The Newsletter of the Akron Section of the Society of Plastics Engineers Our 47th Year of Education and Service to the Plastics Industry

Newsletter Contents

Awards Night Highlights	1
Note to Advertisers/Sponsors	1
Incoming President's Message	2
Program Ideas	2
Outgoing President's Message	3
Advertiser Index	4
Spring Golf Highlights	5
Councilor's Corner	6
Awards Night continued	7
Akron SPE Past Presidents	8
Membership Report, 04-05/06	10
Minutes of 05/15 Board Mtg.	11
2006 TOPCON Advance	13
Program	
Akron Section Board Members	15
SPE International Contacts	15
SPE Educational Foundation	16
Member Benefits Guide	17
Insertion Order form – 2006/07	19
SPE Membership Application	20

Reminder to our ~ Advertisers and Sponsors ~

This is the last edition of the 2005-2006 SPE Newsletter for the Summer. The 2006-2007 Newsletter season begins in August, 2006. We appreciate your support for our newsletter and welcome your advertise-Ments for the next year.

Please see the insertion order request form on page 19.

We look forward to working With you in the future!

Awards Night



The Akron Section Annual Awards Night was held on May 22nd at Guy's Party Centre. Sam DeShazior of the Greater Akron. Chamber was the keynote speaker, but the evening was devoted to the giving of awards earned over the past year.

Students were recognized for their achievements in science fairs and essay contest. Other students were rewarded for their academic achievements with scholarships from our education foundation.

Joe Mattingly won the Zekan Award, and Robert Digiantonio was inducted into the Plastics Hall of Honor.

... Continued on page 7







It is my distinct privilege to serve as your elected President for the coming year. I pledge to bring you the high level of service and benefit that you deserve as supportive members of the SPE. As an SPE member affiliated with the Akron Section since the early 1990's, I can relate to the growing importance of plastics in our local economy from then to today. My experience, together with a very capable Board of Directors, aims to enhance the effectiveness of the Section's programs and services.

But this cannot happen without your help and involvement. First of all, we need your input to help guide our planning for programs and events. Secondly, we need your attendance at those events, to enhance the opportunity for networking with peers, suppliers and customers that constitutes such a large benefit of Society membership. Finally, we welcome your participation on our board, if you would be so inclined to volunteer your skills and time. We need your skills and talents to keep our Society strong and prosperous.

Please feel free to contact me by phone (216-741-6883) or e-mail johnwoodside@ameritech.net or, better yet, in person at one of our monthly meetings.

I'm looking forward to seeing you.

John Woodside Incoming President

Program Ideas

If you have any ideas for programs for the 2006-2007 year, please contact Viv Malpass at 330-342-1120 or vivian.malpass@tek-mark.com



- 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

ROBERT SPANO

OFFICE: 330-633-9699 Fax: 330-633-9288

E-MAIL: rspano@PolymerResources.com **CUSTOMER SERVICE: 800-243-5176**

www.PolymerResources.com

Polymer Analysis Services

Polymer, Filler and Additives

- · Complete Deformulation
- Identification and Quantitation
- · Competitive Product Analysis
- Product Failure / Defects



2672 Metro Blvd., Maryland Heights, MO 63043

Analytical Services

chemir.com

ISO 9001

Certified







As the professional year draws to a close, it is timely to reflect on the activities of the Akron Section over the past nine months. However much I would like to spare you the details with a simple synopsis that the Section has been very successful in its programs and its communications with you, the membership, our major accomplishments deserve mention. These achievements have been recognized in the three awards won by the Section and the two awards by our sponsored Student Chapter at The University of Akron. In addition to the monthly Section meetings, we have held a successful TOPCON on Thermoplastic Elastomers and a MiniTech on Additives for Polymers, not to mention a successful golf outing just last month. Of high note is that many of these activities were held jointly with other bordering Sections and regional organizations. In fact, we interacted more strongly with our fellow local sections this year in general, including an organizational meeting held in Youngstown last fall to discuss issues in building section membership, programs and attendance.

We are most proud of our Student Chapter, which has taken a great interest in educational programs, culminating in a winning plan for a Polymer Day next fall that won the CHASE award with a \$2,500 prize. The Section also provided scholarship, science fair and essay awards, which were presented to an audience of winners, parents, teachers and Section members last month. We were proud to have the outgoing President of the SPE, Len Czuba, make the trip from Chicago to be with us and recount the state of the plastics profession from his vantage point. A local perspective was provided by Sam DeShazior of the Greater Akron Council in his after-dinner remarks.

It is now time to put away reminisces of the past year and turn our thoughts forward to the new ventures and accomplishments in store for the Akron Section under the able leadership of our incoming president, John Woodside. I hope that in the next year you will all contribute to my goal for an even more active and responsive membership. We on the Board of Directors promise to make your participation both rewarding and fun.

Hoping to see you all in the fall,

Lloyd Goettler Outgoing President







Advertiser Index

Akron Polymer Training Center	10	
American Polymers, Inc	8	
Ashland	4	
Berstorff	15	
Capco Polymer Ind.	9	
Chemir Analytical Services	2	
Clariant	4	
D-M-E	8	
David Industrial Sales	4	
H.I.S., Inc.	5	
Omya, Inc.	9	
Plastics 101	5	
Polymer Processing & Testing Services	9	
Polymer Resources	2	
Polysort	4	









• Gravimetric & Volumetric Feeders

Vacuum Loaders

• Dense & Dilute Phase Conveying · Systems & Components

Bulk Bag Systems
 Aero Mechanical Conveyors







· Single & Dual Rotor Mixers · Ribbon Blenders

 Shredders Mills

 Dust Collectors Components

www.davidindustrialsales.com Richfield: (330) 659-3157 Perrysburg: (419) 874-1359



Exactly your chemistry.

