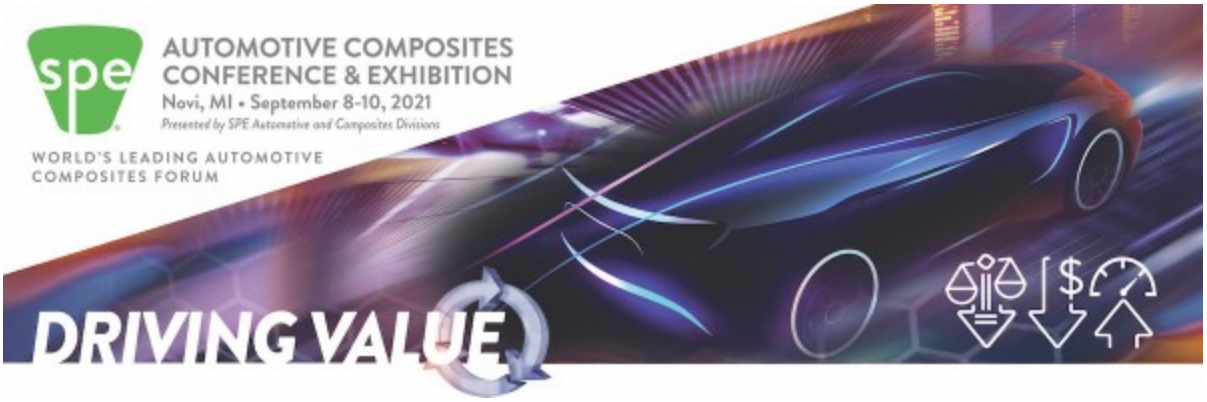

SPE ACCE 2021 SCHEDULED PRESENTATIONS

Scheduled presentations will be approximately 30 minutes in length and are subject to change

KEYNOTE PRESENTATIONS:

- **Advancements for Cost-Effective Resin Systems and Composite Applications**, Dan Dowdall, INEOS
- **Rassini's Innovative Journey to HP-RTM Manufacturer,** Brent Collyer, Rassini International Inc.
- **IACMI - The First Five Years and the Years Ahead**, Dale Brosius, IACMI (Institute for Advanced Composites Manufacturing Innovation)

ADDITIVE MANUFACTURING & 3D PRINTING:

- **Open Platform Advantages in 3D Printing and Finding the Right Materials for Large Components**, Haleyanne Freedman, M. Holland Co.
- **Integrated Systems for Cost-efficient Manufacturing of Multi-Material/Functional Constructs,** Saeed Farahani, Clemson University
- **Process Induced Micro-Void Formation within the Microstructure of Large Scale Polymer Composite Deposition Beads**, Doug Smith, Baylor University
- **Silicone Whipping Additive Manufacturing (SWAM): Technology and Application in Automotive Manufacturing,** Leonardo Simon, University of Waterloo

ADVANCES IN THERMOPLASTIC COMPOSITES:

- **A Metal Plastic Hybrid (MPH) Rail Extension Design Solution for Automotive Bumpers**, Somasekhar Bobba Venkat, SABIC
- **Development of Electrically Conductive Composites of Nylon12 by Incorporation of Biocarbon Filler**, Chinmoyee Das, Michigan Technical University
- **Combined LFT-D and GMT Glass Reinforced Nylon Composite for Optimized Part Molding and Performance**, Navraj Heer, Fraunhofer Project Centre for Composites Research
- **THERMOFIL HP- Innovative Solutions for Lightweighting Using Engineering Glass Fiber Reinforced PP**, Nicolas Schlutig, Sumika
- **An Approach for Integration of RTM Process Simulation**, Anand Bora, Moldex3D
- **Composite Lift Gate with Clear Polymer Window with Integrated Seal & Invisible Defroster Technology**, Boney Mathew, Mathson Composite Group LLC
- **Hybrid Rocker Solution for Electric Vehicle Battery Protection for Side Impact Crashes**, Somasekhar Bobba Venkat, SABIC

ADVANCES IN THERMOSET COMPOSITES:

- **Pushing Structural Sheet Molding Compound Forward by Next-gen Production Line 'CUBE'**, David Buecheler, Schmidt-Heinzmann
- **Composite Compression Limiter for Injection Molded Parts with Improved Pullout Strength**, Kipp Grumm, BASF
- **Assembly and Reuse of Aromatic ThermoSetting coPolyester (ATSP) Composites**, Jacob Meyer, ATSP Innovations
- **Evaluation of Surface Appearance of Sheet Molded Composites**, Tom Skelskey, Ineos
- **Evaluating Phenolic Composite in Benchtop Thermal Runaway Testing,** Ian Swentek, Hexion
- **Thermogravimetric Analysis of SMC Resins for Electric-vehicle Battery Enclosure Applications**, June Wu, INEOS
- **Physical Properties and Process Improvements in Epoxy Composites**, Kazuhiro Yoshida, Kaneka
- **Pultrusion Overmolding for Energy Management Applications**, Ricardo Mercado, BASF
- **Machine Learning Approach for Prediction of Fiber Orientation Distribution in Molded Composites,** Oleksandr Kravchenko, Old Dominion University
- **HP-RTM and LCM Technologies for High Build Rate Automotive Applications**, Stephen Greydanus, Hexion Inc.
- **Advancements in Accelerated Weathering Tests and Materials for Mold-in-Color Sheet Molding Compounds**, Joe Amlung, INEOS Composites

