

TUESDAY, APRIL 15, 2025

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| 7:00 AM | WELCOME REMARKS: | Conference Chair: Dr. Sassan Tarahomi |
| 8:00 AM | TECHNICAL HIGHLIGHTS: | Conference Co-Chairs: Dr. Norm Kakarala & Dr. Suresh Shah |
| 8:20 AM | KEYNOTE SPEAKER: | Launching of an All-New Electric Chevrolet Equinox; Matt Purdy , Executive Chief Engineer for Electric SUVs, General Motors |
| 8:30 AM | KEYNOTE SPEAKER: | Battery Royale-the Global Battery Supply Chain Battle; Brian Engle , Director Amphenol, President NAATBatt, SAE Fellow |

| | CONFERENCE HALL - I | CONFERENCE HALL - II | CONFERENCE HALL - III |
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| | BATTERY AND THERMAL MANAGEMENT SYSTEMS Dhanendra Nagwanshi, SABIC Dr. Jeff Helms, Celanese Corp. Maggie Baumann, PPA/Pinfa NA | EVOLUTION OF INTERIORS Dr. Rose Ryntz, Ryntz & Associates Jeff Crist, Ford Motor Co. Jim Keller, Mankiewicz Coatings LLC | EVOLUTION OF EXTERIORS AND LIGHTING Tom Pickett, General Motors Hala Stevens, Magna Exteriors Inc. Michael Angelo Osero, SABIC |
| 10:00 AM | The Feasibility of Thermoplastic Materials for EV Battery Enclosure Solutions Fred Chang, Koffi Dagnon, Sabic | Smart Surface for Automotive Interior Felipe Melhado, DVN | Body Exterior Trends for Electric Vehicles Tom Pickett, General Motors |
| 10:30 AM | Flame Retarded Compounds for Thermal Runaway Events in Electric Vehicles Christopher Rudzinskas, LyondellBasell | Translucent Materials for Interactive and Sustainable Vehicle Interiors Todd Starke, Mark Allen, Dow Chemical | Self-Adjusting Fastener Sleeve for Flush Exterior Door Handles Mary Reiber, General Motors |
| 11:00 AM | Low Warpage Nylon Grades for Battery Applications Mo Meysami, BASF | Enhancing Heads Up Display Performance with Ultra Low Birefringent Polymer AZP Yutaka Tarda, Asahi Kasei | Innovative Product Designs and Processing with Elastomers Dr. Talat Karmo, Vintech |
| 11:30 AM | Xencor™ XTreme: Advancing Thermal Runaway Protection in Electric Vehicle Battery Design Gaurav Amarपुरi, PhD, Syensqo | Evolution of Interiors with Functional Integration Karen Guzman, Covestro | Innovative, Isocyanate-free, Adhesive Technology used in Bonding/Sealing Automotive EV Body Composite Panels to Aluminum Structures Atul Patel, General Motors |

