

# TPM&F

THERMOPLASTIC MATERIALS AND FOAMS DIVISION



Communications  
Excellence Award



Pinnacle Award

## TPM&F SCOPE

The Thermoplastic Materials and Foams Division is organized to provide a focal point for the interchange of information relating to non-vinyl thermoplastic resins including fluoropolymers, polyamides, polyesters, polyolefins, polystyrenes, polyurethanes, their filled and/or reinforced products, and their foamable and foamed products. Its interests lie in stimulating the development of scientific and engineering knowledge. By encouraging participation between producers and consumers, it aims to provide information on new developments which shall encompass synthesis, characterization, fabrication, safe handling, application, serviceability, and marketing.



The Society of Plastics Engineers  
6 Berkshire Blvd, Suite 306  
Bethel, CT 06801  
United States

## CHAIRMAN'S MESSAGE

MARCH 2016



The most important functions of any SPE division are to provide outstanding conferences and grow membership. To that end, the 2016 International Polyolefin Conference went exceptionally well with over 600 attendees. My thanks go out to Donna Davis and Andy Chatterjee for continuing to energize that conference. Professor Chad

Zeng has organized our four ANTEC® sessions which will run from May 23-24. Finally, the preparation for the 2016 FOAMS® Conference in Seattle is coming along nicely under the guidance of Xiaoxi Wang amongst others. One of the big draws of this event is the Boeing tour, so don't miss out on this golden opportunity.

As for membership, we've decided to drop the Membership Contest which never got any real traction. Instead of pursuing this contest further, several members of the board will be contacting potential member leads from various sources in the hopes of growing membership. This is in addition to any membership gains achieved during our conferences. Under the leadership of Anson Wong, we have found that the Student Travel Award has received significant interest, so we will continue that activity along with our Education Awards and Best Paper Awards.

Both the Pinnacle Award and the Excellent Communication Awards qualification materials were turned in on time, and we have achieved the Gold Pinnacle Award and Notable Achiever Status! Everyone on the board has made significant contributions to these efforts, and for the Communication Award, I am very thankful to Theresa Healy and Xiaoxi Wang for their efforts on LinkedIN/websites and the newsletter, respectively.

Lastly, we plan to honor one of our long standing board members at the next ANTEC®. Sal Monte has timeously served the board in many functions including Chair and Councilor, and we will make him a lifetime honorary board member to recognize his achievements.

*Dale Grove*  
TPM&F Chairman

## COUNCILOR'S REPORT



The SPE Council meeting was held by teleconference on February 5, 2016 from 9:00 to 11:00AM EST. Some of the highlights from the meeting are shown below.

### Financial Results for 2015

Wim DeVos gave a 'preliminary' financial update for 2015. He noted the financial position is reaching to breakeven point despite difficult financial markets. There was a loss of \$213K on investment funds for the SPE Foundation.

SPE also missed income of \$350K from ANTEC® exhibition due to the NPE year.

The operational result for SPE has a loss of \$50K compared to a break-even budget.

Cash has been very well managed, despite losses. The loan has not been increased.

Final results are expected by mid-March and a final report issued during ANTEC® 2016.

### Governance Task Force Model for Governance Reform

Scott Owens shared a new model for governance. The plan is to have a small group of functionally qualified and accountable individuals who would provide the necessary direction and oversight of Society governance matters, enabling Chapters to focus on projects consistent with the Society objectives, for example, member value, education, etc. Following are highlights share some of the proposed plans:

Overall structure remains the same: Central Office, Affiliates, Council, Committees and Taskforces.

The Governance Board (GB) is represented by Sections, Divisions (includes SIGs), and Young Professional. Connections w/GB to Primary Committees.

Three year integrated operating plan: Governance, Staff, and Chapters. GB is responsible for governance.

GB elected by Council or Membership at large. Their roles & qualifications defined by job descriptions and will have two year terms (except

presidents), with lifetime term limits.

The proposed model will be refined and then present specific actions for approval at Council meeting in 2016.

### Electronic Elections

Wim DeVos informed us of a timeline for new virtual election process.

Nominations brochure will be published by February 25.

Nominations from the floor will close on March 20.

The new electronic election process will start from April.

President-Elect on April 4, Senior VP on April 11 and Vice President on April 18.

The detail of the voting process was shared during the meeting.

*Perry Vadhar*  
TPM&F Councilor

## POLYOLEFINS 2016 REPORT

The TPM&F Division organized two sessions for the Polyolefins 2016 International Conference in Houston during February 21-24, 2016. The TPM&F Division is a partner in this conference with SPE South Texas Section and PMAD Division. Donna Davis served as the Technical Program Committee Chair for PO2016. About 625 people attended the conference. The tutorial for the PO is named the Mark Demark Memorial Tutorial Series to honor the departed Mr. Mark Demark who served as Education Chairman of the South Texas Section for many years.

