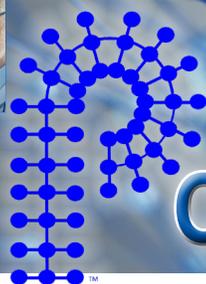




Spring 2021



2021 POLY Chair  
Andrea Kasko



# POLY NEWSLETTER

American Chemical Society  
Division of Polymer Chemistry, Inc.

It is my great pleasure and honor to serve as the 2021 Chair of the Division of Polymer Chemistry (POLY). It has been a most unusual year for all of us, and I consider myself fortunate to be working with POLY's outstanding Executive Committee and Business Office staff as we navigate this transitional year. POLY would not exist without the enthusiasm and commitment of our many volunteers - not only those on the Executive Committee, but also the Programming team, the awards committees, the symposium, workshop and webshop organizers, our committees and subcommittees, and the leaders of our student chapters. It has been a challenging year for all of us, and I am deeply grateful to each and every volunteer for their time and efforts this year.

101 years ago, Hermann Staudinger published a seminal paper in the field of polymer science, titled *Über Polymerisation*, in which he introduced the groundbreaking hypothesis of the existence of long chain molecules built from a large number of covalently linked monomeric units. This paper, and Staudinger's subsequent work on the topic, is considered to be a foundation of the field of macromolecular chemistry and polymer science. To commemorate Staudinger's work, the theme of the ACS Spring 2020 National Meeting in Philadelphia was scheduled to be "Macromolecular Chemistry: The Second Century." However, that meeting was canceled due to COVID-19. Fortunately, the theme/programming were shifted to the ACS Spring 2021 National Meeting, including the opening keynote session with talks from Prof. Takuzo Aida (RIKEN, Univ. of Tokyo), Prof. Kristi Anseth (Univ. of Colorado, Boulder) and Prof. Anthony Ryan (Univ. of Sheffield), and the "Macromolecular Science at the Dawn of its Second Century" Symposium that featured 26 speakers over three days. Unlike previous ACS National meetings, the Spring 2021 meeting spanned two weeks, in addition to the poster session in the third week. As the plenary speaker in the POLY/PMSE awards symposium Prof. Tim Lodge (Univ. of Minnesota) gave a talk titled, "Pillars of Polymer Science", a nostalgic trip through foundational moments in polymer science. Awards and recognition are a key undertaking of POLY, and are reported throughout this newsletter. Notable awards at the Spring 2021 meeting included the Paul J. Flory Award (Prof. Kris Matyjaszewski, Carnegie Mellon Univ.), the Carl S. Marvel Award (Prof. Richard Hoogenboom, Ghent Univ.), and a Distinguished Service Award (Dr. Hayley Brown, Dow).

Even though our members were unable to travel through most of 2020 and 2021, POLY was able to connect its members through several webinars, webshops, and other virtual activities, including the webinar, "Solving the Plastic Waste Problem: Novel Chemical Pathway Upcycling and Chemical Recycling" in January 2021 and the webshop, "Stimulus-Responsive Polymers and Liquid Crystal Elastomers" in April 2021.

This year, we launched the Macromolecular Alliance for Community, Resources and Outreach (MACRO), a new committee supported by both the POLY and PMSE divisions of ACS. The goal of MACRO is to grow the polymer community through curriculum development, professional development and outreach. Take a look at their website: <https://macro-poly-pmse.org>.

The Fall ACS meeting in Atlanta will be a hybrid meeting, in order to serve both those who wish to travel and those who wish to participate remotely/virtually. COVID-19 has posed challenges to ACS and POLY that we probably could not even imagine prior to 2020, and it has quickly transformed our personal and professional lives in ways we never expected. The staff and volunteers of POLY have been working hard to engage and support our membership during this time so that we can all grow and thrive together, be it in-person or virtually. Take care, and may we meet again soon.

## Inside

Chair Message

Awards

Webinars

Elections

IAB

Workshops

Ottenbrite Obit.

MARCO Edu.

National Mtg.

Grad. Symp.

Undergrad. Symp.

Councilors' Rpt.

Membership Rpt.

Upcoming

June 16  
ACS/POLY  
Webinar

July 1  
Paul J. Flory  
Award Deadline

July 31  
IPS Award  
Deadline

Aug. 22-26  
Fall ACS  
Hybrid National  
Meeting

November 1  
Mark Scholar  
Awards  
Deadline

November 30  
POLY Fellows  
Award Deadline

# POLY/PMSE PLENARY LECTURE AND AWARDS PROGRAM



**Timothy Lodge**  
University of Minnesota  
Plenary Speaker

The POLY/PMSE awards reception was held on Wednesday evening, April 14, 2021, during the virtual ACS National Meeting honoring outstanding achievements by its members. Timothy Lodge (University of Minnesota), opened the event with a Plenary Lecture titled, "*Pillars of Polymer Science*." 2021 POLY Chair, Andrea Kasko (UCLA) and the 2021 PMSE Chair, Timothy Bunning (Air Force Research Laboratory) had the pleasure of congratulating this year's plenary speaker and POLY/PMSE award recipients.

View awardees honored below.

## Paul J. Flory Polymer Education Award



**Krzysztof Matyjaszewski**  
Carnegie Mellon University

*In recognition of promoting undergraduate and/or graduate polymer education*



ACS SPRING 2021

MACROMOLECULAR CHEMISTRY: THE SECOND CENTURY



## Carl S. Marvel Award for Creative Polymer Chemistry



**Richard Hoogenboom**  
Ghent University

*To Recognize and Encourage Accomplishments and/or Innovation of Unusual Merit in the Field of Basic or Applied Polymer Science by Younger Scientists*

ACS SPRING 2021

MACROMOLECULAR CHEMISTRY: THE SECOND CENTURY



## Distinguished Service Award



**Hayley Brown**  
Dow, Inc.

*For leadership and dedication in the role of Program Chair and Program Committee Chair during extremely unusual and difficult times*



ACS SPRING 2021

MACROMOLECULAR CHEMISTRY: THE SECOND CENTURY



# 2021 POLY Fellows

Recognizing Outstanding Achievements and Contributions to Polymer Science and the Profession



**Luis Campos**  
Columbia Univ.



**Thomas Epps**  
Univ. of Delaware



**Wei Gao**  
Dow



**Frank Leibfarth**  
UNC, Chapel Hill



**Carmen Scholz**  
Univ. of Alabama,  
Huntsville



**Karen Winey**  
Univ. of  
Pennsylvania

ACS SPRING 2021

MACROMOLECULAR CHEMISTRY: THE SECOND CENTURY



## UPCOMING AWARDS DEADLINES

### Paul J. Flory Education Award

**Deadline:** 7/1/2021

**Purpose:** Recognize, encourage, & stimulate outstanding achievements by an individual or team in promoting undergraduate and/or graduate polymer education.

