

# Sunday, April 16, 2023

Revision: 6  
Date: Feb 20, 2023

12:00 PM Exhibition Set-up Starts

# Monday, April 17, 2023

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

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:** **Jamie Brewer, GM Executive Chief Engineer Electric SUVs, GM's EV/AV Strategy and Innovation**

9:15 AM **Platinum Sponsor Remarks (SABIC & Celanese)**

9:30 AM **Keynote Speaker:** **Dean Stevenson, Rivian Senior Director of Interiors, Systematizing Sustainability**

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

	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>SUSTAINABILITY AND CARBON NEUTRALITY</b> Dr. Rohit Srivastava, Amazon Chuck Jarrett, The Materials Group Drew Geda, Hyundai-Kia America
10:30 AM	<i>Fire Protection Materials for EVs: Technology, Trends, and Markets</i> <b>Dr. James Edmondson</b> IDTechEx	<b>Innovative Hybrid Molding in Color</b> <b>Dan Rozelman</b> Kraus Maffei	<b>Carbon Footprints: The Next Driver in Evolving the Plastics Supply Chain</b> <b>Joseph Chang</b> ICIS Chemicals
11:00 AM	<b>Battery Enclosure Materials Screening tests Torch and Grit (TaG) and Battery Enclosure Material Screening (BEMS)</b> <b>Ken Vessey</b> UCC	<b>HR Resistant PK for Cooling Systems</b> <b>Thilo Stier</b> Akro Compounds	<b>Recyclability of Polypropylene and Polyamide Composites with basalt fibers</b> <b>Sandeep Tamrakar</b> Ford Motor Company
11:30 AM	<b>The physics of Cell Venting Failures: Beyond UL2596 and the Need for Venting Management</b> <b>Brian Engle</b> Amphenol	<b>Welding of FRTP for Challenging BEV Applications</b> <b>Adam Halsband</b> Forward Engineering	<b>LG Chem Chemical Recycling Process of Polycarbonate</b> <b>BK Jeon</b> LG Chem

12:00 PM **LUNCH: Sponsored by SABIC**

	Conference Hall - I	Conference Hall - II	Conference Hall - III
	<b>BATTERY AND THERMAL MANAGEMENT SYSTEM</b>	<b>MANUFACTURING ENABLING TECHNOLOGIES</b>	<b>SUSTAINABILITY AND CARBON NEUTRALITY</b>
1:30 PM	<i>Advanced insulation for high voltage electric motor winding</i> <b>Dr. Monoj Ghosh</b> Eaton Corporation	<b>Compounding with AI</b> <b>Saeed Arabi</b> Alterra Plastics	<b>Reclaimed Carbon Fiber Based Sustainable Solutions for Lightweight Electric Vehicle Structures</b> Saeed Arabi, Alterra Plastics
2:00 PM	<b>Role of Thermoplastics in Accelerating EV Battery Pack Development</b> <b>Dave Sullivan</b> SABIC	<b>Optimized Compounds and Blowing Agents for Technical Applications</b> <b>Thilo Stier</b> Akro Compounds	<b>Basalt Fiber Reinforced Polyamide-6 Composites with Hemp Hurd Biochar Filler for Automotive Applications</b> <b>Mohammad Mezbah UI Hoque</b> Washington State University
2:30 PM	<b>Fire Safety and the Role of FR additives</b> <b>Maggie Baumann</b> Performance Polymers and Additives and Pinfa North America	<b>Toolless Fabrication of TPU with Additive Manufacturing</b> <b>Todd McInally</b> BASF 3D Printing Solution NA	<b>Composite Laminates Thermoformed from Wood-Based Prepregs for Interior Automotive Applications</b> <b>Avishek Chanda</b> Washington State University

3:00 PM	<b>The Growing Role of FR Additives In EVs and AVs</b> Dr. Subra Narayan Clariant	<b>Advanced Composites Manufacturing Solutions for the AV and EV Industry</b> Anand Bora MOLDEX3D	<b>PCR and Bio Based TPO/TPE for Electric Vehicles</b> Dr. Arash Kiani Alterra Holdings
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3:30 PM **BREAK: Sponsored by SPE**

