



DIVISION OF POLYMERIC MATERIALS: SCIENCE  
& ENGINEERING

## 2020 Newsletter

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**Dear PMSE member,**

Welcome to the first issue of *PMSE News in 2020!* Read on for a preview of PMSE sessions at the Spring 2020 National ACS meeting in Philadelphia, meet the latest PMSE award winners, and learn where to find useful resources for career and professional development.

We strive to bring relevant, timely and useful information right to your desk. We want to hear from you on what else you'd like to see included in these newsletters - please email the [Editor pmsenews@gmail.com](mailto:pmsenews@gmail.com) with your feedback.

Have a happy and safe holiday!

Sincerely yours,  
PMSE Newsletter Editor

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**Mark your calendar!**

March 22-26, 2020 The [Spring ACS National Meeting](#) will be held in Philadelphia

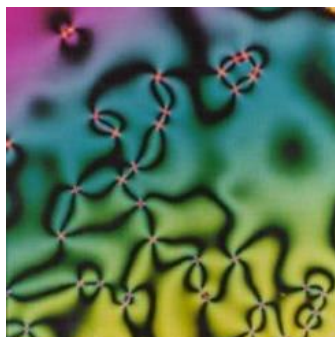
### Useful Resources

Not able to attend last ACS national meeting? Like some talks and want to watch them again? [View selected presentations](#) from ACS meetings anytime, anywhere on your computer or mobile device.

ACS webinars

Learn from the best and brightest minds in chemistry. Hundreds of webinars presented by subject matter experts in the chemical enterprise.  
<https://www.acs.org/content/acs/en/acs-webinars.html>

### Picture of the Quarter



Curious about this picture on PMSE twitter account? It is a nematic liquid crystal polymer under polarized light.  
(Provided by Qianghuang Lin, 2020 Roy W. Tess Award winner)

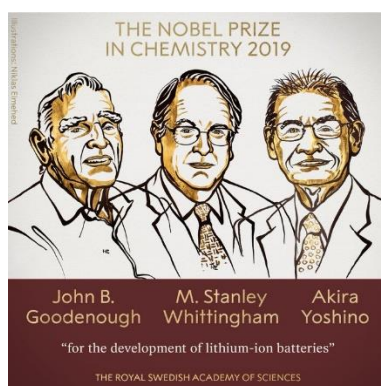
PMSE was founded by a group of scientists working in painting and coating technology. Paint, as shown in the main image, is still an interest still remains today. The use of polymeric materials has expanded into all fields of our world, and likewise has the research and development expanded to these new applications and materials.

If you are a PMSE member with an interesting application and photo of polymeric materials, **please contact the PMSE editor to have your image featured on the next newsletter and PMSE homepage.**

## PMSE News

- It is at an all-time high (>1000) of PMSE abstracts submitted so far for the ACS spring 2020 meeting at Philadelphia!
- The PMSE program at the ACS Fall National Meeting in San Diego features 16 symposia. PMSE is proud to serve as a home for this technical programming. To learn about these awesome symposiums:  
<https://pmsedivision.org/philadelphia-2020/>

- John B. Goodenough, M. Stanley Whittingham & Akira Yoshino won 2019 Nobel Prize in Chemistry “for the development of lithium-ion batteries.”



- Want to know more? Tune into ACS podcast with Goodenough.  
<https://cen.acs.org/people/profiles/Podcast-97-lithium-ion-battery/97/i35>
- Telephone interview with Stanley Whittingham following the announcement of the 2019 Nobel Prize in Chemistry  
<https://www.nobelprize.org/prizes/chemistry/2019/whittingham/interview/>
- 9<sup>th</sup> PMSE/Chinese Chemical Society Joint Symposium on Frontiers in Polymer Science and Engineering was held from Oct. 17-18, 2019 in Xi'an, China, along with ACS Publications Forum.



