

- 6:30–8:15 REGISTRATION - COFFEE IN MEZZANINE
EXHIBITS OPEN / CONTINENTAL BREAKFAST - Lobby
- 8:15–8:45 OPENING REMARKS (Including Best Paper Awards & Student Scholarship Announcements) **Creig Bowland**, '11 & '12 SPE ACCE Chair, PPG Industries
- 8:45–9:00 COFFEE BREAK / EXHIBITS - Multiple Areas

SEE TIMES
IN SESSION
LISTING

	IN AUDITORIUM	IN AMPHITHEATER 101	IN AMPHITHEATER 102
	<p>TECHNOLOGY READINESS - PART 1: European Composites Innovations</p> <p>9:00–9:40 Lee Harper <i>Nottingham University</i> Advancements in Discontinuous Carbon Fibre Composites for Automotive Applications</p> <hr/> <p>9:40–10:20 Jonah Jimenez <i>Sigmatex High Technology Fabrics</i> A Novel 3D Weaving Process for Low Cost, Complex Carbon Fiber Pre-Forms</p> <hr/> <p>10:20–11:00 Speaker to be Announced</p> <hr/> <p>11:00–11:30 Graham Barnes <i>Engenuity</i> Beyond Crash Tubes: Extending Composite Impact Predictions to Adhesively Bonded Energy Absorption Structures</p>	<p>COMPOSITES TUTORIAL - PART 1: Introduction to Polymer Composites</p> <p>9:00–11:30</p> <p>A full 2½ hours of Tutorials on Thermoset & Thermoplastic Composites Presented by the Automotive Composites Alliance & SPE Composites Division board members</p>	<p>VIRTUAL PROTOTYPING & TESTING OF COMPOSITES - PART 1: Best Practices & Fiber Orientation</p> <p>9:00–9:30 Mike Wyzgoski <i>American Chemistry Council</i> Long Fiber Reinforced Thermoplastics Predictive Engineering (PE) Activities</p> <hr/> <p>9:30–10:00 Dan Williams <i>Granta Design Ltd.</i> A Structure & Best Practice for the Management of Composites Data in Engineering Design & Materials Selection</p> <hr/> <p>10:00–10:30 John T. Hofmann <i>Virginia Polytechnic Institute & State University</i> The Effect of Glass Fiber Length on Orientation Distribution within Center & End Gated Injection Molded Composites <i>2012 SPE ACCE Scholarship Award Winner</i></p> <hr/> <p>10:30–11:00 Cong Zhang <i>The Ohio State University</i> Discontinuous Long-Fiber Reinforced Composite Processing & Final Part Stiffness Predictions</p> <hr/> <p>11:00–11:30 Kevin Meyer <i>Virginia Polytechnic Institute & State University</i> Current Efforts in Simulating the Injection Molding of Short and Long Glass Fiber Composites</p>
11:30–12:30	LUNCH - North Patio / EXHIBITS - Multiple Areas — JUDGING FOR STUDENT POSTER COMPETITION		
12:30–1:00	KEYNOTE SPEAKER Sebastian Schelper , <i>BMW AG</i> , <i>Affordable Composites for High Volume Production in the BMW i8</i>		
1:00–1:15	COFFEE BREAK / EXHIBITS - Multiple Areas		
1:15–1:45	<p>BIO & NATURAL FIBER COMPOSITES - PART 1:</p> <p>Alper Kiziltas <i>University of Maine</i> Natural Fiber Blends Filled Engineering Thermoplastic Composites for Automobile Industry <i>2012 SPE ACCE Scholarship Award Winner</i></p>	<p>ADVANCES IN THERMOSET COMPOSITES - PART 1: Epoxy & Polyurethane</p> <p>Roman Hillermeier <i>Momentive Specialty Chemicals GmbH</i> Advanced Thermosetting Resin Matrix Technology for Next Generation High Volume Manufacture of Automotive Composite Structures</p>	<p>VIRTUAL PROTOTYPING & TESTING OF COMPOSITES - PART 2: Laminate Behavior & Material Models</p> <p>Ali Al-Sharif <i>Wayne State University</i> The Effect of Low Cycle Compression Fatigue on Composite Sandwich Beams in the Presence of Delamination</p>
