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Tuesday, June 11, Oral Presentations		
Time	**Advanced Combustion Engines (ACE)**	**Technology Integration (TI)**
7:00 AM	**Continental Breakfast**	
8:00 AM	ACE054: Rapid Compression Machine (RCM) Studies to Understand Autoignition Fundamentals Scott Goldsborough, ANL	TI000: "Tech Integration -- Data and Systems Research" Overview Mark Smith, DOE
8:15 AM		
8:30 AM	ACE013: Chemical Kinetic Models for Advanced Engine Combustion Bill Pitz, LLNL	TI086: Collaborative Approaches to Foster Energy-Efficient Logistics in the Albany - New York City Corridor Jose Holguin-Veras, Rensselaer Polytechnic Institute
8:45 AM		
9:00 AM	ACE012: Model Development and Analysis of Clean and Efficient Engine Combustion Russell Whitesides, LLNL	TI087: Electric Last-Mile Project Grant Fisher, Pecan Street Inc.
9:15 AM		
9:30 AM	ACE006: Advanced Ignition for Gasoline Combustion Isaac Ekoto, SNL	TI088: Making the Business Case for Smart, Shared, and Sustainable Mobility Services Shannon Walker, City of Seattle Department of Transportation
9:45 AM		
10:00 AM	ACE084: Development and Validation of Simulation Tools for Advanced Ignition Systems Riccardo Scarcelli, ANL	TI089: Accelerating Alternative Fuel Adoption in Mid-America Kelly Gilbert, Metropolitan Energy Center Inc.
10:15 AM		
10:30 AM	**Break**	
11:00 AM	ACE005: Spray Combustion and Soot Formation: Cross-Cut Engine Researc Scott Skeen, SNL	TI090: Southeast Alternative Fuel Deployment Partnership Will Manget, Center for Transportation and the Environment
11:15 AM		
11:30 AM	ACE010: Fuel Injection and Spray Research Using X-Ray Diagnostics Christopher Powell, ANL	
11:45 AM		
12:00 PM	ACE125: Model Development of Fundamental Combustion Processes Rainer Dahms, SNL	
12:15 PM		

12:30 PM	**Lunch**	
2:00 PM	ACE126: Developing a Framework for Performing High-Fidelity Engine Simulations using Nek5000 Code for Exascale Computing Muhsin Ameen, ANL	
2:15 PM		
2:30 PM	ACE017: Accelerating Predictive Simulation of Internal Combustion Engines (ICEs) with High-Performance Computing (HPC) K. Dean Edwards, ORNL	
2:45 PM		
3:00 PM	ACE015: Stretch Efficiency for Combustion Engines: Exploiting New High-Dilution Combustion Regimes James Szybist, ORNL	
3:15 PM		
3:30 PM	**Break**	
4:00 PM	ACE004: Low-Temperature Gasoline Combustion (LTGC) Engine Research John Dec, SNL	
4:15 PM		
4:30 PM	ACE127: Advanced Combustion Concepts for High-Efficiency Gasoline Engines Scott Curran, ORNL	
4:45 PM		
5:00 PM		
5:15 PM		
5:30 - 7:30 PM	**Poster Session I -- ACE, BAT (Part 1), EEMS, ELT**	

