

2003 Fall Reports

Advertising - C. Booth

The current, or fall 2003, CD version of Polymer Preprints has four advertisers. While this is acceptable, there is room to have as many as eight. Currently the advertising group is working with D. Block who is an advertising consultant paid by the ACS. The current plan to increase the number of adds is for Dr. Reddy Venumbaka to "walk the floor" at the New York meeting in order to get more sponsors. He plans on bringing several copies of the preprints CD with him so that any potential sponsors may see the final product.

Future plans also include web based and newsletter based advertising. We hope to have a price list for each of the different types of advertising and then to offer "discounts" if the given sponsor chooses to advertise in more than one location. The current locations include: in the text version of Polymer Preprints, on one of the panels of the CD cover of Polymer Preprints, on the Polymer Preprints CD itself. Currently, advertisements are placed in each location for one price. These prices range from \$1000-7000 depending on location of the add in the CD packaging.

Arrangements with Frank Blum will be made in regards to the web based advertising and with the appropriate personnel for the newsletter based advertising. The only other consideration is that several potential advertisers have expressed an interest in being able to buy and mailing list of polymer division members. Currently they can buy a set of one use pre-addressed labels from the ACS itself for the polymer division members. But they wish to have an electronic copy so that they can generate labels in house as many times as necessary. While this could be very profitable, there would be a higher level of "advertisement" mail sent out to the POLYmembers on a regular bases. If all goes well, the new advertising plan will be implemented for the spring 2004 Polymer Preprints.

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Awards - T. J. Pacansky

The **Paul J. Flory Polymer Education Award** recognizes outstanding achievements by an individual in promoting undergraduate and/or graduate polymer education. The winner of the 2004 Paul J. Flory Education Award is the team of Professors James E. McGrath, Garth L. Wilkes and Thomas C. Ward. The award will be presented during the Spring 2004 ACS Meeting. Previous Recipients: Herman F. Mark, Carl S. Marvel, Paul J. Flory, Maurice Morton, Charles G. Overberger, George B. Butler, Eli M. Pearce, Leo Mandelkern, Eric Baer, Roger Porter, James E. Mark, and U. W. Suter. The DuPont Company sponsors the award.

Actively Seeking Nominations for the Industrial Polymer Scientist Award and the Marvel Creative Polymer Chemistry Award

The **Industrial Polymer Science Award** recognizes outstanding industrial innovation and creativity in the application of Polymer Science, conducted by individual scientists or research teams. The deadline for nominations is November 1, 2003. Please refer to the Division website or a recent newsletter for the nomination requirements. The award will be presented during the Fall 2004 CS meeting. Previous awardees include W. H. Mandeville and S. R. Holmes-Farley, Alan. D. English and Lloyd M. Robeson. The POLY Industrial Sponsors support this award.

The **Carl S. Marvel Creative Polymer Chemistry Award** recognizes and encourages accomplishments and/or innovation of unusual merit in the field of basic or applied polymer science by younger scientists. The deadline for nominations is July 1, 2004. Please refer to the Division website or a recent newsletter for the nomination requirements. The award will be presented at the Spring 2005 meeting. Previous recipients of this award include Louis J. Fetters, Wayne L. Mattice, Edward L. Thomas, Garth L. Wilkes, Robert S. Langer, David A. Tirrell, Sukant Tripathy, Krzysztof Matyjaszewski, Bruce Novak, Joseph M. DeSimone, Craig J. Hawker and James L. Hedrick. The Dow Chemical Company Foundation sponsors the award.

The **Herman F. Mark Polymer Chemistry Award** recognizes outstanding research and leadership in polymer science. The next award will be presented at the Fall 2005 ACS Meeting. The deadline for nominations is November 1, 2004. Please refer to the Division website or a recent newsletter for the nomination requirements. Previous recipients of this award include Paul J. Flory, Carl S. Marvel, Maurice L. Huggins, Herman F. Mark, John D. Ferry, Charles G. Overberger, Walter H. Stockmayer, Michael Swarc, E. J. Vandenberg, Harry R. Allcock, James E. McGrath, James Economy, Murray Goodman, Robert Grubbs, Henry K. Hall, Jr., Robert W. Lenz, Leo Mandelkern, Otto Vogl and William J. MacKnight. The Dow Chemical Company Foundation sponsors the award.

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BTEC - K. Uhrich

Potential Interactions of BTEC with POLY or PMSE Divisions

As a POLY representative to BTEC, the following session topics for POLY and PMSE divisions correlate with BTEC planned programming. Below is a spreadsheet in which sessions already planned by POLY and PMSE may (or may not) wish to interact with BTEC's planned sessions. The session chairs are presented for reference.

This message was sent to the BTEC Secretary General (G. Grethe), POLY representative (B. Ratner), PMSE representative for BTEC (G. Swift), current POLY Chair (K. Wynne), and POLY planning (K. Carter).

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2004 Biennial - W. J. Brittain

The topic for the 2004 ACS Division of Polymer Chemistry Biennial is "Polymer Design for Biology: Activity and Structure." Professor Gerg Tew (Univ. of Mass, Amherst) and Professor Erwin Vogler (Penn. State Univ.) are co-organizers for this meeting. The biennial is scheduled for October 3-6, 2004 at the Savannah Marriott Riverfront in Savannah, Georgia.

Focus areas include:

- 1) interfacial biophysics
- 2) surface engineering
- 3) supramolecular and covalent synthesis
- 4) polymer biochemical activity
- 5) clinical biology

Several months ago, we developed a preliminary list of invited speakers and sent out invitations. We are continuing to persuade some of these speakers and also target additional speakers for invitations in the near future.

Circulation - F. Dammont

Polymer Preprints, Vol. 44-2-Fall 2003

CIRCULATION MANAGER'S REPORT

Upon publication, we have shipped a total of 370 copies of POLYMER PREPRINTS, Vol. 44-2, to all fully paid-up library subscribers. Of these, 209 hard copies were shipped directly by the printers, 136 hard copies were shipped from Newark, via UPS, to subscription agents and other multiple copy subscribers and to addresses where we have in the past encountered delivery problems. The premium cost of shipping via UPS is fully justified by the superior reliability of this service over the USPS. We have also mailed from Newark 25 CD-ROM copies to all libraries which have ordered this format. All foreign orders of CD-ROMs were dispatched via AIR LETTER, since the postage difference for this service was insignificant.

The demand for CD-ROMs, despite their significantly lower price, especially for foreign library subscribers is growing rather slowly.

We were very pleased with the M-Bag service provided by the USPS and used for foreign shipments (also used by the printers,) which reduced our shipping costs by more than one half, from about \$25.00 to \$27.00 per book to \$9.90 to \$11.00, depending on the destination. We surcharge all foreign subscriptions \$50.00. An added advantage of the M-Bag service is the offered confirmation of delivery, which costs \$2.30 per M-Bag, and is very useful in countries where delivery is not dependable.

Postage for domestic hard copy delivery by USPS is low: typically between \$2.50 and \$3.00.

We are monitoring the number of worldwide PREPRINTS library subscriptions, which have declined from 421 in 1999 to 370 in 2003, through there was no decline in the last two years. Incidentally, the number of library subscribers in 1986 (Vol. 27) was 686. At that time the cost of a yearly subscription was \$25.00 (we now charge for hard copy \$125.00/domestic + \$50.00 foreign surcharge.)

We are also monitoring the condition of the books exposed to the normal abuse in transit, and we are happy to report that the wrapping, as supplied by the printers is adequate.

Finally, we cannot overemphasize, that, to our best information, the copyright registration of the PREPRINTS in the Library of Congress is overdue since Vol. 39-2 (Fall 1998). Registration for legal and other purposes is of ultimate importance, and, really, should not be neglected.

This is also the place to recognize the excellent support for this office's activities by the editorial staff of the PREPRINTS and the Business Office of the Division, and, especially, the quality of the PREPRINTS, for which we are frequently complimented, and of which we are the undeserving recipients.

PS: At this opportunity, we would like to investigate the desirability to establish and appointed position of LEGAL ADVISOR TO THE DIVISION, whose office would be the continuous

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repository of all pertinent documents and legal information related to the activities of the Division. At present, this function is the responsibility of the office of the elected term secretary, where such duties yield precedence to more urgent, current activities.

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Graduate Student Meeting

5th National Graduate Research Polymer Conference, Sponsored by the Polymer Division of the American Chemical Society

Lehigh University, June 22-25, 2003

Over 120 people attended the 5th National Graduate Research Polymer Conference (sponsored by the Polymer Division) held at Lehigh University from June 22 through June 25, 2003. Ninety-six talks were scheduled overall, with graduate students from 30 universities participating. The conference opened with an introduction by Professor Mohamed El-Aasser, Dean of the P.C. Rossin College of Engineering at Lehigh. The Lehigh U. Center for Polymer Science members presented Professor Les Sperling (Lehigh University) with a new bicycle helmet, in honor of his recent retirement and substantial contributions to the field of polymer science and engineering. Les proceeded to wear the helmet throughout his plenary talk, titled ARecent Advances in Interpenetrating Polymer Networks.

