THOMAS H. EPPS, III
University of Delaware (UD)
- Allan & Myra Ferguson Distinguished Professor of Chemical & Biomolecular Engineering
- Professor of Materials Science & Engineering
- Professor of Biomedical Engineering (affiliated)
- Director, UD, Center for Research in Soft matter and Polymers (CRiSP)
- Director, UD MRSEC, Center for Hybrid, Active, and Responsive Materials (CHARM)
- Deputy-Director, DOE EFRC, Center for Plastics Innovation (CPI)

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Lignolix, Inc.
- Co-founder
- Chief Scientific Officer
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Website: www.lignolix.com

Education:

NIST	Polymer Physics	NRC Postdoctoral Fellow	2006
University of Minnesota	Chemical Engineering	Ph.D.	2004
MIT	Chemical Engineering	M.S. (Practice School)	1999
MIT	Chemical Engineering	B.S.	1998

Graduate Advisor: Frank S. Bates, University of Minnesota
Postdoctoral Advisor: Michael J. Fasolka and Eric J. Amis, NIST-Polymers Division

Current and Previous Appointments:

Co-Director of Industrial Center for Polymer Innovation (iCPI)	2024 - present
Allan & Myra Ferguson Distinguished Professor of Chemical & Biomolecular Engineering	2021 - present
Director, UD MRSEC, Center for Hybrid, Active, and Responsive Materials (CHARM)	2020 - present
Deputy-Director, DOE EFRC, Center for Plastics Innovation (CPI)	2020 - present
Director, UD, Center for Research in Soft matter and Polymers (CRiSP)	2019 - present
Director, UD, Center for Molecular & Engineering Thermodynamics (CMET)	2017 - 2020
Professor, UD, Dept. of Chemical & Biomolecular Engineering	2016 - present
Professor, UD, Dept. of Materials Science & Engineering	2016 - present
Associate Professor, UD, Dept. of Chemical & Biomolecular Engineering	2012 - 2016
Associate Professor, UD, Dept. of Materials Science & Engineering	2012 - 2016
Martin Luther King, Jr. Visiting Professor, MIT, Dept. of Chemistry	2012 - 2013
Affiliated Faculty Member, UD, Dept. of Biomedical Engineering	2012 - present
Thomas & Kipp Gutshall Career Development Professor, UD, College of Engineering	2012 - 2020
Assistant Professor, UD, Dept. of Materials Science & Engineering	2011 - 2012
Member, Center for Fuel Cell and Battery Research (CFCBR)	2010 - present
Member, Center for Molecular and Engineering Thermodynamics (CMET)	2009 - 2020
Faculty Member, UD, Center for Neutron Science (CNS)	2007 - present
Affiliated Faculty Member, Delaware Biotechnology Institute (DBI)	2006 - present
Assistant Professor, UD, Dept. of Chemical & Biomolecular Engineering	2006 - 2012

Fellowships:
American Institute of Chemical Engineers (AIChE), Fellow, 2023
American Chemical Society (ACS), Polymeric Materials Science and Eng. Division (PMSE), Fellow, 2023
National Academy of Inventors (NAI) Fellow, 2022
American Chemical Society (ACS) Fellow, 2021
American Chemical Society (ACS), Division of Polymer Chemistry (POLY), Fellow, 2021
American Institute of Medical and Biological Engineering (AIMBE), College of Fellows, 2021
Royal Society of Chemistry, Fellow (FRSC), 2018

