

Division of High Polymer Physics

September 13, 1996 Newsletter

Division Councillor Election Result

Andy Lovinger has been elected to serve a second term as the DHPP Division Councillor. The Executive Committee extends its congratulations to Andy and its appreciation to Ed Kramer for his willingness to serve the Division.

Call for Nominations: Executive Committee Elections

The DHPP Nominations Committee has proposed the following slate of candidates for positions on the DHPP Executive Committee:

Vice Chair:

John Curro, Sandia National Laboratories
Do Yoon, IBM Almaden Research Center

Member-at-Large:

Bob Bubeck, Dow Chemical Company
Pat Cotts, Dupont Central Research and Development

Secretary-Treasurer:

Peggy Cebe, Tufts University
Barry Farmer, University of Virginia

Members of the Division are hereby invited to submit further nominations for these positions. As provided by the Bylaws, any candidate named by not less than 1% of Division members (currently, 14) shall be considered nominated. Nominations should be sent to the Secretary-Treasurer (at the address above) and **must be received no later than October 25, 1996.**

1997 March Meeting Program

The 1997 DHPP meeting will be held in Kansas City, MO from March 17-21 (Monday through Friday). The DHPP Program Chair is Ken Shull (Northwestern; phone: 847-467-1752; fax: 847-491-7820; email: k-shull@nwu.edu). The DHPP abstract deadline is December 6, 1996, the same as for the APS general program. (Nominations and abstracts for the Padden Award are due November 6, 1996.)

There will be two focused symposia consisting of both invited and contributed talks. Dendrimers and Hyperbranched Polymers is being organized by Nora Beck Tan (Army research Lab; 302-892-6549; nora@arl.mil). *Entanglement Effects in Polymer Processing* is being organized by Greg Beaucage (U. Cincinnati; 513-556-3063; gbeaucag@uceng.uc.edu). These symposia will be scheduled for

Friday.

Special Note: Kansas City does not have adequate hotel space in the immediate vicinity of the meeting. Make your hotel reservations early!

Call for Nominations: Frank J. Padden Jr. Award

The Frank J. Padden, Jr. Award, consisting of a certificate and appropriate recognition, recognizes a graduate student for "Excellence in Polymer Physics Research." To be considered for this award the student must be a member of the DHPP, must be working toward the Ph.D. degree, must not have completed the requirements for the Ph.D. before December 6, 1996, and must submit the following:

- 1) an acceptable abstract for the DHPP March Meeting (Note: Please submit by email and provide a paper copy for the award committee),
- 2) a 1 page C.V. (do NOT send papers or other attachments),
- 3) a letter from their thesis adviser addressing the quality of their graduate research and academic excellence.

Abstracts should be submitted by email to the APS by **November 6, 1996**. (Instructions for email submission appear on the APS and DHPP home pages). In the template space for Special Instructions, please insert "Padden Award Symposium". The abstract will be forwarded to the award committee and to the program chair for inclusion in the March meeting.

A hard copy of the abstract, the C.V. and the adviser's letter should be sent directly to Eric Amis at the address on the letterhead of this newsletter. They must be received by November 6, 1996.

The Education Committee will select 5 finalists. On March 17, 1997 the Padden Award session will be held. Each of the 5 finalists will give a 10 minute oral presentation. The session will be attended by the Education Committee, who will serve as judges, and by any other interested members of the DHPP or APS. The winner will be announced at the annual Business Meeting of the Division.

Membership

Have you renewed your APS membership yet? Did you renew your membership in DHPP? Have you signed up a new member yet? Applications for regular APS Membership and for a *Free* Trial Membership For Students are available on the DHPP Home Page (<http://aps.org>, then select APS Divisions, Sections and Forums and then DHPP) or from the Secretary-Treasurer. Both Graduate students *and undergraduate students* are eligible for the free membership. **Help the Division solve its 3% problem, once and for all.**

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 1997 special issue are due by April 1, 1997** and should be sent to:

Hilary S. Lackritz
School of Chemical Engineering
Purdue University
1283 CHME Building
West Lafayette, Indiana 47907-1283
phone: (317) 494-4065
fax: (317) 494-0805
email: lackritz@ecn.purdue.edu

DHPP Short Course

The DHPP Short Course entitled **Structure and Motion in Synthetic and Biological Polymers: The Power of NMR** will be offered March 15-16, 1997 in Kansas City, MO.

A short course on NMR methods, especially solid-state NMR, designed for industrial and academic scientists and technologists active in polymers, materials and/or biophysics will be offered the weekend preceeding the 1997 APS March Meeting. Emphasis is placed on both fundamentals and applications; the course will encompass state-of-the-art topics, but does not presume prior knowledge of NMR theory or practice. The material will equip participants to select appropriate NMR techniques to address their own needs for information on chemical structure, molecular conformation, segmental alignment, reorientation mechanisms, reorientation rates and spatial organization. Methods covered will include high resolution and wide-line, one-dimensional and two-dimensional spectroscopies as well as NMR imaging. Sufficient description of implementation will be given to appreciate the technical requirements of the methods. Examples will illustrate the impact of NMR methods on understanding synthetic polymers, proteins and surfactants, giving a molecular perspective on macroscopic material properties.