The conference ran three parallel sessions, with talks grouped into 11 different symposia. Those in attendance thought the high quality of the presentations rivaled those at most national meetings. The exclusive use of Powerpoint for electronic presentations went very smoothly, thanks to the help of a number of graduate student volunteers. Many graduate students asked questions of the speakers, and it was wonderful to see them exchanging contact information after Erica Martin's talk on the benefits of Polymer Division membership and the networking that can be important to a successful career. Following her talk on Tuesday afternoon, everyone donned the official conference t-shirt, and a group photo was taken before the barbecue picnic.

Dr. Lloyd Robeson of Air Products and Chemicals Incorporated presented a keynote lecture on "Industrial Polymer Research: Perspectives from a Career in Industry." A second keynote lecture titled ABiocatalysis in Polymer Science" was delivered by Dr. H. N. Cheng of Hercules, Incorporated. Support for the conference was received from Arrow International, W. L. Gore and Associates, Intel, 3M, Metso, and National starch and Chemical.

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Industrial Sponsors - R.S. Moore

The Industrial Sponsors Group of the Division of Polymer Chemistry consists of the members listed below. In the past each member contributed \$1,000 per year to support polymer education and other polymer development activities. Thanks to the substantial efforts of H.N. Cheng, J. DiBattista, and K.O. Havelka the list has now been updated, and has been expanded to include small companies with less than 500 employees, which contribute \$500. Cheng has also led the effort to provide each Sponsor with a reference book of detailed information on the Industrial Sponsors Group. Through the efforts of Lesia Robertson in the POLY Division Office an updated version of these books has now been printed and distributed to the Members and to the Coordinating Committee. J. DiBattista is leading the effort to include one-paragraph summary listings of each company in Polymer Preprints.

Industrial Sponsors Coordinating Committee: This committee, which consists of members of the Industrial Sponsors Group (ISG) and the Division of Polymer Chemistry, coordinates the activities of the Industrial Sponsors Group. Current members are: R.S. Moore, H.N. Cheng, W. Daly, J. DiBattista, A. English, K. Havelka, I. Khan, R. Ottenbrite, T.J. Pacansky and C. Smith. This Committee will meet on Monday, September 8, 2003 from 10:30 a.m. until 11:30 a.m. in the Hilton New York, "Video Conf." Room. A luncheon will be held after this meeting for ISG Members, the Coordinating Committee, and the POLY EXCOM. At the luncheon, our POLY Chair, Ken Wynne, will give a brief overview of the Division's activities.

2003 INDUSTRIAL SPONSORS

3M Company, Honeywell, Inc., Air Products and Chemicals, Inc., International Specialty Products, Ashland Specialty Chemicals Co., Johnson Polymers, Atofina Chemicals, Inc., Kosa, Inc., BASF Corporation, Lubrizol Corporation, Bayer Corporation, National Starch and Chemical Corp, Chevron Phillips, PPG Industries, Inc, Dow Chemical Company, Polymer Chemistry Innovations, Inc., E.I. Du Pont de Nemours & Co., Polymer Source, Inc., Eastman Chemical Company, Proctor and Gamble Company, ExxonMobil Company, Raychem/Tyco Electronics, GelTex Pharmaceuticals, Inc., Rohm and Haas Company, General Electric (GE), Shearwater Polymers, Inc., Genesee Polymers Corp., Solutia, Hercules Incorporated, Wyatt Technology Corporation.

The Twenty-fourth Annual Meeting of the Industrial Sponsors Group (ISG) was held at the New Orleans ACS Meeting. As an alternative to the usual Industrial Sponsors Symposium the major event for the Industrial Sponsors Group for 2003 was co-sponsorship of the workshop and two-day symposium on "The Polymer Science of Everyday Things" (PSOET). In addition to the ISG as an entity, a number of ISG member companies also provided financial support. These events were also designated as an ACS Presidential Event. The Organizers were: ACS Division of Polymer Chemistry, ACS Industrial and Engineering Chemistry Division, Intersociety Polymer Education Council, and the Royal Society of Chemistry.

Sponsors included: Royal Society of Chemistry, National Science Foundation, University of Akron Global Polymer Academy, ACS Committee on Science, ACS Divisional Activities Committee, ACS Polymer Division, ATOFINA, ICI, National Starch, Bausch & Lomb, General

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Electric, Procter & Gamble, Eastman Chemical, DuPont, Bayer, eMedix, Inc., Johnson Polymer, American Chemical Society CORPORATION ASSOCIATES, and ACS Division of Polymer Chemistry's Industrial Sponsors Group.

The Industrial Sponsors Group is proud to have participated in these events because of their several novel features, as described below. It is planned to repeat PSOET again in a similar format in the fall of 2004 at the Philadelphia, ACS Meeting. This innovative symposium and workshop format provides the opportunity to explain how fundamental polymer science and technology form the basis for things that people encounter and use everyday. Moreover, it provides a special, innovative approach to scientific education through long-distance learning via remote sites for the workshop. In addition, the workshop continues the highly successful Intersociety Polymer Education Council (IPEC) program of teachers teaching teachers about the use of polymers. Additional details of the first workshop and symposium are given in the attached Appendix as the final report from the Organizing Committee.

The major activities which are currently supported by the Industrial Sponsors Group, many in cooperation with PMSE via POLYED, include workshops at schools to help to introduce polymer education, the Undergraduate Summer Scholarship Program, the Curriculum Development Award, tutorials, and free short courses on polymer science at national and regional meetings.

INDUSTRIAL POLYMER SCIENTIST AWARD - THOMAS J. PACANSKY

This award was initiated in 1998 to recognize outstanding industrial innovation and creativity in the application of Polymer Science, conducted by individual scientists and research teams. The award consists of a plaque and an honorarium in the amount of \$2,000. The award is usually presented at the Industrial Sponsors program during the Fall National ACS Meeting. The recipient is expected to present an address at a symposium organized in his/her honor. Travel expenses to the symposium are paid in addition to the honorarium. Commencing with the award for 2002, the award will be given every two years. Further details can be obtained from Dr. Thomas J. Pacansky, Chairman of the POLY Awards Committee (Tel. 908-953-9488).

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Appendix

Polymer Science of Everyday Things (PSOET) Workshop and Symposium
Final Report

March 22-24, 2003 New Orleans, LA, USA, ACS National Meeting
PSOET was fabulous - well attended and well received.

The PSOET Workshop for middle school and high school teachers was successfully viewed live at both LSU Health Sciences Center and at University of Akron's Global Polymer Academy. This was our first ever delivery of a fully participatory workshop where teachers/students in both classrooms could see each other and speak whenever they liked. Many thanks to the excellent technical communication staffs at the University of Akron and at LSU. The IPEC Polymer Ambassadors and their British professor team delivered a workshop that was well prepared, relevant and "adored/valued" by the participating teachers - we are still receiving comments back.

The 2-day PSOET Symposium met the same response from members of the scientific community - high level academicians and industrial leaders were among the more than 200 attendees at each of the four sessions. A high percentage listened to every single talk - a notable occurrence for an ACS meeting where there were a multitude of presentation choices and where the New Orleans' French Quarter beckoned.

Both the ACS and the Royal Society of Chemistry pronounced the PSOET Workshop and Symposium as Presidential Events. As a consequence we received publicity, not only in C&E News, but also throughout the ACS meeting site on posters and through word-of-mouth and formal presentations given by the ACS President. Both the ACS and the Royal Society of Chemistry Presidents gave official presentations at PSOET.

The two-sided flyer, which provided PSOET programming and PSOET sponsors information, was distributed on each session attendee chair and at the Polymer Division booth.

In addition, information, including sponsor recognition, on the PSOET Workshop was provided throughout southern Louisiana and southern Mississippi to middle school and high school science teachers thanks to the support of their state organizations. In Ohio, middle school and high school teachers in the greater surrounding counties received information through the Akron Global Polymer Academy's outreach. The Workshop was videotaped, and a professional quality CD will be distributed to all attendees and sponsors. The CD will be available for \$10 on various K-12 science teacher websites - PolyEd, IPEC, ACS, and others as requested.

PSOET would not have been possible without your strong support. We thank you and appreciate your understanding of the need for sharing polymer science's impact on everyday things within the scientific community and the teaching community.

We have been asked by numerous organizations and individuals to provide PSOET again in 18 months at the Philadelphia ACS meeting - are you ready to sponsor this again? If so, what would you like to do to make the PSOET even better?

