



# Mold Making & Mold Design

Division of Society of Plastics Engineers



## Message from the Chair

Happy Chinese New Year and Spring Festival welcome back following the Holiday Seasons around the world.



You know having lived in China for the past 5 years I have come to enjoy the duplicate holiday system. We celebrate the Western New Year for 1 - 5 days, depending on the feelings of the Central or Provincial Government. Then we celebrate Chinese New Year (a.k.a. Lunar New Year) and the Spring Festival a few weeks later. The combined holiday for Spring Festival can last as long as 15 days. And those days are generally filled with the sounds of exploding rockets and fire-cracker strings from dawn until well into the night. This year the festival had another double built right in - Valentine's Day. That's right on the 14th of February we celebrated traditional Valentine's Day and then a scant 10 days later, on the 24th we celebrated the Chinese equivalent holiday called Lantern Festival. It is on this day that young couples tie their wishes to a paper lantern and using a candle, allow the lantern to float off into the sunset (or night sky). It is really quite a pretty site and definitely a note able occasion for the local couples.

I know Tony Lauzon, our Newsletter Editor and Division Chair Elect is looking for ways to use some photos that I shared so I will help him out. On 02-Feb-13

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## Amid a skills shortage, can machines build Molds?

The annual Federal Government Advocacy Survey taken in December by the National Tooling and Machining Association and the Precision Metalforming Association, and released last week, underscores the lack of skilled labor in the metal working trades. Responses from 199 metal working manufacturers who averaged 77 employees in 2012, show that 91% are experiencing challenges finding qualified employees; 42% of those companies are having "severe challenges" finding employees skilled in the metalworking trades.

Some other interesting results to this survey regarding the skilled worker challenge include:

- 69% of survey respondents currently have job openings
- 81% of companies with openings have between 1 and 5 jobs available

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## Message from the Newsletter Editor

Good day, all.

I look forward to working with the new board of directors to drive value and sustainability legacy for the Mold Making and Mold Design membership. As always, we are looking forward to any comments or suggestions from you.



ANTEC is nearly here, please take a moment to review the MM&MD presentation lineup. (page 9). I will be moderating this year and am looking forward to seeing you in Cincinnati.

Respectfully,

Anthony Lauzon

SPE Mold Making & Mold Design Division 2012 Division Chair Elect, Newsletter Editor and Secretary

### *Words of Inspiration*

**Don't wait for extraordinary opportunities. Seize common occasions and make them great.**

**- Orison Swett Marden**

## PLACE YOUR AD HERE!

Advertising with the Mold Making & Mold Design Newsletter is an excellent way to reach out to the industry. This newsletter is electronically issued three times a year.

For more information, please contact the

Newsletter Editor at

[alauzon@husky.ca](mailto:alauzon@husky.ca)

## Message from the Chair cont.

one of my favorite haunts, the Paulaner Brauhaus Guangzhou held their second annual Fasching Party. This is a costume party for all guests of the restaurant. Well in keeping with the Spring Festival theme I donned a traditional costume of Cai Shen - Lucky god in Mandarin - and spread gold foil covered chocolate coins throughout the restaurant. It was a fantastic time interacting with the young and old of Guangzhou and sharing in their culture.

Well enough about China and my exploits. I am glad to have this opportunity to report on the activity of your board.

Since our last edition of the newsletter, we have met once via teleconference and solidified some of the activities of the various members of the division leadership. Additionally we have sought nominations and held an election to extend or add new members to the board.

During our December teleconference our board held a free-form discussion about how to best use the resources that you, our membership have provided. That is to say we are looking at ways to provide a lasting legacy for Mold Makers and Mold Designers for generations to come. We had a free ranging exchange of ideas from establishing our own endowed scholarships to funding research grants. No ideas were too far reaching for this meeting. Our charge at the close of the meeting was to provide (via e-mail) as many ideas as each member thought possible. As a result we are now moving to an analysis phase where we will see what ideas resonate with the majority of the board. From there it would make sense to share the consensus with you our members and gain your agreement on those ideas prior to finalizing and moving forward. This is an exciting project for the board and one that we know will honor the Division for years to come.

Speaking of member involvement, I must admit that the election cycle for our board and the call for nominations to Mold Maker and Mold Designer of the Year left us somewhat flat. We had an extremely low return of ballots from the election and to my knowledge not one nomination for the awards. That leaves me with the hollow sounding question, "Is anybody out there?" We have a division hotline and e-mail link and it would seem that aside from the occasional advertisement from a Chinese Mold making company looking to grow business it goes untouched. Please let us know how to better serve you!

Glenn Starkey and his able bodied assistant Cyndi Kustush have worked tirelessly on our ANTEC Program for ANTEC 2013 - Cincinnati, OH. The program and the overall event will be time well spent. I certainly hope that you will take time to meet the members of the board in attendance.

Glenn is also working with our friends at Mold Making Technology on a joint venture for the Ameri-Mold Show and Conference in Rosemont (Sub-urban Chicago) later this year. When I say Glenn, he provides the energy as a catalyst but the unsung hero (heroine) is Cyndi Kustush. Without her attention to the details, neither our ANTEC Program nor the Ameri-Mold Conference would be as well developed as they are - Cyndi you know we owe you more than can be expressed in this journal - so please accept sincere Thank You from us all.

On a not so positive note we did receive two resignations from the board. Mr. Robert "Bob" Ellerman has taken a new job in the Detroit area and finds that at present he cannot spare the time required to make a meaningful contribution to the division. We look forward to the day when he comes back full of energy and with a little extra time on his hands to dedicate to our industry. Good luck in your new endeavors Bob - you will be missed.

The second resignation came as quite a shock. I guess I hadn't been paying close enough

