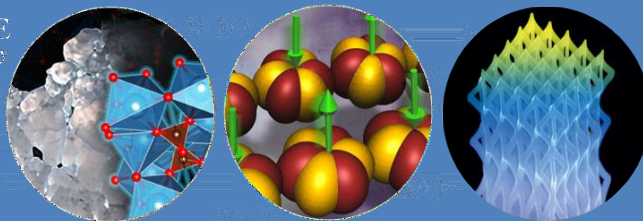


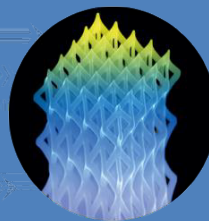
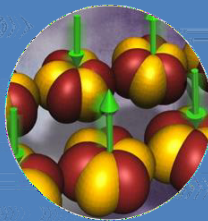
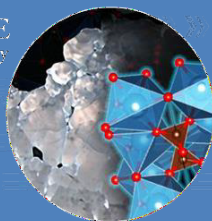
**Monday, August 7  
Crowne Plaza Knoxville, TN**

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



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

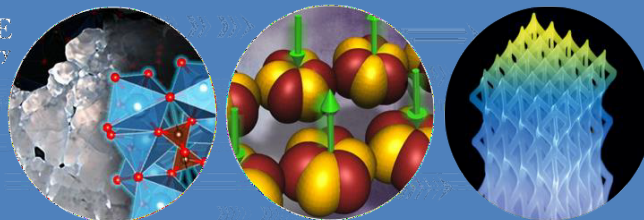
8:00 a.m.–8:50 a.m. ET	Registration and continental breakfast
8:50 a.m.–12:00 p.m. ET	Welcome, BES Update, Plenary Session A, and Group Speed Dating - <u>Location: Summit I</u>
8:50 a.m. ET	ORNL Welcome from the CNMS UEC Speakers: <b>Zachary Hood</b> , Argonne National Laboratory
9:00 a.m. ET	Nanoscience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



## 2023 CNMS User Meeting

## AGENDA

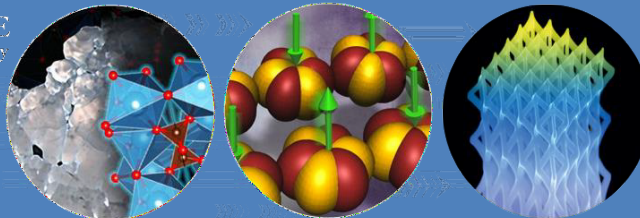
<p>3:00 – 4:45 p.m. ET Parallel Oral Sessions</p>	<p><b>Track Session:</b> Quantum, Nanoelectronics, and Nanophotonics Chair: <b>Masoud Mahjouri-Samani</b>, Auburn University</p>	<p><b>Track Session:</b> Macromolecular Materials and Functional Hybrid Nanomaterials Chair: <b>Jon Camden</b>, University of Notre Dame</p>
	<p><b>Location: Summit I</b></p>	<p><b>Location: Salon A</b></p>
<p>3:00 p.m. ET</p>	<p><b>An-Ping Li</b>: Heterogeneities in Quantum Materials</p>	<p><b>Rajeev Kumar</b>: Harnessing Complex Macromolecular Conformations</p>
<p>3:15 p.m. ET</p>	<p><b>Liping Yu</b>, University of Maine <i>“Descriptor-Enabled High-Entropy Materials Design and Discovery Over Vast Chemical Spaces”</i></p>	<p><b>Amanda Marciel</b>, 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><b>Sarah King</b>, The University of Chicago <i>“Probing the Ultrafast Electron and Phonon Dynamics of 2D Materials on the Nanoscale”</i></p>	<p><b>Feng Yuan Zhang</b>, UT-Knoxville <i>“Engineering Catalysts and Electrodes for High-Efficiency Hydrogen Production”</i></p>
<p>4:15 p.m. ET</p>	<p>Contributed talk <b>Adam Dodson</b> (Vanderbilt) <i>“Temperature Dependence of the Dominant Visible Transitions of Er<sup>3+</sup> in Single Crystal Er<sub>2</sub>O<sub>3</sub>”</i></p>	<p>Contributed talk <b>Nathaniel Dominique</b> (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 <b>Jewook Park</b> (CNMS, ORNL) <i>“Spin-Polarized Scanning Tunneling Thermovoltage Microscopy for Spin-Dependent Thermoelectric Power Mapping”</i></p>	<p>Contributed talk <b>Keith Brown</b> (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 – <b>Location: Summit I</b></p>	
<p>5:30-7:00 p.m. ET</p>	<p>Poster Reception – <b>Location – Summit II</b></p>	



