Automotive Plastics News

Today, Tomorrow - Together

January 2007 Volume 36, Issue 2

AUTOMOTIVE INNOVATION AWARDS COMPETITION & GALA

HONORING THE BEST IN AUTOMOTIVE PLASTICS

The Pre-Gala Competition

What a difference a year can make.

In 2005, the nominations pool for the ***SPE Automotive Innovation Awards Competition*** was the largest in at least a decade. It also represented the greatest diversity of OEMs and suppliers submitting nominations and winning awards of any year since the event began in 1970. In fact, OEMs and tier suppliers on three continents received top honors last year.

This year was quite different. The 2006 event was notable for the large number of awards that went to a single OEM - DaimlerChrysler - which swept 7 of the 11 top awards. DaimlerChrysler teams were successful in large part because they submitted a great number of innovative nominations. They were able to do this because they launched so many new vehicles in 2006.

The Gala Itself

On November 13, 2006, the 36th-Annual SPE Automotive Innovation Awards Gala commenced at Burton Manor in Livonia (Detroit), Michigan to once again honor winners of the competition for the year's *Most Innovative Uses of Plastics* in transportation applications.

This year's event kicked off with a first - a press conference to introduce members of the media to SPE's Executive Award Winners and the Gala's major sponsor, Ticona Engineering Polymers. The media briefing rolled into the VIP cocktail reception sponsored by Ticona. Dinner was served to a near-capacity audience starting at 6:30 pm and the event formally began at 7 and ended at 9 pm. Like last year, an Afterglow reception followed for those able to stay longer. The gala was attended by transportation engineers, business executives, materials suppliers, and media.

The ***SPE Automotive Innovation Awards Competition*** is the oldest and largest recognition event in the automotive and plastics industries, and is considered to be among the best networking opportunities in the North American automotive communities.

The 2006 **Grand Award Winner**, as well as **Body Exterior** category winner was the Blow-Molded Front and Rear Bumper System on the '07 Model Year Chrysler Group Jeep® Wrangler SUV. This was the first Class-A blow-molded, all-plastic bumper that combined fascia and beam functionality. It replaced a traditional steel application and

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Mike Dolman of DaimlerChrysler accepts the Grand Award from Brian Grosser, SPE Innovation Awards Program Chairman.

Treasurer's Report

John Fialka

The SPE Automotive Division bank account balance is in good standing at $150K with $123K in checking and $27K in savings. The Composites Conference had record attendance and sponsorship. The financial report for the ACCE is complete. Income was $141K and expenses were $121K. Surplus from the event was approximately $20K. The division will contribute $7K to our scholarship fund. The Innovation Awards Gala was another success and a final financial report is expected 1st quarter 2007. Federal tax returns were completed 11/11/06. Copies of the taxes and the 2007 budget were sent to SPE National.

Automotive Division Meeting Schedule and Special-Events Calendar

Division Board of Directors Meeting APC, Troy, MI	February 5, 2007
Division Board of Directors Meeting APC, Troy, MI	April 9, 2007
AutoEPCON Best Western Sterling Inn Sterling Heights, MI	April 24, 2007
ANTEC 2007 Duke Energy Center Cincinnati, Ohio	May 6-10, 2007
Division Planning Meeting Location TBD	June 2007
7th-Annual SPE Automotive Composites Conference MSU Management Education Center, Troy, MI	September 11-13, 2007
37th-Annual Innovation Awards Gala Burton Manor, Livonia, MI	November 2007

Automotive Division Board of Directors meetings are open to all SPE members. Call Mark Lapain at (248) 567.5455 for more information.

Chairman's Message

Mark Lapain

This newsletter highlights the 36th-Annual Automotive Innovation Awards Competition and Gala, which was held on November 13 at Burton Manor in Livonia, MI. The Innovation Awards continues to be the premier recognition event within the automotive plastics community and it provides us an opportunity to properly recognize novel advancements and the key executives that help cultivate innovation. While the automotive industry is enduring some challenging times, this event allows us step back for a night, and celebrate some of our victories and reflect on the progress we continue to make. As always, we encourage your feedback. We are continually looking for ways to improve this event and how we honor the best in automotive plastics.

I would like to give my sincere thanks to all of our sponsors that make the Innovation Awards possible each year. Their generous support has enabled us to improve the overall quality and elegance of the event. In addition, the proceeds from the Innovation Awards and our technical conferences help to fund the Automotive Division's educational outreach. This includes scholarships for students pursuing degrees in plastic related fields, PlastiVan visits to local schools, and plastics-related design projects.

Congratulations once again to our executive award recipients. Chris Theodore, vice-chairman of American Specialty Cars, received the Global Executive Engineering Leadership Award; James McCaslin, president and chief-operating officer at Harley-Davidson Motor Company, received the Executive Leadership Award; and Barbara Sanders, director of Advanced Development & Engineering Processes at Delphi Thermal Systems won the Lifetime Achievement Award. Each award was well deserved and the presence of these people during the Awards night made the event even more special.

The Innovation Awards planning committee did an outstanding job. The show ran very smoothly, finished on time, and where else can you find executives riding their *Harley's* on stage? While many people contributed to the success of this event, I would be remiss if I didn't recognize some key contributors. Brian Grosser, did a great job in his first year as the event chair; Peggy Malnati, as Communications Chair pulled together our literature, press conference and press releases; Kevin Pageau, facilitated our nomination process and first round judging; Monica Prokopyshen coordinated our Blue Ribbon Judging; and Suzanne Cole provided guidance as the past-event chair and managed the arrangements at Burton Manor.

We also received much needed support during the Awards night from volunteer students from Ferris State University, The University of Michigan-Dearborn and Focus Hope (thanks to the involvement of Eleanor Josaitis), which was co-ordinated by Jackie Rekopf.

Last, I would like to remind everyone that our next event is AutoEPCON, a one-day conference that focuses on advancements in engineering thermoplastics. It will be held on April 24, 2007 at the Best Western Sterling Inn. This year, Tom Pickett of GM and Nippani Rao of DCX are leading the charge and the event is really starting to take shape. If you are interested in presenting at this conference, being a sponsor or just want to attend, please note the conference flyer within this newsletter.

I hope everyone has a blessed 2007 and I look forward to seeing you at our SPE Automotive events this year.

AUTOMOTIVE SPE INNOVATION AWARDS COMPETITION & GALA

HONORING THE BEST IN AUTOMOTIVE PLASTICS

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offered a 12% piece-cost and assembly-cost reduction as well as a 9% weight reduction.

Furthermore, the design meets domestic impact performance and European safety requirement while complying with OEM styling objectives. Contributing team members included systems supplier and materials processor, ABC Group, Inc.; materials supplier, Salflex Polymers (ABC Group); and tooling supplier, Supreme Tooling (ABC Group). The material featured in this winning application was Salflex® 610 MW - RXF TPO. Mike Dolman of DaimlerChrysler accepted both trophies.

The winner in the **Body Interior** category was the In-Line Compounded Structural Duct Assembly featured on the '07 MY Chrysler Group Dodge Nitro SUV. This is the first application of in-line compounding / injection molding for a 2-piece, vibration-welded instrument panel structural-duct assembly. The thermoplastic polyolefin (TPO) IP retainer (base panel) is subsequently welded to the structural duct, which has a Class-A finish.

Overall assembly cost savings due to materials usage (polypropylene (PP) vs. polycarbonate / acrylonitrile butadiene styrene (PC/ABS)) is approximately 15%. The nominating team included systems and materials supplier, Intertec Systems; materials supplier, Basell Polyolefins; and tooling supplier, Phillips Tool & Mould Limited. The material featured in this winning application was Profax® SG853 polypropylene. John Haubert of DaimlerChrysler accepted the award.

In the **Chassis / Hardware** category, the winner was the Rail-Less Window Regulator on the '07 MY Chrysler Group Dodge Nitro SUV. This is the first integrated, cable-driven, rail-less window regulator system for door modules. The innovative carrier integrates the drum housing and utilizes an industry-first, robotically extruded thermoplastic seal to form the separation between wet and dry sides. The application achieved a weight savings of 25% as well as a direct cost savings.

The team that contributed to this application included systems supplier and materials processor, Faurecia Interior Systems; materials suppliers, St. Gobain and ExxonMobil; and tooling supplier, Omega. The material featured in this winning application was Twintex® comingled glass / polypropylene roving and polypropylene. Bill Grabowski of DaimlerChrysler received the award on behalf of the winning team.

The winning nomination for this year's **Materials** category was the Thermoplastic Vulcanizate (TPV) Primary Seal on the '07 MY Chrysler Group Dodge Ram pickup. This application is the first TPV body-mounted primary seal used in a complete dynamic-sealing application. The new TPV material used for this application is an EPDM-sponge equivalent that enables the transition from thermoset rubber to thermoplastic elastomer.