Ananda Chatterjee has organized and chaired a session on "Foams and High Melt Strength Polymers" on the morning of February 24. The papers (*all invited*) were presented from Total Petrochemicals, Kyoto University (*our own Board member Prof Masahiro Ohshima*), INEOS Olefins and Polymers, JSP (*Japan*), Dow Chemical Company, and Reedy Chemical Foam & Specialty Additives.

Prof Luyi Sun (*University of Connecticut*) developed and moderated a session on "Advances in Film & Flexible Packaging" on the morning of February 24. The papers were from Techmer PM, Ecole Polytechnique (*Montreal*), University of Connecticut

*continued on page 3*

## BOARD OF DIRECTORS LISTING

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TPC 2016

HSM: Honored Service Member  
FE: Fellow of the Society  
HLM: Honorary Lifetime Member

## POLYOLEFINS 2016 (CONTINUED)

(Luyi Sun), Sealed Air Corp, Step Toe, and BOCO Technology (our Board member Aaron Guan). Both TPM&F sessions contain six papers each.

PO Conference Scholarships - Two \$1,000 scholarships were presented at PO 2016 conference on behalf of the TPM&F Division during Tuesday's award ceremony; the funds came from the proceeds of the conference. The first awardee is Mr. Rutvik Godbole of Texas Tech University, Lubbock, TX, where Rutvik is a PhD student in Chemical Engineering.



The other winner is Ms. Huizhen (Adeline) Mah of University of Houston, where Adeline is a PhD student in Materials Science & Engineering. We wish Rutvik and Adeline continued success in their career.



Both schools have SPE chapters as part of the education program of the South Texas Section and both students came highly recommended by the faculty advisors.

By Ananda M. Chatterjee  
TPM&F Coordinator with PO Committee

## ANTEC® 2016 REPORT

25 Papers have been submitted and are grouped into 5 sessions for ANTEC® 2016 Indianapolis May 23-25, 2016, they are as follows:

### MAY 23, MONDAY 8:30-11:30 AM

Foam Injection Molding Joint Session with Injection Molding Division (6 total: 3(TPM&F)+3(IM)) Moderator: Prof. Shu-Kai Yeh

USE OF CORE RETRACTION TO ACHIEVE LOW DENSITY FOAMS IN MICROCELLULAR INJECTION MOLDED POLYPROPYLENE PARTS

THICK PART MICROCELLULAR FOAM INJECTION MOLDING

MECHANISM OF CELL NUCLEATION IN HIGH-PRESSURE FOAM INJECTION MOLDING FOLLOWED BY PRECISE MOLD-OPENING

ANALYSIS OF THE FOAM INJECTION MOLDING PROCESS USING A CHEMICAL BLOWING AGENT

FOAM INJECTION MOLDING OF POLYLACTIDE WITH IN-SITU FIBRILLATED POLYTETRAFLUOROETHYLENE

DEVELOPMENT OF PLA/CELLULOSIC FIBRE COMPOSITE FOAMS USING INJECTION MOLDING: FOAMING AND MECHANICAL PROPERTIES

### MAY 23, MONDAY 1:30-4:30 PM

New Applications of Thermoplastics and Foams (6) Moderator: Prof. Hani Naguib

FABRICATION OF HYBRID POLYMERIC-METALLIC FOAMS AS SCAFFOLDS FOR BONE TISSUE ENGINEERING

DESIGN, FABRICATION AND CHARACTERIZATION OF HIGHLY ACTIVE PIEZOELECTRIC FOAMS BASED ON A HONEYBOMB STRUCTURE

ON THE SUCCESSFUL FABRICATION OF AUXETIC POLYURETHANE FOAMS: KEY INSIGHTS FROM MATERIALS SCIENCE AND POLYMER PROCESSING PERSPECTIVES

EFFECT OF VOID FRACTION ON DIELECTRIC PROPERTIES OF INJECTION-MOLDED POLYPROPYLENE/MWCNT FOAMS

STANDARD REFERENCE MATERIALS FOR THE POLYMERS INDUSTRY

REDUCING THERMAL CONDUCTIVITY OF POLYMERIC FOAMS WITH HIGH VOLUME EXPANSION MADE FROM POLYSTYRENE/EXPANDED GRAPHITE

### MAY 24, TUESDAY 8:30-11:30 AM

New Materials and New Foams (6) Moderator: Prof. Chul Park

EFFECTS OF BLEND MORPHOLOGY AND OPERATING PARAMETERS ON FOAMING OF POLYLACTIC ACID/THERMOPLASTIC POLYURETHANE

PREPARATION OF PPC/PS/PTFE COMPOSITES WITH IN-SITU FIBRILLATED PTFE NANOFIBRILLAR NETWORK AND THEIR SUPERCRITICAL CARBON DIOXIDE EXTRUSION FOAMING PROPERTIES

