

6:30–8:15 a.m. REGISTRATION / BREAKFAST / OPENING OF EXHIBITS & JUDGING FOR STUDENT POSTER COMPETITION - Diamond Ballroom

8:15–8:45 OPENING REMARKS (Including Best Paper Awards & Student Scholarship Announcements) -
Creig Bowland & Antony Dodworth, 2013 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	IN PEARL ROOM
	OPPORTUNITIES & CHALLENGES WITH CARBON COMPOSITES - PART 1:	TUTORIALS - PART 1:	VIRTUAL PROTOTYPING & TESTING OF COMPOSITES - PART 1:	NANOCOMPOSITES - PART 1:
9:00–9:30	Patric Winterhalter <i>Schuler SMG GmbH & Co. KG</i> Application of Vacuum-Assisted High-Pressure RTM-Process for the Series Production of CFRP Components for Car Bodies	Klaus Gleich & Frank Henning <i>Johns Manville & Fraunhofer-Institut für Chemische Technologie</i> Part 1: Processing Technologies for the Manufacturing of Thermoplastic and Thermoset Composites Parts	Tom James <i>FORMAX</i> Modelling and Optimisation of a Multiaxial Fabric	Uday Vaidya <i>University of Alabama at Birmingham</i> Nanographene Reinforced Carbon-Carbon Composites
9:30–10:00	Leland Decker & James Truskin <i>Chrysler Group LLC</i> SRT Viper Carbon Fiber Engine X-Brace	Klaus Gleich & Frank Henning <i>Johns Manville & Fraunhofer-Institut für Chemische Technologie</i> Part 2: Processing Technologies for the Manufacturing of Thermoplastic and Thermoset Composites Parts	Roger Assaker <i>e-Xstream engineering</i> Multi-Scale Modeling of Failure of Continuous Carbon Fiber Composites Application to Coupon Tests	Alper Kiziltas <i>University of Maine</i> Graphene Based Impact Modified Polypropylene Nanocomposites for Automotive Applications ***2012 SPE ACCE Scholarship Award Winner***
10:00–10:30	Tim Langschwager & Matt Kaczmarczyk <i>Quantum Composites</i> The Application of Composite Design Principles for Light Weighting Structural Components using Discontinuous Carbon Fiber Materials	Klaus Gleich & Frank Henning <i>Johns Manville & Fraunhofer-Institut für Chemische Technologie</i> Part 3: Processing Technologies for the Manufacturing of Thermoplastic and Thermoset Composites Parts	R. Byron Pipes <i>Purdue University</i> Lightweighting through Composites Simulations - The Composites Design and Manufacturing HUB	Frédéric Vautard <i>Michigan State University</i> High Density Polyethylene-Exfoliated Graphene Nanoplatelet Nanocomposites for Automotive Fuel Line and Fuel Tanks Applications
10:30–11:00	Takeshi Ishikawa <i>Mitsubishi Rayon Co., Ltd.</i> The Design of a Thermoplastic CF Composites for Low Pressure Molding	Klaus Gleich & Frank Henning <i>Johns Manville & Fraunhofer-Institut für Chemische Technologie</i> Part 4: Processing Technologies for the Manufacturing of Thermoplastic and Thermoset Composites Parts	Edward Bernardon <i>Siemens PLM Software</i> Engineering Software for Designing Cost Effective Mixed Material Vehicles	Michael Claes <i>NANOCYL SA</i> Carbon Nanotubes: Applications and Benefits in the Automotive Industry
11:00–11:30	Jan-Anders Månson <i>École Polytechnique Fédérale de Lausanne</i> Carbon Fiber Reinforced Composite Waste: An Environmental Assessment of Recycling, Energy Recovery & Landfilling	James Chantler <i>PPG Industries</i> Fiberglass Reinforcement Sizing 101	Giuseppe Resta <i>Altair</i> CAE Simulation Catalyzes Composites Growth: Material, Modeling & Optimization	

11:45–1:15 p.m. LUNCH, KEYNOTE, & EXHIBITS - Diamond Ballroom

KEYNOTE SPEAKER 1: Greg Rucks, Senior Consultant, Rocky Mountain Institute (RMI)
The Autocomposites Commercialization Launchpad: Kickstarting Mainstream Adoption of Automotive CF Composites