Bob Woody

800-437-8369

www.clariant.masterbatches.com

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. One call or click to our 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 service solutions that promote health, safety and environmental

® 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

The Formula to Success on Internet

Content = Traffic = Leads = Sales

Good web site Content brings highquality, high-volume Traffic that provides solid sales Leads and many opportunities for Sales.

For high-impact Internet marketing strategies, call (800) 326-8666 or (330) 665-5918.



Internet Marketing Experts for the Plastics and Rubber Industries





Spring Golf Outing

We held our annual spring golf outing on May 19, 2006. We had over 50 golfers on a chilly, overcast day. The rain did start, but not until after all the golfers had their 18 holes in. Prizes were given out to all, withf special wins for longest drives and other golf stuff. One I remember is that Jeff Smola won the longest drive for under 50, which I challenged that we need to verify if he still qualifies. Thanks to all who helped and participated, and see you next year!





Plastics 101

Robert J. Digiantonio

Injection Molding Specialist



P.O. Box 7417 Canton, OH 44705

Consulting

> Personnel training and education

> Project management

> Technical assistance

(330) 493-4033 or (888) 841-1468 Fax (330) 493-4239

> eMail - rdigi@plastics101.com Web - www.plastics101.com



H.I.S., Inc.

Composite Materials & Processes

David G. Miller, President

Phone: (614) 751-0430 Mobile: (614) 314-9492 (Verizon)

Website: http://his-company.com E-Mail: DGMiller@his-company.com

Technical Sales, Consulting and Representation



Councilor's Corner

I attended my last Council Meeting on Sunday, May 7 at the Charlotte ANTEC. Joe Pfeiffer took over as Councilor for 2006-2009 at the first Council Meeting of the 2006-2007 year on Sunday afternoon, May 7.



The Charlotte ANTEC met expectations and, with 2063 registrants, was on budget. The Akron Section was honored to receive 5 awards at the annual Awards Banquet on the Wednesday evening—Section Pinnacle Award (Gold Level), Section Star Award, Student Chapter Chase and Stretch Awards and the Newsletter Award for medium sections. Lloyd Goettler, myself, Kane Guns and Sadhan Jana accepted these awards on behalf of the Akron Section. Tony Dean was recognized as a new Honored Member at the Banquet. Also, your 2005-2006 outgoing President Lloyd Goettler received wide acclaim for his Plenary Speech on "The Emergence of Polymer Nanocomposites". All-in-all an outstanding year of achievement and recognition for the Akron Section. Congratulations to all involved!!!

Following the successful vote to dissolve the SPE Constitution, as of April 10 the new Bylaws and Policy Committee is in effect. This now allows SPE to operate under the new updated Bylaws previously approved by the Council. You can view the new Bylaws on the SPE website. Thanks to all who voted to allow SPE to move forward with the new Bylaws.

Susan Oderwald, your Executive Director, announced at the ANTEC that SPE ended up the 2005-2006 fiscal year with a \$79,000 surplus. This is a big turnaround from recent year's financial performance. Membership, however, was down 5% which emphasized the critical need to gain new members. Please do all you can to recruit new blood for the Section and SPE.

Other significant discussions/actions at the Council meeting were:

- 1) Move to support International Regions, e.g., India, South America, European Coordination.
- 2) Identify ways to improve weaker sections.
- 3) Improve communications.
- 4) Regionalization of SPE activities.
- 5) Review the organizational structure of SPE.

The next Council Meeting will be in Pittsburgh on September 30, 2006.

2006-2007 Akron Section Officers:

President — John Woodside

President Elect—Vivian Malpass

Secretary — David Schultz

Treasurer—Gary Taylor

Councilor — Joseph Pfeiffer

Past President—Lloyd Goettler

Prior Past President—Joe Mattingly

Respectfully submitted, Vivian E. Malpass SPE Councilor, 2003-2006



Awards Night (cont. from page 1)

The Akron section and our Student Chapter were recognized by outgoing SPE president Len Czuba with many awards ... Chase, Stretch, Star, Pinnacle, newsletter and Tony Dean for Honored Service Member.

The evening concluded with the passing of the president's pin from Lloyd Goettler to John Woodside.

Many thanks to all who participated in this enjoyable evening.



Keynote Speaker Sam DeShazior, John Woodside, Len Czuba and Lloyd Goettler



Cameron Fraser presents the Zekan Award to Joe Mattingly



Kathy Perevosnik,, Kaan Gunes, Sadhan Jana and Len Czuba



Cameron Fraser presents Robert Digiantonio for induction into the Plastics Hall of Honor



