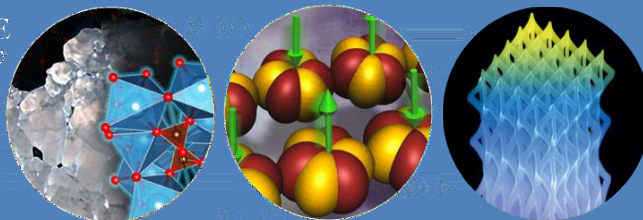


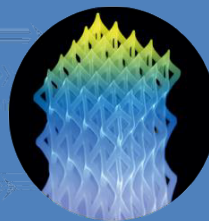
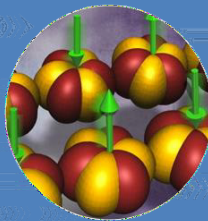
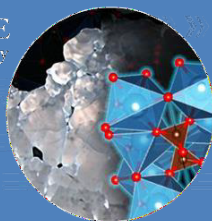
**Monday, August 7
Crowne Plaza Knoxville, TN**

7:30 a.m.–8:00 a.m. ET	Registration and Continental breakfast
Workshops	
8:00 a.m. ET	<p>Novel Materials for Neuromorphic Computing Organizer: Liangbo Liang, Saban Hus, Sabine Neumayer Location: Salon A</p>
8:00 a.m. ET	<p>Machine Learning in Autonomous Science: Synthesis, Characterization, and Theory Organizers: Yongtao Liu, Kevin Roccapiore, Maxim Ziatdinov, Rama Vasudevan Location: Salon B</p>
8:00 a.m. ET	<p>Cryo TEM Organizer: Alexis Williams Location: Salon C</p>



Tuesday, August 8: Main Meeting Day 1 Crowne Plaza Knoxville, TN

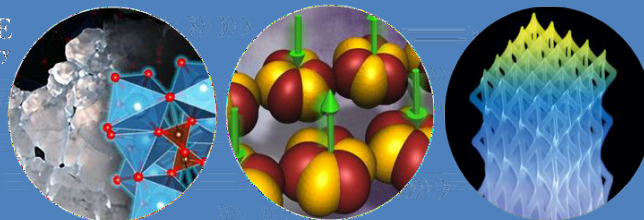
8:00 a.m.–8:50 a.m. ET	Registration and continental breakfast
8:50 a.m.–12:00 p.m. ET	Welcome, BES Update, Plenary Session A, and Group Speed Dating - <u>Location: Summit I</u>
8:50 a.m. ET	ORNL Welcome from the CNMS UEC Speakers: Zachary Hood , Argonne National Laboratory
9:00 a.m. ET	Nanoscience Overview at the Center for Nanophase Materials Sciences Speaker: Karren More , Oak Ridge National Laboratory
9:15 a.m. ET	DOE Basic Energy Sciences (BES) Update Speaker: Linda Horton
9:45 a.m. ET	Plenary Speaker A David Masiello , University of Washington <i>"Nanometer-Scale Spatial and Spectral Mapping of Exciton Polaritons in Structured Plasmonic Cavities"</i>
10:30 a.m. ET	Coffee Break
10:45 a.m. ET	Group "Speed Dating" - <u>Location: Summit II</u>
12:00–1:45 p.m. ET	Lunch on your own in Downtown Knoxville
1:45 – 2:45 p.m. ET	DEIA Event: "Promoting Diversity and Overcoming Implicit Bias in Scientific User Facilities and User Groups" – <u>Location: Summit I</u> Speaker: Natalie Holder , SLAC; <i>"The Top Ten Barriers to Inclusion"</i> Moderator: Piran Kidambi , Vanderbilt Panelists: Chris Copeland , Oak Ridge Institute for Science and Education (ORISE) Juan Restrepo , Oak Ridge National Laboratory Eva Zarkadoula , Oak Ridge National Laboratory



2023 CNMS User Meeting

AGENDA

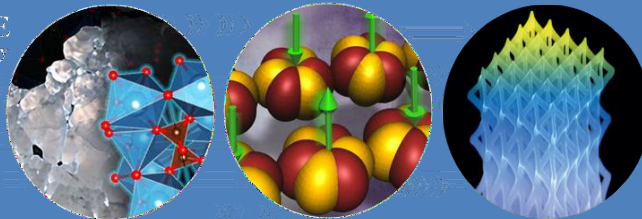
<p>3:00 – 4:45 p.m. ET Parallel Oral Sessions</p>	<p>Track Session: Quantum, Nanoelectronics, and Nanophotonics Chair: Masoud Mahjouri-Samani, Auburn University</p>	<p>Track Session: Macromolecular Materials and Functional Hybrid Nanomaterials Chair: Jon Camden, University of Notre Dame</p>
	<p>Location: Summit I</p>	<p>Location: Salon A</p>
<p>3:00 p.m. ET</p>	<p>An-Ping Li: Heterogeneities in Quantum Materials</p>	<p>Rajeev Kumar: Harnessing Complex Macromolecular Conformations</p>
<p>3:15 p.m. ET</p>	<p>Liping Yu, University of Maine <i>“Descriptor-Enabled High-Entropy Materials Design and Discovery Over Vast Chemical Spaces”</i></p>	<p>Amanda Marciel, Rice University <i>“Influence of Charge Fraction and Sequence on Polyelectrolyte Solution and Brush Properties”</i></p>
<p>3:45 p.m. ET</p>	<p>Sarah King, The University of Chicago <i>“Probing the Ultrafast Electron and Phonon Dynamics of 2D Materials on the Nanoscale”</i></p>	<p>Feng Yuan Zhang, UT-Knoxville <i>“Engineering Catalysts and Electrodes for High-Efficiency Hydrogen Production”</i></p>
<p>4:15 p.m. ET</p>	<p>Contributed talk Adam Dodson (Vanderbilt) <i>“Temperature Dependence of the Dominant Visible Transitions of Er³⁺ in Single Crystal Er₂O₃”</i></p>	<p>Contributed talk Nathaniel Dominique (Notre Dame) <i>“Ad Aurum: Tuning Gold Nanoparticle Surfaces with N-Heterocyclic Carbenes”</i></p>
<p>4:30 p.m. ET</p>	<p>Contributed talk Jewook Park (CNMS, ORNL) <i>“Spin-Polarized Scanning Tunneling Thermovoltage Microscopy for Spin-Dependent Thermoelectric Power Mapping”</i></p>	<p>Contributed talk Keith Brown (Boston U) <i>“Towards Femtogram-Scale Materials Discovery using Scanning Probe Lithography”</i></p>
<p>4:45–5:00 p.m. ET</p>	<p>Break</p>	
<p>5:00–5:30 p.m. ET</p>	<p>Student Poster Slam – Location: Summit I</p>	
<p>5:30-7:00 p.m. ET</p>	<p>Poster Reception – Location – Summit II</p>	