1:45–2:15	<p>Mehdi Tajvidi <i>University of Waterloo</i> Viscoelastic Properties of Polypropylene/Talc/Wheat Straw Fiber Composites for Automotive Applications</p>	<p>Tom McKay <i>BASF Corp.</i> Lightweight Composites: Epoxy-Matrix Materials for Faster RTM Processes</p>	<p>Russell Mailen <i>Baylor University</i> Laminate Stiffness & Curvature for Laminated Carbon Fiber Composites, Experimental Observation & Model Validation</p>
2:15–2:45	<p>Alper Kiziltas <i>University of Maine</i> Utilization of Carpet Waste as Matrix in Natural Fiber-Filled Engineering Thermoplastic Composites for Automotive Applications <i>2012 SPE ACCE Scholarship Award Winner</i></p>	<p>Stephen Misencik <i>SAERTEX USA, LLC</i> All-Composite Transit Bus Body</p>	<p>Pedro Cortes <i>Youngstown State University</i> The Fracture Properties of a Fiber Metal Laminate Based on Self-Reinforced Thermoplastic Material</p>
2:45–3:15	<p>Jeffrey J. Cernohous <i>Interfacial Solutions, LLC</i> Alternative Natural Fiber Based Automotive Composites</p>	<p>Stefan Kreiling <i>Henkel Corp.</i> Polyurethane Matrix Resin Technology: Highly Durable Composites via Cost-Efficient Resin Transfer Molding (RTM) Processes</p>	<p>Umesh Ghandi <i>Toyota Motor Co.</i> Study Effect of Unidirectional Tape on Fiber</p>
3:15–3:30	COFFEE BREAK / EXHIBITS - Multiple Areas		
3:30–4:00	KEYNOTE SPEAKER Oliver Kuttner , <i>Chief Executive Officer & Co-Owner, Edison2</i> , <i>Correct Primary Decisions Leading to Positive Feedback Loops</i>		
4:00–5:30	<p>PANEL DISCUSSION: Design & Assembly of the Multi-Material Car MODERATOR: Lindsay Brooke, <i>Automotive Engineering Magazine / SAE International</i> PANELISTS: Saad Abouzahr, <i>Chrysler Group LLC</i>; Jay Baron, <i>Center for Automotive Research (CAR)</i>; Oliver Kuttner, <i>Edison2</i>; Gary Lownsdale, <i>Plasan Carbon Composites</i>; Tom Pilette, <i>Magna Exteriors and Interiors</i>; George Ritter, <i>EWI</i></p>		
5:30–7:00	COCKTAIL RECEPTION / EXHIBITS - Ballroom Sponsored by Momentive Performance Materials		

WEDNESDAY, SEPT 12

7:00–8:00 REGISTRATION / CONTINENTAL BREAKFAST / EXHIBITS - Ballroom
 8:00–8:15 OPENING REMARKS **Creig Bowland**, '11 & '12 SPE ACCE Chair, PPG Industries
 8:15–8:30 COFFEE BREAK / EXHIBITS - Multiple Areas

	IN AUDITORIUM	IN AMPHITHEATER 101	IN AMPHITHEATER 102
8:30–9:00	ENABLING TECHNOLOGIES - PART 1: RTM & Sandwich Panel Enhancements Raman Chaudhari <i>Fraunhofer-Institut für Chemische Technologie</i> Characterization of High-Performance Composites Manufactured by Using High Pressure RTM Process Variants	PREFORMING TECHNOLOGIES - PART 1: Dan Buckley <i>American GF</i> Preforming can be Fast and Easy	VIRTUAL PROTOTYPING & TESTING OF COMPOSITES - PART 3: Modeling, Simulation & Validation Suof Omran Abdalslam <i>Wayne State University</i> Modeling Impact Behavior of Glass Fiber Composite with Balsa Core
