

December 2017 Vol. 61 No. 4

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Editor: Craig Potter

# **Upcoming Meeting: Monday, December 4, 2017**

# **Holiday Gathering**

# Performance by "The Madrigal Singers"

The Madrigal Singers are one of six choral ensembles taught at the Akron School of the Arts at Firestone High School. This ensemble consists of advanced singers who excel in sight-reading, vocal technique and musicianship. They are chosen based on academic and character references and perform all a'cappella literature without an adult director.

The Madrigal Singers have represented Akron at local, state and national level professional conferences, as well as private functions including weddings and funerals, and have been performing at SPE holiday gatherings for many years.

Come join your friends and fellow plastics engineers at our Christmas Social Meeting. Spouses are encouraged to join us and we will have a gift drawing at the end of the evening.

#### Location:

The Galaxy Restaurant 201 Park Center Dr. Wadsworth OH 44281

Agenda:

- 5:30 Social / Networking
- 6:00 Dinner
- 7:00 Performance by The Madrigal Singers

#### Price:

Members/Guests - \$30 / Retired - \$25 / Student - \$10

#### **Reservations:**

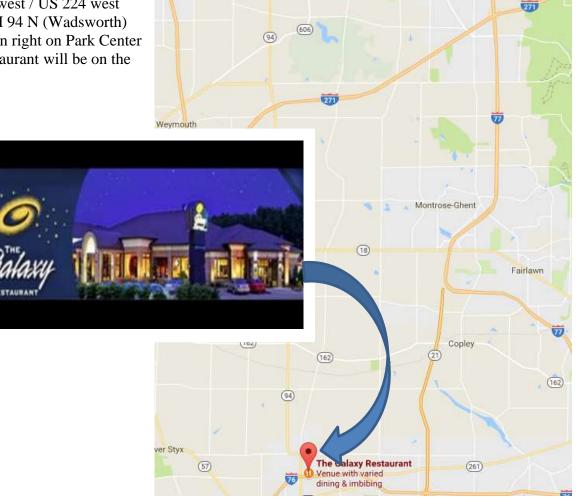
Reservations must be in by noon on Friday Dec. 1 to Gary Taylor at 330-419- 4380 or <u>akronspe1@gmail.com</u>. Please be sure to include any dietary restrictions.

<u>Quick Clicks:</u> Directions to the Meeting <u>About the Speaker</u> 2017-2018 Programs <u>SPE Board – Officers</u> <u>SPE-Cleveland Website</u>

### Directions to December 4<sup>th</sup> Meeting

#### **Directions from Cleveland:**

Take I-271 south to Exit 10 to I-77 S Take exit to I-76 west / US 224 west Take Exit 9 to OH 94 N (Wadsworth) Within 1 mile, turn right on Park Center Drive and the restaurant will be on the right



About the December Presentation



Come and join your friends and fellow plastic engineers at our annual Holiday Gathering. This year we will meet at The Galaxy Restaurant in Wadsworth OH which will be a great backdrop for our dinner and program.

# SPE Cleveland Section Technical Meeting – November 13, 2017

Jeff Jansen of the The Madison Group presented "Preventing Failures by Understanding How Plastics Fail" to the joint session. The Madison group is a consulting engineering firm with extensive skills in plastic parts design, molding and troubleshooting. Jeff has 23 years of experience solving plastic failure problems and is a recognized expert on the subject.

According to Jeff, the best way to avoid plastic part failure is to understand the most common causes of failure. This brief seminar covered topics essential to understanding plastic failure and presented information regarding how and why plastics fail.

Failure can occur because of problems associated with one or more of these key factors:

- Design
- Material
- Processing
- Installation
- Service conditions

By avoiding common mistakes, it is possible to produce plastic parts that have a superior chance to perform successfully.

Based on conducting over 1550 failure investigations, a number of the most common causes of plastic failure will be reviewed in order to illustrate this point. These include:

- Excessive sharp corners
- Molded-in residual stress
- Insufficient dying of molding resin
- Improper material selection
- Time factors
- Chemical contact

The seminar focused on practical techniques to avoid future failures. Participants were very interested in Jeff's presentation and gained a better of understanding why plastic components fail and how to avoid future failures.

The Madison Group can be found at – <u>https://www.madisongroup.com/</u> and Jeff can be reached at jeff@madisongroup.com.

