2010 GOLF OUTING
Oak Marsh Golf Course
Tuesday July 20th
11 am start

GOLF OUTING INCLUDES:
- COST $75 PER SPE MEMBER
- COST $85 PER NON-MEMBER
- SPE RATE OF $300 PER FOURSOME (INCLUDING NON-MEMBERS)
- STARTS AT 11 AM
- 18 HOLES & CART
- 4 PERSON SCRAMBLE
- LUNCH PROVIDED AT THE TURN
- AWARDS & PRIZES
- PRE-REGISTER ONLINE BY JULY 6TH

https://www.wpgolf.com/oakmarsh/spe.asp

526 Inwood Avenue North
Oakdale, MN 55128-7033
(651) 730-8886
Position Wanted - Dennis Hvam
P.O. Box 204, Red Wing, Minnesota 55066
Phone – 651-388-7309 • E-Mail dhvam@charter.net

EXPERIENCED PLASTICS PROFESSIONAL SEEKS POSITION. Molding experience includes injection molding as molder, inspector, project manager, supervisor, purchasing manager, & plant manager. Sales experience includes, plastic raw material sales and distribution, and custom molded part and project sales of injection molded, blow molded, rotational molded, and thermoformed parts.

My desire is to stay in the industry in sales or project management.

ADVERTISING SPACE AVAILABLE
Place your ad here by contacting SPE Section 22
Bill Priedeman: bpriedeman@aol.com
The fiscal year of the Upper Midwest Section of SPE comes to an end on June 30th, and we are going to end the year with a flurry of educational, social and business activity…all in a single day! Our last meeting of the “year” will be held on June 22nd starting with a tour of the Toro Company. By now I’m sure you’ve made your reservations with Dan Mishek and are looking forward to seeing Toro’s magnificent facility in Bloomington. He’s told me that the 50 available slots have been filling fast. We apologize to anyone who may be turned away. But, you can still join in on the fun because following the tour the entire membership is invited to attend a networking event…with free appetizers no less and a brief annual business meeting at Majors Sports Café, also in Bloomington. No reservations are required. This meeting is intended to give us all an opportunity to interact socially and for the Board of Directors to report out to the membership on the status of our Section.

It also is a time for us to think ahead to the coming year which begins with the Annual Golf Outing at Oak Marsh Country Club in Oakdale, MN on July 20th led by Jeff Voelker. If you haven’t already, why not organize a foursome of clients, customers and friends and come join the fun. Lunch will be provided and there will be some nice prizes for longest drive, longest putt and closest to the “gin.”

In August we’re going to take a well deserved break as we allow time for folks to recharge their batteries and enjoy the summer. But, then in September we’ll be back with our regularly scheduled program with another Networking meeting. Special thanks to Eric Swensied from Harbor Plastics for leading this popular and valuable activity for us all.

Also, this fall we very much look forward to welcoming our student members returning to campus. In particular, we look forward to interacting with Dan Ralph’s student group at Hennepin Technical College and to Adam Kramschuster’s student group at the University of Wisconsin—Stout which will be switching their affiliation from a more distant Milwaukee Section to our own. We also plan to continue our work toward establishing a combined Twin Cities student chapter comprised of students at the University of Minnesota, St. Thomas and possibly other local campuses in the coming year. Thanks very much to the hard work of Shilpa Manjure, Tom McNamara, Dan Mishek and Paul Rothweiler for getting the ball rolling earlier this year.

In October, Sean Mertes and Paul Rothweiler are planning another full day MegaTech. So far, they’ve kept the topic and location secret, but the details should be coming out shortly. In December Dave and Verne Erickson will be hosting a special annual awards ceremony. Again, time and place to be announced.

It’s been a great year. But, to be singing “Auld Lang Syne” in June feels a little strange to me, maybe something like celebrating Christmas in July. Still, it’s not the time of year so much as the company we choose to celebrate with. Happy New Year everybody and Thanks!!!
Please give a warm welcome to our newest SPE members. We have added 42 new members in 2010. If you want to join or have a friend or co-worker that wants to join, now is the time! It’s becoming a pretty popular group. Be seen, be heard, be SPE!