OPEN CELL MICROCELLULAR FOAMS OF POLY(LACTIC ACID) BLEND WITH POLY(BUTYLENES SUCCINATE)

SOLID-STATE FOAMING OF POLYLACTIC ACID-HEXAGONAL BORON NITRIDE COMPOSITES TO FABRICATE THERMALLY CONDUCTIVE FOAMS

FOAMING BEHAVIOR OF FLUORINATED ETHYLENE PROPYLENE COPOLYMER USING SUPERCRITICAL CARBON DIOXIDE

AN EFFECTIVE WAY OF PROCESSING IMMISCIBLE PP/PS BLENDS INTO HIGH STRENGTH FIBER

### MAY 24, TUESDAY 1:30-4:30 PM

Structure & Properties of Thermoplastics and Foams (5) Moderator: Anson Wong

MICROSTRUCTURE-PROPERTY RELATIONSHIP FOR IMPACT ENERGY ABSORPTION OF FUNCTIONALLY GRADED POROUS STRUCTURES OF ACRYLONITRILE BUTADIENE STYRENE (ABS)

IMPROVING THE MECHANICAL PROPERTIES AND FLAME RETARDANCY OF MULTILAYERED PP FOAM/FILMS VIA THE INTRODUCTION OF FLAME RETARDANTS

PROPERTIES OF MELT BLENDED CHITIN NANOWHISKER-POLYPROPYLENE COMPOSITES

STABILITY OF POLY (ETHERETHERKETONE) AND POLY [2, 2' (M-PHENYLENE- BIBENZIMIDAZOLE)]

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## ANTEC® 2016 SCHEDULE (CONTINUED)

BLEND UNDER HARSH ENVIRONMENTS

VISCOELASTIC SHEAR ANALYSIS OF  
POLYMERIC FOAM MIDSOLES

MAY 25, WEDNESDAY 8:30-11:30 AM

Foaming fundamentals and processes (6)

Moderator: Aaron Guan

CRITICAL PARAMETERS OF GENERATING PMMA  
NANOCELLULAR FOAM

ENHANCED PROPERTIES OF ORIENTED MULTI-  
LAYER POLYPROPYLENE FILM/FOAMS  
VISCOELASTIC SHEAR ANALYSIS OF  
POLYMERIC FOAM MIDSOLES

EXTRUSION FOAMING OF LLDPE/WOOD FIBER  
COMPOSITES

APPLICATION OF AIR GAP TO ENHANCE ACOUS-  
TIC PERFORMANCE OF BIO-BASED PLA FOAMS

DYNAMIC SOLUBILITY OF CARBON DIOXIDE IN  
POLYPROPYLENE MELT

MODELING OF THE FIBER ORIENTATION IN  
POLYMER/FIBER COMPOSITE FOAMS



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## COMMUNICATION REPORT – THERESA HEALY



### TPM&F WEBSITE AND THE CHAIN

The BOD has been fully updated with the present board members and the results from the latest election. It is now fully in line with that of SPE HQ. Please review the website for any additional changes. The Polyolefins Conference has been promoted through the website and the Chain. The TPM&F website has been updated to incorporate The ANTEC® 2016 and FOAMS® 2016 events. The Membership and Travel contests have been posted to the website, Linked-In site and The Chain. Updated information for the Education tab which should include any webinars and/or PlastiVan events. The latest Scholarship winners have been posted on the site, and the scholarship winners have been informed, so they can direct their fellow friends to our site for added promotion. Just a reminder, the website is smart phone or tablet accessible.

### LINKED-IN TPM&F SITE

The LinkedIn site has been updated and checked daily for new members. Please feel free to post relevant discussion items at any time so we can get good website networking topics. The TPM&F Division can use this to get more SPE memberships and promote upcoming conferences. Our goal is to use it more to gain new members so any ideas you may have, please send them to me.

### OTHER ACTIVITIES

Dale has submitted the Communication Excellence Award application and we have achieved Notable Achiever Status. Theresa Healy will work as the Sponsorship Chair for the FOAMS® 2016 and will work with Xiaoxi to promote this conference. An IT person has been solicited to develop a promotional video as well. All relevant information has been posted to the SPE site as well as our TPM&F site.