Lloyd Goettler and Robert Digiantonio



Akron Section SPE Past Presidents



10.50 10.60	B 11E 2'11 II	1000 1000	T
1959-1960	Donald F. Siddall	1982-1983	James Steiner
1960-1961	Milan Krajcik	1983-1984	Robert G. Hills
1961-1962	Foster J. Young	1984-1985	Anthony F. Dean, Jr.
1962-1963	Dickson L. Stoker, III	1985-1986	Gene Buser
1963-1964	Edward L. Hillier	1986-1987	Harry J. Barth
1964-1965	John R. Russell	1987-1988	Judith A. Fallon
1965-1966	John R. Russell	1988-1989	William E. Tosco
1966-1967	Clyde H. Jones	1989-1990	Robert Wegelin
1967-1968	Alan Corry, Jr.	1990-1991	Geraldine R. Stromquist
1968-1969	Bernard M. Saffian	1991-1992	Spencer Keiser
1969-1970	Harold R. Schick	1992-1993	Robert Wegelin
1970-1971	Robert G. Hills	1993-1994	Tony Dean
1971-1972	John J. Satterfield	1994-1995	Wayne Decamp
1972-1973	Alexis M. Gross	1995-1996	Melanie Stewart
1973-1974	Francis J. Maurer	1996-1997	Kevin Hershfield
1974-1975	Leverett A. Anderson, Jr.	1997-1998	Dave Schultz
1975-1976	Robert M. Hershey	1998-1999	John Raab
1976-1977	Richard L. Fleshman	1999-2000	Gary Taylor
1977-1978	David Curtis	2000-2001	Kevin Malpass
1978-1979	John A. Zelek, Jr.	2001-2002	Ken Sharp
1979-1980	Gerald W. Whitnable	2002-2003	Joe Pfeiffer
1980-1981	Kathleen N. Bechter	2003-2004	Robert Wegelin
1981-1982	Victor E. Giuffrida	2004-2005	Joe Mattingly
		2005-2006	Lloyd Goettler



For six decades, the mold tooling advantage.

- Hot Runner Systems
- Mold Bases
- Machining Services
- Mold Components
- Electronic Controls
- Moldmaking Supplies
- Applications Engineering
- Service & Support

Every D-M-E product comes with your satisfaction 100% guaranteed.



800-626-6653 • www.dme.net



Producer and Major Supplier of Quality **Thermoplastic** Resins

- Polystyrene Producer Custom Compounded Resins
- Color Concentrates
- Blending and Grinding
- In-house Laboratory Testing
- Material Handling Systems

Our distribution and warehousing network system assures you on-time delivery:

- ABS
- Acrylic
- Nylon
- Polycarbonate
- Polyethylene
- Polypropylene
- Polystyrene
- SAN



Bill Ferrell (440) 358-0842 Scott Riegger (330) 785-1300 Sales Representatives

11 Buffum Dam Road • Oxford, MA 01540 Tel 508) 987-8565 • Fax (508) 987-8292

www.americanpolymers.com





44408 State Route 14 P.O. Box 4 Columbiana, OH 44408

Contact us at 888.482.4686 or sales@capcopolymers.com

- Prime
- Wide Spec
- · Custom Recycling Program
- Next Day Delivery on In-stock Items
- "Your Complete Resin Source Since 1983"



Omya Inc.

Supplier of Reliable, High Quality Calcium Carbonate to the Plastics Industry 100 North Point Center East Suite 310 Alpharetta, GA 30022 Tel (800) 749-6692 Fax (678) 393-3006 Email: pnpsales@omya.com www.omya-na.com





The University of Akron

The University of Akron Institute of Polymer Engineering

Polymer Processing and Testing Services

Don't want to invest in expensive equipment at this time? Don't know what equipment is best? Only need the use of the equipment for a short period of time?

Perhaps the best answer to these questions is to contract our polymer processing and testing services.

UA's Institute of Polymer Engineering works with all types of clients in the polymer industry, large companies and small firms, well-established businesses and start-ups. Companies turn to the Institute for assistance because they do not have the capabilities (equipment or personnel) to conduct their own research and testing.

The Institute of Polymer Engineering has a wide variety of specialized equipment needed for polymer processing, characterization, analysis and testing. Some of that equipment is listed here below.

To further discuss your needs, please contact Dr Lloyd Goettler at (330) 972-7467 lagoett@uakron.edu or Cameron Fraser at (330) 972-6008 cfraser@uakron.edu

Analysis and Testing

- x-ray
- scanning electron microscopy
- atomic force microscopy
- optical microscopy
- laser microscopy
- TGA
- DSC
- FT-IR
- DMA
- APA
- stress strain testing
- rheology
- · biaxial stretching

Polymer Processing

- single-screw extruding
- twin-screw extruding
- film casting
- film blowing
- fiber spinning
- inication modelin
- injection molding
- compression molding
- · vacuum molding
- blow molding
- compounding

Sample Preparation

- microtoming
- vacuum drying
- sputter coating
- particle size reducing





Membership Report - May, 2006

- •Akron had 4 new members join in May. Our membership number is at **420**! See list for new members in April and May. We also had two transfers in and one out. I also added new members that joined in April since our later issued newsletter allows me to put in May information.
- •Twenty-three members also renewed in May, thank you.

Membership News from National

- •National news, total membership is at 20,148. Variance from 2005 is (802).
- •AIM is at a 23% conversion rate which is still much better than other methods. See the AIM web page for details, http://www.4spe.org/communities/1d/aim.php.
- •Know anyone interested in SPE and want to learn more about us. Just follow the directions on the webpage and A.I.M. will do the rest. Sounds too easy? Try it and let me know what you think.

I had a great time in Charlotte. I will be turning my membership/newsletter duties over to Joe Mattingly. I will be starting to serve my term as Councilor for our section in July! Thanks to all of you that read my emails in the past and attended our meetings and supported our section. This is truly a great SPE section. Let me know how I can help you in my new role!

Membership chair, Joe Pfeiffer

<u>New Members</u> - Say "hello and thanks for joining" if you know the following people.

April, 2006

Mark Didyk

St. Gobain Performance Polymers

Lisa Dimitrijevs

Advanced Elastomer Systems

Jasmes D. Isner

Polymer Diagnostics, Inc.

Joel Martin

Jerico Plastic Industries, Inc.