American Physical Society (APS) Fellow, 2017

Awards and Honors:
National Science Foundation (NSF) Distinguished Lecture, 2024
AIChE Minority Affairs, Eminent Chemical Engineer Award, 2023
Cornell University, Dept. of Chemistry and Chemical Biology, Covestro Lectures, 2023
University of North Carolina, Department of Chemistry, Slayton Evans Lecture, 2023
Johns Hopkins University, Chemical and Biomolecular Engineering, William H. Schwarz Lecture, 2023
University of Massachusetts – Amherst, Distinguished Alumni Lectures, 2022
Faculty Award for Excellence in Research and Entrepreneurship, UD, College of Engineering, 2022
University of Minnesota, Dept. of Chemistry, Jeannette Brown Lectureship, 2022
University of Illinois at Urbana-Champaign, Birnbaum Award, 2022
AIChE Minority Affairs William W. Grimes Award for Excellence in Chemical Engineering, 2021
University of Delaware, Men's Soccer Team – Most Valuable Professor Award, 2021
C&E News Trailblazer, 2021
Allan & Myra Ferguson Distinguished Professor of Chemical & Biomolecular Engineering, UD, 2021
Percy L. Julian Award (NOBCChE), 2020
University of Minnesota, Chemical Eng. and Materials Science Centennial & Jubilee Alumni Lecture, 2020
Texas A&M University, Dept. of Chemical Engineering, Lindsay Lectureship, 2017
American Chemical Society (ACS) Expert, 2017
Senior Member – Elected, AIChE, 2016
National Academy of Engineering (NAE) Arab-US, Frontiers of Engineering Participant, 2016
University of Notre Dame, Dept. of Chemical and Biomolecular Engineering, Thiele Lectureship, 2016
University of Massachusetts, Amherst - Graduate Students of Diversity Lectureship, 2016
John H. Dillon Medal, American Physical Society (APS), 2016
Owens Corning Young Investigator Award, AIChE, 2015
Kavli Fellow, National Academy of Sciences, 2014
National Academy of Sciences (NAS) Japan-US, Frontiers of Science Participant, 2014
Sigma Xi Young Investigator Award, 2014
National Academy of Engineering (NAE) US-EU, Frontiers of Engineering Participant, 2013
Thomas and Kipp Gutshall Chair of Chemical & Biomolecular Engineering, UD, 2012
Martin Luther King, Jr. Visiting Professor Award (MIT), 2012
UD Gerard J. Mangone Best Young Scholar Award (Alison Young Professor), 2011
DuPont Young Professor Award, 2010
PECASE Award - Department of Defense (AFOSR), 2009
Outstanding Junior Faculty Award, UD, College of Engineering, 2009
Air Force Young Investigator Award, 2009
National Academy of Engineering (NAE), Frontiers of Engineering Participant, 2008
DOW Distinguished Lecturer, UC Santa Barbara, 2007
Lloyd Ferguson Young Scientist Award (NOBCChE), 2007
National Science Foundation (NSF) CAREER Award, 2007
Gordon Research Conference (GRC) Carl Storm Fellowship, 2005
National Research Council Postdoctoral Fellowship, 2004
Bell Labs, Lucent Technologies, Corporate Research Ph.D. Fellowship, 1999
NSF Graduate Fellowship, 1999 (declined for Lucent Fellowship)
GEM Ph.D. Fellowship, 1999 (declined for Lucent Fellowship)
GEM Master's Fellowship, 1998
MIT 1K Entrepreneurial Winner for Natural Electric (NatEl) hydropower, 1998
American Chemical Society Scholarship Award, 1995

Editorial Boards:
Science Advances - Associate Editor (2018-2022)
Journal of Macromolecular Science: Pure and Applied Chemistry (2008-present)

Editorial Advisory Boards:
Accounts of Chemical Research [ACS] (2023-present)
Molecular Systems Design & Engineering [RSC] (2018-present)

Journal of Polymer Science [Wiley] (2015-present)
ACS Applied Polymer Materials [ACS] (2018-2021)
Soft Matter [RSC] (2015-2018)
Polymer Chemistry [RSC] (2013-2015)
ACS Macro Letters [ACS] (2012-2014)
Macromolecules [ACS] (2011-2014)

Advisory Boards:

- Chemical & Engineering News Advisory Board (2024-present)
- NSF Math & Physical Sciences Directorate Advisory Committee (2024-present)
- Department of Energy (DOE) Basic Energy Sciences Advisory Committee (BESAC) User Facility Construction Plans Subcommittee (2024-present)
- AMERIPEN Education and Research Advisory Group (ERAG) (2023-present)
- DOE BESAC Research Strategies Subcommittee (2023-present)
- NSF CCI Phase II - Center for the Chemistry of Molecularly Optimized Networks, External Advisory Board (2021-present)
- DOE BOTTLE Consortium Advisory Board (2021-present)
- LEAP Advisory Council - Mercer Consulting Firm (2020-present)
- MIT Practice School Advisory Board (2020-present)
- DOE BESAC Neutron Subcommittee (2019-2020)
- DOE BESAC (2018-present)
- National Academies' Condensed Matter and Materials Research Committee (CMMRC) (2017-2023)
- National Institute of Standards and Technology: Center for Neutron Research - Beamtime Allocation Committee (SANS/USANS) (2015-2020)
- Brookhaven National Laboratory - National Synchrotron Light Source - Beamline Advisory Team for Soft Matter Interfaces Beamline (2014-2017)
- American Chemical Society - Development Advisory Board (2014-2019)

Peer-Reviewed Publications:

H-index = 53 (Google Scholar as of June 27, 2024)
Total Citations = 10,061 (Google Scholar as of June 27, 2024)
Numbers in brackets are based on Google Scholar citations as of June 27, 2024
Underlined names are undergraduate coauthors

1. [275] Bailey, T. S.; **Epps, T. H., III**; Bates, F. S. *Macromolecules* **2002**, *35*, 7007-7017. "A noncubic triply periodic network morphology in poly(isoprene-*b*-styrene-*b*-ethylene oxide) copolymers."