| | CONFERENCE HALL - I | CONFERENCE HALL - II | CONFERENCE HALL - III | DENNISON ROOM |
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| | BATTERY AND THERMAL MANAGEMENT SYSTEMS | EVOLUTION OF INTERIORS | EVOLUTION OF EXTERIORS AND LIGHTING | SIMULATION & OPTIMIZATION David Kosse, Ascend Materials Steven Vanloozen, Lotte Thilo Stier, AKRO Plastic |
| 1:30 PM | Durable, Light and Sustainable Polyurethane Composite Solutions in Automotive Battery Applications Diane Langer, Huntsman Polyurethanes | Advances in Interior Floor Mats Gail Miciuda, Thermoflex | Functional Exterior Coating Materials Matt Orlando, Mitsubishi Chemical Corporation | Considering the Local Anisotropy in the Simulation Process Chain for Short and Long Fiber Reinforced Thermoplastics - Material Characterization Harish Pothukuchi, Martin Schwab, 4a Engineering GmbH, Austria |
| 2:00 PM | High Voltage Battery Busbar Insulation Cover in Intumescent Fire-retardant Thermoplastics Bhaskara Boddakayala, Ford Motor Company | Advances in Bio-renewable Foam for Automotive Interior Applications Robert Bondar, BASF | Exterior Lighting: New Possibilities on EAV Michael Angelo Osero, SABIC | Simulation-Based Optimization of Battery Covers for EV's Alex Baker, Moldex 3D |
| 2:30 PM | Powering the Future of E-Mobility: Halogen-Free Flame Retardants and Sustainable Additive Solutions for Electrical Vehicles Sebastian Harms, Budenheim | Sustainable Automotive Seating Materials - Design for Recycling Missy Brudzynsky, Lear Xi Chen, Dow | Cadillac Celestiq Integrated-Light Guide Outer Lens Trevor Thompson, General Motors | Lightweight Optimized Composite Battery Cover, Design for EVs: Anisotropic Simulation with Manufacturing Variability Gourab Ghosh, Moldex3D NA |
| 3:00 PM | RTV for Battery Enclosure in Electric Vehicles Tom Pickett, General Motors | Automotive Interior Design Trends Laura Coatsworth, Mankiewicz Coatings LLC | Envalior Innovative Solutions in Automotive Lighting Dan Knapp, Envalior | Advanced Modeling of Battery Cells and Packs for EVs: Enhancing Performance and Thermal Management through Microstructural and Electro-Chemical Simulations Dustin Souza, Hexagon |

TUESDAY, APRIL 15, 2025 CONTINUED

| | CONFERENCE HALL - I | CONFERENCE HALL - II | CONFERENCE HALL - III |
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| | BATTERY AND THERMAL MANAGEMENT SYSTEMS | EVOLUTION OF INTERIORS | EVOLUTION OF EXTERIORS AND LIGHTING |
| 4:00 PM | Regulation, Technology, Market Trends Shaping the EV Market Mika Takahashi, IDTechEx | Market Trends Update for ADAS and Automated Driving Vehicles Andy Whydell, Automotive Safety Council | Plexiglas PMMA For Long Light Pipes to Support New Sustainable Design Trends Puneet Chandra, Trinseo |
| 4:30 PM | Advanced Battery Coatings for EV Safety & Performance Dr. Alexey Petrov, Mankiewicz Coatings | Innovative Solutions for Lightweighting Using Engineering Glass Fiber Reinforced Polypropylene in Automotive Industry for Seatbelt Applications Nicholas Schlutig, Sumika Polymer Compounds EUROPE | Front Decorative Lamps-Emerging Trends in EAV and Application Examples Brian Carr, Chris Spain, Roehm |
| 5:00 PM | Maximize Performance, Minimize Cost, the STM Advantage for Battery Enclosures Ricardo Mercado, BASF | Autonomy and In-Cabin Sensing James Edmondson, IDTechEx | Sustainable Coating Innovations for Automotive Deckard Sorensen, Henkel Adhesive Technologies |
| 5:30 PM | | Virgin-like Post-Consumer Recycled (PCR) materials for EV and ADAS applications Dr. Julian Heinisch, LG Chem | Dodge Charger Daytona EV Jack Block Chris Korson, BASF |