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Many thanks and best regards,
David Bott, Ken Wynne, Ann Salamone, Coleen Pugh, Bob Moore
PSOET Co-organizers

INTERSOCIETY POLYMER EDUCATION COUNCIL (IPEC) - F. Jones
(frankjones@comcast.net)

IPEC (www.uwsp.edu/chemistry/ipec/home.htm) promotes and supports teaching about polymers and polymeric materials in the K-12 curricula. Students are familiar with polymeric materials, and IPEC's programs have proven to be an excellent way to interest students at all grade and ability levels in polymers and, more broadly, in science and technology.

Most of IPEC's activity involves the Polymer Ambassadors. The Ambassadors (www.polymerambassadors.org) are about 18 talented and dedicated classroom teachers, located coast-to-coast. The Ambassadors conduct workshops at regional and national teachers' conventions, where they teach other teachers to use polymers in classroom instruction. During 2002, an estimated 4500 teachers attended about 100 such workshops. Activity for 2003 will be at a similar high level, and perhaps higher. For example, at the spring 2003 National Science Teachers Association meeting, Ambassadors presented 10 workshops to about 800 teachers. These workshops are popular with teachers, who obtain materials for use in their classes that are practical and effective. It is estimated that IPEC has reached well over 500,000 students in this way.

With help from the Ambassadors, the American Plastics Council previously produced a "Hands-on-Plastics" kit that proved very effective. Supplies being exhausted, a second edition of the kit was developed this year and will be disseminated. Ambassadors also assisted in dissemination of posters prepared by the ACC/APC; the posters promote protective gear made of plastics. Tested materials developed by the Ambassadors are published on the World Wide Web.

Polymer Ambassadors have received numerous major awards including National Teacher of the Year Awards. Most recently, Mary Harris was the Missouri winner of the 2003 Presidential Award for Excellence in Math and Science Teaching, the fourth Ambassador so honored.

Akron Initiative. In 2002, IPEC and the Polymer Ambassadors formed a partnership with the Akron Global Polymer Academy (AGPA), whose mission is to use synchronous and asynchronous distance learning to support K-12 science instruction. An important element of the project is to integrate the materials with National Science Education Standards and State Standards, since these standards strongly influence selection of curricula topics. In the July, 2003, six Ambassadors spent nine days at Akron, working with twelve other teachers and six graduate students to develop materials, including film clips, for the www. Twelve polymer lessons, at three grade levels, were developed and are being tested. More activity is expected this fall. AGPA has a major NSF grant application pending with NSF; if received, it would support substantially increased involvement of IPEC and the Ambassadors with the growing AGPA program.

Epcot Center Initiative. IPEC is helping the Society of the Plastics Industry (SPI) to prepare a major display at Disney's Epcot Center near Orlando. This initiative is probably the largest ever for SPI. The exhibit will open in January, 2004 and will run for two years. Polymer Ambassadors will help design displays and demonstrations and will, perhaps, assist in training the staff.

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"Polymer Science of Everyday Things" Workshop and Symposium. IPEC organized a highly successful workshop at the American Chemical Society spring, 2003 meeting, with sponsorship by various elements of the American Chemical Society, the Royal Society of Chemistry, and eight companies. Both ACS and RSC proclaimed it a Presidential Event. The first day was for K-12 teachers. The second day was part of the regular ACS meeting, aimed at chemical educators and other interested people. Both workshops were well attended and acclaimed as highly successful. Plans are underway for a second meeting of this type at the Fall, 2004 ACS meeting in Philadelphia.

IPEC also sponsors other workshops for high school teachers, including "Discovery in Plastics Processing" at Eastern Michigan University and "PAWS for Polymers," at Clemson University. These programs are always filled to capacity; and are well received by the teachers. Polymer Ambassadors often attend both to gain knowledge and to participate in the presentations.

IPEC is a 501(c) not-for-profit corporation. Its Board of Directors comprises two voting representatives from each member organization. Organizations are encouraged to appoint additional representatives to the Board. Current IPEC members are the American Chemistry Council/American Plastics Council and the American Chemical Society Divisions of Polymer Chemistry, Polymeric Materials Science and Engineering, and Rubber. IPEC runs on volunteer energy. Board members receive no remuneration.

Retaining member organizations is essential, and recruiting new member organizations is vitally important. Member funding is the flywheel that drives IPEC's ongoing core activities. Funds for Polymer Ambassador training and travel account for 88% of IPEC's 2003 budget. With more dues-paying members, the corps of Ambassadors could be enlarged—there are plenty of good opportunities for expanded activity. In addition, more member organizations would add more members to the IPEC board, increasing its capacity for new initiatives and fund-raising.

IPEC continues seeking funding from grants. The Society of Plastics Engineers Foundation will provide \$7400 in 2003 for specific IPEC activities, and The Society of the Plastics Industry is expected to provide targeted support in connection with the Epcot Center project. Aid from these sources is greatly appreciated and is important in augmenting IPEC's efforts. And, as noted above, IPEC is attempting to secure major funding through the Akron Global Polymer Academy. IPEC member organizations can be proud of what IPEC accomplishes and can look forward to more high-impact activities.

The next meeting of the IPEC Board of Directors will be at 10:30 AM Tuesday, October 14, 2003 at Cleveland in conjunction with the annual meeting and exhibit of the ACS Rubber Division. As always, the meeting is open to any interested people; representatives of member organizations are especially encouraged to attend. The meeting will be at the White Room of the Sheraton Cleveland City Center Hotel.

IPEC Mission Statement To significantly increase student interest and participation in science and technology subjects by incorporating the teaching of polymers and polymeric materials into K-12 curricula by utilizing the combined resources and infrastructures of the participating scientific societies.

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Macromolecular Secretariat - M. Hillmyer

Personnel:

Steve Kelly, CELL (steve_kelly@nrel.gov) - general secretary 2003

John Long, RUBB (john.long@dsm.com)- general secretary 2004

The 2005 general secretary for 2005 (TBD) will come from PMSE

Marc Hillmyer (hillmyer@chem.umn.edu) and Gary Wnek (gewnek@saturn.vcu.edu) are POLY's representatives to the Macromolecular Secretariat.

Proposed symposia that need to be approved by POLY:

1) Philadelphia (2004): MACRO will present a symposium on Polymers in Pharmacy. Work with R. Nagarajan from COLL.

2) Washington DC (2005): Networks and gels, to be organized by Jay Dias of ExxonMobil

3) San Francisco (2006): Polymers in the environment, to be organized by Christian Lastoskie (University of Michigan) and Robert Ofoli (Michigan State University)

Membership -E. Martin

The Membership Committee currently consists of the following members:

Erica Martin (Rohm and Haas Co) - Chair
HN Cheng (Hercules) - Member-at-Large
Alan Hopkins (Aerospace Corp)
Pal Arjunan (Exxon-Mobil) - Membership Booth Chair
Janelle Ulik (Bausch and Lomb) - Membership Booth Co-Chair
Nozar Sachinvala (USDA)
Maneesh Bahadur (Dow Corning)
Kevin Belfield (Univ Central Fla)
Janelle Ulik (Bausch and Lomb)
Jun Wang (RIT) - POLY database
Harry Barraza (Univ of Oklahoma) - Student Membership

Member Recruitment:

a) Attendees at national ACS meetings

Janelle and Pal have worked hard to recruit board members to spend some time at the POLY booth. Please donate an hr or so of your time, if you have not already signed up with Janelle, and help recruit and welcome new members into the Division. Try and remember when you were new and did not know many people! We will also have some new graduate student members (thanks to the Graduate Student Research Conference) of the committee helping out - we are counting on current board members to show them the ropes of POLY!

b) People who indicate polymers as an interest area on their national meeting registration

As in yrs past, this data was obtained from ACS and letters were sent out to the individuals who were not already members of POLY asking them to join.

c) First and Second-Yr POLY Members

Maneesh Bahadur will be sending out letters to these individuals asking them to reconsider their membership in the Division around the time of fall membership renewals with ACS.

d) Polymer journal initiative

We have a 'permanent' journal display which debuted in New Orleans. It will be brought to every national meeting and display those publications which have been placing a "Join POLY" ad for us free of charge. Please stop by this display next to the POLY table and browse through the materials.

e) Polymer Preprints cover design

The committee has decided on a design theme, and thanks to the hard work of Alan Hopkins, has a draft of the spring 2004 cover. Alan is working closely with Andy Rogers at Mira to coordinate the file conversions. Alan and I will be taking some digital photos at this meeting to capture the 'technical programming' and 'networking' benefits of the Division.

f) POLY screen saver

The committee would like to continue 'producing' these for applicable POLY workshops/biennials. Please let us know of any upcoming opportunities. This is an easy, creative way to advertise POLY to an audience during session 'down time.'

g) Participants in POLY symposia at national ACS meeting

Maneesh Bahadur will be obtaining this data from Oasys after this meeting and sending out email letters to those individuals who are not already members of POLY

Member Retention:

a) Jun Wang will now serve as our database 'manager' - he will work closely with Maneesh Bahadur on our routine recruitment activities which require data on renewals, current memberships, and first and second-yr memberships.

b) Graduate Student Initiative - - our most important program of 2003!

