



# SPEC SHEET

SOCIETY OF PLASTICS ENGINEERS

CLEVELAND SECTION

OCTOBER 2018

VOL. 62

NO. 2

## FLAME RETARDING PLASTICS – WHY AND HOW

Plastics use in our cars, homes and businesses is increasing all the time. Plastics serve many great purposes and are more suitable for many applications than other materials. The topic of flame retardance has become emotionally charged. Yes, it is good to prevent fires from starting or spreading, but are we incurring more health risk in the process?

We will discuss the importance of flame retardants in saving lives and property. We'll explain the different classes of flame retardants for plastics, such as, intumescent, quenching and gas phase flame retardants and show how these different types of flame retardants function. This will enable the designer to better choose which the choice of flame retardant type that can reduce fire risk with minimal associated risk to health.

### LOCATION:

**DoubleTree Hotel\*  
by Hilton**

3150 W Market St  
Akron (Fairlawn) OH

*\*note new location*

### AGENDA:

**5:30pm:** Member arrivals & registration

**6:00pm:** Dinner

**7:00pm:** Presentation

**8:00pm:** Adjourn

### RESERVATIONS:

Reservations must be made by noon on Friday, October 12th and can be made to Gary Taylor at 330-419-4380 or akronspe1@gmail.com. Please be sure to include the company affiliation of each attendee including dietary restrictions.

### PRICING:

\$25 members/guest

\$20 retirees

\$5 students

## DIRECTIONS TO DOUBLETREE HOTEL

**DoubleTree Hotel by Hilton**  
[3150 West Market St.](#)  
[Fairlawn, OH](#)



### SPEAKER'S BIO –

## ROBERT WEILER



Robert earned a BS degree in Chemical Engineering at Case Western Reserve University. He began his plastics career with Product Development positions at Diamond Shamrock and Interstab Chemicals/Akzo Nobel. He was plant manager for PVC siding production at Alside/Associated Material and General Manager at Accurate Color.

Robert has also served as Business Manager for PVC Heat Stabilizers at Akros Chemicals. Most recently Robert is North America Sales Manager and Product Line Manager for non-halogen Flame Retardants at Amfine Chemical Corp. Robert has authored 5 publications on PVC compounding and stabilization and has co-authored several others. He is a past president of the Akron section and is currently Chairman of the Vinyl Division of SPE and Vice Chairman of PINFA, NA. He has developed extensive application and processing experience with non-halogen based flame retardant compounds.



# PRESIDENT'S MESSAGE

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SPE CLEVELAND - SEPTEMBER

First, let me thank John Raybuck and Sajar Plastics in Middlefield, OH for hosting our September SPE Section Meeting with a plant tour and an outstanding presentation on “Gas Assist Injection Molding”. If you weren’t there, you missed an excellent opportunity to learn about this innovative technology from Sajar, one of the industry leaders.

The Cleveland Section of the Society of Plastics Engineers provides a forum for plastics professionals to access technical information and training skills, along with networking opportunities.

We provide scholarships for students entering plastic related fields of study. We provide financial support for the local SPE Plastivan programs which introduces elementary and high school students to the benefits and the “wonders” of plastics. Yes, I did mean to use the word “wonders”. You would agree if you saw the look on the faces of these young people.



(When you ask what “Value” we bring to you and the plastics industry – Here it is!)

Your Board would like to provide more scholarships and more funding for the Plastivan program. We are sponsoring a happy hour and providing a speaker at an up-coming event at Case Western for graduate engineering students. The Board is also considering working with a local Community College to begin an Associates Degree Program in Plastics Manufacturing.

These are all exciting and worthwhile programs but we need your help! We need your attendance at our local meetings and we need you to join the Board of Directors and help with Committee work. If you feel that you need more “Value” out of your SPE Membership – then help us provide it!