### ACS Fellows

<https://www.acs.org/content/acs/en/funding-and-awards/fellows/list-of-2019-acs-fellows.html>

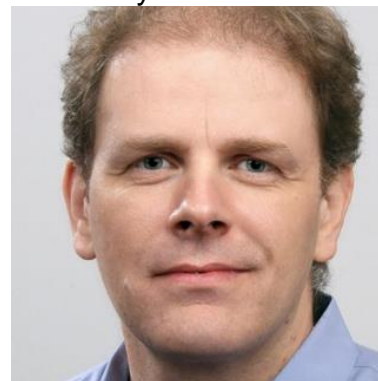
Melissa Grunlan – Texas A&M University



Kevin Cavicchi – University of Akron



Frieder Jaekle – Rutgers University- Newark

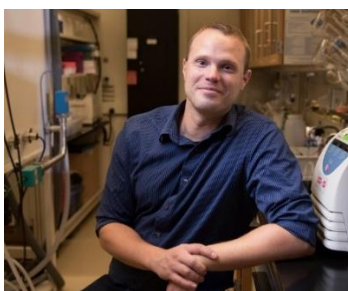


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Hilmar Koerner – Air Force Research Laboratory



Bradley Olsen - Massachusetts Institute of Technology



Coleen Pugh - The University of Akron, and Wichita State University



### PECASE Award Winners from PMSE

<https://pmsedivision.org/2019/08/pecase-award-winners/>

Edwin Chan – NIST (through DoC)



Luis Campos – Columbia (through NSF)



Darren Lipomi – UCSD (through DHHS)



## PMSE Fellows

<https://pmsedivision.org/pmse-fellows/>

Zhiqun Lin -  
Georgia Tech



Nicholas Peppas -  
The University of  
Texas At Austin



Jeffrey Pyun -  
University of  
Arizona



Dean Webster  
- North Dakota  
State University



## 2020 Distinguished Service Award Winner:

**David Chung**

<https://pmsedivision.org/2019/10/2020-distinguished-service-award-winner-david-chung/>



David Y. Chung received a B.S. from National Cheng Kung University in Taiwan and a Ph.D. under Professor Joseph P. Kennedy from the Institute of Polymer Science, The University of Akron. After graduation from Akron, David spent one year at Centre National de la Recherche Scientifique (C.N.R.S.) in Lyon, France as a visiting scientist, before he joined the Central Research of Dow Chemical in Midland, MI., where he worked on anionic polymerization and block copolymers. Three years later, David joined Paramins Division of Exxon Chemical Technology in Linden, NJ doing R&D and commercialization of new lube oil additives. After 13 years in NJ, David moved to Exxon Chemical's Butyl Polymers Technology in Baytown, TX and worked on various butyl process and product R&D projects until he retired from ExxonMobil in 2006. David is the author or co-author of over 50 patents associated with his industrial R&D work. David is also one of the recipients of the 2010 Thomas A. Edison Patent Awards sponsored by New Jersey Research & Development Council. After retired from ExxonMobil, David was tapped by PMSE in 2007 to manage the investments of PMSE funds, with the objectives of maintaining a steady cash flow to support various PMSE activities each year and enhancing PMSE's long-term financial security. Besides managing investments for himself as well as for PMSE, David also enjoys traveling to various parts of the world each year in retirement.



## Bioconjugate Chemistry Lectureship

The Bioconjugate Chemistry Lectureship recognizes an outstanding researcher for important recent advances in interfacing synthetic and biological systems.

2019 Award Winner: Heather Maynard  
University of California, Los Angeles, Department of Chemistry and Biochemistry



Nomination Deadline: February 29, 2020  
<https://pmsedivision.org/bioconjugate-chemistry-lectureship/>



Arthur K. Doolittle Award

## Arthur K. Doolittle Award

The Arthur K Doolittle Award recognizes an outstanding talk presented during a PMSE symposium at each of the Fall and Spring ACS National Meetings.