WEDNESDAY, APRIL 16, 2025

| | REGISTRATION & CONTINENTAL BREAKFAST: SPONSORED BY COVESTRO | | | |
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| 7:00 AM | WELCOME REMARKS: Conference Chair: Dr. Sassan Tarahomi | | | |
| 8:00 AM | KEYNOTE SPEAKER: Machine Learning and AI in Automotive World; Danil Prokhorov , Director, Toyota R&D North America | | | |
| 8:15 AM | KEYNOTE SPEAKER: Shaping Tomorrow: Navigating the Future of Sustainability through Policy, Trends, and Global Collaboration; Mary Wroten , Executive Director, Ford Environmental Quality Office & ESG | | | |
| 8:45 AM | AWARDS: Conference Chair: Dr. Sassan Tarahomi | | | |
| 9:15 AM | BREAK: SPONSORED BY SPE AUTOMOTIVE DIVISION | | | |
| 9:30 AM | CONFERENCE HALL - I | CONFERENCE HALL - II | CONFERENCE HALL - III | DENNISON ROOM |
| | ELECTRIFIED POWERTRAIN & POWER DISTRIBUTION Dr. Jeff Helms, Celanese Corp. Dr. Monoj Ghosh, Eaton Corp. Dr. Javed Mapkar, Daikin America, Inc. | MATERIAL INNOVATIONS Harsh Modi, Tesla Sunit Shah, LyondellBasell Sarah O'Keeffe, Dow | SUSTAINABILITY & CARBON NEUTRALITY Mark Lapain, Advanced Composites Dr. Prasad Soman, Amazon Drew Geda, Hyundai-Kia America | PLENARY TALKS |
| 10:00 AM | Advancing Flame Retardant Materials for e-Mobility: Balancing Safety, Performance, and Compliance Adam Marcinkowski, BASF | Navigating the Flame Retardant Synergist for Low End ATO-Free Compounds Jakub Lison, ICL Group | Emerging Global Sustainability Proposals Impacting Automotive Plastics Megan Shewey, General Motors | Public-Private Partnerships: Creating an Investment Model for the Development of Future STEM Leaders in Michigan Ralph Bland, Detroit Edison PSA |
| 10:30 AM | The Role of Plastics in Electrical Isolation of Battery Modules Matthew Pernot, General Motors | Application of Innovative Polycarbonate Alloy Material in Automotive Alvin Li, Kingfa USA | Exterior Cladding with Living Hinge in PCR TPO Alex Anderson, Rivian Automotive | The Innovus Story: Innovation, Creativity, Curiosity and Partnership Robert Hemley, Innovus Innovation Center |
| 11:00 AM | Advancements in Plastic Film Slot Liner Materials for High Voltage Systems with Moderately High Thermal Demands (200°C) Alyssa Arend, Syensqo | Newly developed Vicnyl Materials Make Autonomous Driving Safer Daniel Shan, Kingfa USA | 3D Printing in Series Production, from Raw Material to Tier 1 Dr. Michael Reck, AKRO Plastic Dirk Kramer, AFT Automotive | GENIUS TALKS Sustainable Bio-foam for EV Seating Corey McKenzie, MSU Pet Friendly Car Seats in EVs Zhanyla Coley, MSU |
| 11:30 AM | Material Solutions For Miniaturization and Metal-Plastic Replacement in Power Electronics and E-Motors Hiroshi Sato, Celanese | Leverage Materials Science for Nylon Modification Dr. Jong-Young Lee, David Zhang, Shouren Ge, Xian Jiang, Dow | Adding Value through Sustainable Materials: Strategic Implementation of Eco-friendly Technologies for Automotive Interiors Isabel Newton, Hyundai Group | Using Engineering Solutions on the ISS to Improve EV Technology on Earth Alexander Graham, Renaissance High School NeuroShield: Rethinking EMF Safety in EVs Preeethi Parthasarathy, Int'l Academy East |