**DENNIS MEADE**

***President***

*SPE Cleveland*

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Blacksburg, VA



# CALL FOR NEW BOARD MEMBERS

As a member of the Cleveland Section, please consider volunteering for a board position. Several positions are available depending on your interest. The work of the board is critical and relies on technical, commercial, industrial or academic leaders like yourself to achieve our mission. In addition, the experiences gained are invaluable. Please contact the Communication Chair at [cwp654@gmail.com](mailto:cwp654@gmail.com) for details.

# CALL FOR PAPERS

## May Conference John Carroll University

SPE Cleveland has been offered a presentation session at the Microscopy Society of Northeast Ohio's annual May conference. The conference will be conducted on John Carroll University's picturesque campus in University Heights OH on May 22, 2019.

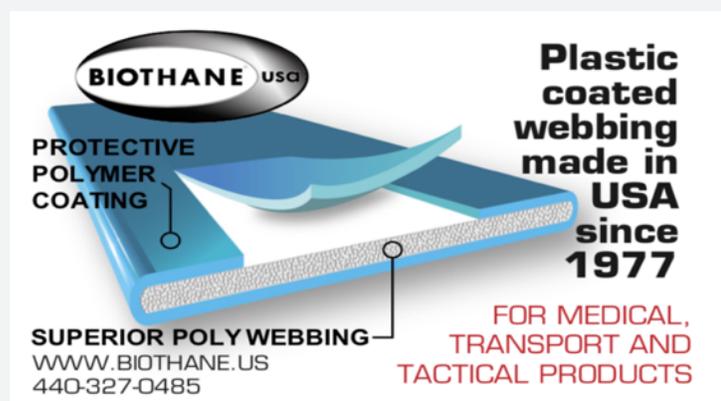
The conference gathers stakeholders from local universities, businesses and technical societies together to present and exhibit in the fields of chemistry, spectroscopy, microscopy and more.

The main topics for our session will be Plastics and

Polymers, but can include any subject within those fields, though it may be best to focus on analytical methods.

We are asking for 3 or 4 presentations from our members or your companies to make up a full speaker session at the event. If you, or someone at your company or facility have a topic, project or presentation you would like to present, please reach out to our Communications Chair at [cwp654@gmail.com](mailto:cwp654@gmail.com) for registration information.

We appreciate your consideration of presenting at the event and hope that you can help us build an informative and beneficial session.



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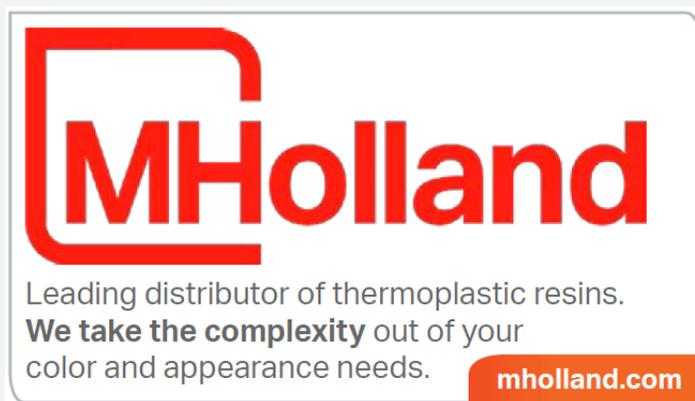
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# RECENT AND UPCOMING EVENTS:

## SPE STUDENT CHAPTER AT CASE EVENT

*Sponsored by SPE Cleveland Section*

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**DATE: OCTOBER 26, 2018**

### **Speaker notes: Mr. Dwight D. Morgan**

As Vice President of Corporate Development, Mr. Morgan is responsible for strategic planning, mergers and acquisitions, corporate development, and marketing processes. He also oversees M. Holland's international operations. He joined M. Holland in February 2015 and is a member of the Executive Leadership Team.

