Biographies of Speakers 2013

Frank Abdi

Dr. Frank Abdi is Chief Technical Officer of Alpha STAR Corp. While at the company, he has been responsible for working with the U.S. Federal Aviation Administration (FAA) on development of a process for aircraft certification by analysis. Among the many projects he has completed are High Speed Civil Transport (HSCT), NASA/Boeing Advanced Composite Technology wing program (ACT) in durability and damage tolerance, X-37 durability and damage tolerance, Shuttle Columbia re-entry accident investigation and Shuttle return-to-flight foam investigation, as well as fuel cells and aerospace composite over-wrapped pressure vessel (COPV). Abdi also investigated several National Aeronautics and Space Administration (NASA)/U.S. Department of Defense (DOD) / U.S. Department of Energy (DOE) sponsored methodology development efforts in composite computational structural mechanics (CSM) projects. Prior to joining Alpha STAR, Abdi worked at Boeing / Rockwell Aerospace for 15 years where he managed the Advanced Program's Controlled Configured Vehicle Research organization. At Boeing he was responsible for design and simulation of prototype aircraft and spacecraft experimental planes and forensic evaluation. Abdi has published over 200 journal papers in durability and damage tolerance, reliability optimization, materials science, and computational structural analysis. He also has co-authored several book chapters on process optimization, durability and damage tolerance (D&DT), certification by analysis, virtual testing, and risk management of composites. He recently authored a book in nano-composite material properties. His work has been recognized by several prestigious awards, including National Aeronautics and Space Administration's (NASA's) Software of the Year 1999, NASA Best of the '90s, R&D 100 year 2000, U.S. Senate / SBA Tibbets 2001 Award, and NASA Columbia Accident Investigation Award 2004. Abdi received B.S. and M.S. degrees in Mechanical Engineering from University of Michigan, and a Ph.D. in Mechanical Engineering from University of Southern California. He currently serves as Adjunct Professor at University of California-Los Angeles's Department of Material Science, and is a Visiting Professor at Imperial College of London's Department of Mechanical Engineering. He is a member of the American Society of Mechanical Engineers, AIAA (member of Optimization Committee), AIAA (member of Adaptive Structure Committee), NASA Ames (Committee in Aircraft Conceptual Design), and SAE (member of RMS Committee), CMH-17 (Mil Handbook) Ceramic Committee.

Koichi Akiyama

Koichi Akiyama is a Research Director at Mitsubishi Rayon Co., Ltd. where he leads the development of mass-production processes for automotive carbon fiber-reinforced plastics, including material, molding processes, and application development. He dedicated 20 years to research and development of unsaturated polyester and vinyl ester resins, molding compounds such as SMC and BMC, and molding processes for these materials at Takeda Chemical Industries, Ltd. (Japan) and Quantum Composites Inc. (in the U.S.) before he joined Mitsubishi Rayon Co., Ltd. in 2007.

Roger Assaker

Roger Assaker, a tech entrepreneur, is CEO and co-founder of e-Xstream engineering, a software and engineering-services company that is 100% focused on advanced materials modeling. Since September 2012, Roger is also the Chief Material Strategist of MSC Software. He holds both Ph.D. and M.S. degrees in Aerospace Engineering with a strong focus on nonlinear computational mechanics – an area of expertise where he now has 20 years' experience. Assaker has complemented his engineering education with an MBA in International Business, plus has taken additional advanced business and technology entrepreneurship courses from prestigious universities such as Massachusetts Institute of Technology and Harvard. In addition to growing e-Xstream engineering into global leadership in advanced composite modeling, Assaker is also Vice-Chair of NAFEMS' Composite Working Group and an active member of other technical material associations such as SPE and SAMPE.

Cedric Ball

Cedric Ball is Automotive Business Development Manager for Momentive Specialty Chemicals, Inc. headquartered in Columbus, Ohio. He began his career with General Motors Corp. as a Chassis Systems Release Engineer on the first-generation Saturn vehicles. Since that time, he has worked in a variety of Marketing and New Business Development roles related to automotive composites, including positions at Owens Corning, Ashland Performance Materials, and Citadel Plastics (BMCI). Ball holds a Bachelor's of Science degree in General Engineering from the University of Illinois at Urbana-Champaign, and Master'S degree in Business Administration from the Stephen M. Ross School of Business Administration at the University of Michigan in Ann Arbor.

Tim Bearnes

Tim Bearnes is CEO of Laurel BioComposite, LLC. He has been responsible for overseeing the development of the company since its formation in 2007, including the construction of its first commercial production plant. He has 25 years of experience working in the agricultural supply chain and his education includes a Master's of Agriculture Economics degree from Kansas State University.

Edward Bernardon

Edward Bernardon is currently Vice-President of Strategic Automotive Initiatives, Specialized Engineering at Siemens PLM Software. Before joining Siemens, Benardon was a Founder and Vice-President of Sales and later Business Development for VISTAGY, Inc. Before this, he directed the Automation and Design Technology Group at the Charles Stark Draper Laboratory (formerly the MIT Instrumentation Laboratory), which developed new manufacturing processes, automated equipment, and complementary design software tools. Bernardon holds an M.S. degree in Mechanical Engineering from the Massachusetts Institute of Technology, a B.S. degree in Mechanical Engineering from Purdue University, and an MBA degree from Butler University. He also has numerous patents in the area of automated manufacturing systems, robotics and laser technologies.

Biographies of Speakers 2013

Frank Billotto

Frank Billotto is currently the Business Marketing Manager for Commercial Transportation and Specialty Adhesives for Dow Automotive Systems. In this role, he is responsible for top-line growth in commercial transportation, composite bonding, and specialty adhesive applications. Billotto began his career at Dow with Essex Specialty Products in 1993. His past roles included Management of Dow Automotives Global Research and Development in polyurethane foams for automotive cavity filling, and New Business Development for strategic growth initiatives. He holds a Master's of Science degree in Polymer Chemistry from the University of Detroit Mercy Polymer Institute. He has authored and presented several SAE technical papers and has been awarded several patents. He also is a recipient of the prestigious Dow Chemical Development Scientist Organization Cramer Award for structural polyurethane foams used for automotive crashworthiness. As a certified Six Sigma project leader, Billotto has been recognized as a member of the exclusive "10MM Dollar Club" for delivering cumulative Six Sigma EBIT in excess of $10-million USD.

Mahmut Bingöl

Mahmut Bingöl is a Ph.D. candidate in Mechanical Engineering at Uludag University in Turkey. He graduated with a Bachelor's degree in Mechanical Engineering from Ataturk University in 2005, then completed a Master's degree in the same department in 2009. Bingöl has also worked as lecturer at Yalova University since 2009.

Creig Bowland

Creig Bowland has over 25 years' experience in composite materials for both the aerospace and automotive markets. His area of expertise is the design and use of long-fiber thermoplastics (LFT) for structural parts. He is currently Co-Chair of the SPE ACCE and is the Global LFT Technical Leader for PPG Industries.

Scott Blake

Scott Blake is the Founder and President of Assembly Guidance Systems of Chelmsford, Massachusetts. With Assembly Guidance he has developed 3D laser display for aerospace, automotive, Formula 1 racing, paint masking, welding, and other manual manufacturing applications. He has integrated laser projection with cutters, metrology, vision systems, tape layers, data-collection systems, and other quality-monitoring systems. In 2000 he was presented with a National Tibbetts award for SBIR work developing the Composites Manufacturing Process Control System (CMPCS). Blake holds 2 patents in composites process control and is a founding member of the Consortium for Integrating/Improving Advanced Composites Processing.

