

2000 Spring

Council Report

Programming - W. Ford, K. Havelka

The response to the Spring 2000 National Meeting in San Francisco was overwhelmingly positive with record-breaking attendance of over 18,000 people. This enabled the Division of Polymer Chemistry to host one of its largest programs ever with over 600 presentations in diverse areas of polymer science. POLY's multidisciplinary program covered a broad spectrum of polymer synthesis and characterization topics of industrial and academic significance. Two symposia, Synthetic Macromolecules with Higher Structural Order and Mass Spectral Analysis of Polymers, started with tutorials that provided background information that provided a baseline for presentations that covered the current state of technology in these exciting areas. Other symposia that reviewed the state-of-art technology, included: Polymeric Bioconjugates; Transition Metals in Polymers and Polymerization; Polymer Processing in Microgravity; Hybrid Organic-Inorganic Polymers; Light Emitting, Light Harvesting and Light Responding Organic Systems; and Polymer Gels. The program was highlighted by two award symposia and an awards reception: ACS Award in Polymer Chemistry honoring Jean M. Frechet, and P. J. Flory Award in Polymer Education honoring Jim Mark. POLY also contributed to the Macromolecular Secretariat symposium on Frontiers in Polymer Science in the 21st Century.

POLY's programming policy is to provide review or tutorial material at the beginning of all symposia so that beginners can gain background needed to understand the current research presented later. All POLY abstracts and all Polymer Preprints for the San Francisco meeting were collected electronically by the ACS Online Abstract System (OASys). OASys ran smoothly for the San Francisco meeting except for some down time due to server overload. ACS promised to increase server capacity to avoid such problems at future meetings. We continue to suggest improvements to ACS. Polymer Preprint submission at OASys encountered some first-time problems, which are mentioned in the report of the Polymer Preprint editor.

For the Spring 2001 meeting, the deadline for submission of Polymer Preprints as well as ACS abstracts at OASys tentatively is November 15, 2000. Check the ACS or the POLY web site in September to be sure of the date. Symposium plans for meetings through San Diego in Spring 2001 are complete. Symposia at the meetings in Chicago Fall 2001, Orlando Spring 2002, and Boston Fall 2002 are partly scheduled. POLY will celebrate its 50th anniversary at the Spring 2001 meeting with a 2-day symposium looking into the future of Polymer Chemistry.

The Spring 2000 meeting was Kathleen Havelka's last official responsibility as Program Chair, and Warren Ford will conclude his term with the Fall 2000 meeting. New Co-chairs of the Program Committee are Christopher Bowman of the Univ. of Colorado and Carrington Smith of Air Products Corp., who will serve national meetings 2001-2003.

The committee aims to insure that symposia cover fundamental subjects in polymer synthesis, characterization and properties on a regular basis, and topics of industrial importance. Suggestions for symposia are welcome at any time. A form is available at the POLY web site showing the information the committee needs to consider a suggestion. Call, fax, mail, or e-mail suggestions to one of the program co-chairs, Christopher Bowman or Carrington Smith.

The following are the written reports from the San Francisco ACS meeting, March 26-31, 2000 presented at the Polymer Division Board Meeting.

Immediate Past-Chair - F. Blum

As Immediate Past-Chair I have responsibility for the Bylaws, Long-Range Planning, and the Operations Manual update. I do not see any required bylaw changes necessary or desirable, but would welcome suggestions. We will probably have a long-range planning meeting in Washington. The Operations manual is on the www and I have most of it updated. I still need updates for the secretary, *Polymer Preprints* Editor, Councilor, alternate Councilor, International activities, Graduate Student meeting, and Library subscriptions chairs. Your assistance in obtaining these is earnestly solicited. The operations manual can be found from the Gen. POLY Info. page or <http://www.chem.umn.edu/~poly/operman.html>. A previous version of those job descriptions is listed there.

I am very pleased with several of the initiatives that have come to maturity over last year and this one. Specifically, the 2000 x 2000 membership drive for which we hope to see the 2000 goal exceeded in Washington and also the www version of *Polymer Preprints*. These are exciting times for the Division.

Secretary - M. Baker

I want to welcome Dennis Smith on board as one of the assistant secretaries. He's a great addition to the team and stood in for me at the San Francisco meeting, aided by Neta Byerly. I have relocated to Cairo, Egypt; please note the new mailing address in the back of the newsletter. All mail goes to a US address and is sent by courier to my office in Egypt; the phone number is a Washington DC voice mail that I pick up by internet (as well as email). I can also be reached directly by phone at 011-20-2-378-5495 (handy for POLY members in Egypt).

Treasurer - K. Havelka

Listed below is the budget for the Polymer Division for 2000. As indicated, the division has a cash flow problem for this year. This problem is due to the rising preprint costs that significantly exceed membership dues. These costs are largely due to the price of printing and mailing large books. The Preprints Committee and Executive Committee are aggressively working to mitigate this problem. The move to electronic preprints on CD and the web will facilitate this. In anticipation of the *Polymer Preprints* being less of a financial burden on the division, other services and benefits that the division can provide to our members are being pursued. This year some of the additional services that we are providing, include: a more generous funding policy for symposia and a complimentary Spring Awards reception open to members. We are able to offer these additional services due to the interest that we are earning off of our investments and the move to electronic preprints.