NEW MEMBER | AFFILIATION | LOCATION
--- | --- | ---
Mark Johnson | Spectrum Plastics Group | Minneapolis, MN
David LaTourelle | Minnesota Rubber & Plastics | River Falls, WI
Paul Hopkins | Stratasys | Eden Prairie, MN
Illyess Hadj-Romdhane | 3M | Saint Paul, MN
Charles Miller | | Minneapolis, MN
Lisa Van Ryn | | Minneapolis, MN
Clement Tottmeh | | Minneapolis, MN
Kent Lillebo | | Minneapolis, MN
Jerry Naumchik | | Hopkins MN
Kevin Mathiason | Boston Scientific | Maple Grove, MN
Nhia Yang | | Minneapolis, MN
Rufus Zeh | | Minneapolis, MN
Kien Ha | | Minneapolis, MN
Charles Andrews | | Monticello, MN
Michael Varley | | Saint Michael, MN
Chelsea Dunlay | | Monticello, MN

NEW MEMBER | AFFILIATION | LOCATION
--- | --- | ---
Paul Sollie | Stratasys | Eden Prairie, MN
Larry Peterson | Boston Scientific | Maple Grove, MN
Raymond Flynn | Force America LLC | Burnsville, MN
Dennis Ferguson | | Saint Paul, MN
Thomas Olmman | | Minnesota
Wanda Dent | Target Corporation | Deer Park, IL
Manuel Natal | NatureWorks LLC | Minneapolis, MN
Dave Stama | | Minneapolis, MN
Kyle Jackson | | Minneapolis, MN
Angelo Vissas | Processing Technologies Int’l | Minneapolis, MN
Laurence Jensen | Tennant Co | Minneapolis, MN
Jake Bump | | Saint Paul, MN
Jeff Lindquist | Boston Scientific Corp | Maple Grove, MN

SPOTLIGHT ON THE BOARD

Jesse Lund, House Chair

Our “Spotlight on the Board” for this issue shines on Jesse Lund, one of our newest board members who is also a full time student at the University of Minnesota. Jesse serves us well as our Section’s “House Chair.” If you’ve attended any of Jesse’s MiniTechs recently you’ve met him at the registration table. Here in his own words is the story about how Jesse became involved in plastics and the SPE.

Well I am the youngest board member for Upper Midwest Section. Maybe I’m not the youngest ever, but at least the youngest for the moment. I am currently finishing my M.S. with the Bioproducts and Biosystems Engineering department at the University of Minnesota. Prior to this endeavor, I completed my B.S. Chemistry at the University of Minnesota.

During my undergraduate research, I first touched upon the polymer field. I was helping on a project dealing with ion selective electrodes that used perfluoropolymer membranes.

After this project, I took a part time technical aide position at 3M in the Corporate Research Materials Lab. I worked on two projects: polymer electrospinning of nanofibers and development of nanowires. During my nanofiber work, my interest in polymer science peaked and I finished out my undergraduate courses by taking advanced electives in polymer chemistry.

I accepted an offer to do graduate research in the Department of Bioproducts and Biosystems Engineering at the University of Minnesota. I undertook a project that incorporated two of my highest interests: polymer science and nanotechnology. I have since been doing research on the synthesis of cellulosic nanocrystals from biomaterials and incorporation and compatibilization of said nanocrystals into different polymer matrices for mechanical reinforcement.

Prior to completing my thesis, I accepted an offer to work as a product development chemist at NatureWorks LLC. While this position was short lived, I got a chance to network with many polymer chemists and engineers. I also got to experience many polymer engineering processes that do not commonly present themselves in academic laboratories.

Continued on page 9
WANTED
Archivist/Historian

Recently, our past and longtime editor of The SPEcialist, Nancy Kochenderfer, transferred all the past section newsletters to me. Nicely preserved in boxes and Tupperware containers is a treasure trove of historical information about our section and the plastics industry in the Upper Midwest going back many decades. It would be wonderful if these materials could be preserved and made more accessible.

So, I’m calling out to the membership for a volunteer who would be willing to serve on our board as the section archivist/historian. No formal training is required.

Some of the activities associated with this position might be to arrange for these materials to be scanned into computer files; working with Rolly Enderes, our Webmaster and Newsletter Editor, to get the materials archived on the section website; authoring a regular column in The SPEcialist with a reprinting of news items from days gone by; and possibly even working with a professional binder to assemble and better preserve these precious documents for posterity.

