

Tuesday, September 9

6:30–8:15 a.m.

REGISTRATION / BREAKFAST / OPENING OF EXHIBITS - Diamond Ballroom
JUDGING FOR STUDENT POSTER COMPETITION & PARTS SHOWCASE - Exhibit Hall C

8:15–8:45

OPENING REMARKS (Including Best Paper Awards & Student Scholarship Announcements)
Michael Connolly & Antony Dodworth, 2014 SPE ACCE Co-Chairs - Diamond Ballroom

8:45–9:00

BREAK / EXHIBITS - Diamond Ballroom

	IN GRANITE/GOLD/ COPPER ROOM	IN EMERALD/ AMETHYST ROOM	IN BRONZE/ SILVER ROOM
	OPPORTUNITIES & CHALLENGES WITH CARBON COMPOSITES - PART 1 OF 1:	VIRTUAL PROTOTYPING & TESTING OF COMPOSITES - PART 1 of 3: <i>Simulations with Discontinuous Reinforcements</i>	NANOCOMPOSITES - PART 1 of 2: <i>Graphene, Attapulgite, and New Assessment Tools</i>
9:00–9:30	Allan James <i>Dow Automotive Systems</i> High Speed RTM Materials and Processing Technology Advancements for Affordable Lightweight Composites	Huan-Chang Tseng <i>CoreTech System (Moldex3D) Co., Ltd.</i> Prediction of Fiber Microstructure for Injection Molding: Orientation, Degradation, and Concentration	David Arthur <i>SouthWest NanoTechnologies, Inc. (SWeNT)</i> Carbon Nanotube Materials for Automotive Applications
9:30–10:00	Koichi Akiyama <i>Mitsubishi Rayon Co., Ltd.</i> Utilization of PCM Technology with Various Applications of Commercial Production Vehicle	Kurt Danielson <i>e-Xstream engineering</i> Stiffness and Failure Modeling of Discontinuous Fiber Composites	Charles Dal Castel <i>University of Waterloo</i> Engineering Polymers / Attapulgite Nanocomposites
10:00–10:30	Hendrik Mainka, Volkswagen AG & Liane Hilfert, University of Magdeburg Lignin — An Alternative Precursor for Sustainable & Cost-Effective Automotive Carbon Fiber	Nicholas Smith <i>Purdue University</i> Use of Orientation Tensors in Homogenized Material Properties of Discontinuous Composites <i>2013 SPE ACCE Scholarship Award Winner</i>	Keith Honaker <i>Michigan State University</i> Processing Methods of High Density Polyethylene-Exfoliated Graphene Nanoplatlet Nanocomposites for Automotive Fuel Tank Applications <i>2013 SPE ACCE Scholarship Award Winner</i> <i>2014 SPE ACCE Dr. Jackie Rehkopf Best Paper Award Winner</i>
10:30–11:00	Louis Dorworth <i>Abaris Training Resources</i> Inspection and Damage Repair of Advanced Composite Automotive Structures - Part 1	Cuntao (Philia) Wang <i>Kyoto Institute of Technology</i> Adhesive Property of Insert-Injection Molded Glass Fiber Reinforced Thermoplastics	Carter Kittrell <i>Rice University</i> CVD Growth of Graphene
11:00–11:30	Louis Dorworth <i>Abaris Training Resources</i> Inspection and Damage Repair of Advanced Composite Automotive Structures - Part 2	Mike Matthews <i>PCCR USA, Inc.</i> Core-Shell Critical Damage & Recovery Properties	Plenary Talk W.H. Katie Zhong <i>Washington State University</i> Industry Applicable Nanotechnologies: Approaches to Enhancing Quality and Stability of Nano-Systems and Quantitative Assessment Tools

11:45 a.m.
–12:45 p.m.

