



# TRENDS & TOPICS

DETROIT SECTION - SPE INSPIRING PLASTICS PROFESSIONALS - "THE CHARTER CHAPTER"

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2018-19 SPE Detroit Section Board of Directors at the June Planning Meeting

## IN THIS ISSUE

SPE Detroit Board of Directors – *PAGE 2*

Message from the President

*EVE VITALE – PAGE 3*

Leaders in Plastics Collaborate to Promote  
TPO Technology

*DR. TARAHOMI & DR. KAKARALA – PAGE 4*

What People are Saying – *PAGE 7*

Tribute to Ron Price

*BILL WINDSCHEIF – PAGE 10*

A Successful Collaboration

*LYLE BEADLE – PAGE 12*

SPE Detroit 2018 Outstanding Member

*WAYNE HERTLEIN – PAGE 14*

SPE Detroit October Board Meeting – *PAGE 18*

PlastiVan® Middle School Curriculum – *PAGE 19*

SPE Detroit Planned Events – *PAGE 20*

Plastics Manufacturing Machinery in America  
*BEKUM AMERICA CORP. – PAGE 21*

October Bekum America Corporation

*PLANT TOUR – PAGE 22*

October Next Gen Bombowling Event  
at the HUB – *PAGE 24*

January Advanced 3D Printing Applications with  
Stratasys – *PAGE 25*

SPE Headquarters Executive Board Summary  
2018Q2 – *PAGE 27*

Detroit Section Executive Board and Committee  
Members – *PAGE 28*

# PRESIDENT'S MESSAGE

Eve Vitale, Series One LLC



## Hello, SPE Detroit Section Members:

We're celebrating 20 Years of Innovation at the 2018 SPE Detroit Automotive Engineered Polyolefins Conference by paying tribute to the many men and women

who have worked to make the TPO Conference such a huge success over the years. This tribute wouldn't be complete without a special shout out to our good, good friend Ron Price, a TPO founder, who recently and suddenly passed away leaving a void in our hearts and team.

We are fortunate that being in Detroit has uniquely positioned us to respond to the automotive OEM's need for new technologies and applications in polyolefins. The SPE was formed in Detroit (we are proud of our #1

status) and was driven by the auto industry's acknowledgement that it had to innovate to meet or exceed the public's expectations in transportation. And we—as the plastics industry—have been partners in that effort for over 75 years.

A fun fact: The TPO Conference with other Detroit SPE initiatives has contributed over \$1,200,000 in funds which have been used for educational initiatives. Thank you to everyone who has attended, sponsored, supported, worked on, and enjoyed the conference. Your time, talent, and treasure has made a difference!

As president, I'm leading the Section these days, but for Detroit that basically means sitting back and watching our wonderfully talented members/volunteers run this well-oiled machine. We are a group of passionate, overworked, over-committed plastics professionals who invite you to join us in celebrating our 20th TPO conference.

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# LEADERS IN PLASTICS COLLABORATE TO PROMOTE TPO TECHNOLOGY

Dr. Sassan Tarahomi & Dr. Norm Kakarala



## IT ALL BEGAN WITH INNOVATION

Over 20 years ago several members of the Detroit Section of the Society of Plastics Engineers recognized the importance of TPO resins and committed to the development of a technical conference in support of these resins in the automotive industry.

The “secret sauce” for the success of the SPE Global Automotive TPO Conference was introduced by the late Larry Kushkin of A. Schulman Inc.

The year was 1998 and the key members were Ron Price from Exxon Corporation, Dr. Norm Kakarala from Delphi Corporation, Nippani Rao from Chrysler Corporation, Larry Kushkin from A. Schulman, Dr. Rose Ryntz from the Ford Motor Company, Tom Powers from Delta Polymers,

Bob Eller from Robert Eller Associates, Tom Pickett from GM, and Bill Windschief from Basell Corporation.

The “secret sauce” for the great success of the SPE Global Automotive TPO Conference was introduced by the late Larry Kushkin of A. Schulman Inc., one of the five charter sponsors. In the first planning meeting Kushkin offered

a brilliant proposal that each of the charter sponsors pre-pay \$5,000 to receive 10 attendee conference registrations which could be used for customers. With that proposal the SPE would have no upfront costs, the conference would have 50 pre-registrations, and have enough volunteers from the sponsor companies to support the conference. No technical conference at that time had this format which ensured strong industry-sponsor support. This successful pre-registration concept has subsequently been adopted by other conferences.

## GETTING STARTED

Kushkin’s idea garnered \$50K in support, the backing of both the SPE Detroit Section and SPE Headquarters, and the first TPO conference was planned for October 1999.

The planning meetings started immediately and were held the second Thursday of each month. Tom Powers scouted an event location choosing the Best Western Sterling Inn in Sterling Heights, about a half hour north of Detroit.

The conference committee decided that the conference would always be held the first complete week in October, starting on Monday morning and concluding on Wednesday at noon. This allowed Sunday afternoon for exhibitor set-up and

The 1999 TPO Conference started on October 4th with 3 keynote speakers and 30 technical papers on 4 session tracks. The first TPO Conference was well received. With over 200 attendees, 15 exhibitors, and break-even financials, it was a success!

Wednesday afternoon for attendees to return home in time to be back to work on Thursday morning. This appreciated tradition continues.

Next, the TPO Committee selected Dr. Kakarala as the Conference Technical Chair and Nippani Rao and Ron Price as the Conference Operation Co-Chairs. Within a few months Dr. Kakarala had planned the sessions and selected his Session Chairs. Simultaneously, Ron Price, Nippani Rao and others in the committee reached out to automotive industry leaders and selected the keynote speakers and a group of experts for the panel discussion. The 1999 TPO Conference started on October 4th with 3 keynote speakers and 30 technical papers on 4 session tracks. The TPO conference was born. With over 200 attendees, 15 exhibitors, and break-even financials, it was a success! It is this ***Spirit of Innovation*** that still exists in every TPO Committee member and drives continued excellence.