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Tuesday, June 11, Oral Presentations		
Time	**Electrification Technologies (ELT)**	**Materials Technology (MAT)**
7:00 AM	**Continental Breakfast**	
8:00 AM	ELT000: DOE Electric Drive Technologies Overview Susan Rogers, DOE	MAT124: Integrated Computational Materials Engineering (ICME) Predictive Tools for Low-Cost Carbon Fiber for Lightweight Vehicles Xiadong Li, University of Virginia
8:15 AM		
8:30 AM	ELT089: Assessing the North American Supply Chain for Traction-Drive Inverters, Motors, and Batteries for Class 3-8 Hybrid Electric and Plug-In Electric Commercial Vehicles Chris Whaling, Synthesis Partners	MAT125: Integrated Computational Materials Engineering (ICME) Predictive Tools for Low-Cost Carbon Fiber Jeramie Adams, Western Research Institute
8:45 AM		
9:00 AM	ELT208: Highly Integrated Power Module Emre Gurpinar, ORNL	MAT118: Functionally Designed Ultra-Lightweight Carbon Fiber Reinforced Thermoplastic Composites Door Assembly Srikanth Pilla, Clemson University
9:15 AM		
9:30 AM	ELT209: High-Voltage, High-Power Density Traction Drive Inverter Gui-Jia Su, ORNL	MAT119: Ultra-Light Hybrid Composite Door Design, Manufacturing, and Demonstration Nate Gravelle, TPI
9:45 AM		
10:00 AM	ELT210: Development of Next-Generation Vertical Gallium-Nitride Devices for High-Power Density Electric Drivetrain Greg Pickrell, SNL	MAT120: Ultra-Light Door Design, Manufacturing, and Demonstration Tim Skszek, Vehma
10:15 AM		
10:30 AM	**Break**	
11:00 AM	ELT211: Power Electronics Thermal Management Gilbert Moreno, NREL	MAT146: Ultra-Lightweight, Ductile Carbon Fiber Reinforced Composites Vlastimil Kunc, ORNL
11:15 AM		
11:30 AM	ELT212: Non-Heavy Rare-Earth High-Speed Motors Tsarafidy Raminosoa, ORNL	MAT117: Development and Integration of Predictive Models for Manufacturing and Structural Performance of Carbon Fiber Composites in Automotive Applications Venkat Aitharaju, General Motors
11:45 AM		
12:00 PM	ELT213: High-Fidelity Multiphysics Material Models for Electric Motors Jason Pries, ORNL	MAT101: Integrated Computational Materials Engineering (ICME) Development of Carbon Fiber Composites for Lightweight Vehicles Xuming Su, Ford
12:15 PM		

12:30 PM	**Lunch**	
2:00 PM	ELT214: Electric Motor Thermal Management Kevin Bennion, NREL	MAT147: Continuous Fiber, Malleable Thermoset Composites with Sub-1-Minute Dwell Times: Validation of Impact Performance and Evaluation of the Efficacy of the Compression-Forming Process Philip Taynton, Mallinda
2:15 PM		MAT148: Spider Silk Proteins as Carbon Fiber Precursors Felix Paulauskas, ORNL
2:30 PM	ELT215: Permanent Magnets without Critical Rare Earths to Enable Electric Drive Motors with Exceptional Power Density Iver Anderson, Ames Laboratory	
2:45 PM		MAT122: Close-Proximity Electromagnetic Carbonization (CPEC) Felix Paulauskas, ORNL
3:00 PM	ELT216: Isotropic, Bottom-Up Soft Magnetic Composites for Rotating Machines Todd Monson, SNL	
3:15 PM		MAT149: Non-Rare Earth Magnesium Bumper Beams Scott Whalen, PNNL
3:30 PM	**Break**	
4:00 PM	Panel Discussion: Electric Drive Technologies Innovations	MAT127: USAMP Low-Cost Magnesium Sheet Component Development and Demonstration Project Randy Gerken, Fiat Chrysler Automotive
4:15 PM		
4:30 PM		MAT143: Mitigating Corrosion in Magnesium Sheet in Conjunction with a Sheet-Joining Method that Satisfies Structural Requirements within Subassemblies Saumyadeep Jana, PNNL
4:45 PM		
5:00 PM		MAT150: Low-Cost Corrosion Protection for Magnesium Aashish Rohatgi, PNNL
5:15 PM		MAT151: Phase-Field Modeling of Corrosion for Design of Next-Generation Magnesium-Aluminum Vehicle Joints Adam Powell, Worcester Polytechnic Institute
5:30 - 7:30 PM	**Poster Session I -- ACE, BAT (Part 1), EEMS, ELT**	

