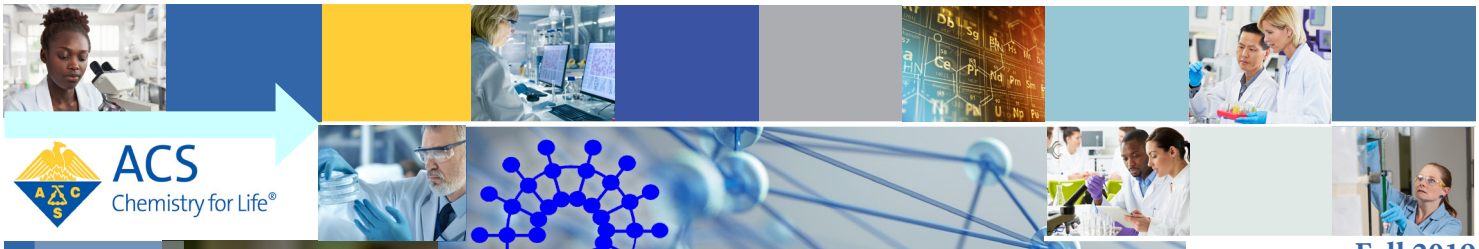


ACS Chemistry for Life®

# POLY NEWSLETTER

Fall 2019

American Chemical Society
Division of Polymer Chemistry, Inc.

2019 POLY Chair
Sarah Morgan

Dear POLY Community,

It has been a great pleasure to serve as POLY Chair over the last year. Thank you for working together to create opportunities for members to engage, advance science, and grow careers. POLY led scientific discussion at the forefront of international challenges in *Chemistry and Water* at the San Diego National Meeting, with symposia including *Characterization of Plastics in Aquatic Environments*; *Eco-Friendly Polymerization*; *Polymeric Materials for Water Purification*; and the DSM Graduate Student Award symposium focused on *Sustainability*. The spring 2020 national meeting is filled with exciting programming on the theme of **Macromolecular Chemistry: The Second Century**.

POLY has been very active at regional and local meetings, including CERM, NORM, and the upcoming SERMACS meeting in Savannah, October 20 – 23, 2019. If you are in the region, check out: *Biodegradable Polymers*, organized by Pascal Binda and Hua Zhao; *Frontier Research in Polymer Science*, organized by Erik Berda, and *Polymer Materials for the next generation sensing, diagnostics, and therapy*, organized by Colleen Scott and Davita Watkins. A POLY Networking Event will be held in New York City April 2020 (contact Kat Knauer).

Inside the newsletter you will find more information about new initiatives put in place to reach the broader POLY audience. Our first WebShop on controlled polymerization was broadcast on June 24th with great success. Thanks to Dominik Konkolewicz and the WebShop team. Our new education initiative, MACRO, is driving curriculum, professional development, and outreach efforts. MACRO is led by Phil Costanzo and Dominik Konkolewicz and supported by both POLY and PMSE. Workshops and webinars continue in popularity with several new offerings planned in the coming year.

Please be sure to vote in the POLY elections. We have an outstanding slate of candidates who will surely drive POLY effectiveness. Please also be sure to nominate your colleagues and students for POLY awards. There are many opportunities for recognition and promotion of the POLY community.

Thank you all for supporting POLY through your membership. I hope to see you all in Philadelphia!

## Inside


- Chair Message
- Awards
- Webinars
- Elections
- IAB
- Workshops
- Webshop
- Salamone Obit.
- MACRO
- National Mtg.
- Councilors Rpt.
- Poster/Video Awd.
- Treasurer Rpt.


***POLY's Mission:***
***Advance the broader polymer enterprise and its practitioners to meet the global challenges of today and the future.***

## Upcoming

- November 1 Mark Awards Deadline
- November 30 POLY Fellows Award Deadline
- December 15 Next Generation Smart Materials Workshop
- January 15 Bio/Macro. Young Invest. Award Deadline
- January 25 Henkel Award Deadline
- February 23 Layered Poly. Systems Workshop

# 2019 FALL POLY AWARDS RECEPTION

## Plenary

The POLY/PMSE awards reception was held on Wednesday evening, August 28, 2019, at the ACS National Meeting in San Diego, CA, honoring outstanding achievements by its members. Benny Freeman (University of Texas at Austin), opened the event with a Plenary Lecture titled, “Ion Solubility, Diffusivity, and Transport in Charged Polymer Membranes.” 2019 POLY Chair, Sarah Morgan (University of Southern Mississippi) and 2019 PMSE Chair, Matthew Becker (University of Akron) had the pleasure of congratulating this year’s presenter.

## Young Industrial Polymer Scientist Award

Jason Rolland (Carbon 3D) was awarded the Young Industrial Polymer Scientist Award for his outstanding industrial innovation and creativity in the application of polymer science. Jason holds the VP position of Materials at Carbon 3D. As VP of Materials, Jason is tasked with creating the broadest possible range of materials for growing 3D objects with Carbon’s CLIP technology. Previously, he was Senior Director of Research at Diagnostics for All, and cofounded Liquidia Technologies. Jason holds a BS in chemistry from Virginia Tech, a PhD in chemistry from UNC Chapel Hill, and has over 25 current and pending patents.

## DSM Science and Technology Award

Royal DSM, the Global Life Science and Materials Science Company, sponsors an award which consists of 4 finalists. During the ACS National Meeting these four awardees present their research and DSM judges their presentations. A grand prize is presented on-site. Congratulations to finalists Malgorzata Chwatko (Univ. of Texas at Austin) POLY 328: "Compositionally Controlled Heterocopolymers Using Old and New Aluminum-Based Catalysts," David Fortman (Cornell Univ.) POLY 324: "Recyclable Cross-Linked Polyurethanes," Christopher Maroon (Univ. of Tennessee Knoxville) POLY 325: "Tailoring Vinyl-Addition Polynorbornenes for Advanced $CO_2$ Separation Membranes: High $T_g$ Glasses that behave like Rubbers," and Grand Prize Winner, Blaine McCarthy (Colorado State Univ.) POLY 327: "Organocatalyzed Atom Transfer Radical Polymerization: Sustainable Polymer Synthesis."