POLY DIVISION BUDGET 2000**2000 INCOME****Category Budgeted**

<u>Operating Income</u>		
	Dues	\$152,000
	Industrial Sponsors	\$30,000
<u>Meetings/Workshops</u>		
	ACS Allotments	\$26,900
	Meetings-Workshops	\$213,000
<u>Publications and Royalties</u>		
	Publications	\$42,000
	Advertising	\$18,500
	Royalties	\$9,550
<u>Investment Income</u>		
	Dividends and Interest	\$27,600
<u>Grants & Awards</u>		
	Grants & Awards	\$35,000
	Award Event	\$0
	Award Sponsorship	\$15,500
Total Income Budgeted		\$570,050

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2000 EXPENDITURES

Category		Budgeted
<u>Publication costs</u>		
	Preprints+Newsletters	\$203,420
	Industrial Sponsors	\$8,833
<u>Meetings-Workshops</u>		
	National Meeting Costs	
	Speakers	\$62,500
	Planning/Program	\$800
	Other (Hosp, Reg.)	\$14,500
<u>Workshops & other Meetings</u>		
	Other Meetings—Workshops	\$157,450
	Regional Meetings	\$2,000
	Membership Booth	\$7,077
<u>Administrative</u>		
	Postage/Supplies	\$25,450
	Business Office	\$42,660
	Executive Committee	\$12,640
	Travel	\$12,664
<u>Grants and Awards</u>		
	Awards	\$24,600
	Award Event	\$2,500
<u>Misc. Programs and Committees</u>		
	PolyEd	\$15,000
	IPEC	\$5,000
	Minority Program	\$2,000

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	Other Committees	\$350
Total Expenditures		\$599,444
Excess Income over Expenditures		(\$29,394)

Polymer Preprints - R. Storey

The cost of printing and shipping *Polymer Preprints*, Vol 41(1) is shown below, compared to the costs of previous issues:

Issue	Pages	Copies	\$ Cost	\$ Cost/Book	\$ Cost/Page
41(1)	1176	8,859	84,220	9.507	0.0081
40(2)	1344	8,597	97,385	11.328	0.0084
40(1)	672	8,706	63,532	7.297	0.0109
39(2)	1,296	8,661	106,597	12.308	0.0095
39(1)	752	8,349	64,202	7.690	0.0102
38(2)	720	8,517	65,500	7.691	0.0107

Preprints in Volume 41(1) are the most uniform in the history of *Polymer Preprints*. Every preprint is archived as a pdf file, enabling a web edition and CD-ROM.

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Circulation - F. Dammont

We have shipped a total of 401 copies of Vol. 41-1 of the PREPRINTS to library subscribers: 309 (including 8 by Air Mail) via Port City Press, and 92 copies from Newark, New Jersey via U.P.S., to addresses requiring special handling.

So far, we have 365 paid-up (including free) accounts. The balance are good risk accounts from the previous year, from whom we expect settlement in the near future.

We had a larger than usual number of claims for missing Vol. 40-2 from Canadian Library and member subscribers, serviced by the printers. Shipments via U.S. Postal Service to Canada, are exceptionally costly due to the cut-off of the book rate for parcels exceeding 4 pounds. U.S. postage for a single copy of Vol. 41-1 is \$3.38 domestic and \$11.36 to Canada. Shipments to the rest of the world is \$7.91.

Publications - K. Wooley

The Division of Polymer Chemistry of the ACS encourages the broad dissemination of the research results presented in the meeting symposia in the form of ACS Symposium Series books. These books serve as archives of the latest advances in polymer chemistry, and allow the information to be accessed by those who are unable to attend the symposium. As incentive for the symposia publications, 10% royalties for the first 1500 books sold and 12.5% royalties for books in excess of 1500 are distributed as 50% to the editor(s) and 50% to the Division of Polymer Chemistry. The royalty period was extended from a three-year period of time, as of December 1999, to include a five-year period of time (thanks to the negotiations of our Chair, Frank D. Blum). The ACS has the first rights to publish the reports from ACS symposia, however, a number of other publishers are available, and the best contract terms should be negotiated by the symposium organizer(s). The Publications Chair must approve negotiated contract terms. The final contract must provide for 50% of the royalties received to be paid to the Division of Polymer Chemistry.

The following are lists of Division of Polymer Chemistry symposium-based books that have been published or that are being developed under contract with ACS Books in partnership with Oxford University Press during March 1999 – March 2000. Also included are the prices for each book. Please note that Division Discounts for some of the books are offered within this POLY Newsletter, and they may be applied toward the purchase of one copy of the books until July 2000.

ACS POLY Symposium-based Books Published (March 1999-March 2000):

1. *Field Responsive Polymers*, Ed. Khan and Simpson, ACS Symposium Series No. 726, July 1999, \$120
2. *Semiconductive Materials* (cosponsored with PMSE)s, Ed. Hsieh, ACS Symposium Series No. 735, August 1999, \$130
3. *Microstructure and Technology*, Ed. Tsukruk and Wahl, ACS Symposium Series No. 741, December 1999, \$145
4. *Advances in Olefin Polymerization*, Ed. Arjunan, McGrath, and Hanlon, ACS Symposium Series No. 749, December 1999, \$120

ACS POLY Symposium-based Books Under Contract (prior to March 2000):

1. *Silicones and Silicone Modified Materials*, Ed. Clarson and Owen, ACS Symposium Series No. 729 (Dallas ACS Meeting, March 1998)
2. *Specialty Monomers and Polymers*, Ed. Havelka and McCormick, ACS Symposium Series No. 755 (Dallas ACS Meeting, March 1998)
3. *Fluorinated Surfaces, Coatings and Films*, Ed. Castner and Grainger (Boston ACS Meeting, August 1998)
4. *Polymers from Renewable Resources: Carbohydrates and Agropoteins* (cosponsored with BEDPS), Ed. Gross and Scholz (Boston ACS Meeting, August 1998)
5. *Polymers from Renewable Resources: Polyesters of Biomedical and Environmental Significance* (cosponsored with BEDPS), Ed. Gross and Scholz, ACS Symposium Series No. 764 (Boston ACS Meeting, August 1998)
6. *Historic Textiles, Papers, and Polymers in Museums* (cosponsored with CELL), Ed. Cardamone and Baker (Boston ACS Meeting, August 1998)
7. *Drug Delivery in the 21st Century*, Ed. Park and Mrsny, ACS Symposium Series 752 (Anaheim ACS Meeting, March 1999)
8. *Controlled Radical Polymerization*, Ed. Matyjaszewski (New Orleans ACS Meeting, August 1999)