### Industrial Polymer Scientist Award

**Deadline:** 7/31/2021

**Purpose:** Recognize outstanding industrial innovation & creativity in the application of Polymer Science, conducted by individual scientists or research teams.

### Mark Young, Scholar, & Senior Awards

**Deadline:** 11/1/2021

**Purpose:** Recognize excellence in basic or applied research & leadership in polymer science by scientists of all ages.

### POLY Fellows Award

**Deadline:** 11/31/2021

**Purpose:** Recognize outstanding achievements in & contributions to polymer science & the profession.

### Award Committee

**Alan Hopkins**

[Alan.R.Hopkins@aero.org](mailto:Alan.R.Hopkins@aero.org)

**Semra Colak Atan**

[semracolak@gmail.com](mailto:semracolak@gmail.com)

**Toby Nelson**

[toby.nelson@okstate.edu](mailto:toby.nelson@okstate.edu)

### Additional Information

[CARLEEL@VT.EDU](mailto:CARLEEL@VT.EDU)

<https://polyacs.org/AWARDS/>

*The Awards Committee is unable to solicit individual nominations and serve to select awardees. In order for POLY to provide a diverse awards recipient list, we need YOU to nominate outstanding scientists.*

## EMAIL DISCUSSION LIST

The discussion list is a great way to inform others and receive information about upcoming symposia, workshops, job positions, share questions and answers, and more. The list is available to all POLY members who choose to sign-up.

To sign up, sign off, or change e-mail address . . .

Go to: <https://polyacs.org/poly-electronic-discussion-list/>

Members can send e-mails to:

[POLY-L@LISTSERV.OKSTATE.EDU](mailto:POLY-L@LISTSERV.OKSTATE.EDU)

**SIGN UP TODAY!**

## LIVE WEBINARS AND YOUTUBE POSTS

The next POLY and American Chemical Society collaboration Webinar will be held on June 16, 2021. The webinar, "**Polymers of the Pandemic**," featuring Professor Michael Schulz of Virginia Tech and Dr. Emilie Rexeisen of 3M will be moderated by Dr. Tomonori Saito of Oak Ridge National Laboratory.



**Emilie Rexeisen**  
3M



**Michael Schulz**  
Virginia Tech

Airing live, this POLY and ACS collaborative webinar series feature two twenty-five minute presentations followed by a moderated question and answer session. These webinars are hosted by rotating POLY members and are organized by the POLY Webinar committee composed of Brent Sumerlin, Tomonori Saito, and Laura Stratton. Typically attracting hundreds of attendees, these events are a popular benefit organized by POLY. The POLY Webinar committee has an exciting working list of topics and speakers, and we welcome your ideas for topics and speakers for future webinars. This year the POLY / ACS co-produced webinars expanded to include two additional webinars organized by the Industrial Advisory Board by Peter Boul.

Past webinars prior to 2020 are posted to the POLY YouTube channel. From April 2020 on, the webinars speakers and titles will be posted on the American Chemical Society Webinars website after the initial live broadcast. Catch our next ACS/POLY co-sponsored webinar on July 1, 2021, titled, "**Designing Bio-Sourced Polymers!**"

[View Past POLY Webinars on YouTube](#)

[View POLY/ACS Co-Sponsored Webinars](#)

### CONNECTING WITH POLY MEANS CONNECTING WITH YOUR COMMUNITY

**POLY E-LIST**

[https://polyacs.org/  
poly-electronic-  
discussion-list/](https://polyacs.org/poly-electronic-discussion-list/)

**POLY WEB**

[www.polyacs.org](http://www.polyacs.org)

[@POLY\\_ACS](http://www.twitter.com/POLY_ACS)



[www.facebook.com/ACSPOLY/](http://www.facebook.com/ACSPOLY/)  
"ACS Division of Polymer Chemistry"



<http://bit.ly/youtubepoly>  
"ACS Division of Polymer Chemistry"



[www.linkedin.com](http://www.linkedin.com)  
"Division of Polymer Chemistry"



2020 Election Results - over 22% membership participation!

Approved election slate below. Election will go live in October 2021.

An email will be sent to voting members containing login instructions.

Keep your email address up-to-date! Send your updated email to [CARLEEL@VT.EDU](mailto:CARLEEL@VT.EDU).

## Officer Duties

**Vice-Chair Duties:** Support the Chair and Executive Committee of the Division while acting as liaison for Division Committees. Become familiar with operations of the Division to prepare for the functions of Chair-Elect and Chair in succeeding years. Attend Executive Committee meetings and promote the interests of members, committees, and Executive Committee.

**Member-At-Large Duties:** Duties for this office include: Attend and participate, when possible, all Executive Committee and Board meetings. Provide input to Executive Committee and Board on membership needs and concerns. Coordinate Membership Committee and membership affair functions. Keep Secretary well informed on possible news items for Newsletter and website on membership activities. Function as the principal communication link between the membership and the Board and the Executive Committee. Identify problems or opportunities pertaining to the membership. Actively maintain a webpage for communication of important Member-at-Large activities with the membership. Work with staff to ensure good electronic communications with the membership. Assume various other duties as directed from time-to-time by Division Chair and/or Executive Committee.

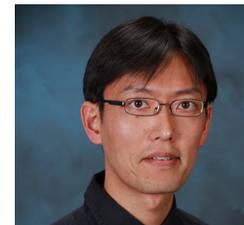
**Councilor Duties:** Councilors represent the Division at an ACS level. Once elected, ACS assigns the Councilor an ACS committee(s) on which to serve. The Councilors attend committee and ACS Council meeting, held during ACS National Meetings, to provide input to represent the Division. They serve as an active voting member of the POLY Executive Committee. A Councilor provides helpful feedback to Division Officers and the membership in regard to ACS level activity. POLY elects both academic and non-academic officers independently to best represent the broad interests of Division's membership. A Councilor is typically a seasoned POLY Member or past officer who can represent the interests of our Division members at the ACS level.

