

Electron Microscopy: Future Challenges and Opportunities

Wednesday - March 8, 2017

	Opening Session
09:00	NIST and MML Metrology Overview Mike Fasolka Material Measurement Laboratory, Acting Director National Institute of Standards and Technology
09:35	Confessions of a former microscopist: What <i>really</i> drives progress in science and technology Alexander H. King Critical Materials Institute, Director The Ames Laboratory
10:25	Coffee break
10:40	Atomic-Scale Analytical Tomography: Taking the Best from (S)TEM and Atom Probe Tom Kelly Vice President for Innovation and New Technologies CAMECA
11:30	Moderated discussion
12:00	Lunch
	Session I: Nanoelectronics and High-Performance Computing
13:00	Transmission Electron Microscopy for Nanoelectronics Alain Diebold Interim Dean - College of Nanoscale Sciences SUNY Polytechnic Institute
13:40	Title TBA Robert Sinclair Charles M. Pigott Professor in the School of Engineering Stanford University
14:20	Coffee break + Posters
14:50	Improving the Resolution, Acquisition Time and Quality of Scanning Microscopy Images Through Computational Rather Than Hardware Means Eric Lifshin Professor of Nanoscience SUNY Polytechnic Institute
15:30	Moderated discussion
16:30	Day 1 adjourn
17:30	Happy hour

Electron Microscopy: Future Challenges and Opportunities

Thursday - March 9, 2017

	Session II: Soft Matter Validation
09:00	Validation of CryoEM Atomic Resolution Structure Wah Chiu Distinguished Service Professor, Department of Biochemistry and Molecular Biology Baylor College of Medicine
09:40	Individual-Particle Electron Tomography (IPET): an approach to study flexible soft-/bio-molecular structure and dynamics Gary Ren Molecular Foundry, Staff Scientist Lawrence Berkley National Laboratory
10:20	Coffee break
10:35	Morphology Characterization and Directing Self-Assembly in Nanostructured Soft Materials Chinedum Osuji Professor of Chemical & Environmental Engineering Yale University
11:15	Moderated discussion
12:15	Lunch
	Session III: Additive Manufacturing
13:30	Electron-microscopy studies of additively manufactured 17-4PH stainless steel Rainer Hebert Additive Manufacturing Innovation Center, Director University of Connecticut
14:10	The role of microscopy on ICME Methods development during the DARPA OM Program Alonso Peralta M&PE Life Prediction Group, Staff Engineer Honeywell Aerospace
14:50	Coffee break + Posters
15:20	Powder-Bed Additive Manufacturing Modeling and Measurement Challenges Ade Makinde Manufacturing & Materials Technologies, Principal Engineer GE Global Research
16:00	Moderated discussion and workshop conclusion
17:00	Meeting Adjourn