Andrew Takacs

Advanced Elastomer Systems

May, 2006

Antonio J. Carrillo

The University Of Akron

Kevin J. Moore

Dupont Liquid Packaging Liqui-Box

Page 10

Mark Stokes

A. Schulman

Ken Tsuchibe

NTWK Polymers



Akron Polymer Training Center

Provides training classes for plastic and rubber processors taught by University of Akron faculty and industry professionals. Visit our website at **www2.uakron.edu/aptc** for a complete list of our current course offerings.

Customized Development and Delivery

The Akron Polymer Training Center also specializes in customized training developed specifically for your employees. Depending on your company's particular needs, our courses can be taught on site at your location, or at our state-of-the-art facility on the campus of The University of Akron.

Our programs are designed to enhance on-the-job effectiveness for all professionals working in the polymer field. If you are experiencing difficulty with polymer-related design or processing problems, contact us. Our reliable and dedicated staff will work with your team to develop a training strategy guaranteed to produce results. Contact Tayba Tahir by phone at 330.972.8661 or email Tayba at tahir@uakron.edu. If you don't see what you need, no problem! We have the resources to solve even the most vexing polymer processing and design issues.

Minutes of Board Meeting – May 15, 2006

Call to Order: 5:30 PM at Akron University Polymer Engineering Center

Present: Lloyd Goettler, Cameron Fraser, Vivian Malpass, Bob Wegelin, Joe Pfeiffer, Josh Wong, Reza Sadeghi, Amruth Puttarudraiah and Tony Dean (Acting Secretary)

Absent - John Woodside, Kevin Malpass, Dave Schultz, Hermant Thakkar, Sadhan Jana, Kaan Gunes and Gary Taylor

Minutes: April minutes amended and approved.

Added items to Agenda: 20/20 Program and 2006/2007 Program Schedule.

President: Lloyd commented on the number of awards won by the section this year. The section won the Newsletter Award. Congratulations to Joe Pfeiffer and his staff.

Treasurer: Gary Taylor unable to make meeting. He sent a report.

Secretary: Tony Dean reported that he was taking minutes in lieu of Dave Schultz.

Officers, **2006**: 2006/2007 Section Officers List was updated. Hemant Thakkar will be Education Chairman and Cameron Fraser will be House Chairman. Corrections such as phone numbers and e-mail addresses will be made. **Lloyd Goettler will revise and send new list.**

Awards Night: Cameron Frazer reported that Kathy Perevosnik is handling the program brochure - a rough copy was handed out to the board. It was noted that Tony Dean will not be present to accept the Honored Service Award. Lloyd Goettler announced that Len Czuba, outgoing SPE Int'l president, will be a guest. The Hall of Honor Award will be picked up May 16. Dean Kelley will also be present.

Student Chapter: Kaan Gunes not present. He sent word that the student picnic, scheduled for May 18, was postponed due to bad weather prediction. Student Chapter elections are coming up soon.

Newsletter: Joe Pfeiffer acknowledged that the section had won the Newsletter Award. Additional comments on the Newsletter were: (1) Joe Pfeiffer said that more technical articles are needed, (2) a mailing list supplied by SPE Int'l will be used in the future, and (3) Joe Mattingly will be the Newsletter Editor for 2006/2007. Joe Pfeiffer will assist.

Membership: Joe Pfeiffer had not received the latest information from SPE Int'l. Section membership is approximately 420.

Councilor's Report: Joe Pfeiffer is new councilor taking over for Vivian Malpass. Joe reported that overall SPE membership is flat. Joe also said that the Akron section is one of the better ones. Congratulations to Vivian Malpass on a job well done.

EPSDIV TOPCON 2006: Josh Wong said fourteen papers have been promised. There are 20 attendees now. It was suggested that ACESS be contacted for possible interest as well as more advertising on the Akron SPE website. A link is needed to the registration page. It was suggested that Jenny Digiantonio be contacted to help with the written program.

Minutes of Board Meeting – May 15, 2006 (cont.)

TPE TOPCON 2007: Vivian Malpass reported that the TPE TOPCON will be held at the Hilton Hotel in Fairlawn, Ohio. The TOPCON Committee has been set up. The first meeting scheduled for June 7 at the Hilton-Fairlawn.

Education Committee: Nothing reported.

Education Foundation: The following section members are now on the Education Foundation: (1) Hemant Thakkar, (2) Amruth Puttarudraiah, (3) Kevin Malpass, (4) Bob Wegelin (Chairman), (5) Joe Mattingly (secretary), (6) Lloyd Goettler, (7) Joe Pfeiffer, and (8) Gary Taylor.

Advertising: Joe Mattingly reported that he is getting ready for 2006/2007. There will be a new advertising page on the website and in the newsletter.

Public Interest / Website: Tony Dean reported that the announcement for the Golf Outing and Awards Night were in the May 15 issue of the Akron Beacon Journal. The following items were suggested:

- (1) Do meeting announcements on the Akron Beacon Journal E-News Site. Tony Dean to look into ABJ E-News site.
- (2) Put new post office address on website. Tony Dean to do.
- (3) Place new advertising sheet on website. Tony Dean to do.
- (4) Investigate possible awards for website. Tony Dean to do.
- (5) Revise Awards Page on website. Tony Dean will investigate.

Program: Vivian Malpass reported that John Woodside had five programs lined up plus a possible Supplier's Night and the October EPSDIV TOPCON. Any ideas for programs; send them to Vivian Malpass.

Fall Golf: No golf; plans are to have a regular meeting at a restaurant. Dinner will be a clambake.

Spring Golf: Bob Wegelin reported that 47 golfers were signed up and there are three hole sponsors. Weather forecast was rain.

