Division of Polymer Physics Newsletter

January 11, 2000 B. L. Farmer

Executive Committee Elections

The following candidates have been nominated for positions on the DPOLY Executive Committee.

For Vice Chair: Ralph Colby, Pennsylvania State

University

Mary E. Galvin-Donoghue, University of

Delaware

For Member-at- Robert M. Briber, University of Maryland

Large: Paula T. Hammond, Massachusetts

Institute of Technology

Brief statements solicited from the candidates appear at the end of this newsletter. All members of DPOLY are asked to mark their ballot (enclosed with the newsletter) and return it to the Secretary-Treasurer. Ballots must be received no later than February 21, 2000.

2000 March Meeting

The next March Meeting will be held in Minneapolis, MN the week of March 20-24, 2000.

The DPOLY Program Chair is <u>Sanat Kumar</u> (Penn State). Focused symposia are scheduled with the following themes: Polymers with Quenched Disorder; Thermoreversibly Associating Synthetic and Biopolymers; Filled Polymer Systems; Polymers Under Pressure; Crystallization - New Perspectives on an Old Problem; and Organic Electronic Materials and Devices (joint with DMP). The program schedule is now available on the web and the full APS program (with abstracts) will be available on the web before the end of January. You will receive the printed DPOLY booklet in February.

Short Course: Adhesion and Other Issues in Polymer Thin Films and Coatings

The DPOLY Short Course will be offered March 18-19, 2000 in Minneapolis.

Who Should Attend: Persons from both academic and applied/industrial institutions. This course will be relevant to physicists, chemists, engineers, faculty, postdocs, and graduate

students, from both academic and applied/industrial institutions, particularly working in or with a view towards entering research in polymers, biomaterials, surface chemistry, coatings, and adhesion.

Topics: Controlling interfacial adhesion; Macromolecular physics of biological surface interactions;

Glass transition of thin films; Dewetting/coating of interfaces; Simulation methods and theory; Polymer-surface dynamics and interfacial rheology; and Instrumental methods for the study of polymer interfaces.

Course Description:

The science and engineering of polymer thin films and coatings are advancing rapidly. This subject is interesting for its own sake and has numerous applied/industrial applications in areas which range from coatings and adhesives, to composites, fillers, and tissue implants. This course will provide an overview of the most recent developments and will also address how these developments are being put to use in a variety of important applications.

Organizer:

Professor Steve Granick tel: (217) 333-1441 Department of Materials Science and fax: (217) 244-2278

Engineering email:

University of Illinois sgranick@uiuc.edu

Urbana, IL 61801

Confirmed Speakers include: Anna Balazs (University of Pittsburgh); Edward J. Kramer (University of California at Santa Barbara); Al Pocius (3M Corporation); Buddy Ratner (University of Washington); Thomas Russell (University of Massachusetts).

Registration Fees: \$400 (\$200 for students). To register for the short course, use the registration form in APS Meeting News or print the form from the meetings web site - www.aps.org/meet/MAR00.

You are encouraged to suggest topics for future DPOLY short courses. Suggestions can be submitted to any member of the Executive Committee or the Education Committee, currently chaired by Scott Milner.

Fellowship Nominations

Members of the Division are invited to submit nominations for Fellowship in the APS. Nomination forms and a list of DPOLY members who are APS Fellows are available from the Secretary-Treasurer. Full dossiers should be mailed to:

Executive Officer American Physical Society One Physics Ellipse College Park, MD 20749-3844

The deadline for nominations is April 15, 2000. The DPOLY Fellowship Committee will review nominees and forward its recommendations to the APS Council, which elects new Fellows annually at its November meeting. The number of new Fellows is limited to one-half percent of the current membership.

Special Issue: Journal of Polymer Science, Polymer Physics Edition

A special issue of *Journal of Polymer Science, Polymer Physics Edition* will publish papers presented at the March Meeting of the Division. There are no page charges for the journal, and authors receive a copy of the issue as well as 50 reprints free of charge. All manuscripts will be peer reviewed. Those accepted for publication within a limited time after the March meeting will appear together in the December issue of the Journal. Manuscripts submitted for the 2000 special issue are due by April 1, 2000 and should be sent to:

Mark D. Foster Email: <u>foster@polymer.uakron.edu</u>

Department of Polymer Phone: (330) 972-5393 Science Fax: (330) 972-5290

University of Akron Akron, OH 44325-3909

Candidate Statements

The Executive Committee asked each candidate to provide a brief statement providing biographical information and/or indicating any specific items they would like to bring to the attention of the voters (for example, a goal they might like to achieve if elected to the Executive Committee). Their statements are presented below. The candidates are listed alphabetically for each office.