In honor of our Executive Leadership Award Winner, Jim McCaslin of Harley-Davidson, over one dozen Harley's were on display, including racing bikes and one-of-a-kind bikes. Also on display was a hand-carved motorcycle ice sculpture.

Estimated cost savings of 20% were achieved. JYCO was the systems supplier, materials processor, materials supplier, and tooling supplier. The winning material was JyFlex™ thermoplastic vulcanizate (TPV). DaimlerChrysler's Bill Grabowski accepted the award.

The Environmental category winner was the Fiberglass-Free Headliner on the '07 MY Honda Motor Company Honda® Acura® MDX SUV. This application uses a non-glass-fiber reinforcement, which enables complete disposal (incineration) of the headliner by the OEM vehicle recycler. Incinerating fiberglass headliners causes huge disposal issues, especially in Japan and Europe. The basalt-reinforced PP composite meets the OEM's disposal requirements without incinerator contamination issues.

The key team members for this development included: systems supplier and materials processor, M-Tek, Inc.; and materials supplier, Azdel, Inc. The material featured in this application was VolcaLite™ basalt-reinforced PP composite. The award was accepted by Mary Dovell of Honda Motor Company.

In the **Powertrain** category, the 2006 winner is the Combined Wideband Turbo Resonator featured on the '07 MY Chrysler Group Dodge Nitro SUV. Turbo whine as well as blade-pass noise is no longer audible on vehicle interiors or exteriors due to this first-ever combination resonator mounted on the pressure side of the turbocharger. The in-line mounted, single-housing resonator provides wideband frequency attenuation. The combination of position and attenuation level saves about 60% in mass and materials vs. alternate methods of quieting turbocharged vehicles.

Contributors to this innovation included systems supplier, Woco MAS USA Inc.; materials processor, Novoplas; materials supplier, DuPont Automotive; and tooling supplier, Novoplas. The material honored in this application was Zytel® 70G33 33% glass-filled polyamide (PA (nylon)) 6.6. Tim Sikes of [COMPANY] accepted the award.

For the **Performance & Customization** category, which captures aftermarket innovations and was added to the competition two years ago, the winning entry was the Flush Rear Center Sliding Window Assembly on the '07 MY General Motors GMT800 pickups. This flush rear center sliding window assembly provides a pleasing aesthetic appearance for pickups due to a flush-mounted, concealed window opening. A patent-pending molded bulb seal provides a leak-resistant barrier and an excellent leak-proof water-management system.

The development can be applied to other OEM pickups thanks to the efforts of systems supplier and materials

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Innovation Awards Program - Gold Sponsors

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processor, Guardian Automotive Products using Rynite® 530 BK503 polyethylene terephthalate (PET) material from DuPont Automotive. Chuck Wilson of Guardian Automotive Products accepted the award.

In the **Process / Assembly / Enabling Technologies** category, the winning application for 2006 was the Free-Form 2-Shot Door Bolster featured on the '07 MY Chrysler Group Dodge Caliber SUV. This process combines a structural substrate (polypropylene) and a soft-feel outer surface (SEBS) elastomer in a single high-pressure molding operation. Creative surface designs that can intermix different colors, haptics, thicknesses, and textures are used to produce a single, more-cost-effective part while also providing the perception of a more expensive component. Cost savings of 10-20% and weight savings of 15% were realized.

This innovation was made possible through the efforts of systems supplier, Lear Corporation; materials processor, Lear Corporation - Greencastle; materials supplier, Kraiburg; using tooling supplied by Hi-Tech. The material used in this application is Thermolast K® HTP8679/33 polypropylene and SEBS (TPE-S) elastomer. The award was received by Tom Edson of DaimlerChrysler on behalf of the winning team.

The winner in the **Safety** category was the Fully Structural Blow-Molded Seatbacks on the '07 MY Audi AG Audi® TT roadster. These all-plastic, blow-molded PC / ABS seatbacks meet strict European safety legislation, including ECE 17 luggage retention, as well as other globally mandated requirements. Because the PC / ABS blow-molded seatbacks replaced metal, a significant weight savings of almost 2.3 kg (5 lb) / vehicle was realized as well as a cost savings of $4 USD / vehicle.

The winning team included: systems supplier, Lear Corporation; materials processor, Moellertech GmbH; materials supplier, Dow Automotive using PULSE™ 2200 BG polycarbonate / acrylonitrile butadiene styrene (PC/ABS). The award was accepted by Timo Elze of Audi.

In the last nomination category - **Hall of Fame**, for applications in continuous use for at least 15 years - the winner was the Thermoplastic Front Grille on the '66 MY General Motors Pontiac® Bonneville®, Catalina®, and Tempest® vehicles. The front grilles on these 1966 Pontiac models were the first thermoplastic parts to be used on the exterior of automobiles. The material used was painted acrylonitrile butadiene styrene (ABS) supplied by the then Marbon Chemical Division of BorgWarner. The application was used across all models in the Pontiac Bonneville, Catalina, and Tempest vehicle lines, saving 6.4 - 8.2 kg (14 - 18 lb) per vehicle.

In the words of Josh Madden, SPE Emeritus and then-design engineer at Pontiac, "This single step into the world

"Most Innovative Use of Plastics" Trophy

of thermoplastics on automobiles was the harbinger of the myriad common parts we now take for granted. In fact, there isn't a car on the market today that doesn't have a plastic grille. That's why we selected it to be our 2006 Hall of Fame award winner." Key team members on that original launch included: Duane Miller (Pontiac Design Engineering), Josh Madden (Pontiac Materials Engineering), Bob Carroll (GM - Ternstedt), and Len Becker and Fred Garnham (Perfect Mold). Management support at General Motors came from Pete Estes, John DeLorean, Herman Kaiser, and Ken Valentine.

Other key team members for this innovation included: systems supplier, Millington Plastics Co. (Upper Sandusky, Ohio) and GM Ternstedt Division (Syracuse, N.Y.); materials processor, Millington Plastics Co. and GM Ternstedt Division; materials supplier, Marbon Chemical Division of BorgWarner (subsequently sold to GE Plastics); and tooling suppliers, Perfect Mold (later The Becker Group) and GM Ternstedt. The resin was CYCOLAC® H painted acrylonitrile butadiene styrene (ABS). Josh Madden accepted the Hall of Fame trophy.

Nippani Rao, SPE Automotive Division Councilor, addresses the audience at the 2006 SPE Innovation Awards Gala.

This event would not be possible without the support of our sponsors. Our **Gala Sponsor** was Ticona Engineering Polymers.

Our **Gold Sponsors** were the American Plastics Council, Advanced Composites, BASF, Delphi, DuPont Automotive, and Husky.

Our **Bronze Sponsors** were ABC Group, Adell Plastics, A. Schulman, Azdel, Inc, Basell Polyolefins, Chevron Phillips Engineering Polymers Group, DaimlerChrysler, ExxonMobil Chemical, Faurecia, Intertec Systems, JSP, Magna, Mathson Industries, Nova Chemicals, Quadrant Plastic Composites, Soliant, Spartech Corporation, Solvay Engineered Polymers, and Victrex.

Our **Media / Association Sponsors** were American Composites Manufacturers Association, Advanced Materials & Processes, American Society of Materials International, Automotive Design & Production, Composites Manufacturing Magazine, Composites Technology Magazine, Injection Molding Magazine, Modern Plastics Worldwide, Plastics Machinery & Auxilliaries Magazine, Plastics Technology Magazine, and Ward's AutoWorld Magazine.

As is customary, funds raised from this event will be used to support SPE educational efforts and technical seminars, which will help to secure the role of plastics in the advancement of the automobile.

Blue-Ribbon Judges for 36th-Annual Innovation Awards Competition

- Germinder Bedi, Ford Motor Co. (retired)
- Jim Best, Market Search
- Robert Eller, Eller & Associates
- Ryan Gehm, SAE, Automotive Engineering Magazine
- Dale Jewett, Automotive News Magazine
- James Kolb, American Plastics Council
- Ralph Kummler, Wayne State University
- Erik Lokensgard, Eastern Michigan University
- Josh Madden, Mold Release Products Inc.
- Michelle Maniscalco, Injection Molding Magazine
- Rhoda Miel, Plastics News Magazine
- Thomas Moore, DaimlerChrysler (retired)
- Al Murray, Ford Motor Co. (retired), SPE Emeritus
- Matthew Naitove, Plastics Technology Magazine
- Irv Poston, General Motors Corporation (retired)
- Ron Price, Global Polymer Solutions
- Roy Sjoberg, Team R2S LLP
- Jeff Sloan, Composites Technology and High-Performance Composites Magazines
- Robert Speirs, Ferris State University
- Mike Tolinski, Plastics Engineering Magazine
- Conrad Zumhagen, The Zumhagen Company LLC

2006 SPE Automotive Division Grand Award Winner

"Most Innovative Use of Plastics"

Blow-Molded Front & Rear Bumper System on the 2007 Jeep® Wrangler

The Grand Award Winning Team: Ray Tonelli, Karl-Willi Meyer, Tim Chapman, Chenza Sadr, Brian Grosser (SPE Awards Program Chairman), Mike Dolman, Romeo Samoy, Marcus Ashmore, Beate Regan, and Dave Flajnik.

