# HE SPECIALIST

# **2013 MEGATECH**

### **TUESDAY NOVEMBER 12, 2013**

9:30 am - 3:30 pm (9:00 am Registration)

#### **PRE-REGISTRATION STRONGLY ENCOURAGED** Hennepin Technical College

9000 BROOKLYN BLVD, BROOKLYN PARK, MN 55445-2320

www.hennepintech.edu • 1-800-345-4655

# ADVANCING PRODUCT COMMERCIALIZATIONS

### **OVERVIEW**

> Product Development Materials

Things to think about when working with an external design firm

Things to think about when designing internally

#### Materials

- How to select & commonly used materials and why?
  - Trends, additives and "greener" material

#### Other Topics

Manufacturing Methods
Trends in Manufacturing (Technologies & Reshoring)
Panel Discussion (Problem Solving and Sourcing)

#### REGISTRATION

Advance Reservation by November 8<sup>th</sup>: **SPE Members**: \$100 **Non-Members**: \$125.00

All Registration after Nov 8<sup>th</sup>: \$150.00 Student with ID: \$20.00

4 or more from same company (must register together): \$100 SORRY – NO REFUNDS!

Snacks, Lunch and Conference are included in costing. **Register at <u>www.uppermidwestspe.org</u>** 

For more information contact or questions: Dan Mishek (danny@vistatek.com)



www.VistaTek.com | 651-653-0400 | parts@vistatek.com 1850 Greeley St S, Stillwater, MN 55082 (NEW LOCATION)

Page

..Page 2

5

The Polymer Lab

VistaTek.....

# **President's Remarks**

#### Dan Mishek

As another year wraps ups and kid's activities are in full bloom, I wonder how did we make it through another year? How did we manage to fit anything into our busy schedules? What else can we fit in or where can we fit it in? If you look around, we have enormous distractions with little focus on balance. We are focused on the daily grind, taxiing kids around, office meetings, sad stories in the news, the government shutting down, elections, etc.

I, personally, have been through a lot over the last 12 months. Selling a division, moving into 4-times more space, adding 8 pieces of capital equipment, adding 7 new employees, coaching my son's baseball team, helping with my three daughters and their piano, guitar and play dress-up routine, putting solar panels on my roof, getting to an 8 handicap, working with the U of M Medical Device Center, plan a golf tournament for church, join the local city chamber, etc. This paragraph sounds ridiculous!

My point is that we are all busy. My challenge to you is to take a deep breath and admit that this is life as we know it. It will not slow down and the days will not get longer. We need to find balance. Balance your work, family, faith and fun. The more balance you find, the more fun you will have. I have recently been blessed to be in certain meetings because of my networking through the local SPE Chapter. If I did not make time for SPE, my work may have suffered. The opportunities that are out there waiting to be had are for the balanced people. Include a friend, spouse or co-worker and join SPE in our activities. Create your own opportunities with the knowledge that you gain from the local level to the national level. Leap and the net will appear - Zen saying.

# **Councilor's Corner**

Paul Rothweiler

Councilor - Upper Midwest Section

We are gearing up for another Councilor's meeting on November 16, 2013. If there are issues you would like addressed, please contact me. In the meantime I'd like to remind you of the upcoming activities and tools we've built to support communications between members.

Make sure to have the following events on your calendar. Materials Characterization Workshop on October 29<sup>th</sup> hosted by Aspen Research. The Annual banquet and awards ceremony in January. And the Medical Plastics Minitech the week of March 24<sup>th</sup> hosted at Hennepin Technical College. The Medical Plastic MiniTech is a joint-program with the Medical Plastics Division of SPE and will have a good representation of all the stakeholders in the medical industry, including attendees from all over the nation. It's a "must attend" event. Finally, I know you have ANTEC on your calendars already. See you in Las Vegas!

Many of you communicate very effectively with us by e-mail. I'd also like to point out there are a number of other online tools you can use to communicate with us. Look for Upper Midwest Section SPE in Facebook, Twitter and Linked In. Join the conversation online. Or visit the Section's website at uppermidwestspe.org.

