

SPE THE SPECIALIST

September
2009

Volume 37

Inside:

**Advertisers
Index**
Page 2

**Presidents
Remarks**
Page 3

**Membership
Corner and
Spotlight on
the Board**
Page 4

**Steinwall
Design Award**
Page 5

Golf Outing
Page 8

**Networking
Event**
Page 8

**MinniTek
Review**
Page 10

Society of Plastic Engineers Upper-Midwest Section

Invite You to a Very Special Event *Getting Physical with Physical Properties*


TUESDAY OCTOBER 6, 2009 • 9:00 AM - 3:00 PM

1700 Buerkle Road, White Bear Lake, MN 55110

REGISTRATION ON PAGE 11

Ever wonder how the data on a specification sheet was created and what it means? Is there an easier way to measure a particular physical property? This is your chance to answer those questions and more by attending our MegaTech presentation on physical properties. **Pre-Registration is required.**

MEGATECH AGENDA

9:00 am	Introduction
9:15 am	First Principles of Thermal Analysis
9:45 am	First Principles of Mechanical Testing
10:15 am	First Principles of Moisture
10:30 am	First Principles of Rheology
11:00 am	Hands-On Workshops in the Lab #1 Mechanical Testing Rheology Measurement Thermal Analysis Moisture Analysis
12:00 pm	Enjoy a box lunch with your colleagues
1:00 pm	Hands-On Workshops in the Lab #2
1:30 pm	Hands-On Workshops in the Lab #3
2:00 pm	Hands-On Workshops in the Lab #4
2:30 pm	Importance of Physical Property Measurements to the Andersen  - Special Guest Mike Deaner
3:00 pm	Closing Remarks

Tours of Aspen, and a review of case studies will be available after the program for those interested.

Sponsored by:

 Aspen Research CORPORATION	Pd Product Development	Id Ideation & Innovation	Am Aspen Materials™	Pl Product Life Prediction	Ta Testing & Analysis	Qu Quality Initiatives	Re Regulatory Compliance	Tk Technology Development	Pr Problem Solving
---	-------------------------------------	---------------------------------------	----------------------------------	---	------------------------------------	-------------------------------------	---------------------------------------	--	---------------------------------

ASHLAND

Where you need it. When you need it.
What else do you need?

Ashland Distribution is the leader in the distribution of thermoplastic materials. No matter which process you use, we have the prime thermoplastics you need plus the technical support to back-up the products we sell. One call or click to our www.ashdist.com website is all it takes to handle your material needs.

For more information contact us at 1-800-828-7659 or on the web at www.ashdist.com



Ashland is committed to the continuous evolution of technology and servicesolutions that promote health, safety and environmental protection around the world.

© Registered Trademark, Ashland © Copyright 2005, Ashland

* Responsible Care is a registered service mark of the American Chemistry Council, the Canadian Chemical Producers' Association and of other entities in other countries.

Discover the Difference

at



Hennepin Technical
College

Have we got a career for you in
Plastics Manufacturing Technology!

Learn more about HTC's affordable, accessible, hands-on learning. Full- or part-time courses may be taken individually or applied to the diploma, degree and the Extrusion or Injection Molding certificates.

Your 1st Choice for Excellence
www.hennepintech.edu

Dan Ralph, Instructor

Direct 763.488.2527

Fax 763.488.2944

Polymer Analysis & Testing

- Materials Identification
- Product Deformation
- Mechanical Testing
- Failure Analysis / Product Defects
- Competitive Product Analysis
- Thermal Analysis

FTIR, NMR, GC, GCMS, LCMS, TGA, SEM, HPLC, ICP, DSC, GPC



CHEMIR

Analytical Services

(800) 659-7659

chemir.com

Sam McCord
CEO

3425 Sycamore Court NE
Cedar Rapids, Iowa 52402

phone: 319.378.0077

fax: 319.378.1577

cell: 319.270.4507

www.mccordgroup.com

sam@mccordgroup.com



BIOCOMPOSITES LLC

INNOVATION IN HOT RUNNERS
DESIGNED FOR PRODUCTION ENVIRONMENTS

PRE-ENGINEERED SYSTEMS

ORYCON
CONTROL TECHNOLOGY INC.