*Continued on page 7*



## Board of Directors

### Division Chair

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#### Newsletter Editor

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#### Membership Chair

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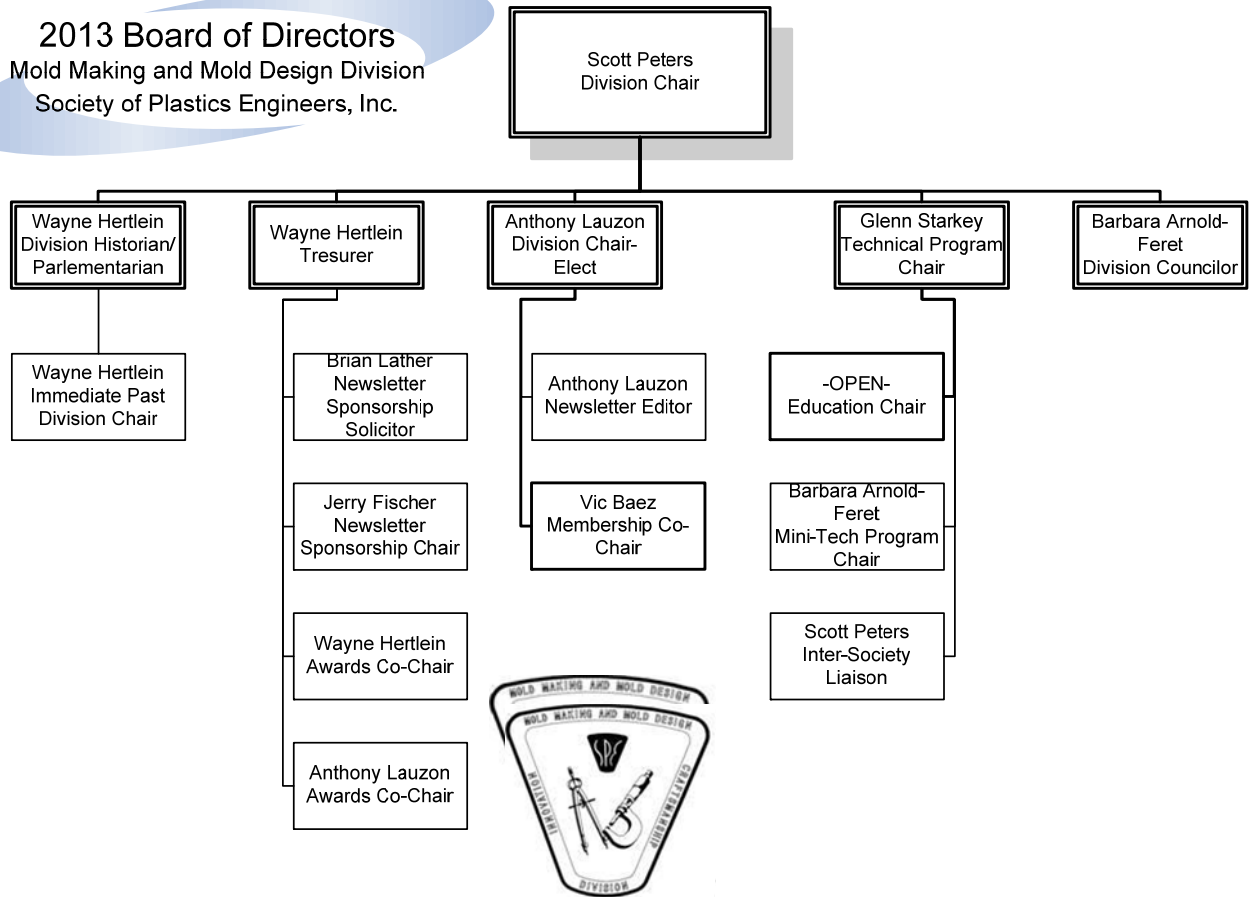
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#### Education Chair

OPEN

Note: \*\* Indicates Past Division Chair

**2013 Board of Directors**  
Mold Making and Mold Design Division  
Society of Plastics Engineers, Inc.



## Newsletter Sponsorship

### Newsletter Publication Release Dates

Spring Issue  
June

Summer-Fall  
Issue  
October

Winter Issue  
February

The newsletter of Mold Making & Mold Design Division of SPE is issued three times a year to over 1500 members worldwide. The readership is composed of individuals involved in all aspects of the mold making industry. These issues are made possible through the support of sponsors shown in this Newsletter. Mold Making & Mold Design Division of SPE thanks these sponsors for their generosity and encouragement in the publishing of our Newsletter.

For information on sponsorship  
of future issues, contact:

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### SPONSORSHIP RATES

SIZE	Yearly Rate	Per Issue
1/10 page (1.87h x 3.62w biz card)	\$250	\$90
1/4 page (4.87h x 3.62w)	\$625	\$225
1/2 page (4.87h x 7.25w)	\$1,250	\$450
Full page (10h x 7.25w)	\$2,500	\$900

Preferred output: Electronic transfer (BMP, TIFF, PCX, JPEG)

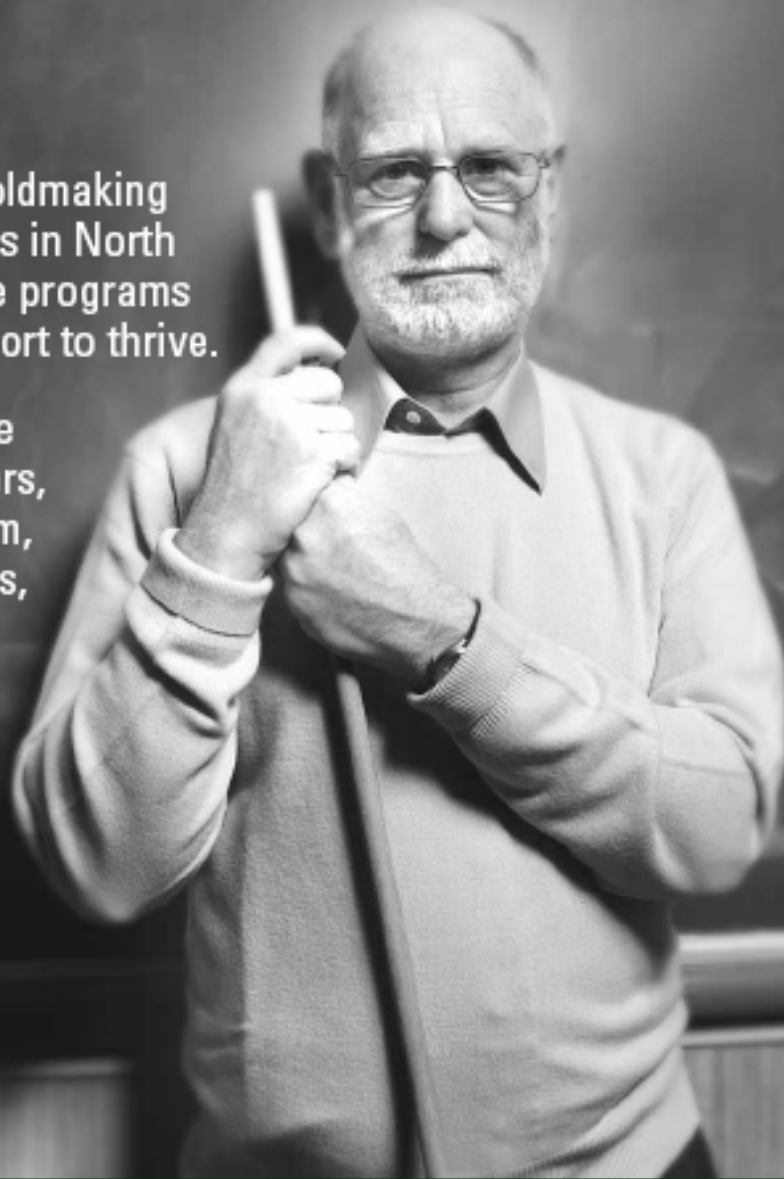
Alternate output: Camera ready art (or business card)



# HELP ME TEACH

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## **I.T. QUARNSTROM FOUNDATION**

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63 W. Breitmeyer Place | Mt. Clemens, Michigan 48043

## Message from the Chair cont.

attention to the fact that many of our leaders had been around the division since its inception. And this one gentleman was probably instrumental at one level or another in the formation of our group. That man is Mr. Glenn Beall. Glenn sent me a lovely letter of resignation and while he is stepping back from the day to day activities of the board he has offered to participate on ADHOC programs as we need. Glenn, I can say that you have provided great inspiration in your dedication and caring for our division. Many of us have come to know you as mentor and friend. You will not get away too easily from our fingers. I have taken the liberty to provide a short excerpt from Glenn's letter for you our members. And here it is:

"I was elected to the Mold Making & Mold Design Division Board of Directors in 1983. I became Secretary of the Board the same year and Chairman for the 1986-1987 term. It is hard for me to believe that I have been on the Board for twenty-nine years.

I have been on other SPE Division Boards, but never for very long. I've often considered moving on and wondered why I hung around for so long. I was always, and still am, interested in the training of mold makers and designers. Aside from that I have to believe it was the camaraderie of like-minded people. Over the years there have been a lot of very impressive and dynamic people serving on the Board. A lot of good things have been achieved. It has been a privilege to have been associated with these industry leaders."