**Alternative Councilor Duties:** During a 3 year term, be available to replace or fill in if a Councilor is unable to fulfill their duties at a National ACS Meeting. Attend POLY Executive Committee meetings and provide the Councilor's report, if absent. Become informed on National and Divisional issues in order to serve as needed. Carry out specific assignments as requested by the POLY Division Chair, Councilor, or serve on committees as needed.

## Vice Chair Candidates



**Dawanee Poree**  
Army Research Lab.



**Tomonori Saito**  
Oak Ridge Nat. Lab.

## Member-At-Large Candidates



**Katrina Knauer**  
Novoloop, Inc.



**Erin Murphy**  
Exponent, Inc.

## Councilor Candidates



**Mary Ann Meador**  
NASA Glenn (Retired)



**Karl Haider**  
Covestro, LLC.

## Alternate Councilor Candidates



**Laura Stratton**  
Polymer Chemistry  
Innovations, Inc.



**Yoan Simon**  
Univ. of Southern  
Mississippi

# THE INDUSTRIAL ADVISORY BOARD



It is with pleasure that I share with you the activities of the Industrial Advisory Board (IAB) for Spring 2021. This time last year it was difficult to comprehend all of the changes and compromises that would take place and the creativity that would be needed. We have worked to meet these challenges to find ways to support our industrial community. It is through this creativity that we succeed in remaining relevant to support opportunities for networking, programming, education, and awards.

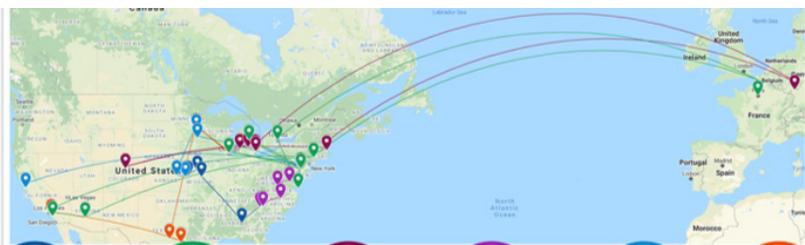
I am proud and inspired by how the Industrial Advisory Board continues to rise to this challenge - with flexibility, resilience, courage – and backed by innovative ideas. Thank you for your enormous contributions. By sharing ideas and working together, we continue to stay relevant in this new normal. I encourage you to reach out to Vice-Chair Peter Boul (AramcoAmericas, [Peter.Boul@aramcoamericas.com](mailto:Peter.Boul@aramcoamericas.com)) or me if you have any suggestions or if we can answer any questions. View IAB's highlights for Spring below!

Corinne Lipscomb, 3M, Chair of IAB, [celipscomb@mmm.com](mailto:celipscomb@mmm.com)

## Highlights for Spring:

- Organization and sponsorship of the January ACS Webinar on, "Solving the Plastic Waste Problem, Novel Chemical Pathway Upcycling, and Chemical Recycling." Lecturers were Katrina Knauer (BioCollection Inc.) and Philippe Reutenauer (Léa Nature).
- Communication with IAB members using the Spring's IAB Spotlight for posting relevant industrial events during and after the ACS Meeting.
- Participation in the Spring virtual ACS Meeting. The IIPS symposium was scheduled for Thursday, April 8, 2021. The session was organized by Michael Abrams (Arkema), Peter Boul (AramcoAmericas), and Bradley Rodier (Rochal).
- Co-sponsored the Undergraduate and Graduate symposia during the Spring 2021 ACS Meeting.
- Co-sponsored and organized the recent POLY webshop on Stimulus-Responsive Polymers and Liquid Crystal Elastomers, on April 27, 2021. This installment of POLY Webshops was hosted by Peter Boul (AramcoAmericas and IAB), the webshop highlighted Chis Bowman (University of Colorado at Boulder, Shu Yang (University of Pennsylvania), and Shengqiang Cai (University of California at San Diego). The event will be re-broadcast in the Fall.
- Piloting of a New Industry Employee Virtual Networking Group. This self-organizing group meets bi-monthly and in turn each plans a session. The IAB provides support through finding interested employees at member companies, as well as facilitation of sessions and use our broad network to connect to relevant industry guests as needed.

## New Industry Networking Members



Michael Minkler  
Milliken & Company



Mary Alice Upshur  
The Dow Chemical Company



Mark Swartzlander  
BASF



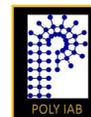
Kacey Hall  
Milliken & Company



Kyle Snow  
Citrine Informatics



Jeff Ting  
3M



Thank You! Board Members  
Industrial Advisory Board



## Congratulations to IAB Member Awardees



**Hayley Brown (Dow)**,  
recipient of the POLY  
Distinguished Service Award



**Wei Gao (Dow)**,  
named POLY Fellow

## CALL FOR NOMINATIONS: INDUSTRIAL POLYMER SCIENTIST AWARD



Did you know the Industrial Advisory Board supports an award that recognizes outstanding industrial innovation and creativity in the application of polymer science conducted by individual scientists or research teams?

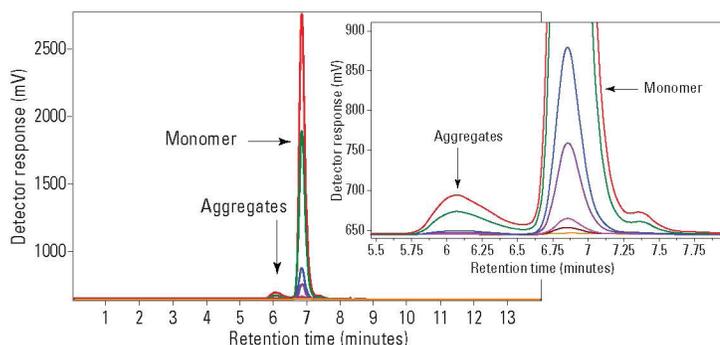
Awardees will receive a plaque, an honorarium of \$4,000, and reimbursement for reasonable travel expenses to attend the national ACS meeting at which the award is presented.