1-800-HOT-RUN1

Advertisers Index

Ashland/General Polymers	Page 2	Omya, Inc.	Page 6
Chemir	Page 2	Orycon.....	Page 3
Clariant	Page 3	PlastiComp	Page 6
D-M-E	Page 6	Plastic Process Equipment	Page 6
E & O Tool and Plastics, Inc	Page 3	Polymer Resources, Ltd	Page 6
Hennepin Technical College	Page 2	QMC Plastic Machinery.....	Page 3
MCG BioComposites, LLC	Page 2	RTP	Page 2
Mold-Masters Limited	Page 6		



Imagineering Plastics®

Corporate Headquarters: 580 E. Front Street • Winona, MN 55987
Tel: (507) 454-6900 • (800) 433-4787 • Web: www.rtpcompany.com

The Global Leader in Specialty Compounding

At RTP Company our engineers work with you to design custom compounds with the specific physical properties and aesthetics essential to your application.

Contact:

Kevin Hurd

Phone: 952-435-0180

Email: khurd@rtpcompany.com

Dave Poinar

Phone: 952-294-9760

Email: dpoinar@rtpcompany.com

www.rtpcompany.com

President's Remarks

Dick Bopp

Thanks to the graciousness of Dan Mishek and the VistaTek organizers of Manufacturing in Minnesota, a one-day MinniTek Symposium on Low Volume Production, held at the North Oaks Country Club on August 18, I was given the opportunity to present an overview of the SPE along with an invitation to all assembled to join the Upper Midwest Section of the Society. (Please note Dan's MinniTek review later in this issue.) The meeting space was filled to capacity to hear invited speakers and panelists present a shared vision of a fundamental change in prototyping from making one or two mockups to manufacturing fully functional low volume production units. Moreover, they noted that "low volume" can mean up to 60,000 units produced.



Dan captured the moment in his introduction when he used the term, "excitement," to describe what was happening in his industry. Because indeed you could feel electricity in the room from start to finish. Of course, having the Honorable Gov. Tim Pawlenty on hand to give a keynote address outlining his plans for retaining small business in Minnesota didn't dampen the mood one bit. But, beyond the governor's well-received address, the spirit of the MinniTek was marked by a series of revelations on what is now possible with low volume production technology, e.g., Direct Digital Manufacturing (DDM), advances in CNC machining and VistaTek's progress with rapid tooling.

OK, but how does this all relate to the Society of Plastics Engineers? It relates because the MinniTek is an excellent example of a grass roots effort demonstrating how the SPE—year in and year out—helps keep us current with rapidly developing technology and business advances in our ever changing field. Other examples would include SPE's GPEC (Global Plastics Environmental Conference), annually held TopCons for Thermoforming, Foams, Vinyl, etc. and, of course, the Annual Technical Conference (ANTEC) and EuroTEC. Added to this list of teaching vehicles are SPE's technical journals and an impressive catalogue of seminars and webinars.

Continued on Page 9



Exactly your chemistry.

Michael Murphy 800-328-5589
Marilyn Vierzba 800-328-5589
John Wooten 800-328-5589

www.clariant.masterbatches.com

Complēt®
Composite Pellets

PlastiComp

The best source for **Long Fiber Reinforced**
Thermoplastic Pellets for Injection Molding.

www.plasticomp.com

Tel: 507.454.4334 Fax: 507.452.5642 e-mail: info@plasticomp.com

E&O
TOOL AND PLASTICS, INC

ISO 9001-2000 REGISTERED

www.eoplastics.com

- Mold Making • Injection Molding • Over Molding
- Value Added Manufacturing • Insert Molding

19178 Industrial Blvd.
Elk River, MN 55330

763-441-6100 Ext. 132
Fax: 763-441-6452

ADVERTISING SPACE AVAILABLE

Place your ad here by contacting
SPE Section 22

Rolly Enderes: rge@chemstock.com

QMc Plastic Machinery LLC
New and Used Plastic Machinery

Dennis McNevin
Phone: (763) 519-0134
Cell: (612) 805-5041

Don Qually
Phone: (952) 944-7991
Cell: (612) 839-4674

<http://www.qmcplastic.com>

WELCOME TO OUR NEW MEMBERS

Dan Mishek, Membership Chairman
Email: Dan@vistatek.com • Phone: (651) 653-0400



Dan Mishek

Meet the newest members of SPE below. I am excited about the diversity of the newest batch of members. Again, we are looking for active members to help grow the local chapter. Use your membership to network, gain education, gain employment or just to hang out with people that have similar interests as you do. There are so many things that you can get involved with. I look forward to personally meeting you at an event.

Maybe at the Golf Event on September 15th – see you there!