Victor Bravo

Victor L. Bravo Ph.D., P.Eng. has 23 years' experience in the polymer-processing field and is the author of more than 25 scientific publications and 1 patent. After completing his Ph.D. at McMaster University (Hamilton, Ontario), he worked at Indesca, the R&D centre for a cluster of polymer production companies dedicated to manufacturing and commercialization of PE (HDPE, LDPE and LLDPE), PP, PVC and PS/EPS at El Tablazo Petrochemical Complex, Venezuela. He is one of the founders of Indesca's Injection Moulding Technology Centre. Bravo moved to Canada in 2002 to participate in the development of a microcellular foaming process for automotive applications and later in the natural fibre thermoplastic composites for construction applications as the Product Engineering Manager for McFarland Cascade (Tacoma, WA). He currently holds the position of Research Officer at the National Research Council of Canada, working at the Magna-NRC Composites Centre of Excellence located in Concord, Ontario. He has been a member of SPE since 2003

Lindsay Brooke

Lindsay Brooke is Senior Editor of SAE's Automotive Engineering International magazine. He has written extensively about automotive technology, manufacturing, business, and history for 30 years. Before joining SAE, Brooke was Senior Auto Industry Analyst at CSM Worldwide (now IHS Automotive) specializing in technology forecasting for various industry clients. Prior to that, he was Editor of Automotive Industries magazine, with a brief stint as Chrysler Corp.'s Manager of Engineering and Technology Media Relations. He has authored 5 books covering automotive and motorcycle history and development, and contributes to The New York Times among other consumer publications. His work has received the annual Jesse H. Neal Award presented by the American Business Press for outstanding journalism. Brooke is a juror on the North American Car and Truck of the Year awards. He holds Bachelor's and Master's degrees in Journalism and Communications from Shippensburg University, and is a member of SAE International and the Automotive Press Association.

Dale Brosius

Dale Brosius is President of Quickstep Composites LLC, the U.S. subsidiary of Quickstep Technologies, an Australian company supplying patented technology for rapid curing of advanced composites. Brosius started his career in 1979 as a manufacturing engineer for Dow Chemical, entering the thermoset composites field in 1984 as Market Development Manager for Dow's efforts in automotive composites. From 1987 to 1999, he served in various sales, market development, and general management roles for Fiberite and Cytec, including assignments in Salt Lake City, Chicago, Detroit, and France. In 1999 he started a consulting business specializing in market analysis and development, strategic planning, and merger and acquisition assistance for companies in the thermosets and composites industries, joining Quickstep in 2004. He holds a B.S. degree in Chemical Engineering and an MBA. He is a member of SAMPE, and is a past chair of the Thermoset and Composites Divisions of SPE. Brosius has completed numerous market studies in the field of composites, and is an author of over 40 published articles in various composites industry magazines.

Biographies of Speakers 2013

Dan Buckley

Dan Buckley is the Manager of Corporate Research & Development for American GFM/GFM, where he is currently responsible for developing technology in the manufacture of single-wall carbon nanotubes, developing technology in the high-speed manufacturing of PEM fuel cell and DMFC components, and developing new process technology for the preforming of fiberglass, carbon fiber, and other reinforcement materials. Buckley has 40+ years of experience in composites, plastics, and related fields. He holds a B.S. degree in Chemistry from the University of Massachusetts and is the author of more than 75 technical papers for domestic and international publications. He has been an educational speaker at numerous universities, corporations and technical conferences, worldwide. He holds numerous patents in composites processing and related fields as well as patents currently in application, plus 2 new patents issued this year. Buckley is a co-founder of the Composites Division of SPE, founder of the SPE Nano/Micro Molding Special Interest Group (SIG), the past chair of both the SPE Composites and Thermoset Divisions. He served 5 terms as Councilor for SPE and is an Honored Service Member of the society.

James Chantler

Originally from England, Dr. James Chantler holds a Bachelor's degree in Chemistry from Bath University and a Ph.D. from Purdue University. He has broad industrial experience in thermoset and thermoplastic composites, roofing, resin, and glass. He currently works at PPG in Shelby, North Carolina as a Senior Research Associate on fiberglass product development. In his spare time, Chantler is an amateur strength athlete.

Ken Cheng

Ken (KC) Cheng obtained his Master's Degree in Mechanical Engineering from University of Texas at Arlington and has been working with Moldex3D for 6 years. With a background in finite-element analysis and with years of field application experience in molding analysis consulting for Moldex3D, Cheng has conducted hundreds of practical case studies to troubleshoot injection molds and composite processes on behalf of global companies such as NVIDIA Corp., Ford Motor Co., Unilever, Emerson Electric Co., and Corning Inc.

Mark Cieslinski

Mark Cieslinski received a B.S. degree in Chemical Engineering from Michigan Technological University. He is currently a graduate student at Virginia Polytechnic Institute & State University working towards a Ph.D. in Chemical Engineering. He is advised by Dr. Don Baird and his research focuses on using rheological measurements of long-fiber composites to assess orientation and stress models.

Michael Claes

Michael Claes is Global Technical Director at Belgium-based Nanocyl SA. He received a Master's degree in Chemistry in 2000 and studied polymer chemistry in the frame of a Ph.D. thesis from University of Liege (ULg), Belgium. He joined the staff of Nanocyl, one of the world's leaders in carbon nanotubes, as a Researcher in 2004 and has been managing global R&D and technical service since 2009. To promote creation and development of new market applications for carbon nanotubes in the field of composite materials, he supervises a team of 15+ trained people. He also is the author or co-author of several papers and patents.

Victoire de Clermont-Tonnerre

Victoire de Clermont-Tonnerre is currently Market Development Manager, Vinyl Specialties at SolVin, a joint venture between Solvay and BASF. She is a commercial engineer and financial analyst with 9 years of experience in various positions in corporate finance in both Europe, Africa, and Australia. De Clermont-Tonnerre holds a Master's degree in Applied Finance from University of Sydney and a Master's degree in Business Administration from the French Business School ISG. She joined SolVin in July 2012 to oversee the company's new business developments, including composites.

Antonio Cossolo

Antonio Cossolo was born in Turin, Italy in 1956. He received his Chemistry degree in Turin in 1980 and he joined Cannon in 1988. Since 2006, he has been Corporate Director Product Development at the company.

Brian Cromer

Brian Cromer holds a B.S. degree in Polymer Science and Engineering, summa cum laude, from Case Western Reserve University, an M.S. degree in Polymer Science and Engineering from University of Massachusetts-Amherst, and he currently is pursing a Ph.D. in Polymer Science and Engineering from UMass-Amherst. His work has been honored by a 2012 National Defense Science and Engineering Graduate Research Fellowship (NDSEG). His expertise includes cross-disciplinary research combining polymer chemistry and polymer engineering as well as nanocomposites.

Kurt Danielson

Kurt Danielson is a Project Engineer for e-Xstream engineering and has spent the last year working to help customers apply the Digimat material modeling software to characterize their composite materials more accurately and increase the accuracy of their finite-element analysis of composite designs. Prior to working for e-Xstream, Danielson spent 6 years working as the Engineering Manager of Aptera Motors, a high-efficiency vehicle company focused on composite materials and other technologies to vastly reduce the fuel consumption of a custom-designed vehicle platform. Danielson earned his Bachelor's degree in Mechanical Engineering from the University of Colorado.

Biographies of Speakers 2013

Leland Decker
Leland Decker is a Development Lead in the Body-In-White Structure's group with Chrysler Group, LLC. He is currently working towards defining Chrysler's lightweight strategies and the multi-material Body-In-White technology roadmap. He has been with Chrysler since February 2011. Prior to that, in his 20 years of automotive experience, he has held a variety of engineering positions in other OEMs dealing primarily with the development of advanced vehicle structures. He has significant experience in the usage, design, and development of lightweight materials, including composites. Prior to his Chrysler position, he led the implementation of the 2006 Chevrolet *Corvette Z06* Aluminum Spaceframe, and was the Engineering Manager overseeing Body, Exteriors, and Closures for start-up electric-vehicle company Fisker Automotive. While at Chrysler, Decker, has implemented a carbon fiber-reinforced plastic (CFRP) structural X-brace as an aftermarket addition for the 2013 *SRT Viper* and sold by Mopar. He holds a BSME degree from The University of the Pacific and an MSME degree from Rensselear Polytechnic Institute.

Lou Dorworth
Lou Dorworth has been involved with the advanced composites industry since 1978. He has been employed by Abaris Training since 1989, where he currently serves as the Direct Services Division Manager. He is a composite material and process specialist, with experience in R&D, M&P engineering, manufacturing engineering, tool design, and tool fabrication. Dorworth has been a professional member of the Society for the Advancement of Material & Process Engineering (SAMPE) since 1982, and a senior member of the Society of Manufacturing Engineers (SME) since 1997, where he is currently the chair of the Plastics, Composites, and Coatings Community (PCC). He also is a well-published author and conference presenter and is a co-author of the popular textbook titled Essentials of Advanced Composite Fabrication & Repair, available from Aviation Supplies & Academics, Inc. (ASA).

