

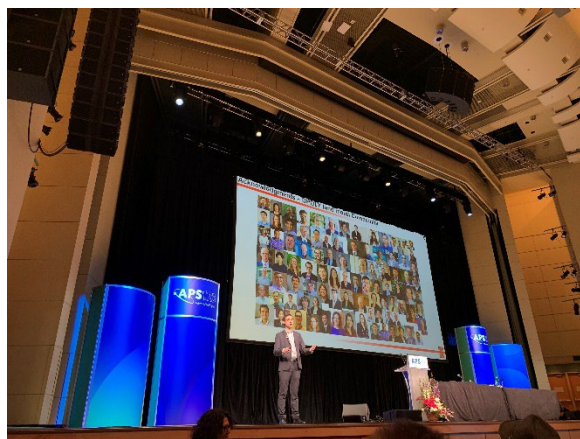


Chair's Message

Thank you all for making the 2024 APS March Meeting in Minneapolis a success starting from the Saturday Short Course and Sunday Squishy Science Event through the final session on Friday! I want to take this opportunity to thank our 2024 Program Chair Bryan Boudouris, Program Vice-Chair Lisa Hall, and DPOLY Past Chair Ryan Hayward for their outstanding leadership and our DPOLY Executive Committee members Danielle Mai, Mahesh Mahanthappa, and Rob Riggelman for their service to the community.



Planning for the 2025 March Meeting is underway! The deadline for Focus Sessions and Invited Sessions is quickly approaching (**April 30th**). Information is provided in this newsletter, but feel free to reach out to 2025 Program Chair Lisa Hall for more. Also included in this Spring newsletter: a “Year in Review” of our recent March Meeting, a recap of the 3M-APS Event, introduction to the new Industrial Advisory Board, New 2024 Campaign to Endow the Dillon Medal, details on By-Laws Amendments and information for two upcoming meetings of interest to our members: the 8th International Soft Matter Conference and 2024 Polymer Physics Gordon Research Conference/Seminar.



The Awards Nomination deadlines are quickly approaching, **June 1** for Polymer Physics Prize, Dillon Medal, and APS Fellowships with more details in this newsletter. As a reminder, DPOLY membership levels are critical to maintaining the vibrancy and impact of our division within APS. Please be sure to renew your membership in DPOLY, and encourage your colleagues, collaborators, and students who may not be members – the first year is free! This year we had many new events including a T-shirt give-away and cool DPOLY swag at our membership table

managed by our outstanding volunteers, especially early- and mid-career researchers. We thank them and you all for creating such a vibrant and diverse community.

Sincerely,

Rachel Segalman
2025 DPOLY Chair

LOOKING AHEAD: 2025 DPOLY March Meeting Program

It is never too early to begin planning for our next exciting meeting to be held in sunny Anaheim, California on March 16 – 21, 2025. This meeting will be larger than usual as it combines the APS March *and* April meetings.

We are looking for volunteers and visionaries to help DPOLY develop our Invited and Focus Sessions. Individuals or small groups can propose to organize sessions in a certain topic area, which may or may not be similar to previously popular topics. Depending on the areas and number of suggestions, the Program Committee will combine groups and make selections to create a balanced program. The identified groups will then be given instructions to create a session description, invite speakers, advertise their session, and later sort the submitted abstracts.

Please suggest Invited and/or Focus session topics by Apr. 30th 2024 to our 2025 Program Chair Lisa Hall (hall.1004@osu.edu) and co-Chair Rafael Verduzco (rafaelv@rice.edu). Include a draft session title in your email. We look forward to hearing from many of you.

Award Nominations DUE JUNE 1, 2024

Please consider nominating your colleagues for the following 2024/2025 DPOLY Honors:

- Polymer Physics Prize (<https://www.aps.org/programs/honors/prizes/polymer.cfm>)
- John H. Dillon Medal (<https://www.aps.org/programs/honors/prizes/dillon.cfm>)
- APS Fellowship (<https://www.aps.org/programs/honors/fellowships/>)

For complete information, see <https://www.aps.org/programs/honors/nomination.cfm>. Note that self-nominations are not accepted. Nominators need not be APS members, however, *all DPOLY awards require active APS membership at the time of nomination and DPOLY unit affiliation.*

Note that each member can support only one nominee for each award in a given year.

Nominations are typically considered over a two-year period, with the option of updating carryover nomination packages by the June 1 deadline. Please check the Rules & Eligibility website for the John H. Dillon Medal, which was updated with a policy for extensions for research career breaks.

