

Sunday, April 7, 2024

Revision: 25
Date: April 4, 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; Josh Holder, Corvette Vehicle Chief Engineer, 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
	BATTERY AND THERMAL MANAGEMENT SYSTEM Dhanendra Nagwanshi, SABIC Dr. Jeff Helms, Celanese Corp. Maggie Baumann, PPA/Pinfa NA	MANUFACTURING ENABLING TECHNOLOGIES David Kosse, Ascend Materials. Steve Vanloozen, Lotte Advanced Materials	EVOLUTION OF EXTERIORS AND LIGHTING Tom Pickett, General Motors Volker Plehn, SABIC Mark Lapain, Advanced Composites
10:30 AM	Polymeric Material Requirements for Batteries Used in Electric Vehicles Ken Vessey UL	A Composite Sandwich Structure Study for EV Battery Cover Application Fred Chang SABIC Sara Simon Forward Engineering	Body Exterior Design Trends for Electric Vehicles Tom Pickett General Motors
11:00 AM	Innovative Raw Materials Addressing Thermal Management and Thermal Runaway Kerry Smith Nabaltec AG	Additive Manufacturing as an Alternative for Small Series Daniel Baek Akro Plastics GMBH	Revolutionizing Automotive Aesthetics: Evolving Functions Enhance Design Freedom Michael Angelo Osero SABIC
11:30 AM	Trends and Novel Solutions for Efficient EV Glycol Thermal Management Dr. Brian J. Cardwell Cooper Standard	Rapid Prototyping with 3D Printed Injection Molding Inserts David Constant BASF	Integrated Tailgate Storage Compartment Mary Reiber, Tanner Ivey GM