In closing we'd encourage you to share with your colleagues the reasons why you are a member of SPE. We'd appreciate a few more good people like you in SPE. A special shout-out to the University of St. Thomas class ETLS 771 led by Dr. Genevieve Gagnon. We look forward to welcoming your class as a student chapter of SPE.





# Spotlight on the Board Michael Arney

Michael Arnev is a Minnesota native. He earned his BS in Chemical Engineering and PhD in Aerospace Engineering from the University of Minnesota, where he studied polymeric and rheological fluid mechanics. He then went on to be a post-Doctoral research assistant for Elf Atochem, Normandy, France, where he investigated multilayer coextrusion instabilities. He was a Principal Engineer at Aspen Research for five years before joining Boston Scientific, where he is currently a Research Fellow. His areas of expertise include polymer analysis, Finite Element Analysis, and polymer processing, including extrusion, injection molding, and ultrasonic welding. Michael joined SPE in 1997 and has been a member of the Medical Plastics Special Interest Group.

# Scholarship Committee

#### Thomas McNamara & Paul Rothweiler

The academic year is off to a great start and we are excited to start receiving applications for our three scholarships. Award levels are the same as 2013 at \$400 for the Tony Norris Award, \$500 for the Jerome Formo Award, and \$1,000 for the Founder's Award. We encourage everyone to direct students with an interest in plastics to visit the website at 'uppermidwestspe.org/edu.htm.' Hyperlinks to the current forms and instructions are located there.

A quick reminder to those in industry. There are a number of ways you can support our student members. They range from providing internship and mentorship opportunities, to hiring their schools for projects, where the school can use the money to offset costs associated with attending ANTEC. If you need help getting connected to a student chapter, please feel free to contact us.

WELCOME TO OUR NEW MEMBERS - Mahin Shahlari, Membership Chair

Affiliation

We are pleased to welcome our newest members of the Upper Midwest Section. As of October 16th, our section has 399 active members! Tell your friends and co-workers about the SPE Upper Midwest Section to help us grow and extend our servece to them.

#### New Member Affiliation

Scott Voisin		
Mike GorzekAir Logic Power Systems		
Pierce Hanson		
Matthew H. LundbladWinona State		
Sheridan SparrowLINDAR Corp		
David BogenhagenAirworthy Aerospace		
Rick BurntonAspen Research		
David ChouProphotosynthetics		
Mark SchweitzerAirworthy Aerospace		
Jake StephanyWilbert Plastic Services		
Ajay KathuriaMichigan State University		
Evan W. CollinsWinona State University		
Nicholas D. HelbergWinona State University		
Benjamin D. Adams Hennepin Technical College		
Rayshawn L. BentleyHennepin Technical College		
Robert L. CassellHennepin Technical College		
Alex B. CharltonHennepin Technical College		
Colin A. CookHennepin Technical College		

# 

**New Member** 

Jason H. Ernst......Hennepin Technical College John T. Francis ......Hennepin Technical College Himie Freeman ......Hennepin Technical College Sylvester R. Gayekpar..Hennepin Technical College Joseph R. Hansen ...... Hennepin Technical College Mohamud O. Hersi ......Hennepin Technical College Charles H. Hutchinson....Gotta Go Gotta Throw Inc. Abdi Isak.....Hennepin Technical College Grams Kolleh ...... Hennepin Technical College Thomas S. Lipe .....Hennepin Technical College Saosamprathna Oudom .Hennepin Technical College David Solomon ......Hennepin Technical College Nicholas D. Stocker......Hennepin Technical College Mary L. Sundeen ......Hennepin Technical College Chester Weah......Hennepin Technical College Kongpheng Yang ......Hennepin Technical College Doug Culbertson .....Premold Corporation

#### New Member Affiliation

New Member	Annation
Jacob Young	3M
Daniel Men	Gopher Sport
Diana B. White	Pine Technical College
Tyler V. Young	Plastic Products Co., Inc.
QingHui Yuan	Eaton
Gordon EbySp	ray Control Systems/Minimizer
Steve Turch	3M
Jay Jennen	3M
Adam Bossert	Raven Industries, Inc.
Ross Jackson	

# Annual Golf Outing 2013















and rheological testing of polymer raw materials through finished plastic parts.