WEDNESDAY, APRIL 16, 2025 CONTINUED

| | CONFERENCE HALL - I | CONFERENCE HALL - II | CONFERENCE HALL - III | DENNISON ROOM |
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| | ELECTRIFIED POWERTRAIN & POWER DISTRIBUTION | MATERIAL INNOVATIONS | SUSTAINABILITY & CARBON NEUTRALITY | STUDENT PRESENTATIONS |
| 1:30 PM | Understanding How to Select the Right Flame-Retardant Levels and Products for Battery Disconnect Units Kai Becker, Ascend | Innovative Biocomposites for Lighter and Flame Retardant Electric Vehicle Parts Prof. Manjusri Misra, University of Guelph | Advanced Eco-Friendly Coatings for Vegan Leather in the Automotive Industry Dr. Suraj Sharma, University of Georgia | Machine Readable Signage to Support Autonomous Vehicle Operation Amir Muhammad, Renaissance HS |
| 2:00 PM | Thermal Management of Future Battery Electrical Vehicle THERMOFIL FR Range Material Best in Class Solutions Nicholas Schlutig, Sumika Polymer Compounds EUROPE | Innovative Low Gloss Engineered Polyolefins for Vehicle Interiors Wesley Pasikowski, LyondellBasell John Walling, Advanced Polymer Solution | Sustainable Polymeric Composite for Automotives: Influence of Biochar on Thermo-Mechanical, Microstructural, and Viscoelastic Properties Mohammad Khusaury Bin Bakri, Washington State University | The Future of Mobility: Using Modular Nuclear Energy Reactors to Power EV Charging Stations Destiny Taylor, CMU |
| 2:30 PM | PEEK Applications & Benefits for Use in EVs Phil Hagerty, Victrex | New Silicone Technologies to Improve Sealing and Protection of Plastic Components Michael Wang, Miranda Luevano, Dow | Sustainability with New Bio-Based Polyamides Bernd Henkelmann, Radici Group | Using the Energy Transfer Ecosystems Found in Forests to Design a More Sustainable High Capacity Energy Storage System for EV's Dyllan Nelson, MSU |
| 3:00 PM | Development of Plastic EMI Shielding Solution for xEV Electrified Parts by Conductive Painting Albert (Inki) Min, LG Chem | New HAR Mineral Solution for Automotive Applications Maz Bolourchi, Imerys | Low Cost Renewable BASF PA6 copolymer Ultramid Flex for BEV Thermal Cooling Tubes Mo Meysami, BASF | PEEK: Sustainable Plastic Fabrication of Semiconductors Used in EVs Wei Yang & Alejandro Bracho, NEOCITY Academy |
| 3:30 PM | BREAK: SPONSORED BY SPE AUTOMOTIVE DIVISION | | | |
| | CONFERENCE HALL - I | CONFERENCE HALL - II | CONFERENCE HALL - III | DENNISON ROOM |
| | NOISE AND VIBRATION | MANUFACTURING ENABLING TECHNOLOGIES | SUSTAINABILITY AND CARBON NEUTRALITY | STUDENT PRESENTATIONS |
| 4:00 PM | Dr. Xian Jiang, Dow Joel Pierce, Borealis Dr. Rodrigo Orozco, Celanese | David Kosse, Ascend Materials Steven Vanloozen, Lotte Advanced Materials Thilo Stier, AKRO Plastic | Mark Lapain, Adv. Composites Dr. Prasad Soman, Amazon Drew Geda, Hyundai-Kia America | Use of Red Phosphorus to Avoid Fires in Electric Vehicles Paul Garrison Jr, Renaissance HS |
| 4:30 PM | Fundamentals of Acoustic Materials Andrea Frey, General Motors | How Large Format Additive Manufacturing (LFAM) can be Used in EV Production and Prototyping Dan Rozzleman, Krauss Maffei | PFAS Free Flame Retardant Plastic Solution Christopher Sullivan, LG Chem | Use of Aerogel-TPO Reinforced Form for Sound Suppression in Vehicles Lael Harris, Mt. Clemens HS |
| 5:00 PM | Advancement of Thermoplastic Materials in Automotive NVH Application Chris Korson, BASF | Enhancing EV Battery Enclosures and Beyond with Helicoid™ Technology Dana Lowell, Helicoid Technology | Sustainability Analysis of Basalt Fiber Reinforced Polyamide Composite with Hemp Hurd Biochar Filler for Automotive Applications Avishek Chanda, Washington State Univ. | |
| 5:15 PM | Replace Natural Rubber with TPE in Anti-vibration and Suspension Systems Dr. Rodrigo Orozco, Celanese | MPDBond Technology For Cost-Effective Hy-brid Parts for the Next Generation of EV's Jesko Thomas, Erwin Quarder Thilo Stier, AKRO Plastic | | |