This sub-program of the committee concentrates on the 3R's as they relate to the young polymer scientist population. At National ACS Meetings we have begun to start a face-to-face recruitment effort during POLY poster sessions. POLY 'business cards' have been printed up and passed out when committee members meet and greet graduate students at their posters. The already in place Spring Recognition Event (see below) targets the current and/or recently graduated polymer student population within the 5 yr anniversary category. For retention, we have initiated a new POLY Graduate Student Travel Award program. Attached to this report is a copy of the application form. Three \$400 awards will be given towards travel to Anaheim in 2004 to present a paper in a POLY symposium.

We are encouraging submission to the SciMix poster session for all meetings starting in Anaheim. Students with posters in Sunday evening poster session symposia can submit. If they are in the Tues evening POLY/PMSE session, as long as their symposia organizer approves, they can also enter SciMix the evening prior.

In addition, we will work to implement several networking opportunities for students at meetings.

An ACS Mini-grant application has been submitted (8/03) asking for \$2000 to attempt to defray the costs of getting this program started. We are waiting to hear back from Kevin Mills in Membership Affairs as to whether or not it was approved.

Member Recognition:

The POLY pins will be ordered and sent out prior to the Anaheim 2004 Spring meeting. We have received a very positive response from this annual Spring Recognition Event and will continue to move it forward!

Member Communication

a) Local Sections

As part of our outreach to local sections, we have received interest from the Philadelphia local section on having a polymer topical symposium. The POLY liaisons from the DE and Phila local sections (HN and Erica) will aid them in getting started by recommending topics and speakers from our database.

b) Survey

H. N. Cheng has worked with the ACS to update and rework the POLY membership survey. It is now on the POLY website and has been advertised to the list-serve.

c) Web site

There is currently a member-suggestion link on the website - it is located on the upper right hand corner of each page under "suggestions." This may not remain here due to future advertising on the website, so we will need to brainstorm as to how best structure a page for feedback.

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Nomenclature - E.S. Wilks

The Nomenclature Committee membership remains essentially unchanged since the last meeting, which was held on Monday, August 17th, 2002. The "call for new members" advertisement, placed on the POLY website, <http://www.chem.umr.edu/~poly/nomenclature.html>, has elicited no further inquiries in the last 4 years. Nevertheless, the ACS POLYmer Division Nomenclature Committee proposes to leave it on the website in the hope of attracting new members.

A Items from the IUPAC Meeting in Ottawa (August, 2003)

Four Committee members (Fox, Metanomski, Wilks, and Work) continue to contribute to projects of the IUPAC Commission on Macromolecular Nomenclature, although Fox, Metanomski, and Wilks are enjoying "semi-retirement" in that they now act mainly as consultants. Topics in various stages of development, for which they are directly or indirectly responsible, include:

- Metanomski, Wilks: Glossary of Polymer Class Names (Project 2002-014-1-400)
- Wilks: Guide to IUPAC Polymer Terminology and Nomenclature (Project 22/93)
- Wilks: Nomenclature for Chemically Modified Polymers (Project 2002-051-1-800)
- Wilks: Nomenclature for Macromolecular Rotaxanes (Project 2002-007-1-800)
- Wilks: "Purple Book" revision
- Work: Definitions of Terms Related to Polymer Blends and Multi-Phase Polymeric Materials (Project 24/93)

Ted Wilks is also Task Leader for the IUPAC Division VIII project entitled: Nomenclature for Discrete Rotaxanes (Project 2002-007-1-800)

Project 2002-014-1-400 (formerly Project 30/97: Prof. Jir' Vohl'dal (Charles Univ., Prague) continues to work on this document, and is now the Project Leader. The title is changed to: Glossary of Class Names of Polymers Based on their Chemical Structure and Molecular Architecture. The project is near completion. Some minor changes have been recommended. Jaroslav Kahovec is responsible for nomenclature proofreading, and Ted Wilks is responsible for final linguistic corrections. It is hoped that the final document will be available for review at the IUPAC meeting in Ottawa, Canada (August, 2003), after which the document will be sent for final review within the IUPAC bodies and then published. It is also planned as a chapter in the forthcoming revision of the "Purple Book".

Project 22/93: The eight chapters that constitute the Guide have been assembled in electronic format. Minor corrections have been made to the document during the year. The updated version will be presented to the Commission at the Ottawa, Canada meeting in August, 2003.

Project 2002-051-1-800 (formerly Project 33/99): the project is renamed "Nomenclature and Graphic Representations for Chemically Modified Polymers". Contributions were received from working-party members Fox, Horie, Kratochv'l, and MarŽchal. At the Beijing meeting (July, 2002), the document was deemed to be too long and too complex; omission of the sections on multi-stage modifications greatly shortened and simplified the document. The revised version is being presented to the Commission at the Ottawa, Canada meeting in August, 2003.

Project 2002-007-1-800 (formerly Project 35/2000): the project is renamed "Nomenclature for Macromolecular Rotaxanes". Contributions were received from working-party members Fox, Fradžt, Kubisa, and Maržchal. The project will be continued, but more slowly; it is planned that this project and a companion project, entitled "Nomenclature for Discrete Rotaxanes" (see below) will be issued simultaneously.

"Purple Book" revision: This is expected to contain the following chapters (where shown, parenthesized year for each chapter indicates year of first publication):

Preface to 2nd Edition (incomplete)

Reprint of preface from the 1991 Purple Book (completed)

History of the Commission on Macromolecular Nomenclature (completed)

Membership of the Commission on Macromolecular Nomenclature (completed)

Terminology Section

1. Glossary of Basic Terms in Polymer Science (1996)
 2. Stereochemical Definitions and Notations Relating to Polymers (1980)
 3. Definitions of Terms Relating to Individual Macromolecules, Their assemblies, and Dilute Polymer Solutions (1988)
 4. Definitions of Terms Relating to Crystalline Polymers (1988)
 5. Definitions of Terms Relating to Low-Molar-Mass and Polymer Liquid Crystals (2001)
 6. Definitions of Terms Relating to the Non-Ultimate Mechanical Properties of polymers (1997)
 7. Terminology Related to Multi-Phase Polymer Composites and Blends
 8. Definitions of Terms Relating to Degradation, Aging, and Related Chemical Transformations of Polymers (1995)
 9. Basic Classification and Definitions of Polymerization Reactions (1994)
 10. Terminology for the Kinetics, Thermodynamics, and Mechanisms of Polymerization* (2003?)
- *Document still provisional
11. Definitions Relating to Stereochemically Asymmetric Polymerizations (2002)

Nomenclature Section

12. Introduction to Macromolecular Nomenclature (new chapter built on previous publications; completed)
13. Nomenclature of Regular Single-Strand Organic Polymers (2002)
14. Nomenclature for Regular Single-Strand and Quasi Single-Strand Inorganic and Coordination Polymers (1984)
15. Nomenclature of Regular Double-Strand (Ladder and Spiro) Organic Polymers (1993)
16. Structure-Based Nomenclature for Irregular Single-Strand Organic Polymers (1994)
17. Graphic Representations (Chemical Formulae) of Macromolecules (1994)
18. Source-Based Nomenclature for Copolymers (1985)
19. Source-Based Nomenclature for Non-Linear Macromolecules and Macromolecular Assemblies (1997)
20. Generic Source-Based Nomenclature for Macromolecules (2001)
21. Classification of Linear Single-Strand Polymers (1988) [unless completely covered by Glossary of Polymer Class Names]

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22. Glossary of Polymer Class Names (nearly completed)
23. Abbreviations (1986) (updated version of Chapter 9 of 1991 "Purple Book")

Appendix I

Use of Abbreviations for Names of Polymeric Substances (1986) (needs updating)

Appendix II

Bibliography of Biopolymer-Related IUPAC-IUBMB Nomenclature Recommendations

Ted Wilks is responsible for collecting all revised chapters and editing of the complete second edition. Much of the 2002-2003 time period was spent in gathering the few chapters already available in electronic format, converting the rest (available only in hard copy) into electronic format, ensuring standardization of format (layout) throughout, and redrawing all graphic representations with ChemDraw software.

Project 24/93: the document was made available for public review during the time period September-November, 2002. Comments arising from that time period, and also from ITCNS members in mid-July, resulted in further corrections to the document. The final draft will be submitted for publication in mid-August, and publication in the October or November, 2003 edition of Pure and Applied Chemistry is anticipated.

Two Committee members (Metanowski and Wilks) are contributing to a new IUPAC Division VIII project entitled "Nomenclature for Discrete Rotaxanes" (Project 2002-007-1-800) - there is opposition to use of the word "discrete" in this title, so the title may have to be changed. This will be a companion document to the "Nomenclature for Macromolecular Rotaxanes" document discussed above.