House: Nothing to report.

ACESS: Lloyd Goettler reported that meeting held on April 27 well attended.

20/20 Program: Vivian reported that he has identified 20 local companies and 20 reasons to join SPE. Idea is to approach them and tell them about benefits of SPE. Joe Mattingly meeting suggested all the companies at once. This topic will be discussed further at the next board meeting

Old Business: Nothing to report.

New Business: Nothing to report.

Closing Comments: Year End board Meeting/Dinner: Lloyd Goettler to determine time and place. Adjourned at 8:00 PM.



Opportunities for sponsorship and exhibiting space available. Contact Frank Cangelosi, Marketing Manager

Unimin Corp., 258 Elm Street, New Canaan, CT 06840 Tel: 203-442-2319, Fax: 203-966-0351, Cell: 203-525-8746

Email: fcangelosi@unimin.com

Abstracts are being accepted. Please submit abstracts to:

Prof. Lynn Loo, Technical Program Chair

Department of Chemical Engineering, University of Texas, Austin

CPE 4.422, C0400, Austin, TX 78712

Tel: 512-471-6300, Fax: 512-471-7060, Email: lloo@che.utexas.edu

Registration http://www.4spe.org/conf/epsdiv06/0610epsdiv.php

SPE members advanced	\$200	Nonmembers advanced	\$250
SPE members on-site	\$300	Nonmembers on-site	\$350
		Students	\$ 25

Conference Hotels

Crowne Plaza at Quaker Square

135 South Broadway Street Akron, OH 44308

Radisson Hotel Akron City Centre

20 West Mill Street Akron, OH 44308 ask for "Society of Plastics Engineers" rate

Sheraton Suites Akron/Cuyahoga Falls phone 330-929-3000 or 800-368-7764

1989 Front Street Cuyahoga Falls, OH 44221

Hilton Akron/Fairlawn

3180 West Market Street Akron. OH 44333 ask for "Society of Plastics Engineers" rate

phone 330-253-5970 or 866-668-6689 e-mail: lbooth@cpquakersquare.com ask for "friends of University of Akron" rate

phone 330-384-1500 or 800-333-3333

e-mail via website

www.radisson.com/akronoh westmill

\$85 for single or double

e-mail via website www.sheratonakron.com ask for "University of Akron" rate

phone 330-867-5000 or 800-325-5788

e-mail via website www.akronhilton.com \$109 for single or double

Sponsors



EASTMAN







TOPCON 2006: Recent Advances in Organic and Polymer Display Technologies



Photo courtesy of the University of Akron

Engineering Properties and Structure Division

Akron, Ohio October 23 and 24, 2006

The University of Akron Student Union ~ Ballroom A

~ Program ~

TOPCON 2006: Recent Advances in Organic and Polymer Display Technologies

Engineering Properties and Structure Division

Day One 《

Morning Session

Materials considerations - design rules for synthesis

- *Ching Tang, University of Rochester
- "Perspectives on Organic and Polymer Displays"
- *Mary E. Galvin, Air Products/University of Delaware
- "Electroactive Molecules and Polymers for Use in LEDS and PVs"
- *Stephen Cheng, University of Akron
- "Polymer Films for Liquid Crystal Display Applications"
- *Franky So, University of Florida
- "Dye-Dispersed Polymer Electrophosphorescent Devices for Solid-State Lighting"

Afternoon Session

Patterning, processing and fabrication

- *Tom Jackson, Pennsylvania State University
- "Vapor and Solution Deposited Organic Semiconductor Transistors"

Yueh-Lin Loo, University of Texas at Austin

"Materials Consideration and Patterning Strategies for Organic Transistors"

Shawn Williams, Plextronics, Inc.

"Advances in PlexicoreTM Technology for Printed Electronic Devices"

Myeong-Ho Hong, Samsung Electro-Mechanics Co.,

"Thermal Imprinting Processing Technologies for Printed Circuit Board Fabrication"

* indicates invited speakers

Day Two



Morning Session

OLEDs and liquid crystal displays

- *Michael Lu, Universal Display Corporation
- "Enabling Large-Area OLED TVs with High Efficiency Phosporescent OLEDS"
- *Shaw Chen, University of Rochester
- "Organic Polarized Light-Emitting Diodes Using Monodisperse Glassy-Nematic Oligofluorenes"
- * Satyen Kumar, National Science Foundation and Kent State University "The Use of Polymers in Liquid Crystal Display Device"

Timothy Schunk, Eastman Kodak Company

"Enhancing the Durability of Polarizers for Liquid Crystal Displays Under Environmental Stress"

Afternoon Session

Physical properties of opto-electrically active polymers

- *Miko Cakmak, University of Akron
- "Mechano-optical Behavior of Polymer Films for Retarder Applications"

Abhishek Kumar Srivastava, Lucknow University, India

"Dielectric Study of Polymer-Liquid Crystal Composites"

Cheol-Ho Choi, Samsung Electro-Mechanics, Co. "Liquid Crystal Polymers in Printed Circuit Board"

Jehuda Greener, Eastman Kodak Company

"The Barrier Problem in Flexible OLED Displays: a Modeling Approach"

Akron Section Board of Directors

216-533-1324 T John Woodside Everlight USA, Inc. 216-741-6883 F President/Chair johnwoodside@ameritech.net

Vivian Malpass 330-342-1120 T Tek-Mark International 330-342-1134 F President/Chair-elect. vivian.malpass@tek-mark.com

VP/Chair, Conf. TOPCON 2007, Program

Dave Schultz 330-798-9300 x212 T Harwick Standard Dist. Corp. 330-798-9328 F schultzd@harwickstandard.com Secretary

Gary Taylor 330-336-6621 T Myers Wadsworth 330-334-7100 F Treasurer gtaylor@po.akro-mils.com

Joe Pfeiffer 330-849-5097 T AES 330-849-5589 F Councilor jepfeiffer@santoprene.com

Lloyd Goettler 330-666-5180 T Retired goet30@aol.com

Past-President/Chair, Fall Social

330-929-4213 x1274 T Joe Mattingly 330-929-4144 F Americhem, Inc. Prior Past-President/Chair, imattingly@americhem.com Membership/Newsletter Ed.