9:00–9:30	Lolei Karine Khoun <i>National Research Council Canada</i> Effect of Process Variables on the Performance of Glass Fibre Reinforced Composites made by High Pressure Resin Transfer Moulding	Christoph Greb <i>Institut für Textiltechnik of RWTH Aachen University</i> Economic Potential of Single- & Multi-Step Preforming for Large-Scale Production of Automotive Composite Structure <i>2012 Best Paper Award Winner</i>	Vasant Pednekar <i>LANXESS Corp.</i> Simulating Structural Composite Hybrid Parts Made from Continuous Fiber Reinforced Plastics
9:30–10:00	Jan Kuppinger <i>Fraunhofer-Institut für Chemische Technologie</i> Polyurethane Base Sandwich Structures – Face Sheet Characteristics and Part Development	Matthias Graf <i>Dieffenbacher GmbH</i> CFRP - Preform Technology – Advancements in the Fully Automated Preform Process for Complex Parts	Rani Richardson & Jason Curtis <i>Dassault Systèmes & Inceptra</i> Automotive Innovation Takes Flight – Literally
10:00–10:15	COFFEE BREAK / EXHIBITS - Multiple Areas		
10:15–10:45	ENABLING TECHNOLOGIES - PART 2: Injection Molding & Fastening Developments Joe Gobernatz <i>ATF Inc.</i> New Lightweight Fastening Solution for Thermoplastic Composites Applications	PREFORMING TECHNOLOGIES - PART 2: Ulrich Mörschel <i>Textechno Herbert Stein GmbH & Co. KG</i> DRAPETEST: Automatic Drapability Tester	VIRTUAL PROTOTYPING & TESTING OF COMPOSITES - PART 4: Modeling, Simulation & Validation (cont'd) Sejin Han <i>AutoDesk</i> The Numerical Analysis & Validation of Compression Molding Process
10:45–11:15	Joachim Kragl <i>Engel Machinery, Inc.</i> Organomelt & In-Situ Polymerization Provide New Opportunities for Injection Molding of Composite Structures	Nathan Han <i>3D Nanocomposites Inc.</i> Low Cost Hook & Loop 3D Composites Enable Automatic Laying-Up Fabrics for Mass Production Preforming	Roger Assaker <i>e-Xstream engineering</i> Stiffness, Failure & Fatigue of Fiber Reinforced Plastics <i>2012 Best Paper Award Winner</i>
11:15–11:45	Scott Powers <i>Trexel Inc.</i> Foam Injection Molding: Unique Process Solutions for Light Weighting Automotive Plastic Parts	Tommy Fristedt <i>LayStitch LLC</i> Novel Fiber Placement Technologies for Composite Applications	Richard Schaake <i>SKF Engineering & Research Centre</i> Estimation of Anisotropic Stiffening Feature Dimensions in Early Design Phase
11:45–12:45	LUNCH - North Patio / EXHIBITS - Multiple Areas — Announcement of SPE Graduate Poster Competition Awards		
12:45–1:15	KEYNOTE SPEAKER Gary Lownsdale , Chief Technology Officer, Plasan Carbon Composites & Calvin Bamford , President, Globe Machine Manufacturing Co. <i>Cutting Cycle Time for Prepregged Carbon Fiber Composites</i>		
1:15–1:30	COFFEE BREAK / EXHIBITS - Multiple Areas		
1:30–2:00	ENABLING TECHNOLOGIES - PART 3: Combining Discontinuous & Continuous Reinforcements Manfred Reif <i>Fraunhofer-Institut für Chemische Technologie</i> Multi-Material Design – Lightweight Design for Electric Vehicles	ADVANCES IN THERMOPLASTIC COMPOSITES - PART 1: Polyamides Manoranjan Prusty <i>BASF SE</i> New PA with Advanced Stabilization & Higher Glass Loading Improves Mechanicals at Elevated Temperatures	ADVANCES IN COMPOSITE REINFORCEMENT TECHNOLOGIES - PART 1: New Options to Improve Mechanical Properties Andy Rich <i>Element 6 Consulting</i> The Effect of Changing Process, Resin, & Fiber Architecture on Composite Properties