2. [133] **Epps, T. H., III**; Bailey, T. S.; Pham, H. D.; Bates, F. S. *Chemistry of Materials* **2002**, *14*, 1706-1714. "Phase Behavior of Lithium Perchlorate-Doped Poly(styrene-*b*-isoprene-*b*-ethylene oxide) Triblock Copolymers."

3. [203] **Epps, T. H., III**; Bailey, T. S.; Waletzko, R. S.; Bates, F. S. *Macromolecules* **2003**, *36*, 2873-2881. "Phase Behavior and Block Sequence Effects in Lithium Perchlorate-Doped Poly(isoprene-*b*-styrene-*b*-ethylene oxide) and Poly(styrene-*b*-isoprene-*b*-ethylene oxide) Triblock Copolymers."

4. [168] **Epps, T. H., III**; Cochran, E. W.; Hardy, C. M.; Bailey, T. S.; Waletzko, R. S.; Bates, F. S. *Macromolecules* **2004**, *37*, 7085-7088. "Network Phases in ABC Triblock Copolymers."

5. [264] **Epps, T. H., III**; Cochran, E. W.; Bailey, T. S.; Waletzko, R. S.; Hardy, C. M.; Bates, F. S. *Macromolecules* **2004**, *37*, 8325-8341. "Ordered Network Phases in Linear Poly(isoprene-*b*-styrene-*b*-ethylene oxide) Triblock Copolymers."

6. [42] **Epps, T. H., III**; Chatterjee, J.; Bates, F. S. *Macromolecules* **2005,** *38*(21), 8775-8784. "Phase Transformations Involving Network Phases in ISO Triblock Copolymer-Homopolymer Blends."

7. [48] **Epps, T. H., III**; Bates, F.S. *Macromolecules* **2006,** *39*(7), 2676-2682. "Effect of Molecular Weight on Network Formation in Linear ABC Triblock Copolymers."

8. [245] Stafford, C.M.; Roskov, K.E.; **Epps, T. H., III**; Fasolka, M.J. *Review of Scientific Instruments* **2006,** *77*(2), 0239081-0239087. "Generating Thickness Gradients of Thin Polymer Films via Flow Coating."

9. [108] **Epps, T. H., III**; DeLongchamp, D. M.; Fasolka, M. J.; Fischer, D. A.; Jablonski, E. L. *Langmuir*, **2007,** *23*(6); 3355-3362. "Substrate Surface Energy Dependent Morphology and Dewetting in an ABC Triblock Copolymer Film." ***(corresponding author)***

10. [43] Young, W.; Brigandi, P. J.; **Epps, T. H., III,** *Macromolecules*, **2008,** *41*(17); 6276-6279. "Crystallization-Induced Lamellar-to-Lamellar Thermal Phase Transitions in Salt-Doped Polymer Electrolytes." ***(corresponding author)***

11. [110] Pathak, J. A.; Ho, D. L.; Lin, E. K.; Vukmir, M. K.; **Epps, T. H., III**; Roland, C. M. *Macromolecules*, **2008**, *41*(20); 7543-7548. "Structure Evolution in a Polyurea Segmented Block Copolymer Because of Mechanical Deformation."

12. [19] Roskov, K. E.; **Epps, T. H., III**; Berry, B. C.; Hudson, S. D.; Tureau, M. S.; Fasolka, M. J., *Journal of Combinatorial Chemistry*, **2008**, *10*(6); 966-973. "Preparation of Combinatorial Arrays of Polymer Thin Films for Transmission Electron Microscopy Analysis."

13. [222] Young, W.; **Epps, T. H., III.** *Macromolecules*, **2009**, *42*(7); 2672-2678. "Salt Doping in PEO-Containing Block Copolymers: Counterion and Concentration Effects." ***(corresponding author)***

14. [82] Singh, N.; Tureau, M. S.; **Epps, T. H., III.** *Soft Matter*, **2009**, *5*(23) 4757-4762. "Manipulating Ordering Transitions in Interfacially Modified Block Copolymers." ***(corresponding author)***
Highlighted in Brookhaven National Lab Research Newsletter

15. [70] Stefik, M.; Mahajan, S.; Sai, H.; **Epps, T. H., III**; Bates, F.S.; Gruner, S. M.; DiSalvo, F. J.; U. Wiesner. *Chemistry of Materials*, **2009**, *21*(22), 5466-5473. "Ordered three- and five-ply nanocomposites from ABC block terpolymer microphase separation with niobia and aluminosilicate sols."