For Vice-Chair

Ralph Colby

Ralph Colby was taught polymer physics by Bill Graessley in the Chemical Engineering Department of Northwestern University, graduating in 1985. For the next ten years, Ralph had the good fortune to work at the Eastman Kodak Company, where he was exposed to numerous interesting practical questions. Ralph is grateful to Jack Chang and John Pochan, who constantly encouraged and supported Ralph's work, and gave him the opportunity to establish himself in the polymer physics community. Since 1995, Ralph has been an Associate Professor of Materials Science and Engineering at Penn State. The brief bio above points to two issues that I would like to work to change, if elected.

Firstly, to obtain a polymer physics education, it seems strange to have majored in Chemical Engineering. While at Kodak, I managed to supervise two PhD Physics students from the University of Rochester. These two physicists now realize that there is more to physics than elementary particles, and are both successfully employed as polymer physicists in U.S. industry. I would like to work to sell polymer physics as PHYSICS to the physicists in the U.S. I believe this is essential both to the subfield of polymer physics and for the survival of physics as a whole. The second point is that our industrial member numbers are dwindling. We need to take action to correct this, and the sooner the better. The particle physicists did not pay attention when their industrial membership dropped, and we cannot afford to make the same mistake! I certainly do not propose to compete with SPE, but we need to develop focussed symposia designed to attract industrial scientists to APS meetings.

Mary E. Galvin-Donoghue

Let me start by providing those of you who do not know me with a brief summary of my background. After completing a Sc.D. at MIT, I joined Bell Labs where I was a Member of Technical Staff and a Distinguished Member of Technical Staff for 14 years. In 1998 I became a Professor of Materials Science and Engineering at the University of Delaware. My research has spanned several arenas, recently focusing on the design of polymers for light-emitting diodes. Highlights of my service to the polymer community include organizing 2 Gordon Conferences, serving as a Technical Program Co-Chair of the PMSE Division of the American Chemical Society, chairing the Nominations Committee of DPOLY and being a member of the Education Committee of DPOLY. During my career, I have enjoyed being a member of DPOLY since it served to unite the community, bringing together polymer engineers, chemists and physicists. It also acts as an organization that promotes academic-industrial collaborations. As chair, I would strive to expand the community that is DPOLY, reaching out to include more industrial and cross-disciplinary scientists.

For Member-at-Large

Robert M. Briber

Robert M. Briber, Associate Professor 7/97 to present, Dept. of Materials and Nuclear Engineering, Univ. of Maryland, College Park, MD; Assistant Prof. 1992-97, Dept. of Materials and Nuclear Engineering, Univ. of Maryland, College Park, MD; Scientist 1985-1992, Polymers Division, NIST; NRC Postdoctoral Fellow 1984-1985, Polymers Division, NIST; Ph.D. 1984, Polymer Sci. Eng., Univ. of Mass.; B.S. 1979, Materials Sci. and Eng., Cornell Univ., Cornell University; APS Fellow 1995; Associate Editor, Journal of Polymer Science, 1999 to present; Dept. of Commerce/NIST Bronze Medal 1990; Electron Microscopy Society of America Presidential Scholarship 1992.

I plan on working to expand and extend the Division's involvement both within the APS with other Divisions and Topical Groups where our scientific interests overlap (DCMP, DBP, etc.) and with other societies (ACS, MRS, etc.). To keep the Division healthy and growing an aggressively outward looking and collaborative approach is needed with respect to joint symposia and conference sponsorship.

Paula T. Hammond

My background in polymer science extends from my graduate work and my exposure to the Polymers graduate program at MIT (PhD 1993). Since joining the faculty in the Chemical Engineering Dept. at MIT in 1995, my research contributions have been on the phase behavior of liquid crystalline and dendritic block copolymers. I have been actively involved in professional service with organizations such as the ACS and MRS, both as a committee member for ACS Polymeric Materials Science and Engineering division, and as a symposium organizer. My introduction to DPOLY at the start of my faculty career has been fairly recent; however, it has had a profound impact on me and my graduate students. DPOLY provides a unique and valuable environment. The high quality and depth of the talks and programs, the accessibility of fellow attendees at the meetings, and the dedication and collegiality of the Division members are among the things that impress me most about the organization. I would like to contribute further to the Division and foster its many strengths.