These plastic professionals have been active in every TPO Conference since 1999:

Bob Eller

Dr. Norm Kakarala

Ron Price {May 25, 1939|June 13, 2018}

Tom Pickett

Tom Powers

Nippani Rao

Dr. Rose Ryntz

Bill Windscheif

### VOLUNTEERISM IS THE KEY TO SUCCESS

After completion of the first conference, the planning committee started work immediately for a conference in 2000. An organizational chart provided a solid leadership structure for the committee.

More volunteers were needed so the original 10 committee members recruited from OEM, Tier 1, and resin suppliers to take on responsibilities for various tasks

From the early years, the TPO Conference Committee recognized the need for two chairs to ensure ongoing success – a chair and a co-chair, who would take the lead after having a

few years of experience under his belt. These top leadership positions are appointed and require a 2–3–year commitment to service.

***Commitment*** to TPO Conference success has been a key characteristic of every TPO Conference Committee member.

### THE COMMITMENT OF OUR SPONSORS SUPPORTS PLASTICS EDUCATION

The generosity of our platinum sponsors, who underwrite all the lunches and receptions, and the support of many other sponsors covering the breakfasts and breaks, allows the SPE Detroit Section to support many educational initiatives including annual scholarships, grants, educational assistance, and sponsorship of the PlastiVan – program. This includes an annual \$5,000 TPO scholarship for an undergraduate or graduate student with TPO as their area of their research. Since 1998 over \$1,200,000 has been allocated for these educational initiatives to support plastics industry workforce development.

### SESSION CHAIRS RESPOND TO INDUSTRY NEEDS

Over 20 Technical Session Co-Chairs, about half from OEMs or Tiers, ensure a broad coverage of the many aspects of TPO technology developments applicable to the transportation industry. More importantly many of the talks in the program are presented by OEMs and Tiers. This heavy upfront engagement of the end-use customers is highly significant for faster implementation of the new technical developments. This is an exceptional landscape at a technical conference, and one that is believed to be unique to the TPO Conference.

Dr. Kakarala has been Chairing or Co-Chairing the Technical Program for 20 years. In 1999, most of the TPO applications were for bumper fascia with greater concerns on paint adhesion. The TPO Conference began with four generic sessions on Materials, Processing, Painting, and Applications with fewer than 30 single-track presentations covered in two and half days. Soon TPO's place in automotive sectors expanded quickly beyond exterior fascia and claddings. In response new sessions such as

TPOs in Interior, Under the Hood, Skins and Adhesives, and NVH were introduced to keep the Conference on the cutting edge of technology. Under the guidance of Dr. Kakarala, new sessions are added every year to expand the scope, to ensure the most relevant technologies are offered, and to provide a path for the introduction of current innovations. Due to the slicing and dicing of topics, last year the two-and-half-day conference had 22 Session Co-Chairs, 10 sessions, and 81 presentations in three concurrent sessions.

The Session Co-Chairs do the heavy lifting for delivering greater value to the attendees and deserve all the accolades for the TPO Conference success. Highly effective Session Co-Chairs have the following attributes:

- Great passion for our industry and serving the profession
- Actively involved in technology developments

- Vast network of contacts in the profession
- Reputation for mentoring and supporting new colleagues
- Consensus builder for team success

Dr. Rose Ryntz, Bob Eller, Mike Balow, and Dr. Suresh Shah demonstrate all these attributes with excellence and are great role models for other co-chairs. The Conference Committee appreciates their contributions over the years, which have led to great success for the conference.

Now in its 20th year, the SPE Detroit Section TPO Conference has grown to be the world's leading automotive polyolefins forum which draws over 1,000 key decision makers and the world's foremost authorities on transportation polyolefin applications. Our entire committee is excited and honored to be part of the 20th anniversary and working hard to continue another 20-year journey of excellence.

### 2017 TPO Conference Technical Sessions and Session Co-chairs were:

#### Additives & Modifiers

Neil Fuenmayor, LyondellBasell Industries  
Mark Jablonka, Dow Elastomers

#### Reinforcements & Compounds

Mike Balow, Asahi Kasei North America  
Ermanno Ruccolo, Borealis Corp.

#### Adhesives & Coatings

Hoa Pham, Freudenberg Performance Materials  
Dr. Pravin Sitaram, Haartz Corporation

#### Surface Enhancements

Dr. Rose Ryntz, IAC Group  
Jeff B. Crist, Ford Motor Co.  
Jim Keller, United Paint & Chemicals Corporation

#### VOC & SOC Issues

Dr. Laura Shereda, Asahi Kasei North America  
David Helmer, General Motors Corp.

#### Interior Applications

Bob Eller, Robert Eller Associates LLC  
Dr. Sam He, Inteva Products, LLC  
Kevin Lyons, Inteva Products, LLC

#### Lightweighting of Parts

John Haubert, FCA US LLC  
Normand Miron, Washington Penn Plastic Co., Inc.

#### Process Developments

Kurt Anthony, Washington Penn Plastic Co., Inc.  
Dr. Suresh Shah, Retired Delphi Corp.

#### Modeling & Simulations

Dr. Li Lu, Ford Motor Co.  
Scott Grant, Autodesk, Inc.

#### Sustainability & Bio-Based Materials

Susan Kozora, IAC Group  
Dr. Alper Kiziltas, Ford Motor Co.