### 2019 Winners

2019

Julia Kalow (Northwestern University), "Reversibly photocontrolled stress-relaxing networks"

2019

Jian Qin (Stanford University), "Competition of solvation and entropic effects in ion-containing block polymers"

### Nominations

PMSE symposium organizers will submit nominations from their symposium to the PMSE Doolittle Award Committee.

<https://pmsedivision.org/doolittle-award/>



Cooperative Research Award  
in Polymer Science and  
Engineering

## Cooperative Research Award in Polymer Science and Engineering

The Cooperative Research Award in Polymer Science and Engineering is given to recognize the cooperative research between industrial and academic or industrial and national laboratory scientists. The cooperative research must be of significant importance to polymer science and technology.

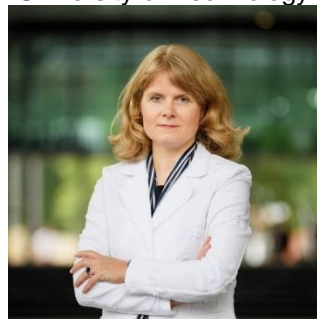
2020 Award Winner: Ahmed Abuelyaman (3M), Peter Bissinger (3M), Christopher Bowman (University of Colorado), Bradley Craig (3M), Karsten Dede (3M), Timothy Dunbar (3M), Adrian Eckert (3M), Babu Gaddam (3M), Guy Joly, Larry Krepski (3M), Joe Oxman (3M), and Timothy Scott (Monash University).

Nominations are to be submitted by August 15 of each year.

<https://pmsedivision.org/cooperative-research/>  
**Journal of Polymer Science Innovation Award**

The *Journal of Polymer Science Innovation Award* is to recognize polymer scientists under the age of 40 to celebrate their significant research innovation and achievement in the field.

2019 Award Winner: Patricia Dankers  
Eindhoven University of Technology



Nominations for the 2020 JPS Innovation Award will be accepted from November 1, 2019 through January 31, 2020

<https://onlinelibrary.wiley.com/page/journal/26424169/homepage/jps-innovation-award>



Roy W. Tess Award

### Roy W. Tess Award

To recognize outstanding individual achievements and note-worthy contributions to coatings science, technology and engineering, confirming PMSE's long-standing and continuing support and dedication to excellence in the science, technology and engineering of coatings.

2020 Award Winner: Dr. Qinghuang Lin



### Nominations Sought for the 2021 Roy W. Tess Award in Coatings

Nomination Deadline: September 1, 2020

<https://pmsedivision.org/roy-tess-award/>



Henkel Award for Outstanding Graduate Research in Polymer Science and Engineering

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

The Henkel Award for Outstanding Graduate Research in Polymer Science and Engineering is given to recognize a graduate student or recent graduate who has completed an outstanding Ph.D. thesis in polymeric research.

2019 Award Winner: Dr. Jovan Kamcev  
Advised by: Profs. Benny D. Freeman and Donald R. Paul, University of Texas–Austin



<https://pmsedivision.org/graduate-research-award/>

### PMSE Best Poster Award

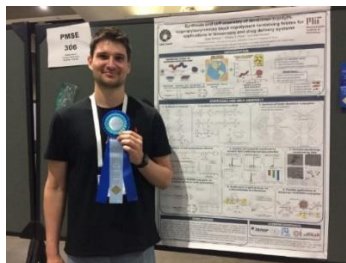
Recognizes an outstanding poster presented by an undergraduate and graduate student during the PMSE poster session at Fall and Spring ACS National Meetings.

### 2019 Fall Best Poster Award Winners

#### Synthesis and self-assembly of dendrimer-b-poly(N-isopropylacrylamide) block copolymers containing folates for applications in biosensors and drug delivery systems [PMSE 306]

Diego Luan Bertuzzi,<sup>1,2</sup> Catia Ornelas,<sup>3</sup> Bradley D Olsen<sup>2</sup>