For more information or to apply: <https://polyacs.org/industrial-polymer-scientist-award/>

# Increased Sensitivity with the LenS<sub>3</sub><sup>®</sup> MALS Detector!

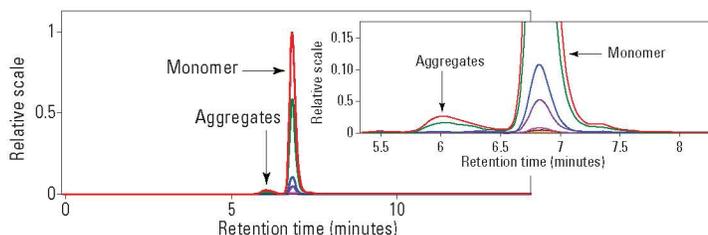
Don't have a LenS<sub>3</sub> MALS yet? See what you are missing:  
**Quantifiable Results at Low Concentrations!**

Analysis of Rituximab, MW ~150,000 Da on UHPLC using TSKgel<sup>®</sup> UP-SW2000, 2 μm, 4.6 mm ID × 30 cm column with LenS<sub>3</sub> MALS and competitive MALS system



LenS<sub>3</sub> MALS Detector

#	Concentration (mg/mL)	Load (μg)	SN Monomer	Injection volume (10 μL) Monomer -MW	Injection volume (10 μL) Aggregate -MW
1	1	10	8000	150800	276600
2	0.5	5	5000	150400	285000
3	0.1	1	800	153000	253300
4	0.05	0.5	400	152300	250600
5	0.01	0.1	80	154500	-
6	0.005	0.05	40	153600	-
7	0.001	0.01	10	160800	-



Competitive MALS Detector

#	Concentration (mg/mL)	Load (μg)	SN Monomer	Injection volume (10 μL) Monomer -MW	Injection volume (10 μL) Aggregate -MW
1	1	10	530	135200	276400
2	0.5	5	310	135900	262000
3	0.1	1	60	137400	819000
4	0.05	0.5	20	137900	949600
5	0.01	0.1	5	108900	-
6	0.005	0.05	2	107500	-
7	0.001	0.01	-	-	-

Competitive separations may not be representative of all applications.

## LenS<sub>3</sub> delivers:

- better quality of data with more accurate and precise results when compared to standard detectors.
- improved signal to noise, allowing lower LOD and LOQ as well as 15x more sensitivity at 10 μg nominal loading!

LenS<sub>3</sub> is the first choice when analyzing proteins, aggregates and other impurities for reliable MW determinations across multiple load levels.



[Click here to learn more](#)

Tosoh Bioscience and TSKgel are registered trademarks of Tosoh Corporation.  
 LenS is a registered trademark of Tosoh Bioscience LLC in the USA, India and Japan.

# Visit website for more info.



**Silicon-Containing  
Polymers and  
Composites**

December 1 – 4, 2021  
Omni San Diego  
San Diego, California USA

**Co-Chairs:**  
Joseph Furgal  
BGSU  
Claire Hartmann-Thompson  
3M

**Organizing Team:**  
S. Iacono, USAFA  
J. Goff, Gelest  
J. Mabry, USAF Lab

**For more info.:**  
<https://www.polyacs.net/2021siliconc>

**Co-Chairs:**  
Wei Gao  
Dow  
John Tsavalas  
UNH

**Organizing Team:**  
J. Bohling, Dow  
S. Foulger, Clemson  
W. Wu, Arkema  
D. Haas, Dow

**For more info.:**  
<https://www.polyacs.net/22polycolloids>



**Polymer  
Colloids**

February 19 - 22, 2022  
Omni San Diego  
San Diego, California USA



**Polymers for Fuel Cells, Energy  
Storage, and Conversion**

February/March 2022  
TBD  
Pacific Grove, California USA

**Co-Chairs:**  
Brian Benicewicz  
USC  
Michael Hickner  
Penn State  
Tom Zawodzinski  
Univ. of Tenn., Knoxville

**Organizing Team:**  
S. Hamrock, 3M  
A. Herring, Mines  
J. Kerr, LBL  
Y.S. Kim, LANL  
C. Mittelsteadt, GES  
R. B. Moore, Virginia Tech  
B. S. Pivovar, NREL

**For more info.:**  
<https://www.polyacs.net/2022fuelcells>

**Workshop Chair:** Marc Hillmyer ([hillmyer@umn.edu](mailto:hillmyer@umn.edu)) or contact: Lesia Pristas ([lesiar@vt.edu](mailto:lesiar@vt.edu))



## NGRPC 2021 Virtual Meeting

**Date: July 26-29, 2021**  
**REGISTRATION IS NOW OPEN!**

**Purpose: For the last 25 years, it's been a premier conference in highlighting the research and achievement of graduate students in polymer science. This is where leaders and innovators meet to share, inspire and network.**

**Website: <https://www.ngrpc2021.com/>**



## Pacifichem 2021 Hybrid Meeting

Date: December 16-21, 2021  
Location: Honolulu, Hawaii, USA

Purpose: to create an active forum and a productive platform where thousands of papers will disclose state-of-the-art, cutting edge findings in chemistry and related multidisciplinary areas that inspire active discussion and opportunities for international collaboration, thereby promoting creativity and a clear creative vision for chemistry.

Website: <https://pacifichem.org/>



### Houston MJ Associates

HMJ Associates is proud to announce the creation of a new GPC/SEC and Dilute Solution Viscometry (DSV) sample analysis service platform for our polymer and biopolymer customers.



Our new service is differentiated by expertise, reliability and cost and features a set of 9 dedicated Triple/Tetra detector GPC/SEC systems and 4 dedicated DSV systems for fast and dependable turn-around times.

To learn more about these exciting services, please visit us at [www.hmjassociates.com](http://www.hmjassociates.com).



### Houston MJ Associates

HMJ Associates is now proud to carry the Shodex line of GPC/SEC columns and calibration standards, as well as a new line of HMJ specialty columns and custom standards to meet your analytical needs.