16. [82] Albert, J. N. L.; Baney, M. J.; Stafford, C. M.; Kelly, J. Y.; **Epps, T. H., III.** *ACS Nano*, **2009,** *3*(12), 3977-3986. "Generation of Monolayer Gradients in Surface Energy and Surface Chemistry for Block Copolymer Thin Film Studies." ***(corresponding author)***

17. [15] Tureau, M. S.; **Epps, T. H., III.** *Macromolecular Rapid Communications*, **2009**, *30*(20) 1751-1755. "Nanoscale Networks in Poly(isoprene-b-styrene-b-methyl methacrylate) Triblock Copolymers." ***(corresponding author)***

18. [621] Albert, J. N. L.; **Epps, T. H., III.** *Materials Today*, **2010**, *13*(6) 24-33. ***[invited review article]*** "Self-Assembly of Block Copolymer Thin Films." ***(corresponding author)***

19. [43] Tureau, M. S.; Rong, L.; Hsiao, B.; **Epps, T. H., III.** *Macromolecules*. **2010,** *43*(21), 9039-9048. "Phase Behavior of Neat Triblock Copolymers and Copolymer/Homopolymer Blends Near Network Phase Windows." ***(corresponding author)***

20. [0] Tsui, O. K. C., **Epps, T. H., III**. *Journal of Polymer Science: Part B - Polymer Physics.* **2010**, *48*(24), 2531-2532. "The American Physical Society Division of Polymer Physics Special Issue Introduction." ***(corresponding author)***

21. [32] Kelly, J. Y.; Albert, J. N. L.; Howarter, J. A.; Kang, S.; Stafford, C. M.; **Epps, T. H., III**; Fasolka, M. J. *ACS Applied Materials & Interfaces.* **2010,** *2*(11), 3241-3248. "Investigation of Thermally Responsive Block Copolymer Thin Film Morphologies Using Gradients." ***(corresponding author)***

22. [110] Albert, J. N. L.; Bogart, T. D.; Lewis, R. L.; Beers, K. L.; Fasolka, M. J.; Hutchison, J. B.; Vogt, B. D.; **Epps, T. H., III.** *Nano Letters,* **2011**, *11*(3), 1351-1357. "Gradient Solvent Vapor Annealing of Block Copolymer Thin Films Using a Microfluidic Mixing Device." ***(corresponding author)***

23. [74] Roy, R.; Park, J. K.; Young, W.; Mastroianni, S.; Tureau, M. S.; **Epps, T. H., III.** *Macromolecules,* **2011,** *44*(10), 3910-3915. "Double-Gyroid Network Morphology in Tapered Diblock Copolymers." ***(corresponding author)***

24. [48] Kelley, E. G.; Smart, T. P.; Jackson, A. J.; Sullivan, M. O.; **Epps, T. H., III.** *Soft Matter*, **2011**, *7*(15), 7094-7102. "Structural changes in block copolymer micelles induced by cosolvent mixtures." ***(corresponding author)***

25. [15] Albert, J. N. L.; Kim, J.; Stafford, C. M.; **Epps, T. H., III.** *Review of Scientific Instruments*, **2011,** *82*, 0651031-0651037. "Controlled Vapor Deposition Approach to Generating Substrate Surface Energy/Chemistry Gradients." *(**corresponding author**)*
Highlighted in Journal of Biological Physics Research

26. [120] Lu, A.; Smart, T. P.; **Epps, T. H., III**; Longbottom, D. A.; O'Reilly, R. K., *Macromolecules*, **2011,** *44*(18), 7233-7241. "L-Proline functionalized polymers prepared by RAFT polymerization and their assemblies as supported organocatalysts**."**

27. [93] Young, W.; Albert, J. N. L.; Schantz, A. B.; **Epps, T. H., III,** *Macromolecules,* **2011,** *44*(20), 8116-8123. "Mixed-salt Effects on the Ionic Conductivity of Lithium-doped PEO-containing Block Copolymers." ***(corresponding author)***

28. [136] Lee, C.; Smart, T. P.; Guo, L.; **Epps, T. H., III**; Zhang, D., *Macromolecules*, **2011,** *44*(24), 9574-9585. "Synthesis and Characterization of Amphiphilic Cyclic Diblock Copolypeptoids from *N*-Heterocyclic Carbene-Mediated Zwitterionic Polymerization of *N*-Substituted *N*-Carboxyanhydride."