Chad Duty
Dr. Chad Duty is a Senior Research Scientist and the Group Leader for the Deposition Science & Technology Group at the Oak Ridge National Laboratory (ORNL). He is the technical lead for the Additive Manufacturing and Roll-to-Roll program areas within ORNL's recently established Manufacturing Demonstration Facility (MDF). He also has served as the Solar Technologies Program Manager for ORNL and as the Director of Technology for the Tennessee Solar Institute. Following his undergraduate degree in Mechanical Engineering from Virginia Tech in 1997, Duty received his Ph.D. in Mechanical Engineering from Georgia Tech in 2001. After working for Lockheed Martin on the C-5 Galaxy, he came to ORNL as a Wigner Fellow in 2004, where his research has focused on the use of high intensity plasma arc lamps for the Pulse Thermal Processing (PTP) of various thin films, semiconductors, and photovoltaic materials. Within the MDF, Duty is currently working on the development of flexible printed electronics as well as improving the mechanical performance of polymer-based additive manufacturing components. Duty also is leading an initiative on the bacterial production of complex nanoparticle via NanoFermentation.

Duane Emerson
Duane Emerson is a Senior Development Engineer in the Automotive OEM Marketing Group for Ticona Engineering Polymers. He has been with Ticona since 2001 focusing on new client and application development, in addition to alternative processing technologies including the fabrication of thermoplastic composites parts. Emerson's expertise includes a wide range of metal-to-plastic conversions within the automotive industry (exterior body components, windshield wiper systems), defense (military hardware), and Industrial applications (fluid handling pumps, air compressors, door hardware, power tools, and mining & construction equipment). He holds a Bachelor's degree in Mechanical Engineering from the University of New Hampshire.

José Feigenblum
Dr. José Feigenblum, Technical Director at RocTool, holds degrees in Mechanical and Process Engineering and received his doctorate in Metal Matrix Composites for Aeronautical Applications in 2002. He joined RocTool the same year in order to develop new molding solutions using inductive heating for the composite and plastic injection fields.

Ian Fellows
Ian Fellows is the Market Manager responsible for CORE Molding Technologies' sales initiatives with composite materials in the automotive market. He had more than 15 years of experience working with engineered materials such automotive glass, metals, and ceramics before starting at CORE in 2011. Fellows holds a Bachelor's degree in Business from Xavier University and an MBA from Capital University.

Ke Feng
Ke Feng is a Product Technologist responsible for the Fortron® polyphenylene sulfide product line. He has been with Ticona since 2006 focusing on new product development and application development. Formerly he held positions as Product Engineer at GE Plastics and M.A. Hanna Color. Feng holds a Bachelor's degree in Chemistry from Fujian Normal University and a Ph.D. in Polymer Chemistry from Clark Atlanta University.

Frank Fetscher
Not available at press time.

Biographies of Speakers 2013

Tommy Fristedt

Tommy Fristedt is President of LayStitch Technologies, provider of unique machine solutions for automated Tailored Fiber Placement (TFP). He has worked as inventor and developer of technology for the automotive industry for 25 years. Before starting LayStitch Technologies, he worked as Product Manager-Seat Climate for Kongsberg Automotive. He has a broad experience from inventing and developing high-volume electronic, electromechanical, mechanical, and plastic products supplied to major global car manufacturers

John Geldernic

John Geldernick is the Manager, Technical Development Center at PlastiComp, Inc. He is a graduate of Winona State University's Composites Engineering program and has worked with both thermoset and thermoplastic composites. Geldernick has extensive experience in injection-molded thermoplastic composites and the use of Finite Element Method (FEM) and Mold Flow Analysis (MFA) techniques to design parts and molds. An avid outdoorsman and a motorcycling enthusiast, he has hands-on use of the many parts designed and manufactured at PlastiComp.

Klaus Gleich

Dr. Klaus Gleich is a Research Associate at the Technical Center of Johns Manville, Littleton, Colorado, where he manages the Sizing Technology group and is involved in application development and development of new products. He has more 20 years' experience in advanced materials development and processing and is well known for his expertise in thermoplastic composites. Over the years, he held key positions in the material, process, and application development as well as in production of composites parts. While at the Royal Dutch Shell Group (later Fibron Technology), Gleich was responsible for the development and production of LFT-materials and for processing those materials to produce automotive parts. He also worked on the development of parts for resin transfer molding (RTM) and reaction-injection molding (RIM). Later he joint Kannegiesser-KMH as Managing Director. After moving to the U.S., Gleich was in charge for the Polymer Composite Group at Southern Research Institute. Gleich received his university degree in Chemistry at the University of Konstanz and in Economics at the Fernuniversity of Hagen. He received his Doctorate degree in Chemistry at the University of Konstanz. He is a long-time board member of the Composites Division of SPE.

Matthias Graf

Matthias Graf is currently the Managing Director of the Forming business unit of Dieffenbacher GmbH & Co. KG in Germany, a position he has held since 2010. From 2008 until 2010, Graf was Technical Director of the Forming business unit. Before that, from 2004 to 2008, he was Product Manager for High-Pressure Technology / Isostatic Presses at Dieffenbacher, and from 1998 to 2004, he was R&D Manager for the company's Wood business unit. Graf gained international experience during a 2-year assignment in Canada at the company's North American operation in Windsor, Ontario as Engineering Manager from 1997 through 1998. He began his career at Dieffenbacher as a Design Engineer in 1991. He holds a Diplom-Ingenieur (FH) degree in Mechanical Engineering from the Karlsruhe University of Applied Science and an MBA degree from University of Southern Queensland (Australia) through the European Study Center.

Darin Grinsteinner

Darin Grinsteinner is the Engineering Manager for CPI Binani Inc., a direct long-fiber thermoplastic (LFT) molder in Winona, Minnesota. He has been managing materials and process development there for 10 years. Previously, he has held positions at Johnson Controls Automotive Systems Group, RTP Co., and StorageTek. Educated at Winona State University in the school's Composite Materials Engineering program, Grinsteinner has been designing and manufacturing composite materials for 18 years.

Ben Halford

Ben Halford, Surface Generation's CEO, has worked for over 18 years in the development and commercialisation of advanced manufacturing systems in the Aerospace, Automotive, Consumer Electronics, Motor Sport, and Bio Medical sectors. Since founding the company in 2002, he has built it into one of the world's foremost out-of-autoclave composite processing providers using state-of-the-art continuous and short fibre thermoset & thermoplastic production solutions.

Frank Henning

Dr. Frank Henning is a full professor for Lightweight Technologies at the Karlsruhe Institute of Technology, Deputy Director of the Fraunhofer Institute for Chemical Technology (F-ICT), and he coordinates the Fraunhofer FUTURE "hybrid materials" for the Fraunhofer Gesellschaft. Henning has more than 16 years of experience in applied research. He began his career at F-ICT as Group Leader for the Composites team at F-ICT from 1997 to 2001. From 2001 to 2002 he was Director of Polymer Engineering at the F-ICT. In 2002 he became Director of Polymer Engineering at the F-ICT, and in 2005 he was appointed Director of the Competence Center for Automotive Light-Weight Solutions, a cooperative venture between the German Aerospace Center (DLR), the Fraunhofer Gesellschaft, and the University of Karlsruhe. Since 2008, Henning has been the CEO of KITe hyLITE – the Karlsruhe Innovation Cluster for Hybrid Light-Weight Solutions, a collaboration between the F-ICT, IWM and LBF, the Karlsruhe Institute of Technology (KIT), and partners from industry. Throughout this time, Henning also was a lecturer for composites at the at University of Cooperative Education (Berufsakademie) Mannheim from 1997 to 2008. In December 2008, Henning was appointed by KIT for a full professorship in light-weight technologies at Karlsruhe Institute of Technology. At the beginning of 2009 he was also appointed Deputy Director of F-ICT. Together with Prof. Drechsler, Prof. Henning is responsible for the new high-performance composite team in Augsburg, which is a research group of the Fraunhofer

Biographies of Speakers 2013

ICT. Since 2010, he also has been an Adjunct Research Professor in the Department of Mechanical & Materials Engineering of The University of Western Ontario (now Western University) in Canada. In 2011, he became Managing Director of Fraunhofer Project Center for Composites Manufacturing in London, Ontario, Canada. Henning holds at Ph.D. in Composites Engineering from University of Stuttgart as well as a Diploma in Mechanical Engineering from the same school. He has been Technical Program Chair and Co-Chair for the SPE ACCE several times and is European Liaison for the SPE Composite Division. In 2013, he was named a Fellow in SPE.

