TPM&F

THERMOPLASTIC MATERIALS AND FOAMS DIVISION



Communications Excellence Award



Pinnacle Award

TPN&F SCOPE

The Thermoplastic Materials and Fo 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

SEPTEMBER 2017



Dear fellow SPE TPM&F Division members.

First, I would like to congratulate Dr. S. T. Lee for winning the Outstanding Achievement Award (OAA) in 2017. Dr. Lee is Principal Editor for Foam Update, Co-Editor-in-Chief for Journal of Cellular Plastics. He has many significant publications,

and has organized numerous technical conferences in foams area. Dr. Lee is well deserved for this highest honor from the SPE TPM&F Division.

I would like to congratulate TPM&F TPC Professor Chad Zeng and the TPM&F moderators for a successful ANTEC* 2017 in May. We had high quality presentations and good attendance for all four sessions. Thanks to the hard work led by the Best Paper Award Committee Chair Gary Wilkes, the Best Paper Award goes to the paper "DIELECTRIC PERMITTIVITY OF THERMOPLASTIC POLYURETHANE/PZT COMPOSITE FOAMS". Congratulations to authors Gayaneh Petrossian and Amir Ameli from Washington State University!

We are excited to announce the winner of the 2017 SPE TPM&F Division Scholarship: Haley Palys, a senior at Penn State majoring in Plastics Engineering Technology. Haley was selected from an exceptionally talented pool of applicants due to her outstanding academic achievements and leadership. Congratulation Haley!

I would like to thank Professor Vipin Kumar, who has been serving on the SPE TPM&F board since 1990 and just retired from the board in ANTEC® 2017. Professor Kumar's special effort was on microcellular foam and creating a community around that subject. He has served in various positions including being Chairman 2001-2003. I greatly appreciate Professor Kumar's nearly three decades of service on the TPM&F board and his great contributions to our division!

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CHAIRMAN'S MESSAGE - CONTINUED

Finally, I cordially invite you to participate in our SPE FOAMS® 2017 Conference, Tutorial, and Exhibition, which will be held October 11–12 in Bayreuth, Germany. It is the premier forum for presentations of new developments in foaming technologies. There will be 1.5-day tutorial, plant tour, beer tasting event, exhibition, and most importantly world-renowned speakers presenting technical papers on innovations in foam processing, nano-cellular foam technology, environmentally friendly foams and more.

Dr. Xiaoxi Wang SPE TPM&F Division Chair

OUTSTANDING ACHIEVEMENT AWARD

On behalf of the Outstanding Achievement Award Committee, I am pleased to announce that Dr. S.T. Lee has been elected to receive the honourable Outstanding Achievement Award in 2017. Dr. Ramesh spearheaded in the nomination, and Dr. Costeux and Prof Ohshima supported the nomination. The Outstanding Achievement Award Committee was impressed by Dr. Lee's achievements. Congratulations to Dr. S.T. Lee! The following is a summary of Dr. Lee's biography.

Chul Park, Chair of Outstanding Achievement Award Committee

Dr. S.T. Lee's biography:

Dr. Lee has made several outstanding contributions in polymeric foams research for more than 25 years. I have observed his research work since 1991. He received his Ph.D. degree in Chemical Engineering from Stevens Institute of Technology in 1986. After graduation he worked at Sealed Air in R&D for nearly 31 years. He has contributed significantly in the areas of polymer foams, polymer materials, foam nucleation, foam expansion, foam processing and safe blowing agent technologies.