29. [15] Kelly, J. Y.; Albert, J. N. L.; Howarter, J. A.; Stafford, C. M.; **Epps, T. H., III**, Fasolka, M. J., *Journal of Polymer Science: Polymer Physics* **2012,** *50*(4), 263-271. "Manipulating Morphology and Orientation in Thermally-Responsive Block Copolymer Thin Films." ***(corresponding author)***

30. [83] Patterson, J. P.; Sanchez, A. M.; Petzetakis, N.; Smart, T. P.; **Epps, T. H., III**; Portman, I.; Wilson, N. R.; O'Reilly, R. K., *Soft Matter* **2012,** *8*(12), 3322-3328. "A simple approach to characterizing block copolymer assemblies: graphene oxide supports for high contrast multi-technique imaging."
Front Cover Article
Top Ten Most-Download January 2012
Highlighted in Materials Today

31. [151] Albert, J. N. L.; Young, W.; Lewis, R. L., III; Bogart, T. D.; Smith, J; **Epps, T. H., III,** *ACS Nano* **2012,** *6*(1), 459-466. "Systematic Study on the Effect of Solvent Removal Rate on the Morphology of Solvent Vapor Annealed ABA Triblock Copolymer Thin Films." ***(corresponding author)***

32. [31] Labiano, A.; Dai, M.; Young, W.-S.; Stein, G.; Cavicchi, K.; **Epps, T. H. III**; Vogt, B., *Journal of Physical Chemistry C* **2012,** *116*, 6038-6046. "Impact of Homopolymer Pore Expander on the Morphology of Mesoporous Carbon Films using Organic-Organic Self-Assembly."

33. [47] Kuan, W. F.; Roy, R.; Rong, L.; Hsiao, B.; **Epps, T. H., III**, *ACS Macro Letters* **2012**, *1*, 519-523. "Design and Synthesis of Network-Forming Triblock Copolymers Using Tapered Interfaces." ***(corresponding author)***
Highlighted in ACS Noteworthy Chemistry online

34. [15] Labiano, A.; Dai, M.; Taylor, D.; Young, W.-S.; **Epps, T. H., III**, Rege, K.; Vogt, B. D., *Microporous and Mesoporous Materials* **2012,** *160*, 143-150. "Slow Release Kinetics of Mitoxantrone from Ordered Mesoporous Carbon Films."

35. [179] Young, W.; **Epps, T. H., III**, *Macromolecules* **2012**, *45*(11) 4689-4697. “Ionic Conductivities of Block Copolymer Electrolytes with Various Conducting Pathways: Sample Preparation and Processing Considerations.” ***(corresponding author)***

36. [18] Tureau, M. S.; Kuan, W. F.; Rong, L.; Hsiao, B. H.; **Epps, T. H., III,** *Macromolecules* **2012,** *45*(11), 4599-4605. “Inducing Order from Disordered Copolymers: On Demand Generation of Triblock Morphologies Including Networks.” ***(corresponding author)***

37. [31] Mayeda, M. K.; Kuan, W. F.; Young, W. S.; Lauterbach, J. A.; **Epps, T. H., III,** *Chemistry of Materials* **2012,** *24*(14), 2627-2634. “Controlling Particle Location with Mixed Surface Functionalities in Block Copolymer Thin Films.” ***(corresponding author)***

38. [13] Tureau, M. S.; **Epps, T. H., III,** *Macromolecules* **2012,** *45*(20) 8347-8355. “Effect of Partial Hydrogenation on the Phase Behavior of Poly(isoprene-b-styrene-b-methyl methacrylate Triblock Copolymers.” ***(corresponding author)***

39. [60] Seppala, J. E.; Lewis, R. L., III; **Epps, T. H., III,** *ACS Nano* **2012,** *6*(11) 9855-9862. “Spatial and orientation control of cylindrical nanostructures in ABA triblock copolymer thin films by raster solvent vapor annealing (RSVA).” ***(corresponding author)***

40. [40] Patterson, J. P.; Cotanda, P.; Kelley, E. G.; Moughton, A. O.; Lu, A.; **Epps, T. H., III**; O’Reilly, R. K., *Polymer Chemistry* **2013**, *4,* 2033-2039. “Catalytic Y-Shaped Amphiphilic Homopolymers - Aqueous nanoreactors for high activity, low loading SCS pincer catalysts”

41. [322] Kelley, E. G.; Albert, J. N. L.; Sullivan, M. O.; **Epps, T. H., III,** *Chemical Society Reviews* **2013,** *42*, 7057-7071. ***[invited tutorial review article]*** “Stimuli-responsive copolymer solution and surface assemblies for biomedical applications.” ***(corresponding author)***
Front Cover Article

42. [458] Theato, P.; Sumerlin, B. S.; O’Reilly, R. K.; **Epps, T. H., III,** *Chemical Society Reviews* **2013,** *42*, 7055-7056. “Stimuli-Responsive Materials.” ***(co-corresponding author)***