<u>NEW MEMBER</u>	<u>AFFILIATION</u>	<u>LOCATION</u>	<u>NEW MEMBER</u>	<u>AFFILIATION</u>	<u>LOCATION</u>
Michael Wilder	—————	Minneapolis	E Ziegler	Andersen Corp.	Bayport
Kyle Starkey	3M	St. Paul	Ross Jones	—————	Lindstrom
Ken Khang	Boston Scientific	Minneapolis	Zachery Johnson	—————	North Branch
Carlos Lopez	U OF M	Minneapolis	Jason Lubs	General Mills	Golden Valley
Tim Wylie	—————	Hopkins	Terry Collier	—————	St. Paul
Mark Wollschlager	Greatbatch Medical	Minneapolis	Jie Song	U of M	Minneapolis
Leo Twaha	—————	Minneapolis	Kelly Edgington	Boston Scientific	Edina
Steve Garden	—————	Saint Paul	Colin Maus	Donatelle	New Brighton
James Orrock	Stratasys	Eden Prairie			
Jason McNulty	—————	Stillwater			

SPOTLIGHT ON THE BOARD

Dick Bopp, President

For this issue of *The SPEcialist* it is my pleasure to present to you, **Dr. Domasius Nwubunma**, our past section president for 2005 – 2007 and now serving on our board as Past President.

Domasius is a native of Nigeria and received an B.S. with honors in chemical engineering from the University of Lagos. He emigrated to the U.S. in 1993 to pursue a Master's degree in polymer engineering at the University of Akron. He obtained his MS degree in 1996. Following his MS degree, he obtained his Ph.D. in polymer engineering from that institution in 1999.

After serving as a post-doctoral fellow, Domasius left Akron for the Twin Cities in

2000 to accept a position as Senior Research Engineer in the Science Research and Organic Materials Research Technology Centers at 3M in St. Paul. In 2004 he was named Research Specialist in the Safety, Security and Protection Services Business Laboratory. He is currently developing a consulting business.



Domasius Nwubunma

Domasius first joined SPE as a student member while at the University of Akron and became a regular member following his Ph.D. How did he become involved with the Upper Midwest Section? In his own words:

"I credit Dave Erickson with [getting] me involved in SPE Upper Midwest

Continued on Page 9

Local Section's Steinwall, Inc. wins INTERNATIONAL INNOVATIVE DESIGN

During the National Plastics Expo (NPE) in Chicago, Steinwall was among 41 other companies worldwide to compete for the honor of being judged one of the best in the plastics' industry. Steinwall won for their contribution to the John Deere Seed Tube project.

The part looks surprisingly simple; yet a simple part design sometimes involves creativity and a complex mold design. The project objective was to design a one-piece molded tube given existing exterior part geometry; the current design was a clam-shell tube. The tube is used for dispensing seed into the ground and the clam-shell parting lines caused seeds to bounce resulting in variability in ground placement.

The design was achieved in three steps; first, design the curved core, then design the cooling, and finally determine the sequencing of the mold. And, this design needed to accommodate high annual volumes requiring the process to be extremely robust and repeatable.

Step One: The core needed to be both straight and curved; therefore, a double-acting slide was necessary to allow for the straight portion of the core to eject first and then a swing arm was required to allow the core to clear the cavity steel when ejecting.

Shutting off the swing-arm core also presented unique design challenges. Since the core moves on an arc, the shut off point involved dynamic analysis to guarantee proper alignment. Without proper alignment, core damage could result increasing flash at the end of the tube. This flash was undesirable as it would also cause the seed to bounce.

Step Two: Cooling the curved-core that was moving on a double-acting hydraulic slide with a swing-arm was extremely challenging! The challenge was machining ¼ inch water lines into an 18 inch curved core while maintaining steel strength. After several false attempts, the solution was to machine the water lines first in flat stock and then machine the curve.

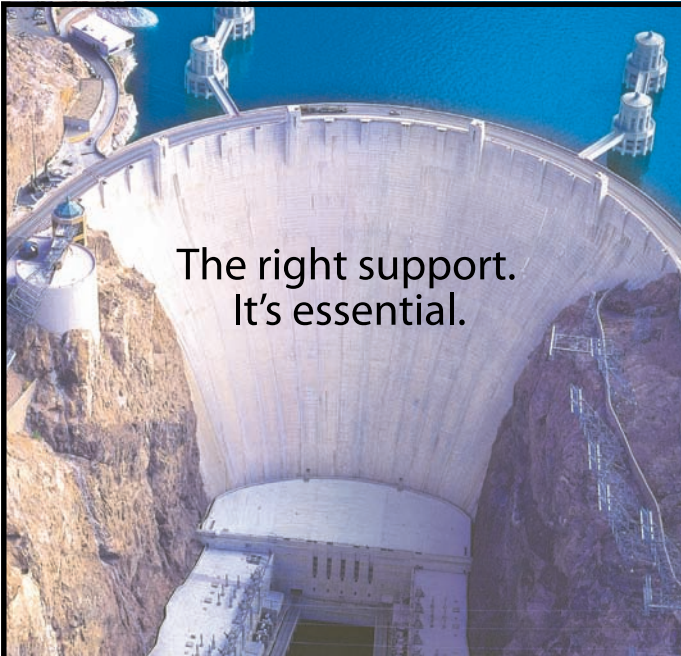
Step Three: Final sequencing of the tool operation is very involved and took this form:

