

2006 Spring Report

Awards - J. W. MAYS

INDUSTRIAL POLYMER SCIENTIST AWARD

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 is being given every two years. Further details can be obtained from Dr. Jimmy W. Mays, Chairman of the POLY Awards Committee (Tel. (865) 974-0747).

Because of the high quality of the candidates, this award was given to two awardees in 2004. The recipients were: Dr. Bill W. Culbertson and Dr. Craig J. Hawker, each of whom was honored at the Fall Meeting with a symposium and a joint reception in their honor. The symposia were very well attended, as was the reception and the accompanying award ceremony.

Ongoing projects:

Ongoing projects of the Industrial Sponsors Group include editing and distribution of the K-12 Polymer Educational Materials Kits developed by Dr. Melvin I. Kohan and the Science Alliance in Delaware. This project was supported via an ISG \$10,000 three-year grant for 1994 through 1996 as part of the "Improving the Public Perception of Polymers" program. The editing has now been completed through the efforts of several of the Polymer Ambassadors of the Intersociety Polymer Education Council (IPEC), and has been forwarded to Dr. Kohan.

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Business Office - N. Byerly

The Business Office assisted with five meetings and workshops during 2005 with two scheduled in 2006. The total overhead received for 2005 meetings was +\$145K. A total overhead of \$30K is anticipated for workshops in 2006.

The 2005 Fall issue of the Polymer Division Newsletter was mailed out to the membership in October. The next Newsletter is drafted and will be mailed out in June 2006. Suggestions for changes and additional articles for the Spring issue can be accepted through mid April 2006. Nine companies continue to advertise in the POLY Newsletter contributing +\$10K to assist in defraying Newsletter costs. Joint solicitation of advertisements and billing with the Polymer Preprints is anticipated in 2006.

The election ballots were printed and dispersed through the Business Office in October 2005. Electronic balloting may be a possibility for 2007 if bylaw changes are approved.

A total of 31 new members joined the Polymer Chemistry Division at the ACS meeting in Washington, DC. The POLY membership booth will be set up near the POLY sessions in the Omni Hotel in Atlanta, GA.

The Business Office staff works closely with several committees of the Polymer Chemistry Division. Financial records are maintained on the Industrial Sponsors activities including invoicing companies as appropriate. Various mailings are sent out to these Sponsors throughout the year. An up-to-date mailing list is maintained on all libraries that subscribe to the Polymer Preprints. We have assisted with several award and recognition efforts for the Division members. The Business Office continues to work with the membership with various mailings.

INDUSTRIAL SPONSORS - R. S. Moore

Background: 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 was 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 Linkous, in the POLY Division Office, an updated version of these books was printed and distributed to the Members and to the Coordinating Committee.

Industrial Sponsors Coordinating Committee (ISCC): 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. The ISCC will meet in Atlanta, GA at the Spring ACS Meeting on Monday, April 27th at 11 a.m. in the Omni at CNN Center, Pecan Room.

A special committee (which includes H.N. Cheng and A. Salamone) has been formed in order to update and expand the membership of the Industrial Sponsors during 2006. In the interim, the list of sponsors who have contributed since 2004 is given below:

INDUSTRIAL SPONSORS Air Products and Chemicals, Inc. Basell, Inc., R&D BASF Corporation Bayer Corporation Chevron Phillips Eastman Chemical Company General Electric (GE) Honeywell, Inc. ICI R&D INVISTA/Kosa, Inc. International Specialty Products Lubrizol Corporation PPG Industries, Inc Polymer Chemistry Innovations, Inc. Proctor and Gamble Company Raychem/Tyco Electronics Rohm and Haas Company Wyatt Technology Corporation

The Twenty-sixth Annual Meeting of the Industrial Sponsors Group (ISG) was held at the fall, 2005 Washington, D.C. ACS Meeting in conjunction with a meeting of the ISG Coordinating Committee at which plans for expanding the ISG Membership and the ISG activities were discussed. At the Atlanta ACS Meeting the ISG is continuing support of the next symposium on "Excellence in Graduate Polymer Science Research". This POLY symposium is also an ACS Presidential Event, and is cosponsored by PROF and YCC.