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9. *Optical Polymers: Advances in Optical Fibers and Waveguides*, Ed. Harmon and Noren (New Orleans ACS Meeting, August 1999)
10. *Stimuli-responsive Water-soluble and Amphiphilic Polymers*, Ed. McCormick (New Orleans ACS Meeting, August 1999)
11. *Polymer Processing in Microgravity*, Ed. Pojman and Downey (San Francisco ACS Meeting, March 2000)
12. *Synthetic Macromolecules with Higher Structural Order*, Ed. Khan (San Francisco ACS Meeting, March 2000)

Workshops - B. Culbertson

1999 RESULTS

POLY sponsored three very successful workshops in 1999, which were the Solid State NMR Spectroscopy of Polymers (A. English and P. Englefield, Advances in Polyolefins 99 ("NAPA-2") (J. McGrath and T. Hanlon) and Concepts and Needs for Low K Materials (K. Carter and D. Kumar). The Division greatly appreciated the efforts of the various organizers of the workshops for all their efforts to make the workshops the success they were.

PLANNED 2000 WORKSHOPS

Chain-Growth Polymerizations – New Chemistry for the New Millennium - March 22-25, 2000, K. Matyjaszewski (Carnegie Mellon Univ.) and B. Novak (North Carolina State Univ.) as organizers. It was an excellent program, with great participation by the attendees. There were less speakers at this workshop, concentrating more on speaker/audience interaction, to promote an event truly of a workshop nature/atmosphere. Every lecture (>45 minutes) was followed by a discussion period. The event was quite successful for POLY scientifically, and in terms of interest by attendees, thanks to an excellent job by the organizers. It was felt, however, that such a workshop should be repeated periodically.

Advances in Polyurethane Science (Polyurethanes 2000): This event is scheduled for Sept. 24-27, 2000, in Annapolis, MD with Virginia Tech Professors J. McGrath and G. Wilkes as co-chairs. This workshop/special symposium is slated to be very successful. The organizers plan to integrate 30-45 minute presentations from both academic and industrial speakers, covering fundamental and applied areas for this technology. Hotels for the event will be Lowes and the Historic Inns in Annapolis, MD. This should be a big success for POLY.

Fluoropolymer 2000 (Oct. 15-18, 2000): This workshop focuses on current frontiers and future trends in polymeric materials containing fluorine. Organizers for this workshop are D. Smith (Clemson Univ.), A. Feiring (DuPont), D. DesMarteau (Clemson Univ.), and M. Pellerite (3M), and J. Scheirs (ExcelPlas Australia). The event will be held at the Savannah DeSoto Hilton, Savannah, GA. This workshop is also projected to be another favorable success for POLY. It is believed there will be significant industrial participation for this scheduled workshop.

2001 WORKSHOPS/SPECIAL SYMPOSIA

POLY has nothing scheduled for the first part of 2001, which is probably good, considering the heavy load of events occurring in Y2K.

Macromolecular Metal Complexes (MMC-9), 2001: This event is held every other year in a different country, with about 150 to 250 attendees. The MMC's are usually held at a university, holding down costs for European attendees. However, the very successful IMMC7, held at a hotel/conference center located outside Amsterdam, attracted a large group of attendees. The very successful MMC-8 event was held in Sept. 1999 at Waseda Univ., Tokyo, Japan. This was an expensive location for the event. Attendance was over 200, due to high participation of Japanese attendees. Prof. K. Levon and Y. Okamoto of Polytechnic Univ. (Brooklyn, NY), were selected at MMC-8 as co-organizers for the MMC-9 event, they are planning the special symposium for the Polytechnic Univ., Brooklyn, NY. POLY was requested to sponsor MMC-9 which is to be held the week of August 19-23, 2001 immediately preceding the Fall ACS Meeting in Chicago, IL. The meeting has been approved for POLY sponsorship, providing a suitable budget is developed and approved by POLY ExComm. All lectures, poster sessions, etc., will be held at Polytechnic. The university has very good lecture halls for the event. The registration table would also be at Polytechnic. A banquet would be arranged at the Marriott Hotel, directly across the street from

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Polytechnic Univ. Workshops co-chair B. Culbertson is following up on this event with Levon and Okamoto.

Polyolefins - 2001 (October 2001): This very successful Polyolefins symposium/workshop is scheduled for the Napa Valley, CA area. The organizers will be J. McGrath and T. Hanlon, who have done an excellent job in the past organizing the Polyolefins I and II events. With the great interest in this area and the organizing capability of the chairs, Polyolefins III should also be a success for POLY.