Body Exterior and Grand Award Winner

Blow-Molded Front & Rear Bumper System

2007 Model Year (MY) Chrysler Group Jeep® Wrangler

System Supplier:	ABC Group Inc
Material Processor:	ABC Group Inc
Material Supplier:	Salflex Polymers (ABC Group)
Resin:	Sallfex® 610 MW - RXF TPO
Tooling Supplier:	Supreme Tooling (ABC Group)

This blow-molded, all-plastic bumper replaced a traditional steel application and offered a 12% piece-cost and assembly-cost reduction as well as a 9% weight reduction. Furthermore, the design meets domestic impact performance and European safety requirement while complying with OEM styling objectives.

ABCgroup

2006 Innovation Awards Competition Category Winners

Body Interior Category Winner

In-Line Compounded Structural Duct Assembly

2007 MY DaimlerChrysler Dodge Nitro

System Supplier:	Intertec Systems
Material Processor:	Intertec Systems
Material Supplier:	Basell Polyolefins
Resin:	Pro-fax® SG853 PP
Tooling Supplier:	Phillips Tool & Mould Limited

This is the first application of in-line compounding / injection molding for a 2-piece, vibration-welded instrument panel structural-duct assembly. The TPO IP retainer (base panel) is subsequently welded to the structural duct, which has a Class-A finish. Overall assembly cost savings due to materials used (PP vs. PC/ABS) is approximately 15%.

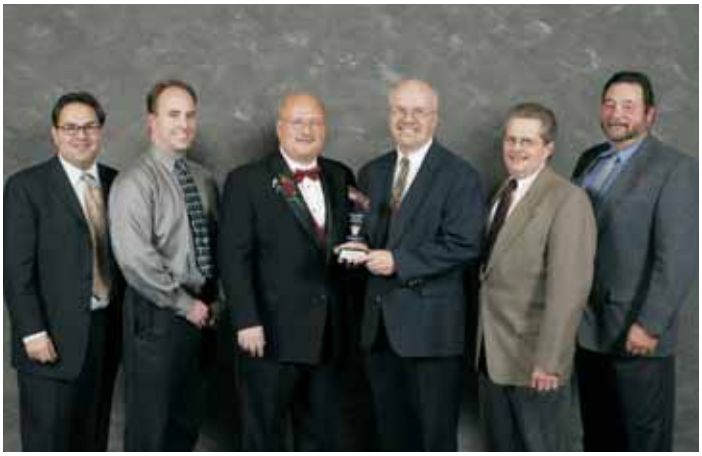
Chassis/Hardware Category Winner

Rail-Less Window Regulator

2007 MY DaimlerChrysler Dodge Nitro

System Supplier:	Faurecia Interior Systems
Material Processor:	Faurecia Interior Systems
Material Supplier:	St. Gobain / Exxon
Resin:	Twintex® GF PP
Tooling Supplier:	Omega

This is the first integrated, cable-driven, rail-less window regulator system for door modules. The innovative carrier integrates the drum housing and utilizes an industry-first, robotically extruded thermoplastic seal to form the separation between wet and dry sides. The application achieved a weight savings of 25% and a direct cost savings of $7 USD / vehicle.



Neil Evenmayor, Bob McHugh, Kevin Pageau (SPE), John Haubert, Ken Okray, and Bob Santoro

Chris McGalvin, Mike Twork, William Grabowski, Bonnie Bennyhoff (SPE), David Carr, Paul Glei, and Jamie Coleman.

2006 Innovation Awards Competition Category Winners

Materials Category Winner

Thermoplastic Vulcanizate Primary Seal

2007 MY DaimlerChrysler Dodge Ram

System Supplier: JYCO
Material Processor: JYCO
Material Supplier: JYCO
Resin: JyFlex™ TPE
Tooling Supplier: JYCO

This application is the first TPV body-mounted primary seal used in a complete dynamic-sealing application. The new JyFlex material is an EPDM-sponge-equivalent material that enables the transition from rubber to thermoplastic. Estimated cost savings of 20% ($5 / vehicle) were achieved.

Environmental Category Winner

Fiberglass-Free Headliner

2007 MY Honda Acura® MDX

System Supplier: M-Tek, Inc.
Material Processor: M-Tek, Inc.
Material Supplier: AZDEL, Inc.
Resin: VolcaLite™ basalt-reinforced PP

This application uses a non-glass-fiber reinforcement, which enables complete disposal (incineration) of the headliner by the OEM vehicle recycler. Incinerating fiberglass headliners causes huge disposal issues, especially in Japan and Europe. The basalt-reinforced PP composite meets the OEM's disposal requirements without incinerator contamination issues.

John McGovern, William Grabowski, Norm Kakarala (SPE), Shawn Jyawook, and Gary Pitt

Mary Dovell and Monica Prokopyshen (SPE)

2006 Innovation Awards Competition Category Winners

Powertrain Category Winner

Combined Wide-Band Turbo Resonator

2006 MY DaimlerChrysler KA / KK

System Supplier: Woco MAS USA Inc.
Material Processor: Novoplas
Material Supplier: DuPont Automotive
Resin: Zytel® 70G33 PA 6.6 GF 33
Tooling Supplier: Novoplas

Turbo whine as well as blade-pass noise is no longer audible on vehicle interior or exterior due to this first-ever combination resonator mounted on the pressure side of the turbocharger. The in-line mounted, single-housing resonator provides wideband frequency attenuation. The combination of position and attenuation level saves about 60% in mass and materials vs. alternate methods of quieting turbocharged vehicles.

Performance & Customization Category Winner

Flush Rear Center Sliding Window Assembly

2006 MY General Motors Full Size Pickups

System Supplier: Guardian Automotive Products
Material Processor: Guardian Automotive Products
Material Supplier: DuPont Automotive
Resin: Rynite® 530 BK503 PET

The flush rear center sliding window assembly provides a pleasing aesthetic appearance for pickups due to a flush-mounted concealed window opening. A patent-pending molded bulb seal provides a leak-resistant barrier and an excellent leak-proof water management system. This development can be applied to other OEM pickups.

Roman Lopez, Gianluigi Molteni, Udo Gaertner, Dr. Jay Raisoni (SPE) Tim Sikes, and Baljit Sierra

Nippani Rao (SPE), Chuck Wilson, Ryan Dear, Brian Corchoran, Randy McDonald, Darrien Neitzke, Phil Taylor, Mark Schreiner, and Jarred Smith

2006 Innovation Awards Competition Category Winners

Process / Assembly / Enabling Technologies Category Winner

Two-Shot Door Bolster

2006 MY DaimlerChrysler Dodge Caliber

System Supplier:	Lear Corporation
Material Processor:	Lear Corporation - Greencastle
Material Supplier:	Kraiburg
Resin:	Thermolast® K HTP8679/33 PP + TPE-S (SEBS)
Tooling Supplier:	Hi-Tech

This process combines a structural substrate and a soft-feel outer surface in a single high-pressure molding operation. Creative surface designs that can intermix different colors, haptics, thicknesses, and textures are used to produce a single, more-cost-effective part while also providing the perception of a more expensive component. Cost savings of 10 - 20%, and weight savings of 15%, were realized.

Robert Schulte, Mike Schoemann, Ken Shaner, Tom Edson, Suresh Shah (SPE), Rich Sieradzki, and Axel Hinrichs

Safety Category Winner

Fully Structural Blow-Molded Seatbacks

2007 MY Audi AG Audi® TT

System Supplier:	Lear Corporation
Material Processor:	Moellertech GmbH
Material Supplier:	Dow Automotive
Resin:	PULSE™ 2200 BG PC/ABS

These all-plastic, blow-molded PC/ABS seatbacks meet strict European safety legislation, including ECE 17 luggage retention, as well as other globally mandated requirements. Because the PC/ABS blow-molded seatbacks replaced metal, a significant weight savings of almost 2.3 kg (5 lb) / vehicle was realized as well as a cost savings of $4 USD / vehicle.