Other 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. The competitive grants program initiated in 1991, "Improving the Public Perception of Polymers", has been completed; over \$55,000 was administered through this program. In its stead the ISG is funding a new program of graduate-student travel grants to present papers on polymer science in POLY at national ACS meetings. This program is being administered through a committee of the POLY Member-at-Large, and awards commenced with the spring 2005 meeting in San Diego. There were three Travel Grant Awardees for the fall, 2005 meeting in Washington, D.C. The plan, at present, is to provide for up to four travel grants of \$500 each. Our hallmark award, the "Industrial Polymer Scientist Award", is described below, as well as an additional project.

INTERSOCIETY POLYMER EDUCATION COUNCIL (IPEC) - F. Jones

IPEC (<http://site6645-1.websiteforge.com/www.uwsp.edu/chemistry/ipec/home.htm>) promotes and supports teaching about polymers and polymeric materials in the K-12 curricula. 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. Students' interest can be sparked because they are familiar with polymeric materials

Most of IPEC's activity involves the Polymer Ambassadors. The Ambassadors (<http://site6645-1.websiteforge.com/www.polymerambassadors.org>) are about 18 talented and dedicated K-12 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. Over 100 such workshops are presented to 3500 - 7500 teachers each year. Students also attend some workshops. These workshops are popular with teachers, who obtain practical and effective materials for use in their classes. Since the start of the program in 1992, well over 50,000 teachers attended these workshops. Snapshots from some of the workshops can be found at the Polymer Ambassadors website.

The Polymer Ambassadors continue working intensively. From August 2005 to February 2006 PA's presented about 57 workshops and courses, including 23 workshops at National Science Teachers Association (NSTA) conventions in Hartford, Chicago, and Nashville. About 1000 teachers attended the NSTA workshops. A few examples of the many topics presented:

- "Designer sneakers: The Gym Shoe Corp." Joyce Brumberger, NSTA Chicago, November, 2005 (47 teachers)
- "Polymers: New Twists on Old Favorites," Debbie Goodwin, NSTA Chicago, November, 2005 (45 teachers) and Nashville, December, 2005 (100 teachers)
- "Bringing the Science of Cars into the Classroom," Andy Nydam, NSTA Nashville, December, 2005 (65 teachers)
- "Polymers are Everywhere-In the Kitchen, Classroom, CarÉ" Lynn Higgins, NSTA Chicago, November, 2005 (36 teachers)

Polymer Ambassadors have received numerous major awards including five Presidential Awards for Excellence in Math and Science Teaching, and they perform considerable service activity. For example, Andy Nydam serves on Washington Learn-the Governor's Steering Committee on Education. (He is the only classroom teacher on the committee!)

The Polymer Ambassadors extend their reach by using electronic media. About 50 practical lessons for Kindergarten through High School are now freely available to anyone on the World Wide Web. The Ambassadors website also has other examples of teaching materials developed by the Ambassadors.

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. Ambassadors have played an important role in establishing the program, participating in teacher training workshops and developing over 50 new lessons, some with film clips. Ambassadors Mary Harris, Sandra Van Natta, Joyce Brumberger, and Suzanne Hall were instructors at an AGPA teacher workshop in August, 2005. Ambassadors also participate in design and refinement of curricula for directors of in-service programs for science teachers, supported by NSF.

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Polymer Science of Everyday Things (PSOET) Workshops and Symposia at National ACS Meetings. As reported previously the first and second PSOET events were highly successful. PSOET-3 is tentatively planned for the Boston ACS meeting in 2007. Organizers are Ken Wynne and IPEC Board members Ann Salamone and Anne Padias.

Sandra Van Natta has served as Polymer Ambassador Chairperson since March, 2005. She continues the progression of highly effective Chairpersons. Previous Chairpersons Joyce Brumberger and Lynn Higgins remain very active as Polymer Ambassadors, and the contributions of all three are greatly appreciated.