2002 WORKSHOPS PROPOSED

Polymers and Organic Chemistry. This concept of a special symposium, for the June-July, 2002 time frame comes from W. Ford and S. Alexandratos. POC is a self-perpetuating series of international meetings (special symposia) that few Americans have attended. The content usually centers around polymers for self-supported synthesis, separations, and other functions. Proceedings are usually published in Reactive and Functional Polymers. Attendance reaches between 120 and 200, with the majority from the host country. The effort is akin to a GRC, held in the same subject area every odd year. Ford and Alexandratos want to organize this first event for the U.S. with POLY in charge/exercising its workshops management expertise. We are awaiting a final proposal from W. Ford. Tentative approval for the concept by the POLY ExComm has been given. Tentative is in reference to development of a budget for the event. With Ford presenting an acceptable budget, POLY will provide final approval. This approval should be made at the Fall ACS Meeting, Washington, DC.

TWC solicits workshop/special symposia concepts from all POLY officers, POLY Board members, entire POLY membership and others. Please use the form on the POLY www site or contact B. Culbertson or J. Riffle for a suitable form. Forms are available for making a suggestion as well as making a commitment to chair an event. Your thoughts are needed and greatly desired.

Industrial Sponsors - E. Vandenberg

The Industrial Sponsors Group of the Division of Polymer Chemistry consists of 29 members (see listing below). In the past each member contributed \$1000 per year to support polymer education and other polymer development activities. We have now expanded our list to include small companies with less than 500 employees who contribute \$500.

If your company is not a member, please urge them to join and participate in this worthwhile program. The Industrial Coordinating Committee includes E. Vandenberg, M. Jaffe, W. Daly, R. Ikeda, I. Kahn, T. Pacansky, R. Ottenbrite, R. Stackman, C. Wooten, A. English, K. Havelka and H. N. Cheng.

2000 INDUSTRIAL SPONSORS

Air Products and Chemicals, Inc.	S. C. Johnson & Son Inc.
Allied-Signal, Inc.	Lubrizol Corporation
BASF Corporation	Montell USA Inc.
Bayer Corporation	National Starch and Chemical Corp.
Dow Chemical Company	Phasex Corporation
Eastman Chemical Company	Phillips Petroleum Company
E. I. du Pont de Nemours & Co.	Polaroid Corporation
Exxon Mobil Company	Polymer Source Inc.
General Electric Company	PPG Industries, Inc.
Genesee Polymers Corp.	Proctor & Gamble Company
B. F. Goodrich Company	Raychem/Tyco Electronics
Hercules Incorporated	Rohm and Haas Company
Hoechst Celanese Company	Solutia
International Specialty Products	Wyatt Technology Corporation
Kosa, Inc.	

Our Twenty-first Annual Meeting of Sponsors will be held on Tuesday, August 22, 2000 at the Washington, DC Meeting. From 2:00 p.m. to 5:00 p.m., there will be a Minisymposium and Panel Discussion organized by Dr. Ray Ottenbrite and Dr. M. Jaffe on "Polymers for the 21st Century" at the assigned Hotel and Room (See Fall Program). This program will be followed by a social hour in honor of the FIRST INDUSTRIAL SPONSOR SCIENTIST AWARDEES, Dr. Harry Mandeville and Dr. S. Randall Holmes-Farley, of Geltex Pharmaceutical, Inc. Final details will be published in the Fall 2000 ACS program. Other details of this new Award are given in a special section which follows.

Our Twentieth Annual Meeting of Sponsors was held on Tuesday, August 24, 1999 at the New Orleans ACS Meeting with a Minisymposium and Panel Discussion on "Does the Future of Polymer Research and Development Depend on Entrepreneurs". This program was organized by M. Jaffe and J. Salmone and was very successful.

The major activities which are currently supported by the Industrial Sponsors, many in cooperation with PMSE via POLYED, include the Polymer Education Newsletter (PEN), Workshops at schools to help 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. We also provide funding to support the "Intersociety Polymers and Plastics Education Committee". A competitive grant program was initiated in 1991 to improve the public perception of polymers and is described below.

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"Improving the Public Perception of Polymers" (I. Kahn)

This Grant consists of up to \$10,000 distributed over three years for an innovative program directed toward "Improving the Public Perception of Polymers". The proposals received in a competitive process are evaluated based on feasibility, impact and originality. Grants have been made annually since 1991 except for 1995 and 1997-1998. To date, we have allocated \$52,200 for improving the Public Perception of Polymers (including year 2000). This program was suspended in 1997 because of limited submissions. We have reactivated this worthwhile program under the chairmanship of Dr. Ishrat Kahn and the results are promising. He obtained in 1999 seven quality proposals. The one judged best by the review panel was from the NOBBChE, Atlanta Metro Chapter, titled "Polymers: Uses, Applications and the Future" has been funded this year with \$10,000 distributed over three years.

Recently an interim report has been obtained from the Science Alliance of Delaware under Mel Kohan on the funding they received a few years ago for a Public Perception Program. It is a very large report covering K3 and K9 with K4-7 pending but promised.

I will be pleased to mail copies of what I have if you will try to use it in your local schools.

"Industrial Polymer Scientist Award" (R. Ikeda)

This Award was approved in 1998 to "recognize outstanding industrial innovation and creativity by individual scientists and research teams".

The first solicitation for nominations was very successful with seven excellent nominations received. The best one was selected by the Division Awards committee for the combined effort of Dr. Harry Mandeville and Dr. S. Randall Holmes-Farley at Geltex Pharmaceutical, Inc. They will be recognized at the Washington DC ACS meeting by a Symposium and Social hour in their honor as well as by a \$2,000 honorarium, a plaque, and travel expenses.

Dr. R. Ikeda, Chairman of this activity, has issued a Call for Nominations for the next Award. Nominations are due to Dr. Ikeda by July 31, 2000 (Tel. 610-388-6125). For further details call Dr. Ikeda.

