

# Sunday, April 7, 2024

Revision: 20  
Date: Mar 21, 2024

12:00 PM Exhibition Set-up Starts

# Monday, April 8, 2024

7:00 AM **Registration & Continental Breakfast Sponsored by SPE Automotive Division**

8:15 AM **Welcome Remarks:** Conference Chair, Dr. Sassan Tarahomi, Alterra Holdings

8:30 AM **Technical Program Highlights:** Dr. Norm Kakarala / Dr. Suresh Shah

8:45 AM **Keynote Presenter:** **Electrified Corvette E-Ray; Tadge Juechter, Executive Chief Engineer Global Corvette, GM**

9:15 AM **Sponsors Remarks**

9:30 AM **Keynote Speaker:** **Lithium Ion Battery and Battery Cooling; John Warner, CEO, American Battery Solutions**

10:00 AM **BREAK Sponsored by SPE Automotive Division**

	Conference Hall - I	Conference Hall - II	Conference Hall - III
	<b>BATTERY AND THERMAL MANAGEMENT SYSTEM</b> Dhanendra Nagwanshi, SABIC Dr. Jeff Helms, Celanese Corp. Maggie Baumann, PPA/Pinfa NA	<b>MANUFACTURING ENABLING TECHNOLOGIES</b> David Kosse, Ascend Materials. Steve Vanloozen, Lotte Advanced Materials	<b>EVOLUTION OF EXTERIORS AND LIGHTING</b> Tom Pickett, General Motors Volker Plehn, SABIC Mark Lapain, Advanced Composites
10:30 AM	<b>Polymeric Material Requirements for Batteries Used in Electric Vehicles</b> Ken Vessey UL	<b>A Composite Sandwich Structure Study for EV Battery Cover Application</b> Fred Chang SABIC Sara Simon Forward Engineering	<b>Trends in Exterior Styling &amp; Functionality</b> Tom Pickett General Motors
11:00 AM	<b>Innovative Raw Materials Addressing Thermal Management and Thermal Runaway</b> Kerry Smith Nabaltec AG	<b>Additive Manufacturing as an Alternative for Small Series</b> Daniel Baek Akro Plastics GMBH	<b>Revolutionizing Automotive Aesthetics: Evolving Functions Enhance Design Freedom</b> Michael Angelo Osero SABIC
11:30 AM	<b>Trends and Novel Solutions for Efficient EV Glycol Thermal Management</b> Dr. Brian J. Cardwell Cooper Standard	<b>Rapid Prototyping with 3D Printed Injection Molding Inserts</b> David Constant BASF	<b>Integrated Tailgate Storage Compartment</b> Mary Reiber, Tanner Ivey GM

12:00 PM **LUNCH: Sponsored by SPE Automotive Division**

	Conference Hall - I	Conference Hall - II	Conference Hall - III
	<b>BATTERY AND THERMAL MANAGEMENT SYSTEM</b>	<b>MANUFACTURING ENABLING TECHNOLOGIES</b>	<b>EVOLUTION OF EXTERIORS AND LIGHTING</b>
1:30 PM	<b>Thermoplastic Solutions for Battery Module</b> Nick Compton GM	<b>Revolutionizing Battery Enclosures in Electric Vehicles Through Polyurethane Systems and Advanced Manufacturing Technologies</b> Ricardo Mercado BASF	<b>Evolving Rear Access Solutions – Lighter and Cleaner</b> Daniel Lee, Gillard Laurent Magna Exteriors
2:00 PM	<b>Solutions for Thermal RunAway</b> Dinesh Minjurulimana SABIC	<b>Optimizing EV Structural Designs with Manufacturing Process Simulations</b> Srikar Vallury Moldex-3D	<b>Innovations in Automotive Exterior Lighting</b> Tom Pickett GM
2:30 PM	<b>Bus Bar Protection</b> Charles Hua GM	<b>PUR Overmolding of Exterior and Interior Parts for Class A Out of Mold Production</b> Oliver Stahl Ruhl / Krauss Maffei	<b>Uniformly Lit Animated Tail Lamps</b> Steve Ganado Magna Lighting
3:00 PM	<b>Electrification Outside Automotive</b> James Edmondson IDTECHex	<b>Lightweight Techniques for EV DC-DC Converter</b> Jung Hwan Lee LG Chemicals	<b>Advancement in Translucent TPOs Enabling Innovative Lighting Design</b> Dan Zhang LyondellBasell