43. [58] Mastroianni, S.; **Epps, T. H., III,** *Langmuir* **2013,** *29*(12), 3864-3878. ***[invited feature article]*** “Interfacial Manipulations: Controlling Nanoscale Assembly in Bulk, Thin Film, and Solution Block Copolymer Systems.” ***(corresponding author)***
Front Cover Article

44. [37] Petzetakis, N.; Robin, M. P.; Patterson, J. P.; Kelley, E. G.; Cotanda, P.; McHale, R.; Bomans, P. H. H.; Sommerdijk, N. A. J. M.; Dove, A. P.; **Epps, T. H., III**; O’Reilly, R. K., *ACS Nano* **2013,** *7*(2), 1120-1128. “Hollow Block Copolymer Nanoparticles Through a Spontaneous One-Step Structural Reorganization.” ***(corresponding author)***

45. [42] Luo, M.; Seppala, J. E.; Albert, J. N. L.; Lewis, R. L., III; Mahadevapuram, N.; Stein, G. E.; **Epps, T. H., III,** *Macromolecules* **2013,** *46*(5), 1803-1811. “Manipulating Nanoscale Morphologies in Cylinder-Forming Poly(styrene-*b*-isoprene-*b*-styrene) Thin Films Using Film Thickness and Substrate Surface Chemistry Gradients.” ***(corresponding author)***

46. [1] **Epps, T. H., III;** Mahanthappa, M. K.; *Journal of Polymer Science: Polymer Physics* **2013,** *51*(7), 461-462. “From fundamental science to advanced technologies” ***(co-corresponding author)***
Front Cover Article

47. [54] Patterson, J. P.; Kelley, E. G.; Murphy, Ryan P.; Moughton, A. O.; Robin, M. P.; Lu, A.; Colombani, O.; Chassenieux, C.; Cheung, D.; Sullivan, M. O.; **Epps, T. H., III**; O’Reilly, R. K., *Macromolecules* **2013,** *46*(15), 6319-6325. “Structural Characterization of Amphiphilic Homopolymer Micelles Using Light Scattering, SANS, and Cryo-TEM.” ***(corresponding author)*** ****Patterson and Kelley are co-first authors***

48. [151] Emerson, J. A.; Toolan, D. T. W.; Howse, J. R.; Furst, E.M.; **Epps, T. H., III,** *Macromolecules* **2013,** *46*(16), 6533-6540. "Determination of Solvent-Polymer and Polymer-Polymer Flory-Huggins Interaction Parameters for Poly(3-hexylthiophene) via Solvent Vapor Swelling." ***(corresponding author)***

49. [297] Luo, M.; **Epps, T. H., III,** *Macromolecules* **2013**, *46*(19), 7567-7579. ***[invited viewpoint article]*** "Directed Block Copolymer Thin Film Self-Assembly: Emerging Trends in Nanopattern Fabrication." ***(corresponding author)***
Front Cover Article

50. [17] Mastroianni, S. E.; Patterson, J. P.; O'Reilly, R. K.; **Epps, T. H., III,** *Soft Matter* **2013,** *9*(42), 10146-10154 "Poly(methyl methacrylate-block-vinyl-*m*-triphenylamine): synthesis by RAFT polymerization and melt-state self-assembly." ***(corresponding author)***

51. [428] Young, W. S.; Kuan, W. F.; **Epps, T. H., III,** *Journal of Polymer Science: Part B - Polymer Physics* **2014**, *52*(1), 1-16. ***[invited review article]*** "Block Copolymers for Rechargeable Lithium Batteries." ***(corresponding author)***
Inside Cover Article

52. [115] Holmberg, A. L.; Stanzione, J. F., III; Wool, R. P.; **Epps, T. H., III,** *ACS Sustainable Chemistry and Engineering* **2014,** *2*(4), 569-573. "A Facile Method for Generating Designer Block Copolymers from Functionalized Lignin Model Compounds." ***(corresponding author)***

53. [107] Kelley, E. G.; Murphy, R. P.; Seppala, J. E.; Smart, T. P.; Hann, S. D.; Sullivan, M. O.; **Epps, T. H., III,** *Nature Communications* **2014** "Size evolution of highly amphiphilic macromolecular solution assemblies via a distinct bimodal pathway." ***(corresponding author)*** **DOI: 10.1038/ncomms4599**
Highlighted on NPR, Philadelphia Station (WHYY)
Highlighted in Argonne National Lab, Advanced Photon Source Newsletter

54. [81] Quadir, M. A.; Morton, S. W.; Deng, Z. J.; Shopsowitz, K. E.; Murphy, R. P.; **Epps, T. H., III**, Hammond, P. T., *Molecular Pharmaceutics* **2014,** *11*(7), 2420-2430. "PEG-polypeptide Block Copolymers as pH-responsive Endosome-Solubilizing Drug Nanocarriers."