1:15–1:30 COFFEE BREAK / EXHIBITS - Diamond Ballroom

	IN GRANITE/GOLD/ COPPER ROOM	IN EMERALD/ AMETHYST ROOM	IN BRONZE/ SILVER ROOM	IN PEARL ROOM
	OPPORTUNITIES & CHALLENGES WITH CARBON COMPOSITES - PART 2:	TUTORIALS - PART 2:	VIRTUAL PROTOTYPING & TESTING OF COMPOSITES - PART 2:	NANOCOMPOSITES - PART 2:
1:30–2:00	Allan James <i>Dow Automotive Systems</i> What's the Difference: Thermoset vs. Thermoplastic Carbon Fiber Composites?	Lindsay Brooke <i>SAE International® / Automotive Engineering International magazine</i> Part 1: A Short History of Automotive Composites	John T. Hofmann <i>Virginia Polytechnic Institute and State University</i> Experimental Evaluation of the Orientation of Long, Semi-Flexible Glass Fibers in Complex 3-Dimensional Flow ***2012 SPE ACCE Scholarship Award Winner***	Jane Spikowski <i>PolyOne Corp.</i> Effect of Fabrication and Electrical Testing on the Measured Performance of Thermoplastic CNT Composites
2:00–2:30	Koichi Akiyama <i>Mitsubishi Rayon Co., Ltd.</i> Development of Particle-Core Compression Molding	Lindsay Brooke <i>SAE International® / Automotive Engineering International magazine</i> Part 2: A Short History of Automotive Composites	Gregorio Manuel Vélez-Garcia <i>Oak Ridge National Laboratory</i> Assessment of the Slowdown in Fiber Orientation Evolution in a Center-Gated Disk ***2009 SPE ACCE Scholarship Award Winner***	Brian Cromer <i>University of Massachusetts - Amherst</i> Melt-Mastication for Polyolefin Nanocomposite Dispersions

(Wednesday Continued)

	IN GRANITE/GOLD/ COPPER ROOM	IN EMERALD/ AMETHYST ROOM	IN BRONZE/ SILVER ROOM	IN PEARL ROOM
	OPPORTUNITIES & CHALLENGES WITH CARBON COMPOSITES - PART 2:	TUTORIALS - PART 2:	VIRTUAL PROTOTYPING & TESTING OF COMPOSITES - PART 2:	NANOCOMPOSITES - PART 2:
2:30-3:00	Hendrik Mainka <i>Volkswagen AG</i> Alternative Precursors for Sustainable and Cost-Effective Carbon Fibers usable within the Automotive Industry	Dan Buckley <i>American GFM</i> Part 1: Dry Fiber Preforming Methods - Pros and Cons	Ken (KC) Cheng <i>Moldex3D Northern America</i> Three Dimensional Predictions of Fiber Orientation for Injection Molding of Long Fiber Reinforced Thermoplastics <i>***2013 SPE ACCE Best Paper Award Winner***</i>	Marilyn Minus <i>Northeastern University</i> Using Nano-Carbon Templates to Control Polymer Matrix Micro-Structure Formation and Properties in the Composite
3:00-3:30	Dale Brosius <i>Quickstep Composites LLC</i> High Performance Composite Body Panels via the Resin Spray Transfer Process	Dan Buckley <i>American GFM</i> Part 2: Dry Fiber Preforming Methods - Pros and Cons	Mark Cieslinski <i>Virginia Polytechnic Institute and State University</i> Simulating Orientation of Long, Semi-Flexible Glass Fibers in Three-Dimensional Injection Molded Thermoplastic Composites	
3:30-3:45	COFFEE BREAK / EXHIBITS - Diamond Ballroom			
3:45-4:15	KEYNOTE SPEAKER 2: Mario Greco, Director-Ground Transportation Market Sector Team, Growth & Market Strategy, Alcoa, Inc. The Multimaterial Reality			
4:15-5:45	PANEL DISCUSSION: Aluminum & Composites — Compete or Collaborate? MODERATOR: Antony Dodworth, Dodworth Design & SPE ACCE 2013 Co-Chair PANELISTS: Mario Greco, Alcoa, Inc.; Doug Richman, Kaiser Aluminum; Jim deVries, Ford Motor Co.; Martin Starkey, Gurit Automotive Ltd.; Jai Venkatesan, The Dow Chemical Co.; Jay Baron, Center for Automotive Research (CAR)			
5:45-8:00	COCKTAIL RECEPTION / EXHIBITS - Diamond Ballroom Sponsored by Momentive Specialty Chemicals, Inc.			
8:00	CONFERENCE ADJURNS FOR THE DAY			