# WHAT PEOPLE ARE SAYING

*“Asahi Kasei Plastics North America, Inc. (APNA) has been part of the TPO Conference for roughly ten years. When deciding to join, what highlighted this conference over others was the inclusiveness of engineered polyolefins and the reach it provided us to a more diverse customer and supplier base.*

*During our time at the conference, APNA has been able to build a platform to kick-off new developments and innovations through networking. The content provided through the presentations and the attendees help us develop insights on the future trends in our industry.”*

**John Moyer, Chairman CEO**

*“Since joining the TPO Conference in 1990’s, I have been able to make connections with attendees from all over the world. This conference helps me stay ahead of the market trends and provides me with new, advanced ways to enhance my knowledge in engineered polyolefins. The content provided during the presentations and networking cultivates innovation for future developments. Whether you are visiting for the first time or you are a regular attendee, you are guaranteed to learn something new.”*

**Michael Balow, Senior Advisor, Asahi Kasei Plastics North America**

Monday - October 5, 2015



Monday Reception Hosted by Advanced Composites

**“Washington Penn Plastic (WPP)** has been a long-term partner of the TPO Conference in the Detroit area. We have found it an excellent venue to meet customers, suppliers, and keep abreast of new technologies available to apply to existing issues. As the conference has grown, so has our support for assisting in keeping it as the quintessential conference of its type.

As a platinum sponsor, we have had access to the conference chairman and technical directors which has led to many introductions of key industry people and companies that lead to the generation of new or improved technology. Generally, we at WPP have been very happy both in supporting the conference and with the activity and new business results that results from the conference. The conference committee also does a very good job of assembling all the papers and distributing them to the attendees for future reference. The topics have been expanded over the years to multiple sessions to allow more presentations and diversity of subject matter while allowing many local suppliers and OEM’s to attend without the difficulty of added travel. These are all important to the success of the conference and it being an important and lead automotive conference.”

**Kurt Anthony, Technology Manager-  
Automotive Applications**



“Over 20 years ago several of us met to discuss the idea of an Automotive TPO Conference to help educate SPE Members and others in the automotive industry. It fell in line with our SPE Detroit Section goal of educating our members. With the help of many dedicated volunteers over the years and the financial support from loyal sponsors, the TPO conference has grown to become the premier global conference on TPO in the automotive industry.

As a GM Materials Engineer, I have found the TPO Conference to be a valuable conference to attend and learn the latest in TPO technology for automotive. Not only does the TPO Conference allow one to see the latest in TPO technology but attending the conference allows for the exchange of ideas between the OEM and different tier suppliers that lead to new ideas.”

**Tom Pickett, GM Materials  
Engineering**



*"I first attended SPE's Auto TPO conference in the late 1990's and have participated many years since. I always look forward to the show as it fosters a close community. This event brings together an influential group of decision makers throughout the automotive industry which you can't find anywhere else. From technical to supply chain, the level of networking available under one roof is significant. In addition to reconnecting with industry partners, I enjoy listening to the keynote speakers. Hosted by industry leaders, these sessions provide insight on market trends and evolving technologies which are shaping the path of innovation. Having attended the show for many years, I learn something new every time. I'm excited to attend the upcoming show in October, and I look forward to the great conversations around this market."*

**Todd Nichols, Commercial Manager for Performance Materials, A. Schulman**



*"The TPO Automotive Conference is a great platform to highlight new innovations and successes to a broad representation of the automotive market while offering an opportunity to catch up with prior colleagues and network with others in the industry. 20 years ago, the TPO Automotive Conference was started to fulfill a real need in the industry by having a dedicated platform solely focused on polyolefins and the automotive industry. The conference remains unique in this focus and the major objectives of education, knowledge sharing, fostering relationships and promoting leading innovations, in this space.*

*If you want to reach out to the automotive industry to meet key decision makers and promote the value you offer the market, there is no other conference that allows you to do so with a focus on thermoplastic olefins."*

**Scott Ashwood, Director – PP Compounds Americas, LyondellBasell**



# TRIBUTE TO RON PRICE - REFLECTIONS FROM AN OLD FRIEND



Bill Windscheif



Ron Price was one of my best friends, and a charter member of the Plastics Professionals Old Guard. Those counted as Old Guard shared status of Comrade in Arms in the quest to make plastics a greater part of the

automotive application material list. Indeed, Ron was a fierce competitor, a smart tactician, and a highly persuasive change agent. I always admired his passion and positive attitude when encountering challenges. He was one of the Borg Warner elite who found himself adapting to change on more than one occasion. When GE Plastics acquired Borg Warner/Marbon (there were many who thought this was a merger) he quickly learned to stay visible in the game. He went from ABS materials to Olefins when he joined the Exxon Polypropylene organization. He flourished with Exxon for the next 10 years.

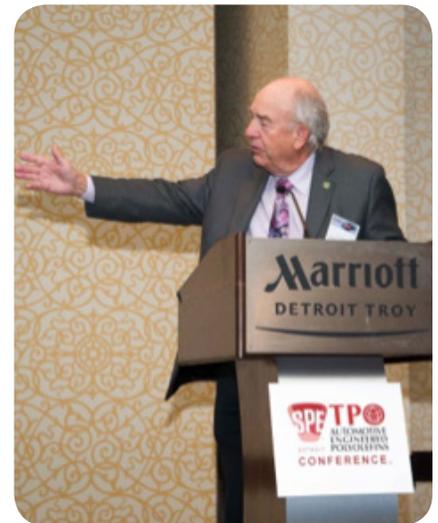
While at Exxon, he set about to mount an assault on the automotive OEM materials engineering community, pushing the highlights and advantages of polypropylenes and TPOs to applications formerly inhabited by engineered thermoplastics. He was a formidable competitor and a magnanimous personality all rolled into one. He was constantly expanding the knowledge of olefins and their advantages to clearly transition from a once-commodity material classification to a highly ubiquitous offset to current choices. He was always thinking out of the box. He lit up any meeting he attended or convened. He was a real spark plug when it came to furthering our cause.