BONDING, JOINING AND FINISHING:

- **Automotive Surge Tank Development via Hybrid Weld Techniques (Vibration Weld + IR Pre-heat)**, Ankur Bhosale, BASF
- **Numerical Study of Unavoidable Material Variability Effects on Damage Development Within a Composite**, Richard Larson, Old Dominion University
- **Mechanical/Electrical Properties of MWCNT/PP Films for Structural Health Monitoring of GF/PP Joints**, Wencai Li, Louisiana State University

BUSINESS TRENDS/TECHNOLOGY SOLUTIONS:

- **Integrating AI-Enabled Automatic Inspection of Composites with Automotive Quality Processes**, Scott Blake, Aligned Vision
- **Advances in Multimaterial EV Battery Enclosures,** Roman Hillermeier, Structeam
- **Replacing Conventional Metal Wheel Balance Weights with Automated Precision Balance Composite System**, Erik LaBelle, 3M
- **The New Plasma Black: Performance and Environmental Benefit**, Thomas Maier, Monolithmaterials
- **Properties of Polypropylene-based Wood-plastic Composites (WPCs) Using Two Different Wood Fillers**, Geeta Pokhrel, University of Maine
- **The Future of Composites Manufacturing: An Automation Case Study**, Jamie Snudden, Airborne

CARBON COMPOSITES AND REINFORCEMENTS:

- **Energy Absorption of CFRP Channels under Quasi-Static and Dynamic Axial Crush Loading**, Benjamin Harvey, University of Waterloo
- **Composite Battery Housing Based on (CF-)SMC/Prepreg Technology**, Timo Huber, ACTC
- **Carbon Fibers from Hybrid Poplar-derived Lignin**, Sagar V. Kanhere, Clemson University
- **A Numerical Approach to Design Polymeric Composite Gear Pairs for Stiffness and Strength**, Sandeep Nagaraju, GM
- **Effects of Midplane Carbon Nanotube Sheet Interleave on the Strength and Impact Damage Resistance**, Amir Nasirmanesh, Baylor University

- **Mode I and Mode II Fracture Toughness Measurement for Non-crimp CFRP Composites,** Aaditya Pradeep Suratkar, Western University

ENABLING TECHNOLOGIES:

- **Efforts Toward Automated Foreign Object Detection of Carbon Fiber Laminates Using Pulse Echo Ultrasound**, Nathaniel Blackman, Baylor
- **EMI Shielding Solutions for Automotive FRP Composite Applications,** Michael Campbell, TFP-Americas
- **Waste to Product with Dieffenbacher's LFT-D Technology**, Louis Kaptur, Dieffenbacher
- **Integrated Systems for Cost-efficient Manufacturing of Multi-Material/Functional Constructs**, Saeed Farahani, Clemson University
- **2022 Toyota Tundra 2nd Row Composite Seat Structures**, Kipp Grumm, BASF
- **Short Fiber TuFF Technology for Automotive Part Production**, Dirk Heider, Composites Automation
- **Microsandwich - The Solution to Light-weighting, Cost-reduction and Sustainability Available Now,** Russell Elkin, 3A Composites
- **Introduction of a Battery Enclosure Thermal Runaway Material Screening Program**, Amanda Nummy, HATCI
- **Enabling a Circular Lifecycle for Lignin-derived Non-Isocyanate Polyurethane Foams**, James Sternberg, Clemson Composites Center

MODELING OF COMPOSITES:

- **Physics-Based Simulation Workflow for Stamp Forming of Thermoplastic Parts**, Rebecca Cutting, Purdue
- **A Sequential Simulation Approach for Predicting Molding and Process-Induced Deformations for GMT**, Dominik Dorr, University of Western Ontario
- **Non-isothermal Crystallization Kinetic Model: Theory, Development and Application,** Srikanth Pilla, Clemson Unversity
- **CAE Modeling Static/Fatigue Performance of Short Glass Fiber Reinforced PP Coupon & Components**, Congyue (James) Wang, Stelantis
- **Effect of Platelet Length and Stochastic Morphology on Flexural Behavior of Prepreg Molded Composite**, Siavash Sattar, Old Dominion University
- **HP-RTM and LCM Applications for Automotive Industry**, Gleb Meirson, University of Western Ontario
- **ICME Solution to Predict Lifetime of Short Fiber Reinforced Thermoplastic Parts**, Dustin Souza, Hexagon

SUSTAINABLE COMPOSITES:

- **Recycled Carbon Fiber Composites: Automotive Perspectives**, Omar Faruk, University of Toronto
- **The Use of Soy-based Oils to Incorporate Recycled Crumb Rubber into Automotive Rubber Composites**, Alexander Jones, Ford Motor Company
- **Can SMC Composites Deliver Sustainable Solutions?,** Adam Halsband, Forward Engineering
- **Thermal and Physical Properties of Thermosetting Composites with Incorporated Graphene**, Daniel Mulqueen, Enviracarbon
- **Manufacture High Thruput Sustainable Automotive Parts Using Spray Transfer Molding (STM) Technology**, Elias Shakour, BASF
- **A New Approach to Lightweight, Sustainable Nonwoven Composites in the Automotive Industry**, Ziniu Yu, BASF
- **Thermally-modified Wood: A Good Filler for Biopolymers**, Douglas Gardner, University of Maine