Nomenclature - E. Wilks

The Nomenclature Committee membership remains essentially unchanged since the last meeting, which was held on Monday, August 23rd, 1999. The "call for new members" advertisement, placed on the <http://www.chem.umn.edu/~poly/nomenclature.html> url on the web, has elicited no further inquiries in the last six months. Some people who showed an interest when the "call for new members" paragraph was placed on the web but were unable to attend the New Orleans meeting are planning on attending the meeting on Monday, March 27th, 2000.

Wilks submitted Macromolecular Nomenclature Notes No. 18, entitled "SRUs: Using the Rules", for publication in Volume 41(1) of Polymer Preprints. This article addresses the fact that, in spite of an excellent, although at times necessarily complex, set of rules and recommendations created by the combined efforts of the American Chemical Society, Chemical Abstracts Service, and IUPAC, authors of papers appear to be ignoring them. A survey of recent publications in prominent polymer journals, as well as encyclopedias, shows that at least 50% of the structures drawn are incorrect. Furthermore, polymer names, when accompanying structure-based representations, are either incorrect or source-based. A campaign is underway in IUPAC to tackle this issue. One very important approach proposed is to try to persuade editors of journals to impose polymer structural representation and nomenclature standards on papers submitted for publication. This will be discussed at the Nomenclature Committee meeting on Monday, March 27th; individual Nomenclature Committee members can also contribute to this effort.

The topic of "SRUs: Using the Rules" is critical to maintenance of worldwide standards; to this end, this article will be printed also in Germany in *Macromol. Chem. Phys.*, courtesy of Dr. Ingrid Meisel (IUPAC member). Also, Wilks is negotiating with publishers of prominent polymer journals in China, Hungary, Russia, and Turkey in an effort to get this article published in Chinese, Hungarian, Russian, and Turkish so that non-English speaking scientists will have better access to it. Prof. Javier Macossay (UANL, Monterrey, Mexico; Nomenclature Committee member) will translate it into Spanish, and he is searching for suitable Central and South American journals for publication. Translation/publication in other countries is being pursued.

In the last report, it was stated that Wilks had written letters to publishers of scientific books and encyclopedias to suggest that, if their publications contain articles on polymers but nothing on polymer nomenclature, addition of suitable articles on this subject should be considered for future publications or revisions. One response only was received directly from McGraw Hill; the writer stated that he would contact Wilks later, but no further letters were received. However, perhaps as a result of the letters sent out, Wilks was approached in October, 1999 by Wiley-VCH, Germany, with a major project: act as editor of a book entitled "Industrial Polymers Handbook". This project is nearly complete, and Wilks has written a chapter on polymer nomenclature for inclusion in the book.

Following up on Ray Ottenbrite's suggestion that the CAS version of the rules for identifying, orienting, and naming Structural Repeating Units be made available on the web, Wilks wrote to Dr. David Weisgerber at CAS. CAS agreed to make Section 222 of Appendix IV of the *Index Guide* available on the web. Section 222 is now accessible at: <http://www.cas.org/EO/polymers.pdf>.

At the invitation of Prof. Otto Vogl, Wilks wrote an extensive paper entitled "Polymer Nomenclature: The Controversy Between Source-Based And Structure-Based Representations (A Personal Perspective)"; this is expected to appear in the first copy of "Progress in Polymer Science" to issue in 2000.

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Four Committee members (Fox, Metanowski, Wilks, and Work) continue to contribute to projects of the IUPAC Commission on Macromolecular Nomenclature. Topics in various stages of development, for which they are directly responsible, include:

- Definitions of Terms Related to Polymer Blends and Multi-Phase Polymeric Materials (Project 24/93)
- Nomenclature for Threaded Macrocyclic Molecules (Catenanes & Rotaxanes) (Feasibility Study F-20)
- Glossary of Polymer Class Names (Project 30/97)
- Source-Based Nomenclature for Modified Polymer Molecules (Project 33/99)
- Structure-Based Nomenclature for Cyclic Macromolecules (Project 29/97)

Project 33/99 (4th item above) was circulated to IUPAC members; Prof. Tatsuki Kitayama made suggestions, which will be reviewed critically for possible incorporation into the next version to be discussed at the IUPAC meeting in Warsaw in July, 2000.

Project 29/97 (5th item above) is still active; the Schultz/Wilks version of the Cyclic Macromolecules Project, numbered pro tem 29/97A, and Fox's version (29/97), was circulated in December, 1999 to the IUPAC Commission IV.1 working party for their consideration. No comments were received; a combined document that incorporates the best features of these two versions will be discussed at the IUPAC meeting in Warsaw in July, 2000.

The Committee continues to promote polymer-nomenclature recommendations, especially those of the IUPAC Commission on Macromolecular Nomenclature (Commission IV.1). 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.

Industrial Advisors - D. Priddy, C. Smith, R. Clough

The industrial advisors are working to help POLY in better serving their industrial members. Goals include: influencing programming to provide more symposia topics of interest to industry, attracting more industrial members, and increasing industrial participation at national meetings in terms of attendance, technical presentations, symposia organizing, and representation on the POLY board.

We attended the Corporation Associates (CA) business meeting in New Orleans (fall ACS), and gave a short presentation of POLY goals. As a result of this, we were able to obtain information from a survey done of Corporation Associates representatives on desired programming topics for future ACS meetings. Suggestions were wide-ranging, and covered many topics of chemistry. Symposium themes which were connected with polymer/material topics, and which were mentioned by the highest percentages of CA respondents included: surface science and adhesion; characterization of interfaces; nanostructured materials; and materials degradation. Other topics mentioned included self assembly of molecules; dendrimers and hyperbranched materials; and condensation polymerization. Among "core competencies" identified in the survey were: radical polymerization and vinyl emulsion polymerization. We have been unable to get names of specific respondents to put with specific topics, which makes this information less useful than it might be if we were able to have an industrial contact who might be ready to volunteer to serve as co-organizer of a symposium on these topics.