During the late 1990s he, myself, and six other plastics professionals colluded to form a concept where the plastics manufacturing companies, automotive OEM materials engineering and design people, and the processing/Tier 1's could come together for a common purpose. Our main objective was and still is to advance the use and application of olefins, TPO's, copolymer and homopolymer polypropylenes in automotive applications. And therefore, the first TPO Conference was created and launched in 1998.

Now the challenge was to promote the conference, solicit sponsorship from automotive suppliers and resin manufacturers, and motivate key automotive OEM engineering and design personnel to attend. Ron innovated a tactic that would

promote OEM people (those that the plastics professionals were doing business with) to attend with minimal expense and maximum educational benefit. It worked so well that in the past 20 years, our TPO Conference attendance has increased from over 100 to just under 1000 qualified industry professionals.

During these years Ron Price continued to be a force to be reckoned with. He was a constant



promoter of the conference, coordinating the audio-visual efforts, and a constant presence with his camera. He was undeniably one of the main pillars of the TPO Conference since its inception, and one of the most recognizable people within the Automotive Plastics Community. He will be missed by everyone who touched the SPE Organization and the TPO Conference organization, as well as his plastics buddies. I have lost a great friend, an esteemed colleague, and a partner in our career-long quest. So Long Ron, we shall miss you dearly, and I especially.



Ron Price at ACCE



# A SUCCESSFUL COLLABORATION

Lyle Beadle



## HOW IT BEGAN

The year was 1998, and there were new plastic material developments on the horizon that focused on TPO/Olefins. Eight members of the Detroit SPE from automotive OEMs, material suppliers, and

Tier 1 processors came together to launch what was to become the benchmark of forums to advance automotive applications and TPO/Olefin materials. But to fully understand the importance and long-term impact of this event, it is just as important to understand the automotive materials and plastics climate at the time, and what precipitated this revolutionary success story.

Norm Kakarala, Nippani Rao, Ron Price (recently deceased), Rose Ryntz, Bob Eller, Bill Windscheif, Tom Powers, and Tom Pickett were the driving force (among others) to create the outline and agenda for this new industry-wide conference. In the mid to late 1990s, TPOs and Olefins, due to their cost and performance advantages, were just gaining interest within the automotive OEM community

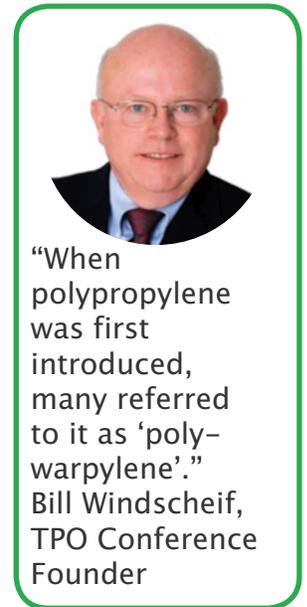
## WHY IT BEGAN

Once upon a time in the automotive manufacturing world, most all material performance standards centered around metals and their physical performance characteristics. Stamped and painted metal body parts could withstand 350°F curing ovens. Metal hubcaps could be stamped and chromed. Metal instrumental panel structures boasted class A metal and painted surfaces. Chrome bumpers could withstand high impact loading without destruction in temperature ranges from -20°F to 250°F. Under hood components, grill reinforcements, fan blade housings and structural applications – all were measured and compared to the performance characteristics of metal.

The ease of metal usage had to be balanced against the issues of oxidation, rust, weight, and design limitations of the stamping process. Inquisitive engineers and material scientists wondered if there could be another class of materials which could provide novel advantages and still meet requirements such as resistance to heat distortion, chemical resistance, high impact loadings with ductility, and the freedom that injection molding, extrusion, and blow molding could provide.

This challenge provided a window of entry to families of polymers that were classified as *engineered thermoplastic resins*. Polycarbonate, SMA, PPOs, ABS, ABS/PC, polyesters i.e. PBTs, PETs, PEI, PMMA, PA, and introducing fillers such as glass fibers, organic compounds, mica, etc. RIM (thermoset reaction injection molding material) was introduced as one of the first bumper fascial replacements that could withstand temperatures and could be painted along with other metal body parts. SMC and glass filled epoxies were filling the gaps in metal transition as well. These were costly alternatives, and highly suspect within the OEM automotive materials groups. But eventually these materials made headway into applications that formerly utilized metal and those materials which conformed to metal performance standards.

**Bill Windscheif**, one of the TPO Conference founders, recalls, “When I worked for GM over a six-year period, automotive materials focused on metallurgy. There were no other material departments for plastics, or even other non-ferrous materials. In fact,” Bill continued, “cutting tools for plastic parts (and especially olefinic materials), introduced rheology



idiosyncrasies of CLTE in flow and cross flow. There had to be CAE available to anticipate the anisotropic effects of shrinkage, especially in glass-filled materials. When polypropylene was first introduced, many referred to it as 'poly-warpylene'. As there were no material performance guidelines for these materials, automotive materials engineering and resin manufacturers relied upon ASTM test methods, and ultimately created ISO material testing

protocols to establish baseline comparative performance data."



"As Olefin/TPO materials matured, newly found applications emerged." Dr. Rose Ryntz TPO Conference Founder

Many of the same people working for resin manufacturers, and some farsighted OEM material engineers began to see the possibility of yet another transition from engineered polymer materials to enhanced commodity classified polymers, specifically, olefins. These leaders within the polymer community envisioned usage of these newly modified olefin materials into applications once

filled by metal, engineered thermoplastics, and thermosets. The versatility of olefins created a new vista for polymer usage in automotive applications.

