

CCMR Symposium

May 22, 2019



Electrochemical Energy Storage
and Conversion



120 Physical Sciences Building (PSB), Cornell University

Wednesday May 22

- 8:00 – 8:30 am** **Breakfast & Registration – *PSB Clark Atrium***
- 8:30 – 9:00 am** **Welcome Remarks and Introduction – *120 PSB***
Prof. Frank Wise, Director, CCMR; with the Symposium Organizing Committee: Profs. Yong Joo, Chemical and Biomolecular Engineering, and Jin Suntivich, Materials Science and Engineering, Cornell University
- 9:00 – 10 am** **Sproull Lecture – Materials Science for Better Batteries. Achievements and New Directions**
Prof. Jean-Marie Tarascon, Solid State Chemistry and Energy, Collège de France
- 10:00 – 10:30 am** **The Pursuit and Discovery of Vehicle Electrification Markets using Lithium-ion and/or Fuel Cell Powertrains**
Prof. Mark Mathias, Chemical Engineering, University of Rochester
- 10:30 – 10:45 am** **Coffee Break & Posters – *PSB Clark Atrium***
- 10:45 – 11:15 am** **Beyond Platinum Alloy Cathode Catalysts for Polymer Electrolyte Fuel Cells.**
Dr. Deborah Myers, Hydrogen and Fuel Cells Materials Group, Argonne National Laboratory
- 11:15 – 11:45 am** **The Importance of Materials Porosity in Fuel Cell Performance at High Power and Use of Hydrogen Fuel Cells in Unmanned Air Vehicles**
Dr. Karen Swider Lyons, Director, Laboratory for Autonomous Systems Research, US Naval Research Laboratory
- 11:45 – 1:15 pm** **Lunch and Poster Session – *PSB Clark Atrium***
- 1:15 – 1:45 pm** **Designing Electrolytes and Interphases for Lithium Batteries**
Prof. Lynden Archer, Chemical and Biomolecular Engineering, Cornell University; and Founder and Board Member of NOHMs, Rochester, NY

- 1:45 – 2:15 pm** **How Far Can We Push the Limits of Intercalation Batteries**
Prof. Stanley Whittingham, Chemistry and Materials Science and Engineering, SUNY at Binghamton
- 2:15 – 2:30 pm** **Coffee Break & Posters – *PSB Clark Atrium***
- 2:30 – 3:00 pm** **Safe and Highly Conductive Electrolytes: From Liquid to Solid**
Dr. Andreas Hintennach, Group Research, Daimler AG
- 3:00 – 3:30 pm** **Lithium-Ion Battery Material Development and Deployment for 48V and High Energy Density Automotive Applications**
Dr. Derek C. Johnson, Global R&D, A123 Systems, LLC
- 3:30– 3:45 pm** **Wrap up**
- 3:45 – 5:30 pm** **Poster Session and Reception - Baker Portico**