

Newsletter, Fall 2018

Prize winners



Ron Larson (University of Michigan) https://che.engin.umich.edu/people/ronald-larson/ wins the 2019 Polymer Physics Prize "For wide ranging, multi-disciplinary contributions to understanding the structure, dynamics, and rheology of polymeric materials in melt, solution, glassy, mesomorphic, and multi-phase states, including viscoelastic instabilities, constitutive equations, alignment transitions, and phase behavior."



Zahra Fakhraai (University of Pennsylvania)

http://web.sas.upenn.edu/fakhraaigroup/people/people-zahra/ wins the 2019 John H. Dillon

Medal "For exceptional investigations of surface effects in polymer glasses and amyloid aggregation."

Deadlines

Oct 26

March meeting abstracts. https://www.aps.org/meetings/march/abstracts.cfm



Nomination for Frank J. Padden Jr. award. Send nominations by email to Amalie Frischknecht (alfrisc@sandia.gov) using the subject line "Padden_name of student".



Nomination for the UK PPG lectureship. Send nominations by email to Darrin Pochan (pochan@udel.edu).

2019 APS March Meeting

From our 2019 DPOLY Program Chair...

We look forward to seeing you at the next APS March Meeting, March 4-8, 2019, in Boston, MA.

On behalf of the DPOLY program committee, I welcome you to submit an abstract and attend the meeting. The abstract submission deadline is Friday, October 26th – just days away. https://www.aps.org/meetings/march/abstracts.cfm

Overviews of our March Meeting are on our website (https://www.aps.org/units/dpoly/) and highlight some of the diverse and exciting technical programming lined up for this year's meeting. In addition to submitting an abstract, we hope you will take the opportunity to share these overviews with colleagues outside DPOLY who may be interested in attending the DPOLY meeting, either by posting them in your department or by forwarding them the link. This is our best opportunity of the year to grow our membership and continue strengthening DPOLY. Thank you for your participation in our division, and we hope to see you this March.

Sincerely,
David S. Simmons

P.S. note that **nominations for the Padden Award** are due the same day (October 26); please email Amalie Frischknecht (<u>alfrisc@sandia.gov</u>) using the subject line "Padden_name of student".

2019 DPOLY Short Course

X-ray and Neutron Scattering for Polymer Science

Organized by Gila Stein

The DPOLY short course will introduce the principles of X-ray and Neutron Scattering from polymeric materials. The first part of the course will focus on techniques that probe polymer structure, including transmission scattering, reflectivity and grazing incidence, with emphasis on hard x-ray, soft x-ray and neutron sources. The second part of the course will cover techniques that probe polymer dynamics, including x-ray photon correlation spectroscopy, quasielastic neutron scattering, and neutron spin echo. The course will conclude with an introduction to new challenges and opportunities, such as integration of scattering with other experimental methods, machine learning, and big data.

New Fellows

The following new fellows in the class of 2018 were nominated by DPOLY.

Mark Foster (The University of Akron)

Citation: For the elucidation of molecular architecture effects on surface segregation and polymeric film surface fluctuations using neutron and X-ray scattering techniques.

Ryan Hayward (University of Massachusetts Amherst)

Citation: For developing innovative approaches to control the structure and properties of polymeric materials through processes of elastic buckling and self-assembly.

Chinedum Osuji (University of Pennsylvania)

Citation: For insightful determination of the structure and functional properties of soft materials and especially the self-assembly and processing of polymers by the novel application of external fields such as chemical surface forces, magnetic fields and periodic pressure gradients.

Keiji Tanaka (Kyushu University)

Citation: For developing innovative methods that significantly enhance our understanding of the conformation, structure and relaxations of polymers confined to thin films and their interfaces with solid substrates, liquids, and other environments.

Elections

Candidates for Vice-Chair are:

Spiros Anastasiadis (University of Crete), spiros@iesl.forth.gr and Ramanan Krishnamoorti (University of Houston), ramanan@uh.edu

Candidates for **Member-at-Large** are:

Laura Clarke (NC State University), liclarke@ncsu.edu
Thomas Epps, III (University of Delaware), thepps@udel.edu and Chris Soles (NIST), christopher.soles@nist.gov

Many thanks to the nominating committee (chaired by Dvora Perahia and comprising Rohan Hule, Rod Priestly, Scott Milner, and Valeriy Ginsburg) for preparing this slate of candidates. If you have additional nominations, please send them (by early November with supporting signatures from a total of at least 15 DPOLY members) to Steve Hudson, DPOLY Secretary/Treasurer (steven.hudson@nist.gov).

The election will be held shortly.

Get Connected Online

Please join DPOLY's online sites

- webpage <u>www.dpoly.org</u> with announcements of meetings and positions available, resumes, journal feeds (administered by Chinedum Osuji) and
- facebook page <u>www.facebook.com/groups/409711462832417/</u>. (moderated by Zahra Fakhraai and Chinedum Osuji)

Membership

To join DPOLY or renew your membership, please go to the DPOLY website (http://www.aps.org/units/dpoly/index.cfm). On the right side, under "More from APS" you will see "Join a unit". If you click there and then log in to the database, you will be able to click on your

membership tab and "Add Unit". The division pays for the first year of membership for first time members. Please encourage others to join. Thanks.

Other meetings of interest

Announcements of other meetings can be sent to www.dpoly.org (contacting Chinedum Osuji) and to DPOLY Secr Steve Hudson for posting online.

Exploiting the Functionality of Soft Materials (https://www.grc.org/complex-active-and-adaptive-material-systems-conference/2019/) is a GRC, inaugurated in 2017, that will meet in January. Please contact Julia Yeomans, Chair, or Rich Vaia, Vice Chair (https://www.grc.org/contact-organizers/?ld=17359&isCa=False)

This DPOLY newsletter was edited by Steve Hudson, Secretary-Treasurer.