Complete nomination packages should be submitted through the online APS Honors portal by no later than June 1, 2024:

<https://apsphysics.secure-platform.com/a/organizations/main/home>

Undergraduate Travel Award: several weeks before MM abstract deadline

Frank J. Padden, Jr. Award: same as MM abstract deadline

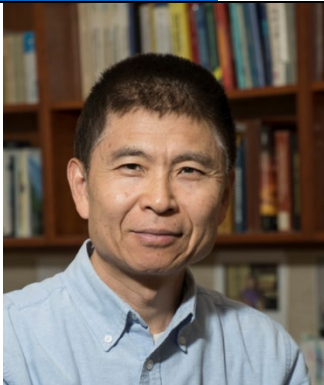


Chang Ryu Travel Award: slightly after MM abstract deadline

The membership of APS is diverse and global, and the nominees and recipients of APS Honors should reflect that diversity so that all are recognized for their impact on our community. Nominations of members belonging to groups traditionally underrepresented in physics, such as women scientists, LGBTQ+ scientists, scientists who are Black, Indigenous, and people of color (BIPOC), disabled scientists, scientists from institutions with limited resources, and scientists from outside the United States, are especially encouraged.




THE YEAR IN REVIEW: 2024 March Meeting

We had a busy March meeting, with 62 DPOLY-led sessions, including 38 DPOLY focus sessions, and a total of 832 DPOLY abstracts. Many thanks to 2024 DPOLY Program Chair Prof. Bryan Boudouris for putting together an outstanding DPOLY meeting schedule. Thanks also to our hard-working session chairs and organizers, and to all our speakers who helped make the meeting a success.

2024 DPOLY Prize Winners:

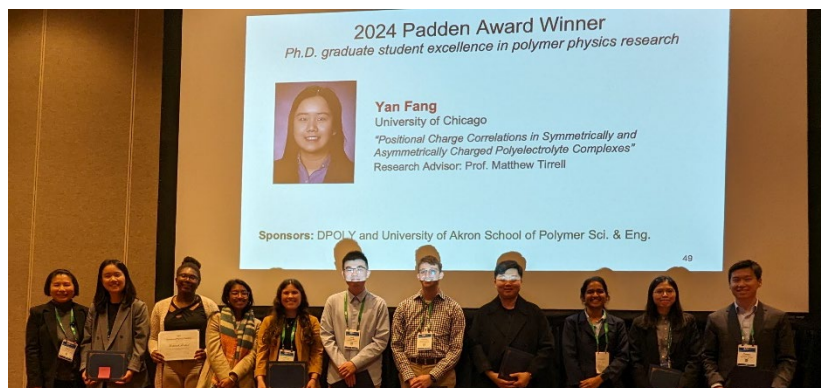
| 2024 Polymer Physics Prize: <u>Zhen-Gang Wang, California Institute of Technology</u> | |
|---|--|
| <i>“For contributions to the theories of polymer physics in regard to nucleation, block polymer self-assembly, and polyelectrolytes, in particular, for the application of these theories to experimentally-motivated phenomena.”</i> |  |
| 2024 John H. Dillon Medal: <u>Charles Sing, University of Illinois at Urbana-Champaign</u> | |
| <i>“For pioneering advances in polyelectrolyte phase behavior and polymer dynamics using theory and computational modeling.”</i> |  |
| 2024 UKPPG/DPOLY Lecture Exchange: UKPPG representative <u>Devesh Mistry, University of Leeds</u> , who presented | |
| <i>“Decoupling how structure and processing affects the properties of Liquid Crystal Elastomers”</i> |  |




2023 APS Fellows:

| <u>Dean DeLongchamp, National Institute of Standards and Technology</u> | |
|---|---|
|  | <i>“For developing resonant soft x-ray methods to quantify polymer structure, order, and orientation, for making these tools available to the polymer physics community, and for illustrating how these parameters are critical to understanding the properties and performance of organic semiconductors.”</i> |
| <u>Bradley Olsen, Massachusetts Institute of Technology</u> | |
|  | <i>“For the development of new theories of polymer gel mechanics that account for network topology, and for the generation of applied theory and experiments to advance our understanding of polymer self-assembly and dynamics using proteins and hybrid protein macromolecules as model polymer systems.”</i> |
| <u>Rodney Priestley, Princeton University</u> | |
|  | <i>“For insights into the physics of glassy polymers under a broad range of nanoscale confinement conditions, and for the creation of polymer nanoparticles with controlled surface and internal structures.”</i> |

Frank J. Padden Jr. Award:

The Frank J. Padden, Jr. Award Session featured 11 exciting research presentations by graduate student members of DPOLY. We congratulate Yan Fang (U. Chicago) as the 2024 Padden Award winner and all the finalists for maintaining a high standard of research with their inspiring presentations. We are grateful to the University of Akron for sponsoring the finalists’ dinner!