IPEC also sponsors other workshops for teachers. For example, the fifth "DISCOVERY in Plastics Processing" was organized and taught by Prof. Eric Lokensgard at Eastern Michigan University July 24-29, 2005. It was the best yet. The course received highly positive reviews from all the teachers who attended, and Dr. Lokensgard was lauded for his dedication and masterful teaching. Financial support came from The University, IPEC, and two units of the Society of Plastics Engineers. IPEC was a prime mover in getting this successful series of workshops started and remains closely involved. Prof. Lokensgard has other commitments for 2006, but it is hoped that the sixth workshop will be held in 2007.

IPEC is a 501(c) not-for-profit corporation. IPEC supporting organizations are the American Chemistry Council Plastics Division and the American Chemical Society Divisions of Polymer Chemistry, Polymeric Materials Science and Engineering, and Rubber. Its Board of Directors comprises two voting representatives from each member organization. Organizations are encouraged to appoint additional Board representatives. IPEC runs on volunteer energy. Board members are not paid.

IPEC's core activities are constrained by a shortage of funds. The original idea was to pay expenses for Polymer Ambassadors for one training year and three active years. Now there is a growing pool of Emeritus Ambassadors have completed their three years but want to continue doing workshops and other IPEC activities. These master teachers are recognized to be among the finest in their profession. A priority goal for IPEC is to find sufficient travel funds to help the Emeritus Ambassadors continue their work.

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. Support of Polymer Ambassador travel expenses account for about 85% of IPEC's budgets. With more dues-paying members, the corps of Ambassadors could be enlarged and activity could be expanded. In addition, more member organizations would add more members to the IPEC board, increasing its capacity for new initiatives and fund-raising.

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 Atlanta during the spring national meeting of the American Chemical Society. It will be Tuesday, March 28 from 9:30 AM to 3:00 p.m. at the Cottonwood Room of the OMNI @ CNN Center Hotel. As always, the meeting is open to all; representatives of member organizations are especially encouraged to attend.

IPEC Mission Statement:

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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.

Membership - A. Hopkins

The Membership Committee currently consists of the following members: 1. Andrew B. Donnalley (Exxon Mobil) 2. Alan R. Hopkins (The Aerospace Corporation) 3. Erica Martin (Rohm and Haas Co) - Member-at-Large 4. HN Cheng (Hercules) - Councilor 5. Janelle Ulik-POLY secretary (Philip Morris) 6. Deanna L. Pickel, (Eastman Chemical)_Membership committee 7. Joe Pickel, (ORNL)_Membership committee 8. Frank Blum (UMR)_POLY web editor 9. Jeffrey P. Youngblood (Purdue University)

Introduction:

Joe Pickel, from ORNL, has graciously accepted an offer to be the new Chair of the POLY Membership Committee effective in February 2006. I would like to thank everyone for all their help and will continue to help this committee in their efforts to actively recruiting new members at national meetings, retaining them by maximizing their benefits and finally recognizing their service and contributions to the division. The current efforts (since our last national meeting) under the three R's are:

1. Recruitment of new members:

a. Continue the "POLY/PMSE Hospitality Suite" as an approach to recruit new ACS members, especially graduate and post-docs. Also this is an opportunity to reach out to current members of the division.

b. We have successfully completed the polymer preprints cover for 2006 (Atlanta & San Francisco). We may want to discuss new cover concepts for 2007 that retain the theme of a timeless message of POLY membership. Maybe some new pics?

c. The student page and job portal is maintained by Joe and Deanna Pickel

Student page: Continue to update with relevant information that concern student activities. Include opportunity for feedback from students, in order to improve page contents. Hopefully we can add more features to this site. Frank has added a link to the Grad Travel awards so students can download application.

Jobs Page: Actively solicit job announcements from polymer industries so that page is of continuous benefit to members. Improve resume presentation to highlight potential member-candidates. Advertise benefit of posting resume on jobs site. Solicit advertisements for summer internship positions. Currently, there's only 4-5 resumes posted on this site.

d. Graduate student orientation packet for new polymer grad students: Need to solicit feedback from students and program administrators with regards to value of initial orientation packet. Should we do this again?? Maybe improve content and distribution of packet for next year.

e. Polymer student showcase: It has been proposed that a new benefit to POLY members who are looking for a job could be a Showcase program. The basic idea is that job candidates (POLY members) who are presenting at an ACS or POLY meeting could have their resumes and presentation times available to prospective employers as coordinated by the POLY membership division. We are currently looking into the feasibility of this program as well as interest of the various parties involved. This grad showcase idea was brought up by Drew.

f. We are encouraging submission to the SciMix poster session for all meetings starting in Atlanta. 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.