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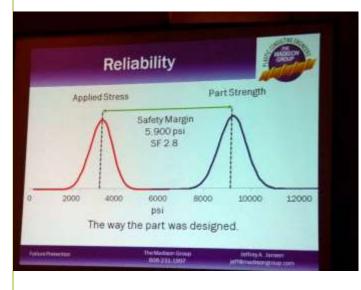
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Photos from the SPE Cleveland Section Technical Meeting – November 13, 2017







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### Photos from the SPE Cleveland Section Technical Meeting – November 13, 2017





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### SPE Cleveland Section Board Meeting Minutes November 13, 2017

#### In Attendance:

Dan Crist (House), John Sovis (Treasure), Rik Keeley (Program), Craig Potter (Advertising, Newsletter), Bob <u>Opalko</u> (Secretary), J. Blayne (Councilor), R. Raleigh (via telecom), G. Zhang

#### Minutes

<u>New Business</u>: G. Zhang reported that he has contacted CASE, and Dr. Shiraldi (Student Chapter councilor) agrees that a seminar in combination with a student happy hour would be effective for recruitment. G. Zhang proposed that the seminar be on the topic of career development, and Dr. Shiraldi agreed. Members agreed that we should target this for Fall 2018, and the Spring programs are already established. Dr. Shiraldi also offered that we hold future SPE Mtgs. at the CASE site.

The Society of Automotive Engineers (SAE) meeting is scheduled on February 26, 2018 as part of the AutoShow at the IX Center. Members agreed that we should contact the Akron Section of the SPE to see if we can jointly attend and solicit members at this meeting. A table would be set up in the presentation room.

R. Keeley will contact B. Weiler concerning the PINFA event.

<u>Treasurer</u>: J. Sovis reported that there has been very little account activity, with a net increase of \$362.70 for the last 2 months. J. Sovis also reported that he has confirmed with Huntington Bank that we are a 501-3c organization.

Advertising: Nothing new to report.

<u>Councilor</u>: The Color and Appearance Division (CAD) has begun planning the 2019 RETEC in Cleveland. Members tentatively agreed to meet with member T. Waddle, who met with CAD, prior to the January SPE meeting to discuss more details on what we can offer.

<u>House</u>: 36 members attended the Lubrizol Research Center tour in October, 29 attendees to attend tonight's meeting.

<u>Membership</u>: Li Nie reported that no new members have joined, and one member dropped out. The membership stands at 141.

<u>Education</u>: D. Meade will be meeting in December with Gene Havel of the SPE Foundation to review possible Plastivan programs for this spring, comparing the lists of schools to contact. Both G. Havel and D. Meade have not been able to contact our Scholarship recipient Jeremy Stack. The SPE Foundation wants to put a write up in their newsletter listing him as one of our Scholarship recipients and it needs information and a picture. This lack of communication may impact his award.

<u>Program</u>: For February 13, 2018, Dr. Gao from the Cleveland Clinic Medical Device Solutions will give a talk entitled, "Plastics Material Selection for Medical Device Design, Prototype and Manufacture". Location TBD.For February, Dr. Gao from the Cleveland Clinic Medical Device Solutions will give a talk entitled, "The Role of Plastics Development in the Medical Field". Location TBD.



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### 2017 – 2018 Cleveland SPE Programs (with Akron section)

Meeting	Торіс	Speaker	Company	Location
4-Dec-18	Holiday Party	Madrigal Singers		Galaxy Restaurant Wadsworth OH
8-Jan-18	ACCESS	Ed Hall	Baerlocher North America	Akron Hilton
12-Feb-18	Plastics in Medical Field	Dr. Gao Shengqiang	Cleveland Clinic	Cleveland
12-Mar-18	TBD			
9-Apr-18	Plastics in Education			Akron Hilton
14-May-18	Cleveland Section Awards			Mentor

#### 2017 – 2018 SPE Cleveland Section Officers and Board of Directors

**President Ron Raleigh BYK** Additives & Instruments rr100496@yahoo.com

#### **Treasurer** John Sovis

#### jsovis@twc.com

**Education / Students** 

**Dennis Meade** Chroma Colors dmeade@chromacolors.com

> Website/Newsletter **Craig Potter** PlastExt, LLC cwp654@gmail.com

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**Councilor** Jerry Blayne Professional Polymer Technical Services, LLC blaynejj@att.net

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**Technical Programs Rik Keeley** Quality Synthetic Rubber rwkplastics1@yahoo.com