

2025 Vehicle Technologies Office Annual Merit Review

Batteries R&D (BAT) Oral Presentation Detailed Schedule

Tuesday, June 3, 2025		Wednesday, June 4, 2025		Thursday, June 5, 2025	
9:00 AM	BAT054: Modeling of Amorphous Solid-State Conductors, Gerd Ceder, LBNL	9:00 AM	BAT470: Process R&D Using Supercritical Fluid Reactors, Youngho Shin, ANL	9:00 AM	BAT576: Solid State Batteries with Long Cycle Life and High Energy Density, Haegyum Lawrence Berkeley National Laboratory
9:15 AM		9:15 AM		9:15 AM	
9:30 AM	BAT091: Characterization and Modeling of Li-Metal Batteries, First Principles Modeling and Machine Learning, Kristin Ceder-Persson, LBNL	9:30 AM	BAT607: Processing and scale-up of high energy density cobalt-free cathodes, Ilias Belharouak, Oak Ridge National Laboratory	9:25 AM	BAT577: Low-Pressure All-Solid State Cells, Tony Burrell, National Renewable Energy Laboratory
9:45 AM		9:45 AM		9:40 AM	
10:00 AM	Bat309: Mathematical Modeling of Beyond Lithium-ion Batteries, Venkat Srinivasan, ANL	10:00 AM	BAT315: Process R&D for Droplet-Produced Powdered Materials, Joe Libera, ANL	9:50 AM	BAT578: Stable Solid-State Electrolyte and Interface for High-Energy Density Lithium-Sulfur Battery, Dongping Lu, Pacific Northwest National Laboratory
10:15 AM		10:15 AM		10:05 AM	
10:30 AM	Bat085: Interfacial Processes- Diagnostics: Characterization and Modeling of Lithium-Metal Batteries, Robert Kostecki, LBNL	10:30 AM	BAT168: Process Development and Scale-Up of Critical Battery Materials - Continuous Flow-Produced Materials, Trevor Dzwiniel, ANL	10:15 AM	BAT579: Multifunctional Gradient Coatings for Scalable High-Energy Density Sulfide-Based Solid-State Batteries, Justin Connell, Argonne National Laboratory
10:45 AM		10:45 AM		10:30 AM	
11:00 AM	BAT619: The Role of Thermodynamics and Kinetics on the Coulombic Efficiency of Lithium Metal Batteries with FEC and DME-based Electrolytes, Yang Shaoorn, MIT	11:00 AM	BAT028: Materials Benchmarking Activities for Cell Analysis, Modeling, and Prototyping (CAMP) Facility Wenquan Lu, ANL	10:40 AM	BAT580: Thick Selenium-Sulfur Cathode Supported Ultra-thin Sulfide Electrolytes for High-Energy All-Solid-State Batteries, Guiliang Xu, Argonne National Laboratory
11:15 AM		11:15 AM		10:55 AM	
11:30 AM	Time Buffer	11:30 AM	Time Buffer	11:05 AM	BAT581: Precision Control of the Lithium Surface for Solid-State Batteries, Andrew Westover, Oak Ridge National Laboratory
11:40 AM	Lunch Break	11:40 AM	Lunch Break	11:20 AM	
1:10 PM	BAT620: Lithium Metal Anode Stability Against Soft and Hard Solid Electrolytes, Nitash Balsara, LBNL	1:10 PM	BAT631: Overview of VTO Battery Recycling Activities, Tina Chen and Jake Herb, VTO	11:30 AM	Time Buffer
1:25 PM		1:25 PM		11:40 AM	Lunch Break
1:40 PM	BAT285: Investigation of Sulfur Reaction Mechanisms, Enyuan Hu, BNL	1:40 PM	BAT377: ReCell–Overview and Update, Jeffrey Spangenberg, Argonne National Laboratory	1:10 PM	BAT582: Inorganic-Polymer Composite Electrolytes with Architecture Design for Lithium Metal Solid-State Batteries, Enyuan Hu, Brookhaven National Laboratory
1:55 PM		1:55 PM		1:25 PM	
2:10 PM	BAT280: Novel Chemistry Lithium -Selenium and Selenium-Sulfur Couple, Khalil Amine, ANL	2:10 PM	BAT573: ReCell Center-Design for Sustainability, Kandler Smith, National Renewable Energy Laboratory	1:40 PM	BAT583: Development of All-Solid-State Battery Using Anti-Perovskite Electrolyte, Zonghai Chen, Argonne National Laboratory
2:25 PM		2:25 PM		1:55 PM	
2:40 PM	BAT555: Advanced Polymer Materials for Batteries, Zhenan Bao, Stanford University	2:40 PM	BAT572: ReCell Center-Advanced Resource Recovery, Yaocai Bai, Oak Ridge National Laboratory	2:10 PM	BAT622: Thin Composite Solid Electrolyte for Li Metal Batteries, Chunsheng Wang, University of Maryland
2:55 PM		2:55 PM		2:25 PM	BAT623: Optimizing Cathode Architecture for Solid-State Li metal-Sulfur Batteries, Eric Wachsman, University of Maryland
3:10 PM	Time Buffer	3:10 PM	Time Buffer	2:40 PM	BAT624: Scalable Noble-metal-free Interlayer Design for Sheet-type Dendrite-free Solid-state Lithium Metal Batteries, Yan Yao, University of Houston
3:15 PM	Break	3:15 PM	Break	2:55 PM	BAT625: Development of High Energy Density All Solid-State Li Batteries Enabled through Optimized Electrochemical Interface and Enginee Wisconsin Milwaukee
3:45 PM	BAT621: overview of cathode portfolio, Carine Steinway, U.S. Department of Energy	3:45 PM	BAT571: ReCell Center-Direct Recycling of Materials, Albert Lipson , Argonne National Laboratory	3:10 PM	Break
3:50 PM	BAT569: Earth-abundant Cathode Active Materials for Li-Ion Batteries: Program Overview, Jason Croy, ANL	4:00 PM		3:45 PM	BAT626: Development of Thin, Robust, Lithium-Impenetrable, High-Conductivity, Electrochemically Stable, Scalable, and Low-Cost Glassy Solid Electrolytes, Steve W. Martin, Iowa State
4:10 PM	BAT570: Cation-disordered Cathode Materials (DRX+) - Overview and Progress Update, Gerd Ceder, LBNL	4:15 PM	BAT574: ReCell Center-Modeling and Analysis, Sabine Gallger and Fulya Dogan Key, Argonne National Laboratory	4:00 PM	BAT627: Developing Materials to Enable High-Energy-for Solid-State Li-S Batteries, Donghai Wang, SMU
4:30 PM	Q & A for BAT569 & BAT570	4:30 PM		4:15 PM	BAT628: Molecular Ionic Composite Solid Electrolytes for Long-Cycling and High Voltage Li-Metal Batteries, Louis Madsen, Virginia Polytechnic Institute
4:45 PM	BAT167: Process Development and Scale-Up of Advanced Active Battery Materials, Ozge Kahvecioglu, ANL	4:45 PM		4:30 PM	BAT629: Stable Sulfide-based Anode-Free and Anode-Limited All-Solid-State Lithium Battery, Puru Jena, Virginia Commonwealth University
5:00 PM		5:00 PM		4:45 PM	BAT630: Blocking Li Metal Dendrites In Solid Electrolytes With Ion-Exchange Induced Residual Stresses, Brian W. Sheldon, Brown University
5:15 PM	Day 1 Ends	5:15 PM	Day 2 Ends	5:00 PM	
				5:15 PM	Day 3 Ends