LUNCH, STUDENT POSTERS, PARTS SHOWCASE - Exhibit Hall C

	IN GRANITE/GOLD/ COPPER ROOM	IN EMERALD/ AMETHYST ROOM	IN BRONZE/ SILVER ROOM
	BUSINESS TRENDS & TECHNOLOGY SOLUTIONS - PART 1 OF 1:	VIRTUAL PROTOTYPING & TESTING OF COMPOSITES - PART 2 OF 3: <i>Laminate & Fabric Simulations; Modeling Pultrusion</i>	NANOCOMPOSITES - PART 2 OF 2: <i>Carbon Nanotubes (CNTs) & Other Nanofibers</i>
1:00–1:30	Alexander Auken <i>Cytec Industries Inc.</i> Increasing the Affordability of Continuous Fibre Composites for High Volume Production	Sarah Stair <i>Baylor University</i> Non-Destructive Characterization of Ply Orientation and Ply Type of Carbon Fiber Reinforced Laminated Composite <i>2013 SPE ACCE Scholarship Award Winner</i>	Plenary Talk Brian Grady <i>University of Oklahoma</i> Carbon Nanotube-Polymer Composites: An Overview
1:30–2:00	David Evers <i>Momentive Specialty Chemicals Inc.</i> Comparison of Engineering Thermosets to Conventional Materials for Automotive Under-the-Hood Applications According to Life Cycle Assessment (LCA)	Kurt Danielson <i>e-Xstream engineering</i> Progressive Failure of CFRP Coupons and Automotive Parts <i>2014 SPE ACCE Dr. Jackie Rehkopf Best Paper Award Winner</i>	W.H. Katie Zhong <i>Washington State University</i> Reduced Viscosity Nanofiber Technology Leading to Enhanced Mechanical Properties and Lower Viscosity for Improved Infusion Processing of Composites
2:00–2:30	Akio Ohtani <i>Gifu University</i> Society of Automotive Composite in Japan	Dustin Souza <i>e-Xstream engineering</i> End-to-End FE-based Homogenization of Woven Composites <i>2014 SPE ACCE Dr. Jackie Rehkopf Best Paper Award Winner</i>	David Lashmore <i>University of New Hampshire</i> Boron Nitride Continuous Fibers
2:30–3:00	Sophie Rabeau <i>Institut Supérieur de Plasturgie d'Alençon - Pôle Universitaire de Montfoulon</i> End-of-Life Vehicle (ELF): Development of a New Recycled Material	Uday Vaidya <i>University of Alabama at Birmingham (UAB)</i> Modeling & Experiments in Thermoplastic Composite Pultrusion	Srinagesh Potluri <i>Zyvex Technologies</i> Gen II: Carbon Nanotube Delivery System for Improving Mechanical Properties of Fiber Reinforced Composites

(Tuesday Continued)

3:00-3:15	COFFEE BREAK / EXHIBITS - Diamond Ballroom
3:15-5:45	EXECUTIVE PANEL DISCUSSION (Diamond Ballroom): Lightweighting & the Multi-Material Car MODERATOR: Jay Baron, Center for Automotive Research PANELISTS: to be announced (exhibits closed)
6:00	COCKTAIL RECEPTION / EXHIBITS - Diamond Ballroom Sponsored by BYK USA, Inc.
8:00	CONFERENCE ADJURNS FOR THE DAY

Wednesday, September 10



7:00-8:00 a.m. REGISTRATION / BREAKFAST / OPENING OF EXHIBITS - Diamond Ballroom
JUDGING FOR PARTS COMPETITION - Exhibit Hall C

	IN GRANITE/GOLD/ COPPER ROOM	IN EMERALD/ AMETHYST ROOM	IN BRONZE/ SILVER ROOM
	ADVANCES IN THERMOSET COMPOSITES - PART 1 of 3: <i>Sheet-Molding Compounds</i>	ADVANCES IN THERMOPLASTIC COMPOSITES - PART 1 of 2: <i>Acetal and Polyamides</i>	SUSTAINABLE COMPOSITES - PART 1 of 2:
8:00-8:30	Scott Lewitt <i>Structural Composites, Inc.</i> Strain Tunable Resin and Coating Technology for Next Generation Composites	Duane Emerson <i>Celanese</i> All-Thermoplastic Composite Hydrogen Storage Cylinders for Fuel-Cell Powered Passenger Vehicles	
8:30-9:00	Michael Sumner <i>Ashland, Inc.</i> Customer-Driven Development of Low Density Class A SMC with Improved Mechanical Properties	Chee Sern (Alex) Lim <i>INVISTA Engineering Polymers</i> Fabrication of Continuous Glass Fiber / Nylon 6,6 Thermoplastic Composite with Improved Mechanical Properties	Minh Tan Ton-That <i>National Research Council Canada</i> Cost-Effect Biocomposite Solutions
9:00-9:30	Jeff Klipstein <i>AOC, LLC</i> Advances in Low Density SMC for Automotive Class A Applications	Paul Kane <i>DuPont Automotive</i> High Glass Transition Polyamide Overmolding Resins with High Weight Fraction Continuous Glass Fiber Reinforced Thermoplastic Laminates: Composite Solutions Providing Improved Stiffness, Light Weight, and Less Design Space	Fatimat Bakare <i>University of Borås (Sweden)</i> Morphological & Mechanical Properties of a Biobased Composite from a Lactic Acid Based Thermoset Resin & Viscose Fiber Reinforcement
9:30-10:00	Christoph Keckl <i>Fraunhofer Institute for Chemical Technology</i> Characterization and Quality Control of Sheet Molding Compound Maturation by Paste Viscosity Measurements	Vasant Pednekar <i>LANXESS Corp.</i> Composite Sheets make Ultra-lite Airbag Housing Possible	Alper Kiziltas <i>Ford Motor Co.</i> Sustainable Polyamide Composites <i>2012 SPE ACCE Scholarship Award Winner</i>