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2. Retention of current members:

- a. Letters to 1st, 2nd yr members each fall encouraging renewal of membership letters to 1st, 2nd yr members each fall encouraging renewal of their membership. We need a new database 'manager' on our routine recruitment activities which require data on renewals, current memberships, and first and second-yr memberships.
- b. Graduate Student focus: Continue with Erica's travel award initiative sponsored by the POLY Industrial Sponsor's Group . For the Atlanta meeting, our winners were Ms. Manuela Ocampo of Akron University and Mr. Marcus A. Hunt of North Carolina State University. A total of 8 application were received for this Spring 2006 and 13 applications for Fall 2005. Membership committee sent letters to key polymer faculty to promote this award.

3. Recognition of members:

- a. Letters/web page listing/ recognition event/ POLY pins for 5, 10, 20, 30 anniversary members every spring - positive response.
- b. There has been an extremely positive response with the pin recognition program. This program will be continued into the foreseeable future.

Poly List and WWW Pages - F. Blum

POLY LIST

There are about 1170 members on the POLY list. The volume of mail is moderate and the number of complaints is low, almost negligible. I approve postings to the list. In the last year, we have not had any worms or true spam pass through our filter (as far as I know).

World Wide Web (www)

Over the past year (Feb 05-Feb-06) we have had a total of 302,000 visitors with a monthly average of 25,000 and 827,000 page views with a monthly average of 69,000. This looks like an increase over the last report.

The number of members who join the Division via the www and register for workshops seems pretty good.

I solicit your help. Please send me things electronically by e-mail for inclusion on the web pages.

<http://www.polyacs.org>

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 they are concerned. It seems logical to make a coordinated effort do this for the web pages, newsletter, and Polymer Preprints.

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

The POLYED Subcommittee Reports are available on-line at www.polyed.org in the section "Info for Committee Members". A summary report is given below.

This is the first year of the new National Starch Award for Outstanding Graduate Research. Warren Ford is overseeing this award in cooperation with National Starch. The award will be given to a graduate student (or recent grad) for outstanding doctoral thesis work related to polymers. The award consists of a plaque, honorarium, and travel expenses to participate in a symposium at the fall national meeting honoring the recipient. Contact Warren Ford at Oklahoma State University or see the POLYED Center web site (www.polyed.org) which will have details about the award. A number of changes were made to the POLYED Undergraduate Award for Achievement in Organic Chemistry in 2005. In particular, administration of the program moved to the POLYED Center and a web-based nomination process was instituted. An automated page was added to the POLYED web site that allows faculty nominators to directly input the student awardees' information. Response to the changes in the award nomination process has been mostly positive and many applications for 2006 awards already have been received. Several nominators requested that they'd like to be able to stipulate a particular date when the certificate is issued so that it is available for award ceremonies. This is difficult to implement due to the large number of certificates that are sent, but we are trying to address this request by turning around nominations within about two weeks. The new direct entry web form is helping to expedite mailing of the certificates. A reminder of the availability of the new web-based nomination form is being sent in a direct mailing to U.S. chemistry, biochemistry, materials, and polymers departments this spring.

We'd like to connect with new polymer faculty at colleges and universities and make them aware of POLYED. If you know someone who is a faculty member in polymers, or a related field, in their first years of a college or university appointment, please let us know (Carraher@fau.edu or jdroske@uwsp.edu). We will follow up with information about POLYED resources that are available for them and with opportunities for them to network with others involved in polymer education.

POLYED is successful because of the contributions of many. We thank those who lead POLYED's programs and for POLY and PMSE's support. We have had a number of retirements of key people in recent years and we need people to help with these programs. Any member of POLY and PMSE who would like to become involved in POLYED should contact John Droske, POLYED Center, University of Wisconsin-Stevens Point, jdroske@uwsp.edu or Charles Carraher, Jr., Florida-Atlantic University, carraher@fau.edu.