#### Our laboratory has plastic testing capability for:

- Material Identification
- Contamination Identification
- Degradation Analysis
- Crystallinity Verification
- Reverse Engineering
- Product Failure Analysis
- Process Validation
- Ongoing Quality Assurance
- Moisture Analysis

#### The Polymer Lab's material analysis procedures include:

- Thermogravimetric Analysis-TGA
- Microstructural Analysis-MSA
- Differential Scanning Calorimetry-DSC
- Fourier Transform Infrared Spectrometry-FTIR
- · Ash content-Burn-off Testing
- Melt Flow Rate-MI/MFR
- Relative Viscosity-RV
- · Capillary Rheometry
- Karl Fischer Titration-KFT

VISA MasterCard 866-864-4902 Toll Free ISO/TS 16949 Certified www.thepolymerlab.com

1302 South 5th Street Hopkins, MN 55343 info@thepolymerlab.com

SOCIETY OF PLASTICS ENGINEERS MEMBERSHIP APPLICATION 13 Church Hill Road, Newtown, CT. 06470 USA European Member Bureau Tel: +1 203-775-0471 Fax: +1 203-775-8490 Tel: +44 7500 829007 membership@4spe.org www.4spe.org speeurope@4spe.org www.speeurope.org Applicant Information: (please print) My Primary Address is home\_\_\_\_\_ or business\_\_\_\_\_ (check one) Name Phone Number \_\_\_ Home\_\_\_ Work\_\_\_\_ Cell\_\_\_ Last First MI Organization Name\_\_\_ Job Title Address\_ Email(Required Field)\_ Address Address \_ Alternate Email State\_ Date of Birth Graduation Date\* City Gender: Male Zip/Postal Code Country Female \*Required for Student Membership Membership Types (please check one) Student \$31 Young Professional \$99 Professional \$144(includes \$15 new member initiation fee) Choose up to 2 Member Groups on the back of this application. Professional +2 Additional Member Groups \$164 Choose up to 4 Additional Member Groups on the back of this application. Professional +4 Additional Member Groups \$184 Choose up to 6 Additional Member Groups on the back of this application. Payment Information: PAYMENT MUST ACCOMPANY APPLICATION-NO PURCHASE ORDERS ACCEPTED Check Number Cash Amount Credit Card Information (Check One) Visa American Express MasterCard Credit Card Number\_ Exp. Date\_ Security Code\_ Name On Credit Card Amount By signing below I agree to be governed by the Bylaws of the Society and to promote the objectives of the Society. I certify that the statements made in the application are correct and I authorize SPE and its affiliates to use my phone, fax, address and email to contact me. Signature\_ Date ID# Recommended by\_ The SPE Online Membership Directory is included with membership. Your information will be automatically included. Exclude my email from the Online Membership Directory. Exclude all my information from the Online Membership Directory. Exclude my address from 3rd party mailings. Dues include a 1year subscription to Plastics Engineering magazine-\$38.00 value (non-deductible). SPE membership is valid for twelve months from the date your membership is processed.

#### OPEN Invitation to all Upper Midwest Section Schools/Colleges to JOIN the Society of Plastics Engineers (SPE)

Top 10 reasons to join the SPE

Student Members of SPE have all the privileges of SPE membership afforded to other member grades, including:

- Reduced SPE membership dues ONLY \$31.00 per year
- Plastics Engineering magazine every month
- Reduced registration for all educational seminars; Reduced registration at ANTEC and other technical conferences
- · Discounts on over 100 important publications
- Insurance programs
- 3 free "position wanted" ads in *Plastics Engineering;* Access to *Career Solutions*, SPE's Online Plastics Employment Network
- Scholarships offered through the SPE Foundation, SPE Sections and Divisions; Cash Awards for Best Paper/Poster at many SPE-sponsored Conferences.
- FREE membership to your local SPE Section; FREE Division affiliation
- Section dinner meetings; technical programs and even Special Events.
- Professional contacts
  - ... and much more!!!