## Charles Overberger International Prize for Excellence in Polymer Research

This biennial award recognizes and encourages accomplishments of unusual merit in the field of basic or applied polymer science. Kenneth Wagener (Univ. of Florida) was the honored 2019 recipient.

## ACS Fellows Award

The (ACS) Fellows Program recognizes ACS members for outstanding achievements in and contributions to science, the profession, and the Society. POLY congratulated its POLY Division Members who received this honor including Hassan Bazzi (Texas A&M Univ.), Kevin Cavicchi (Univ. of Akron), Melissa Grunlan (Texas A&M Univ.), Marc Hillmyer (Univ. of Minnesota), Frieder Jaekle (Rutgers Univ. - Newark), Jerzy Klosin (The Dow Chemical Comp.), Bradley Olsen (Massachusetts Inst. of Technology), and Coleen Pugh (Univ. of Akron and Wichita State Univ.)

Sponsors:

ACS APPLIED POLYMER MATERIALS

ACS Macro Letters

Bio MACROMOLECULES

Macromolecules

# Biomacromolecules/Macromolecules Young Investigator Award

The ACS journals ACS Macro Letters, Biomacromolecules, and Macromolecules, in partnership with POLY, are proud to honor the 2019 Awardees Ilja Voets (Eindhoven Univ. of Technology) and Julien Nicholas (CNRS, Univ. of Paris-Sud). The award recognizes two rising stars every year who have made major impacts in the field of polymer science.

# Henkel Award of Outstanding Graduate Research in Polymer Science and Engineering

Henkel is proud to honor Jovan Kamcev (Univ. of California, Berkeley) for his Ph.D. earned from the Univ. of Texas at Austin under the supervision of Prof. Benny Freeman and Prof. Donald Paul. His presentation delved into the "Ion Partitioning and Transport in Ion Exchange Membranes: Importance of Counter-Ion Condensation." Dr. Kamcev is currently a postdoctoral research associate working with Prof. Jeffrey R. Long in the Department of Chemistry at University of California, Berkeley, where his current research focuses on developing novel porous network polymers for wide-ranging applications.

# Herman F. Mark Award

Nicholas Peppas (Univ. of Texas at Austin) was recognized with this award for his extraordinary contributions to the field of polymer science. His leadership in biomaterials science and engineering, drug delivery, bionanotechnology, pharmaceutical sciences, chemical, and polymer engineering has provided seminal foundations based on the physics and mathematical theories of nanoscale, macromolecular processes, and drug/protein transport and has led to numerous biomedical products or devices.

## APPLY FOR UPCOMING POLY AWARDS

*Deadline: 11/1/19*
**Mark Young, Scholar, and Senior Awards**
Purpose: Recognize excellence in basic or applied research and leadership in polymer science by scientists of all ages.

*Deadline: 11/30/19*
**POLY Fellows Award**
Purpose: Recognize excellence in all ways that POLY members advance our field of polymer science, either through scientific accomplishments, service to the profession, or both.

*Deadline: 1/15/20*
**Biomacromolecules/ Macromolecules Young Investigator Award**
Purpose: Honor the contributions of two individuals, early in their careers, who have made a major impact in the field of polymer science.

*Deadline: 1/25/20*
**Henkel Award of Outstanding Graduate Research in Polymer Science and Engineering**
Purpose: Recognize a graduate student or recent grad. who has completed an outstanding Ph.D. thesis in research accepted by a U.S. or Canadian University.

*Deadline: see web for deadline*
**POLY Graduate Student Travel Award**
Purpose: Provide funding for polymer graduate students to travel to the National ACS meeting to present the results of their research.

*Deadline: see web for deadline*
**POLY Poster Award**
Purpose: Increase the importance and visibility of posters being presented at ACS National Meetings in the POLY section.

**Awards Team**

**Johan Foster**
johanf@vt.edu

**Semra Colak Atan**
scolak@mmm.com

**Toby Nelson**
toby.nelson@okstate.edu

*Additional Information:*
*carleel@vt.edu -*
*https://polyacs.org/AWARDS/*

# LIVE WEBINARS AND YOUTUBE POSTS

POLY continuously strives to find new ways to deliver educational opportunities to both POLY members and the greater scientific community. The goal is to provide easily accessible information on cutting edge science while requiring no travel to meetings. Webinars are an excellent way to accomplish this goal. A live POLY Webinar features two speakers with 20 minute presentations by highly regarded guest speakers with a Q&A session at the end. Following the LIVE broadcast the webinar is posted to the POLY YOUTUBE channel with free access.

At the fall ACS National meeting POLY Chair, Sarah Morgan, selected a new Webinar Committee to include Laura Stratton (Polymer Chemistry Innovations, Inc), Tomonori Saito (Oak Ridge National Labs), and Brett Sumerlin (Univ. of Florida). The committee is currently working with ACS to develop a list of potential titles and dates for 2020. Webinar topics and dates will be publicized on the POLY webpage, media outlets, e-news, and POLY electronic discussion list (listserv).

In the meantime, please visit the POLY Youtube Channel to view past webinars!
POLY YouTube Channel link: https://www.youtube.com/channel/UCEKjJUWIMXvaBC_04RTcnxQ

## View Past POLY Webinars on YouTube

- The Power of Plastics Polymerized Ionic Liquids and Nanostructured Polymers
- How to Design the Next Generation of Sustainable Polymers
- How to Design Better Biomedicine: Polymeric Materials and Nanomaterials
- Semi-Conducting Polymers: The New Horizons and Unmet Future Challenges
- High Impact Nanotechnology Applications of Layer-by-Layer Assemblies
- Opportunities in Photochemistry: Photocontrol of Polymer Synthesis and Properties

# 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/

Complete and submit the web site form.

Members can send e-mails to:
POLY-L@LISTSERV.OKSTATE.EDU

SIGN UP TODAY!

# 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 and scroll to the bottom of the page.

# 2019 POLY ELECTIONS

Officer duties can be found online at: https://polyacs.org/elections/

The 2019 candidate information is summarized below. Full statements and bylaw information can be found online at polyacs.org. An email will be sent to all voting members containing website and login instructions. A postcard will NOT be sent out as in previous years, so please make sure to send your updated e-mail address to Carlee Linkous (carleel@vt.edu).