Thank you seems too shallow for all you have done Glenn - Enjoy your retirement and your activities in the Plastics Pioneers.

There are more "ANTEC" style venues popping up all over the globe. It seems Mumbai-Tec is moving forward as is China-Tec. Both of these are generating a fair amount of local discussion in the industry and we hope that SPE will truly gain as a result of the efforts.

The board will hold another meeting to finalize the Mold Maker of the Year Award and the Mold Designer of the Year Award. We will finish the fiscal year with a late June meeting to set our budget and plan for 2013-2014 operations. As you can see we are a busy group with many different activities and we want your input to determine what is of the greatest value in the marketplace.

Stick with us, it will be Exciting and the rewards will be Great!



Scott L. Peters

Mold Making and Mold Design Division - Society of Plastics Engineers, Inc.

Chair 2012 - 2014

### ***Words of Wisdom***

The more a man  
knows, the more he  
forgives.

**-Catherine the  
Great**

# Everything Else comes second!

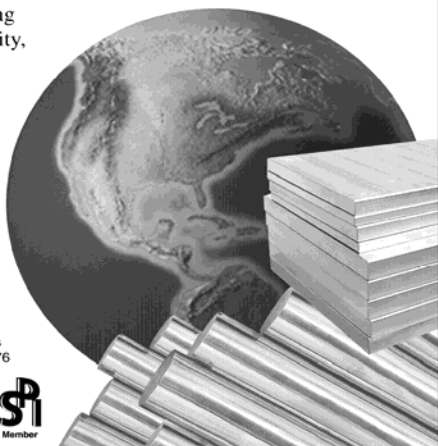
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**progressive** (pro-gres-iv) adj.  
Making use of new ideas, findings or opportunities. Advancing past practices.

**Progressive** (pro-gres-iv) n.  
The source that leads with innovation.  
For those who demand it.

## SETTING HIGHER STANDARDS

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- Improved performance of standard mold components
- Competitive pricing within a globally connected service network

Progressive is more than just our name. Advancing your standards...Is our mission.



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## Calendar of Industry Events

Reed Exhibitions Japan Ltd—Plastic  
Japan

April 10, 2013  
Tokyo, Japan

Society of Plastics Engineers—  
ANTEC 2013

April 22-24, 2013  
Cincinnati, Ohio, USA

Society for the Advancement of  
Material and Process Engineering  
(SAMPE) - SAMPE 2013

May 6-9, 2013  
Long Beach, California, USA

Society of Plastics Engineers—  
EUROTEC 2013

July 4-5, 2013  
Lyon, France

Society of Plastics Engineers—CAD  
RETEC 2013—Color Comes Alive

September 22-24, 2013  
Baltimore, Maryland, USA

Society of Plastics Engineers—SPE  
Thermoforming 2013 Conference

September 23-26, 2013  
Atlanta, Georgia, USA

Society for the Advancement of

Material and Process Engineering  
(SAMPE) - SAMPE 2013

October 21-24, 2013  
Wichita, Kansas, USA

Reed Manch Exhibitions Ltd- India  
Composites Show 2013

October 24, 2013  
New Delhi, India



# ANTEC 2013 MM&MD Speaker Lineup

## Technology

### T14 - Mold Making & Mold Design

(Morning of Tuesday, April 23)

**8:00 AM: Keynote** - Patricia Miller, Senior Technical Manager, Bohler-Uddeholm Corporation, "New Developments in Stainless Mold Materials"

*Keynote description:* This keynote speech is a brief review of the changes in stainless alloys for plastic mold tooling and holders over the past 20 years. It will discuss the benefits that these alloy developments have brought to the tooling market, and the challenges that are still present as new molding materials are developed, and the molding environment becomes more hostile.

**8:30 AM:** 1591344 - Peter Röstel, Post Grad Student - Validation of a highly thermally conductive iron-cobalt-nickel alloy as tool material for injection molds

**9:00 AM:** 1623955 - Frank Rymas - Cemented tungsten carbide: An innovative material for custom core pins in the plastic injection molding industry

**9:30 AM:** 1590459 - Wern-Shiarng Jou - The Optimal Gate Design of a Metal Injection Mold for a Hinge

**10:00 AM:** 1583402 - Jason Williams - Mold Building and Project Management Maturity

**10:30 AM:** 1591944 - Randy Winton - Mold Maintenance: A Strategy for Optimizing Mold Performance

### BREAK

### T33 - Mold Making & Mold Design Division (Afternoon Tuesday)

SESSION TITLE/THEME: Mold Design & Optimization

**1:30 pm: Keynote** - Steve Johnson, ToolingDocs LLC, "How to Improve Mold Maintenance Efficiency for More Profitable Production"

**2:00 PM:** 1592068 - Alan Hickok - Improving Mold Efficiency through Optimization of Collapsing Core

**2:30 PM:** 1591955 - Ken Rumore - Mold Alignment: Testing Engineered Options

**3:00 PM:** 1591670 - Thomas Knight - Listening to Your Mold Using Advanced Mold Monitoring Technology

**3:30 PM:** 1576804 - Fred Buja - Eliminating Burned Parts through Vent Sensing

**4:00 PM:** 1561437 - Ivo Erler - Integrative approaches for the mechanical mold design in injection molding

**4:30 PM:** 1561530 - Paul Walach - Piezo based mold design for injection-compression molding of high precision plastics lenses with minimized centering error

**5:00 PM:** 1588211 - Prof. Wen Ren Jong - Applying ant colony system algorithm in the navigation process for mold manufacturing scheduling optimization

## POSTERS

1574852 - Maria Candal Pazos "Design of an Isolated Runners Mould by using CAD/CAE Tools" - Poster

1579977 - Maria Candal Pazos "Use of a Stack Mould to Increase the Productivity and the Quality in the Injection Moulding" - Poster

1591161 - Pedro Oliveira "Integration of Electron Beam Polishing with Laser Machining" - Poster



# Call for Candidates for Mold Maker of the Year 2013 Award and Mold Designer of the Year 2013 Award



Every year, the Society of Plastics Engineers, Mold Making & Mold Design Division recognizes both a Mold Maker and a Mold Designer, who have made great contributions to their profession and craft, supported/or and advanced the industry at large, and who have played a significant role in supporting their community.

Anyone may submit a candidate to be considered for either of these two prestigious honors. To submit a candidate, please fill out your contact information, along with the contact information for the award candidate. Please identify the award that you are submitting the candidate for. Also, please include a bio for the candidate which explains why you feel that your candidate should receive the respective award.

## Your contact information:

Full name: \_\_\_\_\_

Mailing address: \_\_\_\_\_  
\_\_\_\_\_

Phone number: \_\_\_\_\_

E-mail address: \_\_\_\_\_

You are submitting the candidate below for the following award(s):

- Mold Maker of the Year 2013 (Please check boxes that apply)
- Mold Designer of the Year 2013

Please note that in some cases, a candidate can be suitable for consideration for either award (example: the candidate performs both mold making and mold design).

Also, please note that if a candidate is selected to receive an award, the candidate will receive only one of the award honors.