Thursday, Sept 12

	IN GRANITE/GOLD/ COPPER ROOM	IN EMERALD/ AMETHYST ROOM	IN BRONZE/ SILVER ROOM	IN PEARL ROOM
7:00-8:00 a.m.	REGISTRATION / BREAKFAST / OPENING OF EXHIBITS & JUDGING FOR PARTS COMPETITION - Diamond Ballroom			
	ENABLING TECHNOLOGIES - PART 1:	TUTORIALS - PART 3:	VIRTUAL PROTOTYPING & TESTING OF COMPOSITES - PART 3:	ADVANCES IN THERMOPLASTIC COMPOSITES - PART 1:
8:00-8:30	Kip Petrykowski <i>Single Temperature Controls, Inc.</i> A Study of the Effects of Rapid Cycling Pressurized Water Heating / Cooling on Composite / Injection Mold Tool Temperatures	Lou Dorworth <i>Abaris Training Resources, Inc.</i> Part 1: Repairs for Advanced Composite Structures	Kurt Danielson <i>e-Xstream engineering</i> Multi-Scale Modeling of High Cycle Fatigue of Chopped and Continuous Fiber Composites <i>***2013 SPE ACCE Best Paper Award Winner***</i>	Chul Lee <i>INVISTA Engineering Polymers SolVin</i> Nylon 6,6 Continuous Fiber Thermoplastics Composite – Evaluation of Processing Techniques for Optimal Performance
8:30-9:00	David Lowe <i>Regloplas AG</i> Temperature Control in Manufacturing Self Reinforced Polymers (SRPs): A Smart Way to Keep Cool	Lou Dorworth <i>Abaris Training Resources, Inc.</i> Part 2: Repairs for Advanced Composite Structures	Peter Heyes <i>HBM United Kingdom Ltd.</i> Multi-Axial Assessment Method for Fatigue Calculations in Composite Components	Victoire de Clermont-Tonnerre <i>SolVin</i> The First Generation of Vinyl Composites with Long & Continuous Fibers
9:00-9:30	José Feigenblum <i>RocTool</i> Thin Wall and Superior Surface Quality Processing Method of Fiber Reinforced Thermoplastic for Cosmetic Applications	David Sheridan <i>Ticona Engineering Polymers</i> Part 1: Design & Development of Precision Plastic Gear Transmissions	Frank Abdi <i>Alpha STAR Corp.</i> Damage and Failure Mechanism Study of Composite Crushtubes during Axial Crush through Progressive Failure Dynamic Analysis	Nolan Krause <i>RTP Co.</i> Part 1: Light-Weighting with Engineered Thermoplastic Compounds Including Carbon Fiber Reinforced Polypropylene
9:30-10:00	Scott Blake <i>Assembly Guidance Systems</i> Aerospace Process Control for Automotive Composites: Defect Prevention, Data Collection and Documentation	David Sheridan <i>Ticona Engineering Polymers</i> Part 2: Design & Development of Precision Plastic Gear Transmissions	Ram Iyer <i>Eicher Engineering Solutions, Inc.</i> A Method for Developing Composite Beam Structures that are Optimized for Energy Management using Non-Linear Topology Optimization	Nolan Krause <i>RTP Co.</i> Part 2: Light-Weighting with Engineered Thermoplastic Compounds Including Carbon Fiber Reinforced Polypropylene

(Thursday Continued)

10:00–10:30

COFFEE BREAK / EXHIBITS - Diamond Ballroom

	IN GRANITE/GOLD/ COPPER ROOM	IN EMERALD/ AMETHYST ROOM	IN BRONZE/ SILVER ROOM	IN PEARL ROOM
	ENABLING TECHNOLOGIES - PART 2:	TUTORIALS - PART 4:	VIRTUAL PROTOTYPING & TESTING OF COMPOSITES - PART 4:	
10:30–11:00	Jim Mihalich <i>Cyclics Corp.</i> Rapid Molding of Thermoplastic Composites	Roger Assaker & Rani Richardson <i>e-Xstream engineering & Dassault Systèmes</i> Part 1: Developing Accurate Material Models for Composites	Camilo Perez <i>University of Wisconsin - Madison</i> Study on the Fiber Properties of a LFT Strand	
11:00–11:30	Frank Billotto <i>Dow Automotive Systems</i> Adhesive Technology for Automotive Multi-Material Substrate Bonding	Roger Assaker & Rani Richardson <i>e-Xstream engineering & Dassault Systèmes</i> Part 2: Developing Accurate Material Models for Composites	Sarah Stair <i>Baylor University</i> Ultrasonic Characterization of Fiber Reinforced Composites ***2013 SPE ACCE Scholarship Award Winner***	
11:30 a.m.– 12:00 p.m.	Thomas Smith <i>TenCate Performance Composites</i> Continuous Fiber Reinforced Thermoplastic (CFRT®) Inserts for Injection Over-Molding in Structural Applications		David Sheridan <i>Ticona Engineering Polymers</i> Integrated Anisotropic Simulation for Components Made from Glass Fiber Reinforced Thermoplastics ***2013 SPE ACCE Best Paper Award Winner***	