| <u>2024 Undergraduate Travel Award</u> | <u>2024 Chang Yeol Ryu Travel Fund</u> | |
|--|--|--|
| Milena Mesfun University of Alabama. Advisor: Prof M. Calabrese | Devosmita Sen MIT Advisor: Prof. Brad Olsen | Victor Corona Cal State Univ. Long Beach Advisor: Prof. Alex Klotz |
|  |  |  |

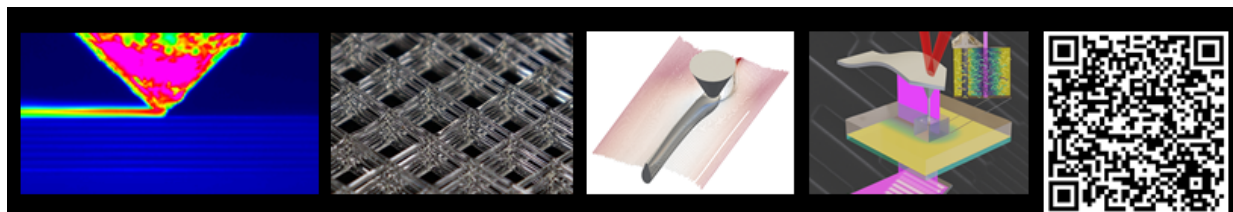
2024 DPOLY Best Poster Awards

This year we had 142 DPOLY posters! We thank Prof. Lisa Hall for organizing the poster session and competition and volunteer judges. This year DPOLY sponsored the poster prizes that included gift cards and certificates awarded to:

1st place: Aubrey Quigley UT Austin, Freeman group
2nd place: Mengying (Sara) Yang UDelaware, Epps group
3rd place: Devosmita Sen MIT, Olsen group



2024 DPOLY Short Course: “*Polymer Physics of Additive Manufacturing*”



The 2024 DPOLY Short Course was a huge success with maximum capacity of over 70 participants thanks to our terrific Organizers and DPOLY members!



Leanne Friedrich
Research Engineer
NIST



Peter Olmsted
Professor
Georgetown University



Emily Davidson
Assistant Professor
Princeton University



Jonathan Seppala
Polymer AM Project Lead
NIST

Topics included thermoplastic extrusion, volumetric 3D printing, direct write printing, powder bed fusion and fused deposition modeling, bioprinting/embedded direct write printing, stereolithography, and digital light processing. More than 30 early career travel awards and numerous speaker travel awards were made possible due to our generous sponsors!



INSTITUTE for SOFT MATTER
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GEORGETOWN UNIVERSITY



CMMI 2403712



3M-APS Event, March 8th, 2024

3M was very gracious to plan and host 40 APS members on March 8th, 2024 to network, and hear more about 3M. DPOLY thanks numerous 3M hosts and the 3M Innovation Center team for organizing this terrific event with sponsorships from 3M TechForum chapters that made the event possible. We thank Hyunki Kim (3M & APS DPOLY member!) for providing the photos that capture several moments from this event!

3M-APS event (March 8, 2024)



3M

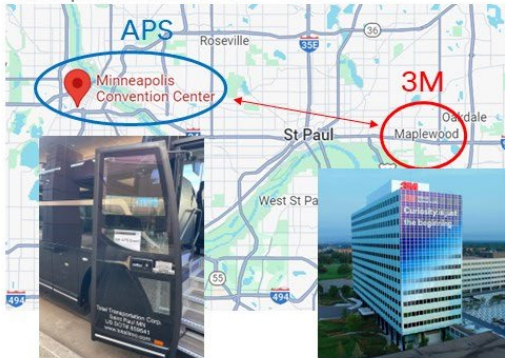
Networking lunch



Innovation Center Tour



Transportation (MCC – 3M)



3M Info session

New Industrial Advisory Board

DPOLY launched an industrial advisory board to help strengthen interactions with industry. The goals are to facilitate exchange of information and development of collaborations, improve the March Meeting programming, enable networking of early career members and prospective employers and increase diversity of job sectors represented within DPOLY membership. Our first meeting was held on virtually on Feb. 22, 2024 with DPOLY Executive Committee members and the 10 inaugural members:

Gus Bosse, Exxon Mobil

Kim Chaffin, Medtronic

Dimitris Collias, P&G

Phil Hustad, Geminatio

Ken Kearns, Dow

Hyunki Kim, 3M

Nadia Krook, Dupont

Phil Rauscher, Syensqo

Elayne Thomas, St. Gobain

Dominica Wong, FlexSys




New 2024 Campaign to Endow the Dillon Medal

Elsevier, sponsor of the Dillon Medal since 1997, unfortunately withdrew their support. The minimum stipend for APS Early Career awards increased to \$3k for 2024 to comply with current policy and further to \$5k minimum has been recommended by APS Committee on Prizes & Awards. Therefore, DPOLY had to campaign to establish a new Dillon Medal endowment. We are thrilled to report that as of the March Meeting we have received \approx \$134k in donations!! We wish to thank numerous former Dillon Medal recipients, industry and Institutions and contributions from DPOLY operating funds!