## Contact information for award candidate:

Full name: \_\_\_\_\_

Mailing address: \_\_\_\_\_  
\_\_\_\_\_

Phone number: \_\_\_\_\_

E-mail address: \_\_\_\_\_

(Note: Bio for Candidate must be submitted for consideration)

**Send Nominations To**

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# AMBA Winter/Spring 2013 Business Forecast Survey Results

For Immediate Release

November 5,, 2012

Contact: Kym Conis

AMBA Managing Director

847.222.9402 kconis@amba.org



## Mold Building Industry Remains Strong

### AMBA's Winter State of the Business Report

**Rolling Meadows, IL:** Most mold building executives understand that the 4th quarter of any year brings about significant challenges as customers and OEMs define coming year budgets and often become hesitant to make decisions at the year's end. This year, items multiplying the impact of the traditional year-end include speculation about the plans of the re-elected administration and how the decision makers will handle our country's fiscal responsibilities to both its citizens and its debt holders. However, the numbers reported by over 80 different firms across the United States in AMBA's most recent economic survey indicate a more positive outlook on future growth than expected, and the outlook for the moldmaking industry in general seems strong and steady.

Although there are some tooling shops that are struggling, the general population of moldmakers in the US is seeing very good market conditions. Currently, slightly over 8 out of 10 of the surveyed participants indicated that current business conditions are either excellent or good, (with the overwhelming majority reporting good) and 17 percent reported business being at least fair.

When considering business conditions, moldmaking executives often look at their backlogs and 90-180 day sales pipelines to obtain the proverbial "gut" feel of their own situation. However, adding to the positive outlook is the fact that profits also are being maintained. From the last survey AMBA conducted in the fall of 2012, over 60 percent of the survey participants indicated that profits remained the same compared to today, where over 70 percent are now reporting their profits as remaining steady.

Those indicating profits are down also have improved from the last survey period moving from 20 percent to 16 percent of the participants reporting profit declines. (With this being said, there does exist a cautionary flag about profitability that must be noted. Beginning at the start of 2012, a decreasing trend line shows the number of moldmaking executives identifying profits as being "up" has been on a consistent decline for the last four quarters - nearly half of the positive responses received slightly over one year ago.)

With this said, projections are even stronger with 93 percent of the mold building population forecasting that the business will increase substantially, moderately or remain the same. Fortifying the outlook is the fact that the Society of the Plastics Industry (SPI) indicated in mid-December that the value of exported molds grew by 18 percent during the first nine months of 2012. Laurie Harbour, president of Harbour Results, a global manufacturing consulting firm with strong expertise in the moldmaking industry, recently indicated that "we have seen this demand continue through the final quarter of 2012." Based on the backlog and demand

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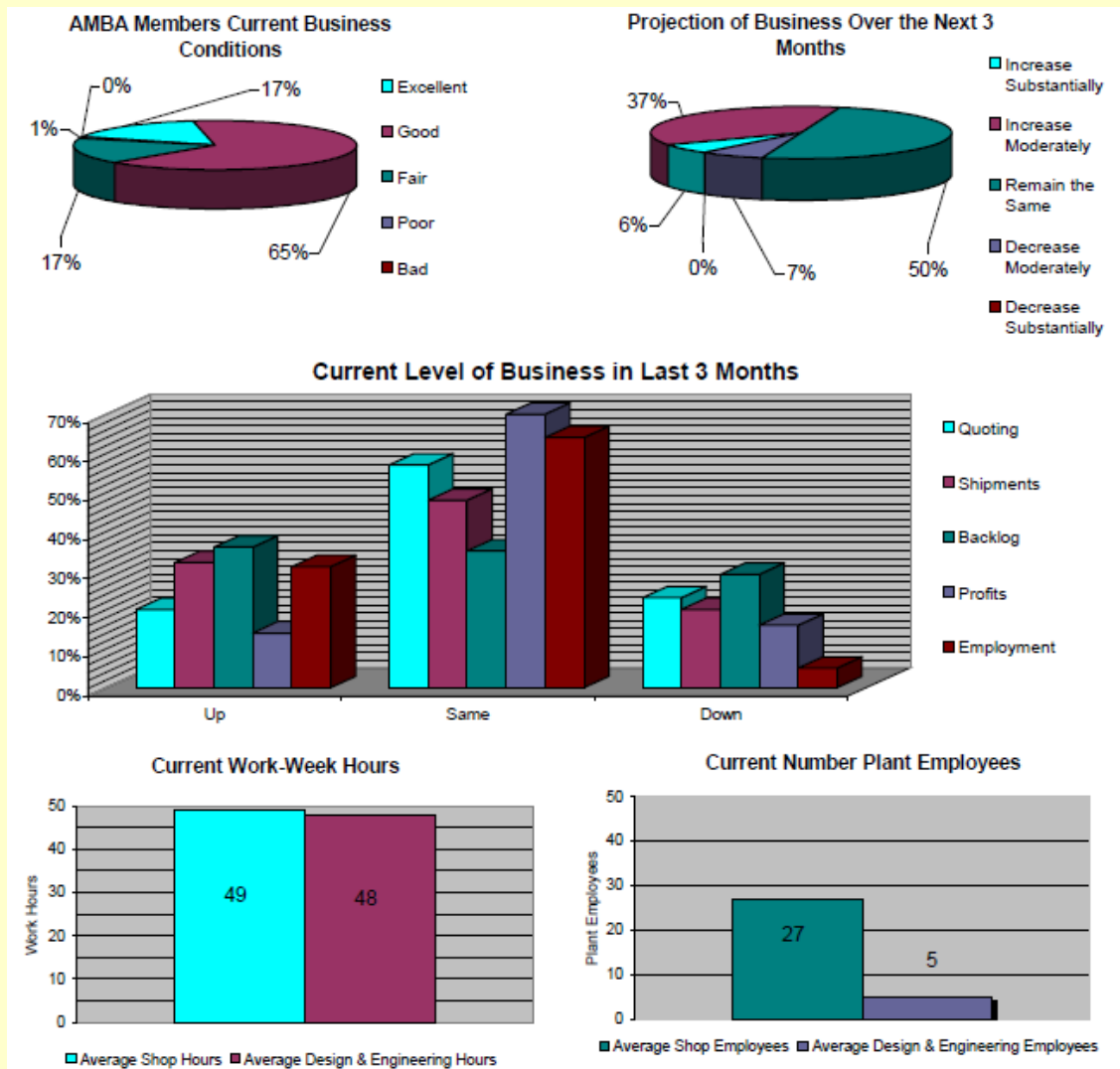
# AMBA Winter/Spring 2013 Business Forecast Survey Results

seen with many moldmakers in Harbour's client base, Harbour has every expectation this will continue well into 2013. Finally, 95 percent of survey respondents have maintained or increased their workforce levels while the "work-week" hours have remained extremely consistent over the last 18 months, running at a median of 50 hours. This is significant because it continues to indicate a very steady business climate for the majority of moldmakers. Overall, the data reported in this 1st quarter survey shows the moldmaking industry to be stable with strong growth ahead for the coming year. For more information on the AMBA, visit [www.amba.org](http://www.amba.org).



## AMBA Winter/Spring 2013 Business Forecast Survey Results

The AMBA Business Forecast Survey was developed to provide AMBA members with information on the current business conditions and a projection of the upcoming months. The Winter/Spring 2013 Survey resulted a response rate of 38% from AMBA members. Business remains "Good" for 65% of the respondents, and for 17% of the respondents it is "Excellent."