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

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

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

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

- Dr. Su Jung Han – GM
- Bhaskara Boddakayala – Ford
- Kenneth R. Vessey – UL
- Brian Engle – Amphenol / NattBatt
- Dr. 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
	BATTERY AND THERMAL MANAGEMENT SYSTEM Dhanendra Nagwanshi, SABIC Dr. Jeff Helms, Celanese Corp. Maggie Baumann, PPA/Pinfa NA	MATERIAL INNOVATIONS Mike Shoemaker, Borealis Rick Luxgrant, Stellantis Sunit Shah, LyondellBasell	EVOLUTION OF INTERIORS Dr. Rose Ryntz, Ryntz & Associates Jeff Crist, Ford Motor Co. Jim Keller, Mankiewicz Coatings LLC
1:30 PM	Mitigating Battery Cell Failures – Managing Cell Venting Events Brian Engle Amphenol	Long Chain Co-Polyamides in Electric Vehicle Extruded Busbar Applications Mikel Petty Lyondellbasell	Current & Future Direction for Seating Materials, Design, and Construction Diane Murtonen Ford Motor Company
2:00 PM	Battery Pack Sealing and Protection Brian Engle Amphenol	Bonding Polymeric Materials for Next Generation Automotive Art Cawley DuPont	Smart Integration Technologies Crossing Over Between Headliner Manufacturing, Lighting, and Electronics Peter Barna Grupo Antolin
2:30 PM	An Overview of NHTSA's EV R&D Safety Activities Dr. Tony Thampan NHTSA	Polyphenylene Sulfide Compositions with a High Degree of Thermal Shock Resistance Dr. Prabuddha Bansal Celanese	PREPRO – Prepositioning Seam Support for Cut and Sew Covering Ulrich Weissert Forvia
3:00 PM	Evolving Thermal Management and Fire Protection in EV Batteries James Edmondson IDTECHex	Composites for Occupant and Battery Protection Chris Korson BASF	Peugeot Drives Car Interior Design Revolution with Stratasys 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
	BATTERY AND THERMAL MANAGEMENT SYSTEM Dhanendra Nagwanshi, SABIC Dr. Jeff Helms, Celanese Corp. Maggie Baumann, PPA/Pinfa NA	MATERIAL INNOVATIONS Mike Shoemaker, Borealis Rick Luxgrant, Stellantis Sunit Shah, LyondellBasell	EVOLUTION OF INTERIORS Dr. Rose Ryntz, Ryntz & Associates Jeff Crist, Ford Motor Co. Jim Keller, Mankiewicz Coatings LLC
4:00 PM	Long Chain Polyamides for Thermal Management and High Voltage Applications in BEV's Dr. Christian Kochanek Evonik	Maximizing Potential: FR Plastics in EV Battery Systems Hadwan Hadwan BASF	UltraBlack - Anti-Glare Coatings for ADAS and HUD Applications Paul Hahler Mankiewicz Coatings, LLC
4:30 PM	Unique Flame Retardant PP Development and Commercialization Dr. Deen Chundury Plastics Compounding LLC	Expanding TPO Performance Using Novel Polyolefin Elastomers Mark Jablonka Dow	Elevate Every Surface: RAYN Technology – Where Elegance Meets Expression Dustin Will RAYN Technology
5:00 PM	Custom Tailored High Performance Polyamide Materials for Enhanced Battery Cooling Applications Doug Thornhill EMS-GRIVORY	Thermoplastics Solutions for Electric Vehicles Dr. Fred Chang SABIC Sara Simon Forward	Brominated Flame Retardants for Electric Vehicles – Safe, Sustainable, Versatile Dr. Rajeev Mathur Albemarle
5:30 PM		Post Industrial Recycled Polyamide Reinforced with Basalt Fiber for Semi-Structural Applications Dr. Ellen Lee, Ford Matthew Delaney, TMG	Flame Retarded Polyolefin Compound for Thermal Runaway Events in Electric Vehicles Christopher Rudzinskas 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
	ADVANCED DRIVER ASSISTANCE SYSTEM (ADAS) Dr. Rodrigo Orozco, Celanese JP Wiese, Polyplastics	NOISE AND VIBRATION Dr. Xian Jiang, Dow Joel Pierce, Borealis	SUSTAINABILITY AND CARBON NEUTRALITY Dr. Alper Kiziltas, Amazon Dr. Prasad Soman, Amazon Drew Geda, Hyundai-Kia America Manoj Patnala, Rivian Automotive
10:00 AM	Automotive Market ADAS and AV Trends and Emerging Requirements for Radar Dr. James Edmondson IDTechEx	Overview of Capabilities to Evaluate Sound and Vibration Performance with Focus on High Resilient and Viscoelastic Polyurethane Foams Josh Hand Dow	Sustainable Products, Challenges and Opportunities Dr. Arash Kiani Alterra Holdings
10:30 AM	Radar Transparency of Exterior Trim – Considerations on The Effect of Mechanical Recycle Content Carlos Pereira, Sebastian Flak SABIC	Sustainable Solutions for EV Motor Mount Bushings Jeff Smith Celanese	Ford Mach E One-Piece Frunk in PCR TPO Mahesh Bhattacharyya, Ford Motor Company Ben McComb, Advanced Composites
11:00 AM	High Performance Transparent Polyamides for IR LED’s and Cameras in ADAS Greg Beach EMS-GRIVORY	Overcome NVH challenges with innovative polyamide solutions for powertrain components Jason Park Ascend Performance Materials	Highly Filled Short Banana Fiber – Polypropylene Composites: Fiber Concentration and Interfacial Adhesion Effects on Damping and Mechanical Performance Dr. Caitlyn Clarkson Manufacturing Science Division, Oak Ridge National Laboratory (Knoxville, TN)
11:30 AM	Beyond Burst Testing: Speeding Up Manufacturing for ADAS & ECUs with New Materials JP Wiese PolyPlastics	Changes of Plastics Used in BEV’s Compared to ICE’s & Why Dr. Ashok Adur Everest International Consulting (LLC)	Sustainable Products Benny Zhao Kingfa
12:00 PM	Laser Weldability and RF Absorber Material Solutions for Automotive Radar Sensors Dr. Jeff Xu SABIC		Sustainable Material Solutions with Bio-Based PA56 Dr. Julian Heinisch LG Chem

12:30 PM **Conference Ends**