Aqueous, organic and specialty GPC/SEC columns  
Conventional, Universal, and Triple Detection  
GPC/SEC calibration standards

Consult with our GPC/SEC experts to ensure you get the right column and standards for your application.

Visit us to learn more at [www.hmjassociates.com](http://www.hmjassociates.com).

## IN MEMORY OF RAY OTTENBRITE



Dr. Raphael Martin Ottenbrite, Professor Emeritus of Virginia Commonwealth University, died on Tuesday, April 6, 2021, at the Bon Secours Hospice House surrounded by the people who loved him and very thoughtful and kind staff. He died after a valiant fight with prostate cancer. Ray was born on Sunday, September 20, 1936 in Claybank, Saskatchewan, Canada. His parents emigrated from Austria to Canada. He was very proud to be one of 10 siblings. As the Dust Bowl extended into Canada, his family moved to Ontario to a small farm. He grew up in Whitby, before going to the University of Windsor, where he received three degrees and met his wife, Nancy. Ray moved his family to Gainesville, Florida to work in a post doctorate

program with Dr. George Buttler.

During his long career, he became the Founder and Director of the VCU Center for Industrial Polymer Research, served as the Chairman of the University Tenure and Promotions Committee, and served as the Associate Dean of Curricula and new programs for the VCU school of Humanities and Science. His professional memberships included roles in the ACS Division of Polymer Chemistry, where he served as Treasurer, Vice Chair and Chairman. He was the National Program Chair as well as serving on the International Relations Committee. He was an organizer of the International Biorelated Polymers ACS/POLY Symposium. He was elected to lead the Gordon Conferences at two meetings in the U.S. He was the founding member of Frontiers on Biomedical Polymers. He created and Editor-in Chief of the Journal of Bioactive and Compatible Polymers, 1985-2015. Dr. Ottenbrite published over 250 journal papers, has +30 patents, and edited or credited 23 polymer related books. He developed high temperature polymers for spacecraft and received five citations from NASA. He co-invented antimicrobials that are effective against SARS. Ray mentored and encouraged postdoctoral students from Italy, England, Germany, Japan, China, Korea and the U.S. In 2015, Dr. Ottenbrite received the Alumni Association Award of Merit from the University of Windsor for distinguished accomplishments. Dr. Ottenbrite was elected to the American Institute for Medical and Biological Engineering, as well as being made an ACS Fellow in 2013.

Ray loved a happy party! He loved to dance and a good joke. He was very athletic. He coached a hockey team at St. Clair College. When in Windsor, he played basketball every Thursday with The Sons of the Maple Leaf. He also played racket ball and walley ball with his graduate students at VCU. He loved to play golf and enjoyed skiing with wonderful friends. He enjoyed swimming and snorkeling at The Great Barrier Reef. He greatly enjoyed sailing and walking along the ocean shore. Ray loved to play cards with family and friends especially Bridge, Euchre and Cribbage. He was an avid gardener and enjoyed bird watching. Ray was tall, elegant, thoughtful and known for his friendships and kindness.

Ray is survived by his wife Nancy of 57 years, his son, daughters, and granddaughter. Dr. Ottenbrite's crematory will be private. A Celebration of Life event will be scheduled in 2022.

### POLY COMMUNITY EVENT CALENDAR

Consider spotlighting your event with other notables in the field on POLY's community event calendar!

Email: [carleel@vt.edu](mailto:carleel@vt.edu) with details of your contribution to the POLY Calendar.

POLY Event Calendar:  
<http://bit.ly/polycalendar>

### INTERESTED IN ADVERTISING?

On behalf of the ACS Division of Polymer Chemistry, we would like to invite you to consider advertising in the POLY Newsletter. Our non-profit organization distributes the POLY Newsletter to approximately 4,000 of it's polymer scientist members. The POLY NEWSLETTER is distributed in June and October each year and describes the Division activities and announces polymer-related scientific activities worldwide. The POLY Newsletter provides an excellent opportunity for advertising.

Complete information is available by going to:  
<https://www.polyacs.net/newsletter>.

### INTERESTED IN A POLY/PMSE STUDENT CHAPTER?

Student Chapters are student run organizations affiliated with the POLY and PMSE division, that provide networking and development opportunities to students and post-doctoral associates in the polymer field.

For more information, please contact:

POLY Student Chapter Representative: Elizabeth Bright ([ebright@mmm.com](mailto:ebright@mmm.com))

PMSE Student Chapter Representative: Dan Savin ([savin@chem.ufl.edu](mailto:savin@chem.ufl.edu))

Learn more at: <https://polyacs.org/student-chapters/>

# MACRO - POLY'S NEWEST EDUCATION INITIATIVE

Macromolecular Alliance of Community, Resources, and Outreach (MACRO) is a newly created committee that is being supported by both the POLY and PMSE divisions of ACS. Our goal is grow and develop the polymer community by supporting three distinct initiatives, which are: 1) curriculum; 2) professional development; 3) outreach.

**Curriculum:** Create a depository of teaching materials for instructors to be able to acquire and utilize in their classrooms. Materials will range from undergraduate to graduate level lecture material as well as a range of laboratory experiments (both teacher and student guides). The aim is to create materials students of various academic standing (freshman, sophomore, junior, senior or graduate) and of various backgrounds so that polymer content can be incorporated into various aspects of a student's curriculum (i.e. polymer exposure in general chemistry, organic chemistry, physical chemistry, etc...). The hope is to create an interface where an instructor can request instructional content based upon student level, interest and background. MACRO's vision is to create a two-way interface where individuals can submit and withdraw polymer knowledge.

**Professional Development:** Create an open forum for individuals within the Polymer community to engage with each other in a range of topics including but not limited to:

- **Undergraduate Level:** Resources for connecting undergraduate students to research opportunities. A guide on applications to graduate studies.
- **Graduate / Postdoc Level:** Information on graduate fellowship opportunities. A guide for graduate students to apply for postdoctoral fellowships, and for current postdoctoral fellows to apply for faculty positions of particular interest will be guidance for potential faculty members to consider R1 vs PUI positions.
- **Faculty Level:** Materials to guide new faculty on mentoring and training postdoctoral fellows and graduate students and setting up a new group in polymer science. Materials, resources and content to help junior faculty navigate the proposal process.