The 2018 POLY Election was a success providing approximately 19.6% voting-membership participation. POLY anticipates a repeat performance in 2019.

**VOTING ONLINE IS AS EASY AS 1-2-3!**

1. Watch for the email to be sent in October from elections@vote-now.com containing your individual password.
2. Once you recieve your email, go online to complete the election ballot.
3. If you do not receive an email by October 20th or for additional questions, please contact the POLY Business Office at kathyl@vt.edu.

**Elections Open: October 16th to November 16th**

## Vice Chair Candidates

Semra Colak Atan
3M

Jianjun Cheng
Univ. of Illinois at Urbana-Champaign

## Councilor

Greg Tew
Univ. of Massachusetts-Amherst

Derek Patton
Univ. of Southern Mississippi

## Councilor

Joseph Mabry
AFRL

Kathryn Beers
NIST

## Secretary

Erik Berda
Univ. of New Hampshire

Scott Iacono
U.S. Air Force Academy

## Alt-Councilor

Phil Costanzo
California Polytechnic State Univ.

Wei Gao
Dow Inc.

## Alt-Councilor

Emily Pentzer
Texas A&M Univ.

Yoan Simon
Univ. of Southern Mississippi

# THE INDUSTRIAL ADVISORY BOARD

I am excited to share with you the contributions made by the POLY Industrial Advisory Board (IAB) as well as keep you informed of other exciting developments as we plan for the future.

POLY Industrial Advisory Board (IAB) continues to keep POLY relevant to its industrial membership by supporting opportunities for networking, programming, education, and awards.

**Highlights:**

- Strong programming continued at the Fall 2019 ACS San Diego National Meeting with the 14th Industrial Innovations in Polymer Science (IIPS) symposium co-organized by Sean Ramirez (Illumina) and Laura Stratton (Polymer Chemistry Innovations, Inc.).
- IAB sponsored the 2nd Young Industrial Polymer Scientist Award and symposium for winner Jason Rolland of Carbon at the ACS San Diego National Meeting.
- IAB continues sponsorship of the Spring and Fall Graduate Student Travel Awards.
- The IAB hosted its biannual networking reception at the Harbor House during the ACS San Diego meeting.
- Several IAB members will receive IAB support to attend POLY workshops.

Planning and development is already in progress for 2020 and beyond. At the Spring 2020 ACS National Meeting in Philadelphia, the Industrial Advisory Board will be represented by the 15th IIPS symposium, co-organized by Brad Rodier (Rochal), Peter Boul (Aramco), and Mike Abrams (Arkema).

As always, I thank you for your active participation and encourage you to reach out to Vice Chair Corinne Lipscomb (3M, celipscomb@mmm.com) or me. I look forward to the participation of each of our members, sharing updates, and gleaning even more ideas for keeping POLY relevant for its industrial members.

**IAB Chair: Michael Hunt (MPD Chemicals)**
mhunt@mpdchemicals.com

**Mission Statement:** ***"Enhance and foster industrial engagement and support to develop programming, awards, and recognition, and education within the ACS Division of Polymer Chemistry."***

## Graduate Student Travel Award Awardees - Fall 2019

**Zachary Clauss**
***University of Utah***
*POLY #263 "Glycosylated Polypeptide Bottlebrushes"*
Presentation: Monday, August 26, 2019, 8:00 PM
Location: San Diego Convention Center
(Sci-Mix)

**David Mackanic**
***Stanford University***
*POLY #235 "Decoupling of Mechanical Properties and Ionic Conductivity in Supramolecular Stretchable Battery Materials"*
Presentation: Tuesday, August 27, 2019, 2:40 PM
Location: Room: Mission Beach C - Manchester Grand Hyatt San Diego

INDUSTRIAL ADVISORY BOARD

POLY IAB

3M, aramco, ADM, ARKEMA, BASF We create chemistry, covestro, DOW, DUPONT, EASTMAN, DSM BRIGHT SCIENCE. BRIGHTER LIVING, illumina, Gelest Enabling Your Technology, KRATON, Malvern Panalytica, Milliken, MPD Chemicals, NSC National Security Campus, Pfizer, PPG, Polymer Chemistry Innovations, Inc., Rochal INDUSTRIES LLC, TOSOH BIOSCIENCE, TOSOH, United Technologies Research Center, WYATT TECHNOLOGY

**CONGRATULATIONS!**

## *IPS Award*

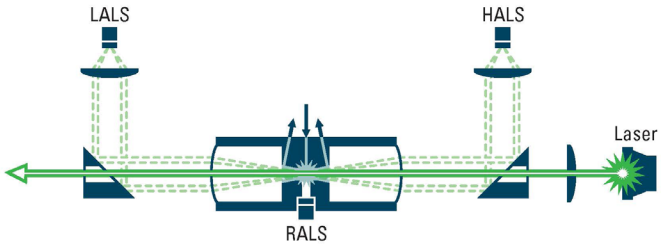
**2019 Industrial Polymer Scientist Award**

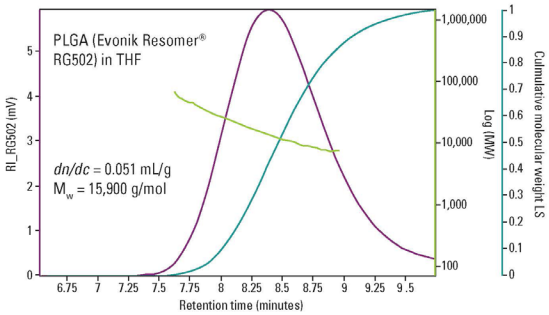
James Wang, Sinopec Shanghai Research Institute of Petrochemical Technology *(to be presented at the Fall ACS National Meeting).*

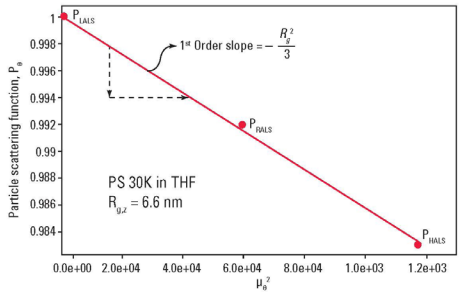
The Industrial Polymer Scientist Award recognizes outstanding industrial innovation and creativity in the application of polymer science conducted by individual scientists or research teams.

