TUESDAY NOVEMBER 2

REGISTRATION / BREAKFAST Sponsored by MAGNA

OPENING REMARKS AND AWARD PRESENTATIONS Including Best Paper and Scholarship Awards (Opal/Garnet/Onyx):
Leonardo Simon, Khaled Shahwan, Xiaosong Huang, 2021 SPE ACCE Chairs

KEYNOTE ADDRESS (Opal/Garnet/Onyx): Dan Dowdall, Business Development Manager – Transportation Composites, INEOS Composites, Advancements for Cost-Effective Resin Systems and Composite Applications

EXHIBITS OPEN / COFFEE BREAK Sponsored by MICHELMAN

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

Physical Properties and Process Improvements in Epoxy Composites
Kazuhiro Yoshida, Kaneka

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ADVANCES IN THERMOSET COMPOSITES

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

ADVANCES IN THERMOSET COMPOSITES

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

Evaluation of Surface Appearance of Sheet Molded Composites
Tom Skelskey, Ineos

KEYNOTE ADDRESS (Opal/Garnet/Onyx): Brent Collyer, VP Engineering, R&D Director Lightweighting, Rassini International Inc., Rassini’s Innovative Journey to HP-RTM Manufacturer

CONFERENCE ADJOURNS FOR THE DAY
WEDNESDAY NOVEMBER 3

REGISTRATION / BREAKFAST / EXHIBITS OPEN

OPENING REMARKS AND AWARD PRESENTATIONS Including Best Paper and Scholarship Awards (Opal/Garnet/Onyx):
Leonardo Simon, Khaled Shahwan, Xiaosong Huang, 2021 SPE ACCE Chairs

KEYNOTE ADDRESS (Opal/Garnet/Onyx): John Hopkins, CEO, IACMI (Institute for Advanced Composites Manufacturing Innovation), IACMI: A National Asset and What Comes Next

EXHIBITS OPEN / COFFEE BREAK Sponsored by

HEMERALD/AMETHYST
ENABLING TECHNOLOGIES

Thermal and Physical Properties of Thermosetting Composites with Incorporated Graphene
Daniel Mulqueen, Enviarcarbon

2022 Toyota Tundra 2nd Row Composite Seat Structures
Kipp Grumm, BASF

Thermally-modified Wood: A Good Filler for Biopolymers
Douglas Gardner, University of Maine

Short Fiber TuFF Technology for Automotive Part Production
Dirk Heider, Composites Automation

Manufacture High Thruput Sustainable Automotive Parts Using Spray Transfer Molding (STM) Technology
Elias Shaker, BASF

EMI Shielding Solutions for Automotive FRP Composite Applications
Michael Campbell, TFP-Americas

Replacing Conventional Metal Wheel BalanceWeights with Automated Precision Balance Composite System
Erik LaBelle, 3M

EXHIBITS OPEN / COFFEE BREAK

OPAL/GARNET/ONYX
SUSTAINABLE COMPOSITES

The New Plasma Black: Performance and Environmental Benefit
Thomas Maier, Monolithmaterials

ADVANCES IN THERMOPLASTIC COMPOSITES

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

Development of Electrically Conductive Composites of Nylon12 by Incorporation of Biocarbon Filler
Chinmoyee Das, Michigan Technological University

ENABLING TECHNOLOGIES

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

BUSINESS TRENDS / TECHNOLOGY SOLUTIONS

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

EXHIBITS OPEN / COFFEE BREAK

ADVANCES IN THERMOPLASTIC COMPOSITES

A Metal Plastic Hybrid (MPH) Rail Extension Design Solution for Automotive Bumpers
Somasekhar Bobba Venkat, SABIC

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

Efforts Toward Automated Foreign Object Detection of Carbon Fiber Laminates Using Pulse Echo Ultrasound
Nathaniel Blackman, Baylor

Microsandwich - The Solution to Light-weighting, Cost-reduction and Sustainability Available Now
Russell Elkin, 3A Composites

PANEL DISCUSSION (Opal/Garnet/Onyx): Driving Value in Automotive Composites Manufacturing
Moderator: Leonardo Simon, University of Waterloo; Panelists: Dan Dowdall, INEOS Composites; DDale Brosius, IACMI; more panelists to be announced

CONFERENCE ADJOURNS FOR THE DAY
THURSDAY NOVEMBER 4

REGISTRATION / BREAKFAST

AWARD PRESENTATIONS (Opal/Garnet/Onyx): Student Poster Competition and Parts Competition Award Presentations
Uday Vaidya, 2021 ACCE Student Poster Competition Chair / Teri Chouinard, 2021 ACCE Parts Competition Chair

7:30–8:30

8:30–9:00

COMPOUNDS COMPRESSION LIMITER FOR INJECTION MOLDED PARTS WITH IMPROVED PULLOUT STRENGTH
Kipp Grumm, BASF

Can SMC Composites Deliver Sustainable Solutions?
Adam Halsband, Forward Engineering

Numerical Study of Unavoidable Material Variability Effects on Damage Development Within a Composite
Richard Larson, Old Dominion University

OPAL/GARNET/ONYX ADVANCES IN THERMOSET COMPOSITES
Pushing Structural Sheet Molding Compound Forward by Next-gen Production Line ‘CUBE’
David Buecheler, Schmidt-Heinzmann

Recycled Carbon Fiber Composites: Automotive Perspectives, Omar Faruk, University of Toronto

Mechanical/Electrical Properties of MWCNT/PP Films for Structural Health Monitoring of GF/PP Joints
Wencai Li, Louisiana State University

EMERALD/AMETHYST SUSTAINABLE COMPOSITES
The Use of Soy-based Oils to Incorporate Recycled Crumb Rubber into Automotive Rubber Composites, Alexander Jones, Ford Motor Company

Assembly and Reuse of Aromatic ThermoSetting copolyester (ATSP) Composites
Jacob Meyer, ATSP Innovations

Recycled Carbon Fiber Composites: Automotive Perspectives, Omar Faruk, University of Toronto

Mechanical/Electrical Properties of MWCNT/PP Films for Structural Health Monitoring of GF/PP Joints
Wencai Li, Louisiana State University

PEARL BONDING, JOINING & FINISHING
Automotive Surge Tank Development via Hybrid Weld Techniques (Vibration Weld + IR Pre-heat)
Ankur Bhosale, BASF

Assembly and Reuse of Aromatic ThermoSetting copolyester (ATSP) Composites
Jacob Meyer, ATSP Innovations

Recycled Carbon Fiber Composites: Automotive Perspectives, Omar Faruk, University of Toronto

Mechanical/Electrical Properties of MWCNT/PP Films for Structural Health Monitoring of GF/PP Joints
Wencai Li, Louisiana State University

10:00-10:30

10:30–11:00

PULTRUSION OVERMOLDING FOR ENERGY MANAGEMENT APPLICATIONS
Ricardo Mercado, BASF

A New Approach to Lightweight, Sustainable Nonwoven Composites in the Automotive Industry
Ziniu Yu, BASF

CONFERENCE ADJOURNS FOR THE YEAR

TOUR OF IACMI SCALE UP RESEARCH FACILITY (SURF)

TOUR OF IACMI SCALE UP RESEARCH FACILITY (SURF)

EXHIBITION HOURS:
TUESDAY 7:00 AM – 7:00 PM • WEDNESDAY 7:30 AM – 6:30 PM

SAVE THE DATE

AUTOMOTIVE COMPOSITES CONFERENCE & EXHIBITION
Novi, MI • September 7-9, 2022
Presented by SPE Automotive and Composites Divisions