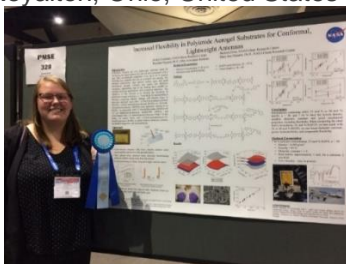
1. Institute of Chemistry, University of Campinas, Campinas, Brazil
2. Chemical Engineering, MIT, Cambridge, Massachusetts, United States
3. Institute of Chemistry, University of Campinas – UNICAMP, Campinas SP, Brazil



**Increased flexibility in polyimide aerogel substrates for conformal, lightweight antennas [PMSE 328]**

Jessica Cashman,<sup>1</sup> Baochau N Nguyen,<sup>2</sup> Bushara Dosa,<sup>1</sup> Mary Ann Meador<sup>1</sup>

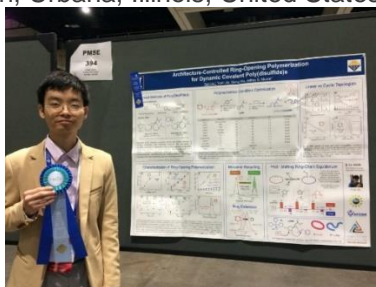
1. NASA Glenn Research Center, Cleveland, Ohio, United States
2. Ohio Aerospace Institute, North Royalton, Ohio, United States



**Lewis pair-mediated ring-opening polymerization of cyclic disulfides: Building high molar mass polymers with dynamic s-s bonds [PMSE 394]**

Yun Liu, Yuan Jia, Qiong Wu, Jeffrey Scott Moore

1. Beckman Institute for Advanced Science and Technology; Department of Chemistry, University of Illinois at Urbana-Champaign, Urbana, Illinois, United States



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## PMSE Young Investigator Symposium

Yan Xia (Stanford) and Rudy Wojtecki (IBMS) are organizing the 2020 Polymer Materials Science and Engineering (PMSE): Young Investigator Symposium. Established in 2011, the symposium aims to highlight the research early career scientists and engineers from academia, national labs, and industry who are emerging as leaders in their respective fields within polymer materials science and engineering. This specially organized symposium will be part of the 2020 Fall National Meeting of the American Chemical Society in San Francisco, CA held on August 16-20, 2020. For more information about the symposium, please see our website: <https://pmsedivision.org/pmse-young-investigator/>

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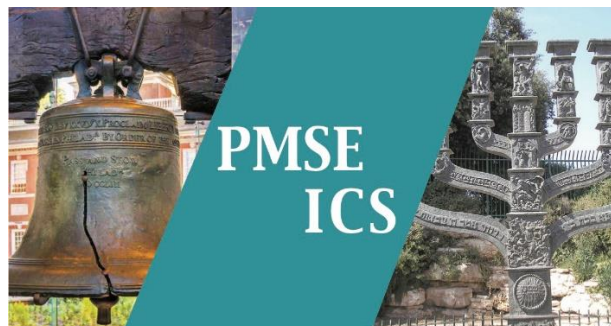
## Future Faculty Symposium

Davita L. Watkins (University of Mississippi, Ole Miss) and AJ Boydston (University of Wisconsin) are organizing the 2020 Polymer Materials: Science and Engineering: Future Faculty Symposium.

Established in 2018, the symposium aims to highlight the research endeavors of ~15 postdoctoral researchers who are emerging as leaders in their respective fields within polymer materials science and engineering. This specially organized symposium will be part of the 2020 Fall National Meeting of the American Chemical Society in San Francisco, CA held on August 16-20, 2020. For more information about the symposium, please see our website:

<https://pmsedivision.org/pmse-future-faculty/>

## PMSE-ICS (Israel Chemistry Society) Symposium



### POLYMERIC MATERIALS: FROM SYNTHESIS TO APPLICATION

#### US - ISRAEL JOINT SYMPOSIUM

**Michael S. Silverstein**, Technion, Israel  
**Melissa A. Grunlan**, Texas A&M University, USA  
**N. Gabriel Lemcoff**, Ben-Gurion University, Israel  
**Christopher L. Soles**, NIST, USA  
**Maya Davidovich-Pinhas**, Technion, Israel