Amruth Puttarudraiah 330-630-7107 T A. Schulman amrutheswar puttarudraiah@aschulman.com Director, Awards

240-643-0184 T Kaan Gunes U Akron Polymer Engineering 330-239-2998 F Director, Student Chapter President kg23@uakron.edu

330-849-5179 T Bob Wegelin AES 330-849-5589 F Director, Spring Golf robert.wegelin@santoprene.com

Kevin Malpass 330-490-4743 T Diebold. Inc. 330-490-4788 F Director malpask@diebold.com

Sadhan Jana 330-972-8293 T U Akron Polymer Engineering 330-258-2339 F Director, Student Chapter Advisor janas@uakron.edu

Hemant Thakkar 330-794-6600 T ARDL 330-794-6610 F Director, Education, hemant thakkar@ardl.com **Education Foundation**

330-972-6008 T Cameron Fraser U Akron Polymer Engineering 330-258-2339 F Director, House cfraser@uakron.edu

Tony Dean 330-929-9916 T Retired - Director, Web Content Master, francis@neo.rr.com Public Interest, Website Manager

Josh Wong 330-972-8275 T U Akron Polymer Engineering swong@uakron.edu Director, Conference TOPCON 2006

330-849-5166 T Jenny Digiantonio **AES** 330-849-5589 F Newsletter jldigi@santoprene.com

Contacts at SPE INTERNATIONAL

14 Fairfield Drive P.O. Box 403 Brookfield, CT 06804-0403

Phone: 203-775-0471 • Fax 203-775-8490

Web: www.4spe.org

all phones in area 203 - all e-mail @4spe.org

NAME / Function e-mail / phone

Susan Oderwald seoderwald **Executive Director** 740-5471

Marie Salzo mcsalzo Executive Assistant 740-5422

Deborah Daily dadailv E-Services Manager 740-5468

Laurie McDougal lamcdougal Training and Education Coord. 740-5432

Jackie Salzo jsalzo 740-5411 **Advertising Sales**

Tobi Gebauer tgebauer 740-5457 Senior Manager, Membership

Tricia McKnight tmcknight Liaison, Leadership Serv.-Section Admn. 740-5430

Maria Russo mrusso Liaison, Leadership Serv.-Divisions, 740-5431 SIGs, Student, ANTEC Exhibits

Lesley Kyle Iskyle Senior Event Manager 740-5452

Gail R. Bristol grbristol Managing Director, Foundation 740-5447

Iroos Customer Relations - BookStore 740-5449

Elizabeth Mitchell emitchell Online Technical Program Coordinator 740-5472

Berstorff

7095 Industrial Rd., PO Box 6270 (41022-6270) Florence, KY 41042 www.berstorff.com 859-283-0200 · Fax 859-283-1860 · Info@berstorff.com Compounding, Pelletizing & Calenderizing Equipment



Akron Section Society of Plastics Engineers, Inc.

The Akron Society of Plastics Engineers Educational Foundation operates exclusively for the benefit of and to carry out the purposes of the Akron Section of the Society of Plastics Engineers, Inc., which is to promote scientific and engineering knowledge relating to plastics by making educational scholarship grants to deserving students in the field of plastics engineering and related subjects. The Organization is supported primarily by contributions from the Akron Society of Plastics Engineers, the Society's individual members and corporations like yours affiliated with the polymer industry.

Since the inception in 1988, the Akron Society of Plastics Engineers Educational Foundation has grown to its current position through the hard work of many volunteers and the generosity of the local business community. Over the twelve years that the foundation has been in existence, it has provided scholarships to over 200 young men and women, totaling in excess of \$100,000 to assist them in furthering their careers in the polymer industry.

Our goal is to continue to grow the assets of the Foundation in order to increase the number of scholarships awarded as well as the size of the awards, and to do so in perpetuity. In doing this, we hope to be able to contribute to the supply of well-trained individuals to support the growth of the polymer industry in the Northeast Ohio area today and well into the future.

When the Foundation began its fund raising activities in 1988, we offered those companies who contributed \$30,000 a scholarship in their name. To date we have two named scholarships -- *Rubbermaid* and *Goodyear*. We are asking your company to help with the growth of well-trained individuals in the local polymer industry. Please check below:

[]	\$30,000 lump sum	[] \$10,000 / yr next 3 yrs.	[] \$5,000 / yr next 6 yrs.
[]	other		

Our named scholarship donors are recognized at the annual Awards Night of the Akron Society of Plastics Engineers. We invite you to present your donation at our Awards Night, which will be scheduled in May.

I am looking forward to your support of this very worthwhile cause by your fine company. Please contact me at 330-490-4743 or e-mail at malpask@diebold.com with any questions. Thank you for your consideration.