**Rose Ryntz, Ph.D, VP, Advanced Development and Materials Engineering at International Automotive Components** recalls, "As Olefin/TPO materials matured, newly found applications emerged. What started as replacement for RIM, TPO/Olefin painted fascia consumed all development effort to achieve paint adhesion and 'gouge resistance', known as weak boundary layer de-cohesion; and ultimately turned into an automotive interior application revolution. MIC (molded in color) applications on IPs and door panels required continual development, specifically with scratch and mar resistance. There was also the challenge to resolve the 'stickiness' after weathering (the interactions between stabilizer packages and slip agents)."

**Nippani Rao**, formerly with Chrysler (FCA), notes that, "While major chemical companies invested in new material (olefinic) technologies, automotive standards were being revised and designed to accommodate these new materials. Cost advantages of the newly minted formulations motivated automotive companies to realize the benefits of TPO materials from

the standpoint of design and styling, in addition to cost and performance. Tier 1 suppliers facilitated these materials into applications by creating process technology that could produce large parts, such as bumper fascia, at thinner wall sections, thereby reducing weight and maintaining performance." Nippani continued, "TPO materials are currently used for front and rear fascia on the majority of some 80 million vehicles produced each year around the world today."

During 1998 this group of forward-thinking OEM material engineers and material manufacturers launched the TPO Conference which would give voice to this new industry of materials. Even today as we look at the topics highlighted for the conference presentations, we can witness the evolution and change from 20 years ago to today. Major categories of presentations today include:

- Materials Development
- Surface Enhancements and Coatings
- Process Developments
- Interior Applications
- Lightweighting Technologies
- Sustainability for Recycle and Emission Requirements
- VOC & SOC Issues
- Bio-based Materials
- Additives & Modifiers

The 2018 Automotive Engineered Polyolefins Conference continues to be an industry-wide collaboration that has elevated the use of TPOs and Olefins. What began with 100 attendees, is now almost 1000 attendees. Material suppliers and Tier 1 manufacturers are quick to recognize the advantage of being present, offering new technologies, and networking with OEM engineering professionals. This snapshot of TPOs and Olefins gives a quick look at an evolving industry and the conference which supports it. **Congratulations to all those hard-working volunteers who continue to make this conference a 'world class' event!**



"While major chemical companies invested in new material (olefinic) technologies, automotive standards were being revised and designed to accommodate these new materials." Nippani Rao TPO Conference Founder



# OUTSTANDING MEMBER 2018

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Society of Plastics Engineers  
Detroit Section

**2018**  
**OUTSTANDING**  
**MEMBER**



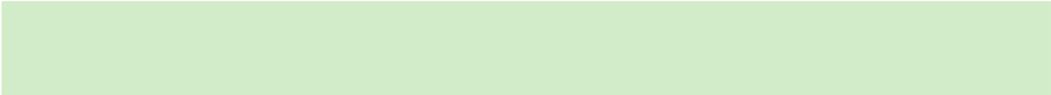
**Wayne M. Hertlein**



**Wayne M. Hertlein** has been an active and dedicated SPE & SME member since 1981. He currently serves on the boards of directors of the SPE Mold Technologies Division (formerly the Mold Making and Mold Design Division) as its treasurer and historian and the SPE Detroit Section of which he is Immediate Past President. In fact, in the Section's history, he is only the second person to hold the position of president for two years. In addition, he served as Chair of the Mold Technologies Division in 2003 and from 2010 to 2012. Wayne was named an Honored Service Member of SPE in 2006. Other leadership positions include chairmanship of the SME's Plastics Tooling and Mold Design Tech Group, SME Senior Member since 1987, Advisor to the Plastics Industrial Advisory Committee at Ferris State University since 2005 and serving as an editorial advisory board member for MoldMaking Technology Magazine from 2005 to 2008 and from 2012 to 2016.

A native Chicagoan, you could say Wayne was born destined to work in the manufacturing industry. In his own words, he describes early signs of the career he would later pursue: "From an early age I enjoyed making things and taking things apart to see what made them work. My uncle made me a tool box with carpenter tools when I was about six years old. He would give me wood when we went to visit him, and I would sit there and saw, cut and hammer all day long. My father was a machinist and we always had tools around the house. When I was nine he gave me my first micrometer and taught me how to read it."

Wayne began his career in 1976 at Armin Tool (Elgin, Illinois) as an apprentice moldmaker and trained at the Tool and Die Institute in Park Ridge, Illinois. From then on, he demonstrated a passion for the industry and a desire to learn and lead. Upon receiving his journeyman moldmaker and mold designer certificates in 1979, he was also named Apprentice Moldmaker of the Year by the Institute and the perfect attendance award. He then worked full-time at Armin and part-time as an instructor assisting Henry Tschappat, then head of the Plastics Department at Elgin Community College in Elgin, Illinois, until 1982. There, he helped set up and operate plastics laboratory equipment, lectured in Moldmaking and toolmaking, and tutored handicapped and international students in plastics. Later, he also led the establishment of the Henry Tschappat Memorial Leadership Award Endowment at Ferris State University in 2004, followed by the Frank Marra Memorial Endowment in 2005.





In 1987, Wayne earned an Associates in Applied Sciences, Plastics, degree with honors from the Kalamazoo Valley Community College in Kalamazoo, Michigan. Even today, Wayne continues his pursuit of plastics industry knowledge. He is a senior earning a Bachelor of Science in Engineering Technology, with a plastics emphasis, at Lawrence Technological University in Southfield, Michigan, and currently works as Tooling Manager at RPC/Superfos, Letica Corporation in Rochester Michigan. The previous roles Wayne has held at various leading manufacturing companies are many, but in every case he has enjoyed the opportunity to apply his knowledge of plastics materials, steel and mold construction materials, processing and engineering and also product design and development. A rich career indeed.