OUTLINE:

- Introduction to nuclear magnetic resonance and magnetic interactions
- Characterizing chemical structure in solution and solid state
- Orientational order

- Quantifying types and rates of molecular motion
- Molecular conformation
- Characterizing segregation on nanometer to micrometer scales
- Imaging spatial arrangements on millimeter to macroscopic scales

INSTRUCTORS include:

Julia Kornfield, Organizer: Chemical Engineering at the California Institute of Technology.

Address: Caltech 210-41, Pasadena, CA 91125

phone: 818-395-4138

fax: 818-568-8743

email: jak@cheme.caltech.edu

Klaus Schmidt-Rohr: Polymer Science and Engineering at University of Massachusetts at Amherst and co-author of "Multi-dimensional Solid-State NMR and Polymers".

Haskell Beckham: Textile & Fiber Engineering at Georgia Institute of Technology.

Peter Mirau: Bell Labs / Lucent Technologies.

Cost: \$400 regular fee; \$200 for graduate students. (A limited number of tuition waivers may be available for students. Please contact the Organizer for details.)

Individuals planning to attend the short course are urged to contact the Organizer and to pre-register by February 15, 1997.

Up-Coming Deadlines

Nominations for Executive Committee: Oct. 25, 1996

Padden Award Nominations: Nov. 6, 1996

Abstracts for March Meeting Dec. 6, 1996

Nominations for Fellowship Jan. 15, 1997

Short Course Registration Feb. 15, 1997

Papers for the Special Issue April 1, 1997

Fellowship

Members of the Division are invited to submit nominations for Fellowship in the APS. A nomination form and a list of DHPP members who are APS Fellows are available on the DHPP Home Page or 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 is **January 15, 1997**. The DHPP Fellowship Committee will review nominees and forward its recommendations to the APS Council. The number of new Fellows is limited to one-half percent of the current membership.

Directory Information

You can correct or update your entry in the APS Membership directory by connecting to the APS home page. To do so, click on "Member Directory", then type "directory" (without quotes) as the username and "F=ma" (without quotes) for the password. You can enter or change your email address directly by entering your name and Member Number on the form shown. To change your address or telephone number, etc., fill in the electronic Change of Address Form available from the same page.

Thus far, about 70% of DHPP members have registered their email addresses and can receive broadcast announcements on important DHPP news and deadlines.

DHPP Executive Committee (1996-1997)

Chair: Jeffery T. Koberstein, (860) 486-4716, Fax: (860) 486-4745,
jeff@venus.ims.uconn.edu

Chair-Elect: Timothy P. Lodge, (612) 625-0877, Fax: (612) 624-1589,
lodge@chemsun.chem.umn.edu

Vice-Chair: Eric J. Amis, (301) 975-6681, Fax: (301) 926-8012,
amis@micf.nist.gov

Past-Chair: Edwin L. Thomas, (617) 253-6901, Fax: (617) 258-7874,
thomas@uzi.mit.edu

Councillor: Andrew J. Lovinger, (703) 306-1839, Fax: (703) 306-0902,
ajl@lucent.com

Sec.-Treas: Barry L. Farmer, (804) 924-0605, Fax: (804) 982-5662,
farmer@virginia.edu

At-Large: Glenn H. Fredrickson, (805) 893-8308, Fax: (805) 893-4731,
ghf@squid.ucsb.edu

At-Large: Mark D. Ediger, (608) 262-7273, Fax: (608) 262-0381,
ediger@chem.wisc.edu

At-Large: David A. Hoagland, (413) 577-1513, Fax: (413) 545-0082,
dah@neurotica.pse.umass.edu

DHPP Committee Chairs (1996-1997)

High Polymer Physics Prize:

(For 1997 Prize) Koberstein (see above)

(For 1998 Prize) Lodge (see above)

Fellowship: Lodge (see above)

Education: Amis (see above)

Centenary Representative: Han, (301) 977-6772, Fax: (301) 869 3239

Program: Shull, (847) 467-1752, Fax: (847) 491-7820, k-shull@nwu.edu

Publications: Lackritz, (317) 494-4065, Fax: (317) 494-0805

lackritz@ecn.purdue.edu

Nominating: Adams, (513) 255-6825, Fax: (513) 255-1128,

adamsw@ml.wpafb.af.mil

Public Info. Coordinator: Cooper (301) 831-8017 Fax: (301) 831-6751

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[DHPP home page](#)