Mike Shoemaker, Maria Ciliberti (SPE), and Timo Elze

2006 Hall of Fame Inductee

First Thermoplastic Front Grille

1966 MY General Motors Pontiac® Bonneville®, Catalina®, and Tempest®

System Suppliers:	GM Ternstedt Division Millington Plastics Co.
Material Supplier:	Marbon Chemical Division of BorgWarner (now GE Plastics)
Resin:	CYCOLAC® H ABS
Tooling Supplier:	Perfect Mold (The Becker Group)

The Hall of Fame category is for applications in continuous use for at least 15 years. The front grilles on these 1966 Pontiac models were the first thermoplastic parts to be used on the exterior of automobiles. The application was used across all models in the Pontiac Bonneville, Catalina, and Tempest vehicle lines, saving 6.4 - 8.2 kg (14 - 18 lb) per vehicle.

In the words of Josh Madden, SPE Emeritus and then-design engineer at Pontiac, "This single step into the world of thermoplastics on automobiles was the harbinger of the myriad common parts we now take for granted. In fact, there isn't a car on the market today that doesn't have a plastic grille. That's why we selected it to be our 2006 Hall of Fame award winner."

Key team members on that original launch included: Duane Miller (Pontiac Design Engineering), Josh Madden (Pontiac Materials Engineering), Bob Carroll (GM - Ternstedt), and Len Becker and Fred Garnham (Perfect Mold). Management support at General Motors came from Pete Estes, John DeLorean, Herman Kaiser, and Ken Valentine.

Josh Madden, SPE Automotive Division Director Emeritus, was uniquely honored, as he was a member of the original Thermoplastic Front Grille development team at General Motors over 30 years ago, he introduced the Hall of Fame category at the 2007 Innovation Awards Gala on behalf of SPE, and accepted the award on behalf of Pontiac Motor Division and General Motors. Josh has led the SPE Hall of Fame committee for many years, and is one of original pioneers in the use of plastics in automobiles.

1966 MY General Motors Pontiac® Bonneville®

David Barnhart, Duane Miller, Josh Madden (SPE), Dave Reed (SPE), Fred Garnham, and Joseph Gassel

Innovation Awards Program Media and Association Sponsors

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PlasticsTechnology

ASM INTERNATIONAL The Materials Information Society

MODERN PLASTICS WORLDWIDE

Innovation Awards Program Questions and Answers

How does my company benefit from participating?

☛ Involvement in the process drives and rewards innovative thinking, and promotes excellence.

☛ Keep up to date on the latest innovations from other engineers, designers, competitors, and customers.

☛ Reward your team and company through worldwide recognition.

Is there any cost to make a nomination?

☛ No, there is no application fee. You must supply SPE a representative part/assembly, and be willing to make presentations to the judging committee(s).

Who can make a nomination?

☛ Nominations can be made by anyone knowledgeable of the achievement - material supplier, molder, Tier 1, OEM, etc.

☛ OEM approval is required for the nomination to be considered.

Where do I get the nomination form, and when is the deadline for nominations?

☛ The electronic nomination form can be downloaded from our website at **www.speautomotive.com**. It is usually posted by early June. The deadline for nominations varies each year, but is usually around the middle of September.

Is my application eligible?

☛ Parts must be in mass production and on a vehicle that is available for purchase by November 1 of the year of the judging.

☛ The vehicle can be manufactured anywhere in the world.

☛ There is no minimum number of vehicles required.

☛ The application (innovation) cannot have previously been nominated.

How do I know if my application has been previously nominated, and/or whether it is innovative enough?

☛ You really can't know. The past 5 years of the Award Program can be viewed at our website, but it can be tedious reviewing the previous nominations. You can contact the SPE Automotive Division board for guidance.

☛ If there is any doubt, we strongly encourage you to nominate your application. If it has been nominated previously, we will let you know. Many times people are so involved in the application development process that innovation and uniqueness of their application has become transparent to them.

What are the categories, and is the judging criteria the same for each category?

☛ The categories are **Body Interior, Body Exterior, Chassis/Hardware, Powertrain, Materials, Environmental, Process/Assembly/Enabling Technologies, Performance and Customization, Safety, and Hall of Fame**.

☛ For Interior, Exterior, Chassis/Hardware, and Powertrain, the judging compares the attributes of the nomination to the others in the same category. These tend to be design-related innovations, but often have process or materials innovations that helped the application succeed. Examples might include a new invisible airbag tear-seam design, a new bumper energy absorber, metal replacement for powertrain, a new plastic door module, etc.

☛ In the Materials category, the focus of the evaluation is how innovative is the material used in the application, and the benefits the new material provides, with less emphasis on the actual part or application. Past winners include nano-composite TPO, carbon fiber SMC, and UV-stable TPU.

☛ The Environmental category looks at the long-term sustainability of plastics. Applications should be nominated if they make use of post-industrial or post-consumer recycle, especially in decorative or structural applications. Also, if an application is uniquely designed for recycling, it may compete well.

☛ The Process category is straightforward, where the primary innovation is in the process (gas-assist, multi-layer blow molding, co-extrusion, etc). Once a process has been submitted, another unique part made with the same process cannot be submitted in this category in following years; the part can compete in any of the other categories. Assembly/Enabling Technologies is a "catch-all" category where the primary innovation is related to unique assembly methods (welding, snap fits) or some other technology that contributes to the overall application development process.

☛ In the Performance and Customization the judges will be evaluating how plastics contributed to the important industry trends in personalization and vehicle enhancement. Nominations will be judged on the effective and creative use of plastics to enhance vehicles.

☛ Applications in the Safety category will be judged regarding the effective application of plastics to improve the safety performance of vehicles.

☛ The Hall of Fame Award will be presented for an innovative application that has stood the test of time, being in continuous production for over 10 years.

My part/application could fit multiple categories; which one do I enter it in?

☛ This often happens when a new design requires development of a new resin and/or new processing techniques. By answering the questions in the nomination form, this can often lead you to identify the single most innovative aspect of the application. The review committee may recategorize the nomination upon review.

☛ The nomination may also be moved to another category if that category is filled with strong nominations. For example, an exterior nomination with unique process may be moved to the Process/Enabling Technologies if that category has a low number of nominations.

☛ Our objective is to get nomination in the category in which it will compete best, and have the best chance to win.

Who judges the competition?

☛ The first round of judging is by the Board of Directors of the SPE Automotive Division and select industry experts. The finalists that will move on to the Blue Ribbon Judges are selected.

☛ The Blue Ribbon judging panel consists of leading industry experts, including journalists from automotive and plastics publications, university professors, automotive/plastics consultants, and retired automotive engineers.

☛ The Blue Ribbon panel selects the category winners from the list of finalists in each category, and the Grand Award Winner from the list of category winners.

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We can drive performance where you need it to go.

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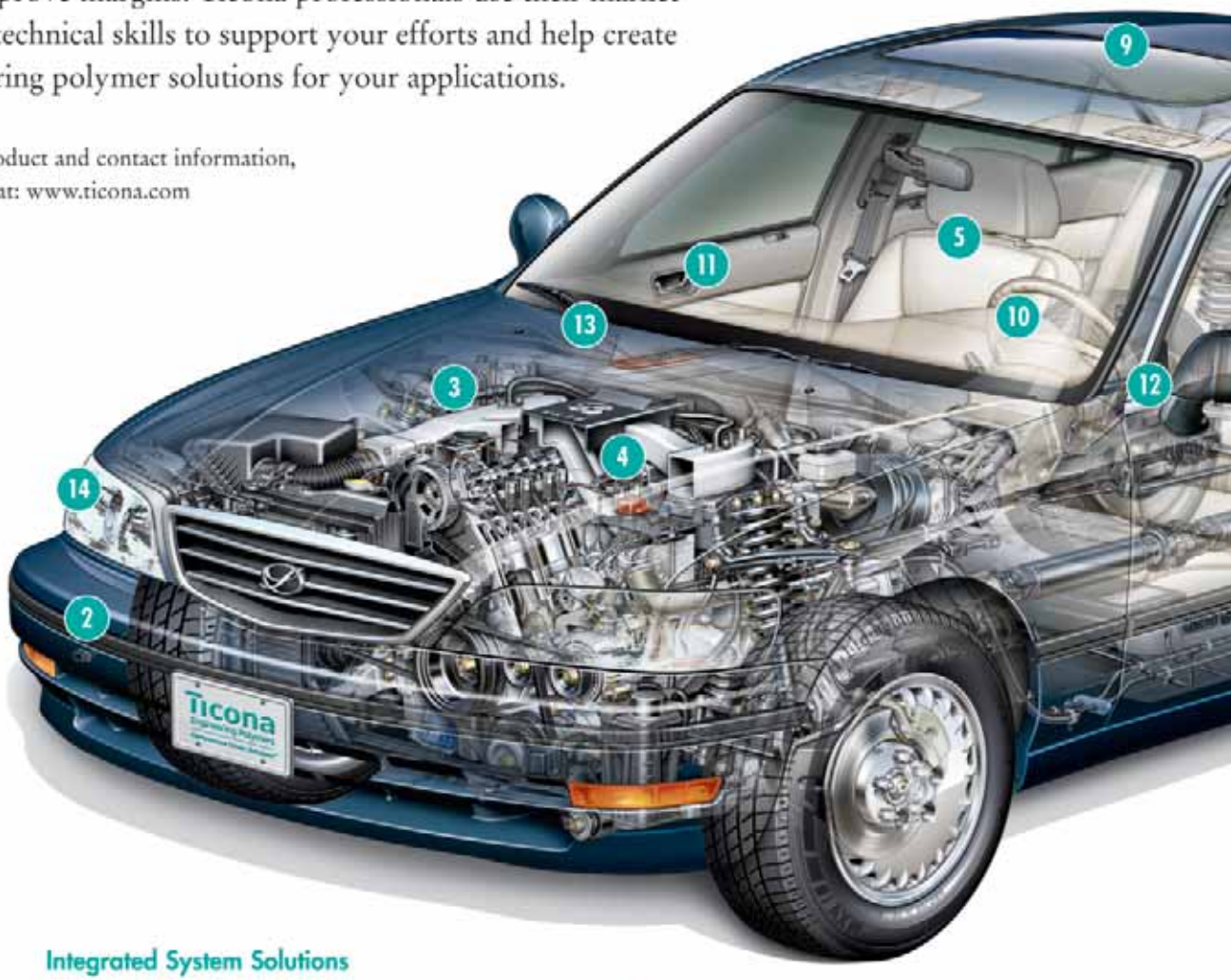