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Polymer Preprints - R. Venumbaka

The Atlanta issue of Polymer Preprints [47(1), 2006] is the second year of publishing only a CD version in addition to posting the Preprints on the web. This issue contains the preprints from 8 Symposia plus General Papers for a total of 342 papers published on 607 pages. It continues to be the goal of the editorial staff to elevate the stature of Preprints in the world of scientific publishing. The CD continues to evolve, incorporating new functionalities as technology advances including the ability to print all papers under a chosen symposium. We are continuing to add additional information of interest for POLY members to the CD version.

The Division recognizes the importance of advertising to the future finances of the Preprints. Currently the Poly Business Office has been assigned to coordinate this critical function in conjunction with the Poly Newsletter advertising, hopefully resulting in additional potential income for the Division.

Texas State University-San Marcos will continue to sustain the in-kind support of the Polymer Preprints editorial functions. The Polymer Division's financial support of \$ 20,000/yr for the editorial operation of preprints has remained consistent up to the fall 2004 issue. Due to the elimination of the print copy, the editorial costs (mailing and proofing) were reduced approximately \$1,000 a year. Thus, we would like to request funding at the level of \$19,000/year. The following table outlines the publication costs for Preprints:

	New York	Anaheim	Philadelphia	San Diego	Washington	Atlanta (Estimate)	San Francisco (Projected)
# of CDs	7,000	7,100	7,200	8,000	7,800	7,600	8,000
# of Books	700	700	675	0	0	0	0
Preprints	523	625	452	480	713	342	500
Pages	990	1220	899	868	1,317	607	1,000
Cost							
Total for CDs	\$32,988	\$31,010	\$30,478	\$32,409	\$29,862	\$24,292	\$30,000
Cost per CD	\$4.71	\$4.37	\$4.23	\$4.05	\$3.83	\$3.20	\$3.75
Total for Books	\$22,840	\$26,451	\$14,107	\$0	\$0	\$0	\$0
Total Publishing Cost	\$55,828	\$57,461	\$44,585	\$32,409	\$29,862	\$24,292	\$30,000
Editorial Cost	\$10,000	\$10,000	\$10,000	\$9,500	\$9,500	\$9,500	\$9,500
TOTAL COST	\$65,828	\$67,461	\$54,585	\$41,909	\$39,362	\$33,792	\$39,500

Public Relations - D. A. Schorzman

Team Publicity currently consists of Pete Broske (Agilent Technologies), Anil Mahapatro (Diagnostic Systems Laboratories), and myself (Bausch & Lomb).

Action items since the last meeting: - The 2006 Flory Education Award was publicized in an announcement submitted to C&EN, and all Awards honored with symposia within the POLY division were publicized via email distribution and a presentation at the reception event in San Diego. - Several posters were provided for Atlanta publicizing the awards reception event, the graduate student travel awards for travel to the Spring 2006 meeting in San Francisco, the excellence in graduate research symposium in Atlanta, and the graduate student travel award winners in Atlanta. These posters were all printed and shipped, along with POLY/PMSE hospitality suite invitations, from a single printing agency and shipped directly to the hotel. This method of printing and shipping will continue in upcoming meetings. POLY board members are encouraged to coordinate printing requirements through the publicity team to reduce overall cost.

- Monthly mailings of POLY division announcements via the email list was continued as a reminder to members of upcoming events, workshops and meetings on a regular basis. - Team Pub is anxious to explore and utilize new publicity mechanisms to increase POLY visibility. New ideas and/or suggestions will always be graciously accepted.

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Regional Meetings - W. T. Ford

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 near to the location of the polymer chemistry sessions.

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.

During 2005 the Middle Atlantic Regional Meeting (MARM) had an extensive polymer program. POLY did not support a session at the 2005 Midwest Regional Meeting that did not meet POLY requirements. The Midland Local Section was provided support for a one-day meeting. Other regional meetings either did not request support or were not held in 2005. For 2006 the Middle Atlantic, Western, Great Lakes, Central, and Southeast regional meetings are planning polymer symposia.