Peter Heyes

Peter Heyes read Natural Sciences at Cambridge University. He then taught physics for 5 years before turning to the dark side and becoming an engineer by way of a Ph.D. in Metal Fatigue at Sheffield University. For most of the last 20 years, Heyes he has worked for nCode (now part of HBM) in a variety of roles including Consulting Engineer, Product Manager, and Chief Technologist. He is currently responsible for development of fatigue analysis methods, principally for nCode's DesignLife product.

John T. Hofmann

John Hofmann completed his Bachelor's in Chemical Engineering at Case Western Reserve University before moving on to graduate school at Virginia Tech. He is currently working on completing his Ph.D. in Macromolecular Science and Engineering. He is advised by Dr. Don Baird and works in the Polymer Processing lab in the department of Chemical Engineering. The main focus of his research is on glass fiber-reinforced injection-molded composites. Hofmann also was a 2012-2013 SPE ACCE Graduate Scholarship Award winner.

Timo Huber

Timo Huber studied mechanical engineering at the University of Stuttgart, specialized in automotive and polymer engineering, and graduated as an engineer (Dipl-Ing) in 2007. Since graduating, he has worked as a Scientific Staff Member and Project Director in the Polymer Engineering department headed by Prof. Dr.-Ing. Frank Henning at Fraunhofer ICT. Huber is also a PhD student in the faculty of Mechanical Engineering at the Karlsruhe Institute of Technology (KIT). He has experience in processing thermoplastic polymers and composites, especially in the field of discontinuous and local continuous fiber reinforced thermoplastics in combination with automated high volume production processes (injection and compression molding). In 2009, he became Team Leader of Thermoplastic Processing at Fraunhofer ICT.

Takeshi Ishikawa

Dr. Takeshi Ishikawa is a research director in the Advanced Composite Research Group of Mitsubishi Rayon Co., Ltd., where he has worked for 2 years. Prior to that, he worked at Mitsubishi Chemical Corp. for 20 years developing several kinds of polymers and their processing. He received a Ph.D. degree in 2000 from Kyushu University with a focus on the numerical study for polymer mixing in twin-screw extruders. He also is an editorial board member of the Japan Society of Polymer Processing.

Ram Iyer

Ram Iyer works for Eicher Engineering Solutions, a global engineering services provider in the area of mechanical product design. He has been with this organization for 14 years and currently works as the Engineering Director for CAE and simulation services. He has a Master's of Science degree from the University of Miami with a specialization in fluid and thermal sciences.

Allan James

Allan James is the Composites Marketing Manager for Dow Automotive Systems in North America. In this role, he is responsible for evaluating trends and managing marketing activity as well as business development for composites in the NAFTA region. He began his career at the Dow Chemical Company in 1981 in Research and Development (R&D) supporting plant processes. In 1990, he joined Dow Automotive TS&D where he was the Technical Leader/Scientist for reactive polymers, which included polyurethane materials, epoxy resins, and vinyl esters. During this tenure, he has authored or co-authored a number of papers and patents with respect to thermosetting materials and automotive applications. In late 2011, James moved to the marketing function within Dow Automotive and after 1 year is the lead marketing person for composites in North America. He holds a Bachelor's of Engineering Science degree in Chemical Engineering from the University of Western Ontario. Currently, he serves as vice-chair of the Society of Automotive Engineers (SAE) VOC committee.

Tom James

Thomas James is a Chartered Engineer from the UK with 15 years of experience working within high-performance composites and 3 years as Director of Innovation at Formax.

Matt Kaczmarczyk

Matthew Kaczmarczyk is the Senior Design Engineer for Quantum Composites Inc., where he is responsible for managing composite part design, simulation analysis, testing, and structural validation of composite components. He has been with Quantum for the past 6 years as the technical lead for design and development of lightweight composite structures. Before that, Kaczmarczyk held the positions of Engineering Manager at Key Plastics LLC and Project Engineer at Titian Plastics. He has over 14 years of automotive experience in product design and development using thermoset and thermoplastic materials and holds a B.S. degree in Plastics Engineering from Ferris State University.

Biographies of Speakers 2013

Henning Karbstein

Henning Karbstein, New Business Development, Senior Specialist—Composites/Automotive at BASF (Charlotte, North Carolina), is responsible for technical market development of sustainable, lightweight composites for automotive, mass transportation, building products/mobile living applications, and related industrial and consumer product end-use markets. He has extensive experience in product development, program management, and business process improvements. Karbstein has a Mechanical Engineering degree from University of Karlsruhe with an internship at Mercedes-Benz. He followed his education with positions of increasing responsibility as an Application Engineer, Program Manager and Lean Manager across multiple business units in the Schaeffler Group based alternatively in U.S. and Germany prior to joining BASF. During this time he has been named inventor in 13 patents for various automotive applications.

Alper Kiziltas

Alper Kiziltas holds an undergraduate degree in Forest Products Engineering from Karadeniz Technical University, Trabzon, Turkey. Upon graduation, he was awarded a prestigious scholarship from the Turkish government to attend graduate school at the Karadeniz Technical University. In the spring of 2006, the Republic of Turkey's Ministry of National Education awarded him a full scholarship to pursue graduate studies in Wood Science and Technology in the United States. He enrolled in the School of Forest Resources at the University of Maine in the fall of 2007, obtained a Master's of Science degree in August of 2009, and is currently enrolled in the School of Forest Resources' Ph.D. program and expects to graduate in 2014. Kiziltas also was a 2012-2013 SPE ACCE Graduate Scholarship Award winner.

Nolan Krause

Nolan Krause is an Application Development Engineer for RTP covering the Automotive Market. He also is in charge of coordinating automotive specification and approval process. Krause's previous work was in Product Development for the structural group. He holds a Bachelor's of Science degree in Composite Materials Engineering from Winona State University.

Stefan Kreiling

Dr. Stefan Kreiling is Head of Product Development Europe for the Automotive Business Unit of Henkel Corp., a position he has held since 2010. Previously, from 2008-2010, he was Team Leader–Global R&D – Thermoset Systems at the company, where he was responsible for epoxy, reactive resin chemistries, and composites. Kreiling began his work in the chemical industry in 2004 when he joined Henkel's Corporate Research group in Polymer Chemistry. He is a 2004 graduate with a Ph.D. in Polymer Sciences from the University of Marburg in Germany.

Andreas Kürten

Andreas Kürten studied Engineering with a specialization in Plastics Technology at Iserlohn, Germany. He has worked ISK Iserlohner Kunststoff-Technologie GmbH since 1996, been a shareholder since 2000, and a Manager since 2012. There, his focus is on product development for thermoplastic and thermoset injection molded parts; CAE-calculations with the company's own programs as well as Moldflow and Sigmasoft; examination of component and mold constructions; performing process optimizations; and giving lectures.

Marcia Kurcz

Marcia Kurcz's 30 year career in the plastics industry has included positions in Commercial Business Development for GE Plastics Automotive; Market and Product Development for Solvay Engineered Polymers; and Business Development for high and low pressure compression molded products from Quadrant Engineered Plastics. Her present responsibility is General Manager for Polyscope Polymers B.V. leading the company's North American business strategy for XIRAN engineered products and specialty polymers business units.

Tim Langschwager

Tim Langschwager is the Lead Development Chemist for Quantum Composites Inc. He has worked for the past 8 years in the automotive industry -- the last 5 at Quantum. Before that, Langschwager worked in the Divisional Materials Lab for Delphi Steering as the Organics Lab Coordinator responsible for PPAPs and engineering changes on plastic, rubber, oil, and grease compounds as well as failure analysis. He holds a B.S. degree in Chemistry from Saginaw Valley State University.

Chul Lee

Dr. Chul Lee is an Applications Development Manager at INVISTA Engineering Polymers, located in Wichita, Kansas. He started his career as a Research Scientist at Battelle Memorial Institute working on failure prevention in plastic pipe system. He then joined a new engineering plastics company, Allied Chemical, and built his career as an Applications Development Engineer working for several leading engineering plastics companies during the past 30 years. He has been active in applications development for engineering resins in industrial, furniture, and automotive components. His latest activities include thermoplastics composite applications for automotive lightweight structural system development. He has published more than 40 technical papers and holds 3 patents on product design and joining technology. Lee holds a Ph.D. degree from the University of Michigan.

David Lowe

David Lowe has held the position of Technical Director at Regloplas AG for over 15 years. He holds a degree in Mechanical and Economic Engineering and an EMBA degree in Entrepreneurship. He is married, has 3 children, and loves to mountainbike.