Wayne resides in Mount Clemens, Michigan, with his wife Elizabeth. In keeping with his quest for knowledge, a hobby he enjoys is collecting, updating and maintaining his library, which comprises more than 8,000 textbooks and other documents relevant to the plastics engineering industry. He also spends his free time enjoying new experiences like supporting youth programs to get young people interested in manufacturing, engineering and moldmaking. He attends the Makers Faire every year and the Future City Competition hosted by the Engineering Society of Detroit (for the past eight years as a judge). He says he is still a kid at heart, visiting aerospace museums, the Henry Ford Museum, art museums and so on, whenever he has the chance.

Speaking of kids, one of Wayne's favorite experiences as an SPE Detroit Section member has been his participation in the annual Christmas Toy Distribution project which, for each of its 18 years, has provided between 60,000 to 80,000 plastic toys to needy children in partnership with American Plastic Toys Inc. As the Section's 75th president, he says he was privileged to see the millionth toy donated.

Wayne closed his final President's Message to Detroit Section members by writing, "I am honored to have had the opportunity to serve as President of the Detroit Section for the past two years and would like to extend a heartfelt thank you to the Board of Directors, volunteers and members for their generous assistance and commitment to this organization during my time as president. I look forward to even more fabulous things happening within this organization in the future."





#### Professional Experience

- (2017 – present) Tooling Manager, RPC/Superfos, Letica Corporation, Rochester, MI
- (2017) Maintenance Manager, Yanfeng, Novi, MI
- (2012 – 2017) Senior Program Manager, Wilbert Plastics Services, Troy, MI
- (2011 – 2012) Aerospace and Defense Applications Engineer, MMI Engineered Solutions, Saline, MI
- (2010 – 2011) Program and Manufacturing Engineering Supervisor, International Automotive Components (IAC), Huron, OH
- (2009 – 2010) Engineer/Plant Manager (Contract), International Automotive Components (IAC), Hermosillo, Mexico
- (2007 – 2009) Applications Engineer, Progressive Components, Wauconda, IL
- (2006 – 2007) Plant Manager, Complete Prototype Services, Clinton Township, MI
- (2005 – 2006) Tooling Engineer, Plastech Engineered Products, Dearborn, MI
- (1999 – 2005) Lead Tooling Engineer, Collins and Aikman, Troy, MI
- (1998 – 1999) Engineering Manager – Continuous Improvement, AMP Industries, Harrison Township, MI
- (1997 – 1998) Program Manager, Norplas Industries, Northwood, OH
- (1994 – 1997) Senior Mold Engineer, Cardell Corporation, Auburn Hills, MI



# SPE DETROIT SECTION BOARD MEETING

OCTOBER 22, 2018

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## TOPIC:

OCTOBER BOARD MEETING

## LOCATION:

American Chemistry Council  
5750 New King Dr., Suite 120, Troy

## DATE:

October 22, 2018

## TIME:

5:00–8:00 PM

## AGENDA:

5:00 PM Dinner  
5:30–8:00 PM Meeting

## RSVP:

Ms. Karen Rhodes–Parker  
[karen@spedetroit.com](mailto:karen@spedetroit.com)  
(248) 244–8920



# PlastiVan<sup>®</sup>

*Changing The Perception Of Plastics One Classroom At A Time*

## WOULD YOU LIKE THE PLASTIVAN<sup>®</sup> TO VISIT THE SCHOOL IN YOUR AREA?

Schedules for the 2018–2019 school year are being made now!

Tom Miller  
[thomas.miller@basf.com](mailto:thomas.miller@basf.com)

Julie Proctor  
PlastiVan<sup>®</sup> Program Coordinator  
[jproctor@4spe.org](mailto:jproctor@4spe.org)



**THROUGH LIVELY DEMONSTRATIONS & HANDS-ON ACTIVITIES, PLASTIVAN<sup>®</sup> IS DESIGNED TO EXCITE STUDENTS ABOUT REAL-WORLD APPLICATIONS OF PLASTICS.**

*PlastiVan<sup>®</sup> explains the history, chemistry, processing, and sustainability of plastics in addition to describing the opportunities in science and engineering within the plastics industry.*

*PlastiVan<sup>®</sup> educators are skilled in tailoring the presentation to meet the needs and grade-level expectations of each classroom.*

## TOPICS

- History of polymers/plastics
- How your life is impacted by plastics
- What engineers and scientists do
- Major industries that use plastics
- Basic raw materials for plastics
- Biopolymers and sustainable materials
- Amorphous and crystalline polymer structure
- Manipulating amorphous polymer chains
- Injection molding and thermoplastics
- Bottle preforms and blow molding
- Thermoset plastics and crosslinking
- Open- and closed-foamed polymers
- Material selection in product design
- Hydrophilic, hydrophobic, & oleophilic polymers
- Crosslinked polymers and non-Newtonian fluids
- Reduce, Reuse, Recycle

## PROGRAM GOALS



DEMONSTRATE THE BENEFITS OF PLASTICS IN EVERYDAY LIFE



EXCITE STUDENTS ABOUT CAREERS IN THE PLASTICS INDUSTRY



ENCOURAGE STUDENTS TO RECYCLE AT HOME AND SCHOOL



CHANGE THE PERCEPTION OF PLASTICS ONE CLASSROOM AT A TIME

# 2018-2019 PLANNED EVENTS

SPE Detroit



DATE	EVENT	LOCATION
September 10, 2018	Keynote Speaker: Steven D. London Presentation: Global Overview of Plastics Machinery Manufacturers	Michigan State University Management Education Center 811 W. Square Lake Rd. Troy, MI 48098
October 7-10 , 2018	2018 TPO Conference 20th Anniversary!	Detroit Marriott –Troy
October 15, 2018	Bekum America Corporation Facility Tour & Presentation	Bekum America Corp. 1140 West Grand River Williamston, MI 48895
October 18, 2018	Next Gen Bombowling HUB Stadium	2550 Innovation Dr. Auburn Hills, MI 48326
October 22, 2018	SPE Detroit Section Board Meeting	ACC 5750 New King Dr. Suite 120, Troy
January 14, 2019	Stratasys Advanced 3D Printing Applications	Michigan State University Management Education Center 811 W. Square Lake Rd. Troy, MI 48098
February 4, 2019	SPE Detroit Section Board Meeting	ACC 5750 New King Dr. Suite 120, Troy