Mold Open	Mold Close
Lock Pin open	Ejection retract
Hydraulic slide out	Mold close
Hydraulic swing-arm open	Hydraulic swing-arm close
Mold open	Hydraulic slide in
Ejection Forward	Lock Pin closed

The timing of the sequencing above is crucial to producing acceptable parts. Several proximity switches were installed to increase the robustness of the operation.

The article was provided by Steinwall, Inc and for more information, you can go to www.steinwall.com/awards.html

Visit The Upper Midwest Section of SPE's Website
WWW.UPPERMIDWESTSPE.ORG



The right support.
It's essential.

D-M-E delivers the most complete set of market-leading products — plus unsurpassed knowledge and resources. It's how we're there to support you every step of the way.



www.dme.net ♦ 800.626.6653
a Milacron Company

POLYMER RESOURCES LTD.
The Leader in Classic Engineering Plastic Compounds

- PRL PC – Polycarbonate
- PRL PPX – Modified PPO/PPE
- PRL TP – PBT Polyester
- PRL ABS – ABS
- PRL PC/TP – PC Polyesters
- PRL PC/ABS – PC/ABS Blends
- PRL PEI – Polyetherimide
- PRL NY – Polyamide

RANDY RITCHEY

OFFICE: 847-742-3141 E-MAIL: rritchey@PolymerResources.com
FAX: 847-742-3181 CUSTOMER SERVICE: 800-243-5176
www.PolymerResources.com



Kevin Krummel
Regional Sales Mgr.
kevin.krummel@omya.com

Omya Inc.

2815 Maine Street
Quincy, IL 62301
Tel (217) 224-5198
Fax (217) 224-5198
Cell (802) 345-5847

Supplier of Reliable, High
Quality Calcium Carbonate
to the Plastics Industry

ADVERTISING SPACE AVAILABLE

Place your ad here by contacting
SPE Section 22

Rolly Enderes: rge@chemstock.com

global hot runner solutions

- modular or custom designs
- turnkey hot half packages
- local service supported
- online hot runner design wizard
- temperature controllers

Your regional hot runner specialist:

Gary Seils

(t) 651.451.8558 (f) 651.451.8593

Mold-Masters Limited

233 Armstrong Avenue

Georgetown, ON L7G 4X5 Canada

www.moldmasters.com

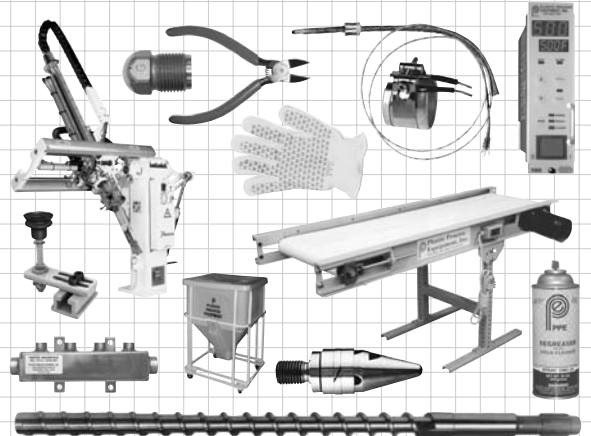


© Mold-Masters is a Registered Trademark of Mold-Masters Limited. © 2003



First or Last... Call PPE for All Your
MOLDING ACCESSORIES
ORDER TOLL FREE: 1-800-362-0706

- ROBOTS
- MACHINERY
- SCREWS
- SCREW TIPS
- NOZZLES
- HEATERS
- HAND TOOLS
- END-OF-ARM TOOLING
- MATERIAL HANDLING
- THERMOCOUPLES
- TEMPERATURE CONTROLS
- WATERLINE COMPONENTS
- AEROSOLS & CHEMICALS
- SAFETY PRODUCTS



www.ppe.com • sales@ppe.com



PLASTIC PROCESS EQUIPMENT, INC.