2:00–2:30	Jan-Anders Månson <i>EELCEE AB</i> QEE-TECH™ - Thermoplastic Composites for High Volume Structural Applications	Jonathan Spiegel <i>Polystrand</i> Development of Continuous Fiber Reinforced Nylon Composite for Structural Applications	Juan Serrano , <i>PPG Industries</i> Technological Developments in Fiber Glass Composites for Lightweight Structural Application Solutions
2:30–3:00	Benjamin Hangs <i>Fraunhofer-Institut für Chemische Technologie</i> Co-Compression Molding of Tailored Inserts made from UD-Tape with Directly Compounded Long-Fiber-Reinforced Thermoplastics (D-LFT) <i>2010 SPE ACCE Scholarship Award Winner</i>		Andrew Head <i>A&P Technology</i> Braided Reinforcements Enable Nimble Automation of Composite Molding
3:00–3:15	COFFEE BREAK / EXHIBITS - Multiple Areas		
3:15–4:15	KEYNOTE SPEAKER Jan-Anders Månson , Professor, Director-Laboratory of Polymer & Composite Technology, Ecole Polytechnique Federale de Lausanne <i>Opportunities & Challenges for Automotive Composites</i>		
4:15–5:45	PANEL DISCUSSION: Predictive Analysis of Multi-Material Automotive Structures MODERATOR: Doug Smock, <i>PlasticsToday.com, TheMoldingBlog.com</i> PANELISTS: Roger Assaker, <i>e-Xstream engineering</i> ; Fouad el Khaldi, <i>ESI Group</i> ; Hannes Fuchs, <i>Multimatic Engineering</i> ; Mark Minnichelli, <i>BASF Corp.</i> ; Tim Palmer, <i>MSC Software Corp.</i> ; and Jeff Webb, <i>Ford Motor Co.</i>		
5:45–7:15	COCKTAIL RECEPTION / EXHIBITS - Multiple Areas Sponsored by SPE Automotive & Composites Divisions		

THURSDAY, SEPT 13

6:30-8:00	CONTINENTAL BREAKFAST / EXHIBITS - Ballroom		
	IN AUDITORIUM	IN AMPHITHEATER 101	IN AMPHITHEATER 102
8:00-8:30	CARBON COMPOSITES - PART 1: Opportunities & Challenges Cliff Eberle <i>Oak Ridge National Laboratory</i> Status of Low-Cost Carbon Fiber Developments	ADVANCES IN THERMOPLASTIC COMPOSITES - PART 2: Polyolefins Kunal Kumar <i>Hanwha Azdel, Inc.</i> Development of a New Light Weight Reinforced Thermoplastic for Automotive Interiors	NANOCOMPOSITES - PART 1: Nanotubes & Nanofibers Carla Leer Lake <i>Applied Sciences Inc.</i> Carbon Nanofiber Composites: From Innovative R&D to Commercial Reality
8:30-9:00	George Husman <i>Zoltek Companies, Inc.</i> Carbon Fiber Composites – Low Cost Materials and Manufacturing Options	Duane Emerson <i>Ticona Engineering Polymers</i> Using Unidirectional Glass Tapes to Improve Impact Performance of Thermoplastic Composites in Automotive Applications <i>2012 Best Paper Award Winner</i>	David Inglefield <i>Virginia Tech</i> Functionalization of Multi-Walled Carbon Nanotubes with Hydrogen Bonding Sites for High Performance Polyurethane Nanocomposites <i>2011 SPE ACCE Scholarship Award Winner</i>
9:00-9:30	Glade Gunther <i>UMECO</i> Dform: Enabling the Use of High Performance Materials in High Volume Applications	Jim Keeler <i>Albis Plastics Corp.</i> Higher Temperature PP-Based Composite Provides Nylon/PA-Level Performance at Lower Weight & Cost	David Lashmore <i>Nanocomp Technologies</i> All CNT Lithium Based Secondary Battery
