

M | MATERIALS RESEARCH INSTITUTE

MMRI Annual Symposium - March 29-30, 2023

“Materials for a New Mobility”

University of Michigan North Campus Research Complex, NCRC Building 18 - Dining Hall
2800 Plymouth Rd, Ann Arbor, MI 48105, USA

March 29

- 5:00 PM Student Poster Presentations, with Hors d'Oeuvres
7:00 PM Dinner starts
7:30 PM **Brian Storey, Toyota Research Institute**, Keynote Presentation
“How can we (meaningfully) accelerate materials discovery?”

March 30:

- 8:30-9:00 AM **REGISTRATION + LIGHT BREAKFAST** 30 min
9:00 AM **OPENING REMARKS** 20 min
Session 1: Batteries
9:20 AM **Jeff Sakamoto** University of Michigan 30 min
“Mechano-electrochemical Phenomena and Anode-free Manufacturing of Solid-state Batteries”
9:50 AM **Mei Cai** General Motors – Global GM R&D 30 min
“LiFSI based electrolyte corrosion study on Al current collector and its effect on Cu side”
10:20 AM **BREAK** 15 min
Session 2: Electronics and Sensors
10:35 AM **Wei Lu** University of Michigan 30 min
“Materials and Devices for Bio-inspired Computing”
11:05 AM **Deep Jariwala** University of Pennsylvania 30 min
“Low-Dimensional Heterostructures for Low-power Memory devices and Photonics”
11:35 AM **LUNCH, Poster Competition Announcement, Networking**
Session 3: Structural Materials
12:40 PM **John Allison** University of Michigan 30 min
“The PRISMS Center Framework: An advanced open source multi-scale capability for accelerating predictive materials science”
1:10 PM **Ashley Buscek** University of Michigan 30 min
“Current and Future Capabilities in 3D X-Ray Diffraction Microstructure Imaging”
1:40 PM **BREAK** 15 min
Session 4: Computation and Data Science
1:55 PM **Elizabeth Holm** University of Michigan 30 min
“Making the most of what we’ve got: Designing microstructural data sets for AI applications”
2:25 PM **Wenhao Sun** University of Michigan 30 min
“Predicting synthesis routes to novel computationally-designed materials”
2:55 PM **BREAK** 15 min
Session 5: Batteries
3:10 PM **Mohamed Alamgir** LG Energy Solution 30 min
“Battery Development Activities at LG Energy Solution”
3:40 PM **Shirley Meng** University of Chicago & Argonne 40 min
“From Lab to Prototype – An Update on Sulfide Based Solid State Battery”
4:20 PM **CLOSING REMARKS** 10 min
4:30 PM **ADJOURN**