Biographies of Speakers 2013

Hendrik Mainka
Hendrik Mainka has worked as a Project Engineer for Volkswagen since 2011. He also is a Ph.D. candidate in the Manufacturing Engineering Department of University of Bremen in Germany. Mainka earned a Bachelor's degree in Chemical Engineering from the Otto-von-Guericke University in Magdeburg, Germany in 2008 and a Master's degree in Molecular and Structural Product Design from the same school in 2010. Mainka was also a Research Assistant at Otto-von-Guericke University from 2010 to 2011. The focus of his current research is on alternative precursors for sustainable and cost-effective carbon fiber production for the automotive industry.

Damien Maillard
Damien Maillard is a Research Officer specializing in polymer chemistry and a member of the Bioproducts and Advanced Composites Materials teams of the National Research Council of Canada (NRCC). His areas of expertise are the polymers' formulations and characterizations in various composites applications. Recently, his work has focused on development of new high-throughput processes for structural parts and body panels in the industry, including high-pressure RTM (HP-RTM) and sheet-molding compound (SMC). Additionally, Maillard supports research projects dedicated to the introduction of green content in industrial composites for various industrial applications (natural fibers, wood, bio resins, etc.). He holds a Master's degree in Chemical Engineering from the École Supérieure de Chimie Organique et Minérale (ESCOM) in France and a Ph.D. degree in Polymer Chemistry from the Université de Montréal. He concluded his training with a postdoctoral fellowship in the Chemical Engineering department of the Columbia University in New York.

Jan-Anders Månson
Professor Jan-Anders E. Månson received his Ph.D. from Chalmers University of Technology, Gothenburg, Sweden. After several years' industrial experience as Chief Technology Officer, he was appointed Professor of Composite Materials at University of Washington, in Seattle, Washington, U.S.A. In 1990, Månson joined Ecole Polytechnique Fédérale de Lausanne (EPFL) as Professor and Director of the Polymer and Composite Laboratory (LTC). His research is focused on novel cost-effective materials, processes, and applications with additional functionality, pushing the performance envelope beyond that of classical composite materials. Emphasis is on scaling and implementation strategies for an industrial context in the automotive, aerospace, and sport domains. He has led several supply-chain consortium projects in the automotive field. Månson also is Founder of the composite company, EELCEE SA, active in the field of high-volume composites and is President of the International Sport Academy (AISTS), an organization linking academic institutions in collaboration with the International Olympic Committee (IOC).

Jim Mihalich
Jim Mihalich joined Cyclics Corp. in 2003 as Sales Director – Americas. He re-joined the company in early 2009 as Vice-President of Research & Development and was promoted to CEO in April 2010. During his 28 years in the plastics industry, he has held titles of VP of Operations, VP of Sales, and VP of Commercial Development for several mid-size firms. Mihalich also founded and ran a startup producer of plastic color concentrates. He was with GE's Plastics and Silicones businesses for a combined 10 years in marketing, sales, and planning. He holds a Bachelor's degree in Chemical Engineering from The University of Pennsylvania and earned an MBA from UPenn's The Wharton School.

Marilyn Minus
Dr. Marilyn Minus is currently an Assistant Professor in the Department of Mechanical and Industrial Engineering at Northeastern University. She also is the director of the Macromolecular Innovation in Nano-materials Utilizing Systems Laboratory otherwise known as the MINUS lab. She received her B.S. degree in May 2002 from Georgia Institute of Technology in the area of Polymer, Textile, and Fiber Engineering. She received her Ph.D. in August of 2008 at Georgia Institute of Technology in Polymer Engineering. Minus' research is focused on addressing sustainability issues with the goal of producing energy-efficient lightweight materials based on polymer/nano-carbon composites. The goal is to understand fundamental phenomenon associated with polymer/nano-carbon structure development in the composites during processing procedures. The research work expands the scientific and technical base for understanding the manipulation of nano-scale matter during composite fabrication as it pertains to building mechanically superior materials. Her research interests also include structure-property relationships in polymer-based nano-composites, control of interfacial

Senat Mohanty
Dr. Sanat Mohanty is an Associate Professor in Chemical Engineering at IIT Delhi and the co-founder of Inkilab Technologies Private Ltd., a startup that has been working on natural fiber composite materials. He holds a Ph.D. degree in Chemical Engineering from University of Minnesota and spent 8 years at 3M Company in Minnesota in R&D and product development on adhesives, pressure-sensitive adhesives (PSAs) and nanocomposites -- both as researcher and in managing the R&D group for adhesives and PSAs. Mohanty has over 20 peer reviewed publications on high-performance soft materials and over 10 patents.

Tri-Dung Ngo
Dr. Tri-Dung Ngo joined the National Research Council of Canada (NRCC) in 2008. His research focuses on biopolymers, biocomposites from renewable resources and biomass, nanocomposites, polymers, and composites. He has several inventions, has authored 60 publications in scientific journals and conference proceedings as well as over 60 technical reports and presentations.

Biographies of Speakers 2013

Calvin Nichols

Calvin C. Nichols is currently Market Segment Manager for Automotive Interior and Seating at BASF in the North American Performance Materials business unit. He holds responsibility for market development and commercialization for new applications. Nichols is one of the champions serving as Global Leader for the BASF Seating Competence Team, which pulls resources from other BASF business units globally (e.g. urethane, coatings, and catalysts) to create automotive seating system solutions for its OEM customers. Prior to his role at BASF, Nichols held leadership positions in Sales and Marketing Management and Product Strategy at Panasonic Automotive Systems, Visteon Corp., and Omron Automotive Electronics. He has also held positions in Advanced Product and Manufacturing Engineering at both Ford Motor Co. and Denso Corp. He holds a patent on automotive instrument panel plastic design for injection molding and has served on local community service boards and activities. Nichols holds a Bachelor's degree in Mechanical and Manufacturing Engineering in Plastics and Material Science from the University of Toledo, an MBA in International Business and Marketing from Eastern Michigan University, and a post-graduate Management degree from the University of Notre Dame.

Stefan Pastine

Dr. Stefan Pastine has over 15 years of experience in chemical research, which has spanned the areas of Organic Synthesis, Polymer Chemistry, Organic Materials Science, Biomimicry, and Nanotechnology. His growing awareness of the composite recycling problem converged with his interest in programmable materials, leading him to a series of fundamental questions: can a thermoset be re-engineered to change; and can thermoset composites be made truly recyclable? Along these lines, he created Recyclamine technology, leading to the world's first recyclable thermosetting epoxy. In 2011, he founded Connora Technologies to commercialize the technology. Pastine holds a B.S. degree in Biochemistry from the College of Charleston, a Ph.D degree in Organic Chemistry from Columbia University, and studied Polymer Science and Organic Materials Science at the University of California-Berkeley as an U.S. National Institutes of Health (NIH) Postdoctoral Fellow. He holds over 25 scientific publications and patents and is a recipient of the 2010 R&D 100 Award and the 2012 American Composite Manufacturing Association BEST award.

Camilo Perez

Camilo Perez is a 2nd-year Polymer Science graduate student at the University of Wisconsin in Madison. He is originally from Bogota, Colombia where he completed his Bachelor's degree at the National University of Colombia in Chemical Engineering. He currently works at the Polymer Engineering Center at University of Wisconsin where his research topics involve fiber motion simulation, product design optimization, and material characterization. Apart from polymer processing and composite materials, his interests include finite-element analysis, particle simulation, image processing, and high-performance computing.

Kip Petrykowski

Kip Petrykowski has over 20 years of experience in automotive and aerospace product development, design, and production. He has been Business Development Manager-Composites at Single Temperature Controls for the last 3 years and travels the globe developing relationships and facilitating mold-heating solutions for composites manufacturing composite products. Previously, he has spent 6 years as Director of Engineering for an automotive supplier, 3 years as Director of Operational Excellence for an automotive supplier, 1 year as a Senior Engineer at USAir, and 2 years as a Composites Design Analyst for a consulting group. Petrykowski holds a B.S. degree in Aerospace Engineering from Embry Riddle University, is Certified both as a Six Sigma Black Belt and in Lean Training, and is a multiple U.S. patent holder.

R. Byron Pipes

Dr. R. Byron Pipes was elected to the National Academy of Engineering in 1987 in recognition of his development of an exemplary model for relationships between corporate, academic, and government sectors to foster research and education in the field of composite materials. Pipes served as the 17th President of Rensselaer Polytechnic Institute from 1993-1998. A hallmark of Pipes' career has been his commitment to innovation and change. He is recognized as a pioneer in revitalizing undergraduate education; a leader in creating new partnerships between government, the private sector, and academia; and an international expert in advanced composite materials.