# A Revolutionary Technology for Polymer Characterization

## See Your Polymer in a Whole New Light with the New LenS3 MALS Detector!




### Revolutionary Detector Design Extends Light Scattering Capabilities

- Proprietary flow path geometry maximizes scattered light collection while minimizing noise from undesired flare effects
- New optical design allows exceptional signal-to-noise at extreme angles (10° and 170°)

### Molecular Weight Measured with Exceptional Sensitivity

- Direct and accurate molecular weight distribution by low angle light scattering (LALS) even for oligomers and low *dn/dc* samples
- Limit of detection less than 10 ng of PS 100K in THF

### $R_g$ below 10 nm by MALS for the first time!

- Angular dependence of scattered light is reliably detected to much lower size range
- The angular dissymmetry plot* replaces the traditional Zimm plot

** Patent Application# PCT/US19/12095: Light Scattering Detectors and Methods for the Same*

## A Winning Combination for Your Polymer Analysis

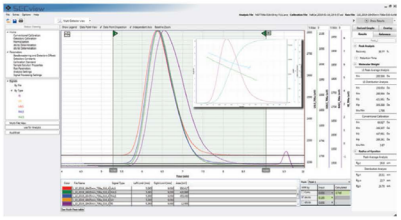
EcoSEC Elite® HLC-8420GPC

LenS™ 3 Multi-Angle Laser Light Scattering

SECview™ Advanced Multi-Detector SEC Software

+

+



Delivering greater stability and reproducibility than ever before

Driven by powerful and intuitive software

Supported by team of GPC experts

## For more information, visit www.tosohbioscience.com

EcoSEC Elite and Tosoh Bioscience are registered trademarks of Tosoh Corporation.
LenS and SECview are trademarks of Tosoh Bioscience LLC.

**TOSOH BIOSCIENCE**
www.tosohbioscience.com

TOSOH

# POLY WORKSHOPS

https://www.polyacs.net/workshops

## Register Now!

**NEXT GENERATION SMART MATERIALS**
**December 15-18, 2019**
The Desoto Hotel, Savannah, GA
E. Berda (Univ. New Hampshire), Y. Simon (Univ. Southern Mississippi), J. Foster (Virginia Tech), M. Thuo (Iowa State Univ.), and L. Deravi (Northeastern Univ.)

**LAYERED POLYMERIC SYSTEMS**
**February 23-26, 2020**
Holiday Inn Windsor, Sonoma Wine Country, Windsor, CA
J. Grunlan (Texas A&M) and S. Nazarenko (Univ. of Southern Mississippi)

**SUSTAINABLE POLYMERS**
**May 17-20, 2020**
Safety Harbor Resort and Spa, Safety Harbor, FL
M. Hillmyer (Univ. of Minnesota), T. Epps (Univ. of Delaware), and M. Robertson (Univ. of Houston)

**FLUOROPOLYMER**
**June 28-July 1, 2020**
Embassy Suites, Denver, CO
S. Iacono (USAFA), B. Ameduri (Charles Gerhardt Inst.), and J. McCollum (Univ. of Colorado,Colorado Springs)

**CONTROLLED RADICAL POLYMERIZATION**
**November 15-18, 2020**
Hotel Emeline, Charleston, SC
K. Matyjaszewski (Carnegie Mellon Univ.), N. Tsarevsky (Southen Methodist Univ.), H. Gao (Univ. of Notre Dame), and B. Sumerlin (Univ. of Florida)

**POLYMERS AND NANOTECHNOLOGY**
**February/March 2021**
Napa, CA, Venue TBD
R. Laine (Univ. of Michigan)

**Workshop Information**

**CHAIR: H.N. Cheng, USDA**
hncheng100@gmail.com

Workshop Proposals
https://www.polyacs.net/workshops
or contact:
Lesia Pristas, LESIAR@vt.edu

**Please let your graduate students know about this beneficial opportunity to network! To learn more: http://www.cpe.vt.edu/ngrpc2020/index.html .**

# E-LEARNING Web-shop series

Report Submitted By:
Dominik Konkolewicz

The polymer chemistry (POLY) division has had a long track record of success with in depth on-site workshops. These have allowed scientists to gain in-depth content knowledge in a specific topical area of the workshop. However, traditional on-site workshops can involve substantial travel and financial commitments from the attendees. POLY has also had long success with hosting more broadly accessible webinars, which offer short and focused content in an emerging area of polymer chemistry, although in a relatively short format. The goal of the WebShop was to develop a new type of broadly accessible web-based workshop (WebShop). POLY was fortunate enough to have the initial WebShop supported by an innovative project grant (IPG) from the American Chemcial Society. These WebShops were designed to bridge traditional web-based seminars (Webinars) and more traditional in-person POLY workshops. As a result of the online format and low subscription fee of $99 per IP address, the WebShop is much more widely accessible to all POLY members and provides value to the large fraction of our division members that do not (or unable to) attend National ACS Meetings every year (estimated at about 80% of our membership). Indeed, many scientists could and did participate in the WebShop from a single subscription using a projector and a common viewing space.

The inaugural WebShop was held on June 24 2019 at 11:30 AM EST, and reached a diverse range of polymer chemists across the nation, leveraging the existing collaboration with ACS Webinars and POLY. Dr. Dominik Konkolewicz was the host and organizer of the inaugural WebShop, with Dr. Marc Hillmyer (the host of the inaugural Webinar series) acting as executive producer and Lesia Linkous Pristas providing outstanding support from the POLY business office (as usual). The inaugural WebShop was on the topic of controlled polymerization, featuring four internationally-reconginzed leaders in controlled polymerization: Dr. Kris Matyjaszewski (CMU); Dr. Brent Sumerlin (UFL); Dr. Tanja Junkers (Monash); and Dr. Rachel O'Reilly (Birmingham) discussing their research and also broader issues and guidelines for creating polymers with precise structure and controlled architecture. The talks were all excellent, with Dr. Matyjasewski focusing on controlling radicals and atom transfer radical polymerization, Dr. Sumerlin focusing on reversible addition fragmentation chain transfer polymerization and photochemistry, Dr Junkers describing strategies to make complex multiblocks and enhance livingness, while Dr. O'Reilly described how controlling polymer architecture can promote interesting self-assembly and crystallization phenomena.