Integrated System Solutions

1 **Door/Lock/Window**
Celcon, Celstran, Celanex

2 **Front End Modules**
Celstran, Celanex, Impet

3 **Electrical**
Celanex, Fortron, Vectra, Celcon

4 **Power Distribution**
Celstran, Celanex, Vectra, Fortron

5 **Cockpit Environment**
Celanex, Vandar, Riteflex, Celcon

6 **Underbody Skid Plates**
Celanex, Celstran

7 **Advanced Fuel Delivery**
Celcon, Fortron, Celanex, Riteflex

8 **Seating & Restraint**
Celcon, Celstran, Riteflex, Celanex, Vandar

9 Multi-functional Roof
Celcon, Celanex, Fortron, Celstran

10 Instrument Panels
Celstran

11 Speaker Grilles, Knobs, Handles and Levers
Celcon, Celstran, Celanex

12 Mirror Housings
Celcon, Celanex, Celstran

13 Wiper Plenums
Celcon, Celanex, Celstran

14 Lighting Housings
Celanex, Vectra, Fortron

Celanex® Thermoplastic Polyester
- Outstanding thermal and chemical resistance
- Toughness
- Rigidity
- Exceptional dimensional stability
- Superior electrical properties

Celcon® Acetal Copolymer
- Excellent mechanical properties
- Inherent lubricity
- Chemical resistance
- Broad temperature use range

Celstran® and Compel® Long Fiber Reinforced Thermoplastic
- High stiffness
- Exceptional toughness
- Long-term dimensional stability
- Wide temperature use range

Fortron® Polyphenylene Sulfide
- High continuous use temperature
- Resistance to auto fuels and fluids

Impet® Thermoplastic Polyester
- Outstanding physical properties
- Superior thermal and chemical resistance
- Toughness
- Rigidity
- Dimensional stability
- Wide temperature use range

Riteflex® Thermoplastic Polyester Elastomer
- Excellent toughness and fatigue resistance
- Outstanding chemical resistance
- Good low temperature impact
- Wide temperature use range

Vandar® Thermoplastic Alloys
- Excellent chemical resistance, ductility and stiffness
- High impact strength at low temperatures

Vectra® Liquid Crystal Polyester
- Superior thermal characteristics and dimensional stability
- High strength and modulus
- Broad chemical resistance
- Low mold shrinkage
- Excellent electrical properties
- Inherent flame resistance

Ticona
Engineering Polymers
Performance Driven Solutions™

Plastics are for Cars after all . . .

Presented at the 6th-Annual SPE Automotive Composites Conference, September 12-14, 2006, Troy, Michigan.

Opening Keynote Address by Dr. Michael M. Fisher
Senior Director
American Plastics Council
A Division of the American Chemistry Council

Good morning. It is both a great pleasure and an honor to lead off this year's SPE Automotive Composites Conference. I want to start by thanking the organizing committee for the opportunity to speak at this very important and influential conference. In my view, for the sixth year in a row, the conference is unparalleled in presenting a cross-section of materials-related innovations affecting the global automotive industry. I commend the chair, the organizing committee, and of course, SPE for your steadfast commitment to a quality event.

One of the messages I want to bring to you this morning is that what you are doing to advance the cause of lightweight composites in the automotive market is extremely important to society and that it needs to be understood and talked about more, not just here in the Detroit area, but in Washington, New York, Brussels, Beijing, Boston, San Francisco, Tokyo, Sydney, New Delhi, Seoul, to name a few major centers of influence, decision making, and power.

I am speaking here today because of my involvement with the American Plastics Council's Automotive Group, a Group that has existed in one form or another since 1991. Over the years, membership in this Group has included essentially all of the major companies that produce plastic resins for the automotive market. I would like to make clear today that I am not speaking on behalf of the APC or its Automotive Group. The talk reflects too many of my own personal opinions and biases. I also want to mention that when I use the word plastics, I am referring to the entire family of polymer-based materials-from neat plastics to plastic composites of all types. From petroleum and natural gas derived plastics to bio-derived plastics.

My overarching message this morning is rather pointed. The global automotive industry must change, the global plastics industry will change, and Federal support for R&D and education in the United States needs to change if we want, as a nation, to be competitive, and if we, as scientists and engineers, working in the polymer composites field, really want to make a leap frog and lasting difference in the automotive world. If these change elements can be brought together and harmonized over the next two decades, we will all be living in a better and more sustainable world. The automotive industry is just that significant to society and the plastics industry has that kind of potential to be the difference between incremental and revolutionary change. Bringing these change elements successfully together would help solidify progress along the road to sustainable transportation across global markets. Thanks in part to the imagination and commitment of the APC Automotive Group, I think the process is truly underway and we are beginning to see critical mass develop in support of our industry and its products.

What does harmonized mean? It means the development of a common vision and a common set of strategic objectives by state and federal government, the automotive and chemical industries, and academia. Seeking alignment of purpose and strategic goals for technology development and deployment are key. Eventually we must gain the support of Intergovernmental Organizations and Non-Governmental Organizations, the IGOs and NGOs, if you will. The timing is right for our industry to make its case and make it loudly. This is a critical time in the history of the automotive industry, the global chemical industry, the plastics industry, the energy industry, and indeed industrialization itself. It is not the time to be silent. It is time to question the status quo and propose thoughtful, creative, alternative scenarios that hold promise for a truly sustainable future.

Energy issues, environmental protection concerns, social aspirations, and the global search for sustainable economic growth are becoming aligned in a way that supports a search for new solutions. I see lightweight polymer-based composite materials applied to transportation needs as the disruptive technology and critical lynchpin for innovation that can really be instrumental in bringing all of the pieces of the puzzle together. Obviously in the past, and certainly in the present, not everyone was or is on board with this view.

Case in point. In 1995, Francois Castaing, then Vice President, Vehicle Engineering for Chrysler Corporation, stated "Steel is for cars, aluminum is for airplanes, and plastics are for toys." I can assure you that members of the APC Automotive Group bristled when they heard that statement.

A lot has happened over the past ten years. Boeing, through the development of the 787 Dreamliner with 50 percent by weight composites compared to only 14 percent for the 777 is well on its way to proving Castaing wrong on

aluminum. By the conclusion of this conference, I hope that all of you agree he was wrong about steel and significantly underestimated and misrepresented the value of plastics to society by essentially downplaying their contribution to human mobility.

How do we support change? Here is one set of recommendations. Seek every pre-competitive opportunity to speak with one voice. Make sure the voice is heard in Washington as well as Detroit. Agree on a common Vision for the future. Demonstrate that you know where you want to go and that you have a roadmap to get you there. Articulate a set of meaningful values and common objectives. Inform decision leaders when public-private partnerships are essential. Implement a pre-competitive, multi-stakeholder strategy that helps inform and complement individual company actions.

Coming together is easier said than done, but back in 2000, at the urging of Joe Carpenter, Program Manager for DOE's Automotive Lightweighting Materials Program, APC members did came together to develop a Technology Roadmap for the Automotive Market that has become the cornerstone of our program today. The development and publication of Plastics in Automotive Markets Vision and Technology Roadmap was indeed a watershed event for our industry. It opened doors and facilitated creative thinking both in Detroit and in Washington. Let me emphasize an important point. Washington must be part of our business strategy. This is a fundamental principle of the APC Automotive Roadmap. Most, if not all of the technical challenges defined in the Roadmap-Advanced Material Systems, Predictive Engineering, Automotive Design, Advanced Manufacturing Technologies, Education Infrastructure, Recycling are beyond the ability of any one company to effectively address on their own. They are even beyond the ability of any one industry. In fact, the only way challenges of this magnitude can be tackled is through public-private partnerships that alone can bring the necessary resources to bear. So at this point let me talk a bit about some of the areas where significant progress is being made.