9:30-10:00	COFFEE BREAK / EXHIBITS - Multiple Areas		
10:00-10:30	CARBON COMPOSITES - PART 2: Opportunities & Challenges (cont'd) Felix Nguyen <i>Toray Composites (America), Inc.</i> Fast-Cycle CFRP Technologies for Automobile Applications	ADVANCES IN THERMOPLASTIC COMPOSITES - PART 3: Polyesters Victor Bravo <i>National Research Council Canada</i> DLFT Experiments with Cyclic Butylene Terephthalate	NANOCOMPOSITES - PART 2: Graphene Nanoplatelets Jon Myers <i>Graphene Technologies LLC</i> Enabling the Future through Bottom-Up Synthetic Bulk Graphene
10:30-11:00	Koichi Akiyama <i>Mitsubishi Rayon Co., Ltd.</i> Development of Preforming Process in PCM (Prepreg Compression Molding) Technology	Jim Mihalich <i>Cyclics Corp.</i> In-Situ Polymerization of Reinforced Thermoplastics	Lawrence Drzal <i>XG Sciences, Inc.</i> Graphene Nanoplatelets: A Multi-Functional Nanomaterial Additive for Polymers and Composites
11:00-11:30	Changchun Zeng <i>FAMU-FSU College of Engineering</i> Recycling of Carbon Fiber Reinforced Composites by Using Supercritical Water		
11:30-12:30	LUNCH - North Patio / EXHIBITS - Multiple Areas		
12:30-1:00	BUSINESS TRENDS & TECHNOLOGY SOLUTIONS - PART 1: Paul Dugsin <i>Chetna Consulting</i> Shifting into High Gear: Open and Holistic Research Models as an Accelerator for Innovation in the North American Composites Industry	ADVANCES IN THERMOPLASTIC COMPOSITES - PART 4: Additives & Mixed-Resin Systems Chandrashekar Raman <i>Momentive Performance Materials</i> Thermally Conductive but Electrically Insulating Plastics for Thermal Management Applications	ADVANCES IN THERMOSET COMPOSITES PART 2: SMC & BMC Cheryl Ludwig <i>Chromaflo Technologies Corp.</i> The Art and Technology of Controlling Alkaline Earth Oxide Thickeners in SMC
1:00-1:30	Jacqueline Stagner <i>University of Windsor</i> Polymeric Composites & End-of-Life Vehicles: Recycling & Sustainability Issues	Louis Martin <i>Addcomp North America, Inc.</i> Overview of Maleic-Anhydride-Grafted Polyolefin Coupling Agents: Uses & Benefits	Randy Lewis <i>P. R. Lewis Consulting, LLC</i> BMC with Unprecedented Adhesion to Fillers, High Glass Transition Temperature and Chemical Resistance
1:30-2:00	Tom Lobkovich <i>General Motors Co.</i> Development & Execution of Composite-Intensive Coach for EN-V Demonstration Vehicle Fleet	Uday Vaidya <i>University of Alabama at Birmingham</i> Thermoplastic Sandwich Composites from Recycled Sources for Impact Damage Tolerance & Crashworthiness	
2:00-2:15	CLOSING REMARKS & SPE ACCE PART INNOVATION AWARD Creig Bowland , '11 & '12 SPE ACCE Chair, PPG Industries		
2:15	CONFERENCE ADJOURNS		
4:30-6:30	THURSDAY AFTERNOON: OFFSITE PLANT TOUR AT PLASAN CARBON COMPOSITES R&D CENTER IN WIXOM, MICH. (SEE CARBON COMPOSITES MOLDED VIA NEW OUT-OF-AUTOCLAVE PROCESS) MUST PREREGISTER TO ATTEND. LIMITED TO 40 PARTICIPANTS.		
8:30-5:00	ALL DAY FRIDAY: OFFSITE TOUR OF NEW FRAUNHOFER PROJECT CENTRE FOR COMPOSITES RESEARCH IN LONDON, ONTARIO. (SEE D-LFT & D-SMC MOLDING SETUPS) MUST PREREGISTER TO ATTEND. LIMITED TO 60 PARTICIPANTS.		