While attending the Corporation Associates planning meeting in San Francisco, we got their programming subcommittee to agree to announce at the open Corporation Associates Meeting that POLY was seeking input on program topics; the e-mail address of R. Clough was to be provided with the request for symposium topics input. We also obtained the names of two CA committee members (not present at the meeting) who are trying to get more involved in influencing divisional programming decisions. We will be following up in contacting and working with these people.

We are also working to try to arrange co-sponsored programming with industrially related societies. Our first successful discussions involve the Federation of Societies for Coatings Technology (7300 members, publishes its own journal, puts on annual paint show with technical conference: 300-500 attendees at technical conference and 1000+ at expo). Their programming person has agreed to joint program sponsoring for at least one ACS spring meeting and one paint show technical conference (in the Fall). We have committed to getting a boilerplate agreement like the ones we have signed with SPE on polyolefins with PMSE. This year is too early to do this fall's paint show, so it will likely be the 2001 paint show, and 2002 ACS symposium (that gives us time to get a 2-session symposium in). This would involve POLY's advertising of the paint show technical symposium, and the Federation of Societies for Coatings Technology doing likewise for the ACS POLY symposium. There will be no dollar exchange, and no requirement for programming interaction. There is still a lot to do, but we will be working to get an agreement. As another means of attracting more industrial attendees at POLY symposia, we have arranged, in conjunction with the POLY programming committee, to hold two rubber-related symposia at an upcoming meeting (San Diego, 2001). One symposium is "Silicones and Silicone-Modified materials"; the other is titled "Durability of Plastics and Rubbers." The symposia will be advertised within the ACS Rubber Division, with the help of Bill Brittain.

International Relations - R. Ottenbrite

The International Relations Committee initiated the placement of an information and membership booth at four different meetings during the past year. These were: The 5th International Conference on Polymers and Advanced Materials in Pozan, Poland; NATO Advanced Research Workshop in Pozan, Poland; MACRO/99 in Bath, England; and 2nd International Symposium on Advanced Polymers Via Macromolecular Engineering in Williamsburg, VA. Due this activity, several new members joined the Division and literature regarding the activities of the Division was distributed. The committee worked with Prof. Stan Penzcek for the past two years to formulate the IUPAC Macromolecular Meeting being held this summer in Warsaw, Poland. The setting up of a booth at important meetings will be continued in view of the fact that Polymer Preprints will be available on line as well as on disc this summer which will make Preprints, the flagship of the Division, more accessible and such an outstanding promotion item.

Publicity - D. Smith

Since the last Executive Committee meeting, the POLY Publicity Committee has achieved at least two C&EN publications with two pending, distributed announcements for awards and workshops, maintained the semi-monthly sponsored programs e-distributed update, and supplied posters publicizing membership and awards at this meeting.

Publicity is currently approached in four ways; by (1) electronic distribution to the POLY list, (2) posting on our web site, (3) submission to Michele Gandy for publication in C&EN, and (4) posters and flyers at national meetings.

Three people have joined the publicity committee since the last meeting. Jerrold Miller (Bridgestone/Firestone), Andrea Bowen (P&G), and Erica Martin (Morton Powder Coatings). Please join me in welcoming these new POLY volunteers as we expand this important committee. The current and future focus of "Team Pub" involves web-based outreach for POLY programs and membership.

Selected publicity activities:

- Paul J. Flory Award winner, e-distributed, posted, published in C&EN 3/20/00 and posters brought.

- "POLY Awards Reception", e-distributed, and posters brought to this meeting.
- Herman Mark Awards announced via posters brought to this meeting.
- 2000 x 2000 Membership drive, e-distributed, flyers and posters brought to this meeting.
- Chain Growth Polymerization – New Chemistry for the New Millennium", e-distributed and attempted at C&EN.
- Public Perception of Polymers solicitation, e-distributed, posted, and attempted at C&EN.
- Concepts and Needs for Low Dielectric ...". Workshop e-distributed and posted.
- Unilever Award call, e-distributed, posted, and published in C&EN (10/4/99).

Programming - W. Ford, K. Havelka

The response to the Spring 2000 National Meeting in San Francisco was overwhelmingly positive with record-breaking attendance of over 18,000 people. This enabled the Division of Polymer Chemistry to host one of its largest programs ever with over 600 presentations in diverse areas of polymer science. POLY's multidisciplinary program covered a broad spectrum of polymer synthesis and characterization topics of industrial and academic significance. Two symposia, Synthetic Macromolecules with Higher Structural Order and Mass Spectral Analysis of Polymers, started with tutorials that provided background information that provided a baseline for presentations that covered the current state of technology in these exciting areas. Other symposia that reviewed the state-of-art technology, included: Polymeric Bioconjugates; Transition Metals in Polymers and Polymerization; Polymer Processing in Microgravity; Hybrid Organic-Inorganic Polymers; Light Emitting, Light Harvesting and Light Responding Organic Systems; and Polymer Gels. The program was highlighted by two award symposia and an awards reception: ACS Award in Polymer Chemistry honoring Jean M. Frechet, and P. J. Flory Award in Polymer Education honoring Jim Mark. POLY also contributed to the Macromolecular Secretariat symposium on Frontiers in Polymer Science in the 21st Century.