B Promulgation of Correct Polymer Nomenclature and Structure-Based Representations

B1. Macromolecular Nomenclature Note No. 18 (MNN 18)

MNN 18, originally in English, was published in Polymer Preprints, 2000, 41(1), 6a-11a; it has now been translated into Chinese, Hungarian, Japanese, Korean, and Spanish. All versions are available on the POLY website: <http://www.chem.umn.edu/~poly/nomenclature.html>; some are available only in ".pdf" format.

The possibility of translating MNN 18 into Portuguese (for Brazilian readers), courtesy Dr. David Tabak (IUPAC Division IV member), is still being pursued. Translation into Russian is a possibility for late 2003.

B2. New MNN Articles available on POLY website

<http://www.chem.umn.edu/~poly/nomenclature.html>

MNN 23 by E. S. Wilks, entitled "Polymer Indexing, Registration Policies of Chemical Abstracts Service (CAS), and Suggestions for Their Enhancements," was published in Polym. Prepr. 2002, 43(2). The article addressed five major topics that, at the time the article was written, still needed serious and urgent attention from Chemical Abstracts.

Item 1. Linking of registrations of polymers having structure-based representations with their source-based equivalents, and vice versa, so that comprehensive retrieval of a polymer,

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regardless of how many representations it has, is available without the need to speculate on how it might have been indexed.

Item 2. In searches for structure-based representations, freedom from the necessity to orient structural repeating units (SRUs) correctly in order to retrieve them.

Item 3. Improved indexing of post-treated polymers, which is a rapidly growing field.

Item 4. Improved indexing and registration of copolymers by provision of structural representations for copolymers for which SRUs cannot be assumed, as exemplified by polyalkylene glycols.

Item 5. Provision of searchable structure-based representations based on fragments, corresponding to structural (constitutional) units (monomeric units), for those polymers for which SRUs cannot be assumed.

Concurrently with its publication in *Polym. Prepr.* 2002, 43(2) at the ACS meeting in Boston, Chemical Abstracts announced the introduction of the "Polylink" search tool, which solved the problems listed in Items 1 and 2.

MNN 24 by E. S. Wilks, entitled "Terminology and Nomenclature for Rotaxanes - A Progress Report," was published in *Polym. Prepr.* 2003, 44(1). This article listed the basic types of rotaxanes reported in the literature during the last 35 years, and summarized nomenclature proposals by Gottfried Schill (late 1960s) and, more recently, by Professor F. Vösgtle and co-workers.

B3. Other Web-Based Articles on Polymer Nomenclature and Terminology

Past copies of the "Back Pages" PMSE Notes, reprinted with permission of Prof. C. Ober, PMSE, are now available on the POLY website

<http://www.chem.umn.edu/~poly/nomenclature.html>. Our thanks go to Dr. Frank Blum for adding them.

B4. Other Nomenclature Items of Interest

Professor Choon Do of Sunchon National University, Chonnam, Korea plans to translate into Korean the IUPAC document "Generic Source-Based Nomenclature for Polymers (IUPAC Recommendations 2001)".

C Other Matters

The Committee continues to promote polymer-nomenclature recommendations, especially those of the IUPAC Commission on Macromolecular Nomenclature. The Committee monitors how the macromolecular nomenclature matters are explained and discussed in various textbooks and handbooks, and offers suggestions for improvements. Individual questions from POLY members and requests to help in the naming of polymers are answered promptly.

D A Personal Note

Ted Wilks regrets to announce his retirement as Chair of the ACS POLYmer Division Nomenclature Committee, as of the end of 2003. He wishes the Division and its members "long life and prosperity".

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Polymer Preprints - S. C. Israel, R. Venumbaka

The New York issue of Polymer Preprints marks the conclusion of our third year of publishing both a CD and Print version in addition to posting the Preprints on the WWW. It continues to be the goal of the Editors to elevate the stature of Preprints in the world of scientific publishing. We have established a uniform look and consistent formatting (Macromolecules format) of each and every preprint. We endeavor to make Polymer Preprints the benchmark for scientific publications of its type.

New York

The New York Polymer Preprints contains the preprints from 8 Symposia plus General Papers for a total of 575 papers presented and 532 papers published. The CD version continues to evolve, incorporating new functionalities as technology advancements allow. We are continuing to add additional information of interest to our membership to the CD version.

For the New York meeting we introduced a new, easy to use, MS Word template for submission of Preprints. A significant number of authors made use of the new template and we have had no negative feedback thus far. It was anticipated that this new template would somewhat cut down on the post-submission editing currently necessary for each preprint and it was successful. One of the problems that we faced for the Boston Meeting was the size of each Preprint and the capacity of the CD-ROM. This problem has been solved with the technical assistance from the Acrobat engineers at Adobe and Mira and the issuance of Adobe Acrobat 5.0. We are now able to reduce the file size significantly upon re-conversion of the Word file to a PDF file.

The editors continue to see the critical importance of advertising to the future financial health of Preprints. Thus, significant effort has been directed to increasing the number of advertisers and the revenue generated per advertiser. The Polymer Division has appointed Dr. Chad Booth, coordinator of the advertising committee. In the process of publishing the New York preprints the advertising was transitioned from the preprints staff/editorial administration to the Polymer Division Advertising Committee. We have expanded the advertising options available to advertisers as well as changed the pricing structure to capture more revenue. In the future the committee may explore the possibility of additional professional advertisement-marketing individuals. We believe that it is important the Executive Board get involved in garnering advertising for all Division activities, in particular Preprints and the Newsletter. We have developed an advertiser's information brochure to inform prospective advertisers of the various options and copy requirements. These brochures will be available at the New York Division Membership Booth and would like to encourage any member who knows of, and would be willing to approach, a prospective advertiser to give them a copy. In addition, we request all our members to mention to the Preprint advertisers that they saw their ad in Preprints.

Financial Status

We are experiencing significant savings in the cost of delivering the CD version due to the fact that we are streamlining the process and moving some of the production steps from Mira to the Preprints editorial staff. We are continuing to invest in improvements to the functionality of the CD and some of these costs have been/are one-time expenses. Library subscribers

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overwhelmingly prefer the print version. We currently have approximately 400 library subscribers, at \$100 per year, generating over \$40,000 per year. However the costs associated with the print copy are continuing to rise. Currently approximately 200 Division members subscribe to the Print version and approximately 50 more receive the Print version at the booth or when they join. At \$50.00 per member per year we are not covering the direct costs of producing and mailing the Print Copy. Paper, packaging, and postage are the major cost items and these are generally not under our control. We recommend to the Division to reevaluate the cost structure for library and member subscriptions to the print copy and in addition, evaluate the financial impact of eliminating the print copy altogether. Thus, providing both members and libraries CD copies only.

	# of Papers	# of Pages	Copies	Cost
ate tration				
	550			
			7,000	\$32,000
		1000	700	\$25,000
ate tration				
w ed)	532			
			7,000	\$32,978
		900	700	\$20,416
w	670			
			7,500	\$35,330

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Postage	\$6,403	\$6,790
Discount	-\$1,569	-\$1,587
TOTAL CD COST	\$35,330	\$32,978
Book		
Prepress	\$2,712	\$2,000
Printing, Binding, Finishing, Packaging, and Fulfillment	\$24,257	\$16,666
Postage	\$3,621	\$1,750
TOTAL BOOK COST	\$30,590	\$20,416
TOTAL COST	\$65,920	\$53,394

The Polymer Division's financial support to the editorial functions of publishing preprints has remained constant. Texas State University-San Marcos will continue to provide for at least one more year (at no cost to the Division) staffing of one full time equivalent senior administrative assistant. The Editors will be requesting funding for 2004 at the current level of \$20,000. Attached is a break down of the actual costs of producing Preprints.

When the Editors initially evaluated vendors to produce Preprints it was determined that Mira Digital Publishing was the best and most cost efficient in the field. Since that time additional vendors have emerged and have presented proposals for the production of Preprints. We have evaluated each proposal and have determined that Mira Digital continues to provide the best service for the lowest price. We will continue to explore, and entertain bids from, alternative vendors before we go into production for future meetings.

POLYMER PREPRINTS Financial Information

Detailed Publication Cost Breakdown- 2003

Detailed Expenses of Editorial Administration - 2003

Expense
Salary of Administrative Support
Fringe Benefits
Editing Expenses
Lee Associates (Preprint Templates)
Staff Travel Expenses
Equipment

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Shipping and Postage
Office Supplies
Communications
IT Support/Web Design
TOTAL

Advertisements Volume 44 Number 2 D Fall 2003, New York, NY

Company	Ad Price	Ad Location
Wyatt Technologies Corporation	\$2,500	Digipack (Full panel), Book (Full page back
Viscotek	\$1,550	Digipack (Full panel), Book (Full page inside
Scientific Polymer Products	\$2,800	Digipack (Full panel), Book (Full page), CD-
Tosoh Bioscience	\$3,000	Digipack (Full panel), Book (Full page), CD-
CEMCO	\$250	Book (Half page), CD-ROM
Polymer Preprints, Japan	No Charge	Book (Full page), CD-ROM
Instec	\$1,000	Book (Full page), CD-ROM
TOTAL	\$11,100	

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POLYED - C. Carraher, Jr. and J. Droske

POLYED NEWS

POLYED continues on-line at <http://www.polyed.org> and has plans to update and improve the web page. We thank those POLYED subcommittee chairs who provided reports in advance of the meeting.