Anyone interested in applying for this position should contact, Dick Bopp, President at Richard_C_Bopp@NatureWorksLLC.com or (952) 742-0454.
A High-Energy Conference on Biopolymers

Despite tight corporate travel budgets, more than 300 people from 30 countries attended Innovation Takes Root 2010, the international biopolymers conference hosted by NatureWorks in Dallas, April 13 - 15. There were more than 30 exhibitors and booths were filled with interested attendees during breaks in the conference proceedings. During meals and at the conference's two evening receptions, there was palpable energy in the air as connections were made and attendees discussed the many interrelated aspects of sustainability, biopolymer processing, and marketing products with low environmental impacts.

On the day before the formal conference, NatureWorks organized two workshops. One focused on principles and concepts of biobased and biodegradable materials and the other on practical tools for characterizing and understanding product performance in biopolymers. Here are some of the many highlights of the conference.

**Additives and blends approaches to tailoring Ingeo™ performance**

Product manager Jed Randall went “open source” and described for conference attendees the formulation details of Ingeo™ 3801X, NatureWorks new injection molding grade. He discussed the grade’s impact modifier, crystallization accelerator, and agents for reinforcement and nucleation.

Randall said, “To spur innovation and drive biopolymers more widely into injection molding applications, NatureWorks is borrowing a page from the computer industry and making details for its new, high-heat, high-impact bioresin, Ingeo™ 3801X available by providing access to both formulation and compounding procedure.”

“Ingeo™ 3801X is patent pending.”

Leading compounders PolyOne, Teknor Apex, and RTP described approaches for achieving engineering resin properties with biopolymers through compounding. PolyOne presented its new reSound™ biopolymer line which contains a minimum 30 wt percent Ingeo™, PHB, PHBV, etc. for applications requiring improved sustainability and higher engineered performance. Teknor Apex described thermoplastic starch (TPS) technology for Ingeo™ modification, and RTP described compounded Ingeo™ or biobased PA formulations (32-80 percent biocontent) as offsets to HIPS, PC/ABS, 30 percent glass fiber reinforced polypropylene, or polyamide composites.

For those interested in 100 percent bioplastic blends, PHA producer Tianan Biologics compared properties and potential of PHBV/Ingeo™ and PHBV/EcoFlex formulations, Industry Suppliers Takemoto, Sukano, and polymer producers BASF and Arkema highlighted technologies to improve the property and processing performance of Ingeo™ products. Enercon detailed its latest in surface treatments for improved adhesion of UV Flexographic inks to Ingeo™ substrates.

**New Ingeo™-based product developments**

A cross section of leading national and international brands and manufacturers collectively showed the momentum that is now behind the industry drive toward offering better consumer products and packaging.

Representatives of Spartech discussed new higher heat resistant sheet stock. Sony described its push to include biopolymers and decrease the fossil carbon content of its plastic components. Clear Lam Packaging not only spoke about its latest portfolio of new products, but also the results of a new consumer study in the U.S. demonstrating what was for many in the audience, surprising consumer awareness around the renewable theme. Fabri-Kal showed 100 percent Ingeo™ cups and discussed world class production, while Sommer Needlepunch shared inside details on the development of the Ingeo™ exhibition-grade carpet used at Copenhagen’s COP-15 conference, and subsequently recycled into lactic acid in a new cradle-to-cradle paradigm for materials recycling.

**Advances in Ingeo™ fibers and nonwovens**

US Pacific, Alhstrom, and the University of Tennessee shared the newest advances with Ingeo™ nonwovens in spun-bond and melt-blown applications such as hygiene, filtration, and agriculture. Leading fiber finish producer Goulston presented the latest in Ingeo™ fiber surface modification developments, while NatureWorks’ longest standing Ingeo™ fibers “Master Licensee” partner, Fiber Innovation Technologies (FIT), lived up to its name, sharing the latest in how FIT tailors fiber structure to customer requirements.