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Tuesday, June 11, Oral Presentations		
Time	**Battery R&D (BAT)**	**Energy-Efficient Mobility Systems (EEMS)**
7:00 AM	**Continental Breakfast**	
8:00 AM	BAT337: The Low Cobalt, Cobalt-Free Initiative for Next-Generation Lithium-Ion Cathode Materials Peter Faguy, DOE	EEMS056: Overview of the Workflow Ann Schlenker, ANL
8:15 AM		EEMS057: Urban Traveler – Changes and Impacts: Mobility Energy Productivity (MEP) Metric Venu Garikapali, NREL
8:30 AM	BAT252: Enabling High-Energy, High-Voltage Lithium-Ion Cells for Transportation Applications: Project Completion Highlights, Part I Jason Croy, ANL	
8:45 AM		EEMS011: Integrated Mesoscale Urban Systems Modeling with Behavior, Energy, Autonomy, and Mobility (BEAM) to Explore Shared and Automated Vehicles and their Impacts on Energy and Mobility Colin Sheppard, LBNL
9:00 AM	BAT253: Enabling High-Energy, High-Voltage Lithium-Ion Cells for Transportation Applications: Project Completion Highlights, Part II Dan Abraham, ANL	
9:15 AM		
9:30 AM	BAT374: Stabilizing Cathode/Electrolyte Interface by New Electrolyte Design John Zhang, ANL	EEMS058: Systems and Modeling for Accelerated Research in Transportation (SMART) Mobility Consortium Tools and Process Development Aymeric Rousseau, ANL
9:45 AM		
10:00 AM	BAT183: In Situ Spectroscopy of Solvothermal Synthesis of Next-Generation Cathode Materials Feng Wang, BNL	
10:15 AM		Panel Discussion
10:30 AM	**Break**	
11:00 AM	BAT375: Deep-Dive into Next-Generation Cathode Materials (2A): Realizing the Potential of Layered Transition-Metal Oxides Jason Croy, ANL	EEMS035: Coupling Land-Use Models and Network-Flow Models Paul Wadell, University of California at Berkeley
11:15 AM		
11:30 AM	BAT376: Deep-Dive into Next Generation Cathode Materials (2B): A New Class of Materials--Disordered Rocksalt Transition-Metal Oxides Gerbrand Ceder, LBNL	EEMS007: Mobility Data and Models Informing Smart Cities Joshua Sperling, NREL
11:45 AM		
12:00 PM	BAT377: Lithium-Ion Recycling Center Overview Jeff Spangenberger, ANL	EEMS019: Smart Urban Signal Infrastructure and Control H.M. Abdul Aziz, ORNL
12:15 PM	BAT378: Lithium-Ion Recycling Center Overview Linda Gaines, ANL	

12:30 PM	**Lunch**	
2:00 PM	BAT379: Direct Cathode-to-Cathode Efforts John Vaughey, ANL	EEMS039: Fueling Infrastructure for Future Shared and Shared-Automated Vehicles John Smart, INL
2:15 PM		
2:30 PM	BAT380: Other Materials Separation Kris Pupek, ANL	EEMS044: Quantify National Energy Impact of Electrified Shared Mobility with Infrastructure Support Joann Zhou, ANL
2:45 PM		
3:00 PM	BAT381: Design For Recycling Jianlin Li, ORNL	EEMS040: Fuel Selection in Automated Mobility Districts/Dynamic Wireless Power Transfer Feasibility Omer Onar, ORNL
3:15 PM	BAT382: Modeling and Analysis for Recycling Qiang Dai, ANL	
3:30 PM	**Break**	
4:00 PM	BAT265: Miltec: Development of Ultraviolet Curable Binder Technology to Reduce Manufacturing Cost and Improve Performance of Lithium-Ion Battery Electrodes John Arnold, Miltec	EEMS043: Mobility Behavioral Responses to Transportation Network Company Services Alejandro Henao, NREL
4:15 PM	BAT266: Co-Extrusion (CoEx) for Cost Reduction of Advanced High-Energy-and-Power Battery Electrode Manufacturing Ranjeet Rao, PARC	
4:30 PM	BAT264: Vanderbilt: High-Performance Lithium-Ion Battery Anodes from Electrospun Nanoparticle/Conducting Polymer Nanofibers Peter Pintauro, Vanderbilt University	EEMS023: The Whole Traveler Transportation Behavior Study Anna Spurlock, LBNL
4:45 PM	BAT263: PPG: Electrodeposition for Low-Cost, Water-Based Electrode Manufacturing Stuart Hellring, PPG	
5:00 PM		
5:15 PM		
5:30 - 7:30 PM	**Poster Session I -- ACE, BAT (Part 1), EEMS, ELT**	

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