- ◆ Dr. S.T. Lee was elected as SPE Fellow in 2001 for his outstanding technical contributions for foams research in 2001. In addition, he was inducted into Sealed Air Corporation Inventor Hall of Fame in 2004 for exceeding the milestone of achieving 20 original US Patents.
- ◆ He recently won the Keynote Award at the Chinese Plastics Engineer in North America in 2015. He also won the President Award from the Palisades-New Jersey Section of SPE in 2015.
- ◆ Dr. S.T. Lee was instrumental in developing environmentally safe and technically sound blowing agents and blends for PE foam extrusion with multiple collaborators.
- ◆ He proposed foam enhanced de-volatilization technique to remove unreacted monomers and moisture from polymer to improve its quality in the vented extrusion process. He also proposed cavity based nucleation theory to describe the meta-stable gas-polymer state to correlate shear energy into polymeric foam nucleation mechanism.
- He had the vision to started Foam training/seminar for foam researchers and practitioners at Technomic foam seminar in 2000. Foam Tutorial was approved and adopted by SPE Foams Conference in the early 2000's.
- Since 2009, he has served as Principal Editor for Foam Update, which provides foam practitioners a monthly survey of latest foam literature and patents to promote foam knowledge and practice across the continents.
- Served as Co-Editor-in-Chief for Journal of Cellular Plastics since 2007, which is the leading scientific
 journal dedicated to foams.
- ◆ Edited the 1st edition of *Foam Extrusion*; *Principles and Practice* published by Technomic in 2000 which sales exceeded 1000 copies in three years. It became a best seller for Technomic in 2002. This book helped put the fragmented foam knowledge into a good cohesion. The 2nd edition of *Foam Extrusion* co-edited by Dr. Park was published in 2015. Served as Polymeric Foam series editor, six books have been published.

BOARD OF DIRECTORS LISTING

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HSM: Honored Service Member

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Gary Wilkes (2018)

Dart Container Corp. 517-244 2196 phone, 517-525-0755 mobile gary.wilkes@dart.biz BEST PAPER AWARD CHAIR

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Shu Kai Yeh (2019)

National Taipei University of Technology 02)2771-2171x2524 phone, (02)2731-7117 fax skyeh@mail.ntut.edu.tw

Changchun (Chad) Zeng (2017)

Florida State University 850-410-6273 phone 850-410-6342 fax zeng@eng.fsu.edu TPC 2016

COMMITTEE MEMBER: Ana Paula de Azeredo

Polymer Science Group, Braskem S.A.(Brazil) +55 51 3721-8111 ana.azeredo@braskem.com

FE: Fellow of the Society HI

HLM: Honorary Lifetime Member

2017 SPE THERMOPLASTIC MATERIALS & FOAMS (TPM&F) DIVISION SCHOLARSHIP



We are excited to announce this year's winner of the 2017 SPE Thermoplastic Materials and Foams (TPM&F) Division Scholarship is Haley Palys. Haley was selected from an exceptionally talented pool of applicants due to her outstanding academic achievements and leadership. Haley was born and raised in Northern Virginia and has spent most of her life in Stafford, VA until she left for college. She is currently a senior at Penn State majoring in Plastics Engineering Technology.

Congratulation Haley!

OUR DIVISION REPRESENTATION AT ANTEC 2017

The SPE Thermoplastics, Materials and Foams Division hosted 2 sessions at ANTEC®2017 spanning 2 days (May 8-9, 2017). Ten speakers presented their insightful work that was well received by our audience.

The sessions were under the categories of FOAM APPLICATIONS (moderated by Chul Park) and NEW FOAMING MATERIALS AND FOAMS (moderated by Miguel Rodríguez-Pérez)

MONDAY

MORNING	SESSION	May 8, 2017
Moderator:	Vipin Kumar	•
8:00 AM	CELL NUCLEATION IN HIGH-PRESSURE FOAM INJECTION MOLDING R. Chu, University of Toronto	
8:30	FOAM INJECTION-MOLDING PROCESS DESIGNED TO PRODUCE SUB-MIC S. Costeux, Dow Chemical Company	CRON CELLS
9:00	MICRO-GRAPHITE ENHANCED EXTRUSION FOAMING OF PET RESIN L.J. Lee, Ohio State University	
9:30	SIMULATION OF CELL GROWTH IN HIGH-PRESSURE FOAM INJECTION M C.Wang, University of Toronto	IOLDING
10:00	INFLUENCES OF MOLECULAR STRUCTURE ON THE RHEOLOGICAL PROAND FOAMABILITY OF MODIFIED POLYPROPYLENE C. Zeng, Florida State University	PERTIES
10:30	DEVELOPMENT OF HIGH THERMAL INSUATION POLYPROPYLENE FOAM INJECTION MOLDING WITH MOLD OPENING C. Park, University of Toronto	IS BLOWN IN