Those interested in any of the Innovation Takes Root technical and/or business presentations may email NatureWorks via the FAQ page on [www.natureworksllc.com](http://www.natureworksllc.com). The conference website [www.innovationtakesroot.com](http://www.innovationtakesroot.com) features a host of details on the agenda and speakers.
## Upper Midwest Section (S22) Membership

**June 1, 2010**

**Section Total .......................... 438**

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

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
We had our Council meeting on May 16th, just prior to this year's Annual Technical Conference (ANTEC). We had a changing of the leadership as well as changes of numerous Councilor positions as some terms expired. Our new President, Ken Braney, has as his mantra – “Global Growth”. This in light of our Society expanding to many other countries of the world. The goal of the Society: to grow membership to 16,000 by the end of the year, most likely is not possible without increasing global membership. We have a new Section charter in the Middle East and a new Division charter for European Medical Polymers. We are also working hard to include and entice new young engineers to become part of our community. We have two new student chapters; Texas Tech and EAIF in Southern Florida. Also four of our Upper Midwest Section Board members visited the University of Wisconsin – Stout Polytechnic Institute to discuss their formation of a student chapter. Adam Kramschuster, Program Director for the Plastics Engineering program, is very interested in applying for SPE Student Chapter status when his new students arrive in the Fall. Our Section is more than happy to be their sponsor for Charter.

The Executive Director’s report and staff update indicated that staff is working a host of new projects and initiatives to keep SPE current and competitive in the information marketplace. Some of the highlights of the update include:

SPE had a modest positive balance for the first three months of 2010

Total membership as of 4/30/10 is 14,700. This reflects 750 new members this year and renewals are running on par with last year.

As of mid-April, over 520 attendees participated in SPE webinars for a profit of over $45M. This is up from last year, when 362 attendees participated.

Wiley and Sons, Inc., SPE’s publishing partner for Plastics Engineering magazine, has introduced a new website for the publication: www.plasticsengineering.org. The site includes new pages for items such as the Online Technical Library and the Consultants Circle.

The SPE Foundation reported their investment balance was over $1.6MM as of the end of March. They continue to assess applications and select recipients for various scholarships.

The Honored Service Member Election Committee elected six individuals for HSM this year and the Fellows Election Committee elected three members as Fellows of the Society. All were honored at the SPE Celebrates Banquet at ANTEC

On another note of awards, our Section qualified for the first time to receive the Pinnacle Award for excellence in operations to serve our membership. The award requires the organization to have a viable Board of Directors with all officer posts filled, multiple technical meetings, multiple numbers and types of communication, budget in place, goals and work plans in place, annual financial reports, Councilor attendance, provide networking opportunities, and provide membership incentives. Only 13 of approximately 80 Sections have earned this award.

Congratulations to our President, Richard Bopp, for presiding over this effort. Along with Dick, your Upper Midwest Section Board has worked very hard to obtain this award. The Board is committed to making our Section one of the best Sections in the Society. Please help us by increasing your participation in all activities offered.

Again, you can help us grow and improve our Society. I implore all of your help in soliciting new members for our Section. Please pass on the word that our Section is operating with a full Board and have many exciting events planned for 2010. We continue to plan events in which we think professionals would like to participate including: technical mega and mini-techs, plant tours, networking sessions, golf outings, etc. Just have anyone interested contact any person on the Board listed on the last page of the newsletter. We need your help and welcome all.
SPOTLIGHT ON THE BOARD – Jesse Lund
Continued from page 4

Through my contact with Dick Bopp at NatureWorks, I was encouraged to join the Society of Plastics Engineers Upper Midwest Section. When there was an open position on the board of directors, he also encouraged me to apply for the position since it would give me a chance to continue networking with plastics engineers and scientists all across Minnesota and the Midwest region. I applied and was approved to become the house chair.

I look forward to the new opportunities that will present themselves and the ways I can grow and learn from SPE Upper Midwest while contributing to making the plastics industry better everyday.
Society of Plastics Engineers Membership Application

Applicant Information

Name: [first name] [last name] [middle initial]

Company Name and Business Address (or College):

job title: 

address: 

city: state: zip: country: 

Phone/Fax Format: USA & Canada: (xxx) xxx-xxxx All Others: +xx(xx) x xxx xxxx 

Work Phone: Fax: Email: used for society business only 

Home Address: 

address: 

city: state: zip: country: 

(✓) Preferred Mailing Address: Home Business 

Payment Information

New Member 1 Year New Member 2 Years * Student Member 

US ($128.00) US ($235.00) US ($30.00) 