8303 Corporate Park Drive, Macedonia (Cleveland), Ohio 44056, U.S.A.
216-367-7000 • Fax: 216-367-7022 • Toll Free: 800-321-0562

3615 Walnut Avenue
Chino, California 91710, U.S.A.
909-627-8511 • Fax: 909-627-8101
Toll Free: 800-258-8877

11218 Challenger Avenue
Odessa, Florida 33556, U.S.A.
727-834-8888 • Fax: 727-834-8873
Toll Free: 800-282-6783

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)

EXECUTIVE DIRECTOR	Susan Oderwald	
ANTEC Conference Management / ANTEC Booth Sales		
Lesley Kyle	203.740.5452	lskyle@4spe.org
ANTEC Paper Submission		
Peter Boergermann	203.740.5472	pboergermann@4spe.org
ANTEC Registration		
Martha Charris	203.740.5458	mlcharris@4spe.org
Awards (Chase, Husky)		
Laurie McDougal	203.740.5432	lamcdougal@4spe.org
Awards (STRETCH, PRIDE/Outstanding Division)		
Maria Russo	203.740.5431	mrusso@4spe.org
Awards (Essay Contesst, HSM, Newsletter, STAR)		
Tricia McKnight	203.740.5430	tmcknight@4spe.org
Awards (Annual awards program)		
Gail Bristol	203.740.5447	grbristol@4spe.org
Book Orders		
Linda Roos	203.740.5449	lroos@4spe.org
Change of Address/Transfers		
Customer Relations	203.740.5403	membership@4spe.org
Council Liaison		
Marie Salzo	203.740.5422	mcsalzo@4spe.org
Divisions, Special Interest Groups, Student Chapters		
Maria Russo	203.740.5431	mrusso@4spe.org
Dues, Billing & Payments		
Customer Relations	203.740.5403	membership@4spe.org
Employment & Classified Ads		
Jackie Salzo	203.740.5411	jsalzo@4spe.org
e-Live™ Presentations & Courses		
Peter Boergermann	203.740.5472	pboergermann@4spe.org
e-Live™ Presentations Registration		
Linda Roos	203.740.5449	lroos@4spe.org
Journal/Magazine Orders		
Linda Roos	203.740.5449	lroos@4spe.org
Membership Processing/Questions		
Bonnie Kaczowski	203.740.5428	bakaczowski@4spe.org
Membership programs/retention		
Tobi Gebauer	203.740.5457	tgebauer@4spe.org
News Brief emails-sections/divisions/SIGs		
Deb Daily	203.740.5468	ddaily@4spe.org
Section & Division Billing		
Dolores Pruefer	203.740.5446	dcpruefer@4spe.org
Section & Division Investment Program		
Doris Thoren	203.740.5444	dlthoren@4spe.org
Section Administration		
Tricia McKnight	203.740.5430	tmcknight@4spe.org
Seminar Program & In-Plant Training		
Laurie McDougal	203.740.5432	lamcdougal@4spe.org
Seminar Registration		
Martha Charris	203.740.5458	mlcharris@4spe.org
SPE Training Products & Bookstore		
Linda Roos	203.740.5449	lroos@4spe.org
The SPE Foundation Scholarships & Grants		
Gail Bristol	203.740.5447	grbristol@4spe.org
Topical Conference Planning		
Leslie Kyle	203.740.5458	lskyle@4spe.org
Topical Conference Registration		
Martha Charris	203.740.5458	mlcharris@4spe.org
Website		
Deb Daily	203.740.5468	dadaily@4spe.org

Upper Midwest Section (S22) Membership

August, 2009

Total 413

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

Here are 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... check out the Annual Golf Outing flyer to be held on September 15 this year.
- Professional contacts

... and much more!!!

Please contact

Shilpa Manjure, Education Chair – Upper Midwest Section SPE to learn more about the benefits of being a member of SPE and a few easy-steps to form a student chapter:

email smanjure@ntic.com or call (763) 225 6646

THE UPPER MIDWEST SECTION OF SPE
IS PROUD TO ANNOUNCE OUR NEXT
SPE NETWORKING HAPPY HOUR

THURSDAY SEPTEMBER 10, 2009 • 5 P.M. TO 7 P.M.