Sincerely, Kevin Malpass, Chairman Akron Section Society of Plastics Engineers, Education Foundation

SPE MEMBER BENEFITS GUIDE

		BENEFIT	DESCRIPTION	WEBSITE LINK	
S	NETWORKING	Business Networking Resources Local Section Affiliation Online Membership Directory Technical Affiliation	Connect to industry experts Network with members locally in over 75 countries Unlimited access provides the link to fellow members 24 Divisions represent major industry specialties	www.4spe.org/cc www.4spe.org/communities/sections www.4spe.org/membercenter www.4spe.org/communities/divisions	B
MEMBERS	Мерія	Newsletters Plastics Engineering (PE) SPE Online Tech Focus	News & events about specific local & technical affiliations The official monthly publication of SPE Your 24/7 source for Society information Monthly electronic newsletter offering society & industry news	www.4spe.org/communities/newsletters www.4spe.org/pub www.4spe.org www.4spe.org/membercenter	
FREE TO	TECHNICAL	Online Technical Library Message Forums Special Interest Groups SPE Journals	Searchable database of technical articles & conference papers Online question & answer forum Emerging areas not currently covered by technical Divisions Read abstracts from our three technical journals	www.4spe.org/membercenter www.askpip.com www.4spe.org/communities/divisions/#sig www.4spe.org/pub/journal	
	CAREER	American Management Association Awards Leadership Development Online Career Development Professional Recognition Scholarships & Grants Student Benefits Unemployment Services	Through a partner alliance, access AMA's educational resources Outstanding contributions recognized The opportunity to improve professionally & personally Career enrichment, job openings & resume database Distinguished grades of membership recognize accomplishments Awarded by The SPE Foundation Over 100 Student Chapters in nine countries Benefits for the unemployed member	www.4spe.org/membercenter www.4spe.org/awards www.4spe.org/communities/leadership www.4spe.org/membercenter www.4spe.org/membercenter www.4spe.org/foundation www.4spe.org/membercenter www.4spe.org/membercenter	
RS	Г	BENEFIT	DESCRIPTION	Website Link	

-
100
The same of the sa
\leq
0
0
0
2
0
0
0
0
0
S T0
0
S T0
S T0
S T0
GS TO
S T0
IGS TO
IGS TO
NGS TO
NGS TO
NGS TO
IGS TO

ANTEC Largest annual technical conference in the industry www.antec.ws Career Coaching For-a-fee services for career enhancement www.4careersolutions.org RAINING e-Learning Center Online self-paced courses, live & archived presentations www.4spe.org/elearning In-plant Training Seminar instruction at member's company www.4spe.org/training/seminars Seminars Expert instruction on current plastics topics www.4spe.org/training/seminars **Technical Journals** Subscribe to peer-reviewed articles. Available online and in print www.4spe.org/pub **Topical Conferences** Targeted at specific technical & management disciplines www.4spe.org/conf Training Products Developed by SPE & other leading providers. Some Spanish titles www.4spe.org/training/products Career Transition Services Outplacement program offered to member's company www.4careersolutions.org Group Health Insurance Health, disability & life insurance at attractive group rates www.4spe.org/membercenter Online Job Posting A source for companies to find qualified staff www.4careersolutions.org SPE BookStore Discounts on 250+ reference books & training products www.4spe.org/training/products SPE/MBNA Credit Card SPE Platinum Plus Mastercard® (US & Canada only) www.4spe.org/membercenter

Website links subject to change - check www.4spe.org for full benefits

WHY JOIN ?

It has never been more important to be a member of your professional society than now, in the current climate of change and volatility in the plastics industry. Now, more than ever, the information you access and the personal networks you create can and will directly impact your future and your career.

Active membership in SPE:

- keeps you current
- keeps you informed
- keeps you connected

The question really isn't "why join?" but

WHY NOT?



Akron Section Society of Plastics Engineers

Joe Mattingly, Advertising Manager 330-929-4213, ext. 1274

Insertion Order 2006-07

Polymer Valley News: Akron Section SPE Newsletter
Delivered via email, stored at http://www.akronspe.org/newsletter.htm

Please check ad size wanted. One column is 3-7/8" wide.

Rates are for entire season, September 2006 – Summer 2007. **Payable in Advance. Please let me know if you need an invoice.**

Ad format must be electronic (but we can scan your original artwork). File size should be limited based on the size of the ad ordered. Oversized ads will be charged an additional fee. Acceptable formats are .bmp, .pcx, .jpg, .tif, .gif, or MS PowerPoint or Word (if you have any issues with format, please email us and we can provide assistance). **Color is Free! Color helps your ad stand out!**

Email artwork and this Insertion Order (completed) as an attachment to jmattingly@americhem.com

If you don't include your email address, we have no way of sending you each issue!

(please X)	Ad Size	Dimensions	Price for year
	Business Card	One column by 2" high	\$200
	Double	One column, 2 to 4" high	\$300
	Triple	One column, 4 to 6" high	\$400
	Half Page	One column, 10" high	\$500
	Half Page	Page width (7.5"), 5" high	\$500
	Hotlink to company website	N/A	\$75 / year

The cost on a per issue basis will be calculated by dividing the "Year" price by 10

	Contact Person	Billing Information:
Company:		
Name:		
Address:		
Phone #:		
Fax #:		
Email address:		

Mail checks, payable to AKRON SECTION SPE, to:

Akron Section SPE c/o Joe Mattingly SPE – Akron Section PO Box 1417 Akron, OH 44309