SEPTEMBER 12-15 - SEATTLE, WA



# FOAMS® 2016

14<sup>th</sup> International Conference on Advances in Foam Materials & Technology  
CONFERENCE, TUTORIAL & EXHIBITION



## Call for Papers–FOAMS®2016 Conference

Co-Sponsored by the Pacific Northwest Section & TPM&F Division of The Society of Plastics Engineers

The FOAMS® 2016 Conference will address advances in synthesis, characterization and properties of polymer foams by leading researchers in industry and academia. This conference is the premier forum for sharing ideas and learning about new developments in foaming technologies due to the diversity of the attendees, and will be held on September 14-15, 2016 in Seattle, Washington USA.

### Program Committee, FOAMS 2016:

- Conference Chair: Dr. Xiaoxi Wang, The Boeing Company
- Technical Program Chair: Prof. Vipin Kumar, Department of Mechanical Engineering, University of Washington

### Papers are invited on the following topics with special emphasis on industrial applications:

- Innovation in Foams
- Novel Blowing Agents
- Notable Foaming Technologies
- Nanocomposite Foams
- Sustainability in Foams
- Biodegradable Foams
- Foams for Industrial Applications
- Micro and Nanocellular Foams

Please send a title and an abstract of your paper, 100-150 words in length, with full contact information to:  
Prof. Vipin Kumar [vkumar@uw.edu](mailto:vkumar@uw.edu)

#### Key Dates:

- May 1, 2016–Abstract due.
- May 15, 2016–Notification of accepted abstracts to all authors
- July 1, 2016–First version of the paper to be sent to Vipin Kumar ([vkumar@uw.edu](mailto:vkumar@uw.edu))
- August 1, 2016–Final version of the paper with any revisions due.

The submitted papers will be carefully reviewed. The criteria for selection of papers will be based on significant developments that bring benefits to the foam industry with highest quality and originality. The best papers will be selected and announced in January 2017. If you have any questions regarding the abstract, topics, or deadlines, please contact the Conference Chair. We look forward to your participation. Thank you.

[www.4spe.org/foams2016](http://www.4spe.org/foams2016)



# FOAMS<sup>®</sup> 2016



14<sup>TH</sup> International Conference on Advances in Foam Materials & Technology

## CONFERENCE, TUTORIAL & EXHIBITION SEPTEMBER 12-15 – SEATTLE, WA

### JOIN US!

Leading researchers from industry and academia will present the newest developments in foam materials, technology, and applications on the following topics:

Innovation in Foams  
Novel Blowing Agents  
Notable Foaming Technologies  
Nanocomposite Foams

Sustainability in Foams  
Biodegradable Foams  
Foams for Industrial Applications  
Micro and Nanocellular Foams

### JUST ANNOUNCED!

**BOEING FACTORY TOUR**  
Tuesday, September 13  
*Follows the morning tutorial session*

### QUESTIONS

#### GENERAL CONFERENCE

Dr. Xiaoxi Wang  
wang0213@gmail.com

#### PAPER SUBMISSIONS

Abstracts Due: May 1  
Professor Vipin Kumar  
vkumar@uw.edu

#### SPONSORSHIP

Theresa Healy  
thealy@reedychemicalfoam.com  
Eric Teoh  
spepnw@gmail.com

#### STUDENT POSTERS & SCHOLARSHIPS

Scholarship Applications Due: July 1  
Dr. Stephane Costeux  
scosteux@gmail.com  
Professor Changchun Zeng  
czeng@fsu.edu

[www.4spe.org/foams2016](http://www.4spe.org/foams2016)

Co-sponsored by: SPE TPM&F Division & Pacific Northwest Section

## FOAMS® 2016 TUTORIAL

### The Instructors:



Dr. Chul B. Park

#### OUTLINE

- 1 Design of Foam Structures
- 2 Foaming Agents
- 3 Fundamentals of Continuous (Microcellular) Foaming
- 4 Control of Cell Nucleation
- 5 Control of Foam Density



Dr. Hani Naguib

#### OUTLINE

- 6 Foam Structures & Properties
- 7 Biofoams: *Biofoams: processing, properties, and applications*
- 8 Sustainable Foams: *processing, properties, and applications*



Dr. Stéphane Costeux

#### OUTLINE

- 9 Foam Fundamentals: *Nucleation, Growth and Stabilization*
- 10 Application to Nanocellular Foams

#### SPE Member Fees (Advance ends Aug. 12, 2016):

Tutorial Only	\$ 400 Advance / \$ 600 Late
Conference Only	\$ 500 Advance/ \$ 700 Late
Tutorial & Conference	\$ 750 Advance/ \$ 1,050 Late

#### SPE Non-Members: (Advance ends Aug 12, 2016):

Tutorial Only	\$ 600 Advance / \$ 800 Late
Conference Only	\$ 700 Advance/ \$ 900 Late
Tutorial & Conference	\$ 1,050 Advance/ \$ 1,400 Late