Wednesday, August 9: Main Meeting Day 2

Crowne Plaza Knoxville, TN

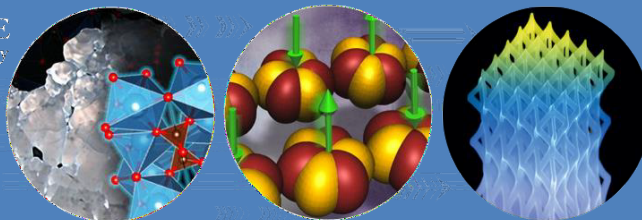
8:00 a.m.–8:45 a.m. ET	Registration and continental breakfast	
8:45 a.m.–10:30 a.m. ET Parallel Oral Sessions	<p>Joint Session: Multiscale Dynamics and Ferroelectrics Chair: Liam Collins, ORNL</p>	<p>Joint Session: Emergent Materials and Devices Chair: Ethan Self, ORNL</p>
	Location: Summit I	Location: Salon B
8:45 a.m. ET	Peter Maksymovych : Multiscale Dynamics	Neus Domingo : Functional Atomic Force Microscopy
9:00 a.m. ET	<p>Jon Ihlefeld, UVA “Exploring the Mechanisms Leading to Polarization Wake-Up in Ferroelectric Hafnium Oxide Thin Films”</p>	<p>Steven Stevenson, Purdue University - Fort Wayne “Fullertubes: New Molecules and Collaborative Opportunities at ORNL”</p>
9:30 a.m. ET	<p>Jerry Bernholc, North Carolina State University “Large-Scale Simulations of Nanomaterials and Nanodevices”</p>	<p>Jill Venton, University of Virginia “Nanoscale Carbon Electrodes for Neurotransmitter Detection”</p>
10:00 a.m. ET	<p>Contributed talk Md Tawsif Rahman Chowdhury, Wayne State University “Engineering Pulsed Laser Deposited Tantalum Oxide Films for Memristor Devices”</p>	<p>Contributed talk Gene Yang, Univ. South Carolina “Strain effect on oxygen reduction reaction of epitaxial La_{0.8}Sr_{0.2}CoO_{3-δ} thin films”</p>
10:15 a.m. ET	<p>Contributed talk Bogdan Dryzhakov, University of TN “Heterostructured Ferroelectricity with Light-Emitting Properties by Intracrystalline Mixing of 2D- and 3D-Perovskite Phases”</p>	<p>Contributed talk Wei Zhou, Virginia Tech “Sensing Interfacial Faradaic and Non-Faradaic Processes with Voltage-Responsive Nanoplasmonic Luminescence in Nano-Optoelectrodes”</p>



2023 CNMS User Meeting

AGENDA

10:30 a.m. ET	Coffee Break
10:45 a.m. ET	Plenary Speaker B – <u>Location: Summit I</u> <u>Oana Jurchescu</u> , Wake Forest University <i>“Organic Transistors for Optoelectronics and Bioelectronics”</i>
11:30 a.m. – 12:15 p.m. ET	CNMS Town Hall and Panel Discussion – <u>Location: Summit I</u> Speaker: Zachary Hood, CNMS UEC Chair Panelists: <u>Brad Lokitz</u> <u>Karren More</u> <u>Jon Camden</u> <u>Wan-Yu Tsai</u>
12:15 p.m. ET	Meeting closes
1:00 p.m. ET	Tour of the CNMS – bus leaves from the Crowne Plaza Tour guide: TBD
4:00 p. m. ET	Return to Crowne Plaza



Thursday, August 10
CNMS

Workshops

Understanding Structure and Dynamics of Charged Polymers

Organizer: Rajeev Kumar

Location: Building 8610 (CNMS), Executive Conference Room, L-183

1:00 p.m. – 5:00pm ET

Chemical Characterization of Materials

Organizer: Anton levlev, Jon Poplawsky, Liam Collins

Location: Building 4151, Room 265

1:00 p.m. – 5:00pm ET

PLEASE NOTE WORKSHOP LOCATIONS FOR THURSDAY ARE AT ORNL