**Outreach:** Create a depository of outreach materials for individuals to be able to spread their passion and knowledge of science to the general population. The hope is to create an interface where individuals can request instructional content based upon audience composition and support resources. Additionally, we plan to create an opportunity for individuals to share what they are currently utilizing in their communities and receive appropriate recognition for their contributions to the Polymer community. MACRO's vision is to create a two-way interface where individuals can submit new polymer knowledge and also access and gain new resources in polymer science.

Visit the MACRO website for more information at <https://macro-poly-pmse.org/>.

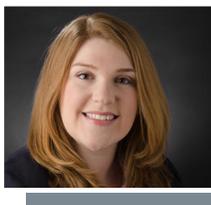
If you are interested in contributing to any of these initiatives, please feel free to contact Phil ([pcostanz@calpoly.edu](mailto:pcostanz@calpoly.edu)) or Dominik ([d.konkolewicz@miamioh.edu](mailto:d.konkolewicz@miamioh.edu)).



Pictured left to right: Philip Costanzo, CAL POLY and Dominik Konkolewicz, Miami University.

## Programming Team

Pictured top to bottom: Hayley Brown, Rob Mathers, Levi Moore, and Sara Orski



## 262nd Hybrid ACS National Meeting (Fall) August 22-26, 2021 \*Atlanta, GA

**ACS Theme: Resilience of Chemistry**

**Lead Program Chair: Sara Orski ([sara.orski@nist.gov](mailto:sara.orski@nist.gov))**

- 2020 Mark Scholars Award in honor of Luis Campos
- 2020 Mark Scholars Senior Award in honor of Karen Winey
- ACS Macro Letters/Biomacromolecules/Macromolecules Young Investigator Award
- Charles G. Overberger International Prize
- Circular Economy of Polymers
- DSM Science & Technology Award
- Fourth CME NASA Symposium: Chemistry for Resilient Human Space Exploration
- General Topics: New Synthesis & Characterization of Polymers
- Henkel Award for Outstanding Graduate Research in Polymer Science & Engineering Honoring Austin Evans (PMSE co-sponsored)
- Herman F. Mark Award in honor of Kristi Anseth
- Industrial Innovations in Polymer Science
- POLY/PMSE Plenary and Awards Ceremony
- Structure to Function in Supramolecular Polymers & Materials
- Young Industrial Polymer Scientist Award in honor of Victoria Piunova

### POLY GRAPHICAL ABSTRACT SUBMISSION REQUIREMENTS:

- POLY abstract includes title, authors, affiliations, abstract text and a key figure
- The word limit for national meetings is 300 words (2500 characters)
- Both tables and images subtract from the abstract word count
- Each row in a table counts for a total of 7 words (56 characters)
- An image counts for a total of 70 words (560 characters)

### NOTE ON SUBMISSIONS:

We are still accepting proposals for symposia for Spring 2022 in San Diego! The theme for the meeting is "Bonding Through Chemistry."

Please submit proposals via the website at [polyacs.org/symposium-proposal-online-form/](http://polyacs.org/symposium-proposal-online-form/) by **June 25, 2021**.

- The POLY Programming Team

## 263rd ACS National Meeting (Spring) March 20-24, 2022 \*San Diego, CA

**ACS Theme: Bonding Through Chemistry**

**Lead Program Chair: Levi Moore ([levi.moore.1@us.af.mil](mailto:levi.moore.1@us.af.mil))**

- 50 Years of Polymer Science and Engineering at Southern Miss.
- Carl S. Marvel Award for Creative Polymer Chemistry
- Engineering Functionality into Bio(memetic) Polymers
- Excellence in Graduate Polymer Research
- From Staudinger Macromolecules to the Genome of Macromolecules
- General Topics: New Synthesis and Characterization of Polymers
- Incorporating Polymer Science into the Classroom
- Industrial Developments in Polyolefin Macromolecular Design
- Industrial Innovations in Polymer Science
- NMR of Polymeric Materials
- Paul J. Flory Polymer Education Award
- POLY/PMSE Plenary and Awards Ceremony
- Translational Polymer Research
- Undergraduate Research in Polymer Science

- ACS National Meeting: [www.acs.org/content/acs/en/meetings/national-meeting.html](http://www.acs.org/content/acs/en/meetings/national-meeting.html)
- POLY Program Info: <https://polyacs.org/poly-at-national-accs-meetings/>
- ACS Symposia Submission: <https://polyacs.org/symposium-proposal-online-form/>

## EXCELLENCE IN POLYMER GRADUATE RESEARCH

The sixteenth symposium on "Excellence in Polymer Graduate Research" took place during the Spring 2021 virtual ACS National Meeting. The purpose of this symposium was to provide recognition to outstanding graduate students in polymer science and engineering, to foster networking and exposure, and to help develop the careers of future leaders in our field. There were 54 student presenters for this symposium.

Each student was recognized with a certificate plus a cash award. In addition, Wiley (Journal of Polymer Science) presented book awards (worth \$250 each) to four students (Anna LaChance, Univ. of CT, Molly McFadden, Caltech, Ronald Smith, GA Tech, and Cody Weyhrich, AZ State Univ.) as additional recognition of their outstanding work. ACS also provided an extra cash award to three students (Julia Early, Univ. of MN, Jeromy Rech, Univ. of NC, and Jeffrey Self, UC-Santa Barbara) who displayed exemplary research.