## Upper Midwest Section (S22) Membership

October 2013

Section Total ..... 399

### WHO CAN HELP YOU

SOCIETY OF PLASTICS ENGINEERS, INC. PO BOX 0403, BROOKFIELD, CT 06804-0403 PHONE: 203-775-0471 • FAX: 203-775-8490 \_\_\_\_\_\_ WEB: www.4spe.org

Office Hours: 9:00 a.m. - 5:00 p.m (Eastern Time)

Gail Bristol	ACADEMIC OUTREACH 203.740.5447	grbristol@4spe.org
Sarah Sullinger	ANNUAL AWARDS 203.740.5422	ssullinger@4spe.org
ANTEC BOOTH	SALES/CONFERENCE M	ANAGEMENT
Lauren McCarthy	203.740.5472 ITEC PAPER SUBMISSION	Imccarthy@4spe.org
Barbara Spain	203.740.5418 BOOK ORDERS	bspain@4spe.org
Bonnie Kaczowski	203.740.5428 CHANGE OF ADDRESS	bakaczowski@4spe.org
Customer Relations	203.775-0471	membership@4spe.org
Sarah Sullinger	203.740.5422	ssullinger@4spe.org
Lauren McCarthy	NFERENCE REGISTRATIO 203.740.5472	Imccarthy@4spe.org
CO Lauren McCarthy	NFERENCE SPONSORSHI 203.740.5472	P Imccarthy@4spe.org
CORP Gail Bristol	203.740.5447	grbristol@4spe.org
Gail Bristol	203.740.5447	grbristol@4spe.org
D Customer Relations	UES/BILLING/PAYMENTS 203.775-0471	membership@4spe.org
EM 888-491-8333 ext. 1063	IPLOYMENT ADVERTISING customerservice+64639@sup	
FELLOW & I Sarah Sullinger	HONORED SERVICE NOM 203.740.5422	INATIONS ssullinger@4spe.org
Sarah Sullinger	GOVERNANCE LIAISON 203.740.5422	ssullinger@4spe.org
MARKE Tom Conklin	TING/MEMBERSHIP DIRE 203.740.5453	CTOR tconklin@4spe.org
	203.775-0471	STIONS
MEMBE	RSHIP PROGRAMS/RETE	
Sue Wojnicki	203.740.5420 PINNACLE AWARD	swojnicki@4spe.org
Sarah Sullinger PLASTICS EN	203.740.5422 GINEERING MAGAZINE AI	ssullinger@4spe.org
Joseph Tomaszewski	908-514-0776 DIVISION INVESTMENT P	
Dawn Roman-Weide	203.740.5414	dromanweide@4spe.org
Sarah Sullinger	ONS & SPECIAL INTERES 203.740.5422	ssullinger@4spe.org
SEMINAR Lauren McCarthy	PROGRAM & IN-PLANT T 203.740.5472	RAINING Imccarthy@4spe.org
S Lauren McCarthy	203.740.5472	Imccarthy@4spe.org
Tom Conklin	SOCIAL NETWORKING 203.740.5453	tconklin@4spe.org
SPE FOUNE Gail Bristol	203.740.5447	grbristol@4spe.org
SPE I	NDUSTRY RESOURCE GU 800-816-6710	
Sue Wojnicki	<b>STUDENT CHAPTERS</b> 203.740.5420	swojnicki@4spe.org
Lauren McCarthy	AL CONFERENCE PLANN 203.740.5472	IING Imccarthy@4spe.org
,	L CONFERENCE REGISTR 203.740.5472	, , , ,
WE Barbara Spain	BINARS (Non Registration 203.740.5418	n) bspain@4spe.org
	EBINARS REGISTRATION 203.740.5428	1 1 0
	EBSITE ADMINISTRATION 203.740.5438	
	RIAL MATERIAL FOR PLA	1 1 0
	NS REGARDING SPE JOU 203-740-5429	
	200-140-0429	ujuomon@4spe.org