	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>ADVANCED DRIVER ASSISTANCE SYSTEM (ADAS)</b> Dr. Rodrigo Orozco, Celanese JP Wiese, SABIC	<b>EVOLUTION OF EXTERIORS AND LIGHTING</b> Tom Pickett, General Motors Volker Plehn, SABIC Mark Lapain, Advanced Composites
4:00 PM	<b>Large, Safe, Lightweight, and Multifunctional Thermoplastic Enclosures for EV Battery Packs.</b> Fred Chang SABIC	<b>SABIC Specialties' Solutions for Automotive Radar Sensors</b> Dr. Jeff Xu SABIC	<b>Material Solutions and Innovations for Exterior Panels</b> Volker Plehn, Jeff Eshenauer SABIC
4:30 PM	<b>High Energy Density Battery Pack Concept</b> Pat Granowicz Celanese	<b>Material, Process and Design effects on Warpage in Camera Brackets</b> Brandon Bouchard Celanese	<b>Smart Rear &amp; Front Panels by Purposefully Combined Plastic Processing</b> Michael Fischer Engel
5:00 PM	<b>Polyamide Technologies Addressing Thermal Runaway Challenges in EV's</b> Kai Becker Ascend Materials	<b>Optimizing Radar Performance of Exterior Trim</b> Carlos Pereira SABIC	<b>Innovative Protective Coatings for Automotive Exterior Parts, Headlamps and Sensor Covers</b> Dr. Andreas Haeuseler, Adam Keeling Momentive

5:30 PM – 7:30 PM **Reception: Cheese & Wine Sponsored by Celanese**

## Tuesday, April 18, 2023

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

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

8:30 AM **Student Poster Competition:** Chuck Jarret, The Materials Group

8:45 AM **Keynote Speaker: Jeff Makarewicz, Group Vice President Technical Resources Toyota North America R&D, Key Challenges, and Innovative Ideas to Navigate the Road to Future Mobility**

9:15 AM **Platinum Sponsor Recognition (ENTEC)**

9:30 AM **Keynote Speaker: Alan Amici, President and CEO of Automotive Research (CAR), Assessment of Inflation Reduction (IRA) Act Impacts on North American Electric Vehicle Supply Chain**

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

### 10:30 AM **Panel Discussion on Thermal Runaway Protection**

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

12:00 PM **LUNCH: Sponsored by ENTEC**

Conference Hall - I	Conference Hall - II	Conference Hall - III
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	<b>EVOLUTION OF INTERIORS</b> Dr. Rose Ryntz Jim Keller, Mankiewicz Coatings LLC Jeff Crist, Ford Motor Co.	<b>MATERIAL INNOVATIONS</b> Mike Shoemaker, Borealis Paula Kruger, Ascend Materials Sunit Shah, LyondellBasell	<b>EVOLUTION OF EXTERIORS AND LIGHTING</b> Tom Pickett, General Motors Volker Plehn, SABIC Mark Lapain, Advanced Composites
1:30 PM	<b>Dual Cast Process for Designing Circular and Monomaterial for Automotive Interiors</b> Dr. Murali Reddy Cpk Interior Systems	<b>Advanced Polymers for Electric and Autonomous Vehicles Applications</b> Dr. Sassan Tarahomi Alterra Holdings	<b>The Development of Integrated Multifunction EV Grille</b> George Liu MintH
2:00 PM	<b>Translucent Foam: Physical Properties and Level of Light Transmittance</b> Kiego Shimura Sekisui Voltek	<b>Novel Formulating Strategies for Flame Retardant Automotive Compounds</b> Jakub Lison, ICL Industrial Products	<b>Innovative Designs and Environmental Solutions to Meet Customer Demands</b> Brian Guinn, Bob Frazier
2:30 PM	<b>Advances in Automotive Interiors</b> Dr. Pravin Sitaram The Haartz Corporation	<b>Enabling Thermal Management with Innovations in CoolPoly® Thermally Conductive Plastics</b> Dr. Prabuddha Bansal Celanese	<b>Material Solutions that Enable Cost and Weight Savings in Automotive Exterior Lighting</b> Dan Fuller Celanese
3:00 PM	<b>Needs, Challenges and Film-based Solutions for Functional Decoparts</b> Paul Rye Kurz	<b>High Performance Polymers for Busbars in Power Electronics and e-Motors of Electric Vehicles</b> Dr. Victoria E. Lee Solvay	<b>Managing Heat using Thermally Conductive Polycarbonates to Achieve Weight, Space and Cost</b> Jim Lorenzo Covestro