The Textbook Authors Committee remains active and mailed approximately 25-30 letters at the end of March 2003 to undergraduate textbook authors in Chemistry, Chemical Engineering, and Materials Science and Engineering. The title of letter was "The Inclusion of Modern Polymer Topics and Examples in Undergraduate Books."

The POLYED Center has completed editing and updating the first of three Polymer Activity Booklets. The first booklet is designed for Teachers of Science in Grades 6 - 9. Final editing and review of the K-6 Activity Booklet was completed in Summer, 2003 for distribution in Fall, 2003. Be sure to contact the POLYED Center if you would like a copy or know of teachers who may be interested in it. The 80 page booklet contains polymer-related activities written by teachers in grades 6 - 9 who participated in the MATR workshops at the University of Wisconsin-Stevens Point in the 90s. All activities were edited, and in some cases extended, by a Polymer Ambassador from Stevens Point and former elementary teacher, Sue Hall, working with John Droske at the POLYED Center. The booklet includes hands-on activities on topics such as safety, biological polymers (DNA), water and oil absorbent polymers, properties of matter including polymers, and polymer molding.

The college and university level laboratory activities developed by the POLYED Center are being put in HTML format for inclusion in USM's Polymer Science Learning Center.

We thank both POLY and PMSE for all of their support for POLYED's polymer education efforts.

AWARDS PROGRAMS

Warren Ford reports that the recipient of the 2003 **Unilever Award for Outstanding Graduate Research** is Dr. Christopher W. Bielawski, who received his doctorate in October 2002 from the California Institute of Technology, Pasadena, CA under the direction of Professor Robert H. Grubbs. Dr. Bielawski's research efforts were directed toward establishing new concepts and strategies in macromolecular synthesis through the development of designer Ru catalysts. For example, the efficient synthesis of copolymers with segments that require two or more different polymerization techniques remains challenging as multiple steps are usually necessary. To circumvent this drawback, Bielawski developed a series of catalysts that are capable of simultaneously mediating two mechanistically distinct polymerizations (i.e., ring-opening metathesis polymerization and atom-transfer radical polymerization). This has enabled the preparation of a variety of complex block copolymers in a single pot. A second aspect of Bielawski's research was focused on the synthesis of cyclic polymers. Traditionally, such polymers are made through the intramolecular coupling of linear precursors. However, such cyclizations are rarely quantitative and extremely dilute conditions are required which places limits on the ability to prepare substantial amounts of pure cyclic polymer. By adding monomer to a "cyclic" catalyst, Bielawski demonstrated that both ends of the growing polymer chain remain attached to the catalyst so the topology of polymer remains cyclic throughout the entire reaction.

The Unilever Award, which will be presented at the New York meeting of the American Chemical Society (Sept. 7-11) consists of a \$2,000 prize, a plaque and travel expenses. This award, administered by the Polymer Education Committee of the Polymer Chemistry and Polymeric Materials Science and Engineering Divisions, was established in 1991 and is sponsored by Unilever, a global manufacturer of consumer products, foods and specialty chemicals. The award recognizes and encourages outstanding graduate research in the design, synthesis and physical chemistry of polymers.

ICI Student Award in Applied Polymer Science

The chair for 2003 is Thoman Hahn of National Starch. Six finalists have been selected among 13 applicants for the 2003 ICI Student Award in Applied Polymer Science. This Award, sponsored by ICI and administered through the Joint Polymer Education Committee of the ACS Divisions of Polymeric Materials: Science and Engineering (PMSE) and Polymer Chemistry (POLY), is given annually for the best paper presented at the ICI Student Award Symposium as part of the PMSE program at the Fall ACS Meeting.

The six finalists and their respective papers are:

-Christopher W. Bielawski, California Institute of Technology

Synthesis of Cyclic Polymers Using Ring-Opening Metathesis Polymerization (ROMP)

-Yushan Hu, Case Western Reserve University

Structural Model for Oxygen Permeability of a Liquid Crystalline Polymer

-Brian K. Johnson, Princeton University

NanoPrecipitation of Organic Active using Mixing and Block Copolymer Stabilization

-Benjamin Falk, Rensselaer Polytechnic Institute

Optical pyrometry: A novel method for monitoring photopolymerizations

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-Won Jae Chung, Georgia Institute of Technology

Structure-property relationships for Pd catalyzed poly(Norbornene) derivatives

-Chunyan Chen, University of Michigan

Molecular-Level Understanding of Polymer-Silane Interacting Mechanism by SFG Vibrational Spectroscopy

The finalists will be presenting their papers at the ICI student Award Symposium at the 226th ACS National Meeting, New York, New York. The session is being held at the Hilton New York, Clinton Suite, on Tuesday, September 9, 2003 from 1:15 PM until 4:45 PM. The finalists will be compensated up to \$750 for their expenses to attend the meeting. In addition, they will receive one-year membership to the PMSE division.

An anonymous committee selects the winner among the six finalists after the papers are presented. The winner will be notified at a later date, and then he or she will receive the award at the 227th ACS National Meeting, Spring 2004.

Lastly, the ICI Student Award Committee is pleased to announce that the Women's Chemists Committee has agreed to cosponsor this and future symposia. It is our expectation that this cosponsorship will result in greater recognition of the symposium by potential applicants, and by the overall ACS community.

POLYED Subcommittees

The POLYED Subcommittee Reports are available on-line at www.polyed.org under "Info for Committee Members". They are organized around four directorates. The four directorates are listed below along with the names of the associate directors. The reports from each directorate also are included below. The chairs wish to thank all of the members of POLYED for their fine efforts on behalf of polymer education. These efforts would not be possible without the strong support of the leadership of both the ACS Division of Polymer Chemistry and the ACS Division of Polymeric Materials: Science and Engineering. We'd especially like to thank the chairs (past, present, and elect), treasurers, secretaries, and other leaders of these divisions for their support and contributions to our efforts.

DIRECTORATES AND DIRECTORS:

Precollege Directorate (D. COCUZZI, Associate Director)

College and University Students Directorate (M. ZELDIN, Associate Director)

College/University Faculty Directorate (R. ARCHER, Associate Director)

Industrial/Government Professionals Directorate (R. MOORE, Associate Director)

DIRECTORATE REPORTS (subcommittee chairs within each directorate are listed in parentheses):

Precollege Directorate (D. COCUZZI, Associate Director)

1. Award for Excellence in HS Teaching (Cocuzzi) No Report

2. Teacher Outreach (Sherman/Woodward)

3. Intersociety Polymer Education Council (Droske/Salamone/Carraher/Padias/Mathias)

A report will be distributed at the meeting in NY.

4. MATR Activity Guides (Droske).

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Final editing and review of the Grades 6 - 9 Activity Booklet was completed in Summer, 2003 for distribution in Fall, 2003. Be sure to contact the POLYED Center if you would like a copy or know of teachers who may be interested. The nearly 80 page booklet contains polymer-related activities written by elementary school teachers who participated in the MATR workshops at the University of Wisconsin-Stevens Point. All activities were edited and in some cases extended, by a Polymer Ambassador from Stevens Point and former elementary teacher, Sue Hall, working with John Droske at the POLYED Center.

College and University Students Directorate (M. Zeldin, Associate Director)

1. Organic Student Award (Feld)

POLYED Award for Excellence in Sophomore Organic Chemistry Courses (Feld)

This award continues this year with more than 400 colleges and universities participating. The award recognizes the chemistry major with the top academic performance in sophomore organic chemistry. The criteria for the award are rigorous and only one award is granted per institution. The number of participating institutions continues to grow. This award has become an important part of many colleges and universities' Spring awards programs.

2. Polymer Graduates (Deanin)

3. Undergraduate Summer Research Scholarships (Cohen)

This program was not offered in 2003 and will not be offered in 2004. Instead, a new Travel Grant Program is being instituted.

4. Undergraduate Research Awards Program (open)

POLYED Undergraduate Research Recognition Award (Droske)

This program recognizes outstanding undergraduate researchers with a cash award of \$100 and a certificate. Nominations for this year's award currently are being accepted.

5. J. Chem. Ed. Preprints (Zeldin)

College/University Faculty Directorate (Ron Archer, Associate Director)

1. Textbook Authors (Ford/Krause/Sperling)

Two of the committee members indicated activity since the New Orleans meeting as follows:

1) Sonja Krause recently emailed answers to a number of polymer questions from a person who is writing a textbook for nonmajors.