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# SPE DETROIT TECHNICAL PROGRAM

September 10, 2018



## TOPIC:

PLASTIC MANUFACTURING MACHINERY IN AMERICA

## LOCATION:

Michigan State University Management Education Center  
811 W. Square Lake Rd., Troy, MI 48098

## DATE:

September 10, 2018

## TIME:

5:00–8:30 PM

## AGENDA:

- 5:00 PM Registration and Networking
- 6:00 PM Dinner
- 6:30 PM Call to order by Sassan Tarahomi Opening Remarks by Eve Vitale
- 6:45 PM Awards presented by Nippani Rao and Eve Vitale
- 7:15 PM Presentation by Steven D. London, President and COO Bekum America Corp.
- 8:00 PM Q & A
- 8:30 PM Program Closing

## COST:

- \$35/one seat
- \$250/table of 8
- FREE for SPE Detroit Section Board, Students & Faculty

## RSVP:

- Ms. Karen Rhodes–Parker
- [karen@spedetroit.com](mailto:karen@spedetroit.com)
- (248) 244–8993 x3



Steven D. London, President and Chief Operating Officer of Bekum America Corporation will be presenting the Plastics Manufacturing Machinery in America.

BEKUM America is North America's leading provider of blow molding technology and was established in 1979 with the mission to introduce top quality blow molding machinery, designed to produce plastic bottles, containers and other large plastic parts in the North American marketplace, via blending German design and technology with American skill and ingenuity. A sample of products produced on BEKUM's machinery includes customer favorites such as cosmetic and shampoo bottles, food jars, detergent bottles, beverage and juice containers, and countless other large plastic objects. BEKUM's customers produce these products for an impressive array of consumer-oriented companies. Bekum's customer base includes large multi-national customers, as well as owner/operator plastic bottle manufacturers.



# SPE DETROIT TECHNICAL PROGRAM

October 15, 2018

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## TOPIC:

BEKUM AMERICA CORPORATION PLANT TOUR

## LOCATION:

Bekum America Corporation,  
1140 West Grand River, Williamston, MI 48895

## DATE:

October 15, 2018

## TIME:

5:00–8:30 PM

## AGENDA:

5:00 PM Registration and Networking  
6:00 PM Pizza & Pop  
6:30 PM Presentation by Bekum America Corporation  
7:00 PM Plant Tour  
8:00 PM Program Closing

## COST:

\$10 for non members  
Free for SPE members and the  
Detroit Section Board, Students & Faculty

## RSVP:

Ms. Karen Rhodes–Parker  
[karen@spedetroit.com](mailto:karen@spedetroit.com)  
(248) 244–8993 x3

Bekum America Corporation manufactures single and double station blow molding machines. It offers H–line and BM–line machines for the production of bottles and containers; BA–line machines for the production of L–ring drums, IBC containers, jerry cans/canisters, automotive plastic fuel tanks, air ducts, spoilers, and technical parts; long stroke/multi–cavity machines for blow molding machines; and tandem blow or multi–cavity programs, which allows for the production of bottles. The company also provides co–extrusions for applications in packaged foods, cosmetics, chemicals, agro–chemicals, and pharmaceuticals; extrusion heads for the processing of polyolefins and for heat sensitive materials.



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- Photoshop .tif Files:  
300 dpi resolution, RGB color model.
- JPG Files:  
300 dpi resolution, RGB color model.

If any other formats are to be submitted, please contact Jim at Maple Press 248-733-9669, fax 248-307-1777, or [orders@maplepressprinting.com](mailto:orders@maplepressprinting.com).

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**Note:** Artwork for your first newsletter, is the artwork that will be used for the entire year.

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Please email or call for information on other Sponsorship opportunities or less than full year rates after October 1<sup>st</sup>.



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A Next Gen Event Sponsored By SPE Detroit

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*Connecting with industry professionals should be the perfect balance between work and play!*

Join SPE Next Gen for a night of bombowling, networking and special guest speakers. This event is \$20 per person.

PLEASE RSVP TO CHELSEA BARRIGA BY FRIDAY, OCTOBER 12<sup>TH</sup>.

[cbarriga@chasplastics.com](mailto:cbarriga@chasplastics.com)

## GUEST SPEAKER



**ALPER KIZILTAS, PHD**  
**Ford**

Research Scientist -  
Sustainability  
& Emerging Materials  
6:45PM

# SPE DETROIT TECHNICAL PROGRAM

January 14, 2019



## TOPIC:

ADVANCED 3D PRINTING APPLICATIONS WITH STRATASYS

## LOCATION:

Michigan State University Management Education Center  
811 W. Square Lake Rd., Troy, MI 48098

## DATE:

January 14, 2019

## TIME:

5:00–8:00 PM

## AGENDA:

5:00 PM Registration and Networking  
6:00 PM Dinner  
6:30 PM Presentation by Fadi Abro, Stratasys Sales Executive  
7:30 PM Q & A  
8:00 PM Program Closing

## COST:

\$35/one set  
\$250/table of 8  
FREE for SPE Detroit Section Board, Students & Faculty