10:00-10:30 COFFEE BREAK / EXHIBITS - Diamond Ballroom

	IN GRANITE/GOLD/ COPPER ROOM	IN EMERALD/ AMETHYST ROOM	IN BRONZE/ SILVER ROOM
	ADVANCES IN THERMOSET COMPOSITES - PART 2 of 3: <i>Epoxyes</i>	ENABLING TECHNOLOGIES - PART 1 of 3: <i>Injection Molding</i>	SUSTAINABLE COMPOSITES - PART 2 of 2:
10:30-11:00	Roman Hillermeier <i>Momentive Specialty Chemicals Inc.</i> Automotive Composites "Crash Box" for Mass Production	Alexander Roch <i>Fraunhofer Institute for Chemical Technology</i> Investigations on Injection Molded, Long-Glass-Fiber Reinforced Integral Foams Using Breathing Mold	Mahmoodul Haq <i>Michigan State University</i> Hybrid, Multi-Scale Reinforced Cotton Gin Waste-Based Composites
11:00-11:30	Stephen Greydanus <i>Momentive Specialty Chemicals Inc.</i> Prepreg Compression Molding for High Volume Manufacturing of Lightweight Epoxy Automotive Structures	Mark Paddock <i>Arburg, Inc.</i> Hybrid Components: Innovative Process for Lightweight Construction and Automated Insert Over-Molding	Ayşe Ademuwagunn <i>Hyundai-Kia America Technical Center, Inc.</i> Biobased Fillers for Polypropylene for Interior Application
11:30-12:00	Kumar Kunal <i>Evonik Corp.</i> Optimized Epoxy Resins for Automotive Composites: Tough, Stiff & Fatigue Resistant	Putinun Uawongsuwan <i>Kyoto Institute of Technology</i> Direct Fiber Feeding Injection Molding of Carbon Fiber Reinforced Polycarbonate Composites	Esra Erbas Kiziltas <i>University of Maine</i> Preliminary Study of Using Heat Treated Wood in Engineering Thermoplastic Composites

(Wednesday continued on next page)

(Wednesday Continued)

12:15–1:15

LUNCH, STUDENT POSTERS, PARTS SHOWCASE - Exhibit Hall C

1:15–1:45

KEYNOTE (Diamond Ballroom): Jan-Anders Månson
Laboratory of Polymer and Composite Materials (LTC),
Institute of Materials, École Polytechnique Fédérale de Lausanne (EPFL)
Why Sport is Important for Automotive Composites
(exhibits closed)