LUNCH, STUDENT POSTER AWARDS, KEYNOTE, & EXHIBITS - Diamond Ballroom

12:15–1:45

KEYNOTE SPEAKER 3: Jai Venkatesan, Director-Material Science & Engineering, The Dow Chemical Co.
Industrialization of Carbon Fiber Composites – Lessons Learned, Investment Priorities for the Future

1:45–2:00

COFFEE BREAK / EXHIBITS - Diamond Ballroom

	IN GRANITE/GOLD/ COPPER ROOM	IN EMERALD/ AMETHYST ROOM	IN BRONZE/ SILVER ROOM	IN PEARL ROOM
	ENABLING TECHNOLOGIES - PART 3:	ADVANCES IN PREFORMING & REINFORCEMENT TECHNOLOGIES - PART 1:	BIO & NATURAL FIBER COMPOSITES - PART 1:	
2:00–2:30	Matthias Graf <i>Dieffenbacher GmbH Maschinen- und Anlagenbau</i> High-Pressure Resin Injection – Key Technology for Large-Scale Production	Jaap Van der Woude <i>PPG Industries</i> Thermoplastic Composites in One Step: In Situ Polymerization of Caprolactam into Fiber Glass Reinforced APA6	Sunil Kumar Ramamoorthy <i>University of Borås</i> Biocomposites Based on Regenerated Cellulose Fiber & Bio Matrix	
2:30–3:00	Darin Grinsteiner <i>CPI Binani Inc. (formerly Composite Products Inc.)</i> Improving DLFT Molding Productivity via Lessons Learned in Non-Automotive Applications	Mingfu Zhang <i>Johns Manville</i> Structural Thermoplastic Composites (STPC)	Damien Maillard <i>National Research Council Canada</i> Compaction Behaviour and Permeability of Cellulosic Fibre for RTM Applications	
3:00–3:30	Chad Duty <i>Oak Ridge National Laboratory</i> Additive Manufacturing Research Briefing	Antonio Cossolo <i>Cannon USA</i> Industrial Preformers for CFRP	Alper Kiziltas <i>University of Maine</i> Micro- and Nanocellulose Composites for Automotive Applications ***2012 SPE ACCE Scholarship Award Winner***	
3:30–4:00	Ben Halford <i>Surface Generation Ltd.</i> Active Thermal Management using the PtFS Process for Rapid Processing of Composite Structures	Tommy Fristedt <i>Laystitch LLC</i> Tailored Fiber Placement Technologies for Composite Applications	Henning Karbstein <i>BASF Corp.</i> Lightweight Bio-Composites with Acrodur® Resin Technology	

4:00–4:15

COFFEE BREAK / EXHIBITS - Diamond Ballroom

4:15–4:45

KEYNOTE SPEAKER 4: Elias Shakour, Research Scientist, Manufacturing, Engineering & Technology, Center for Automotive Research
Creating Value through Collaboration

4:45–5:15

KEYNOTE SPEAKER 5: Ray Boeman, Program Director-Energy Partnership, Oak Ridge National Laboratory
The National Advanced Composites Manufacturing Institute – A Consortium Approach to Automotive Composites

5:30–7:00

COCKTAIL RECEPTION / EXHIBITS - Diamond Ballroom Sponsored by Autodesk Inc.