WHERE: ALASKA EATERY AND GLACIER BAR
6501 WAYZATA BOULEVARD, ST. LOUIS PARK, MN 55426

WHO: EVERYONE IN THE PLASTICS INDUSTRY

WHY: IT IS FUN! PLUS, THERE HAS NEVER BEEN A BETTER TIME TO GET TO KNOW
YOUR FELLOW PROFESSIONALS IN THE PLASTICS INDUSTRY. YOU NEVER KNOW
WHEN YOU WILL NEED IT.

COST: **FREE ADMISSION AND COMPLIMENTARY APPETIZERS!!**
FOOD AND DRINKS OFF THE HAPPY HOUR MENU ARE EXTRA.

IF YOU HAVE ANY QUESTIONS PLEASE FEEL FREE TO E-MAIL ME AT: ERICSHARBOR-PLASTICS.COM
IF YOU PLAN TO COME PLEASE E-MAIL ME SO I CAN MAKE SURE WE HAVE ENOUGH SPACE RESERVED.

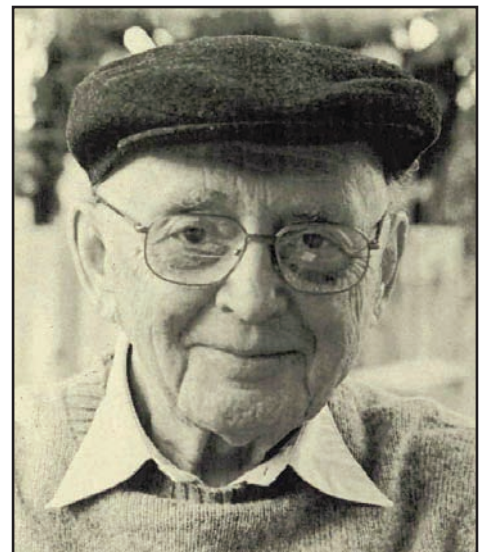
u p p e r m i d w e s t s e c t i o n
GOLF OUTING
RESCHEDULED FOR
S e p t e m b e r 1 5 , 2 0 0 9
Oak Marsh Golf Course • Oakdale MN

For Registration and Questions, please contact;
ERIC at 62-810-9764 or erics@harbor-plastics.com
SHILPA MANJURE at 763-225-6646 or shilpa.manjure@gmail.com
or go to the section website at www.uppermidwestspe.org

SPE Past President

Jerome L. Formo

The Society of Plastics Engineers notes with sorrow the passing of Jerome L. Formo of Roseville, Minnesota. Jerry died on April 9, 2009, at the age of 93. He was President of SPE in 1956, and he was the first President of the Upper Midwest Section, which was founded in 1947.



Presidents Remarks, continued from Page 3

Beyond all these educational opportunities, there are equally valuable opportunities for our individual career development at SPE conferences. Specifically, we can present technical papers or posters about our work. We can also develop and, more importantly, demonstrate our leadership skills by participating in the organizing body of a conference, e.g., SPE Division, Section or SIG. Finally, we have the opportunity to develop our professional network through person-to-person interactions with fellow SPE members.

All of this reminds me of some sage advice given to me by a senior scientist very early in my career. He advised that I pay close attention to my “Absolute Career.” I asked what he meant by “Absolute.” He responded by saying that much of what we accomplish in industry can never make it to our résumé due to the legitimate proprietary needs of our employer. In those instances our accomplishments are only known—and therefore “related”—to the “company.” So, as a young professional I should take care to do whatever was necessary to show the breadth, depth and quality of my work beyond the confines of the “company.” Of course, patents and refereed technical journal articles are two great examples. But, often times bureaucratic and technical requirements make them difficult to obtain on a regular basis. He went on to say that participation in professional societies like the SPE was one of the best ways he knew of developing a public record of his professional accomplishments—his Absolute Career.

I agree. ANTEC proceedings are peer reviewed and provide a written example of the quality of our work without the hassle sometimes found authoring journal articles or the proprietary restrictions of internal reports. Presentation of our work at SPE conferences also gives our peers—and potential future employers—a unique and personal look at the depth and breadth of our technical work as well as our oral and written communication skills. Lest anyone think that these opportunities apply only to engineers and scientists, keep in mind that the sales, marketing and regulatory aspects of our industry are also well represented within SPE. Over the years the accumulative effect can become significant. So, when I’m asked if the SPE has been important in my plastics career, I always answer, “Absolutely!”