2023 Fall Election Results

We welcome our newest executive committee members

| Vice Chair Brad Olsen MIT | Member-at-Large Michelle Sing Braskem | Early Career-Member McKenzie Coughlin NIST |
|---|---|---|
|  |  |  |

and thank you to Pinar Akcora , Ken Kearns, Pierre Kawak for their willingness to serve.

8th International Soft Matter Conference (ISMC2024)

Many members may be interested in the **8th International Soft Matter Conference (ISMC2024)**, held in Raleigh, North Carolina. ISMC2024 will bring together over 800 participants and provide an immersive and enriching experience. The event is strategically designed to facilitate the cross-pollination of diverse Soft Matter research domains, fostering collaboration and innovation. ISMC2024 will delve into a broad spectrum of topics, including Active Matter, Biological Soft Matter, Colloidal Matter, Fluid Dynamics and Rheology, Glasses, Granular Materials and Jamming, Interfaces, Surfaces and Membranes, Liquid Crystals, Measurement and Characterization, Networks and Gels, Polymers, and Self Assembly.

Additional events include:

A Satellite [Young Investigator Workshop at NCSU](#) campus (July 26-28, 2024).

[Duke Soft Matter Day](https://softmatter.duke.edu/duke-soft-matter-day) <https://softmatter.duke.edu/duke-soft-matter-day> (July 29).

ISMC 2024

**8TH INTERNATIONAL
SOFT MATTER CONFERENCE**

RALEIGH CONVENTION CENTER
RALEIGH, NORTH CAROLINA
JULY 29 - AUGUST 2, 2024



Topics Include:
Active Matter, Biological
Soft Matter, Colloidal
Matter, Fluid Dynamics and
Rheology, Glasses, Granular
Materials and Jamming, and
many more




For more info:



This landmark soft matter conference marks
the first time ISMC will be held in the Americas

Thank you to our sponsors














Contact email for inquiries: ISMC24@soft-matter.com

ISMC2024 Chairs: Ronit Freeman (UNC), Jan Genzer (NCSU), Michael Rubinstein (Duke).

Organizing Committee Patrick Charbonneau (Duke), Karen Daniels (NCSU), Moumita Das (RIT), Lilian Hsiao (NCSU), Daphne Klotsa (UNC), Christoph Schmidt (Duke), Stefan Zauscher (Duke)

2024 Polymer Physics Gordon Research Conference/Seminar

Mount Holyoke College, 50 College Street, South Hadley, Massachusetts,
Please plan on attending to show the strength and breadth of the polymer community. Please circulate to people in adjacent communities that may be interested.

| <u>GRC (July 21-26, 2024)</u> |
|--|
| <p>Chair: R. Segalman; V. Chair: A. Jayaraman</p> <p>Sessions:</p> <p>Big Data in Polymer Science: Olsen and de Pablo</p> <p>Polymer Upcycling: Korley, Helms, Robertson</p> <p>Patterning with Polymers: Voets and C. Bates</p> <p>Structure, Dynamics, and Properties of Functional Polymers: Ricarte, Calabrese, Davidson, Morozova, Marciel, Chen</p> <p>Phase Behavior: Osuji, Lodge</p> <p>Physics of Zwitterions, Coacervates, and Charge Neutral Complexes: Srivastava, Laaser, Muthukumar</p> <p>Structure and Mechanics: Suo and Creton</p> <p>Ion and Electron Conducting Polymers: Sokolov, Lutkenhaus, Salleo</p> <p>Transport and Membranes: Datta and Z. Smith</p> <p>Power hour will be chaired by K. Bay, L. Hall, A. Rosales</p> |
| <u>GRS (July 20-21, 2024)</u> |
| <p>Chairs: Anastasia Neuman and Kathryn G. Wilcox</p> <ul style="list-style-type: none"> • Oriented for graduate students, post-docs, and early career scientists • Leading scientists from associated GRC serve as mentors • Informal networking with peers and mentors <p><i>Mentorship Panel:</i> “Mapping Your Career Phase Diagram in Polymer Physics”</p> <p>**8 student/postdoc speakers selected**</p> |

2024 By-Laws Amendment

At the Business meeting, we announced that DPOLY will submit amendments to the By-Laws for vote. The [Amendment Synopsis](#) was posted to Engage. Please be on the lookout for a special election ballot to vote on these proposed changes.

Best Regards,
The DPOLY Executive Committee