AFTERNOON SESSION Moderator: Chul Park

2:00 PM	CELLULAR POLYMERS FOR OIL/WATER MIXTURES SEPARATION –
	EVALUATION OF PROCESS CONDITIONS
	P. Cherukupally, University of Toronto
2:30	DIELECTRIC PERMITTIVITY OF THERMOPLASTIC POLYURETHANE/PZT
	COMPOSITE FOAMS
	A. Ameli, Washington State University
3:00	A NEW GAS DIFFUSIVITY MEASUREMENT TECHNIQUE FOR CO2 INFUSED POLYMER
	SYSTEM DURING GAS DESORPTION
	V. Kumar, University of Washington
4:00	MICRO ORGANIC POLLUTANTS REMOVAL USING A FOAM FILTER THROUGH
	RATIONALLY SELECTED HYDROPHILIC MEDIA
	P. Cherukupally, University of Toronto

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TUESDAY

	G SESSION : Xiaoxi Wang
8:00 AM	LOW DENSITY OPEN CELL FLEXIBLE FOAMS WITH HIGH TORTUOSITIES AND MECHANICAL PROPERTIES HIGHLY DEPENDENT ON THE STRAIN RATE
8:30	M.Á. Rodríguez-Pérez, University of Valladolid CRYSTALLIZATION STUDIES OF POLY (LACTIC ACID) DURING EXTRUSION FOAMING
	A. Tabatabaei, University of Toronto
9:00	LOW DENSITY HMS POLYPROPYLENE FOAM: CONTROLLING FOAM DENSITY AND CELL MORPHOLOGY
	S. M. Krupinski, Braskem NA
9:30	CELL NUCLEATION IN HIGH-PRESSURE FOAM INJECTION MOLDING OF SEMI-
	CRYSTALLINE POLYMERS
	V. Shaayegan (Speaker: C. Wang), University of Toronto
10:00	IN-SITU VISUALIZATION AND CELL GROWTH MODELING IN A POLYMERIC FOAMING
10.20	PROCESS
	P. Lee, University of Vermont NEW DEVELOPMENTS IN HIGH ENERGY ELECTRON BEAM INDUCED LONG CHAIN
10:30	BRANCHED POLYOLEFINS FOR LOW DENSITY, NON-CROSSLINKED FOAMS
	E. Phillips, E-Beam Services, Inc.
11:00	CELLULAR STRUCTURES FROM ANISOTROPIC SEMI-CRYSTALLINE POLYMER
	TEMPLATES
	A. Lesser, University of Massachusetts Amherst,
	M. Erp, Eindhoven University of Technology Netherlands
AFTERNO	OON SESSION
Moderator	: Miguel Rodríguez-Pérez
2:00 PM	FOAMING BEHAVIOR OF THE MULTI-LAYERED PS/PA6 BLEND AND ITS ANISOTROPIC
	MECHANICAL PROPERTIES
	L.F. Feng, Zhejiang University
2:30	ENVIRONMENTALLY BENIGN PROCESSING OF POLY(2,6-DIMETHYL-1,4-PHENYLENE
	OXIDE) (PPO) WITH SUPERHEATED LIQUIDS A. Lesser, University of Massachusetts Amherst
3:00	EFFECT OF MULTI-WALLED CARBON NANOTUBES ON POLY(E-CAPROLACTONE)
	FOAMING BEHAVIOR
	T. Kuang and X. Peng, Southern China University of Technology
3:30	WIDE-RANGE OF MICROCELLULAR BEAD FOAMS FROM DIFFERENT PLA-BASED