Dwight began his career in plastics with M.A. Hanna Co., a predecessor to PolyOne Corp., where he held a succession of corporate development and general management roles. In 1998, he formed Accel Color Corp. When Accel Color was sold to Techmer PM in 2008, Dwight continued to run

the company. In 2013, he joined The Composites Group (TCG) as vice president of sales and marketing where he participated in integrating three business units and prepared the business for its eventual merger with Citadel Plastics in 2014.

Dwight has a Bachelor of Arts in Journalism from Kent State University and a law degree from the University of Akron School of Law. He is also an award-winning author. Dwight and his wife, Carol, have two children.

For more information, please follow the link to the [MHolland blog](#) for Developing Young Polymer professionals.

### **LOCATION:**

**Schmidt Auditorium**  
2074 Adelbert Rd.  
Millis Hall  
Cleveland, OH

### **AGENDA:**

**3:00pm** meet at Schmidt Auditorium at Case Western University  
**3:15pm** presentation by Mr. Dwight D. Morgan Vice President, Corporate Development, MHolland Corp  
**4:30pm** pizza and networking with students, professors, board members and guests  
**6:00pm** adjourn

### **RESERVATIONS:**

Please send an email to [guojun.zhang@aschulman.com](mailto:guojun.zhang@aschulman.com) to confirm your attendance by noon October 19, 2018.

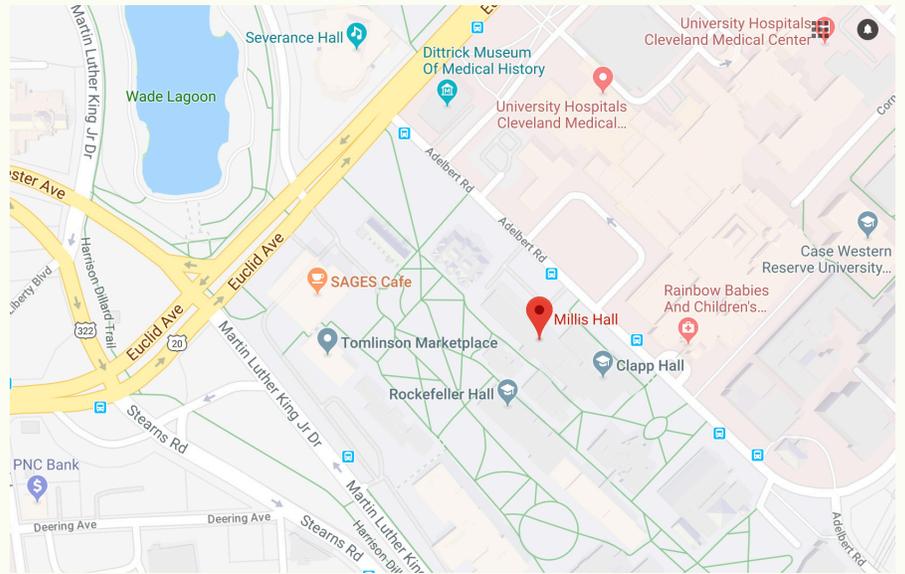
## DIRECTIONS

### Schmidt Auditorium

2074 Adelbert Rd.

Millis Hall

Cleveland, OH



# CLEVELAND TECHNICAL SOCIETIES COUNCIL (CTSC) ANNUAL COLLABORATION EVENT

**SPE representation:** Ron Raleigh

**Date/Venue:** Flat Iron Grill, Cleveland, OH, Aug. 27th 2018

Other technical societies are using volunteer credits that are required or requested in some college and university applications as a driver to get youth involved in society activities.

The CTSC is asking for member societies to contribute any anecdotes or contributions that their constituents may have made to the original Apollo moonshot for a project that shows how Cleveland had helped the project. Please forward to SPE Cleveland Communications Chair at [cwp654@gmail.com](mailto:cwp654@gmail.com).

Made a contact that may be able to help get a Plastivan sent to Solon schools. Same contact may also be able to help us work with ASME Cleveland to put a representative at their annual teacher's

camp (to help arm local teachers with material for students).