**ANTEC Registration Form**  
**April 21-24, 2013**  
**Advance Registration Deadline April 12, 2013**

**Attendee Information**

Please update your information here:

SPE Membership Number \_\_\_\_\_ This is my \_\_\_\_\_ home address or \_\_\_\_\_ company address  
(check one)  
Name \_\_\_\_\_ Title \_\_\_\_\_  
Company \_\_\_\_\_ Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip/Postal Code \_\_\_\_\_ Country \_\_\_\_\_  
Email \_\_\_\_\_ Phone Number \_\_\_\_\_ Fax Number \_\_\_\_\_  
Date of Birth \_\_\_\_\_ Male \_\_\_\_\_ Female

**Registration Class (check all that apply)**

\_\_\_\_\_ First Time Attendee \_\_\_\_\_ LinkedIn® Member \_\_\_\_\_ Facebook® Member \_\_\_\_\_ SPE Councilor  
\_\_\_\_\_ ANTEC 2013 Division/SIG Technical Program Chair \_\_\_\_\_ Honored Service Member \_\_\_\_\_ SPE Fellow  
\_\_\_\_\_ Speaker: Technical Paper Number \_\_\_\_\_ Moderator: Technical Session Number \_\_\_\_\_  
Check which day(s) you will present/moderate: \_\_\_\_\_ Monday \_\_\_\_\_ Tuesday \_\_\_\_\_ Wednesday  
\_\_\_\_\_ Check here if you are a replacement speaker

**Primary SPE Technical Division/Area of Interest (Primary Division Included with Membership)**

New Members: My Primary Division is \_\_\_\_\_. Check other (s) as additional Divisions at a cost of \$10 each.

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Additives & Color Europe (45)           | <input type="checkbox"/> European Medical Polymers (46) | <input type="checkbox"/> Polymer Analysis (33)                |
| <input type="checkbox"/> Automotive (31)                         | <input type="checkbox"/> European Thermoforming (43)    | <input type="checkbox"/> Polymer Modifiers & Additives (38)   |
| <input type="checkbox"/> Blow Molding (30)                       | <input type="checkbox"/> Extrusion (22)                 | <input type="checkbox"/> Product Design & Development (41)    |
| <input type="checkbox"/> Color & Appearance (21)                 | <input type="checkbox"/> Flexible Packaging (44)        | <input type="checkbox"/> Rotational Molding (42)              |
| <input type="checkbox"/> Composites (39)                         | <input type="checkbox"/> Injection Molding (23)         | <input type="checkbox"/> Thermoforming (25)                   |
| <input type="checkbox"/> Decorating & Assembly (34)              | <input type="checkbox"/> Medical Plastics (36)          | <input type="checkbox"/> Thermoplastic Materials & Foams (29) |
| <input type="checkbox"/> Electrical & Electronic (24)            | <input type="checkbox"/> Mold Making/Mold Design (35)   | <input type="checkbox"/> Thermoset (28)                       |
| <input type="checkbox"/> Engineering Properties & Structure (26) | <input type="checkbox"/> Plastics Environmental (40)    | <input type="checkbox"/> Vinyl (27)                           |

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# ANTEC Registration Form

April 21-24, 2013  
Advance Registration Deadline April 12, 2013

## I. Registration

	Save Up To \$155 Before April 12, 2013	After April 12, 2013
<b>SPE Member</b>	<b>Advance Price</b>	<b>Onsite Price</b>
ANTEC Full Conference (includes conference proceedings)	\$895	\$850
One-Day Conference	\$495	\$650
Exhibits Only (Includes Business of Plastics)	\$75	\$125
Speaker/Moderator Full Conference	\$400	\$500
Speaker/Moderator One-Day	----	----
Division/SIG Technical Program Chair Full Conference	----	----
Division/SIG Board Member	\$350	\$350
Student, Full Conference	\$100	\$110
Student Speaker, Full Conference	----	----
Emeritus	\$150	\$150
*New Membership or Dues Renewal	\$109	\$109
Emeritus/Student New Member/Renewal	\$31	\$31
Conference Proceedings (already included with any Full Conference registration)	\$20	\$50
<b>Nonmember</b>		
ANTEC Full Conference (includes conference proceedings)	\$895	\$1,050
One-Day Conference	\$695	\$850
Exhibits Only (Includes Business of Plastics)	\$75	\$125
Student, Full Conference	\$100	\$110
Conference Proceedings (already included with any Full Conference registration)	\$40	\$100
Scholarship Fund (Helps fund scholarships to students in the field of plastics)	\$10	\$10
Voluntary Contribution (This is an unrestricted gift to the SPE Foundation)	\$10	\$10

\*Special Conference Rate-\$200 savings off the non-member registration rate of \$895.

## II. Special Events

### Sunday, April 21

SPE Celebrates! Banquet

\_\_\_\_\_ Tickets per person @ \$75 each \$ \_\_\_\_\_

\_\_\_\_\_ Table of 10 @ \$700 each \$ \_\_\_\_\_

### Monday, April 22

ANTEC Welcome Reception Guest (for non-registrants)

\_\_\_\_\_ Ticket without registration @ \$30 each \$ \_\_\_\_\_

### Wednesday, April 24

Student Awards Luncheon

\_\_\_\_\_ Student ticket per person @\$5 each (\$20 onsite) \$ \_\_\_\_\_

Student Awards Luncheon (Guests)

\_\_\_\_\_ Tickets per person @\$20 each (\$40 onsite) \$ \_\_\_\_\_

Student Speed Interviewers/Companies

\_\_\_\_\_ Tickets \$25 each \$ \_\_\_\_\_

Student Speed Interviews

\_\_\_\_\_ Tickets \$0

Continued on page 15



## ANTEC Registration Form

April 21-24, 2013  
Advance Registration Deadline April 12, 2013

### III. Registration Cancellation Policy and Payment Instructions

Full refunds will be granted through March 15, 2013 less a \$100 processing fee. No refunds will be granted after the March 15, 2013 deadline.

ALL REGISTRATIONS MUST BE ACCOMPANIED BY A CREDIT CARD NUMBER OR CHECK. Please make checks in US Dollars payable to SPE ANTEC. Return your completed registration form and payment to:

SPE Customer Relations Department, Society of Plastics Engineers  
13 Church Hill Road, Newtown, CT 06470. By Fax: +1 203-775-8490

Registration Subtotal (Section I) \$ \_\_\_\_\_

Special Events Subtotal (Section II) \$ \_\_\_\_\_

GRAND TOTAL \$ \_\_\_\_\_

Credit Card Information (Check One) American Express \_\_\_\_\_ Visa \_\_\_\_\_ MasterCard \_\_\_\_\_

Credit Card Number \_\_\_\_\_ Exp. Date \_\_\_\_\_ Security Code \_\_\_\_\_

Name On Credit Card \_\_\_\_\_ Amount \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

Check Number \_\_\_\_\_ Amount \_\_\_\_\_

Security Code for Visa/MasterCard: The 3-digit security code can be found on the back of your card in the signature strip. You will find a 7-digit number: the last 3 digits are your security code.

Security Code for American Express: The 4-digit security code is printed on the front of the card directly over the last raised digit in your card number.

\_\_\_\_\_(Handicap Box Logo) Check box if you or your spouse/guest require special accommodations to fully participate in ANTEC 2013. Please attach a written description of your needs.



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# Mold Making and Mold Design Board of Director Meeting Minutes

**Date:** 07-Jan-2013

**From:** Scott L. Peters

**To:** SPE Mold Making & Mold Design Division Board of Directors

**Subject:** BOD Meeting Minutes 15- Dec-2012

Scott Peters Division Chair called the meeting to order on 15-Dec-2012, 08:10 AM Beijing Standard Time (19:10 EST New York 14-Dec-2012).

## **Roll Call:**

Scott Peters, Wayne Hertlein, Jerry Fischer, Glenn Starkey, Glenn Beall, Brian Lather, Fred Steil

## **Absent:**

Vic Baez, Bob Ellerman, Tony Lauzon, Barbara Arnold-Feret

## **Secretary Report – Minutes Review:**

Scott Peters acting as the Secretary reviewed the meeting minutes from Last (3) BOD meetings.