55. [33] Green, M. D.; Foster, A. A.; Roy, R.; Lehr, R. M.; **Epps, T. H., III**; Sullivan, M. O., *Polymer Chemistry* **2014,** *5*, 5535-5541. "Catch and Release: Photocleavable Cationic Diblock Copolymers as a Potential Platform for Nucleic Acid Delivery." ***(corresponding author)***
Front Cover Article

56. [8] Haq, E.; Toolan, D. T. W.; Emerson, J. A.; **Epps, T. H., III**; Howse, J. R.; Dunbar, A. D. F.; Ebbens, S. J. *Journal of Polymer Science: Part B - Polymer Physics* **2014,** *52*(15), 985-992. "Real Time Laser Interference Microscopy for Bar-Spread Polystyrene/Poly (methyl methacrylate) Blends"

57. [174] Holmberg, A. L.; Reno, K. H.; Wool, R. P.; **Epps, T. H., III,** *Soft Matter* **2014,** *10*, 7405-7424. ***[invited review article]*** "Biobased building blocks for the rational design of renewable block copolymers" ***(corresponding author)***
Soft Matter Hot Article for Aug. 2014
Soft Matter #1 Most Read Article for Sept. 2014

58. [29] Murphy, R. P.; Kelley, E. G.; Rogers, S. A.; Sullivan, M. O.; **Epps, T. H., III,** *ACS Macro Letters* **2014,** *3*, 1106-1111. "Unlocking chain exchange between block polymer micelles at the air-water interface: influence of agitation method" ***(corresponding author)***

59. [45] Foster, A. A.; Greco, C. T.; Green, M. D.; **Epps, T. H., III**; Sullivan, M. O. *Advanced Healthcare Materials* **2015** *4*(5), 760-770 "Light-Mediated Activation of siRNA Binding and Release in Diblock Copolymer Assemblies for Controlled Gene Silencing" ***(co-corresponding author)***
Highlighted on Materials Views - http://www.materialsviews.com/light-sensitive-polymers-controlled-gene-silencing/

60. [89] Gilbert, J. B.; Luo, M.; Shelton, C.; Rubner, M. F.; Cohen, R. E.; **Epps, T. H., III** *ACS Nano* **2015,** *9*(1), 512-520. "Determination of Lithium Ion Distributions in Nanostructured Block Polymer Electrolyte Thin Films by XPS Depth Profiling" ***(corresponding author)*** *******Gilbert and Luo are co-first authors*
Highlighted on Nanotechweb.org

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144. [1] Shen, Y-H.; Yadav, R.; Wong, A. J.; Balzer, A. H.; **Epps, T. H., III**; Sumerlin, B. S.; Veige, A. S. *Reactive and Functional Polymers* **2024** *194,* 105810 "Fibril Size Control, Tensile Strength, and Electrical Properties of Cyclic Polyacetylene"

145. [0] Ren, T.; Hinton, Z. R.; Huang, R.; **Epps, T. H., III**; Korley, L. T. J.; Gorte, R. L.; Lee, D. *Journal of Chemical Physics* **2024** *160* (2), 024909 "Increase in the Effective Viscosity of Polyethylene Under Extreme Nanoconfinement"

146. [0] Yang, M.; **Epps, T. H., III** *Chemistry of Materials* **2024** *36*, 4, 1855-1869 "Solid-state, single-ion-conducting, polymer blend electrolytes with enhanced Li+ conduction, electrochemical stability, and limiting current density" ***(corresponding author)***

147. [0] Mou, R. J.; Barua, S.; Prasad, A.; **Epps, T. H., III**; Yao, K. P. C. *ACS Applied Materials & Interfaces* **2024** *16* (6), 6908-6919 "Electrophoretic deposition as a versatile low-cost tool to construct a synthetic polymeric solid-electrolyte interphase on silicon anodes: A model system investigation"

148. [1] Sun, J.; Kots, P.; Hinton, Z.; Marinkovic, N.; Ma, L.; Ehrlich, S.; Zheng, W.; **Epps, T., III**; Korley, L.; Vlachos, D. *ACS Catalysis* **2024** *14*, 3228-3240 "Size and structure of carbon-supported ruthenium nanoparticles on waste polypropylene hydrogenolysis activity, selectivity, and product microstructure"