# Newsletter

#### Upper Midwest Section Board of Directors 2012 - 2013

www.4spe.org

#### PRESIDENT Dan Mishek

Dan Mishek Vista Technologies 380 Oak Grove Pkwy, Suite 100 Vadnais Heights, MN 55127 651-653-0400 dan@vistatek.com

PAST PRESIDENT Richard C. Bopp NatureWorks LLC 15305 Minnetonka Blvd. Minnetonka, MN 55345 952-562-3314 952-562-3462 FAX richard\_c\_bopp@natureworksllc.com

ADVERTISING CHAIR Bill Priedeman 405 S. Willow Drive Long Lake, MN 55356 612-850-8987 bpriedeman@aol.com

Mary Grussing 7-SIGMA 4832 Winterset Drive Minnetonka, MN 55343 612/252-6242 W 952/933-8008 H 612/252-6292 FAX Office: mgrussing@7-sigma.com Home: mmgrussing@comcast.net INTL. COUNCILOR/ EDUCATION CO-CHAIR Paul Rothweiler Aspen Research Corp. 8401 Jefferson Highway Maple Grove, MN 55369 651-842-6100 651-842-6199 FAX paul.rothweiler@aspenresearch.com

TREASURER

SECTION AMBASSADOR AWARDS CO-CHAIR Dave Erickson 13502 Essex Court Eden Prairie, MN 55347 952/937-0960 952/829-5966 FAX SPECIAL EVENTS CHAIR Eric Swensied Harbor Plastics, Inc. 1470 County Road 90 Maple Plain, MN 55369 763-479-4776 FAX erics@harbor-plastics.com

MEMBERSHIP CHAIR Mahin Shahlari 4201 Woodland Road P.O. Box 69 Circle Pines, MN 55014 P: 913-544-9800 mshahlari@ntic.com NEWSLETTER/ ONLINE EDITOR Rolly Enderes ChemCeed, Corp. 2252 Olson Drive Chippewa Falls, WI 54729 715-726-2300 715-726-2314 FAX rolly@chemced.com www.chemceed.com SECRETARY

SECKETARY Shilpa Manjure Northern Technologies International Corp. 4201 Woodland Road

PO. Box 69 Circle Pines, MN 55014 763-225-6600 763-225-6645 FAX smanjure@ntic.com

#### EDUCATION CO-CHAIR Thomas McNamara

Thermotech 1202 S. Fifth Street Hopkins, MN 55343 952-933-9439 952-933-9499 FAX thomas.mcnamara@thermotech.com AWARDS CO-CHAIR LuVerne (Verne) Erickson Clariant Corporation 9101 International Parkway Minneapolis, MN 55428 763-971-6133 FAX verne.erickson@clariant.com

#### BOARD MEMBER

Eric Cybulski 3M BLDG 235-3F-08 P: 651-737-4584 ecybulski@mmm.com

BOARD MEMBER

Matt Havekost Advanced Technology Systems 255 Roselawn Ave E, Ste 45 St. Paul, MN 55117 Office: 651-489-6990 Cell: 952-484-7436 mhavekost@advtek.com

# CALENDAR OF EVENTS

MEGATECH	November 12, 2013
HOLIDAY EVENT	January, 2014
ANTEC	April 28 - 30, 2014



#### SOCIETY OF PLASTICS ENGINEERS

Upper Midwest Section Mahin Shahlari P.O. Box 69, Circle Pines, MN 55014

FORWARDING SERVICE REQUESTED

PRESORTED FIRST CLASS MAIL U.S. POSTAGE PAID MPLS., MN Permit No. 1024

#### FIRST CLASS - DATED MATERIAL