1:45–2:00

COFFEE BREAK / EXHIBITS - Diamond Ballroom

	IN GRANITE/GOLD/ COPPER ROOM	IN EMERALD/ AMETHYST ROOM	IN BRONZE/ SILVER ROOM
	ADVANCES IN THERMOSET COMPOSITES - PART 3 of 3: <i>Polyurethanes</i>	ADVANCES IN THERMOPLASTIC COMPOSITES - PART 2 of 2: <i>Additives, Reinforcements & New Polymers</i>	VIRTUAL PROTOTYPING & TESTING OF COMPOSITES - PART 3 of 3: <i>Testing & Manufacturing Corrections</i>
2:00–2:30	Jean-Philippe (J.P.) Masson <i>Evonik Corp.</i> PU Prepregs - A New Approach to Highly Automated Composite Processing	Dana Swan <i>Arkema</i> ELIUM® - A Range of Novel Liquid Thermoplastic Resins for Composite Applications	Benjamin Hangs <i>Fraunhofer Institute for Chemical Technology</i> Evaluation of Process and Layup Induced Warpage for Tailored Laminates made from Thermoplastic UD-Tape <i>2010 SPE ACCE Scholarship Award Winner</i>
2:30–3:00	Troy Hendricks <i>Johnson Controls, Inc. (JCI)</i> Analysis and Reduction of VOCs in a Vehicle Interior: a Tier 1 Supplier Perspective	Tamotsu Harada <i>Mitsui Chemicals America, Inc.</i> New Coupling Agent for Carbon Fiber Reinforced Polypropylene	Mathilde Chabin <i>ESI Group</i> Correction of Composite Parts Geometrical Distortions Induced by Manufacturing with Simulation
3:00–3:30	Peter Brookes <i>Huntsman Polyurethanes</i> A Tunable and Snap-Curing Polyurethane System Enabling Fast-Cycle Manufacture of Structural Composites	Akio Ohtani <i>Gifu University</i> Development of Thermoplastic Resin Impregnated Yarn and its Composite Properties	Sean Fowler <i>Q-Lab Corp</i> New Accelerated Weathering Method for Automotive Coatings
3:30–4:00	Kevin Roslinski <i>Henkel AG & Co. KGaA</i> High Volume Structural Composite Part Production: Paintable Parts Right out of the Mold through Surface Resin Transfer Molding Process	Gayle Tomkinson <i>Kraton Polymers LLC</i> Improving the Toughness of Unidirectional Thermoplastic Composites with Little Tradeoff in Flex Modulus	Gary Latham <i>Pratt & Miller Engineering and Fabrication</i> Adhesive Applications in Motorsports: Design & Analysis Examples

4:00-4:15

COFFEE BREAK / EXHIBITS - Diamond Ballroom

4:15–4:45

KEYNOTE (Diamond Ballroom): Prof. H. J. Dagher, Ph.D., P.E.
Director, Advanced Structures and Composites Center, University of Maine-Orono
Polymer Composite Materials in Infrastructure Applications
(exhibits closed)

4:45–5:15

KEYNOTE (Diamond Ballroom): Kestutis (Stu) Sonta
Senior Materials Engineer, General Motors Co.
Novel Composite Developments on the Chevrolet Spark Battery Enclosure
(exhibits closed)

5:30–7:00

COCKTAIL RECEPTION / EXHIBITS - Diamond Ballroom / Fireside Room *Sponsored by Momentive Specialty Chemicals, Inc.*

7:00

CONFERENCE ADJURNS FOR THE DAY

Thursday, September 11

7:00-8:00 a.m.

REGISTRATION / BREAKFAST / OPENING OF EXHIBITS - Diamond Ballroom
JUDGING FOR PARTS COMPETITION - Exhibit Hall C

	IN GRANITE/GOLD/ COPPER ROOM	IN EMERALD/ AMETHYST ROOM	IN BRONZE/ SILVER ROOM
	ENABLING TECHNOLOGIES - PART 2 of 3: <i>Compression Molding</i>	TUTORIALS - PART 1 of 2: <i>Long-Fiber Thermoplastics (will be video recorded)</i>	ADVANCES IN REINFORCEMENT TECHNOLOGIES - PART 1 of 2: <i>Carbon & Honeycomb</i>
8:00-8:30	Duane Emerson <i>Celanese</i> Development of a Doorframe Support Structure in Glass-Reinforced Polypropylene Composites: Material Validation & Process Enhancements	Vanja Ugresic <i>Fraunhofer Project Centre @ Western</i> Tutorial on the Use of Long Fiber Thermoplastics in the Automotive Market - Part 1	
8:30-9:00	Markus Geier & Thomas Joachim <i>Schuler Group</i> Large Scale Production Line with New Multi-Functional Hydraulic Short Stroke Press	Vanja Ugresic <i>Fraunhofer Project Centre @ Western</i> Tutorial on the Use of Long Fiber Thermoplastics in the Automotive Market - Part 2	Tommy Fristedt <i>Laystitch LLC</i> Tailored Fiber Placement - Modular Design and Additive Manufacturing
9:00-9:30	T.J. McDonough <i>Zoltek Corporation</i> Mechanical Study of Direct Long Fiber Thermoplastic Carbon / Polyamide 6 & its Relations to Processing Parameters	Vanja Ugresic <i>Fraunhofer Project Centre @ Western</i> Tutorial on the Use of Long Fiber Thermoplastics in the Automotive Market - Part 3	Frédéric Vautard <i>Michigan State University</i> Engineering the Carbon Fiber-Vinyl Ester Interface for Improved Mechanical Properties
9:30-10:00	Matthias Graf <i>DIEFFENBACHER GmbH Maschinen – und Anlagenbau</i> Tailored Fiber Placement LFT-D – Endless Fiber Reinforced Hybrid Composites – Flexible and Economical Process Technology for Structural Applications	Vanja Ugresic <i>Fraunhofer Project Centre @ Western</i> Long-Fiber Thermoplastics Round-Table Discussion	Klaus Gleich <i>Johns Manville Technical Center</i> A New Generation of Thermoplastic Honeycomb based on Polyester Spunbond