MEMBERSHIP APPLICATION

Applicant information	
Name:	Home Address: (please provide)
first last mi	address:
Applicant Type:	address:
☐ Member	city: state:
□ Student (must supply graduation date)	zip: country:
Job Title:	Preferred Mailing Address:
	☐ Home ☐ Business
Company Name and Business Address (or College):	Job Function: Gender:
company/college:	Job Function: Gender: Gender: □ Male □ Female
address:	☐ Consulting (11) Birth Date: (mm/dd/yyyy)
address:	Design (02) Education (08)
city: state:	☐ General Management The SPE Online Membership
zip: country:	☐ Library (10) Directory is included with membership. Your information
Work Phone: Fax:	☐ Marketing (07) will automatically be included.
()	☐ Quality Control (05) ☐ R & D (03) ☐ Partition (05) ☐ Exclude my email from Online Member Directory
Home Phone:	☐ Retired (98) ☐ Student (09) ☐ Exclude all my information from Online Member Directory
Email: used for society business only	☐ Tech Support (12) ☐ Other (99) ☐ Exclude my address from all 3rd party mailings
	ora party mailings
Payment Information	Sid party mainings
New Member 1 Year New Member 2 Years * Studer □ US (\$117.00) □ US (\$202.00) □ US □ Canada (\$175.50) □ Canada (\$303.00) □ Canada	at Member \$26.00) ada (\$39.00) ⊕(€27.00) Membership Amount
New Member 1 Year New Member 2 Years * Studer □ US (\$117.00) □ US (\$202.00) □ US □ Canada (\$175.50) □ Canada (\$303.00) □ Canada	tt Member \$26.00)
New Member 1 Year New Member 2 Years * Studer □ US (\$117.00) □ US (\$202.00) □ US □ Canada (\$175.50) □ Canada (\$303.00) □ Canada (\$249.00) □ Euro (€143.00) □ Euro (€249.00) □ Euro	Member \$26.00
New Member 1 Year New Member 2 Years * Studen □ US (\$117.00) □ US (\$202.00) □ US □ Canada (\$175.50) □ Canada (\$303.00) □ Canada (\$303.00) □ Euro (€143.00) □ Euro (€249.00) □ Euro My Primary Division is (Division names are below) □ Additional Divisions are available for a fee. Check below to select Addit □ Automotive (D31) □ Mold Making & Mold □ Blow Molding (D30) □ Plastics Environment □ Color & Appearance (D21) □ Polymer Analysis (D3 □ Composites (D39) □ Polymer Modifiers & Delymer	## Member \$26.00) ## ada (\$39.00) ## Primary Division FREE ## Onal Divisions. ## Design (D35) ## Additional Division(s) ## additives (D38) ## delives (D
New Member 1 Year New Member 2 Years * Studen □ US (\$117.00) □ US (\$202.00) □ US □ Canada (\$175.50) □ Canada (\$303.00) □ Can □ Euro (€143.00) □ Euro (€249.00) □ Euro My Primary Division is (Division names are below) □ Additional Divisions are available for a fee. Check below to select Addit □ Automotive (D31) □ Mold Making & Mold □ Blow Molding (D30) □ Plastics Environment □ Color & Appearance (D21) □ Polymer Analysis (D3 □ Composites (D39) □ Polymer Modifiers & A □ Decorating & Assembly (D34) □ Product Design & De □ Electrical & Electronic (D24) □ Rotational Molding (D □ Engineering Properties & Structure (D26) □ Thermoforming (D25 □ Extrusion (D22) □ Thermoforming, Euro □ Injection Molding (D23) □ Thermoplastic Materi □ Marketing & Management (D37) □ Thermoset (D28) □ Medical Plastics (D36) □ Vinyl Plastics (D27) □ CHECK □ VISA □ AMEX □ MAS □ CHECK □ VISA □ AMEX □ MAS	Membership Amount Section Sect
New Member 1 Year New Member 2 Years * Studen □ US (\$117.00) □ US (\$202.00) □ US (\$202.00) □ Canada (\$175.50) □ Canada (\$303.00) □ Can □ Euro (€143.00) □ Euro (€249.00) □ Euro My Primary Division is (Division names are below) □ Additional Divisions are available for a fee. Check below to select Addit □ Automotive (D31) □ Mold Making & Mold □ Blow Molding (D30) □ Plastics Environment □ Polymer Analysis (D3 □ Polymer Analysis (D3 □ Composites (D39) □ Polymer Modifiers & Delectrical & Electronic (D24) □ Rotational Molding (D □ Electrical & Electronic (D24) □ Rotational Molding (D □ Extrusion (D22) □ Thermoforming, Euro □ Injection Molding (D23) □ Thermoplastic Materi □ Marketing & Management (D37) □ Thermoset (D28) □ Medical Plastics (D36) □ Vinyl Plastics (D27) □ CHECK □ VISA □ AMEX □ MAS	Membership Amount Section Sect
New Member 1 Year New Member 2 Years * Studen □ US (\$117.00) □ US (\$202.00) □ US □ Canada (\$175.50) □ Canada (\$303.00) □ Can □ Euro (€143.00) □ Euro (€249.00) □ Euro My Primary Division is (Division names are below) ■ Additional Divisions are available for a fee. Check below to select Addit □ Automotive (D31) □ Mold Making & Mold □ Blow Molding (D30) □ Plastics Environment □ Color & Appearance (D21) □ Polymer Analysis (D3 □ Decorating & Assembly (D34) □ Product Design & De □ Electrical & Electronic (D24) □ Rotational Molding (D25) □ Extrusion (D22) □ Thermoforming, Euro □ Injection Molding (D23) □ Thermoplastic Materi □ Marketing & Management (D37) □ Thermoset (D28) □ Medical Plastics (D36) □ Vinyl Plastics (D27) □ CHECK □ VISA □ AMEX □ MAS Card number	Membership Amount Section Sect