSHIP

Directions to Missouri Science and Technology

Directions to Missouri S&T Havener Center

From St. Louis or Springfield

1. Take Interstate 44 to exit 185.
2. If traveling West on 44, turn left onto University Drive at the top of the ramp. If traveling east, turn right onto University Drive.
3. At the intersection of University Drive and Highway 63, turn right.
4. Turn left onto 10th Street.
5. Turn left onto State Street.
6. State Street will dead-end, turn left into the Havener Center parking lot.

Hotels:

There are three hotels in the area that give discounts to University business: Drury Inn, Hampton Inn, and Holiday Inn Express.

Registration

Please register at the CSMMS registration table.



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