3:30 PM **BREAK: Sponsored by SPE Automotive Division**

	Conference Hall - I	Conference Hall - II	Conference Hall - III
	<b>BATTERY AND THERMAL MANAGEMENT SYSTEM</b> Dhanendra Nagwanshi, SABIC Dr. Jeff Helms, Celanese Corp. Maggie Baumann, PPA/Pinfa NA	<b>MATERIAL INNOVATIONS</b> Mike Shoemaker, Borealis Rick Luxgrant, Stellantis Sunit Shah, LyondellBasell	<b>EVOLUTION OF EXTERIORS AND LIGHTING</b> Tom Pickett, General Motors Volker Plehn, SABIC Mark Lapain, Advanced Composites
4:00 PM	<b>Innovative Solutions for Thermal Propagation in EV's</b> John Waltz LG Chem	<b>Material Trends and Innovation in 2024</b> Dr. Sassan Tarahomi Alterra Holdings	<b>Environmental Stewardship Through Implementation of Thermoset BMC Recycling in Automotive Lighting</b> Bob Fraizer Valeo
4:30 PM	<b>Novel Polyester Films for EV and AV Technology Solutions</b> Jan LaRiviere Mylar Specialty Films	<b>Halogen Free Flame Retardant Polypropylenes for Electric Vehicle Applications</b> Mark Evans Borealis	<b>Coating Systems for Lighting</b> Dr. Andreas Haeuseler Momentive
5:00 PM	<b>Thermal Packing for EV's</b> Marina Mendoza Fricke Parker Hannifin	<b>Flame Retardant Choices for Automotive Compounds in Changing Regulatory Landscape</b> Jakub Lison ICL Industries	<b>Sustainable Polyamide Solutions: Solutions for Global Challenges</b> Bernd Henkelmann Radici Group
5:30 PM	<b>Innovative Materials for Lightweight EV Battery Enclosure</b> Keith Kauffmann Envalior	<b>Flame Retardant Engineering Compounds for Electric Vehicles</b> Marc Ollig Akro Plastics GMBH	<b>Electrical Architecture, the New Challenge of Automotive Lighting</b> Paul Henri Matha DVN

6:00 PM – 8:00 PM **Reception: Sponsored by SPE Automotive Division**

## Tuesday, April 9, 2024

7:00 AM **Registration & Continental Breakfast Sponsored by SPE Automotive Division**

8:15 AM **Welcome Remarks:** Conference Chair, Dr. Sassan Tarahomi, Alterra Holdings

8:30 AM **Keynote Speaker:** **Aligning EV Material Trends with Ford's Sustainability Roadmap; Dr. Ellen Lee, Technology Lead, Ford Motor Company**

9:00 AM **Awards & Student Poster Competition:** Dr. Sassan Tarahomi, Alterra Holdings & Chuck Jarret, The Materials Group

9:30 AM **Keynote Speaker:** **Benchmarking Recent Vehicle Launches; Manojdeep Jasrotia, VP of Sales, Caresoft**

10:00 AM **BREAK: Sponsored by SPE Automotive Division**

### 10:30 AM **Panel Discussion on Thermal Runaway – Detection, Containment and Mitigation**

Participant Panelist:

- Mohammadreza Eftekhari – Ford
- Dr. Su Jung Han – GM
- Bhaskara Boddakayala – Ford
- Kenneth R. Vessey – UL
- Brian Engle – Amphenol / NattBatt
- James Edmondson - IDTechX
- Prof. Amar K. Mohanty - University of Guelph

(Moderated by Dhanendra Nagwanshi, SABIC; Dr. Jeff Helms, Celanese & Maggie Baumann, PPA/Pinfa NA)