SPOTLIGHT ON THE BOARD – Continued from Page 8

Section. I had gone to SPE 2005 technical conference and inquired from Trish McKnight (Upper Midwest Section Liaison Officer at the time) about how I can get involved and volunteer for my section. Soon after the conference, Dave contacted me. With his support, I was elected [to] the board and delighted to serve as your president for two years...”

Domasius is a prolific author, having published 11 technical papers and two book chapters. He has also edited two books, Polyolefin Blends and Polyolefin Composites. Moreover, his publications have already been cited by other authors over 150 times...an excellent example of building an Absolute Career! (See the President’s Remarks column in this issue.) In addition to his membership in SPE, Domasius is a member of the American Chemical Society (ACS) and Polymer Processing Society (PPS).

When asked about how he became interested in polymer science and engineering, Domasius replied, “I credit my interest in plastics to my two mentors: my high school chemistry teacher Mr. Arora (an Indian) and my chemical engineering teacher Dr. Olakoje Olabisi (a Nigerian)... I love plastics field so much that I can’t imagine being in any other field.”

Minni Tek - August 18, 2009

Local SPE and the Governor Help Support Manufacturing in Minnesota

The SPE - Upper Midwest Section helped sponsor Minni Tek on August 18, 2009. SPE realizes small businesses and the local manufacturing sector are vital elements to keeping local economies strong, and last week, Minnesota Governor Tim Pawlenty reinforced that message during his keynote address to a crowd of nearly 170 people attending Minni Tek, a half-day, invitation-only event organized by Vista Technologies. The educational event introduced attendees to the new methods and technologies used to manufacture low volume production parts including additive fabrication, milling and aluminum tooling.



During his speech, Gov. Pawlenty noted that the public perception of manufacturing is 20 to 30 years out of date, and praised Minnesota manufacturers for adopting niche and value-added systems to counteract decline in the sector. He also commented on the prevalence of Minnesota growth due largely in part to in-state entrepreneurs who build their businesses locally.

The Governor had a tough act to follow, because Chapter President Richard Bopp had the podium before Governor Pawlenty to discuss the local SPE chapter and all the positives there are to joining. He highlighted the Online Technical Library, technical conferences, opportunities to network and for career development and the Golf Event on September 15, 2009. There were no member applications leftover on the Sponsor Table so we are looking for a great upswing in membership!

Dan Mishek, co-owner of VistaTek and on the SPE Board (Membership Committee), and his grandfather, Ken Wilson, founder of Wilson Tool, introduced the Governor together.



The event was held at North Oaks Golf Club in North Oaks, Minn. Attendees included engineers and purchasers from companies including Medtronic, Lockheed Martin, St. Jude, Toro, 3M and Boston Scientific.

About Minni Tek

Minni Tek strives to increase the awareness of the growing niche of low volume production and its struggles. The intention of this platform is to educate companies of new technologies and the successes that follow. For more information on MinniTek or to download the presentations, please visit www.lowvolumeproduction.com.

The session concluded with an expert panel discussion on the trends of low volume production and the implications these trends have on the Minnesota economy.

Other participating experts at the event included:

- Dr. Art Erdman**, University of Minnesota, event moderator
- Gloria McDonnell**, HLB Tautges Redpath, LTD., presenting on manufacturing and regulations
- Jeff Hanson**, RedEye, presenting on Direct Digital Manufacturing
- Dave Reasor**, Product Development Solutions, Inc., presenting on CNC Machining
- Dan Mishek**, VistaTek, presenting on Rapid Tooling and Injection Molding
- Expert panelists **David Sparks** - Andersen Corporation
- Michael Thorsfeldt** - Clearfield
- Paul Hennen** - Donaldson
- Bill Buenz**, Graco
- Kimberly Stenerson**, Medtronic





Society of Plastic Engineers Upper-Midwest Section
Getting Physical with Physical Properties

Pre-Registration Form

Please fill out this registration form and immediately FAX it to:

(952) 492-5156

Or scan this form and email to sdmertes@ashland.com

The number of seats are limited and will be assigned to the first 100 registrations received based on the FAX time stamp. Sorry, no exceptions.