**Macromolecular Chemistry:  
The Second Century**  
 ACS National Meeting  
 Philadelphia, PA, March 22-26, 2020



### CONFIRMED SPEAKERS

**Roey Amir**, Tel Aviv University, Tel Aviv  
**Ronit Bitton**, Ben Gurion University of the Negev, Be'er Sheva  
**Jason A Burdick**, University of Pennsylvania, Philadelphia, PA  
**Yachin Cohen**, Technion – Israel Institute of Technology, Haifa  
**Daniel Cohn**, Hebrew University, Jerusalem  
**Elizabeth Cosgriff-Hernandez**, University Texas at Austin, Austin, TX  
**Maya Davidovich-Pinhas**, Technion – Israel Institute of Technology, Haifa  
**Charles Diesendruck**, Technion – Israel Institute of Technology, Haifa  
**Avi Domb**, Hebrew University, Jerusalem  
**Moris Eisen**, Technion – Israel Institute of Technology, Haifa  
**Jaime Grunlan**, Texas A&M University, College Station, TX  
**Melissa A. Grunlan**, Texas A&M University, College Station, TX  
**Jeremiah Johnson**, Massachusetts Institute of Technology, Cambridge, MA  
**Moshe Kol**, Tel Aviv University, Tel Aviv  
**LaShanda Korley**, University of Delaware, Newark, DE  
**Gabriel Lemcoff**, Ben Gurion University of the Negev, Be'er Sheva  
**Tim Lodge**, University of Minnesota, Minneapolis, MN  
**Shlomo Magdassi**, Hebrew University, Jerusalem  
**Yitzhak Mastai**, Bar Ilan University, Ramat Gan  
**Krzysztof Matyjaszewski**, Carnegie Mellon University, Pittsburgh, PA  
**Kalman Migler**, National Institute of Standards and Technology, Gaithersburg, MD  
**Boaz Mizrahi**, Technion – Israel Institute of Technology, Haifa  
**Emily Pentzer**, Texas A&M University, College Station, TX  
**Jennifer Schaefer**, Notre Dame University, Notre Dame, IN  
**Ester Segal**, Technion – Israel Institute of Technology, Haifa  
**Roy Shenhar**, Hebrew University, Jerusalem  
**Meredith Silberstein**, Cornell University, Ithaca, NY  
**Michael S. Silverstein**, Technion – Israel Institute of Technology, Haifa  
**Christopher L. Soles**, National Institute of Standards and Technology, Gaithersburg, MD  
**Alejandro Sosnik**, Technion – Israel Institute of Technology, Haifa  
**Natalie Stingelin**, Georgia Institute of Technology, Atlanta, GA  
**Samuel Stupp**, Northwestern University, Evanston, IL  
**Matt Tirrell**, University of Chicago, Chicago, IL  
**Steven C. Zimmerman**, University of Illinois at Urbana Champaign, Urbana, IL



## PMSE Student Chapter News

\* We welcome the newest PMSE/POLY Student Chapter at Texas A&M! This brings us up to eight chapters, with two who are inactive. If your University is interested in starting a new PMSE/POLY Student Chapter, go to <https://pmsedivision.org/student-chapters/> for more information.

\* Every ACS National Meeting there is a PMSE/POLY Student Chapter Happy Hour on Monday night. Stay tuned for the time and location in Philly.

\* The PMSE Division had two student travel awards to the San Diego meeting:

Stephanie Aguilar (UCLA, Kaner Group)

Abby Delawder (Washington University, Barnes Group)

Nominations for student travel awards to the Philadelphia meeting will come out in January.

\* The University of Florida was named Chapter of the Year for AY 18-19. Go Gators!

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PMSE Publication Committee  
Huaxing (Daniel) Zhou (ExxonMobil Research and Engineering)  
Wenyi Huang (DuPont)

Contact us at [PMSEnews@gmail.com](mailto:PMSEnews@gmail.com)

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