The first is our initiative in the field of Predictive Engineering. Predictive Engineering of plastic composites has been identified as a top technical priority in the APC Automotive Roadmap. Recently, predictive engineering was identified as a key enabler for advancing future automotive safety. By Predictive Engineering of composites we mean the computer modeling tools that allow us to reliably predict processing requirements and part performance. Great progress has been made over the past decade, but much, much more is needed. We are extremely pleased that advances in this challenging field will involve collaboration between the National Science Foundation and universities on the one hand, and the Department of Energy and its National Labs on the other. Cooperation between NSF and DOE is essential. Many of

Continued on Page 20

Plastics are for Cars after all . . .

Continued from Page 19

us believe that new ground is being broken in this regard. In June of 2004, APC, DOE, and NSF jointly sponsored a workshop for university researchers working in the area of computer modeling of composite properties and processing. As a result of that groundbreaking initiative, six university projects are now being funded collaboratively by NSF and DOE.

The second area is Automotive Safety. Anyone from the automotive industry, who looks at the subject of automotive safety realistically, recognizes that it has been a political hot potato for more than three decades. Nevertheless, the Automotive Group recognized very early that complementing our research and development relationship with the Department of Energy had to be similar outreach to the Department of Transportation; in particular the National Highway Traffic Safety Administration (NHTSA). The Vision of the Roadmap, that plastics are the material of choice in the design of all major automotive components and systems by 2020, had to be seen as embracing Safety as a key long-term goal. The question of how to do this responsibly, for the first time ever within the plastics industry, in the midst of CAFE politics and America's growing infatuation at the time with larger and heavier cars and trucks, became an important issue.

We decided that the appropriate road was in fact through the Congressional appropriations process making a strategic case for long-term R&D investments in new enabling technology centered on lightweight plastics and plastic composite materials. Congress has, in fact, encouraged NHTSA to take a serious look at the enabling role of plastics and composites to enhance future automotive safety, and NHTSA worked with our industry to organize a technology integration workshop to focus strategically on advanced automotive safety research and development and the enabling role of plastic, composite, and plastic-metal hybrid material systems. NHTSA and the American Plastics Council have agreed that the Workshop is only a first step. An Automotive Safety Roadmapping effort is needed to merge the exciting initial ideas from the Workshop into a focused plan to define the potential for plastics, plastic composites, and plastic-metal hybrid materials to enhance next-generation and beyond systems (passive and active) for superior automotive safety. Work is now underway in conjunction with the DOT's Volpe Center to establish such a program.

I would like next to touch briefly on five interrelated issues that challenge all of us. First is the need for a renewed commitment to longer-term R&D that does not forsake short-term needs and mid-term goals. If we do not find a way to accomplish this, the U.S. is destined to lose its competitive edge in science and technology. The Roadmap is largely about achieving this balance-within industry and within government. Second is to integrate basic and applied research where it can enhance creativity and support innovation. The third is to ensure that technology is benchmarked from a global, not just a local, perspective. Global competition is for real and the need to understand and appropriately respond to globalization is essential. Who will be the innovators of tomorrow is not a trivial question. Fourth is to embrace multidimensional technical challenges such as automotive safety and energy efficiency that are beyond the capabilities of any one company or industry to take on alone. The versatility of plastic composites makes this all the more exciting. Finally, the fifth technology integration need is to improve science and engineering education in the United States through significant revision in how we teach polymer science and engineering and through better integration of polymer science and engineering with traditional engineering curricula.

I want to turn now to say a few words about attitudes and beliefs. A Big Picture look at plastics as the enabler for future sustainable transportation can't be accomplished

without looking at the challenges we face from every possible direction.

If Detroit is truly to be innovative and competitive in future global automotive markets, there must be a change in attitudes and beliefs. I think there has been progress. I suppose some may view Ford Motor Company going outside the automotive industry for its new CEO as a manifestation of that change. In this look at attitudes and beliefs, I am going to use Toyota as an example of what works, and to mirror what does not work. Not everyone is likely to agree with my thesis.

About four years ago, in an interview in Automotive World, Fujio Cho, Toyota Chairman, was asked what problems Toyota faced. His response has become one of my favorite quotes from the annals of business literature. He responded-"Since we know where we are going, we don't have any problems, only challenges". If you don't know where you are going, any road will get you there. DOE encouraged the automotive plastics industry to define where it is going. That challenge served as the origin of APC Automotive Roadmapping effort. So in my view, the automotive plastics industry has joined Toyota in knowing where it is going. That means we have replaced problems with challenges and see the glass as half full.

Two years ago, at the Automotive Management Briefing Seminars in Traverse City, MI, a group of panelists from the purchasing side of the business was asked about the pressure being put on suppliers to source from Asia. All of the American companies admitted that this had to be an important part of their cost-containment strategy. The Toyota panelist said that they understood the trend, but from Toyota's point of view maintaining a strong manufacturing base in the United States was essential to their success.

Toyota has two principal core values. The first is continuous improvement and the second is respect for people. In my view, these two principles should be the backbone of all companies and organizations. Just having them as principles is of course not sufficient; they need to become core competencies. I am completely convinced that the automotive plastics industry will not even come close to achieving its full potential if it does not follow Toyota and fully embrace the principle of continuous improvement and respect for people.

Respect for people is not just an internal matter. It needs to be understood in a societal and global context, as well. I think it is this core value that leads companies like Toyota and Honda to address energy and environmental questions the way they do. They always preface their remarks in these fields with comments on protecting the quality of life for future generations. Many American companies seem to choke on sentiments such as these.

My thesis is that billions of people around the world, the vast majority present or future customers are beginning to think like Toyota and Honda. And the list includes policy influentials and leaders from both the public and private sectors in both the developed and developing world. We need to shake off outdated thinking and become comfortable with change we cannot control, challenges beyond the purview of individual companies to address that require collective action, including public-private partnerships, and longer-term opportunities that entail significant risk in the short term. And Washington must become part of the business strategy.

The future of PCIVs can be very bright. A roadmap to the future does exist. The Roadmap is a Big Idea that has successfully tackled the Big Problem of not knowing where you want to go. Castaing was wrong. Plastics are for cars after all. That case is being made by APC in Congress, with Federal Agencies, with academia, and all along the automotive industry value chain. In my view, and in the view of the APC Automotive Group, the early results have been extremely positive and encouraging. Plastics are well on their way to becoming the material of choice in the commercial aviation industry and they can do the same in automotive.

With publication of the APC Automotive Roadmap in 2002, doors of opportunity, too long closed to our industry, have been opened. Opportunity is staring us in the face. It is up to us to take advantage of it. No one else will do it for us. The APC/ACC Automotive Group believes that plastic and composite intensive vehicles are the long-term answer to sustainable personal and public transportation. Broad priorities have been defined and some groundbreaking steps toward achieving these goals have been realized over the past three years.

It is time though to write the second edition and this is where we need your help. Let us know where you feel you can contribute to the next edition of the Roadmap. Input from everyone becomes important if the ten to fifteen percent plastics vehicles of today are to become the 50 percent or higher plastics and composite intensive vehicles of tomorrow. Send us an email (mike_fisher@americanchemistry.com) and let us know how you can help.

ANTEC 2007
Annual Technical Conference - Cincinnati, Ohio May 6-10

The SPE Annual Technical Conference (ANTEC) will take place in Cincinnati, Ohio at the Duke Energy Center from May 6 - 10, 2007. It is the leading technical forum for providing cutting-edge technological issues and information pertinent to the needs of the plastics industry. SPE announced plans to collocate the Plastics News' Plastics Encounter trade show with ANTEC.

If you want to learn about the latest developments in automotive plastics, plan to attend the Automotive Division Session of ANTEC. This session is well attended each year by leaders in the automotive industry. The chairman of the Automotive Division ANTEC sessions is Tom Pickett. Assisting Tom review papers for the ANTEC Automotive Session are Norm Kakarala, Jay Raisoni, Suresh Shah, Kalyan Sehanobish and Michael Shoemaker.

For more information about ANTEC, visit SPE website: **www.4spe.org**.

AutoEPCON

Second-Annual Conference Announced

The Detroit Section and Automotive Division have again teamed up to host a special one-day technical conference and exhibition on advances in engineering plastics for the automotive industry. Called Design & Developments with Automotive Engineering Plastics (or AutoEPCON for short), the event will be held April 24, 2007 at the Best Western Sterling Inn in Sterling Heights, MI.