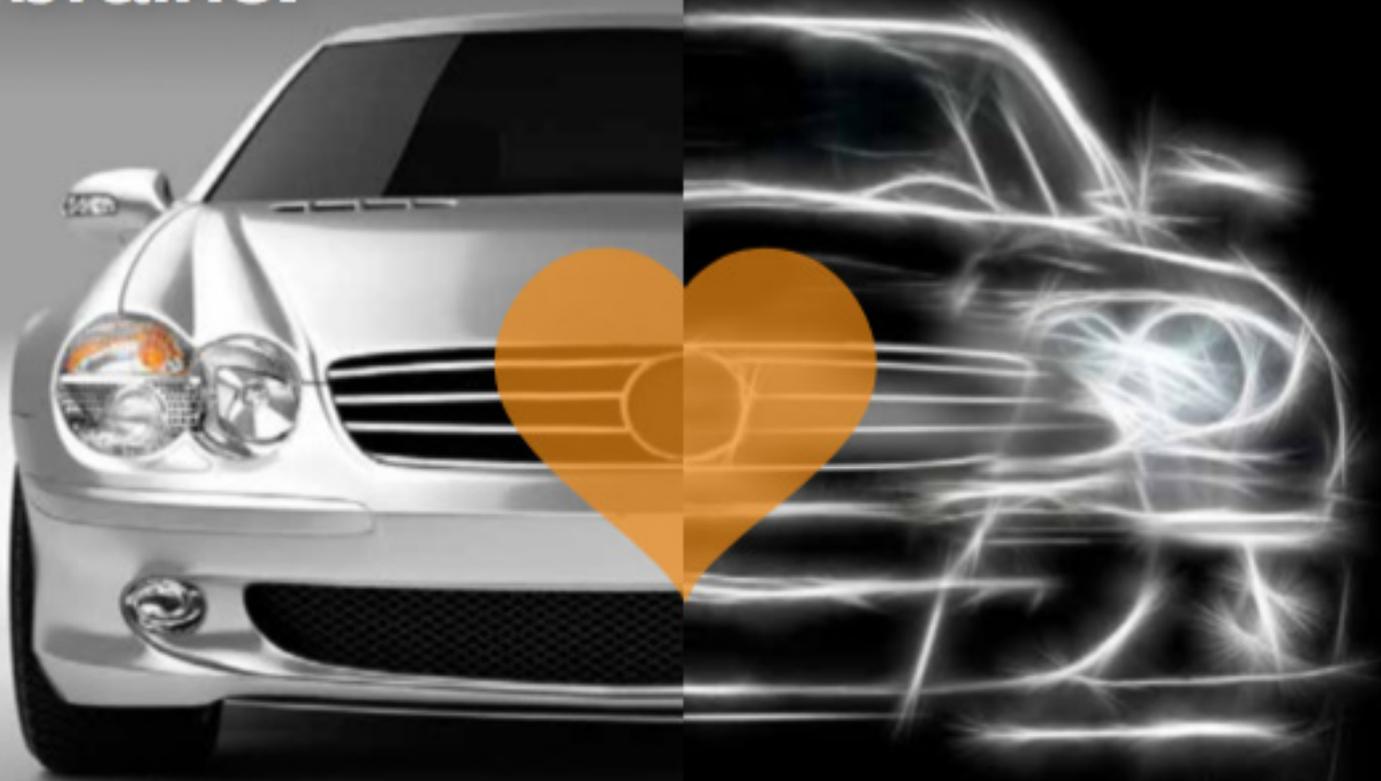
## RSVP:

Ms. Karen Rhodes–Parker  
[karen@spedetroit.com](mailto:karen@spedetroit.com)  
(248) 244–8993 x3



There's more than one way to build an idea. Today's advanced 3D printing and additive manufacturing processes boast fantastic design feats, and it has gone beyond simple prototypes. This presentation will discuss tooling, fixtures, jigs and other factory floor solutions using 3D printing. Fadi Abro of Stratasys will dive into the leading AM technologies and how to choose the ideal process for your project. By attending this TDM, you'll also learn how, 3D printing applications can help you gain competitive advantage in today's global market, plus advanced materials open new possibilities, beyond rapid prototyping and additive manufacturing is changing the future of automotive and other manufacturing industries.

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The Chemical Company

**July 9, 2018**

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*Each quarter, the Executive Board of SPE will publish a summary of noteworthy activities and discussions that impact the Society. The goal is to keep Council and membership current on goals and activities related to the 3-year operating plan (3YOP) and the Leadership Deployment Plan (LDP).*

There was significant SPE activity over the past 3 months with a new website launch, ANTEC and Council meetings. The new website has been very-well received by the majority of members, while work continues to build and enhance our online technical library, one of the major jewels of SPE. Our flagship conference was a great success, with attendance and profitability above budget. ANTEC 2019 in Detroit is coming soon, however, and planning is already underway with new TPCs (Mark Spalding and Donna Davis) hard at work. As many of you know, there will be some new programs at ANTEC and a formal announcement will be coming soon. Many of our RETECs and TOPCONs occur in the fall. A complete list of SPE conferences can be found on the website.

The Executive Board welcomed three new members in the past quarter: Dr. Raymond Pearson (VP Education & Technology); Dr. Scott Eastman (VP Sections); and Lynzie Nebel (VP Young Professionals). EB continues to focus on strategic issues to ensure the long-term viability of the Society. Clear communication, willingness to listen, and recognition of change are areas where all EB members are active. The board is committed to a vision of a global society and is now reviewing tactical matters such as setting variable dues, promoting regional top-cons, and ensuring that SPE staff has adequate resources.

Our operational result is currently significantly better than budget, driven mostly by good cost control and lower-than-expected expenses. It is still too early to tell where we will end up at the end of the year. The relatively flat stock market since the beginning of the year, however, means that our investments have not appreciated in value significantly.

As always, we encourage you to reach out to members of the Executive Board with questions, comments or ideas with how we can continue to improve our Society.



Brian Grady  
President



Conor P. Carlin  
VP Marketing & Communications



**DETROIT SECTION**  
**SOCIETY OF PLASTICS ENGINEERS, INC.**  
**1800 Crooks Road**  
**Troy, MI 48084**

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