#### FOAMS® 2016 TUTORIALS SCHEDULE September 12-13, 2016

<b>Monday</b>	9:00am–1pm <i>Chul Park</i> 2:00pm–6pm <i>Hani Naguib</i>
<b>Tuesday</b>	8:00am–noon <i>Stéphane Costeux</i>

### FOAMS® 2016 TUTORIAL REGISTRATION FORM

To register online, visit: <https://www.eiseverywhere.com/ehome/152807/346454/>  
Event Date: September 12-13, 2016, Monday-Tuesday Event Location: Crowne Plaza, Seattle

NAME \_\_\_\_\_ TITLE \_\_\_\_\_  
 COMPANY \_\_\_\_\_  
 ADDRESS \_\_\_\_\_ CITY \_\_\_\_\_  
 STATE \_\_\_\_\_ ZIP CODE \_\_\_\_\_ COUNTRY \_\_\_\_\_  
 TEL. \_\_\_\_\_ FAX: \_\_\_\_\_ E-MAIL \_\_\_\_\_

Please pay Registration Fee in US Dollars by:  
 bank transfer  check  credit card



Credit Card Payment: \$ \_\_\_\_\_ Cardholder Name: \_\_\_\_\_  
 Card Number: \_\_\_\_\_  
 Expire Date: \_\_\_\_\_ Signature: \_\_\_\_\_

PLEASE CALL, MAIL OR FAX THIS FORM TO:  
 EVENTS DEPARTMENT, SPE US OFFICE, 6 BERKSHIRE BLVD, SUITE 306, BETHEL, CT 06801  
 PHONE: 203-740-5403, FAX: 203-775-8490

# TREASURER'S REPORT – MAX WINGERT

February 22, 2016



## FINANCIAL SUMMARY:

- 1) FY15-16 budget: Income \$29,810.65; Expenses \$33,600. We have a budgeted deficit of \$3,789.35.
- 2) The division received \$9,610.65 proceeds for PO2015 in July 2015, so the budgeted income for PO conference proceeds are higher than normal this FY (*because we should receive income for PO2016 before July 2016*).
- 3) First half of FY actual transactions are: Income \$11,303.77; Expenses \$11,751.29.
- 4) See below for details on our investment account advisor's new broker and statements.

## INVESTMENT ACCOUNT UPDATE:

Our advisor, Tom Ragonese and his partner, closed their small business Constitution Advisory Group in fall 2015. They joined Wells Fargo Advisors to serve as their brokers, replacing Lincoln Financial Securities/Pershing as our investment firm.

Tom remains our main advisor. Our mutual funds were directly transferred between brokers. We did incur a \$50 account closing fee, but they only charged a \$23.57 advisory fee (versus the traditional 0.213% quarterly fee, which would have been about \$300). Otherwise, the investments were unaffected by the change.

Between June 30 and December 31, the account lost 2.0%, falling from \$141,869.98 to \$139,074.27. As of Feb 17, the investment account value has fallen to \$134,590.71.