7:00

CONFERENCE ADJURNS FOR THE DAY

6:30–8:00 a.m. REGISTRATION / BREAKFAST / OPENING OF EXHIBITS & JUDGING FOR PARTS COMPETITION - Diamond Ballroom

	IN GRANITE/GOLD/ COPPER ROOM	IN EMERALD/ AMETHYST ROOM	IN BRONZE/ SILVER ROOM	IN PEARL ROOM
	ADVANCES IN THERMOSET COMPOSITES - PART 1:	ADVANCES IN THERMOPLASTIC COMPOSITES - PART 2:		
8:00–8:30	Stefan Kreiling, Henkel AG & Co. KgaA & Frank Fetscher, Benteler SGL Progress with Polyurethane Matrix Resin Technology: High-Speed Resin Transfer Molding Processes and Application Examples	Duane Emerson Ticona Engineering Polymers Energy Absorption Characteristics of Automotive-Type Beam Structures in High-Speed Crush Testing		
8:30–9:00	Mike Super Bayer MaterialScience LLC Evolution of an Excellent Lightweighting Tool – PUR Sandwich Composites	Timo Huber Fraunhofer-Institut für Chemische Technologie ICT Thermoplastic Composites in Structural Lightweight Applications – Potential of Unidirectional Fiber Reinforcement & Sandwich Structures		
9:00–9:30	Mahmut Bingol University of Yalova New SMC Application for Automotive Seat	Calvin Nichols BASF Corp. Advancing Structural Capability of Injection Molded Components with Continuous Fiber Reinforcement -- Seat Pan Opel Astra OPC		
9:30–10:00	Ian Fellows Core Molding Technologies Continuing Evolution of Low Density SMC for the Automotive Market	Victor Bravo National Research Council Canada Effect of Runner & Gate Configuration on the Performance of D-LFT Composite Parts		

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

	IN GRANITE/GOLD/ COPPER ROOM	IN EMERALD/ AMETHYST ROOM	IN BRONZE/ SILVER ROOM	IN PEARL ROOM
	ADVANCES IN THERMOSET COMPOSITES - PART 2:	ADVANCES IN THERMOPLASTIC COMPOSITES - PART 3:	BIO & NATURAL FIBER COMPOSITES - PART 2:	
10:30–11:00	Tobias Potrya Fraunhofer Project Centre @ Western University Screening of Natural Lightweight Fillers for Sheet Moulding Compound in North America ***2008 SPE ACCE Scholarship Award Winner***	Creig Bowland PPG Industries A Formulation Study of Long Fiber Thermoplastic Polypropylene (Part 4): The Effect of Molding Changes on Mechanical Properties of the PP LFT Parts	Senat Mohanty Indian Institute of Technology & Inkilab Technologies Pvt. Ltd. High Performance Moldable Bamboo Fiber-Epoxy Composites	
11:00–11:30	Cedric Ball Momentum Specialty Chemicals, Inc. Recent Case Studies of Engineering Thermosets for Under-the-Hood Applications (Part A: Overview)	Ke Feng Ticona Engineering Polymers Innovative Polyphenylene Sulfide Material Tailored for Robotic Manipulated Blow Molding	Tri-Dung Ngo National Research Council Canada Fire Resistance Cellulosic Fiber-Thermoset Composites	
11:30–12:00 p.m.	Andreas Kürten ISK GmbH PART B: Thermal and Rheological Design of Thermoset Molds	Marcie Kurcz Polyscope Polymers BV Integrated Semi-Convertible Sunroof System in Glass-Reinforced SMA/ABS Resin	Abdul Shakoor Loughborough University Toughening the Poly(lactic) Based Biocomposites with Natural Fibres and Epoxidized Natural Rubber Masterbatch	
12:00–12:30	Stefan Pastine Connora Technologies Sustainable by Design: Introducing Recyclable Epoxy Hardener Technology	John Geldernick Plasticomp, Inc. Expanding Design Options for Long Fiber Thermoplastic Composites	Tim Bearnes & Raymond Schenk Laurel BioComposite, LLC Protein Polymer with Cellulosic Filler Compatible in Various Thermoplastic and Thermoset Systems	

LUNCH, PART INNOVATION AWARDS, KEYNOTES, & EXHIBITS - Diamond Ballroom

12:30–2:30 **KEYNOTE SPEAKER 6:** Martin Starkey, Managing Director, Gurit Automotive Ltd.
A Class Surface Composites: from Niche Production to Advancing Materials for Higher Volume OEMs

KEYNOTE SPEAKER 7: Howard Coopmans, Senior Manager-Body Engineering, SRT Viper, Chrysler Group LLC
Composite Technology Developments on the SRT Viper

2:30–2:45 CLOSING REMARKS: Creig Bowland & Antony Dodworth, 2013 SPE ACCE Co-Chairs

2:45 CONFERENCE ADJOURNS FOR THE YEAR

PLANT TOUR - STAY TUNED FOR DETAILS