4

MICROCELLULAR FOAMING BEHAVIOR OF BIODEGRADABLE POLY (3-HYDRO-

XYBUTYRATE-CO-3-HYDROXYVALERATE)/POLYLACTIC ACID COMPOSITES

T. Kuang and X. Peng, Southern China University of Technology

DROP/SEA BLEND MORPHOLOGIES M. Nofar, Istanbul Technical University

4:00



THERMOPLASTIC MATERIALS AND FOAMS DIVISION BEST PAPER WINNER ANTEC® 2017

ELECTRIC PERMITIVITY OF THERMOPLASTIC POLYURETHANE/PZT COMPOSITE FOAMS

Gayaneh Petrossian – Presenter, Amir Ameli

Advanced Composites Laboratory, School of Mechanical and Materials Engineering, Washington State University Tri-Cities, WA

ABSTRACT

The in-situ fibrillation of polyethylene terephthalate (PET) in a polypropylene (PP) matrix during conventional fiber spinning of PP/PET (95/5 wt%), enhances the strainhardening behavior in extensional flows of the PP matrix. Furthermore, fibrillated-PET domains increase the tensile strength of PP. Foam extrusion of the microfibrillar composite reveals a two orders of magnitude increase in cell density and a five-fold increase in expansion ratio compared to neat PP. Using fiber spinning of polymer blends to generate microfibrillar composites is technologically promising to improve foaming ability of the matrix polymer.





COMMUNICATION REPORT – THERESA HEALY



TPM&F WEBSITE
AND THE CHAIN
The last BOD
meeting (Houston
2/27/17) minutes
were distributed via
email and posted on

The Chain.

The website is current and we will start promoting the FOAMS® 2017 Conference. Travel award winners have been posted as well as the TPM&F scholarship winners and runner ups. Theresa has updated two slides for the promotion of Education awards at the ANTEC®. Both the Communication Excellence Award and Pinnacle Award will be posted on our website. Any additional updates, pictures, ideas, please send to thealy@reedvintl.com.

Linked in .

LINKED-IN TPM&F SITE

The TPM&F site on Linked-In has been updated and

checked weekly for new members. We have announced the FOAMS® 2017 Conference on this site. Continue to spread the words so that there will be good attendance in Germany. Theresa will repost a promotion discussion around June 2017.



15th International Conference on Advances in Foam Materials & Technology

CONFERENCE, TUTORIAL & EXHIBITION OCTOBER 9-12 - BAYREUTH, GERMANY

Conference Chair: Prof. Dr.-Ing Volker Altstädt

TUTORIAL - MONDAY, 9 OCTOBER

8:00 am: Registration Starts

9:00 am - 1:00 pm: Prof. Chul Park - Foaming Technology

Lunch

2:00 - 6:00 pm: Prof. Hani Naguib - Sustainable and Multifunctional Foams

TUTORIAL - TUESDAY, 10 OCTOBER

9:00 am - 1:00 pm: Dr. Stéphane Costeux - Nanocellular Foams

Lunch

2:00 - 5:30 pm: Plant Tour: Neue Materialien Bayreuth GmbH,* afterwards visit of brewery with beer tasting

CONFERENCE

Wednesday & Thursday | 11-12 October

Presentations, Poster Session and Exhibition

Sponsored by SPE TPM&F Division













^{*}NMB and brewery tour is also open for non-tutorial participants; therefore please select NMB tour as option during the registration or email us: info.foams2017@uni-bayreuth.de

WEDNESDAY | 11 OCTOBER

7:30 am: Registration Starts

8:00 am: Welcome Address/Announcements: Professor Volker Altstädt

8:10 am: Plenary Speech: Dr. Roland Hingmann (BASF SE)

Thermoplastic Foams: An Exciting Story of Versatile Cellular

Materials for Multifaceted Applications and Markets

Session 1 8:55 - 10:10am

Mahdi Abbasi, Karlsruhe Institute of Technology Foaming and Rheology of Model Linear, Comb and Bottlebrush Polystyrenes

Svenja Göttermann, University of Stuttgart Modification, Preparation and Characterization of Polylactide Foams

Wei-Hsiang Liu, National Taiwan University of Science and Technology

Preparation of Microcellular Polyamide 6 Foam by Batch Foaming

Session 2 10:40 am - 12:20 pm

Merve Demir, University of Bayreuth

Effect of Supramolecular Nucleating Agents on the Morphology and Properties of Semi-crystalline Polymer Foams