POLY's programming policy is to provide review or tutorial material at the beginning of all symposia so that beginners can gain background needed to understand the current research presented later. All POLY abstracts and all Polymer Preprints for the San Francisco meeting were collected electronically by the ACS Online Abstract System (OASys). OASys ran smoothly for the San Francisco meeting except for some down time due to server overload. ACS promised to increase server capacity to avoid such problems at future meetings. We continue to suggest improvements to ACS. Polymer Preprint submission at OASys encountered some first-time problems, which are mentioned in the report of the Polymer Preprint editor.

For the Spring 2001 meeting, the deadline for submission of Polymer Preprints as well as ACS abstracts at OASys tentatively is November 15, 2000. Check the ACS or the POLY web site in September to be sure of the date. Symposium plans for meetings through San Diego in Spring 2001 are complete. Symposia at the meetings in Chicago Fall 2001, Orlando Spring 2002, and Boston Fall 2002 are partly scheduled. POLY will celebrate its 50th anniversary at the Spring 2001 meeting with a 2-day symposium looking into the future of Polymer Chemistry.

The Spring 2000 meeting was Kathleen Havelka's last official responsibility as Program Chair, and Warren Ford will conclude his term with the Fall 2000 meeting. New Co-chairs of the Program Committee are Christopher Bowman of the Univ. of Colorado and Carrington Smith of Air Products Corp., who will serve national meetings 2001-2003.

The committee aims to insure that symposia cover fundamental subjects in polymer synthesis, characterization and properties on a regular basis, and topics of industrial importance. Suggestions for symposia are welcome at any time. A form is available at the POLY web site showing the information the committee needs to consider a suggestion. Call, fax, mail, or e-mail suggestions to one of the program co-chairs, Christopher Bowman or Carrington Smith.

Macromolecular Secretariat - MACRO - M. Hillmyer

From the New Orleans ACS meeting in August 1999 -

Personnel: Tim Long (POLY) is the 2000 general secretary. Don Schulz (PMSE) has been appointed as the general secretary elect for 2000 and the general secretary for 2001. COLL will provide the next general secretary elect.

Symposia: At this meeting in San Francisco Richard Turner (PMSE) has organized "Frontiers for Polymer Science in the 21st Century." This symposium has an excellent line-up of speakers from both academia and industry. All were encouraged to attend.

The following upcoming MACR symposia have been approved by MACR and by POLY:

- Fall 2001 (Chicago) – Polymers for Biomedical Applications. Tim Long is currently confirming the official organizer of this symposium.

- Fall 2002 (Boston) – "Naturally-Occurring Polymers" (exact title TBA) Wolfgang Glaser (CELL) will organize this symposium (wglasser@vt.edu).

Three topics for future MACR symposia are currently under discussion, and the representatives listed below have been assigned to the evaluation of these topics as potential MACR symposia:

- "Semi-Fluorinated Polymers" (Marc Hillmyer, POLY)

- "Intelligent Polymers" (Ty Vigo, CELL)

- "Non-Covalent and Aggregate Materials" (Tim Long, POLY)

Input or comment on these topics is welcomed.

Notes: MACR will ultimately have a web page on the ACS server. The past General Secretary (Bob Pett, RUBB) is responsible for the maintenance of this page.

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Materials Secretariat - MTL R. Laine

At the Fall meeting, the Materials Secretariat (Dale Perry) Secretary General discussed several items that should be of interest to POLY members. In order of increasing importance, they are:

Approved Symposia

1. A symposium on "Combinatorial Approaches to Materials Development" [Organizer: Ripu Malhotra].
2. For Fall 2001 (Chicago) a symposium on Manufacturing Processes for Microprocessors is being organized.

Proposed New Symposia

1. Fall 2000 (Materials for Transportation; Ray Dickie, Organizer, PMSE)-Handout at meeting. PMSE will be a cosponsor.

Symposia to be considered (We are looking for Organizers)

1. "Electronic Materials"
2. "Photonics" (contact Ray Mackay, COLLOID) for further information and participation.

Intersociety Polymer Education Council - IPEC - A. Salamone

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

To maximize training of teachers "teachers teaching teachers", IPEC this year has under development synergistic vehicles for content delivery – our normal hands-on inservices, long distance synchronous inservices, and web delivery of asynchronous inservices and content.

The IPEC Web site is under construction and is linked to each participating organization.

The SPE Foundation generously awarded IPEC a three year grant of \$10,000 per year.

Programs:

POLYMER AMBASSADORS

The Intersociety Polymer Education Council (IPEC) currently has 10 Polymer Ambassadors, 1 In-Training Polymer Ambassador, and 7 Emeritus Polymer Ambassadors. The Polymer Ambassadors have been honored with several significant awards over the past few months, including the Disney Award for Outstanding Science Teacher in the Nation, Ohaus Award for National Outstanding Middle School Teacher, and Outstanding Middle/Elementary Teacher in the State of Wisconsin. The Polymer Ambassadors, in addition to providing hands-on inservices, to thousands of their peer teachers hold training and coordination meetings twice yearly. In February, they met in Atlanta and went to Southern Mills to learn first hand about fiber production. New inservices will incorporate this information.

PROCESSING DISCOVERY WORKSHOP

This Eastern Michigan University K-12 teacher workshop, in its third summer, provides continuing education for the Polymer Ambassadors, Polymer Associates, and other K-12 science teachers.

MaTR INSTITUTE

This program is officially closed. However, written materials are being transferred to web access and the graduates, the Polymer Associates are utilized for in-services around the country to augment the Polymer Ambassador effort.

GLOBAL POLYMER ACADEMY

The University of Akron Institute of Polymer Science is building long distance synchronous learning programs for K-12 teachers, university, and industrial continuing education in polymers. IPEC is co-spearheading the K-12 component with the Institute faculty.