Comments were made that a new way to drive increased meeting attendance is if the topic is off the subject of the society; ie. leadership at ACS.

Events that cater to career guidance have been successful in bringing in young professionals; resume building sessions, LinkedIn profile building help, etc.

For student engagement, groups have found success in sponsoring a project that can be interesting and also a resume builder, it helps to have prizes too.

Suggestions to drive attendance were to look at activities that are non-traditional, and social in nature such as escape rooms, scavenger hunts, pub crawls, brewery tours, bowling, mini-golf, etc.



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- Gas Assist Injection Molding
- Structural Foam Molding
- 85T to 1500T Presses



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# SEPTEMBER 17, 2018 TECHNICAL PROGRAM – SAJAR PLASTICS

## SPEAKER'S BIO –

Sajar Plastics of Middlefield OH welcomed us to their facility for a plant tour and technical presentation. John Rayback, Director of Engineering gave a presentation to explain the technology and its capabilities and advantages.

Sajar Plastics of Middlefield OH welcomed us to their facility for a plant tour and technical presentation. John Rayback, Director of Engineering gave a presentation to explain the technology and its capabilities and advantages.

Sajar's primary activity is the gas-assisted injection molding (GAIM) of large high value parts for medical, architectural and automotive applications with complex designs and distinctive finishes. They also perform traditional injection molding and structural foam molding.

Nitrogen injection technology was developed by Sajar in 1985 and they remain one of the few users of this technology in the world. This is a low pressure injection process with a short shot of resin to fill the mold and then high pressure N<sub>2</sub> or CO<sub>2</sub> is injected to pack the resin into the mold. The gas is introduced via its own channels in the mold.

*(continued.)*



*The Sajar Crew. Keynote Speaker John Rayback pictured right.*



*SPE Attendees*

**GAIM is preferred for the following reasons:**

- increased design freedom
- increased part size, complexity and cosmetics
- improved physical integrity with integrated ribs and bosses
- Increased rib and boss standoff sizes
- ability to mold thick cross-sections in one piece.

**Exceptional dimensional stability is achieved**

- holds tight tolerances for large parts
- minimizes warp over large flat surfaces
- lower molded-in stress
- gas pressure is present throughout the entire cooling phase

**Reduced cavity pressure**

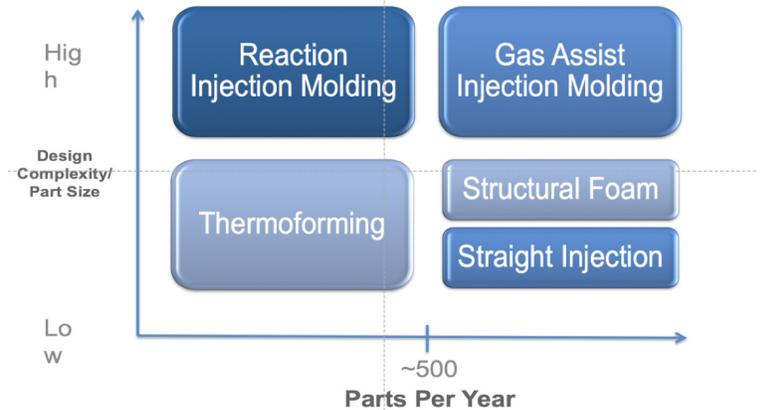
- allows production of larger parts on smaller presses
- lower clamp tonnage rules
- less pressure reduces warp on large, flat surfaces
- cavity packing pressure provided by high pressure gas

**Why use Gas Assist vs Injection Molding?**

- GA increases design freedom
- Enables robust support features
- exceptional dimensional stability
- ability to convert metal to plastic

For more information, please contact Sajar at 440-632-5203 or online at [sajarplastics.com](http://sajarplastics.com)

**Production Process Selection**



**Gas Assisted Molded Parts**



# MINUTES SPE CLEVELAND BOARD MEETING –

SEPTEMBER 17

**ATTENDEES:** D. Crist (House), J. Sovis (Treasurer), B. Opalko (Secretary), D. Meade (President, Education), R. Raleigh (Past President), Li Nie (Membership), R. Keeley (Programs), C. Potter (Communications / Sponsors), T. Waddle

## **NEW BUSINESS:**

Our event at CASE will be 10-26-18, with Dwight Morgan (MA Hanna, PolyOne, ACCEL Color, M. Holland) presenting. This is a scheduled night for the Student Mixer at CASE. R. Raleigh will talk to member G. Zhang about prospective sites.