Anna Uray, University of Loeben

Modified Talcum as a Novel Nucleating Agent

Yuxiao Zhang, RWTH Aachen

Investigation of the Effect of the Nucleation Process on the Foam Structure in Foam Injection Molding

TBD

12:20 - 1:50 pm Lunch Break

Session 3 1:50 - 3:30 pm

TBD

Ernesto Di Maio, University of Naples

Thermoplastic Foaming by Using CNT and Microwaves

Daniele Tammaro, Sulzer

Continuous Production of PET Foams with a Novel, Economic and Stable Process

Masahiro Oshima, University of Kyoto

A Simplified Foam Injection Molding Process for Producing Microcellular Plastic Foams

Session 4 4:00 - 5:40 pm

Norbert Reichelt, Borealis

Sustainable and Versatile Lightweight Foam Made from Daploy™.

Michael Hartung, University of Kassel

Injection Molding of Liquid Silicone Rubber Foams

Julia Gensel, Neue Materialien Bayreuth GmbH

Fusion in EPP Bead Foams: Influence of Processing and Functional Additives

Jean-Francois Koenig, DOW

Novel Thermal Insulating Styrenic Polymer Foam for Refrigerated Trucks

Poster Session: 6:00 - 7:00 pm Conference Dinner: 8:00 pm

THURSDAY | 12 OCTOBER

8:15 am: Plenary Speech: Dr. Chris Holmes (Adidas AG) *Polymer Foams for Advanced Sports Applications*

Session 5 9:00 - 10:15am

Jochen Manara, ZAE Bayern

Experimental Characterization and Theoretical Modeling of the Infrared-Optical Properties and the Radiative Thermal Conductivity of Foams

TBD

Sean Teller, Veryst Engineering

Volumetric Testing of Polymer Foams for Finite Element Modeling

Session 6 10:45 am - 12:25 pm

Harald Heitkamp, Trexel

Gas Migration on Physical Foamed Parts and the Influence on Subsequent Processes

Josef Jančář, Brno University of Technology

Structurally Gradient Impact Resistant ICPC Nano-composite Foams for Automotive Applications

Patricia Parlevliet, Airbus

Foam Core Based Thermoplastic Composite Sandwich Materials for Structural Aerospace Applications

TBD

12:25 - 2:20 pm Lunch Break + Award Show

Session 7 2:20 - 4:00 pm

Shahriar Ghaffari, University of Toronto

Development and Characterization of Multifunctional Super-Insulated Organic Aerogels Nano Foams with Enhanced Mechanical Elasticity

Martin Günther, BAM

Fire Phenomena of Rigid Polyurethane Foams

Luigi Sorrentino, Istituto per i Polimeri, Compositi e Biomateriali

Composite Foams with Anisotropic Structural and Fuctional Properties

Session 8 4:20 - 6:00 pm

Vahid Shaayegan, University of Toronto

Controlling the Mold Cavity Pressure to Govern Foaming Phenomena in Foam Injection Molding

Judith-Martin de Leon, University of Valladolid Semi-Transparent Nanocellular Polymers Based on PMMA: Production and Characterization

Heinz Gross,

Dr. Gross Kunststoff-Verfahrenstechnik

Laser Melting Technologies Open Up New Possibilities to Improve the Distribution of Blowing Agents in Extrusion Dies

Reza Nofar, Istanbul Technical University

Continuous Foam Extrusion of Polystyrene (PS) Blends and Composites

Closing Ceremony: 6:00 pm

TUTORIAL

The tutorial is addressed to people from scientific institutes as well as from companies involved in thermoplastic foam development, production and application. It will provide practical information that will help enhance the attendees' technical capability in foaming. A guided tour to the facilities of Neue Materialien Bayreuth GmbH will further give an overview about foaming technologies.

CONFERENCE

The conference is addressed to industry and academia. For 2 days, world-renowned speakers present technical papers on innovations in foam processing, nano-cellular foam technology, environmentally friendly foams and more.