2) Les Sperling mailed approximately 25-30 letters at the end of March 2003 to recent undergraduate textbook authors in Chemistry, Chemical Engineering, and Materials Science and Engineering. The title of his letter was "The Inclusion of Modern Polymer Topics and Examples in Undergraduate Books."

2. Curriculum Development Award (open)

3. Visitation Program (Droske)

No POLYED workshops have been offered since the last meeting.

4. Unilever Award (Ford/Berry)

The recipient of the 2003 **Unilever Award for Outstanding Graduate Research** is Dr. Christopher W. Bielawski, who received his doctorate in October 2002 from the California Institute of Technology, Pasadena, CA under the direction of Professor Robert H. Grubbs. Dr. Bielawski's research efforts were directed toward establishing new concepts and strategies in macromolecular synthesis through the development of designer Ru catalysts. For example, the efficient synthesis of copolymers with segments that require two or more different polymerization techniques remains challenging as multiple steps are usually necessary. To

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circumvent this drawback, Bielawski developed a series of catalysts that are capable of simultaneously mediating two mechanistically distinct polymerizations (i.e., ring-opening metathesis polymerization and atom-transfer radical polymerization). This has enabled the preparation of a variety of complex block copolymers in a single pot. A second aspect of Bielawski's research was focused on the synthesis of cyclic polymers. Traditionally, such polymers are made through the intramolecular coupling of linear precursors. However, such cyclizations are rarely quantitative and extremely dilute conditions are required which places limits on the ability to prepare substantial amounts of pure cyclic polymer. By adding monomer to a cyclic catalyst, Bielawski demonstrated that both ends of the growing polymer chain remain attached to the catalyst so the topology of polymer remains cyclic throughout the entire reaction.

The Unilever Award, which will be presented at the New York meeting of the American Chemical Society (Sept. 7-11) consists of a \$2,000 prize, a plaque and travel expenses. This award, administered by the Polymer Education Committee of the Polymer Chemistry and Polymeric Materials Science and Engineering Divisions, was established in 1991 and is sponsored by Unilever, a global manufacturer of consumer products, foods and specialty chemicals. The award recognizes and encourages outstanding graduate research in the design, synthesis and physical chemistry of polymers.

Efforts to get long term funding from Unilever still have not succeeded. At present even another year is in doubt. The Unilever lab at Edgewater, NJ that has sponsored the award is being closed. Our advocate, member of the selection committee, and award presenter, Dr. K. P. Ananth, is moving to a Unilever facility in Connecticut. He has promised to try to get Unilever to continue the award, and will bring information on the management response to me at the New York meeting.

5. ICI Student Award in Applied Polymer Science (Thomas Hahn (2003 chair), John Thomaidis)

Six finalists have been selected among 13 applicants for the 2003 ICI Student Award in Applied Polymer Science. This Award, sponsored by ICI and administered through the Joint Polymer Education Committee of the ACS Divisions of Polymeric Materials: Science and Engineering (PMSE) and Polymer Chemistry (POLY), is given annually for the best paper presented at the ICI Student Award Symposium as part of the PMSE program at the Fall ACS Meeting.

The six finalists and their respective papers are:

1. Christopher W. Bielawski, California Institute of Technology
Synthesis of Cyclic Polymers Using Ring-Opening Metathesis Polymerization (ROMP)
2. Yushan Hu, Case Western Reserve University
Structural Model for Oxygen Permeability of a Liquid Crystalline Polymer
3. Brian K. Johnson, Princeton University
NanoPrecipitation of Organic Active using Mixing and Block Copolymer Stabilization
4. Benjamin Falk, Rensselaer Polytechnic Institute
Optical pyrometry: A novel method for monitoring photopolymerizations
5. Won Jae Chung, Georgia Institute of Technology
Structure-property relationships for Pd catalyzed poly(Norbornene) derivatives
6. Chunyan Chen, University of Michigan

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Molecular-Level Understanding of Polymer-Silane Interacting Mechanism by SFG Vibrational Spectroscopy

The finalists will be presenting their papers at the ICI student Award Symposium at the 226th ACS National Meeting, New York, New York. The session is being held at the Hilton New York, Clinton Suite, on Tuesday, September 9, 2003 from 1:15 PM until 4:45 PM. The finalists will be compensated up to \$750 for their expenses to attend the meeting. In addition, they will receive one-year membership to the PMSE division.

An anonymous committee selects the winner among the six finalists after the papers are presented. The winner will be notified at a later date, and then he or she will receive the award at the 227th ACS National Meeting, Spring 2004.

Lastly, the ICI Student Award Committee is pleased to announce that the Women's Chemists Committee has agreed to cosponsor this and future symposia. It is our expectation that this cosponsorship will result in greater recognition of the symposium by potential applicants, and by the overall ACS community.

*Thomas D. Hahn, National Starch, 2003 Committee Chair

Industrial/Government Professionals Directorate (R. MOORE, Associate Director)

1. Short Course Directory Based on review of this program and discussion at the New York meeting, the Short Course Directory will not be offered in 2004.
 2. Audiovisual Aids (Meister)
 3. Industrial Teachers
 4. Educational Needs of the Industrial Polymer Scientist (new)
-

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Treasurer - R. B. Moore

The POLY Chair-Elect, Kenneth Carter, has audited the accounting records of the Division of Polymer Chemistry and certified that the records are accurate and that expenses are in accord with the needs and goals of the Division. This report presented on this date at the Annual Business Meeting outlines the current status of the Division finances.

The table below outlines the status of the 2003 budget with respect to the current income and expenditures through July 2003 and is compared to the end-of-year figures for 2002.

Budget Category	2002 Actual		2003 Budget		2003 Actual	
	Income	Expense	Income	Expense	Income	Expense
ACS Dues and Allocations	176,349	----	235,000	----	146,585	----
National Meeting Activities	54,070	118,932	80,800	127,000	64,160	77,187
Administrative	1,172	191,123	500	142,900	500	77,359
Publications and Advertising	89,287	169,201	83,000	152,000	63,847	121,591
Committee Activities	23,500	33,424	17,500	30,000	13,000	17,203
Total Budget*	728,929	761,021	611,700	611,700	409,586	341,659
Budget Delta		32,052		0		67,928
Investment Balance		314,571				343,530
*Total budget reflects the balance for the entire budget (see attached) and not the sum of the highlighted categories in this report.						

In comparison to 2002, we have significantly reduced the operating budget for 2003. This change reflects a reduction in overall Workshops activities for 2003 (three Workshops/meetings for 2003 vs. five in 2002), and a significant cut back in administrative expenses. With the implementation of strict budgeting procedures for Workshops in 2002 and outstanding efforts from our Workshop organizers, our Workshops have become very successful for the Division. This trend is continuing through 2003 and has allowed us to rapidly overcome the budget deficit experienced in 2002. To date, the division finances are strong, with a positive balance near \$68,000. With encouraging projections from our remaining Workshop activities and a detailed check on our remaining financial obligations, the end-of-year report is predicted to conclude with a significant surplus.

In August 2003, \$25,000 was transferred from the primary POLY checking account to our Investments account. In 2002, \$100,000 was transferred from our investment reserves to cover carry-over expenses from 2001. Repayment back to our reserves, beginning with this initial installment of \$25,000, will be vigorously pursued throughout the coming months. Based on our

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financial predictions, another \$25,000 installment back to our investments should be possible by years end.

Long Range Planning

Even in this poor economic environment, our conservative investments are growing at an outstanding rate of near 15%. With repayment back to reserves and the continued careful monitoring of our portfolio, our investment reserves are expected to remain healthy with a strong potential for growth. The treasurer's office will continue to analyze the operating budgets and procedures associated with the POLY Business Office and Polymer Preprints with the goal of minimizing expenditures and refining the operations while maintaining the efficiency and benefit of these extremely valuable activities. This analysis stage is expected to be complete in the first quarter of 2004 with operational modifications (if needed) to be implemented by the summer of 2004.

This year POLY has experienced the financial relief from an increase in membership dues. Beginning in January of 2004, the Division will also greatly benefit from an increase in ACS allotments. With these new financial parameters and careful attention to the divisional budget, the Division is poised for period of unprecedented growth and the opportunity to convert these resources into new and valuable areas of benefit to our members.

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Poly List and Web Pages - F. Blum

POLY LIST

There are still about 1400 members on the POLY list. The volume of mail continues to be moderate and the number of complaints is low, almost negligible. Either Ken Carter or I approve postings to the list. This has the effect of removing most nuisance e-mails from the list. So far, we avoided being caught up in the recent rounds of worms, though the worms tried!