**Motion:** To approve all minutes as submitted and reviewed by the acting secretary. Motion by Jerry Fischer – motion carried.

## **Committee Chair Reports:**

Due to a personal commitment Glenn Starkey presented the Technical Program Chair report out of order from the published agenda.

## **TECHICAL PROGRAM CHAIR REPORT – Glenn Starkey**

### **ANTEC 2013**

Glenn has enlisted Cyndi Kustush of his organization as an assistant in managing the solicitation and review of papers. [Cyn-di.Kustush@ProComps.com](mailto:Cyndi.Kustush@ProComps.com).

Present technical program for ANTEC 2013 consists of 6 General Session Papers and 6 Student Session Papers.

Glenn shared concern over attendance at ANTEC given the Cincinnati venue.

### **AMERI-MOLD 2013**

Glenn met with Cristina Fughes at Euro-Mold 2012 in Hanover Germany. During the meeting they discussed the potential of Mold Making and Mold Design Division -

- Providing Technical Programming on the Engineering portion of the conference.

- Co-presenting the Mold Maker and Mold Designer of the Year Awards with the MoldMaking Technology Lead-Time Leader Award.

- Working more closely with MoldMaking Technology in providing synergy and visibility for the division in industry (mostly in the US).

- Utilize a free 10 x 10 booth space at the exhibition.

- Secure attendee listings from the conference for use in generating potential new memberships in SPE Mold Making and Mold Design Division.

**Motion:** To provide ½ Day Technical Programming for the Ameri-Mold 2013 Conference and Exhibition on the subject of Engineering and exploratory work to find areas of greater synergy for similar conferences in the future – Glenn Starkey to coordinate and act as liaison to the board. By Glenn Starkey – Motion carried.

At this point the meeting returned to the original agenda.

## **Division Chair Report – Scott Peters**

Resignations –

*Continued on page 17*

# Mold Making and Mold Design Board of Director Meeting Minutes

Glenn Beall submitted his resignation from the "Active Board" and will accept special assignments as needed on a limited basis. His letter of resignation is attached and should be re-published in entirety in the division newsletter.

Robert "Bob" Ellerman informed me that he would not be able to participate on the board at the present time due to work commitments. He requested that he not be placed on the ballot for re-election in 2013.

## Special Thanks and Recognitions –

As noted in the recent newsletter Wayne Hertlein was recognized for his extra efforts on behalf of the board.

Glenn Beall was recognized for his many years of service and dedication to the industry and our division.

Jerry Fischer and Fred Steil were recognized for their years of service and continued dedication to the industry and division.

## Special Projects –

Vic Baez is working on an alternating schedule to allow greater participation in board meetings. This will be reviewed with the board to ensure that all members are in agreement with the times and days of the week. It appears that Friday evenings in the US and Saturday Mornings in China are not good for all members.

## Communications/Division Hotline –

There has been no activity on the Division Hotline since our last meeting.

Posting on the Division Linked-In Page seeking input from membership has shown ZERO RESPONSE.

## In Passing –

Steve Mandes, Executive Director of the National Institute of Metalworking Skills passed away in April of 2012 after a two year battle with cancer. Steve succeeded Bob Sherman as Executive Director. Steve was instrumental in establishing a "Skills Based" Apprenticeship Program with the U.S. Department of Labor. An e-mail letter was sent to the current Executive Director, James Wall, expressing sincere regret over Steve's passing. A copy is attached.

## **Division Chair-Elect Report – Anthony "Tony" Lauzon**

No report provided at this meeting.

## **Treasurers Report – Wayne Hertlein**

M & I Bank was sold to Harris Bank Corp of Chicago. As a result all new signature cards were required and reporting was delayed to the division.

### Current Financial Status:

\$39,185.00 in Checking

\$87,273.68 in Certificate of Deposit Investments (maturing over next 3 years)

\$1,213.60 Rebate and \$1,375.00 Sponsorship to be deposited

2011 Operational Taxes have been filed and received at the IRS

2012-2013 Operating Budget has been filed with SPE Headquarters and will be e-mailed to all board members.

### ITQ Financial Status:

\$766.32 in Money Market Checking

\$37541.60 in Certificate of Deposit

## **Newsletter Sponsorship Report – Jerry Fischer**

### Sponsors:

No losses from last report, but no additions either

Invoicing going out on time – telephone work to secure payments behind due to work schedule.

The new format and timing on Newsletter Publication will be good as the timing more accurately reflects current conditions.

Need for transition planning to begin as assistant to Jerry and then take over the committee at some point in the future.

## **Mini-Tech Chair Report – Barbara Arnold-Feret**

No report provided at this meeting.

## **Division Councilor Report – Barbara Arnold-Feret**

No report provided at this meeting.

*Continued on page 18*

# Mold Making and Mold Design Board of Director Meeting Minutes

## **Membership Chair Report – Barbara Arnold-Feret/Vic Baez**

No report provided at this meeting.

Scott Peters noted that the Active/Inactive Membership Reports on the SPE Intra-Net are one and the same and that they show the entire membership of SPE not a breakdown by division. This has been reported to SPE HQ with no response to date.

## **Awards Chair Report – Wayne Hertlein**

Work is underway for the ANTEC Speaker and Moderator Awards. This is being coordinated with Glenn Starkey to ensure proper names and numbers of awards.

Honorarium presentations for Student Speakers (or teams of speakers) need to be determined prior to ANTEC.

Mold Maker and Mold Designer of the Year Nominations opened in the most recent newsletter.

## **Newsletter Editor Report – Anthony “Tony” Lauzon**

Report copy attached.

## **Inter-Society Liaison Report – Scott Peters**

Report copy attached.

## **Education Chair Report – Robert “Bob” Ellerman**

No report provided at this meeting.

## **New Sponsors Chair Report – Brian Lather**

No report provided at this meeting.

Scott Peters explained in further detail the expectations for this committee (of the whole). It is every board members responsibility to assist Brian in attempting to secure new sponsors for the division newsletter. The funding of the newsletter allows the division to provide monies for other projects and educational endeavors.

## **ITQ Chair Report – Fred Steil**

ITQ is working to secure new sponsors. At present the contact listing is very thin and thus contacts are few and far between. Fred requested that board members send him potential sponsor contact information so that he and the ITQ Board can follow-up and solicit funding.

ITQ is working with the Plastics Pioneers Association to see if there is synergy.

## **Division Historian Report – Glenn Beall**

The division history has been transferred to Wayne Hertlein. This was accomplished in October. Included in the transfer was the Division Chair Briefcase. Wayne is working to open the locks and will report the contents.

Glenn thanked the board for all of our commitments to the industry and the division.

## **Old Business:**

There was no additional old business at this time.

## **New Business:**

Scott Peters introduced a discussion point related to the proper distribution of Division Funds. This discussion centered on the potential philanthropic activities of the Division within Education and/or Research. The discussion was wide ranging and in the end was brought to a close with a request by Scott that each board member think about where he/she sees a good application of monies and send that listing to him for compilation. The compiled listing will then be distributed to the

*Continued on page 19*



## Mold Making and Mold Design Board of Director Meeting Minutes

board for further review and discussion. The goal is to find lasting ways to use the division funds that will bring honor to the division and a lasting legacy in the industry. The reports should be submitted prior to the end of January 2013.