	FY2014-15		FY2015-16	
	6/30/14 Actual	Budget	6/30/15 Actual	Budget
<b>INFLOWS</b>				
Interest & Dividends	\$ -	\$ -	\$ -	\$ -
Wells Investment Program Net Gain	\$ 1,973.23	\$ 5,000.00	\$ -	\$ 2,000.00
Conference - FOAMS	\$ -	\$ 6,000.00	\$ -	\$ 6,000.00
Conference - Polyolefins	\$ -	\$ 9,000.00	\$ 9,610.65	\$ 18,610.65
Previous Year TopCon Reimburse	\$ -	\$ -	\$ -	\$ -
SPE Rebate	\$ 2,258.44	\$ 3,200.00	\$ 1,318.12	\$ 3,200.00
Sponsorship	\$ 500.00	\$ 500.00	\$ 375.00	\$ 875.00
<b>Total Inflows</b>	<b>\$ 4,731.67</b>	<b>\$ 23,200.00</b>	<b>\$ 11,303.77</b>	<b>\$ 29,810.65</b>
<b>OUTFLOWS</b>				
ANTEC Expenses	\$ 3,395.44	\$ 3,500.00	\$ -	\$ 3,500.00
Best paper awards	\$ 500.00	\$ 2,700.00	\$ -	\$ 2,700.00
Non-ANTEC Board Meeting	\$ 2,348.03	\$ 3,000.00	\$ -	\$ 3,000.00
Councilor Travel	\$ 1,096.09	\$ 2,000.00	\$ 872.72	\$ 2,000.00
Educational Programs	\$ 5,800.00	\$ 6,000.00	\$ 1,000.00	\$ 6,000.00
FOAMS Conference Net Loss	\$ 6,493.47	\$ -	\$ 2,426.25	\$ -
General Office	\$ 10.35	\$ 50.00	\$ 2.40	\$ 50.00
Communication	\$ 750.00	\$ 4,000.00	\$ 3,876.00	\$ 6,550.00
Membership Content	\$ -	\$ -	\$ -	\$ 2,000.00
Outstanding Achievement Award	\$ 1,000.00	\$ 4,500.00	\$ 1,000.00	\$ 3,500.00
Scholarships/Grants	\$ 1,000.00	\$ 3,500.00	\$ -	\$ 1,000.00
Student Travel Award	\$ -	\$ -	\$ -	\$ 2,000.00
Technical Training Seminars	\$ -	\$ 1,500.00	\$ -	\$ 500.00
Wells Investment Program Net Loss	\$ -	\$ -	\$ 2,573.92	\$ -
Other expenses	\$ -	\$ 1,000.00	\$ -	\$ 800.00
<b>Total Outflows</b>	<b>\$ 22,393.38</b>	<b>\$ 31,750.00</b>	<b>\$ 11,751.29</b>	<b>\$ 33,600.00</b>
<b>Overall Surplus (deficit)</b>	<b>\$ (17,661.71)</b>	<b>\$ (8,550.00)</b>	<b>\$ (447.52)</b>	<b>\$ (3,789.35)</b>
<b>Budget Plan</b>	<b>\$ (8,550.00)</b>	<b>\$ (8,550.00)</b>	<b>\$ (3,789.35)</b>	<b>\$ (3,789.35)</b>
<b>Variance from Budget</b>	<b>\$ (9,111.71)</b>		<b>\$ 3,341.83</b>	
<b>Ending Account Balance</b>	<b>\$ 176,257.62</b>		<b>\$ 175,810.10</b>	

## FOAMS®2016 REPORT – XIAOXI WANG

February 21, 2016

### FOAMS 2016 Committee

CONFERENCE CHAIR

*Xiaoxi Wang, Boeing*

CONFERENCE CO-CHAIR

*Allen Smith, Calsak Corporation*

TECHNICAL PROGRAM CHAIR

*Professor Vipin Kumar, University of Washington*

TUTORIAL PROGRAM CHAIR

*Professor Chul Park, University of Toronto*

STUDENT POSTER CHAIR

*Professor Chad (Changchun) Zeng, Florida State University*

STUDENT SCHOLARSHIP CHAIR

*Stephane Costeux, Dow Chemical*

HOTEL CHAIR

*Eric Teoh, DSM Plastics*

TREASURER

*Chris Hall, Availen Associates;*

*Maxwell Wingert, Procter & Gamble*

SPONSORSHIP CHAIR

*Theresa Healy, Reedy Chemical Foam,*

*Eric Teoh, DSM Plastics*

HOSPITALITY CHAIR

*Charles Pratt, Pratt Materials Consulting*

BOEING TOUR

*Allen Smith, Calsak Corporation*

BEST PAPER CHAIR

*Gary Wilkes, Dart Container*



### Status of Conference Planning

#### Key deadlines

May 1, 2016 – Paper abstract due

July 1, 2016 – Student Scholarship

TBD – TPM&F Travel Award

July 29, 2016 – Poster abstract submission

August 12, 2016 – Early registration

### Technical Program Planning – Vipin Kumar

Document finalized

Soliciting Plenary speaker / Invited speakers  
(welcoming suggestions)

### Sponsor/Exhibitors planning – Theresa Healy and Eric Teoh

Document finalized

### Tutorial Planning – Chul Park

Program / document finalized

### Poster Session Planning – Changchun (Chad) Zeng

Document finalized

### Student Scholarship – Stephane Costeux

Document finalized

Combined with TPM&F Travel Award to further boost student attendance

Cross references

(Poster, FOAMS® scholarship, and TPM&F Travel Award)

### Advertising/Publicity – Xiaoxi Wang

[www.4spe.org/foams2016](http://www.4spe.org/foams2016)

Ads in SPE PE Magazine starting from January 2016

Ads on Plastics News (\$3600)

Side & top bar on the “Upcoming Events” webpage starting February

To be published in paper in early August

TPM&F website

Social media (Facebook, LinkedIn, SPE Chain, etc.)

Promotion in PO

Documents shared

Help needed to promote FOAMS®2016

(such as session moderators)

Promotion in ANTEC®

Flyers (150 general flyer & 150 call for paper \$119,

100 tutorial trifold \$126, 50 student scholarship & poster \$72)

Help need to promote FOAMS®2016

(such as session moderators)

### Boeing Tour Planning – Al Smith

Reserved one slot: 2 pm Tuesday 9/13

(50 spots)

Complimentary Boeing tour provided for sponsors with certain levels

### Hotel/Registration Update – Eric Teoh

Signed contract

All the events will be co-located in a big room

Discounted room rate \$189 (9/9~9/18)

Please book your hotel room early!