World Wide Web (www)

The www pages were moved to www.polyacs.org in February. There have been few problems I know of. If you encounter any, please report them to me. A list of the hits per page since the first of the year is found below. In August we had our 200,000th hit! In July, our strongest month we averaged 326 visitors and 1321 pages viewed per day. The main page gets over 130 hits per day.

Since Jan 2003

/index.html 20888
/main/jobs.shtml 15398
/main/polyspon.shtml 2763
/main/preprintsonline.shtml 2588
/main/natlmeet.shtml 1850
/arcmeetings/neworleans.303.shtml 1512
/main/join.shtml 1508
/wwwboard/wwwboard.shtml 1503
/main/orgchart.shtml 1266
/arcmeetings/newyork.903.shtml 1241
/cgi-bin/polyreg1.pl 1217
/main/activities.shtml 1165
/index.shtml 1145
/cgi-bin/polyreg2.pl 952
/main/othermeet.shtml 913
/main/contact.shtml 807
main/otherservers.shtml 799
/arcmeetings/polyolefins.1003.shtml 791
/membership/anniv03.shtml 729
/main/whatsnew.shtml 723
/main/pageinfo.shtml 644
/main/awards.shtml 639
/wwwboard/messages/23.shtml 594
/membercenter.html 566
/wwwboard/messages/33.shtml 532
arcmeetings/orlando.402.html 489
/wwwboard/messages/18.shtml 389
/arcmeetings/polycond.904.shtml 355
/nomcl/mnn23.pdf 343
/main/books.shtml 333
/main/orglist.shtml 333

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/membership/anniv02.shtml 330

/main/nomenclature.shtml 330

/main/listjoin.shtml 323

/cgi-bin/polyreg3.pl 317

I solicit your help. Please send me things electronically by e-mail for inclusion on the web pages. <http://www.polyacs.org>

The number of members who join the Division via the www and register for workshops continues to increase.

I also request help in soliciting advertising for the web page. Now that the pages are on a commercial site, we have no restrictions as far as the web pages are concerned. It seems logical to do this for the web page, newsletter and Polymer Preprints with a coordinated effort.

2003 Fall Reports

Regional Meetings - W. T. Ford and L. Dulany

The Division of Polymer Chemistry (POLY) will provide up to \$500 to support a well-planned regional meeting symposium. In turn POLY would like the opportunity to advertise its programs and recruit members at a table next to the room where the polymer chemistry sessions are held.

The criteria for POLY support are:

- 1) There must be a full day symposium devoted to polymer chemistry.
- 2) The program should include one or more invited speakers.
- 3) To apply for support, the Program Chair or symposium organizer must send (a) a copy of the technical program to the POLY Committee on Polymer Programs at ACS Regional Meetings and (b) a budget showing how the funds will be used to defray registration fees and travel costs of invited speakers.

Notice of the opportunity for POLY support has been sent to the Program Chair and/or the General Chair of all 2004 ACS regional meetings. The Middle Atlantic, Southeast, Southwest, and Western regional meetings are holding polymer symposia with POLY support in 2003. The Southeast regional meeting has requested support for 2004.

The President of the ACS for 2004, Charles Casey, will continue the program started by Eli Pearce in 2002 and continued by Elsa Reichmanis in 2003, of providing support from the President for programs at Regional Meetings. He is offering up to \$2500 to support technical programs that are co-sponsored by one or more divisions at each regional meeting, with the hope that the matching funds will be provided by the divisions. Matching funds could also come from industrial sponsors, PRF, or other sources. He reasons that the upcoming increased allotments to divisions should make it possible for divisions to help provide enhanced programs at regional meetings.

2003 Fall Reports

Workshops - J. Riffle and D. Smith

POLY off-site workshops continue to be strong technical meetings on contemporary topics with national and international invited speakers. They are well attended, and the POLY business office management and staff continue to provide excellent service to the members. The POLY business office and POLY treasurer work together to budget funds appropriately for these meetings. We are scheduled through 2005. Suggestions and suggested chairs and co-chairs for 2006 workshops are sought.

2003

Advances in Materials for Proton Exchange Membrane Fuel Cell Systems

Held February 23-26, 2003

Asilomar Conference Center, Monterrey, CA

Chairs: Jim McGrath (VA Tech) and Tom Zawodzinski (Case Western Reserve)

Attendees: 200

Feedback from attendee questionnaires requested a 2nd meeting for 2005 which is now scheduled. The conference site has good facilities, excellent catering services for receptions, and keeps participant costs down somewhat from hotel locations. This is considered an excellent meeting site but must be scheduled about 2 years out.

7th International Symposium on Polymers for Advanced Technologies - PAT

September 21-24, 2003

Bahia Mar Radisson, Fort Lauderdale, FL

Chairs: Rob Storey (Univ. S. Mississippi), Bob Moore (Univ. S. Mississippi) and Bill Daly (Louisiana St.)

Announcement available and Web information linked to the POLY site Registration is at 151 (8/21/03) and rising Organization/Mgt by POLY's International Polymer Committee with support from the POLY business office

Advances in Polyolefins 2003

October 5-8, 2003

Sonoma Doubletree, Rohnert Park, CA

Chairs: Jim McGrath (VA Tech), Paul Arjunan (Exxon-Mobil), Tom Hanlon (Albemarle, retired)
Registration is on-target. Hotel room occupation is on-target.

PRF funds have been secured (\$3600) + \$3000 in industrial support has been obtained.

This is a site that we have worked with many times with good experiences.

Pacific Polymer Conference 8

November 24-27, 2003

Queen Sirikit National Convention Ctr., Bangkok, Thailand

Organized by the Polymer Society, Thailand

2004

Molecular Modeling of Polymers

March 18-20, 2004

Crowne Plaza, Hilton Head, SC

2003 Fall Reports

Chairs: Rahmi Ozisik (Rensselaer Poly) and Greg Rutledge (MIT)

This is projected to be smaller meeting than some of the others and has been budgeted appropriately.

The co-Chairs are working hard to define an excellent program.

Branched Polymers for Performance

May 23-26, 2004

Woodlands Hotel and Conference Center, Williamsburg, VA

Co-Chairs: Tim Long (VA Tech), Ralph Colby (PA St.), Doug Kiserow (ARO), Richard Turner (Eastman), Carl Willis (Kraton Polymers)

Full program on the web with link from POLY

Flyer is available with a program at the POLY desk here in NY

PRF funds have been secured.

This is a relatively new conference facility in Williamsburg and a 1st time location for POLY.

Polycondensation 2004

September 26-29, 2004

Virginia Tech Roanoke Hotel and Conference Ctr., Roanoke, VA

Chairs: Jim McGrath (VA Tech), Frank Harris (U. Akron), Ed Paschke (Amoco, retired)

Flyer is available at the POLY desk here in NY

Biennial 2004 Polymer Design for Biology: Activity and Structure

October 3-6, 2004

Savannah Marriott, Savannah, GA

Chairs: Bill Brittain (U. Akron), Greg Tew (U. Mass), Erwin Vogler

Flyer is available at the POLY desk here in NY

This is an excellent location that we have worked with previously. This meeting is immediately followed by

FLUOROPOLYMER 2004 at the same location.

FLUOROPOLYMER 2004 Current Frontiers and Future Trends

October 7-9, 2004

Savannah Marriott, Savannah, GA

Chairs: Dennis Smith

Flyer is available at the POLY desk here in NY

2005

Advances in Materials for Proton Exchange Membrane Fuel Cells 2005

February 20-23, 2005

Asilomar Conference Ctr., Monterrey, CA

Co-Chairs: Jim McGrath (VA Tech), Tom Zawodzinski (Case Western Reserve), Mike Hickner (UC-Davis)

Polymers in Photonics

May, 2005

Orlando, FL

2003 Fall Reports

Chair: Kevin Belfield (U. Central Florida)

Co-chairs (tentative): Tom Smith (U. Rochester), Paul Armistead (ONR)

The dates and location are designed to be co-located with UCF for lab demonstration purposes.

The exact site in Orlando has not yet been secured.

Polymers in Biology and Medicine 2005 (4th workshop on this topic)

May-June, 2005

Sonoma Doubletree, Rohnert Park, CA

Co-Chairs (tentative): Buddy Ratner (U. Washington), Kathryn Urich (Rutgers), Judy Riffle (VA Tech)

This is the same site utilized for the 2002 Polymers in Biology and Medicine workshop which was well attended and well received. Our intention is for Buddy Ratner to co-chair this and hand off the series to a new chair. This was moved from 2004 to 2005 since POLY's biennial 2004 targets biomaterials/biology. After 2005, the intention is to move it back to it's timeslot coincident with the biennials.

Pacific Polymer Conference 9

Dec. 10-13 or 14??, 2005

Westin, Maui, Hawaii

Chairs: Jim McGrath (VA Tech), Bill Daly (LSU)

Polyurethanes 2005 (Tentative)

Fall, 2005

Chair: Garth Wilkes

Annapolis or Baltimore