OAK RIDGE National Laboratory
CENTER FOR NANOPHASE MATERIALS SCIENCES

Agenda

2014 CNMS User Meeting
Oak Ridge National Laboratory
Oak Ridge, Tennessee

4:00p	**Tuesday, September 16**	**Poster Session and Student Poster Competition** - SNS Atrium and C-152
5:45	The 8th edition of ***RidgeDance NanoScience Film Festival*** – SNS Auditorium	
7:30a	**Wednesday, September 17**	**Registration Opens** - Posters available for viewing
	PLENARY SESSION *Iran Thomas Auditorium, SNS* **Chair**: Hans Christen, CNMS Director	
8:00	**Welcome and Announcements**	
8:20	"Hierarchical 3-D Nano-Architectures for Biomimetics, Batteries, and Lightweight Structural Materials" **Julia Greer,** *California Institute of Technology*	
9:05	"Accelerated Materials Discovery by Combining High-Throughput Computation and Experiments" **Gerbrand Ceder**, *Massachusetts Institute of Technology*	
9:50	**Break**	
	New Capabilities for Users at CNMS	**Chair**: Vivek Prabhu, NIST
10:10	"Analysis and Visualization Strategies for Large Data Sets," **Alex Belianinov**	
10:25	"Probing Magnetism with an Electron Microscope," **Juan Carlos Idrobo**	
10:40	"Advanced Atom Probe Tomography for Nanoscience Applications," **Jonathan Poplawsky**	
10:55	"Beam-Induced Direct Writing of Nanostructures using the CNMS Helium-Ion Microscope," **Adam Rondinone**	
11:10	**Panel Session: Q&A with CNMS Senior Staff**	
11:30	**User Group Town Hall Meeting** *including announcement of Student Poster Award winners*	
12:00p	**Lunch on your own; Posters available for viewing**	

	Track A (CLO, C-156) **Chairs:** Martyn McLachlan and Megan Robertson	**Track B (Auditorium)** **Chairs:** Anthony Hmelo and Ray Unocic
1:30	**INVITED:** "Tuning Interactions at Melt/Brush Interfaces for Functional Polymer Films," **Gila Stein** (U. Houston)	**INVITED:** "Characterizing Interfacial Effects in Ferro-Electric Thin Films using Aberration-Corrected STEM," **Robert Klie** (U. Illinois, Chicago)
2:00	"*In-Situ* Study of Phase Transitions and Morphological Evolution in Solution-Processed Bilayer Organometal Halide Perovskite Photovoltaic Cells," **Bin Yang** (CNMS)	"Studies on Multiferroic and Magnetoelectric Properties of Pb(Fe0.5Nb0.5)O3 and Pb(Fe0.5Nb0.5)O3/ Ni0.65Zn0.35Fe2O4 Heterostructures," **Dhiren Pradhan** (U. Puerto Rico)
2:20	"Rapid and Sensitive Detection/Diagnosis of Pathogens," **Cheng Cheng** (U. Tennessee)	"Dielectric Meta-Reflectarray for Broadband Linear Polarization Conversion and Optical Vortex Generation," **Yuanmu Yang** (Vanderbilt U.)
2:40	"A Bridge Between DNA Nanotechnology and Inorganic Nanotechnology," **Liqian Wang** (U. Rome Tor Vergata)	"Air-Stable, Lithium Superionic Conductors," **Gayatri Sahu** (CNMS)
3:00	**Break**	
3:20	**INVITED:** "Crafting Functional Nanocrystals by Capitalizing on Nonlinear Block Copolymers as Nanoreactors," **Zhiqun Lin** (Georgia Tech)	**INVITED:** "Controllable Complex Oxide Heterointerface," **Ying-hao (Eddie) Chu** (National Tsing-Hua U.)
3:50	"Detection of Aflatoxin B1 by Aptamer-Based Biosensor using PAMAM Dendrimers as Immobilization Platform," **Katia Spinella** (U. Rome Tor Vergata)	"Electronic Properties of Bilayer Graphenes Strongly Coupled to Interlayer Stacking and the External Field," **Changwon Park** (CNMS)
4:10	"Symbiotic Relation in Bimetallic Ag Nanoparticles," **Abhinav Malasi** (U. Tennessee)	"Electronic Properties of Rhenium Doped Tungsten Disulfide Monolayers," **Eduardo Cruz-Silva** (Pennsylvania State U.)
4:30	"Line-focused Femtosecond Laser Machining of Fused Silica," **Brian Canfield** (U. Tennessee Space Institute)	"Controlled Vapor-Phase Growth of Photoresponsive Two-Dimensional GaSe Crystals and Van der Waals Heterostructures," **Xufan Li** (CNMS)
4:50	"Volumetric Durable Superhydrophobic Coatings," **John Simpson** (U. Tennessee)	"Origins of Electromechanical Strain Ascertained from in situ X-ray and Neutron Diffraction," **Jacob Jones** (North Carolina State U.)
5:10	**Adjourn**	