Tobias Potrya

Starting in the year 2000, Tobias Potyra studied Material Science at the University of Bayreuth in Germany, where he focused on polymers and polymeric composites. After graduating in 2005, he joined the Fraunhofer Institute for Chemical Technology (ICT) as researcher and Ph.D. candidate. His research field is thermoset polymers with a focus on sheet moulding compound (SMC), particularly material and process development in the field of conventional and direct SMC. In fact, since 2007, Potyra has been responsible for all SMC activities at Fraunhofer ICT and also a member of the steering committee of the European Alliance for SMC/BMC (bulk moulding compound). In 2008, he received an SPE ACCE graduate-level scholarship for his work on "New Direct Processing Technology for the Manufacturing of SMC Parts: Direct-SMC." Three years later, in September of 2011, the Direct SMC Consortium — consisting of Dieffenbacher GmbH, DSM Composite Resins, and Fraunhofer ICT — was awarded First Prize in the Industry category by the AVK (German Federation for Reinforced Plastics) for innovations and industry relevance in the field of Direct SMC. Since 2011, Potyra also has been Group Leader of the Canada Group at Fraunhofer ICT. He relocated to London, Ontario in November of that year and has since managed opeations of the Fraunhofer Project Centre at the University of Western Ontario (now called Western University).

Biographies of Speakers 2013

Sunil Kumar Ramamoorthy
Not available at press time.

Giuseppe Resta
Giuseppe Resta is Manager of Global Automotive at Altair Engineering. Since 1998, he has held different roles within Altair in product design, technical support, software program management, and business development. He has expertise in crashworthiness simulation, and international rules and regulations for safety evaluation. He also has knowledge of lightweighting solutions and optimization techniques for engineered plastic and laminate composites. Resta is member of SPE and SAE and holds a Master's degree in Material Engineering from University of Lecce in Italy.

Rani Richardson
Rani Richardson is a Composites Product Specialist at Dassault Systèmes where she brings technical expertise and extensive real-life composites design and manufacturing experience to her position there. In this role, she consults with customers, particularly in the aerospace and automotive industries, concentrating on North American implementation and demonstrations for the CATIA V5 and V6 Composites Solutions. Prior to joining Dassault Systèmes, Richardson worked for nearly a decade at Magestic Systems, a leader in nesting and laser projection solutions, where she was Director of Operations. She is an active member of SAMPE (Society for the Advancement of Material and Process Engineering), NCC (National Composite Center), COE (CATIA Operators Exchange), SAE (Society of Automotive Engineers), SME (Society of Manufacturing Engineers) and SPE (Society of Plastics Engineers). She is also a frequent presenter at various industry conferences on the subject of composites.

Raymond Schenk
Raymond Schenk is Technology Manager at Laurel BioComposite, LLC and leads the development of bio-based materials, including formulations for injection molding, extrusion, and rotational molding. He is responsible for development of Laurel's intellectual property and technical applications. He has dedicated 8 years to research and development of bio-based materials using distillers grains, the by-product of ethanol production, and has extensive experience in new product development in the manufacturing industry.

Abdul Shakoor
Abdul Shakoor is an Assistant Professor in the Department of Mechanical Engineering at the University of Engineering & Technology in Peshawar, Pakistan. He also is a Doctoral Researcher in the Department of Materials at Loughborough University in Liecestershire, U.K. working on a thesis entitled "Development of Bio-Derived Novel Composites Reinforced with Natural Fibers and Mineral Fillers."

David Sheridan
David Sheridan is a Senior Design Engineer at Ticona Engineering Polymers, a Celanese Corporation. He has worked for Ticona and been involved with the design and analysis of plastic parts for over 25 years. He has also been involved with plastic gear design and analysis for the past 15 years and is an active member of the American Gear Manufacturers Association's Plastics Gearing Committee. He has authored many articles on plastic part and gear-related topics. Sheridan received a Bachelor of Science in Mechanical Engineering degree from GMI Engineering & Management Institute in 1988.

Thomas Smith
Thomas Smith has over 20 years of experience in high-volume application of thermoplastic composite materials. He is presently President of TenCate Performance Composites, a worldwide leader in thermoplastic composite materials. Previously he was President of Performance Materials Corporation (U.S. and China) and President of Baycomp Company (Canada) for over 10 years. These company specialized exclusively in the production of Continuous Fiber Reinforced Thermoplastic (CFRT®) materials and components. Smith also worked in engineering and program management for the Energy Systems Group of Rockwell International running various project related to energy management, and ran a consulting firm, which specialized in technical, marketing, and business solutions to various companies for over 5 years. He holds BSME and MSME degrees in Management and Engineering from Tennessee Technological University.

Jane Spikowski
Jane Spikowski joined PolyOne in April 2010 as an R&D Process Engineer in the Corporate Technology group. In this role, she has contributed to advanced nanocomposite and reactive extrusion programs. Her recent work has focused on optimizing and characterizing the performance of thermoplastic carbon nanotube composites for use in injection-molded products. She graduated from Case Western Reserve University with a Bachelor's of Science degree in Macromolecular Engineering.

Sarah Stair
Sarah Stair graduated *magna cum laude* with a Bachelor's degree in Mechanical Engineering and a minor in Mathematics from Baylor last year. She continued working on her Master's degree in Mechanical Engineering at Baylor and currently is in her second year of the program. Her research focuses on non-destructive testing techniques of fiber reinforced laminated composites.

Biographies of Speakers 2013

Mike Super

Mike Super is Applications Development Manager, Polyurethane Composites and Polyurethane Reaction Injection Molding (RIM) at Bayer MaterialScience LLC. Super, who joined Bayer 16 years ago, and initially he worked in raw materials and later in product research and development. Super has spent the past 14 years focusing on RIM and, more recently, composites technology. For the last 6 years he has been managing application developments in composites and RIM, pursuing opportunities to leverage the performance advantages of these materials to bring lightweighting solutions to the automotive and various non-automotive markets. Super earned M.S. and Ph.D. degrees in Chemical Engineering from the University of Pittsburgh.

James Truskin

James Truskin is a Development Lead for CAE Integration in the Body-In-White Structure's group at Chrysler Group, LLC, where he is responsible for the development and application of CAE-based design and optimization tools for Chrysler's BIW group. He has been with Chrysler since February 2011. Prior to that, Truskin has worked with multiple OEMs in the area of advanced body design, including assessment of alternate body configurations and integration of lightweight materials. He has developed and led BIW topology optimization teams at both General Motors and Chrysler. While at Chrysler, Truskin led the design and optimization activities for the 2013 *SRT Viper* carbon fiber structural X-brace, and he continues to use topology and other optimization tools to guide the design of future Chrysler vehicles. Truskin holds a Bachelor's degree in Aerospace Engineering from Royal Melbourne Institute of Technology University, where he majored in structures and composite materials.

Gregorio Manuel Vélez-García

Gregorio Manuel Vélez-García is a post-doctoral fellow doing research in composites and additive manufacturing at Oak Ridge National Laboratories. He holds B.S. and M.S. degrees in Chemical Engineering from University of Puerto Rico and a Ph.D. in Macromolecular Science and Engineering from Virginia Tech. His doctoral work was supervised by Dr. Peter Wapperom and Dr. Donald G. Baird. Last year he began his first post-doctoral work with Dr. Charles Tucker at University of Illinois Urbana-Champaign. His research work has been focused on experimental modeling and simulation of fiber length and fiber orientation in injection-molded fiber-reinforced composites. Vélez-García was instructor in the Chemical Engineering and General Engineering Departments at University of Puerto Rico-Mayaguez. Also, he taught a course on process modeling in the Chemical Engineering Department at Virginia Tech. In addition, he traveled throughout Latin America to give lectures about polymer science and polymer processing in the Spanish language. In terms of professional experience, he has served as consultant to several electronics, medical device, and pharmaceutical companies in Puerto Rico and also is an active member of the Society of Plastics Engineers (SPE). He is Councilor for SPE's Caribbean Section, Co-Chair of the Plastic Educators group, and was Chair of the Next Generation Advisory board for 3 consecutive terms.