## Have you seen an ACS Webinar?

ACS Webinars are your source for online live and on-demand content, created by the American Chemical Society.

ACS Webinars connect you with subject experts and global thought leaders in chemical sciences, management, and business on relevant professional issues.

Webinars shown weekly on Thursdays at 2pm ET.

Watch for **FREE** at your convienience.

Upcoming ACS Webinars:

***Treating Diabetes: Designing the Once-Weekly and Oral GLP-1 Semaglutide**
- Date: October 24, 2019
- Speaker: Jesper Lau, VP Novo Nordisk A/S

***Combating Climate Change with New Nanobugs: Teaching Bacteria to Eat Carbon Dioxide and Light with Quantum Dots**
- Date: November 7, 2019
- Speaker: Prashant Nagpal, Univ. of Colorado Boulder

The WebShop allowed attendees to engage with speakers through on-line question and answer sessions. The question and answer sessions were quite lively and informative, with many insightful and engaging questions from the participants. It was a treat to see the depth of questions from the audience, with questions ranging from "how to guides" through complex and insightful mechanistic questions. Following the success of the live broadcast, a rebroadcast of the original recording on October 8, 2019 at 1 AM EST was scheduled so that the rest of the world can view the "Controlled Polymerization" WebShop (for an even smaller fee). Looking forward, the success of the inaugural WebShop encourages POLY to continue the WebShops on other topics in modern Polymer Chemistry with Dr. Konkolewicz serving as the new Executive Producer.

# IN MEMORY OF JOSEPH SALAMONE

Dr. Joseph C. Salamone, internationally-renowned leader in polymer chemistry, passed away peacefully on July 9, 2019. Dr. Salamone lived a life so full of love that he dedicated himself across a wide spectrum of roles: father, grandfather, inventor and ballroom dancing enthusiast, to name a few. He was a person of rare determination, raised in a newly immigrated Italian-American family, who focused on improving his life and all those he cared for. More notable than any other attributes, Dr. Joseph Salamone was a provider of compassion and innovation.

Dr. Salamone was the first-born son in his generation, and at a minimum the 10th Joseph Salamone. He was highly motivated to succeed: he rose from assistant professor to professor in six years and to Dean at U. Mass Lowell within 8 years. During this time he cofounded his first company in an entirely new field of eye care, following his invention of oxygen-permeable contact lenses. He retired for the first and only time in his early 40s, which lasted about six months. He then signed on to be the Editor-in-Chief of an encyclopedia on polymeric materials. In addition to creating new biomaterials in eye and wound care, he worked to advance the field of polymer chemistry. He is a co-founder of the Pacific Polymer Federation - a professional society for polymer scientists in countries around the Pacific Ocean. He lead the American Chemical Society Division of Polymer Chemistry, as Chair in 1982, to more comprehensive programming and financial soundness. Within the American Institute for Medical and Biological Engineering, he lead the expansion of the Industry Council. Dr. Salamone's most honored professional recognition was election into the U.S. National Academy of Engineering (NAE). NAE, under an 1863 congressional act signed by President Abraham Lincoln, is directed "whenever called upon by any department or agency of the government, to investigate, examine, experiment, and report upon any subject of science or art" by providing engineering leadership in service to the nation. In 2013, he was elected to the National Academy of Inventors where his class consisted of 26 presidents, 69 members of the National Academies (Medicine, Science and Engineering), 6 recipients of the US National Medal of Technology, and 9 Nobel Laureates. Many of his creations have come to market through licensing agreements with Rochal Industries (named after his children: Robert, Chris, and Alicia). Perhaps the most important of all of his contributions, Dr. Salamone was a profound humanitarian. His products have improved healthcare for millions of people in many countries.

Dr. Salamone is survived by his loving family: his wife Ann, son Chris, daughter Alicia, sister Joan, as well as cousins, spouses of children (Brent and Jade), and grandchildren (Cadence and Murphy). Throughout his long and illustrious career, Dr. Salamone made sure that his family came first, often moving work functions, or focusing his mind on developing products that might solve the challenges that families face every day. He functioned with "old fashioned" values of honor and duty, often befuddling or frustrating others with his sense of obligation. Sometimes these values might manifest as an overwhelming knowledge of classical music, oral debate about who would pay the dinner bill, or competitive round of air hockey wherein he would play with maximum vigor against all challengers. And, while perhaps confusing to onlookers, his perspective couldn't be more clear to his loved ones. He believed in dedicating himself with full effort, taking care of those he loved, and leading vigorously by example. Most interestingly, Dr. Salamone often remained silent as to his motivations, and only when pressed did his personal quest to improve the human and family condition arise. In passing, he is joined by his mother Angela, father Joseph, and son Bob. He is also gratefully survived by many of his Rochal partners, the Rochal team, colleagues and friends.

A celebration of his life was held on Saturday, July 13, 2019 at Porter Loring North Mortuary, San Antonio, TX. Donations to "Doctors without Borders" or anywhere of personal choosing would make Dr. Salamone pleased.

POLY COMMUNITY EVENT CALENDAR

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

Email: carleel@vt.edu with details of your contribution to the POLY Calendar.

POLY Community Event Calendar: http://bit.ly/polycalendar

REGIONAL MEETINGS

Have you attended a regional meeting? Upcoming meetings listed below:

*Southeastern Regional Meeting (SERMACS) - Chemistry on the Coast
October 20-23, 2019 - Savannah, GA
Website:https://www.sermacs2019.org/

*Southwest & Rocky Mountain Regional Meeting (SWRM/RMRM)
November 13, 2019 - El Paso, TX

*Central Regional Meeting (CERM)
May 27, 2020 - Columbus, OH

*Middle Atlantic Regional Meeting (MARM)
June 12, 2020 - New York, NY

*Northwest Regional Meeting (NORM)
June 28, 2020 - Bellingham, WA

*Northeast Regional Meeting (NERM)
October 18, 2020 - Rochester, NY

*Great Lakes Regional Meeting (GLRM)
June 6, 2021 - Minneapolis, MN

**If you're attending SERMACS or in the area be sure to check out the POLY Student Social!**
Location: Savannah Taphouse, GA
Date: October 21, 2019
Time: 5:30 - 7:30 PM
Website:https://savannahtaphouse.com

# MACRO - POLY'S NEW EDUCATION INITIATIVE

MACRO is a newly created committee that is being supported by both the POLY and PMSE Divisions of ACS. Current leadership includes Philip Costanzo from California Polytechnic State University (POLY) and Dominik Konkolewicz from Miami University (PMSE).