### Congratulations Students!

**Alex Balzer**  
Georgia Tech  
**Monika Baraniak**  
Rutgers Univ.  
**Eric Bruckner**  
Northwestern Univ.  
**Mengxue Cao**  
Yale Univ.  
**Ryan Carrazzone**  
Virginia Tech  
**Morgan Cencer**  
Univ. of Illinois  
**Paul Chazovachii**  
Univ. of Michigan  
**Amylynn Chen**  
Caltech  
**Daniel Corbin**  
Colorado State

**John Cue**  
UT Dallas  
**Ajinkya Deshmukh**  
Univ. of Connecticut  
**Alicia Doerr**  
Univ. of TN Knoxville  
**Logan Dugas**  
Univ. of S. Miss.  
**Julia Early**  
Univ. of MN  
**Huayang Fang**  
Univ. of Iowa  
**Jessica Faubel**  
Georgia Tech  
**Hannah Feinberg**  
Furman Univ.  
**Hayden Fowler**  
Univ. of CO Boulder

**Shailja Goyal**  
Iowa State  
**Shawn Gregory**  
Georgia Tech  
**Jun Guan**  
Univ. of Michigan  
**Varun Kelkar**  
Arizona State  
**Thomas Kolibaba**  
Texas A&M Univ.  
**Anna LaChance**  
Univ. of Connecticut  
**Jacob LaNasa**  
Penn. State  
**Hongxu Liu**  
UMass  
**Shawn Maguire**  
UPenn

**Molly McFadden**  
Caltech  
**Stuart Montgomery**  
Georgia Tech  
**Laura Murdock**  
Univ. of SC  
**Jason O'Neill**  
Univ. of Akron  
**Ashray Parameswar**  
Univ. of CO Boulder  
**Dillon Presto**  
Univ. of Akron  
**Peiyuan Qu**  
New York Univ.  
**Jeromy Rech**  
UC, Chapel Hill  
**Buddhima Rupasinghe**  
Bowling Green

**Azin Sadat**  
Univ. of Guelph  
**Jeffrey Self**  
UC-Santa Barbara  
**Chengtian Shen**  
UIUC  
**Minjie Shen**  
Univ. of Houston  
**Xutao Shi**  
Univ. of Delaware  
**Ronald Smith**  
Georgia Tech  
**Sanjuna Stalin**  
Cornell Univ.  
**Duyen Tran**  
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**Rachel Tritt**  
UW-Madison

**Brendan Turner**  
UNC/NCSU  
**Samiksha Vaidya**  
Univ. of Connecticut  
**Siyang Wang**  
Clemson Univ.  
**Cody Weyhrich**  
Arizona State Univ.  
**You-Chi Wu**  
MIT  
**Weiheng Xu**  
Arizona State Univ.  
**Tianwei Yan**  
UIUC  
**Hui Wen Yong**  
McGill Univ.  
**Dongyang Zhu**  
Rice Univ.

#### Organizers

**H.N. Cheng (USDA), Christine Coltrain (Eastman Kodak Company), Christopher Ellison (Univ. of Minnesota), and Tim Long (Univ. of Arizona)**

#### Sponsors/Support

**ACS President-Elect Funding, BASF, IAB, TOSOH, and Wiley**

#### POLY's Grad. Website

**<https://www.polyacs.net/2021excellencesite>**

## UNDERGRADUATE RESEARCH SYMPOSIUM

The fifteenth annual "Undergraduate Research in Polymer Science" Symposium was held during the Spring 2021 virtual ACS National Meeting. There were 14 oral presentations and 27 poster presentations from numerous universities across the globe. The symposium featured a virtual panel discussion on careers in polymer science with representatives from national laboratories, academia, and industrial laboratories. The symposium is intended to provide recognition to outstanding undergraduate students in polymer science and engineering, to foster networking and exposure, to introduce opportunities in graduate research and to help develop the careers of future leaders in both academia and industry.

The POLY Industrial Advisory Board and MACRO provided awards for best paper and poster presentations. Best oral presentation winners were: 1st place, Alexander Thome, Murray State University, 2nd place, Deniz Tekant, Cornell University, and 3rd place Clayton Keene, University of Florida and University of Southern Mississippi REU. Best poster presenters were: 1st place, Greg Bisbjerg, California Polytechnic State University and University of Southern Mississippi REU, 2nd place, Anna Zeleny, College of Saint Benedict and Saint John's University, and 3rd place, Eric Miller, Clemson University. The organizers extend thanks to all sponsors.

#### Organizers

**Sarah Morgan, Heather Broadhead, and Sergei Nazarenko (The University of Southern Mississippi)**

#### Sponsors/Support

**IAB, MACRO, and NSF  
University of Southern  
Mississippi REU Site**

#### POLY's Undergrad. Website

**<https://www.polyacs.net/2021undergradpolyresearch>**

## POLY COUNCILORS' REPORT



### POLY Councilors

Pictured left to right: Kathryn Beers, Mary Ann Meador, Greg Tew, and Kathryn Uhrich

### Future ACS Meetings

Resilience of Chemistry  
August 22 - 26, 2021  
Atlanta, GA

Bonding Through Chemistry  
March 20 - 24, 2022  
San Diego, CA

Sustainability in a  
Changing World  
August 21 - 25, 2022  
Chicago, IL

Crossroads of Chemistry  
March 26 - 30, 2023  
Indianapolis, IN

Harnessing the Power of Data  
August 13 - 17, 2023  
San Francisco, CA

Many Flavors of Chemistry  
March 17 - 21, 2024  
New Orleans, LA

Elevating Chemistry  
August 18 - 21, 2024  
Denver, CO

<http://bit.ly/futureacsm meetings>

**Meetings & Exposition** (Mary Ann Meador/Kathryn Uhrich): The ACS Council Meeting was held virtually on March 24, 2021 prior to the Spring National Meeting. The Committee on Nominations and Elections presented to the Council the following nominees for selection as candidates for President-Elect, 2022: Gerard Baillely, Anne M. Gaffney, Judith C. Giordan, and John C. Warner. By electronic ballot, the Council selected **Judith C. Giordan** and **John C. Warner** as candidates for **2022 President-Elect**. These two candidates, along with any candidates selected via petitions, will stand for election in the Fall National Election.

The Council approved the Petition to *Harmonize Committee Structures, Processes, and Terms*. This petition places all committees in one category called "Society Committees". The years of service and the number of committee members on each Society Committee will now be consistent and match the present terms of the Elected Committees: three-year terms with a two-term maximum for committee members. Certain Society Committees will no longer have the "Councilor only" designation, allowing an individual to join and continue service on a committee regardless of their status as Councilor. The petition will become effective immediately upon approval by the Board of Directors, however, existing committee assignments will be starting the term limits on January 1, 2022.

The Council approved the 2022 Schedule of Membership, upon recommendation of the Committee on Membership Affairs. The Schedule reduces the base dues rate to \$160 per year and establishes various dues categories and benefits packages based upon career stages, role in the chemical enterprise, and desired level of interaction by the Member with the Society.