For further information and rates, please visit: **4spe.org/foams2017**

CONFERENCE COMMITTEE

General Conference: Prof. Volker Altstädt, University of Bayreuth
Technical Program: Prof. Ernesto Di Maio, University of Napoli
Tutorial Program: Prof. Chul B. Park, University of Toronto
Sponsorship Chair: Michaela Mörl, University of Bayreuth

Sportsorship Chair. Wichaela Wort, Offiversity of Dayreuth

Student Poster: Prof. Hans-Werner Schmidt, University of Bayreuth

Hotel Information: Milena Spörl, University of Bayreuth

NMB Tour: Dr. Thomas Neumeyer, Neue Materialien Bayreuth GmbH

Student Scholarship: Kimberly McLoughlin, Braskem

Contact: info.foams2017@uni-bayreuth.de





HIGHLIGHTS FOR TPM&F BOARD MEETING

Meeting Date: May 7, 2017, 8:00pm Central Time

ATTENDANCE

Attending the BOD meeting in person: Dale Grove, Stéphane Costeux, Miguel Perez, Vipin Kumar, Shu-Kai Yeh, Xiaoxi Wang, Perry Vadhar, Donna Davis, and Gary Wilkes

Attendence via on-line: Ashu Sharma, Anson Wong, Kim McLoughlin, Sal Monte, and Max Wingert

CHAIR REPORT — DALE GROVE/ XIAOXI WANG

Dale announced TPM&F Division received two awards: Communication Excellence and Pinnacle Gold. Dale Grove's term expires and Xiaoxi Wang assumes the position of Chairman starting this BOD meeting. Vipin and other board members thanked Dale for his leadership for past two years. Dale mentioned there is a key officer position still open. This is for Chair-Elect. This position should be filled in the event the current Chair decides to leave the board.

Incoming Chair Xiaoxi recommended using a central repository, to keep all the information central, hence it is easier to do paperwork for tax purposes and for award applications.

BOARD MEMBER UPDATE

Vipin Kumar will retire from the board after ANTEC* 2017. He joined the board in 1990. His special effort was on microcellular foam. During that time he created a community around it. Vipin has served in various positions including as a Chair 2001-2003.

He looks forward meeting with friends at the future events. He plans to work with Stephane with Foams conferences and provide support with organizing in India or Seattle.

FOAMS® 2017 REPORT — CHUL PARK/STÉPHANE COSTEUX

FOAMS® 2017 will be held in Germany. There will be a tutorial and a tour during the conference. We would like to limit to max 30 papers, although we have close to 55 papers. Breakeven number for participants should be 80. Max suggested holding a regular update meeting for FOAMS® 2017 with the core team.

POLYOLEFINS CONFERENCE 2017 REPORT — DONNA DAVIS

Donna gave an up update on PO 2017. There were 700 registered for the conference. The division's net was \$8000. There were 13 sessions plus tutorials. New Global Regulatory session was very popular. Exhibits were also sold out.

Next year, PO 2018 conference is from Feb. 25-28. Ana Azeredo will be contacted for PO 2018. TPM&F Division has signed an agreement for two sessions. We will share profit based on the number of sessions.

INTERNATIONAL ACTIVITY — HANI NAGUIB

Sal Monte has been issued a European Patent granted on April 12, 2017. The title of the patent is: Construction Materials and Compositions from Oil-Containing Filler. Miguel Perez, Shu-Kai Yeh, Chul Park, and Stéphane Costeaux all participated in the Polyfoam Conference in Mainz, Germany. Miguel presented a paper there titled: "Production and Properties of Low Density Nanocellular PMMA with Controlled Density and Cellular Structure." Chul Park has been attending and presenting at several conference including Asia-Australasia Conference, Chengdu, China, Engineering of Polymers, Shanghai, China, Polymer Foam, Cologne, Germany, 2016 Polymer Materials and Engineering Symposium, Qingdao, China, Poly-Foam 2017, Mainz, Germany. Shu-Kai Yeh participated in the following activities: Polyfoam 2016, Shanghai, China, Polyfoam 2017 Frankfurt, and Symposium Organizer for the upcoming Polymer Foams, Annual Conference of Polymer Processing Society which will be held in Taipei, Taiwan in 2018.