MACRO's goal is to grow and develop the polymer community by supporting three distinct initiatives.

1. Curriculum
2. Professional Development
3. Outreach

**Curriculum:** MACRO aims to 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).

**Professional Development:** MACRO aims to create an open forum for individuals within the polymer community to engage with each other on a range of topics, including but not limited to:

-Undergraduate level
-Graduate/Postdoc level
-Faculty level

**Outreach:** MACRO aims to create a depository of outreach materials for individuals to be able to spread their passon and knowledge of science to the general population. The goal is to create an interface where individuals can request instructional content based upon audience composition and support resources.

If you are interested in contributing, please feel free to contact Phil (pcostanz@calpoly.edu) or Dominik (d.konkolewicz@miamioh.edu).

MACRO Website: https://polyacs.org/macro/.

Pictured left to right: Philip Costanzo and Dominik Konkolewicz.

## CONNECTING WITH POLY MEANS CONNECTING WITH YOUR COMMUNITY

**www.twitter.com/POLY_ACS**
**@POLY_ACS**

**POLY E-LIST**

**https://polyacs.org/poly-electronic-discussion-list/**

**POLY WEB**

**www.polyacs.org**

**www.facebook.com/ACSPOLY/**
**"ACS Division of Polymer Chemistry"**

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

**www.linkedin.com**
**"Division of Polymer Chemistry"**

# POLY/ACS NATIONAL MEETING ACTIVITY

## 259th ACS National Meeting (Spring)
## March 22-26, 2020

**ACS Theme: Macromolecular Chemistry: The Second Century**
**Lead Program Chair: Hayley Brown** (hbrown1@dow.com)

- 2020 Paul J. Flory Polymer Education Award
- 50 Years of Polymer Science & Engineering at Southern Mississippi
- Celebrating Inclusivity in Polymer & Materials Science
- Celebrating Underrepresented Groups in Polymer Science
- Engineering Functionality into Bio(mimetic) Polymers
- Excellence in Graduate Polymer Research
- From Staudinger Macromolecules to the Genome of Macromolecules
- Frontiers in Conjugated Polymer Design & Synthesis
- General Topics: New Synthesis and Characterization of Polymers
- Green Polymer Chemistry: New Products, Processes & Applications
- Industrial Developments in Polyolefin Macromolecular Design
- Industrial Innovations in Polymer Science
- Macromolecular Science at the Dawn of its Second Century
- Polymer Colloids: Synthesis, Analysis, Modeling & Application
- Polymer Symposium Honoring the Winner of the Frederic Stanley Kipping 2020 Award
- Polymers and Advanced Materials for Humanity's Next Giant Leap
- Role of ASTM International in Polymer Testing & Analysis
- Structure to Function in Supramolecular Polymers & Materials
- The Road to Packaging Sustainability
- Undergraduate Research in Polymer Science

***POLY welcomes newest additions to the POLY programming committee.***

***Scott Iacono, US Air Force Academy (POLY Program Chair) and Robert Mathers, Pennsylvania State University.***

**Programming at National meetings of the American Chemical Society rely on volunteers to organize and execute symposia on a wide range of topics. POLY is dedicated to supporting symposia organizers and ensuring a robust and impactful presence of polymer-related research at National ACS Meetings. When proposing a symposium, please take into consideration the theme of the National ACS meeting and complementarity to symposia proposed for the meeting (see above), as well as recent symposia and POLY workshops. POLY seeks to support the scientific diversity of research and applications in the field of polymers.**

## 260th ACS National Meeting (Fall)
## August 16-20, 2020

**ACS Theme: Chemistry from Bench to Market**
**Lead Program Chair: Scott Iacono** (Scott.Iacono@usafa.edu)
***Currently accepting proposals for symposia***

- Additive Manufacturing: From Molecules to Marketplace
- Biomacromolecules/Macromolecules Young Investigator Award
- Characterization of Plastic Debris in Oceans and Inland Waterways
- DSM Graduate Student Award
- Entrepreneurial Polymer Chemistry: From the Lab to Start-Up
- General Topics: New Synthesis and Characterization of Polymers
- Henkel Award for Outstanding Graduate Research in Polymer Science and Engineering
- Industrial Innovations in Polymer Science
- Industrial Polymer Scientist Award
- Mark Young, Mark Scholar, and Mark Senior Awards (each recieve a 1/2 day symposia)
- NMR of Materials
- Overberger International Prize
- Recycling of Polymers or Circular Economy of Polymers
- Silicon based Hybrid Materials for Today, Tomorrow, and the Future

- **ACS National Meeting: www.acs.org/content/acs/en/meetings/national-meeting.html**
- **POLY Program Info: https://polyacs.org/poly-at-national-acs-meetings/**
- **POLY Abstracts Archieve: https://polyacs.org/poly-at-previous-national-acs-meetings/**
- **ACS Symposia Submission: https://polyacs.org/symposium-proposal-online-form/**

## Future ACS Meetings

Macromolecular Chemistry:
The Second Century
March 22 - 26, 2020
Philadelphia, PA

Chemistry from Bench to Market
August 16 - 20, 2020
San Francisco, CA

Bonding Through Chemistry
March 21 - 25, 2021
San Antonio, TX

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

March 20 - 24, 2022
San Diego, CA

August 21 - 25, 2022
Chicago, IL

March 26 - 30, 2023
Indianapolis, IN

August 13 - 17, 2023
San Francisco, CA

March 17 - 21, 2024
New Orleans, LA

August 18 - 21, 2024
Denver, CO

http://bit.ly/futureacsmeetings

# POLY COUNCILORS' REPORT

The 258th ACS National Meeting held August 24-29, 2019 in San Diego with the theme "Chemistry and Water" was attended by over 12,000 members, exhibitors, and guests. At the ACS Council meeting that was held on August 28, the Council approved the continuation of the Committees on International Activities and Professional Training, contingent on approval by the Board of Directors. The Council also approved the creation of an ACS International Chemical Sciences Chapter in the Republic of Georgia, contingent on approval by the Board of Directors.