Last year's AutoEPCON was successful with great attendance from OEMs and tier suppliers. The 2007 AutoEPCON will feature technical presentations on the newest advances in materials technology & design, process enhancements, and application developments for thermoplastic and thermoset engineering materials for the automotive industry. Tabletop exhibits will be on display throughout the event. A lunch and an Afterglow, plus several coffee breaks will also be provided throughout the conference to allow further networking opportunities for all who attend.

For more information on this program, contact Pat Levine, SPE Automotive Division, p.levine@yahoo.com or call +1.248.244.8993.

Design and Development with

Automotive Engineering Plastics

"Auto EPCON"

One Day Technical Conference & Exhibition

Tuesday April 24, 2007

Call for Technical Presentations

Deadline for Abstracts:
Friday February 16, 2007

Location of Conference:
Best Western Sterling Inn
Sterling Heights, MI

Contact Information:

Technical Presentations:
Dr. Norm Kakarala, Delphi Corp.
248-655-8483
norm.kakarala@delphi.com

Sponsorships:
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248-563-6343
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Co-Chairs
Tom Pickett, General Motors
586-492-2454
tomjpickett@yahoo.com
Nippani Rao, DaimlerChrysler
248-576-7483
nr2@daimlerchrysler.com

Program Scope: The **Automotive Division** and **Detroit Section** of the **Society of Plastics Engineers** (SPE®) International invite you to attend a new 1-day technical conference & exhibition showcasing innovative developments in the *Design*, *Materials*, *Processing*, & *Use* of Engineering Plastics for the Global Automotive Industry.

Who Should Attend: This conference is specifically designed to inform, update and educate the OEM & supplier communities about advances in both thermoset & thermoplastic engineering polymers. Learn how these widely used materials can help improve performance & productivity, while reducing cost and mass.

Presentations: Hear Technical Presentations on the Newest Advances in Engineering Materials related to:

- Design Engineering
- Materials Development
- Processing & Enabling Technologies
- New Applications & More

Exhibits: See Exhibits from Engineering Plastics Suppliers, Compounders, Additives & Reinforcement Suppliers, Design & Engineering Firms, & Machinery Suppliers. Experts will show you how to apply the latest technologies to your next program.

Conference Includes:

> Full Day of Innovative Presentations, Lunch & Coffee Breaks. Exhibits of Advanced Technologies & Practices, Keynote Speaker, Panel Discussion

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2006 Innovation Awards Program

Gala Sponsor

VIP Reception 2006

The VIP cocktail reception (reserved for program sponsors and senior-level automotive executives) was one of the absolute best networking opportunities in town, according to several supplier executives in attendance. This year's VIP reception featured lighted Harley-Davidson bikes, a unique Ice Sculpture bar, and a string quartet. This created a very conducive environment for Jim McCaslin, Chris Theodore, Barbara Sanders and top level OEM executives to interact with program sponsors and VIPs.

Education Report

Jackie Rehkopf

As in past years, student volunteers from local schools were a tremendous help to us at the Innovations Awards Gala. They devoted a good part of their day to help set up displays, stuff goody-bags, usher attendees through the displays and to the VIP reception. They also assisted with teardown and cleaning up after the event.

In return for all their hard work, they had the opportunity to review the outstanding components that were recognized for their innovation, they networked with engineers and business leaders in the plastics industry, and enjoyed the magnificent meal and awards ceremony. It was an absolute pleasure to have such professional and energetic students participating in the event.

Ferris State University students: Allissa Witucki, Kyle Jackson, Mike Easlick, Evan Triick, Kylie Speirs and Andrew Hicks, coordinated by Professor Robert Speirs, Chair of the Plastics and Rubber Department.

Focus Hope students: Donald Cook, Lisa Hutto, Dion Golden, Darryl Menifee, Joel Griffith, Dennis Simmons, Jeffrey Harris, Dwayne Sharper, Louis Rice III and Simeon Thomas, coordinated by Ms. Joanna Woods.

University of Michigan - Dearborn students: Garun Agarwal, Karthik Balakrishnan and Lavish Agarwal, coordinated by Professor Pankaj (PK) Mallick.

Dr. Norm Kakarala received the Past-Chairman's Award for his leadership of the SPE Automotive Division 2005-2006.

The Student Volunteers at the 2007 SPE Innovation Awards Gala

Innovation Awards Program - Bronze Sponsors

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SPE Award Winners on Stage....

James A. McCaslin, Harley-Davidson Motor Company

Chris P. Theodore, American Specialty Cars

Barbara A. Sanders, Delphi Thermal Systems

Executive Leadership Award

McCaslin is Honored for Business Leadership, Work Integrating Polymers on Global Vehicle Platforms

James. A. McCaslin, president and chief-operating officer at Harley-Davidson Motor Company, is the 2006 recipient of the SPE Automotive Division's Executive Leadership Award. The award honors transportation-industry executives who have demonstrated leadership in integrating polymeric materials on global vehicle platforms and who have been recognized - both within their industry as well as in their community - as leaders. McCaslin has been with Harley-Davidson since 1992 and has been president and chief operating officer (COO) since 2001. During his tenure as president and COO,

Harley-Davidson's motorcycle revenues have risen 59% from annual sales of $2.63 billion USD to $4.18 billion USD; Parts & Accessories revenues have increased 60% from annual sales of $507.3 million USD to $815.7 million USD; and General Merchandise revenues have grown 51%, from annual sales of $163.9 million USD to $247.9 million USD.

Before joining Harley-Davidson, McCaslin worked for J.I. Case, the 160-year-old agricultural and construction equipment OEM. He began his career in the auto industry in the Detroit area, working first for General Motors, then Volkswagen, and last for Chrysler Corporation.

Only two previous executives have received SPE's Executive Leadership award. These include: James Padilla, chief-operating officer and president, Global Automotive Operations, Ford Motor Company; and Tom Edson, director, Applied Material and Manufacturing Technology, Advanced Vehicle Engineering, at Daimler Chrysler.

Chris P. Theodore, James A. McCaslin and Brian "Chaps" Grosser (SPE)

Lifetime Achievement Award

Sanders is Honored for Technical Achievements in Automotive Plastics at SPE Automotive Innovation Awards Gala

Barbara A. Sanders, director of Advanced Development & Engineering Processes at Delphi Thermal Systems, is the 2006 recipient of the SPE Automotive Division's prestigious Lifetime Achievement Award. The honor recognizes the technical achievements of automotive industry executives whose work - in research, design, or engineering - has led to significant integration of polymeric materials on passenger vehicles.

Ms. Sanders was selected as this year's recipient because of her extensive background with polymeric materials - particularly composites - throughout her career at Delphi and General Motors Corporation (GM). She also organized and led an industrial research consortium on composite materials at the University of Delaware and sat on the advisory board for the program for more than a decade. She represented GM on the boards of the Michigan Materials & Processing Institute, which helps develop plastics-based businesses in Michigan, as well as the Automotive Composites Consortium, a pre-competitive partnership between GM, Ford Motor Company, and DaimlerChrysler for composites research.

There have only been 5 previous recipients of the SPE Lifetime Achievement Award. Ms. Sanders joins J.T. Battenberg, III (past-chairman and CEO of Delphi), Bernard Robertson (executive vice-president of DaimlerChrysler), Robert Schaad (chairman of Husky Molding Inc.), Tom Moore (retired vice-president of DaimlerChrysler), and Shigeki Suzuki (general manager - Materials Division, Toyota Motor Corporation).

Barbara A. Sanders with SPE Automotive Division Chairman, Mark Lapain.

Executive Engineering Leadership Award

"Father of the Ford GT" is Honored for Outstanding Engineering Leadership at Automotive Innovation Awards Gala

Chris P. Theodore, vice-chairman of American Specialty Cars (ASC), is the 2006 recipient of the SPE Automotive Division's new Global Executive Engineering Leadership Award. This award was created to recognize executives who have exhibited outstanding engineering leadership throughout their careers and are considered to be an "Automotive All-Star" within the global transportation industry.

Candidates are evaluated based on their overall leadership in engineering roles, as well as their success in these roles, such as the number of new vehicles the candidates championed, had significant involvement in, or launched. Often called the "Father of the Ford GT" and "an engineer's engineer," Theodore has been associated with a number of high-profile vehicle launches - including the Ford GT, new Ford Mustang®, new Ford 150 pickup, Chrysler® PT Cruiser, original Dodge Viper, second-generation Chrysler minivans, original Jeep® Grand Cherokee, and the Fiat® Spyder Turbo in the early '80s - and has held notable executive engineering positions at several major vehicle manufacturers during his 30+ year career in the auto industry.

Theodore has been vice-chairman of ASC since October 2005, where he is responsible for the company's product-development activities. Previously, he has held positions at Ford, DaimlerChrysler, General Motors, and two specialty-car companies - Cars & Concepts and Legend Industries.

