

**AGENDA**  
**2009 Joint CNMS-SHaRE User Meeting**

Wednesday, September 16 – Thursday, September 17  
 Oak Ridge National Laboratory

<u>Date</u>		<u>Location</u>
<b>Wednesday, September 16 MORNING</b>		
8:00 am	Continental breakfast	SNS Lobby
8:30 am	CNMS & SHaRE Welcome	A-103, Auditorium
	Dr. Mike Simonson, CNMS Interim Director Dr. Karren More, SHaRE Director	
	Opening Remarks Dr. Michelle Buchanan, Associate Laboratory Director for Physical Sciences	
<b>Oral Session I: Advanced Microscopy Characterization</b>		
Chair: Karren More, SHaRE Director		
8:45 am	<b>Prof. Nigel Browning:</b> Department of Chemical Engineering and Materials Science, University of California, Davis <i>"Studying Catalysts In-situ with High Spatial and Temporal Resolution"</i>	
<b>Plenary Lecture</b>		
9:30	<b>Kelly Perry:</b> Department of Chemistry and Chemical Biology, Rensselaer Polytechnic Institute <i>"The Effects of Process and Polymer Chemistry on the Structure and Performance of Phosphoric Acid-Doped Proton Exchange Membranes"</i>	
<b>Invited User</b>		
10:00	<b>Prof. Zhengwei Pan:</b> , Department of Physics and Astronomy, University of Georgia <i>"Imaging and Manipulating Nanostructures--The Art of Nanoscience"</i>	
<b>Plenary Lecture</b>		
10:45	<b>SHaRE User Group Business Meeting</b>	
11:30 – 12:30p	<b>Tutorial I: "XPS and AES Surface Characterization Tools: We've always been Nano!"</b> by Harry Meyer	C-156
11:30	Lunch provided	
<b>Wednesday, September 16 AFTERNOON</b>		
12:30p – 1:30	<b>Tutorial II: "Electron Energy Loss Spectroscopy" by Miaofang Chi</b>	C-156
<b>Oral Session II: Origins of Functionality at the Nanoscale</b>		
Chair: Mike Simonson, CNMS Interim Director		
1:45	<b>Prof. Dawn Bonnell,</b> Department of Materials Science & Engineering, University of Pennsylvania <i>"Understanding and Exploiting the Surfaces of Complex Oxides"</i>	
<b>Plenary Lecture</b>		
2:30	<b>Gerardo Jose La O:</b> Department of Mechanical Engineering, Massachusetts Institute of Technology <i>"Electrochemical Conversion and Storage: Science, Materials and Applications"</i>	
<b>Invited User</b>		
3:00	<b>Prof. James Spivey:</b> Department of Chemical Engineering, Louisiana State University <i>"CO Hydrogenation to Higher Oxygenates: Mechanistic Studies at CNMS"</i>	
<b>Invited User</b>		
3:30	Afternoon break	

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4:00 <b>Plenary Lecture</b>	<b>Prof. Franky So:</b> Materials Science and Engineering, University of Florida <i>"Nanoscale Effects in Organic Optoelectronic Devices"</i>	
4:45 <b>Invited User</b>	<b>Prof. Hanno Weitering:</b> Department of Physics and Astronomy, University of Tennessee <i>"Electronic Instabilities, Fluctuations and Charge Transport in Quantum Chains"</i>	
5:15 – 6:30	<b>Poster Session and Reception</b>	SNS Lobby
6:30 – 7:30	<b>RidgeDance Nanoscience Film Festival</b>	A-103, Auditorium

**Thursday, September 17 MORNING**

8:00 am	Continental breakfast	SNS Lobby
	<b>Oral Session III: Functional Polymer Architectures</b> Chair: Jimmy Mays, Theme Leader	A-103, Auditorium
8:30 <b>Plenary Lecture</b>	<b>Prof. Thomas Russell:</b> Polymer Science and Engineering Department, University of Massachusetts Amherst; Director, Materials Research Science and Engineering Center on Polymers <i>"Long-Range Lateral Order of Block Copolymer Thin Films"</i>	
9:15 <b>Invited User</b>	<b>Prof. Akos Vertes:</b> Department of Chemistry, George Washington University <i>"Nanophotonic Ion Production from Biomolecules"</i>	
9:45 <b>Invited User</b>	<b>Prof. Kane Jennings:</b> Department of Chemical & Biomolecular Engineering, Vanderbilt University <i>"Polyhomologation to Prepare 'Thick' Self-Assembled Monolayers and Superhydrophobic Polymer Films"</i>	
10:15	Morning break	
10:45 <b>Plenary Lecture</b>	<b>Prof. Igor Luzinov:</b> School of Materials Science and Engineering, Clemson University <i>"Functional Surfaces Via Polymer Grafting"</i>	
11:30 <b>Invited User</b>	<b>Prof. Mark Dadmun:</b> Department of Chemistry, University of Tennessee <i>"The Dynamics of Multicomponent Polymer Systems"</i>	
12:00 pm	<b>CNMS User Group Business Meeting</b> Hai-Ping Cheng, Chair, CNMS User Executive Committee	A-103, Auditorium
12:00	Lunch provided	

**Thursday, September 17 AFTERNOON**

	<b>Oral Session IV: Understanding Emergent Behavior</b> Chair: Peter Cummings, CNMS Principal Scientist	A-103, Auditorium
1:30 <b>Invited User</b>	<b>Prof. Mike McCollum:</b> Department of Electrical and Computer Engineering, Virginia Commonwealth University <i>"Understanding the Functional Role of Stochastic Fluctuation in Nanoscale Systems"</i>	

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- 2:00  
**Plenary Lecture**      **Prof. James Spivey:** Department of Chemical Engineering, Louisiana State University  
*"LSU's Center for Atomic-level Catalyst Design"*
- 2:45                      Afternoon break
- 3:15  
**Plenary Lecture**      **Dr. John M. Tranquada:** Condensed Matter Physics & Materials Science Department, Brookhaven National Laboratory  
*"Self-Organized Electronic Nanostructures and Emergent Superconductivity in Cuprates"*
- 4:00  
**Plenary Lecture**      **Dr. David Wesolowski:** Chemical Sciences Division, Oak Ridge National Laboratory  
*"Fluid Interface Reactions, Structures and Transport"*