September is a prime time for tourism in Seattle! There is no penalty to cancel/modify prior to 6:00pm 72 hours before day of your arrival!



# FOAMS® 2016



14<sup>TH</sup> International Conference on Advances in Foam Materials & Technology

SEPTEMBER 14-15 SEATTLE, WA

## MICHAEL REEDY SCHOLARSHIPS



Two \$500 scholarships are offered for selected undergraduate /graduate students in plastics/foams area attending the FOAMS®2016 Conference (Sept. 14-15, 2016) in Seattle. The scholarships, named in memory of our former board director Michael Reedy, are sponsored by Reedy International.

### ELIGIBILITY REQUIREMENTS

1. Must be a full-time undergraduate or graduate student.
2. Must be majoring in or taking courses relevant to a career in the plastics/polymer industry.
3. Good academic standing with their schools (GPA > 3.0).
4. Must be able to attend the FOAMS®2016 conference.

### HOW TO APPLY

Applicants must email an application **By July 1, 2016** to:

Dr. Stéphane Costeux [sccosteux@dow.com](mailto:sccosteux@dow.com)

*The application submitted must include:*

1. One-page statement telling why you are applying for the scholarship, your qualifications, and your educational and career goals in the plastics/foams industry.
2. One or two (2 preferred) recommendation letters from academic or professional individuals.
3. A high school and/or college transcript for the past 2 Yrs.
4. A list of current and past school activities, community activities, and honors.

### QUESTIONS?

Contact Dr. Stéphane Costeux  
[sccosteux@dow.com](mailto:sccosteux@dow.com)

## STUDENT POSTER SESSION

If you are a graduate or undergraduate student conducting research related to polymer foam, consider participating!

### BENEFIT

1. Free admission to FOAMS® 2016
2. An opportunity to win Best Poster Awards that will be presented on Day 2 of the conference (\$350 for 1st place and \$150 for 2nd place)
3. Opportunities to network with fellow students, peers and experts in the field of foams

### HOW TO PARTICIPATE

1. Submit a 100-200 words abstract including title, authors and affiliation **by July 29, 2016** to Dr. Changchun Zeng ([czeng@fsu.edu](mailto:czeng@fsu.edu)).
2. Create a poster that will fit in a 48" wide 36" tall space (*you will receive an email from Dr. Changchun Zeng concerning details on poster mounting*)
3. Print your poster and bring it to the first day of the conference.

### QUESTIONS?

Contact Dr. Changchun Zeng  
[czeng@fsu.edu](mailto:czeng@fsu.edu)

## HIGHLIGHTS FOR TPM&F BOARD MEETING

*Meeting Date: February 22, 2016*

7:30pm Central Time (Polyolefins Conference, Houston, TX)

### ATTENDANCE

**Attending the BOD meeting in person:** *Theresa Healy, Gary Wilkes, Aaron Guan, Donna Davis, Andy Chatterjee, Masahiro Ohshima, and Kathy Schacht.* **Attendance via phone:** *Dale Grove, Xiaoxi Wang, Hani Naguib, Perry Vadhar, Stephane Costeux, Anson Wong, Ashu Sharma, Chul Park, N.S. Ramesh, and Ray Shute.*

**CHAIR REPORT – Dale Grove** The Pinnacle and Communications Excellence Awards have both been submitted to SPE.

The membership committee has developed a list of approximately 450 new contacts. It would be helpful if additional board members would support this cause given the drastic downward trend in SPE membership over the course of the last ten years. The membership contest did not work as anticipated.

The next BOD meeting will be held at ANTEC® 2016. We would have the choice of a Sunday evening or Tuesday evening given the main reception restraints. However, Donna brought up a valid point that SPE has numerous evening celebrations going on during the same time period.

After much discussion, in the end it was decided that the TPM&F Division would join the other divisions during the Monday night reception, that the annual business meeting would occur at the end of an ANTEC® session on either Monday or Tuesday, and that we would have our board meeting over breakfast from 7-8:30 AM.

**COUNCILOR CHAIR REPORT – Perry Vadhar**  
The SPE Council meeting was held by teleconference on February 5, 2016 from 9:00 to 11:00AM EST. (*see page 2 in this newsletter*)

**SECRETARY'S REPORT – Theresa Healy**  
There was a motion to approve the last Meeting Minutes on November 20, 2015 and the motion was approved and posted to our website, The Chain, and will be published in our Newsletter

**NEWSLETTER CHAIR REPORT – Aaron Guan/Xiaoxi Wang** Aaron Guan will be taking over the role of Newsletter Chair for the 2015/2016 fiscal year,

and he thanked Xiaoxi for making such a smooth transition possible.