CENTER FOR MATH AND SCIENCE LEARNING

The University of Southern Mississippi is building internet and asynchronous learning programs for K-12 teachers in polymer and marine science for building content knowledge and understanding. IPEC is partnering with USM in the development and implementation of this program.

CLEMSON INITIATIVE

Clemson University is in concept stage for a summer workshop focused on fibers and films content for the Polymer Ambassadors, Polymer Associates, and local K-12 science teachers.

IPEC Members:

The ACS Divisions of Polymer Chemistry, Polymeric Materials, and Rubber; the Society of Plastics Engineers; and the American Plastics Council. IPEC Board positions will be voted upon at the May 2000 Board meeting at ANTEC 2000 in Orlando.

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POLY List - F. Blum

There are over 1400 members of the POLY list. The volume of mail is moderate and the number of complaints is low, except for a significant problem last year generated by repeat e-mails. This situation was created by a remote user and has been corrected. The list stress level got a little high, but most users were very understanding. We lost about 100 members in the process.

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World Wide Web (www) - F. Blum

The www project continues to grow. I have installed some counters on popular POLY pages in terms of the number of accesses. Not all of the pages started at the same time.

	PAGE	SINCE 8/99	TOTAL
Main Page		17057	66038
Meetings			
	Natl.	4000	28827
	P-Spon./workshops	2578	8165
	Other Meetings	1804	7200
	Past	707	2982
Secretariats		337	511
Polymer Preprints (USM)		no counter	
Membership Activities		575	1444
	Join	1085	2608
What's New		963	4831
POLYED		UWSP	
IPEC		473	918
General Info			3066
	Org. Chart	1175	3659
	Org. List	615	2023
	Election Info	404	1493
	Officers List #1	307	1111
	Officers List #2	221	695
	Org Info	240	464
	Operations Man.	New	223
Awards		827	2987

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Jobs		13781	58449
Nomenclature		612	1770
Industrial Sponsors		456	1166
Other Servers		1024	5496
Publicity		483	661

I solicit your help. Please send me items electronically by e-mail for inclusion on the web pages.
<http://www.chem.umr.edu/~poly>

Membership - H.-N. Cheng, S. Pollack

Since January 2000 the POLY Membership Committee has been reorganized with H. N. Cheng (Hercules) and Steve Pollack (Howard University) as Co-Chairs. The committee now consists of seven members: Ken Carter (IBM, Member-At-Large), Cheng, Pollack, Dan Knauss (Colorado School of Mines) , Erica Martin (Morton), Pal Arjunan (Exxon), and Garrett Poe (University of Southern Mississippi, as Student Membership Chair). The committee coordinates its activities through monthly teleconferences. We also met at the National ACS meeting in San Francisco. Working together, we have formulated a work plan for 2000. The plan consists of four parts:

1. Take ownership and manage membership data
2. Enhance membership value
3. Recruit and retain members
4. Serve as a conduit between members and POLY board

A particular mission is to institutionalize the best practices of the 2000 X 2000 program that has been successful in recruiting new members. The detailed work plan will soon be posted on the POLY web site.

Efforts have already been started to implement this plan. Using the electronic information available, Pollack has sent invitation letters (via email) to authors who presented papers in POLY symposia in ACS meetings and who were not yet POLY members. At the ACS National Meeting in San Francisco, we worked with Dennis Smith to publicize the 2000 X 2000 membership drive. To assist with recruiting, we also provided demo of Polymer Preprint on CD. In a related matter, late last year Carter, Pollack, and Cheng had updated the Membership Committee portion of the POLY operations manual to reflect the new thrust.

In order to carry out the many activities that are planned, we are looking for more volunteers. If you are interested, please let one of us know. Also, please give us your thoughts on what you feel the membership committee should be focussing its efforts on. We can be reached via email: Arjunan (pal.arjunan@exxon.com), Carter (kcarter@almaden.ibm.com), Cheng (hcheng@herc.com), Knauss (dknauss@mines.edu), Martin (emartin@morton.com), Poe (garrett.poe@usm.edu), Pollack (spollack@howard.edu).

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Business Office - N. Byerly

The Business Office assisted with the following meetings October 1999 through March 2000:

- Advances in Polyolefins II - Napa, California (October 24-27, 1999)
- Concepts and Needs for Low Dielectric Constant $0.15 \mu\text{m}$ Interconnect Materials: Now and the Next Millennium - Monterey California (November 14-17, 1999)
- Chain Growth Polymerization - New Chemistry for the New Millennium - Santa Rosa, California (March 22-25, 2000)

The Business Office is assisting with the following upcoming workshops/meetings:

- Fluoropolymer 2000 – Savannah, Georgia (October 15-18, 2000)
- Advances in Polyurethanes – Annapolis, Maryland (September 24-27, 2000)
- Poly Millennial 2000 – Waikoloa, Hawaii (December 10-13, 2000)

Site locations are currently being evaluated for Polyolefins III in California. Brochures can be obtained at the Membership Booth in San Francisco or by contacting the Business Office.

The Fall 1999 Newsletter was mailed out to the membership in October 1999. Suggestions for changes and additional articles for the June 2000 Newsletter will be accepted through April 15, 2000.

Kathy Black and I managed the Membership Booth at the ACS Meeting in New Orleans August 1999. The Division recruited a total of 154 new members. We will also be at the Membership Booth in San Francisco. Last year we started a membership drive -- "2000X 2000". Our goal was to attract 2000 new members by the end of the year 2000. We have already gained more than 1500 new members to date!

Daily responsibilities of the Business Office include responding to requests for information, performing accounting duties, assisting with various projects, and processing new membership applications.