The CTSC event at JCU on 5-22-19 is looking for 3 presentations from SPE. Members agreed that we should keep this open, but we will need to have speakers lined up early in 2019. We may call out for papers in the Newsletter in the future.

The Ohio University College of Engineering is interested in industry professionals speaking to students about careers in plastics. Members agreed to the event but Fall of 2019 may be the best timing. R. Raleigh will get more details.

## **TREASURER:**

J. Sovis circulated the Treasurer's Report and the Annual Financial Report. With a bond maturing in July 2019, members discussed some options, but we agreed to allow J. Sovis to fully explore the options before we vote on an action. Also presented was the budget for the 2018-2019 term, and members accepted the budget after some corrections.

John also informed that board that he will retire from this position and the board as of May 2019. The board thanked John for his many years of service and wished him well in his future endeavors.

## **COMMUNICATIONS:**

According to Craig Potter, David Roll, professor at KSU, is our new web manager and has re-designed the website and Newsletter. With that, we have data that says that only 25% of recipients open the Newsletter! Members discussed that the target audience may not be right, and duplicate mailings may contribute to the low number. .

## **COUNCILOR:**

J. Blayne updated members via email prior to the meeting.

## **HOUSE:**

28 attendees expected for tonight's tour / presentation at Sajar Plastics.

## **MEMBERSHIP:**

Li Nie reported that we have 150 members.

## **EDUCATION:**

D. Meade proposed that we set up an endowment fund to fund our scholarship, following the lead of the Akron and Detroit sections. All members agreed with the concept and J. Sovis and D. Meade will investigate details before we proceed.

At Lorain Community College, Kelly Zeleznik wants to discuss establishing an Associates degree in Plastics Technology. Dennis Meade to follow up.

The Solon public schools have expressed interest in holding the PlastiVan event. R. Raleigh to provide details to D. Meade.

Members agreed that we hold our Awards Night on May 13, 2019 for better student attendance.

## **FUTURE PROGRAMS:**

Can we get an event at Sherwin-Williams (Warrensville Ctr. Rd. location), preferably for 4-15-19? M. Ghosh to follow up.

# 2018-2019 PROGRAM SCHEDULE:

DATE	TOPIC	TITLE	COMPANY	LOCATION
10/15/18	TBD	Polymer Coated Systems		Akron
11/12/18	Plant tour	Liquid Silicone Injection Molding	Qure Medical	Twinsburg
12/10/18	Holiday Party	Madrigal Singers		Wadsworth
1/14/19	ACCESS			Akron
2/19/19	Plant tour	Thermoset Molding	Mar-Bal	Mentor
3/11/19	TBD	Extrusion Event	After-market Suppliers	Akron
4/8/19	Education Night	Magnet presentation		Akron
May 2019	Education Awards	Science Fair Award winners		Cleveland

## UPCOMING SPE EVENTS



Date	Event
Oct. 7	Automotive TPO Conference
Oct. 8-10	Annual Blow Molding Conference
Oct. 23-25	Vinyltec® 2018: PVC Additives Today and Tomorrow
Oct. 28-31	FlexPackCon® 2018
Nov. 7	SPE Automotive Division Innovation Awards Gala
Dec. 13-14	2nd CPRJ and SPE New Materials for Plastics Application Conference and Showcase

# 2018 – 2019 SPE CLEVELAND SECTION OFFICERS AND BOARD OF DIRECTORS

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Chroma Colors

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