A motion to adjourn the meeting was made at 10:15 AM Beijing Standard Time on 15-Dec-2012.

Respectfully Submitted



Scott L. Peters  
Chair Mold Making and Mold Design Division, the Society of Plastics Engineers, Inc.  
2012 – 2014

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# Designing for reshoring: Can DFM and DFA bring it home?

By Clare Goldsberry

Published: January 3, 2013

Total cost of ownership (TCO) and total cost of management (TCM) represent a supply chain model that has been around for several decades. However, according to John Biagioni, VP of supply chain and operations for Dynisco, the concepts are an underdeveloped management science.

TCO and TCM can drive product development changes, while Design for Manufacture and Assembly (DFMA) represents one of the complementary tools that can help companies reduce their total costs to manufacture and determine whether to off-shore manufacturing, reshore manufacturing or keep it here from the start.

Labor has been one of the biggest perceived cost drivers in pushing OEMs to outsource to Asia. Yet rising labor rates are becoming a big issue in China as there are fewer agricultural workers migrating from the farms to the large cities, which is driving up factory wages. DFMA can eliminate labor from the equation - or at least make it less of a consideration - if companies would implement DFMA as a part of their TCM and TCO.

Click Here for the full story  
[www.plasticstoday.com](http://www.plasticstoday.com)



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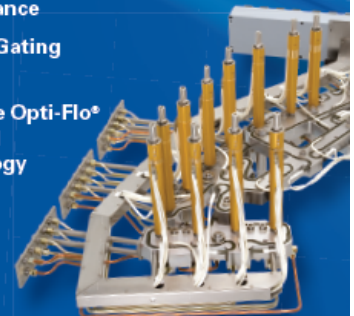
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**Fraternity Brothers Band Together to Honor Fallen  
Classmate**



**Navy Pilot Lieutenant**

**John Leon Abrams**

**Killed in Action over Vietnam in 1968**

**The John Leon Abrams Memorial Scholarship Committee and Stout Foundation  
acknowledges the support and generous contribution from**

**The Mold Making and Mold Design Division  
of the Society of Plastics Engineers**



*Continued on page 22*

## Fraternity Brothers Band Together to Honor Fallen Classmate

Dec. 13, 2012

Menomonie, Wis. — A band of civilian brothers from University of Wisconsin-Stout has made sure that one of their own, a man who made the ultimate sacrifice for his country, will be remembered into perpetuity.

A scholarship in the name of Lt. John Abrams was established this year at University of Wisconsin-Stout, where Abrams graduated 50 years ago, in 1962.

Abrams died July 13, 1968, in the Mekong Delta region of Vietnam when the Navy helicopter he was piloting crashed after being hit by enemy fire.

About a year ago eight members of the Sig Tau Gamma fraternity, of which Abrams was a member, decided to start an endowed scholarship to honor their friend. Nearly \$41,000 has been raised, and the first John Leon Abrams Memorial Scholarship was awarded this fall by the Stout University Foundation.



Photo of Lt. John Abrams

The Sig Tau Gamma group also has presented a plaque to Abrams' family, purchased an engraved brick in his name at the Dunn County Veterans Memorial in Menomonie and has inspired the university to begin developing a Hall of Honor at the Memorial Student Center for all alumni killed while serving their country.

Abrams was one of six UW-Stout graduates who died in Vietnam.

Sig Tau Gamma members and UW-Stout alumni who served on the memorial committee are Bob Dealey '64, Jerry Burke '63, Bob Janeczko '63, Bernie Howaniec '67, Dave Meilahn '63, James Rathert '64, Dave Reisinger '62 and Brian Walker '64.

"Brian Walker, who piloted carrier-based Navy A-4s over Vietnam, asked if a memorial was ever established for John Abrams. That question set John's fraternity brothers on a yearlong mission to honor a Stout grad and war hero," Dealey said.

The scholarship has been funded through pledges from former classmates and the plastics industry, including the Making and Mold Design Division of the Society of Plastics Engineers which donated \$5,000.

The scholarship will be awarded annually to a plastics engineering major upperclassman active in campus activities, a veteran or member of a service branch or a descendent of a veteran.

"The objective was to honor John by naming the scholarship for him, recognize the Stout grads who served our country and to help promote the recently inaugurated plastics engineering program at Stout," Dealey said.

Abrams, along with three other men, died when their helicopter was hit by gunfire. He was 28. He had been in the Navy since 1962, the year he graduated from Stout State College.

He graduated from high school in Milwaukee and is buried there, although his hometown of record at the time of his death is listed as Menomonie.

*Continued on page 23*

## Fraternity Brothers Band Together to Honor Fallen Classmate

To donate to the Abrams scholarship fund or other scholarships at UW-Stout, contact Stout University Foundation, 715-232-1151 or go to [www.uwstout.edu/alumni](http://www.uwstout.edu/alumni).

###

Lt. John Abrams



From Left: Glenn Beall—Past Division Chair (1986-1987), Bob Dealey—Past Division Chair (1990-1991), Pat Miller—Past Division Chair (2003-2004), Wayne Hertlein—Past Division Chair (2010-2012) (2002-2003), Dr. Jeff Anderson—Dean of Science & Technology, Stout University, Sue Pittman—Director of University of Wisconsin—Stout Foundation, Teresa Wentworth—Alumni Services Coordinator University of Wisconsin Stout



From Left: Sue Pittman—Director of University of Wisconsin—Stout Foundation, Wayne Hertlein—Past Division Chair (2010-2012) (2002-2003), Dr. Jeff Anderson—Dean of Science & Technology, Stout University



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**-Dwight D. Eisenhower**

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For more information, please contact the

Newsletter Editor at

[alauzon@husky.ca](mailto:alauzon@husky.ca)



## PRESS RELEASE

Date: March 25, 2013

### Annual Education/Career Night

The Milwaukee Society of Plastics Engineers Annual Education / Career Night is a meeting to educate members about products, companies and technologies. It is also a night to educate educators and students about potential careers in plastics. Make sure you come early to see the fine WCTC facilities and meet the staff.

**When:** Wed April 17, 2013

**Time:**

3:30- 5:00 p.m.	Tour the WCTC Manufacturing labs - Robert Novak (Meet in Richard T Anderson Education Center Lobby for Tours)
4:30 - 5:45 p.m.	Registration Net working/ Table Top Networking
5:45 p.m.	Dinner - Buffet with Dessert/beverages
6:15 p.m.	Speaker - Bob Werner (Pres First Technologies) 3D Printing - Uses for Manufacturing, Rapid Prototyping and Educating
6:40 p.m.	Keynote Speaker - Richard Meeusen -Badger Meter COB/President/CEO-Making Milwaukee the Silicon Valley of Water Technology
7:15 PM	Scholarship and Student Awards/Prizes - Drawing for 3 \$250 scholarships for attending college students
7:45 - 9:00 p.m.	Additional time to view tables/Network

**Cost:**

- Member - \$35.00
- Guest w/member - \$25.00
- Non Member - \$40.00
- Free Students and Educators (with ID) / Parents of students - \$17.00

Students and Educators should register by email to [ray.ciezki@sabic-ip.com](mailto:ray.ciezki@sabic-ip.com) or call 262-370-2259  
(Register by April 10th)

**Where:**

WCTC- Waukesha County Technical College  
Richard T Anderson Education Center  
800 Main Street  
Pewaukee, WI 53072

*Continued on page 26*



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#### **Keynote Speaker:**

Rich Meeusen is chairman, president and chief executive office of Badger Meter, Inc., a Milwaukee-based company that is a leading manufacturer and marketer of flow measurement solutions, with a primary focus on the water industry.