12:00 PM **LUNCH: Sponsored by SPE Automotive Division**

	Conference Hall - I	Conference Hall - II	Conference Hall - III
	<b>BATTERY AND THERMAL MANAGEMENT SYSTEM</b> Dhanendra Nagwanshi, SABIC Dr. Jeff Helms, Celanese Corp. Maggie Baumann, PPA/Pinfa NA	<b>MATERIAL INNOVATIONS</b> Mike Shoemaker, Borealis Rick Luxgrant, Stellantis Sunit Shah, LyondellBasell	<b>EVOLUTION OF INTERIORS</b> Dr. Rose Ryntz, Ryntz & Associates Jeff Crist, Ford Motor Co. Jim Keller, Mankiewicz Coatings LLC
1:30 PM	<b>Mitigating Battery Cell Failures – Managing Cell Venting Events</b> Brian Engle Amphenol	<b>Long Chain Co-Polyamides in Electric Vehicle Extruded Busbar Applications</b> Mikel Petty Lyondellbasell	<b>Current &amp; Future Direction for Seating Materials, Design, and Construction</b> Diane Murtonen Ford Motor Company
2:00 PM	<b>Battery Pack Sealing and Protection</b> Brian Engle Amphenol	<b>Bonding Polymeric Materials for Next Generation Automotive</b> Mr. Art Cawley DuPont	<b>Smart Integration Technologies Crossing Over Between Headliner Manufacturing, Lighting, and Electronics</b> Peter Barna Grupo Antolin
2:30 PM	<b>An Overview of NHTSA’s EV R&amp;D Safety Activities</b> Dr. Tony Thampan NHTSA	<b>Polyphenylene Sulfide Compositions with a High Degree of Thermal Shock Resistance</b> Dr. Prabuddha Bansal Celanese	<b>PREPRO – Prepositioning Seam Support for Cut and Sew Covering</b> Ulrich Weissert Forvia
3:00 PM	<b>Evolving Thermal Management and Fire Protection in EV Batteries</b> James Edmondson IDTECHex	<b>Composites for Occupant and Battery Protection</b> Chris Korson BASF	<b>Peugeot Drives Car Interior Design Revolution with Stratasys</b> Fadi Abro Stratasys

3:30 PM **BREAK: Sponsored by TBD SPE Automotive Division**

3:45 PM **Exhibit Hall - Student Poster Competition Awards:** Dr. Sassan Tarahomi, Alterra Holdings & Chuck Jarret, The Materials Group

	Conference Hall - I	Conference Hall - II	Conference Hall - III
	<b>BATTERY AND THERMAL MANAGEMENT SYSTEM</b> Dhanendra Nagwanshi, SABIC Dr. Jeff Helms, Celanese Corp. Maggie Baumann, PPA/Pinfa NA	<b>MATERIAL INNOVATIONS</b> Mike Shoemaker, Borealis Rick Luxgrant, Stellantis Sunit Shah, LyondellBasell	<b>EVOLUTION OF INTERIORS</b> Dr. Rose Ryntz, Ryntz & Associates Jeff Crist, Ford Motor Co. Jim Keller, Mankiewicz Coatings LLC
4:00 PM	<b>Regulatory Topics in EAV</b> Fang Want SGS North America	<b>Maximizing Potential: FR Plastics in EV Battery Systems</b> Hadwan Hadwan BASF	<b>UltraBlack - Anti-Glare Coatings for ADAS and HUD Applications</b> Paul Hahler Mankiewicz Coatings, LLC
4:30 PM	<b>Unique Flame Retardant PP Development and Commercialization</b> Dr. Deen Chundury Plastics Compounding LLC	<b>Expanding TPO Performance Using Novel Polyolefin Elastomers</b> Mark Jablonka Dow	<b>Elevate Every Surface: RAYN Technology – Where Elegance Meets Expression</b> Dustin Will RAYN Technology
5:00 PM	<b>High Performance Polyamides for Demanding Battery and Thermal Management Systems</b> Doug Thornhill EMS-GRIVORY	<b>Thermoplastics Solutions for Electric Vehicles</b> Dr. Fred Chang SABIC Sara Simon Forward	<b>Brominated Flame Retardants for Electric Vehicles – Safe, Sustainable, Versatile</b> Dr. Rajeev Mathur Albemarle
5:30 PM	<b>Post Industrial Recycled Polyamide Reinforced with Basalt Fiber for Semi-Structural Applications</b> Dr. Ellen Lee Ford Matthew Delaney TMG	<b>Long Chain Polyamides for Thermal Management and High Voltage Applications in BEV’s</b> Dr. Christian Kochanek Evonik	<b>Flame Retarded Polyolefin Compound for Thermal Runaway Events in Electric Vehicles</b> Christopher Rudzinkas Lyondellbasell