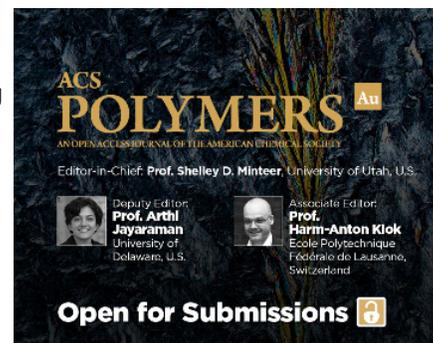
**Divisional Activities** (Kathryn Beers): The Council also approved the Distribution Formula for Division Allocations upon the recommendation of the Committee on Divisional Activities. ACS Standing Rules state that 9% of the ACS Member Dues Pool be allocated to the technical divisions. The new allocation formula is transparent, immediately implementable, reduces the year-to-year variation in the distribution amount and will work in all current national meeting formats. The new formula increases the base allotment and the per division member allotment portion of the pool to be distributed among the 32 Divisions. The portion of the pool devoted to Innovative Project and Strategic Planning Grants will increase from 10 to 15%. The intent is to support division strategic planning, expand the scope of innovative projects grants, and fund shortfalls due to the capping of year-to-year losses. A 7.5% cap on the year-to-year distribution gain/loss by a division is intended to increase stability and give divisions a chance to adjust to the new formula. This formula is considered transitional and will be reviewed by the Committee on Divisional Activities yearly.

**ACS Publications** (Greg Tew): Open access publishing - whereby anyone, anywhere with an internet connection can freely access the published results of scientific research - has been increasing.

What does this mean for polymer science? The scholarly publishing environment is evolving, and ACS Publications has adapted. In 2020 it launched JACS Au (edited by Prof. Christopher W Jones) as an open access alternative to JACS. JACS Au welcome submissions across all chemistry disciplines, including polymer science. The appointment of Prof. Rodney Priestly as an Associate Editor of JACS Au, highlights the breadth and excellence of polymer science that the journal endeavors to publish.

ACS Publications recently introduced the **ACS Au portfolio of nine subject-specific community journals** with Prof. Shelley Minteer (University of Utah) as Editor-in-Chief. The portfolio includes ACS Polymers Au, for which Prof. Arthi Jayaraman (University of Delaware) serves as Deputy Editor, with Prof. Harm-Anton Klok (Lausanne, Switzerland) supporting her as Associate Editor. The journal has a broad scope covering all areas of macromolecular and soft matter science and their applications. As an open access journal, ACS Polymers Au has no barriers to readers. This means research can be built on more quickly, increasing the influence of authors so they can boost their impact. If you're interested in reaching more readers through open access publishing, Arthi and Harm-Anton would welcome the opportunity to evaluate your next submission.

More detail on licenses, publishing agreements, and other possible discounts for authors is at <https://acsopenscience.org/open-access/pricing/>. Specifically, I would like to thank Sophia Garakyaraghi at ACS Pubs for assisting in the preparation of this journal article.





## MEMBER-AT-LARGE REPORT

Each day, more and more of our members are getting vaccinated and returning to labs and offices around the world. Despite the hardships faced by students, faculty, and other POLY professionals during the COVID-19 pandemic, POLY activity still thrived. This past year, we initiated three new student chapters: University of Massachusetts-Amherst (led by Liz Stubbs), University of New Hampshire (led by Wynter Paiva), and Arizona State University (led by Cody Weyhrich). At POLY, students are a priority and we are thrilled to welcome these new Student Chapters!

While we are looking forward to seeing our POLY members at in-person meetings over the next year, we will continue to find ways to keep our members active virtually and to provide value to POLY membership. We are exploring new webinar platforms to expand our educational and professional development capabilities as well as a strategy to offer POLY workshops and other events virtually.

We encourage our member to take advantage of the other benefits we offer, especially those available to graduate students. Other benefits that our POLY members can access are:

- Eligibility for awards (and spotlighted in a POLY E-News)
- Alerts for academic, national lab, and industrial job opportunities shared through the POLY list serv/social media
- Networking and professional development events at local/national ACS meetings and local POLY/PMSE chapters
- Industrial scientist support and networking through IAB (Industrial Advisory Board)
- Polymer science-related conferences and workshops advertised through the POLY list serv/social media
- Online educational webinars and webshop series covering cutting-edge polymer research
- Opportunity to vote for the Executive Committee (annually)
- Recognition for membership (5th, 10th, 20th, and 30th anniversaries)
- Student support – student awards, student symposia, career panels at ACS meetings, support for student chapters
- An excellent support group for building strong networks in the polymer community!

If you have other ideas of how we can keep enhancing the value of POLY membership please contact Kat Knauer at [kmk06f@gmail.com](mailto:kmk06f@gmail.com). We want to thank our members for their support and we encourage everyone to stay safe!

**FREE 1st Year Membership!**

[Member-At-Large](#)  
Katrina Knauer, [kmk06f@gmail.com](mailto:kmk06f@gmail.com)

## 3-MINUTE PITCH COMPETITION

We are calling on all of our awesome Student Chapters to host their own 3-Minute Pitch Competition!

A 3-minute pitch competition challenges graduate students to present their PhD research in 3 minutes or less in a captivating and engaging manner. Student chapters will be responsible for choosing a date for the competition (any time between now and July 10th) and a panel of judges (3 judges minimum). The selected winners of each university will receive a \$500 prize (sponsored by POLY) as well as free registration for the upcoming National Graduate Research Polymer Conference (NGRPC) which will be hosted virtually by Virginia Tech July 26th-July 29th. Winners from the student chapter competitions will then compete in a national competition at the NGRPC where a grand prize of \$1,500 will be awarded to the 1st place winner and \$500 to the 2nd place winner.

Student chapters are free to organize their competitions virtually or in person depending on their respective university COVID restrictions. The judges must be either faculty from respective universities or an external representative from industry or national lab.

Once you have set a date for your local competition please contact POLY's member-at-large, Katrina Knauer ([kmk06f@gmail.com](mailto:kmk06f@gmail.com)) with your dates and the judges (three judges minimum). Katrina will be the main point of contact for the competitions.



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WEI GAO  
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ExComm & Past Chairs Dinner, Fall 2019