Canada ($152.00) Canada ($278.00) Canada ($36.00) 

Euro** (€124.00) Euro** (€226.00) Euro** (€25.00) 

My Primary Division is (choose from below) 

ADDITIVES & COLOR (D45) AUTOMOTIVE (D31) BLOW MOLDING (D30) COLOR & APPEARANCE (D21) COMPOSITES (D39) DECORATING & ASSEMBLY (D34) ELECTRICAL & ELECTRONIC (D24) ENGINEERING PROPERTIES & STRUCTURE (D26) EXTRUSION (D22) FLEXIBLE PACKAGING (D44) INJECTION MOLDING (D23) MARKETING & MANAGEMENT (D37) Additives & Color Europe (D45) Automotive (D31) Blow Molding (D30) Color & Appearance (D21) Composites (D39) Decorating & Assembly (D34) Electrical & Electronic (D24) Engineering Properties & Structure (D26) Extrusion (D22) Flexible Packaging (D44) Injection Molding (D23) Marketing & Management (D37) Polyolefins Thermoset TPEs Thermocol Vinyls No Interest 

Additional Division(s) are available for a fee. Check below to select Additional Divisions. 

- ADDITIVES & COLOR
- AUTOMOTIVE
- BLOW MOLDING
- COLOR & APPEARANCE
- COMPOSITES
- DECORATING & ASSEMBLY
- ELECTRICAL & ELECTRONIC
- ENGINEERING PROPERTIES & STRUCTURE
- EXTRUSION
- FLEXIBLE PACKAGING
- INJECTION MOLDING
- MARKETING & MANAGEMENT 

- Medical Plastics (D36)
- Mold Making & Mold Design (D35)
- Polymer Analysis (D33)
- Polymer Modifiers & Additives (D38)
- Product Design & Development (D41)
- Rotational Molding (D42)
- Thermofoming (D25)
- Thermoplastic Materials & Foams (D29)
- Thermoset (D28)
- Vinyl Plastics (D27) 

- Polyolefins
- Thermoset
- TPEs
- Thermocol
- Vinyls
- No Interest 

- Additives & Color Europe
- Automotive
- Blow Molding
- Color & Appearance
- Composites
- Decorating & Assembly
- Electrical & Electronic
- Engineering Properties & Structure
- Extrusion
- Flexible Packaging
- Injection Molding
- Marketing & Management 

Payment must accompany application. No purchase orders accepted. 

By signing below I agree to be governed by the Constitution and 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: 

Recommended by member (optional): Id # 

www.4spe.org Tel: +1.203.740.5403 Fax: +1.203.775.8490 P.O. Box 403, Brookfield, CT 06804-0403 USA 

European Member Bureau Eric Sasselaan 51, BE-2020 Antwerpen, BELGIUM 

Tel: 32 (0)3 541 7755 Fax: 32 (0)3 541 8425 www.speeurope.org 

Dues include a 1-year subscription to Plastics Engineering magazine-$38.00 value (non-deductible). SPE membership is valid for twelve months from the month your application is processed. *extra savings. **European membership dues include a program fee to support SPE’s activities in Europe.
Upper Midwest SPE Chapter Presents:
A Tour at The Toro Company
&
Happy Hour at Majors - Bloomington

Date: June 22nd
Time: 2:30pm-7:00pm
Location: The Toro Company HQ
Cost: $20/Members *
     $25/Non-Members*
Limitation: 50 Spaces Available

The Toro Company - 2:30pm
8111 Lyndale Avenue South
Bloomington, MN 55420

Majors Sports Cafe - 4:30pm
8301 Normandale Boulevard
Bloomington, MN 55437

You will get an inside view of the Corporate Headquarters of The Toro Company. You will see the facilities, testing labs, engineering department, etc.

Happy Hour and Networking event to follow at Majors after the tour. Happy Hour will include complimentary appetizers and is open to non-members.

Please RSVP for either or both events!

RSVP to Dan Mishek | danny@vistatek.com or 651-653-0400
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CALENDAR OF EVENTS

July 20, 2010
Golf Outing
Oak Marsh Golf Club
Oakdale, Minnesota

September 14, 2010
Networking

October 12, 2010
MegaTech

November 9, 2010
Networking

December 14, 2010
Awards Dinner