6:00 PM- 8:00 PM **Reception: Sponsored by SPE Automotive Division**

# Wednesday, April 10, 2024

- 7:00 AM **Registration & Continental Breakfast Sponsored by SPE Automotive Division**
- 8:15 AM **Conference Remarks:** Conference Chair, Dr. Sassan Tarahomi, Alterra Holdings
- 8:30 AM **Keynote Speaker: Alternative Chemistries Delivering Significant Positive Impact on “Domestic Battery Solutions.” No Materials Tourism!;** Tom Pilette, CEO, Zeta Energy
- 9:00 AM **Keynote Speaker: Forecast on Electrification Outlook;** Kevin Riddell, LMC GlobalData
- 9:30 AM **BREAK Sponsored by SPE Automotive Division**

	Conference Hall - I	Conference Hall - II	Conference Hall – III
	<b>ADVANCED DRIVER ASSISTANCE SYSTEM (ADAS)</b> Dr. Rodrigo Orozco, Celanese JP Wiese, Polyplastics	<b>NOISE AND VIBRATION</b> Dr. Xian Jiang, Dow Joel Pierce, Borealis	<b>SUSTAINABILITY AND CARBON NEUTRALITY</b> Dr. Alper Kiziltas, Amazon Dr. Prasad Soman, Amazon Drew Geda, Hyundai-Kia America Manoj Patnala, Rician Automotive
10:00 AM	<b>Automotive Market ADAS and AV Trends and Emerging Requirements for Radar</b> <b>Dr. James Edmondson</b> IDTechEx	<b>Overview of Capabilities to Evaluate Sound and Vibration Performance with Focus on High Resilient and Viscoelastic Polyurethane Foams</b> <b>Josh Hand</b> Dow	<b>Sustainable Products, Challenges and Opportunities</b> <b>Dr. Arash Kiani</b> Alterra Holdings
10:30 AM	<b>Radar Transparency of Exterior Trim – Considerations on The Effect of Mechanical Recycle Content</b> <b>Carlos Pereira, Sebastian Flak</b> SABIC	<b>Sustainable Solutions for EV Motor Mount Bushings</b> <b>Jeff Smith</b> Celanese	<b>Ford Mach E One-Piece Frunk in PCR TPO</b> <b>Mahesh Bhattacharyya,</b> Ford Motor Company <b>Ben McComb,</b> Advanced Composites
11:00 AM	<b>High Performance Transparent Polyamides for IR LED’s and Cameras in ADAS</b> <b>Greg Beach</b> EMS-GRIVORY	<b>Overcome NVH challenges with innovative polyamide solutions for powertrain components</b> <b>Jason Park</b> Ascend Performance Materials	<b>Highly Filled Short Banana Fiber – Polypropylene Composites: Fiber Concentration and Interfacial Adhesion Effects on Damping and Mechanical Performance</b> <b>Dr. Caitlyn Clarkson</b> Manufacturing Science Division, Oak Ridge National Laboratory (Knoxville, TN)
11:30 AM	<b>Beyond Burst Testing: Speeding Up Manufacturing for ADAS &amp; ECUs with New Materials</b> <b>JP Wiese</b> PolyPlastics	<b>Changes of Plastics Used in BEV’s Compared to ICV’s &amp; Why</b> <b>Dr. Ashok Adur</b> Everest Internation Consulting (LLC)	<b>Sustainable Products</b> <b>Benny Zhao</b> Kingfa
12:00 PM	<b>Laser Weldability and RF Absorber Material Solutions for Automotive Radar Sensors</b> <b>Dr. Jeff Xu</b> SABIC		<b>Sustainable Material Solutions with Bio-Based PA56</b> <b>Dr. Julian Heinisch</b> LG Chem

12:30 PM **Conference Ends**