Jaap Van der Woude

Dr. JHA (Jaap) van der Woude is Director Science and Technology, Europe and Associate Director, Thermoplastics for PPG Industries Fiber Glass BV where he has global R&D responsibility for PPG's products and processes for thermoplastic applications, chopped strands in general, and long-fiber reinforced thermoplastics. He has previously held positions in several functions in Science and Technology as well as Manufacturing at PPG in Europe and the U.S. in the areas of glass melting, fiber glass manufacturing, fiber glass product and application technology. He is board member and secretary for VNG, Vereniging van Nederlands Glasfabricanten (Association of Glass Manufacturers in the Netherlands); chair of NCNG, National Comitee Nederlandse Glasfabrikanten (National Technical Committee NL Glass Industry); chair of the Sustainability working group with the German Composite Association; a member of the American Composites Manufacturers Association's (ACMA's) Green Committee; and a member of PPG's Collegium. Van der Woude holds a Ph.D. in Physical & Colloid Science, a Master's degree in Inorganic and Theoretical Chemistry, and has published a variety of papers and patents, and made contributions to scientific books.

Dr. Uday Vaidya

Dr. Uday Vaidya is a Professor and Director of the Materials Processing and Applications Development (MPAD) Center for Composites at the University of Alabama at Birmingham (UAB). The UAB MPAD Center works closely with industry for applications development support and composites R&D leading to commercialization. Vaidya has 25 years of experience in the design, analysis, application development, and processing of composite materials. He also has published a comprehensive book on Composites for Automotive, Mass Transit and Transportation.

Frédéric Vautard

Frédéric Vautard holds a Ph.D. degree from the University of Upper Alsace in France, where his topic was interfacial adhesion in carbon fiber composites cured by electron beam. He then did post-doctoral work at Oak Ridge National Laboratory in the U.S. on interfacial adhesion in carbon fiber/vinyl-ester composites and on lignin precursors for carbon fibers. He currently is doing further post-doctoral work at the Composite Materials and Structures Center at Michigan State University on interfacial adhesion in carbon fiber/vinyl-ester composites-exfoliated graphene nanoplatelets/high-density polyethylene (HDPE) nanocomposites. Vautard's field of expertise is polymer composites and nanocomposites-interfacial adhesion and interfacial phenomena-electron beam curing of composites.

Biographies of Speakers 2013

Patric Winterhalter

While studying Mechanical Engineering at Karlsruhe Institute of Technology, Patric Winterhalter worked for 3 years as a research assistant at the Institute of Production Science focusing on construction and assembly of experimental rigs and experiments in the field of fiber-reinforced plastics. Winterhalter's thesis topic was on the development of composite presses at Schuler SMG. After his studies, Dipl.-Ing. Patric Winterhalter began working as Product Manager for Lightweight Applications at Schuler SMG.

Mingfu Zhang

Dr. Mingfu Zhang is a Research Associate working in corporate R&D at Johns Manville's Technical Center in Littleton, Colorado. His main research areas include developments of sizings and binders for fiber glass and his current research focuses on development of sizings for continuous fiber reinforced thermoplastics. Zhang received his Ph.D. degree in Polymer Chemistry from University of Bayreuth in 2004. He worked at University of Massachusetts-Amherst as a post-doctoral research fellow in the Department of Polymer Science and Engineering from 2004 to 2006.

Keynote Speakers

Ray Boeman

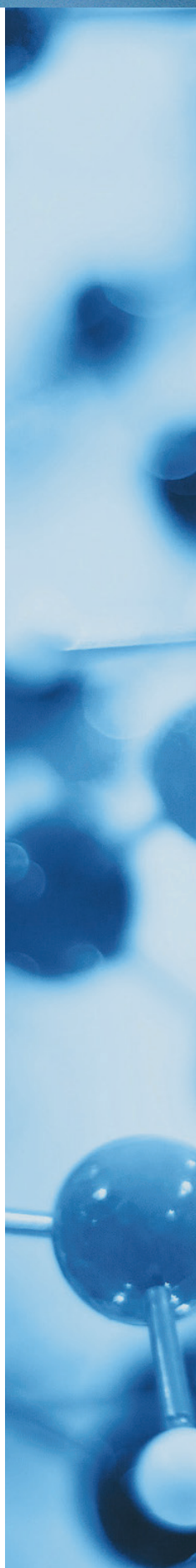
As director of Energy Partnerships for the Energy and Environmental Sciences Directorate at the Oak Ridge National Laboratory (ORNL), Dr. Raymond Boeman develops public private partnerships that match ORNL's capabilities with industry needs and the nation's energy challenges. He has been located in Southeast Michigan since February 2010. Prior to his current assignment, Boeman had responsibility for ORNL's transportation research efforts, including R&D programs for the Department of Energy's (DOE's) Office of Energy Efficiency and Renewable Energy's Vehicle Technologies Office, Bioenergy Technologies Office, and Fuel Cell Technologies Office. Research areas including fuels, engines, emissions, advanced power electronics, energy storage, and materials. Boeman also served as director of the National Transportation Research Center User Facility, a collaboration of ORNL and the University of Tennessee that houses one of America's largest concentrations of transportation researchers, laboratories, and development programs. Boeman is currently serving as founding director of the National Advanced Composite Manufacturing Institute (NACMI), a membership-based public-private partnership being established under the United States Automotive Partnership for Advancing Research and Technologies (USAutoPARTs), which will address critical needs for advancing composite manufacturing technologies including shared-infrastructure for research, development, and demonstration; education and workforce development; and supply chain issues including support for small and medium enterprises. Boeman also was a founding board member of USAutoPARTs. Since joining ORNL, Boeman has been a contributor to technology roadmaps and multiyear program plans as well as leading the establishment of unique technical capabilities and facilities. He led the envisioning, proposal process, and project start-up of ORNL's Carbon Fiber Technology Facility, the first open-access, pre-production scale facility of its kind. He was assigned for 5 years in Detroit, Michigan from 1999 to 2004 as DOE Technical Liaison to the Automotive Composites Consortium under the auspices of the United States Council for Automotive Research (USCAR). In 2004-2005, Boeman served in the Vehicle Technologies Office in Washington, D.C, as Technical Coordinator to the director of the 21st Century Truck Partnership. He holds a Ph.D. degree in Engineering Science and Mechanics from Virginia Polytechnic Institute and State University and has conducted research in diverse areas including: composite materials, fracture mechanics, adhesive bonding, photomechanics, mechanical properties, materials processing, damage mechanisms, and non-destructive evaluation.

Howard Coopmans

Howard Coopmans, Senior Manager-Body Engineering for 2013 *SRT Viper* at Chrysler Group LLC. He joined Chrysler in 2000 to work on structural and body development for D-segment and E-segment vehicles. Before that, he worked at The Boeing Co. from 1986-2000 on various programs including 777 empennage, A6 Re-wing, Advance Composite and Development Group, and Joint Strike Fighter. He holds a B.S. degree in Mechanical Engineering from University of Missouri-Rolla.

Mario Greco

Mario Greco is the Director of the Ground Transportation Market Sector Team in the Growth and Market Strategy organization of Alcoa, Inc. Together with his team, he is responsible for providing customer and market transparency, developing and maintaining the forecasts for automotive and commercial transportation market segments used for business unit planning, and support execution of Key Account plans while seeking to maximize cross-business unit growth opportunities through business development activities. Prior to rejoining Alcoa in 2010, Greco was Vice-President-Advanced Development at Industrial Origami Inc. (IOI,) a Silicon Valley startup, where he led commercial strategy and product development programs. He has held several roles in the automotive industry including Manager of Product Portfolio Integration at FIAT Group Automobile; Lead Development Engineer for the Design Concept Car Team for the BMW Group; and Program Manager at Porsche Engineering Services, in Troy, Michigan. He originally joined Alcoa in 1996 as a Product Design Engineer in the Automotive Structures Business Unit, where he was responsible for design support on advanced vehicle structures for Ferrari and other OEM customers. Greco holds B.S. and M.S. degrees in Mechanical Engineering from Rensselaer Polytechnic Institute and an MBA from the University of Bradford.



Biographies of Speakers 2013

Greg Rucks

Greg Rucks works in the Industry and Transportation practices at Rocky Mountain Institute (RMI). He is currently leading RMI's Autocomposites Project to facilitate lightweighting with carbon fiber composites at scale in the automotive industry. Prior to joining RMI, he worked for The Boeing Co. on structural optimization and lightweight design for the 787 program.