Three issues of newsletters are planned for the 2015/2016 fiscal year with a possible 4th if necessary October 2015 (after FOAMS® TopCon)

March 2016 (after PO TopCon)

May 2016 (after ANTEC®)

An optional 4th issue may occur if we want to cover best papers (full text) from FOAMS®, PO or ANTEC®

**Communication Chair Report – Theresa Healy**  
(*see page 5 in this newsletter*)

**EDUCATION CHAIR – Ashu Sharma**

The Division provided two Reedy Scholarships at the FOAMS® Conference at Kyoto, Japan. We will continue funding the Platinum Sponsorship of SAC at ANTEC® 2016 (budgeted amount \$2500) and supporting SPE Foundation Scholarship during 2016 (budgeted amount \$2500) A check needs to be issued. Upcoming advertising needs to be addressed.

**HSM/Fellows Nominations – Donna Davis** Congratulations to our two new Fellows: Stephane Costeux and Bharat Chaudhary.

**BOARD ELECTIONS – Ray Shute** If you wish to join or continue serving on the Board, Ray Shute needs 3-5 sentences from you regarding why you should be elected (or re-elected) along with your photo. The terms for BOD members are listed in the Newsletter. Ray would like to have ballots sent by March 15. Seven people are up for re-election.

Ray made a moved that Sal Monte be named an Honorary Lifetime Member. He will still sit on the board but will not have voting privileges. This motion was carried and approved. Ray will send a template to Dale who will then obtain a plaque. Sal's plaque will be presented at ANTEC® 2016.

*continued on page 13*

**INTERNATIONAL ACTIVITIES REPORT – Hani Naguib, Miguel Perez and Masahiro Ohshima**

Chul Park has attended and presented a number of keynote and plenary talks in the 31st International Conference of the Polymer Processing Society, in Jeju, Korea on June 07-11, 2015, the Polymer Processing Society Europe-Africa Conference, Graz, Austria, September 21-25, 2015, the Poly-Foam 2015, Shanghai, China, December 2-3, 2015, and the Polymer Processing Society, 2016 Asia-Australasia Conference, Chengdu, China, October 11-14, 2016.

Chul Park and Hani Naguib will be attending and presenting the 32nd International Conference of the Polymer Processing Society, Lyon, France, July 25-29, 2016

Send Hani any international conference activities.

Donna suggested we have a flyer listing the conference dates. We could even use this to recruit speakers and members. Masahiro Ohshima will assist in putting this together

**NEW AND OLD BUSINESS**

Dale is looking for help with contacting people to join SPE. We have a list of names and contacts. Currently, there are four volunteers that will contact potential members.

**Adjourn at 9:17pm central time**

**MEMBERSHIP COMMITTEE REPORT**

Membership Chair: Anson Wong,  
Committee Members: Dale Grove, Aaron Guan

**2015 SUMMARY:**

- 1) Target to increase Membership by 10% during 2015 could not be achieved.  
# of TPM&F Active Members: **(-7%)**  
Jan 1, 2015 – 898, Jan 1, 2016 – 839  
# of Total SPE Section Members: **(-10%)**  
Jan 1, 2015 – 12,119, Jan 1, 2016 – 10,878
- 2) Student Travel Award – 13 applications received, and two winners selected by a panel of 5 judges from our TPM&F BOD.  
\* Rebecca Shotwell (*University of Wisconsin-Madison*)  
\* Vahid Shaayegan (*University of Toronto*)
- 3) Membership Contest was not successful – 0 applicant received.
- 4) Membership Retention – personal email contacts was effective in retaining existing members.

**MEMBERSHIP COMMITTEE GOAL IN 2016:**

- \*Increase Membership by 10% (From 01/01/16 to 01/01/17)
- \*Travel Award 2016
- \*New member recruitment via personal email contact
- \*Identify new methods to improve values for TPM&F members

**TRAVEL AWARD IN 2016**

Proposal - 2 awards at \$1000/each (*same as 2015*)  
Award Announcement – SPE email blast, personal email contact (conference attendees, potential members, etc.), LinkedIn, TPM&F Newsletter, flyers/announcement during TPM&F conferences (SPE ANTEC® 2015, etc.).  
Timeline and structure to be determined.

**MEMBER RECRUITMENT**

A list of ~450 potential members generated via previous conference attendees, LinkedIn, Research Gate, etc. An email template that outlines the benefits of membership has been generated and each potential member will be contacted.