

Workshop on Batteries for a Sustainable Future



Thursday, Nov 18th, 2021 9:00 AM to 3:00 PM (CT)



https://utexas.zoom.us/j/97216773501

Moderator: Arumugam Manthiram

9:00 AM - 9:35 AM : Dr. Yue Qi, Brown University

Ion and Electron Transport at Li/SEI/electrolyte Interfaces

9:35 AM - 10:10 AM: Dr. Matthew McDowell, Georgia Institute of Technology

Chemo-Mechanics of Metal Alloy Anodes in Next-Generation Lithium Batteries

Break

10:10 AM - 10:20 AM

Moderator: Venkat Subramanian

10:20 AM - 10:55 AM: Dr. Dominik Kramer, Karlsruhe Institute of Technology

The lithiation and delithiation of aluminum metal and factors influencing its

reliability as electrode material

10:55 AM - 11:30 AM: Dr. Dan Steingart, Columbia University

Death of a Battery: A Tale in Two Acts

Break

11:30 AM - 12:30 PM

Moderator: Gyeong Hwang

12:30 PM - 1:05 PM: Dr. Brian Heligman, UT Austin

Composite Foil Anodes for Lithium-ion Batteries

1:05 PM - 1:30 PM: Dr. Raj Gopalaswamy & Dr. Richard Hamerton, Novelis

Aluminum Recycling and its Applications to Industry

1:30 PM - 1:55 PM: **Dr. Jeffrey Hales,** *UT Austin*

Policy & Market Drivers of a Sustainable Energy Transition

Break

1:55 PM - 2:10 PM

Moderator: Brian Heligman

2:10 PM - 2:25 PM: **Jayse Langdon,** *UT Austin*

An Advanced Electrolyte for High-Energy Lithium-Metal Batteries

2:25 PM - 2:40 PM : Maitri Uppaluri, UT Austin

Physics-based models for degradation & capacity fade prediction of lithium-ion

batteries

2:40 PM - 2:55 PM : Dr. Swastik Basu, UT Austin

Molecular Modeling of Batteries