10:00-10:30

COFFEE BREAK / EXHIBITS - Diamond Ballroom

	IN GRANITE/GOLD/ COPPER ROOM	IN EMERALD/ AMETHYST ROOM	IN BRONZE/ SILVER ROOM
	ENABLING TECHNOLOGIES - PART 3 of 3: <i>Resin Transfer Molding (RTM)</i>	TUTORIALS - PART 2 of 2: <i>Nanotechnologies (will be video recorded)</i>	ADVANCES IN REINFORCEMENT TECHNOLOGIES - PART 2 of 2: <i>Glass & Basalt</i>
10:30-11:00	Sebastian Schmidhuber <i>KraussMaffei Technologies GmbH</i> HP RTM Lightweight Composite Technologies – Machines and Processes	Alan Lesser <i>University of Massachusetts-Amherst</i> Engineering Nano-Reinforced Composite Materials - Part 1	
11:00-11:30	Klaus Ritter <i>Huntsman Advanced Materials</i> Compression Moulding vs. High-Pressure-RTM: Two Complementary Technologies for Cost Effective Carbon Composites Mass Production in Automotive	Alan Lesser <i>University of Massachusetts-Amherst</i> Engineering Nano-Reinforced Composite Materials - Part 2	Ryan Emerson <i>PPG Industries</i> High Rate Response of Novel Fiberglass for Automotive Composites
11:30-12:00	Tobias Jansen <i>Hennecke GmbH</i> High Pressure meets Lightweight	Lawrence Drzal <i>Michigan State University</i> Graphene Nanoplatelets: A Multifunctional Nanomaterial Additive for Polymers and Composites	Corey Melvin <i>Owens Corning</i> Long Fiber Thermoplastic Polypropylene Reinforced with Novel Glass Reinforcements Offers Innovative Potential in Comparison to State-of-the-Art
12:00-12:30	Philipp Rosenberg <i>Fraunhofer Institute for Chemical Technology</i> Effects of Process Parameters on Cavity Pressure and Component Performance in High-Pressure RTM Process Variants	Tie Lan <i>Nanocor, LLC</i> Chemically Modified Bentonite Clays (Nanoclay) as Plastic Additives-Applications in Automotives	Ting Yang <i>Kyoto Institute of Technology</i> Polyurethane Surface Treatment of Two Kinds of Basalt

12:30-1:30

LUNCH, STUDENT POSTERS, PARTS SHOWCASE - Exhibit Hall C

1:30-2:00

KEYNOTE (Diamond Ballroom): **Daniel Ageda**
Secretary General & Chief Operating Officer, JEC Composites Group
Overview & Dynamism of the Worldwide Composites Market
(exhibits closed)

2:00-2:30

KEYNOTE (Diamond Ballroom): **Matthew Marks**
Chair of the American Chemistry Council Plastics Division Automotive Team & Senior Business Manager, Automotive and Mass Transportation at SABIC American Chemistry Council - Plastics Division
Plastics and Polymer Composites Technology Roadmap for Automotive Markets
(exhibits closed)

2:30-2:45

CLOSING REMARKS & PART INNOVATION AWARDS: **Michael Connolly & Antony Dodworth**, 2014 SPE ACCE Co-Chairs

2:45

CONFERENCE ADJURNS FOR THE YEAR