The Committee on Nominations and Elections is soliciting Councilors' input of qualified individuals for President-Elect and/or Directors for future consideration. Suggestions can be sent to nomelect@acs.org. Ballots for the 2019 fall national election will be distributed starting on September 30th, with a voting deadline four weeks later on October 25th.

The Society's 2019 financial performance through July 31st yielded a Net from Operations of $30.1 million. This is $10 million favorable to the Approved Budget, and $1.7 million less than the same period in 2018. Total revenues are right on budget at $338 million. Total expenses are $308 million, which is $10 million favorable to budget.

Divisional Activities Committee (DAC): (Mary Ann Meador) The DAC is moving forward with developing the concept of Convergent Research Communities as a way to enhance collaborative programming between divisions on emerging topics. DAC once again hosted a well-attended breakfast meeting for program chairs to collaborate on programming and plan to continue this at future meetings. More new members have taken advantage of the three free division memberships available when they join ACS. This has resulted in 39% of ACS members being members of at least one division up from 32.5%.

JBCCP (Greg Tew): ACS Publications continues to lead in the area of open-access publications. The division management reported on ACS Conference of Editors that was held in January 2019. Topics included updates on operational issues and a review of ongoing developments across all aspects of the Society's publishing activities. The theme for this meeting was "The Pursuit of Excellence" which featured speakers from among the editors, staff, and the president of the US National Academy of Sciences. JBCCP Strategic Planning continued to focus on re-shaping and the various activity aspects of the committee's charge including wider dissemination around copyright.

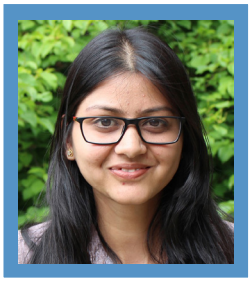
**Vote for 2020 President-Elect before October 25th!**
**Ballots were distributed on September 30th.**
**Presidential Candidates: H.N. Cheng and Carol A. Duane.**

Report Submitted By:
Joseph Mabry, Mary Ann Meador, Greg Tew, and Kathryn Uhrich

# POLY POSTER AWARD

- Established to increase the importance and visibility of POLY posters presented at ACS National Meetings.
- Goal: Acknowledge high-quality research.
- More than 60 POLY Posters were reviewed during Fall Sci-Mix poster session.
- Poster participants are judged on the quality and the impact of their research, clarity of poster's design, and presentation and communication skills.

## Congratulations Fall Awardees



**Shailja Goyal, Iowa State University**
288: Synthesis, Characterization, and Cure Kinetics Study of Carborane Containing Cyanate Esters with Excellent Thermal Stability

**Stefan Huber, University of Konstanz**
255: Combining Controlled Suzuki-Miyaura Cross Coupling Polymerization and Controlled Radical Polymerization for the Synthesis of Conjugated Rod-Coil Copolymers

**Travis Varner, UNC Chapel Hill**
17: Stereocontrolled Cationic Polymerization of Vinyl Ethers

**Enter the POLY Outstanding Poster Competition!**
To be eligible for the award, candidates MUST choose "Consider for Sci-Mix" during their abstract submission for the ACS Meeting. The Sci-Mix Poster Session is typically held on Monday evening at 8:00 PM with posters contributed by each participating division.

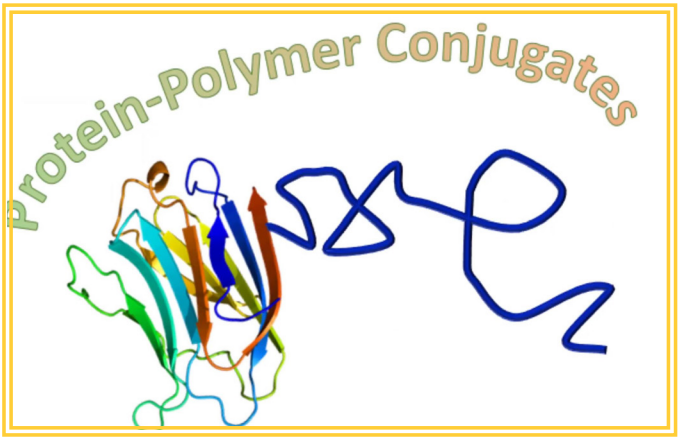
*Sponsored By:* CAMBRIDGE UNIVERSITY PRESS

# POLY VIDEO AWARD

Amanda Pritzlaff, University of Florida, is the recipient of the 2019 Video Award. Amanda's video summarizes the main concepts of Protein-Polymer Conjugates. In addition to receiving a certificate and $250 prize, the winning video was posted online to the POLY YouTube Channel.

The purpose of this award is to prepare young chemists to present their research and interact with a broad range of audiences, including not only senior scientists, but also, the general public. To be eligible, current PhD students or post docs should submit a three-minute video describing their research to a non-technical person. The next award deadline will be July 15, 2020. For further details, visit the POLY webpage, at POLYACS.ORG under "AWARDS".

**Congratulations!**
**Amanda Pritzlaff**
**University of Florida**




**View other video awards at https://www.youtube.com/watch?v=4SvkXdPV4-Y**

*Special thanks to Semra Colak Atan and the volunteer judges*

# TRESURER'S REPORT

The table below is a summary of the 2018 activity, the 2019 approved budget, and the 2019 income and expenditures for POLY as of July 31, 2019. POLY is a non-profit organization and as such, the Executive Committee is challenged to provide excellent services and growing benefits for its members while maintaining a balanced annual budget.