Chris P. Theodore and SPE Automotive Division Past-Chair, Suzanne Cole.

Membership Matters

Marcie Kurcz

Are SPE Dues Tax Deductible?

The legal counsel of a large New York-based engineering society delivered an opinion, derived from interpretation of two rulings from the Internal Revenue Service, that a portion of Society dues are tax-deductible as a charitable contribution if certain conditions are met.

In the case of SPE, the amount of $72.00 can be deducted as a charitable contribution if you itemize contributions. This sum is the difference between total dues ($110.00) and the amount applied as a member subscription to *Plastics Engineering* ($38.00), as stated on the dues invoice.

The full sum of $110.00 can be used to compile the aggregate amount of miscellaneous deductions, of which that in excess of 2% of the taxpayer's adjusted gross income can be deducted. Remember, however, you can't deduct any portion of your dues twice. It's an "either/or" situation.

To join SPE, visit **www.4SPE.org**

Below we welcome some of our newest members of the SPE Automotive Division:

Vijay Gupta	Tata AutoComp Systems Ltd
Imagin Abdulahad	DuPont
Peter Bebber	Tekpro Group Inc
John Luca	Hope Global
Larry Langell	Ferris State University
Robert Cunningham	Lanxess Polymers LLC
Todd Hipsky	Performance
Richard Robert	Bayer Inc
Carl Sayler	
Matthew Calvage	IG Manufacturing Services
Tricia McKnight	Society of Plastics Engineers
Allen Swift	Hi-Tech Mold & Eng SE
Curtis Ferguson	
Jose Rios	Polytechnical University
Dean Larsen	Ritus Corp
Yuechun Ma	Solvay Engineered Polymers
Robert Nadin	Sunoco Chemicals
Matthew O'Dwyer	Matcom Industrial Installations
Jan Stamhuis	Dutch Polymer Institute (DPI)
Mike Gragtmans	Mitsubishi Chemical
Gabriel Hernandez	Dynasol Elastomers SA DeCV
Tony Masuda	Mitsubishi Chemical
Xiao-Ping Shen	ACH
Mark Sherman	Mitsubishi Chemcial

Xiu Wang	Haartz Corporation
Zhu Zhang	
Paul Graham	
Alex Gutierrez	Miliken & Company
Ben Herzog	Invista
Marc Levesque	Global Vehicle Systems
Ted McLaughlin	Sealed Air
James Oakley	A Schulman Inc
Ryan Sliger	
David Wilfong	Milliken & Company
Matt Yadlowsky	Paragon Die & Engineering
Satish Akole	Mahindra & Mahindra
Bart Berghuis	LRM Industries
Ted Brezina	Lola Cars International Ltd
Andrea Burls-Derrer	Harman Becker Automotive
Albert Chan	
David Cramer	FiberForge
Benjamin Dollar	KPMG LLP
Jeff Dowell	Toyota
Dirk Dragt	Alcoa Automotive
John Eubanks	Vetrotex
Ricole Johnson	Weyerhaeuser Company
Sandeep Manandhar	
Michael Petley	PPG Industries

Ichiro Taketa	Toray Industries Inc
Mike West	
Anthony Vulpitta	United Plastics Corp
Raymond Hagemann	
Gary Michelsen	Continental Plastics
Paul Gauthier	Degussa Corp
Nagahide Takeda	Vuteq California Corp
Derrick Mc Carthy	Mc Carthy Group
Jatin Somaiya	Synoprene Polymers Ltd
Marcos Tonndorf	Rieter Automotive NA
Vishwanath Godavarty	Kurz - Kasch Inc
Mark Helder	The Haartz Corporation
Ryan Williams	
Thomas Houtteman	General Electric
Steven Kay	Faurecia Interior Systems
Susan Yester	Daimler Chrysler
Chris Cosentino	Sherwood Dash Inc
Tom Findlan	Mts Systems Corp
Masayuki Morikawa	Advanced Composites Inc
Dustin Lynch	
Joel Myers	Hyundai America
Shafiq Topiwala	North American Lighting
Boney Mathew	Mathson Industries Inc
Lok Leung	Invotronics Mfg

Meeting Minutes - Automotive Division Board Meeting - December 4, 2006

by Tom Pickett, Division Secretary

Attendance:
Mark Lapain, Tom Pickett, Brian Grosser, Kevin Pageau, Fred Deans, Josh Madden, Nippani Rao, Marcie Kurcz, Norm Kakarala, Shashank Kamik, Ed Garnham, John Fialka, Monica Prokophyshen, and Peggy Malnati.

Meeting Called to Order. Chairman Mark Lapain called meeting to order at 5:45 PM. Meeting minutes recorded by Secretary Tom Pickett.

Opening Comments. Mark Lapain reviewed the chair's objectives with the board. He listed the following: Concise & organized Board meetings, continued improvement of key events such as the Composites Conference, Innovation Awards Program, and AutoEPCON. Do we need more people on the Auto BOD roster? Need to add an active person. Division board roster list is updated.

Pinnacle Award – Mark Lapain informed the BOD that we meet all the requirements for the gold. The Pinnacle Award application was submitted by November 15th. The winners are selected January 15, 2007 and presented at ANTEC Awards Banquet. Mark gave special thanks to the following individuals for helping him with the Pinnacle Award application: Nippani Rao, John Fialka, Peggy Malnati, Marcie Kurcz, Kevin Pageau, Brian Grosser, Monica Prokopyshen, and Tom Pickett.

Innovations Awards Recap. Brian Grosser recapped the Innovations Awards. Good attendance with approximately 650 attendees. Program ended on time. Sponsorship came in at $210K. Expenses should be about the same as last year. More info to come on that. The press conference had a half dozen media that went well. The student help went well. Mike Voris and the BaderTV crew did a fine job. The string quartet was great. Brian mentioned a few areas to improve on for next year. Overall an outstanding job. Mark Lapain acknowledged the Innovations Awards Committee for the great job!

2007 Composite Conference Update. The conference will be in September. A lot of interest in composites.

2007 AutoEPCON. Tom Pickett informed the Board that the AutoEPCON Planning Committee is actively working on the conference. The AutoEPCON conference on Design & Development of Engineering Plastics for automotive will take place April 24, 2007 at the Best Western Sterling Inn, Sterling Heights, MI. The conference co-chairs are Tom Pickett and Nippani Rao. The chairs for the sub-committees are: Sponsorship – Ron Price, Nippani Rao; Communications – Tom Pickett, Technical Program – Norm Kakarala; Industry Panel – Terry Cressy, Ron Price; Exhibitors – Nippani Rao; House – Craig Bellissimo. The Sponsorship sub-committee is actively seeking sponsors for the event. The Technical sub committee is seeking presenters. The abstracts are due February 16, 2007. A Call for Presenter flyer was handed out at the TPO Conference and advertised at the Innovations Awards Gala.

Treasurers Report. John Fialka update the board on SPE Automotive Division bank account balance. Taxes were completed November 2006. John would like to hire people to help with taxes next year. 2007 budget complete. Final ACCE report with net proceeds of $27K. The proceeds were distributed with 30% to SPE, 35% to the Composites Division, and 35% to Automotive Division. The SPE Automotive bank account is in good standing at $150K with $123K in checking and $27K in savings.

Education (including PlastiVan Schools). Monica Prokopyshen announced one more PlastiVan scheduled. Monica reported feedback on the Explorathon 2006 Designing with Plastics session.

Membership. Marcie Kurcz reported total SPE Automotive Division membership is 1,719 (1,114 primary membership, 605 secondary membership). There were 23 new members in November. Pinnacle award membership drive had 66 names submitted to SPE for e-mail contact.

Inter-Society. Inquiries have been made to ASM, SME and SAMPE.

Councilor's Report. Nippani Rao said the councilor's meeting is scheduled for January in Charlestown, SC.

Newsletter. Kevin Pageau indicated the January newsletter will highlight the Innovations Award Winners. There is $17,400 confirmed sponsorship. Another $7,800 due in January. Additional opportunities being pursued.

Communications / Publicity. Peggy Malnati reviewed the Innovations Awards and the Composites Conference. Innovations Awards had a press briefing that was well received. Good representatives of the press. Program guide was 52 pages. The brand identity logo worked well. For post events, Peggy sent out a press release. Peggy then reviewed the Automotive Composites Conference committee chairs and members for next year. Work on the 2007 Composites Conference has already started, and the Call for Papers will be sent out in December.

New Business. SPE International Fred Schwab Award was awarded to Don Paulson. The SPE Automotive website will go out for quote. ANTEC Automotive session papers will be reviewed by December.

Next Meeting. February 8, 2007 5:30PM at the American Plastics Council in Troy.

Meeting Adjourned - Mark Lapain thanked everyone for coming to the Board Meeting. Meeting adjourned at 7:10pm.

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