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

	<b>Conference Hall - I</b>	<b>Conference Hall - II</b>	<b>Conference Hall - III</b>
	<b>EVOLUTION OF INTERIORS</b> Dr. Rose Ryntz Jim Keller, Mankiewicz Coatings LLC Jeff Crist, Ford Motor Co.	<b>MATERIAL INNOVATIONS</b> Mike Shoemaker, Borealis Paula Kruger, Ascend Materials Sunit Shah, LyondellBasell	<b>NOISE AND VIBRATION</b> Andrea Frey, General Motors Dr. Xian Jiang, Dow
4:00 PM	<b>Throwing Your Shoes at Your Car Seat</b> Aaron DeLong HP	<b>Next-gen Automotive Materials to Increase Safety and Reliability in the Electrical Powertrain</b> Keith Kauffmann DSM	<b>Automotive Acoustic Materials: Design for Acoustics &amp; Applications in Electric Vehicles</b> Jian Pan Auria Solutions
4:30 PM	<b>Automotive Acoustic Materials: design for sustainability</b> Jian Pan Auria Solutions	<b>Next Generation Polyurethane for Internal Battery Structure</b> Chris Korson BASF	<b>Absorption and Reflective Properties of a Crosslinked Foam</b> Keigo Shimura Sekisui Voltek
5:00 PM	<b>Mineral-Based Solutions for EAV Plastics and Sustainability</b> Saied Kochesfahani IMERYS Performance Minerals	<b>Bonding to Dielectric Materials in Battery Pack Assembly</b> Dr. Thomas Clark DuPont Adhesives	<b>Anti-vibration polyamide solutions to overcome a multitude of NVH challenges</b> Jason Park Ascend Materials
5:30 PM	<b>Electrification Driven Challenges for Automotive Plastics</b> Bernad Henkelmann Radici Group	<b>Conductive Molding Compounds in Fuel Cells and Battery Applications</b> Mike Kiesel LyondellBasell	<b>Design for Sustainable Solutions for Carbon Neutrality</b> Karen Guzman Covestro

6:00 PM - 8:00 PM **Reception: Wine & Cheese Sponsored by SPE**

# Wednesday, April 19, 2023

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

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

8:30 AM **Keynote Speaker:** **Dr. Kevin Swift, Senior Economist, ICIS Global Chemicals, *Long-term Scenarios for Automotive Plastics***

9:00 AM **Recognition of Student Participation & Awards:** Dr. Sassan Tarahomi, Alterra Holdings & Chuck Jarret,

The Materials Group

9:30 AM **BREAK Sponsored by SPE**

	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>SUSTAINABILITY AND CARBON NEUTRALITY</b> Dr. Rohit Srivastava, Amazon; Chuck Jarrett, The Materials Group; Drew Geda, Hyundai-Kia America	<b>NOISE AND VIBRATION</b> Andrea Frey, General Motors; Dr. Xian Jiang, Dow
10:00 AM	Trends and Disruptions for Battery Electric Vehicle (BEV) Thermal Management Systems Erik Rask ITW Automotive	Evaluation of Post-Consumer Recycled Polycarbonates for Electric Micromobility Vehicles Rashed Islam, Lyft	Review of dynamic material properties of common plastic materials Nick Oosting Roush Industries, Inc.
10:30 AM	Temperature Management Using Thermally Conductive Electrically Insulative (TCEI) Plastic Materials Ray Szparagowski / Sai Sundararaman	High Performance Polyamides for Demanding Battery and Thermal Management Systems Doug Thornhill EMS-GRIVORY	Development of a Multi-Layer Acoustic Package Model for Automotive Acoustics Manoj Thota Dow
11:00 AM	Thermally Conductive Thermoplastic Solutions for EV Battery Pack Somasekhar Bobba SABIC Specialties	Developments in CirculenRecover TPO Compounds with Recycled Feedstocks for Bumper and Exterior Trim Applications of Electric Vehicles Tomik Mouradian LyondellBasell	Frunk made of Ultra-Silent: Greater Driving Range for Electric Cars Michael Collinsworth Autoneum North America, Inc.
11:30 AM	Zytel® ecool Multilayer Coolant Tube Technology Nate Dumm Celanese	Possibilities for Reducing the Carbon Footprint Thilo Stier Akro Compounds	How Composite e-Motor Mounts Affect EV NVH Performance Ricardo Mercado BASF
12:00 PM	Santoprene® TPV in EV Cooling Hose Applications Paul Zwick Celanese	Advancement in Sensing and Visualization Semiconductor Solutions that Enhance Safety, Comfort and Sustainability Michael Godwin	2nd Generation NVH Zytel™ hushes the crowd with muscle Gabriel Knee Celanese

12:30 PM **Conference Ends**