Through his work for Badger Meter, Meeusen began to research the potential of Milwaukee as the “silicon valley” of water. He developed a list of 120 companies based in the region that serve the water industry, recognizing that these companies could be the catalyst for a vision to make the Milwaukee region the world hub for freshwater research, economic development and education.

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## Upcoming Division Board & Business Meetings

Monday April 22 9:00 EST at ANTEC

Teleconference Meeting

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## **I. T. QUARNSTROM FOUNDATION**

A non-profit foundation assisting the Society of Plastics Engineers  
Mold Making and Mold Design Divisions education initiatives.



To Our Colleagues in the Mold Making Community:

Now, more than ever, the next generation of mold design and mold making professionals needs our assistance.

Although current challenges are affecting the mold making community, it is important not to lose our focus and assistance towards curriculums currently in place.

The I.T. Quarnstrom Foundation is a non-profit organization that has been providing funds towards educational causes since 1979. Please review the attached Sponsorship Information sheet and consider becoming a sponsor of the ITQ.

Thank you in advance for your consideration. It is our hope that your assistance can be provided.

Sincerely,

The I.T. Quarnstrom Foundation Board of Directors

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**Foundation Chairman**

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*"The Leadtime Leader award and corresponding article allowed us to showcase our capabilities and gain exposure on a national level. Recently, a local potential client called us asking us for a tour of our facility because they saw the article/award in MoldMaking Technology magazine. That potential client has now been converted into an actual customer."*

Rebecca Ford, Quality Assurance Manager, Mold-Tech, Inc.  
2011 Mid-to-Small Mold Shop Winner

#### Category Winners and Honorable Mentions Earn These Benefits:

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For complete information, eligibility requirements and nomination forms, please visit: [short.moldmakingtechnology.com/LLA](http://short.moldmakingtechnology.com/LLA)  
or contact Editorial Director Christina Fuges at [cfuges@gardnerweb.com](mailto:cfuges@gardnerweb.com) or (800) 579-8809



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We are a non-profit working in cooperation with the SPE Mold Making and Mold Design Division. To become a sponsor, email us at [info@itqfoundation](mailto:info@itqfoundation) or visit [www.itqfoundation.org](http://www.itqfoundation.org).

63 W. Breitmeyer Place | Mt. Clemens, Michigan 48043





# Society of Plastics Engineers

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

## MEMBERSHIP APPLICATION

### Applicant Information

Name:

first last mi

Company Name and Business Address (or College):

company/college:

Job title:

address:

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:

Gender: ☐ Male ☐ Female

Birth Date: (mm/dd/yyyy)

### Demographics

Job Function (choose only one)

- |  |  |
|--|--|
| <input type="checkbox"/> Consulting          | <input type="checkbox"/> Purchasing      |
| <input type="checkbox"/> Design              | <input type="checkbox"/> Quality Control |
| <input type="checkbox"/> Education (Faculty) | <input type="checkbox"/> R & D           |
| <input type="checkbox"/> Engineer            | <input type="checkbox"/> Retired         |
| <input type="checkbox"/> General Management  | <input type="checkbox"/> Self-Employed   |
| <input type="checkbox"/> Manufacturing       | <input type="checkbox"/> Student         |
| <input type="checkbox"/> Marketing/Sales     | <input type="checkbox"/> Tech Support    |
| <input type="checkbox"/> Other               |  |

Materials (choose all that apply)

- |  |                                      |
|--|--------------------------------------|
| <input type="checkbox"/> Composites          | <input type="checkbox"/> Polyolefins |
| <input type="checkbox"/> Film                | <input type="checkbox"/> Polystyrene |
| <input type="checkbox"/> General Interest    | <input type="checkbox"/> TPEs        |
| <input type="checkbox"/> Nylon               | <input type="checkbox"/> Thermoset   |
| <input type="checkbox"/> PET                 | <input type="checkbox"/> Vinyls      |
| <input type="checkbox"/> Foam/Thermoplastics | <input type="checkbox"/> No Interest |

Process (choose all that apply)

- |   |   |
|---|---|
| <input type="checkbox"/> Blow Molding           | <input type="checkbox"/> Injection Molding  |
| <input type="checkbox"/> Compression            | <input type="checkbox"/> Mold Making        |
| <input type="checkbox"/> Compounding            | <input type="checkbox"/> Product Design     |
| <input type="checkbox"/> Engineering Properties | <input type="checkbox"/> Rotational Molding |
| <input type="checkbox"/> Extrusion              | <input type="checkbox"/> Thermoforming      |
| <input type="checkbox"/> Fabrication            | <input type="checkbox"/> General Interest   |
| <input type="checkbox"/> Foam                   | <input type="checkbox"/> No Interest        |

### Payment Information

New Member 1 Year

- ☐ US (\$122.00)  
☐ Canada (\$162.75)  
☐ Euro (€125.00)

New Member 2 Years \*

- ☐ US (\$212.00)  
☐ Canada (\$282.00)  
☐ Euro (€219.00)

Student Member

- ☐ US (\$28.00)  
☐ Canada (\$37.50)  
☐ Euro (€25.00)

Students must supply graduation date: \_\_\_\_\_

Membership Amount \_\_\_\_\_

Primary Division FREE

My Primary Division is (choose from below) D35

Additional Divisions are available for a fee. Check below to select Additional Divisions.

- |   |  |
|---|--|
| <input type="checkbox"/> Additives & Color Europe (D45)           | <input type="checkbox"/> Medical Plastics (D36)                |
| <input type="checkbox"/> Automotive (D31)                         | <input type="checkbox"/> Mold Making & Mold Design (D35)       |
| <input type="checkbox"/> Blow Molding (D30)                       | <input type="checkbox"/> Plastics Environmental (D40)          |
| <input type="checkbox"/> Color & Appearance (D21)                 | <input type="checkbox"/> Polymer Analysis (D33)                |
| <input type="checkbox"/> Composites (D39)                         | <input type="checkbox"/> Polymer Modifiers & Additives (D38)   |
| <input type="checkbox"/> Decorating & Assembly (D34)              | <input type="checkbox"/> Product Design & Development (D41)    |
| <input type="checkbox"/> Electrical & Electronic (D24)            | <input type="checkbox"/> Rotational Molding (D42)              |
| <input type="checkbox"/> Engineering Properties & Structure (D26) | <input type="checkbox"/> Thermoforming (D25)                   |
| <input type="checkbox"/> Extrusion (D22)                          | <input type="checkbox"/> Thermoforming, European (D43)         |
| <input type="checkbox"/> Flexible Packaging (D44)                 | <input type="checkbox"/> Thermoplastic Materials & Foams (D29) |
| <input type="checkbox"/> Injection Molding (D23)                  | <input type="checkbox"/> Thermoset (D28)                       |
| <input type="checkbox"/> Marketing & Management (D37)             | <input type="checkbox"/> Vinyl Plastics (D27)                  |

Additional Division(s)

costs for each Additional Division

	1yr.	2 yrs.
US	\$6.00	\$12.00
Canada	\$8.00	\$16.00
Euros	€5.00	€10.00

TOTAL \_\_\_\_\_

☐ CHECK

☐ VISA

☐ AMEX

☐ MASTERCARD

card number \_\_\_\_\_

expiration date (mm/yyyy) \_\_\_\_\_

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signature \_\_\_\_\_ date \_\_\_\_\_

recommended by member (optional) \_\_\_\_\_ id # \_\_\_\_\_

D