Wednesday, August 9: Main Meeting Day 2

Crowne Plaza Knoxville, TN

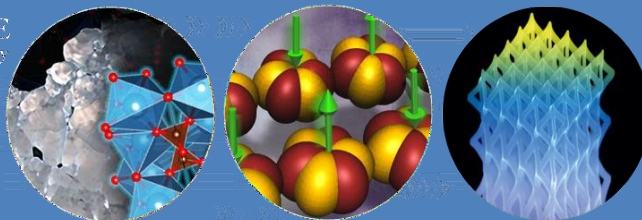
8:00 a.m.–8:45 a.m. ET	Registration and continental breakfast	
8:45 a.m.–10:30 a.m. ET Parallel Oral Sessions	<p><b>Joint Session:</b> Multiscale Dynamics and Ferroelectrics Chair: <b>Liam Collins</b>, ORNL</p>	<p><b>Joint Session:</b> Emergent Materials and Devices Chair: <b>Ethan Self</b>, ORNL</p>
	<b>Location: Summit I</b>	<b>Location: Salon B</b>
8:45 a.m. ET	<b>Peter Maksymovych</b> : Multiscale Dynamics	<b>Neus Domingo</b> : Functional Atomic Force Microscopy
9:00 a.m. ET	<p><b>Jon Ihlefeld</b>, UVA “Exploring the Mechanisms Leading to Polarization Wake-Up in Ferroelectric Hafnium Oxide Thin Films”</p>	<p><b>Steven Stevenson</b>, Purdue University - Fort Wayne “Fullertubes: New Molecules and Collaborative Opportunities at ORNL”</p>
9:30 a.m. ET	<p><b>Jerry Bernholc</b>, North Carolina State University “Large-Scale Simulations of Nanomaterials and Nanodevices”</p>	<p><b>Jill Venton</b>, University of Virginia “Nanoscale Carbon Electrodes for Neurotransmitter Detection”</p>
10:00 a.m. ET	<p>Contributed talk <b>Md Tawsif Rahman Chowdhury</b>, Wayne State University “Engineering Pulsed Laser Deposited Tantalum Oxide Films for Memristor Devices”</p>	<p>Contributed talk <b>Gene Yang</b>, Univ. South Carolina “Strain effect on oxygen reduction reaction of epitaxial La<sub>0.8</sub>Sr<sub>0.2</sub>CoO<sub>3-δ</sub> thin films”</p>
10:15 a.m. ET	<p>Contributed talk <b>Bogdan Dryzhakov</b>, University of TN “Heterostructured Ferroelectricity with Light-Emitting Properties by Intracrystalline Mixing of 2D- and 3D-Perovskite Phases”</p>	<p>Contributed talk <b>Wei Zhou</b>, 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	<b>Coffee Break</b>
10:45 a.m. ET	Plenary Speaker B – <b><u>Location: Summit I</u></b> <b><u>Oana Jurchescu</u></b> , Wake Forest University <i>“Organic Transistors for Optoelectronics and Bioelectronics”</i>
11:30 a.m. – 12:15 p.m. ET	<b>CNMS Town Hall and Panel Discussion – <u>Location: Summit I</u></b> Speaker: Zachary Hood, CNMS UEC Chair Panelists: <b><u>Brad Lokitz</u></b> <b><u>Karren More</u></b> <b><u>Jon Camden</u></b> <b><u>Wan-Yu Tsai</u></b>
12:15 p.m. ET	<b>Meeting closes</b>
1:00 p.m. ET	<b>Tour of the CNMS – bus leaves from the Crowne Plaza</b> <b>Tour guide: TBD</b>
4:00 p. m. ET	<b>Return to Crowne Plaza</b>



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

Location: Building 4151, Room 265

1:00 p.m. – 5:00pm ET

**PLEASE NOTE WORKSHOP LOCATIONS FOR THURSDAY ARE AT ORNL**