Elias Shakor

Dr. Elias Shakour is a Research Scientist with the Manufacturing Engineering and Technology group at the Center for Automotive Research (CAR) where his research involves lightweight material manufacturing, technology road-mapping, analytical cost-modeling analysis, and R&D strategy and exploitation. Additionally, he works closely with the CAR's Coalition for Automotive Lightweighting Materials (CALM) group. Prior to joining CAR, Shakour was Technology Development Manager at the Michigan Economic Development Corporation (MEDC). While there, he developed consortiums in advanced manufacturing; established collaborations with major manufacturing companies, R&D centers and government labs; developed and implemented market growth business plans; and assessed market opportunities. Shakour also worked at Liuman Technologies in East Lansing, Michigan where he developed the business plan, secured SBIR funding, designed and manufactured complex Carbon Fiber Reinforced Polymers shapes for a projectile impact, and developed manufacturing processes for thermoplastics and thermosets. He holds a Ph.D. degree in Materials Science and Mechanics from Michigan State University, and an M.B.A degree from Technion - Israel Institute of Technology.

Martin Starkey

Martin Starkey is currently Managing Director at Gurit Automotive Ltd. He holds a degree in Materials Science from Swansea University and joined then SP Systems in 1999. While there, he coordinated the development of a range of new composite materials for the automotive market, with a special focus on creating cost-effective and lightweight Class A body panels. This range of materials was launched in 2002 under the SPRINT CBS brand and remains the primary material system used today at the company for the manufacture of Class A panels. In 2006 SP Systems became Gurit and Starkey took up the position of Global Development Manager reporting to the Chief Technology Officer and focused on leading the development of composite systems across the Gurit group in markets such as Wind Energy, Marine, and Transportation until 2008 when he was appointed Managing Director of Gurit's growing automotive activities. Since 2008, Gurit Automotive has continued to expand as an automotive Tier 1 specializing in the design, development, and manufacture of carbon fiber-based Class A panels and now supplies many of the most prestigious vehicles and OEMs across the European market.

Jai Vankatesan

Dr. Jai Venkatesan brings over 20 years' experience in the chemicals and materials industry where he has held a number of leadership positions spanning technology, marketing, and business management. He is currently the Director for Material Science & Engineering with Dow Chemical developing and deploying Dow's capabilities around material architecture, processing technologies, modeling, & prototyping. These are leveraged into products ranging from resins, composites, films, foams etc. for end-use applications such as automotive, packaging, electronic materials, and infrastructure. Before joining Dow, Venkatesan worked with Cytec Industries for 15 years where he most recently worked in the Engineered Materials business dealing with aerospace composites and adhesives. His other leadership roles include a complement of technology, marketing, and business management assignments covering a range of product lines including adhesives & sealants, surfactants, crosslinkers, coatings, and plastic additives. Prior to his time at Cytec, Venkatesan began his career with 3M and worked on materials for imaging applications. He is a graduate of Lehigh University where he received his Master's and Ph.D. degrees in Chemical Engineering & Polymer Science. He has published over 25 papers and presentations with peer-reviewed journals and conferences and holds 6 patent disclosures and a range of invention records.

Panel Discussion

Moderator: Antony Dodworth

Antony Dodworth, Managing Director of Dodworth Design has spent most of his storied career working for automakers and racing teams. From 2003 until earlier this year, he was Principal Research Manager at Bentley Motors Ltd. (Crewe, Cheshire, U.K.). His initial duties were to lead a small team investigating the adoption of composite materials. The team's efforts were well received internally and externally, leading to at least 16 patent applications, a large capital investment, expansion of the team, and the work being translated through other members of the Volkswagen Group, which owns Bentley. Before joining Bentley, Dodworth spend a year-and-a-half at Futura Design as a Studio Engineer, where he worked on mechanisms for door and vent openings, as well as the composite chassis for the Cadillac Cien show car for then General Motors Corp. During his time at the company, he also worked on the chassis for a Jaguar F Type show car for Ford Motor Co., and carried out feasibility work on the interior, main chassis components, and novel multilink powered front and rear door hinges for a show car being developed by Nissan Motors. For most of 2001, Dodworth was Senior EngineerStyle Feasibility for Rolls Royce and Bentley Motors Cars where he liaised between designers and engineers and supervised a small team of studio engineers working on vehicle concept designs – from clay models through production to intent. In this role, he was also responsible for producing design proposals and patents for unique features such as a retractable hardtop, composite chassis assemblies, and door hinging systems.

Biographies of Speakers 2013

From 1996-2000, Dodworth worked in Germany for Hyundai Motor Europe as a Studio Engineer, where he was responsible for all aspects of studio projects, including packaging and feasibility. In this position, he primarily worked on show cars, and designed composite chassis and suspension components, as well as any additional mechanisms required to make parts function better. From 1994-1996, Dodworth was Chief Designer for International Automotive Design España S.A. (now IDD) where he led the engineering team in design and development of the MCC / Iberdroca electric light van from blank sheet through to prototype testing and homologation. Another project Dodworth oversaw was the body-in-white for a new SEAT Motors Sport Rally kit car with a newly designed front suspension assembly. Additionally, Dodworth has held positions at Ford Motor Sport, McLaren Cars, Ltd., Fondmetal Formula 1, Composite Technics Ltd., Leyton House Racing Ltd., March Engineering Ltd., Ralt Racing Cars, Peter Brotherhood Precision Engineering Co., and Schmidt Manufacturing & Equipment (UK) Ltd. He holds an Ordinary National Diploma in Mechanical and Production Engineering and a Higher National Certificate in Mechanical Engineering.

Panelist & Keynote: Mario Greco, Alcoa, Inc.

See biography in keynote section.

Panelist: Doug Richman, Kaiser Aluminum

Doug Richman is currently Vice-President, Engineering & Technology at Kaiser Aluminum. He joined Kaiser's management team in 1996 as Vice-President Engineering and General Manager - Automotive Castings business unit. Before joining Kaiser, Richman served as Director Automotive Business Development and Vice-President - Automotive Castings for Alcan Aluminum. His background also includes 20 years in automotive product design, development, and management at General Motors. He holds a Bachelor's of Science degree in Mechanical Engineering from the General Motors Institute, a Master's Degree in Business Administration from the University of Detroit, and is a registered Professional Engineer in Michigan.

Panelist: Jim deVries, Ford Motor Co.

Jim deVries graduated *summa cum laude* from Central University of Iowa with a Bachelor's of Science degree in Physics. He briefly studied surface science at the University of Missouri-Rolla before joining Ford Motor Co. in 1978. He has spent his time at Ford participating in and managing various research programs within Ford Research and Product Development. These programs have included paint and adhesive interfacial chemistry characterization; surface-related phenomena associated with automotive materials; development of advanced composites; and most recently, lightweight materials and associated manufacturing processes. Many of his efforts have been directly transferred to Ford vehicle programs. He is currently Global Manager of Materials and Manufacturing Research within the automaker. In this capacity he coordinates long range and applied research, both internally and through industry and government consortia.

Panelist & Keynote: Martin Starkey, Gurit Automotive Ltd.

See biography in keynote section.

Panelist & Keynote: Jai Venkatesan, The Dow Chemical Co.

See biography in keynote section.

Panelist: Jay Baron, Center for Automotive Research (CAR)

Dr. Jay Baron is President and CEO of the Center for Automotive Research. In addition to executive responsibilities there, Baron leads the Manufacturing Engineering & Technology Group at CAR. His own research has involved automotive tooling, vehicle assembly, process validation, and competitive evaluation of technologies involving advanced lightweight material processing and business-case assessment. Prior to his current position, Baron was an Associate Research Scientist at the University of Michigan where he developed new tooling tryout techniques to accelerate new vehicle launches while improving automotive body quality and reducing cost. He also introduced new analysis methods for assessing the correlation between tryout, stamping, and body assembly processes. Further Baron led several global benchmark efforts for various technologies, such as laser welding, high-strength steel, weld-bond adhesives, low-volume tooling design and materials and studied engineering and manufacturing methods used by European and Asian automotive manufacturers. Several body sub-system studies were also completed with U.S., European, and Japanese manufacturers that involved the design, fabrication, and assembly of car doors and body sides. Most recently, Baron has been involved with the identification and evaluation of technologies that contribute to improved fuel economy. In 2010, he co-authored, "Assessment of Fuel Economy Technologies for Light-Duty Vehicles," published by the National Research Council. Using data from this NRC publication, he co-authored, "The U.S. Automotive Market and Industry in 2025," published by the Center for Automotive Research. Baron continues to provide numerous presentations and seminars on automotive manufacturing and global trends. He holds a Ph.D. and a Master's degree in Industrial and Operations Engineering from the University of Michigan and an M.B.A. from Rensselaer Polytechnic Institute.