BEST PAPER CHAIR REPORT — GARY WILKES

Five finalists identified from 24 papers. Max has sent out a check to the person who received the best paper award. The person has still not cashed it. His address is in Portland Oregon.

EDUCATIONAL CHAIR REPORT — KIM MCLOUGHLIN

Plastipak provides plastics hands-on education experiences to high school students. It also promotes community awareness of benefits of plastics. Now under new leadership (Eve Vitale) and expanded financial support (Braskem.). EC recommends funding at the same level as last year (one day of support.) *continued on next page*

HIGHLIGHTS FOR TPM&F BOARD MEETING (CONTINUED FROM PAGE 9)

MICHAEL REEDY SCHOLARSHIP:

Solicitation of applications to coincide with SPE FOAMS® (Bayreuth) Call for Papers. Two scholarships (each \$500) are available. To be announced & presented at the SPE FOAMS conference.

TRAVEL AWARD UPDATE:

Travel scholarship is given for any conference. Some discussion to reach out to undergraduate students in good polymer curriculum. We had actually budgeted for four so it appears we have two more left. Kim to discuss with Max a budget for Education for 2017. We have done a good job with high school, and graduate students and next focus is for undergraduate,

CHATTERJEE AWARD:

Students and professors were invited to the podium and recognized by the Division Chair at BOD Business Meeting. Souvenir bottles with student activities logo will be presented to student scholarship winners and their professors.

TREASURER'S REPORT — MAX WINGERT

Preliminary planning is done for the next year. However, we did not approve budget for next year yet. Overall positive cash flow. SPE rebate was higher. We are under spending budget. During NPE year, expenses were \$3500 of which \$1700 was for the reception. Peacock Graphics bill may be coming.

There is an audit report and posted on the Chain.

Foundation expenses were higher in 2016; SPE had to return one of the donations of \$100K.

Higher return on SPE's investment in 2016. Cash at \$229K; it is always high at end of April but then it reduces as all the payments are done following ANTEC*. ANTEC* revenue continues to decline but SPE makes up with other events.

This year CEO search added extraordinary expenses for this year.

Renewed contract with Wiley after getting competitive bids from other two companies.

The great news is Wiley has offered signing bonus of \$1.5 million to SPE

COMMUNICATION AND SECRETARTY REPORT — THERESA HEALY See page 4.

COUNCILOR REPORT—PERRY VADHAR

SPE has appointed Pat Farrey as its new CEO. He will succeed Wim DeVos, who will be stepping down in June. Patrick Farrey comes to SPE after a 23-year career in the publication and association management sector.

PLASTICS RACE:

It will be held again this year. This gives good opportunity to interact with students and young professionals. Pinnacle Award Task Force Brian Landes and his team are drafting requirements to award Pinnacle Award. This is to recognize impact and member value proposition. Awards are for Outreach, Education, Communication, Programming and Students Activities/NG. The task force is finalizing standard and metrics, a form of award and presentation method and venues.

ELECTRONIC ELECTION PROCESS:

Some Councilors not in favor of the process as there is no face to face meeting with a candidate.

The electronic system allows recruiting candidates from other regions. If we plan face to face meeting, then SPE will have to pay for non-Councilors to attend this meeting.

The electronic election process was voted in favor.

Russell Broome explained why discount given to Board members was stopped for ANTEC* registration.

Councilors voted to continue to offer a discount to board members. This will be evaluated again by Executive Board.

Two nominations for Election of CCOW Chair. Babli Kapur was elected as a new Chair.

Please note E-Members email addresses are available from SPE.

ANTEC* student activities donation reached to \$52,800 this year with aggressive marketing. This is a record. Past donation has been between \$32K to \$40K.

ADJOURN. Meeting was adjourned at 7:00pm. Motion by Sal Monte.