In recent years, it has become challenging to find committed long-term sponsors to support the key POLY awards. POLY continues to annually fund its major awards including the Carl Marvel-Creative Polymer Chemistry Award, Herman Mark-Polymer Chemistry Award, Paul Flory-Polymer Education Award, and the Industrial Polymer Science Award though the POLY investment fund. This change, voted by the Executive Committee in 2017, took effect starting in 2018. As of January 1, 2019, POLY has $924k in investments which continues to support the budget annually.

As to best serve our membership, POLY continues to look for ways to reduce expenditures. Election announcement and directions are posted in the Fall Newsletter, which is circulated during the election period, and the reminder post-card mailings have been discontinued. In 2018, publishing of the Newsletter went entirely electronic, enabling $8K in yearly cost savings. The POLY business office has significantly enhanced the reading experience of this new electronic Newsletter through design and interactive options. POLY continually drives towards reducing costs at the National ACS meetings while ensuring excellent services for POLY members. POLY continues to provide support via finances and innovative approaches to its membership. A new Education Committee has been created in 2019 for our younger and aspiring members, and the IAB (Industrial Advisory Board) continues to support, organize symposia, and sponsor awards aimed at our members in industry. Topical workshops, organized by POLY members, offer great value to both the Division and our members.

POLY continues to seek sponsors for receptions, coffee sessions, awards including student and poster awards, newsletters, and workshops to help offset growing expenses. Please contact Christine Coltrain, Christine.coltrain@kodak.com, or Kathy Mitchem, kathyl@vt.edu for further information about these opportunities.

The 2020 POLY budget will be developed during December 2019 and approved during the POLY Executive Committee Meeting in January 2020. Please submit requests for funding for committee activity, symposium support, and other POLY related activity directed to the POLY Treasurer, Christine Coltrain, Christine.coltrain@kodak.com, by December 1, 2019.

Report Submitted By:
Christine Coltrain

| | 2018 Actual | | 2019 Budget | | 2019 Jan-July | |
|---|---|---|---|---|---|---|
| Budget Category | Income | Expense | Income | Expense | Income | Expense |
| Dues/ACS Allocations | $148,512 | | $149,700 | | $93,931 | |
| National Meetings Activities | $53,139 | $186,634 | $56,500 | $175,600 | $32,390 | $86,266 |
| Workshop Activities | $262,295 | $209,906 | $220,075 | $167,825 | $198,023 | $76,611 |
| Administrative | $0 | $168,161 | $0 | 171,500 | $0 | $148,317 |
| Publication/Advertising | $14,207 | $4,440 | $14,150 | $4,900 | $6,690 | $2,358 |
| Committee/Awards Activities | $68,898 | $86,333 | $49,000 | $66,300 | $32,850 | $21,578 |
| Cashed Investments/Savings | $87,000 | | $96,700 | | $50,000 | |
| Total Budget | $634,052 | $655,474 | $586,125 | $586,125 | $413,883 | $335,131 |

TIME-CRITICAL CONFIDENTIAL PROBLEM SOLVING SINCE 1973

- CHEMICAL ANALYSIS AND CHARACTERIZATION
- THERMAL ANALYSIS AND RHEOLOGY
- MECHANICAL TESTING
- ORGANIC SYNTHESIS
- LAB COMPOUNDING, PELLETIZING AND INJECTION MOLDING
- FAILURE ANALYSIS
- QUALITY ASSURANCE
- CHEMICAL RESISTANCE
- ACCELERATED WEATHERING
- FDA EXTRACTIONS
- R & D

- PLASTICS
- POLYMERS
- RUBBER
- ASTM

P: 281-879-8600
F: 281-879-8666

10626 KINGHURST
HOUSTON, TX 77099

POLYHEDRON LABORATORIES, INC.®
www.polyhedronlab.com

American Polymer Standards Corporation
8680 Tyler Blvd., Mentor, OH 44060
Phone: (440) 255-2211 * Fax: (440) 255-8397

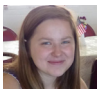
★GPC/SEC Analysis (Organic & Aqueous)

★GPC/SEC Polymer Standards (Organic & Aqueous)

*Visit Our Website for Full Product Listings*

www.ampolymer.com

*Printable PDF of catalog available on webiste*



## Contact POLY for Advertising Opportunities, Membership Benefits, & More

- Newsletter & E-news Advertising
- Membership Benefits
- POLY Workshops
- POLY Webinars
- ACS National Meetings
- POLY Sponsored Events

POLY Business Office
1075 Life Science Circle, M.C. 0917
ICTAS II, Virginia Tech
Blacksburg, VA 24061
540-231-3029, KATHYL@VT.EDU

## ACS Division of Polymer Chemistry, Inc. - Executive Committee

**CHAIR**
SARAH MORGAN
Univ. of Southern Mississippi
Sarah.Morgan@usm.edu

**CHAIR-ELECT**
MICHAEL MEADOR
NASA Glenn (Retired)
michael-meador@sbcglobal.net

**VICE CHAIR**
ANDREA KASKO
Univ. of California, Los Angeles
akasko@ucla.edu

**SECRETARY**
ERIK BERDA
Univ. of New Hampshire
Erik.Berda@unh.edu

**TREASURER**
CHRISTINE COLTRAIN
Eastman Kodak Company
christine.coltrain@kodak.com

**MEMBER-AT-LARGE**
KATRINA KNAUER
BioCellection
katrina@biocellection.com

**PAST CHAIR**
DIANA GERBI
3M (Retired)
dgerbi773@gmail.com

**COUNCILORS**
JOSEPH MABRY
Air Force Research Lab.
joseph.mabry@us.af.mil

**COUNCILORS** *(continued)*
MARY ANN MEADOR
NASA Glenn (Retired)
mabmeador@gmail.com

GREG TEW
Univ. of Mass., Amherst
tew@mail.pse.umass.edu

KATHRYN UHRICH
Univ. of California, Riverside
kathryn.uhrich@ucr.edu

**ALTERNATE COUNCILORS**
SEMRA COLAK ATAN (3M)
scolack@mmm.edu

JOHAN FOSTER (Virginia Tech)
johanf@vt.edu

LAURA STRATTON (Polymer Chemistry Inn.)
laura@polychemistry.com

BRENT SUMERLIN (Univ. of FL)
sumerlin@chem.ufl.edu

ExComm & Past Chairs Dinner, Fall 2019