NAME(s): _____

COMPANY: _____

PHONE: _____

ADDRESS: _____

EMAIL: _____

I/we will attend. Enclosed is my payment for:

Before September 22nd

\$99.00 per SPE member _____

\$129.00 per Non-member _____

\$60.00 per Student (ID Required) _____

After September 22nd:

\$129.00 per SPE member _____

\$149.00 per Non-member _____

PAYMENT – Visa Master Card American Express Check

CARD #: _____ EXPIRATION DATE: _____

NAME ON CARD: _____ CODE on BACK _____

For payments with a check, the postmark date on the envelope will be used to determine eligibility for the first 100 seats (not the FAXed registration form). Make checks payable to "SPE - Upper Midwest Section" and mail to:

Sean Mertes
19095 Wells Lane
Jordan, MN 55352

For questions and further information please contact:

Sean Mertes
Phone: (612) 801-2417

Upper Midwest Section Board of Directors 2009 - 2010

www.4spe.org

PRESIDENT

Richard C. Bopp
NatureWorks LLC
P.O. Box 5830, MS #114
Minneapolis, MN 55440-5830
952-742-0454
952-742-0481 FAX
richard_c_bopp@natureworkslc.com

PAST PRESIDENT

Paul Rothweiler
Aspen Research Corp.
1700 Buerkle Road
St. Paul, MN 55110
651-341-5427
651-264-6270 FAX
paul.rothweiler@aspenresearch.com

PROGRAM CHAIR

Sean Mertes
Ashland Distribution
19095 Wells Lane,
Jordan, MN 55352
612/801-2417 MOBILE
sdmertes@ashland.com

PROGRAM CHAIR

Jeff Voelker
SABIC Innovative Plastics
33 Founders Green
Hudson, WI 54016
651-895-9482 CELL
651-846-5023 FAX

jeffrey.voelker@sabic-ip.com

AT LARGE

Domasius Nwabunma
3214 B Juniper Circle
Woodbury, MN 55125
651-714-9356
domasius@yahoo.com

TREASURER

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

MEMBERSHIP CHAIR

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

SPECIAL EVENTS CHAIR/ ADVERTISING CHAIR

Eric Swensid
Harbor Plastics, Inc.
1470 County Road 90
Maple Plain, MN 55369
763-479-4772
763-479-4776 FAX
erics@harbor-plastics.com

ADVERTISING CHAIR

Bill Priedema
405 S. Willow Drive
Long Lake, MN 55356
612-850-8987
bpriedema@aol.com

EDUCATION CHAIR

Shilpa Manjure
Northern Technologies International
Corp.
4201 Woodland Road
P.O. Box 69
Circle Pines, MN 55014
763-225-6600
763-225-6645 FAX
smanjure@ntic.com

NEWSLETTER/ ONLINE EDITOR

Rolly Enderes
ChemCeed, Corp.
705 Bay Street, Suite 2A
Chippewa Falls, WI 54729
715-726-2300
715-726-2314 FAX
rolly@chemceed.com
www.chemceed.com

INTL. COUNCILOR

Thomas McNamara
Thermotech
1202 S. Fifth Street
Hopkins, MN 55343
952-933-9438
952-933-9499 FAX
thomas.mcnamara
@thermotech.com

SECTION AMBASSADOR AWARDS CO-CHAIR

Dave Erickson
13502 Essex Court
Eden Prairie, MN 55347
952/937-0960
952/829-5966 FAX

SECRETARY

Ajay Gupta
Boston Scientific
Two Scimed Place
Maple Grove, MN 55311
763-494-1510
guptaa@bsci.com

HOUSE CHAIR

Jesse Lund
University of Minnesota
1416 Winchell Street
St. Paul, MN 55106
651-329-8453
lund0751@umn.edu

AWARDS CO-CHAIR

LuVerne (Verne) Erickson
Clariant Corporation
9101 International Parkway
Minneapolis, MN 55428
763-971-6143
763-971-6133 FAX
verne.erickson@clariant.com

CALENDAR OF EVENTS

September 10, 2009

NETWORKING HAPPY HOUR -

Alaska Eatery & Glacier Bar, St. Louis Park, MN

September 15, 2009

Upper Midwest Section Golf Outing

Oak Marsh Golf Course in Oakdale

October 6, 2009

MEGATECH

ADVERTISERS WANTED!!

To help continue circulation (over 800) of our newsletter, we need continuing support from current advertisers but also welcome new supporters. All advertisements will also be published on our new website. If you are interested in advertising, our current rates can be found below. If you are interested in purchasing an ad, please send your request to Bill Priedeman at bpriedeman@aol.com or call 612-850-8987 for more information.

SIZE	COST:
Full Page	\$900.00
Half-Page	\$450.00
Quarter-Page	\$225.00
Business Card	\$75.00



SOCIETY OF PLASTICS ENGINEERS

Upper Midwest Section
Richard Bopp / NatureWorks, LLC
PO Box 5830 MS 114 • Minneapolis, MN 55440-5830

FORWARDING SERVICE REQUESTED

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