149. [0] Roh, E. H.; Sullivan, M. O.; **Epps, T. H., III** *ACS Applied Materials and Interfaces* **2024** *16* (11), 13399-13410 “Which lipid nanoparticles (LNP) designs work?: A simple kinetic model linking LNP chemical structure to *in vivo* delivery performance” ***(co-corresponding author)***

150. [0] Zare, M.; Kots, P. A.; Hinton, Z. R.; **Epps, T. H., III;** Korley, L. T. J.; Caratzoulas, S.; Vlachos, D. G. *Applied Catalysis B: Environment and Energy* **2024** *351*, 123969 “Effect of reaction media on hydrogenolysis of polyethylene plastic waste: Polymer-surface interactions in small alkane/polymer blends”

151. [0] Mahajan, J. S.; Hinton, Z. R.; Bueno, E. N.; **Epps, T. H., III;** Korley, L. T. J. *Materials Advances* **2024** *5*, 3950-3964 “Lignin-derivable, thermoplastic, non-isocyanate polyurethanes with enhanced hydrogen-bonding content and toughness vs. petroleum-derived analogues” ***(corresponding author)***

152. [0] O’Dea, R. O.; Nandi, M.; Kroll, G.; Arnold, J. R.; Korley, L. T. J.; **Epps, T. H., III** *JACS Au* **2024** *4* (4), 1471-1479 “Towards Circular Recycling of Polyurethanes: “One-Step” Depolymerization and Recovery of Isocyanates” ***(corresponding author)***

153. [0] Oberhausen, C. M.; Mahajan, J. S.; Sun, J. A.; **Epps, T. H., III;** Korley, L. T. J.; Vlachos, D. G. *ChemSusChem* **2024** e202400238 “Hydrogenolysis of poly(ethylene-co-vinyl alcohol) polymers and related polymer blends over ruthenium heterogeneous catalysis”

154. [0] Moura, P.; Kots, P.; Vance, B.; Schyns, Z.; Najmi, S.; Hinton, Z.; Quinn, C.; **Epps, T. H., III**; Korley, L.; Vlachos, D. *ACS Sustainable Chemistry & Engineering* **2024** *12* (23), 8717-8728 “Catalytic Deconstruction of Ethylene Vinyl Acetate Copolymer and Polyethylene Mixtures via Hydroconversion: Challenges and Solutions”

155. [0] Zhang, X.; Mahajan, J. S.; Zhang, J.; Korley, L. T. J.; **Epps, T. H., III**; Wu, C. *Food & Chemical Toxicology* **2024** *190*, 114787 “Lignin-Derivable Alternatives to Bisphenol A with Potentially Undetectable Estrogenic Activity and Minimal Developmental Toxicity”

Manuscripts In Review

156. Nixon, K.D.; Schyns, Z. O. G.; Luo, Y.; Ierapetritou, M. G.; Vlachos, D. G.; Korley, L. T. J.; **Epps, T. H., III** *Nature Chemical Engineering* **2024** “Analyses for Impactful Circular Solutions in Advanced Plastics Waste Recycling” ***(minor revisions) (corresponding author)***

157. Christoff-Tempesta, T.; Balzer, A.; Bass, G. F.; Nixon, K. D.; **Epps, T. H., III** *ACS Macro Letters* **2024** “Room-temperature polymerization of a lignin-derivable monomer to semi-crystalline poly(vinyl ethers)” ***(major revisions) (corresponding author)***

158. Balzer, A. H.; Hinton, Z. R.; Vance, B.D.; Vlachos, D. G.; Korley, L. T. J., **Epps, T. H., III** *ACS Central Science* **2024** “Tracking Chain Populations and Branching Structure During Polyolefin Deconstruction Processes” ***(in review) (co-corresponding author)***

159. Mahajan, J. S.; Behbahani, H. S.; Green, M. D.; Korley, L. T. J.; **Epps, T. H., III** *RSC Sustainability* **2024** “Lignin-derivable polysulfones with increased hydrophilicity as potential alternatives to bisphenol A-based water filtration membranes” ***(submitted) (co-corresponding author)***

160. Shapiro, A. J.; Brigandi, P. J.; Moubarak, M.; Sengupta, S.; **Epps, T. H., III** *ACS Applied Polymer Materials* **2024** “Sustainable Crosslinked Polyolefins: Opportunities for Circularity Throughout the Materials Lifecycle” ***(submitted) (corresponding author)***

Edited Journals:

Guest Editor for special issue of *Journal of Polymer Science, Part B: Polymer Physics* (Wiley) highlighting research from DPOLY at the American Physical Society March 2010 Meeting

Guest Editor for special issue of *Journal of Polymer Science, Part B: Polymer Physics* (Wiley) Young Investigator APS DPOLY Issue; March 2013

Guest Editor for special issue of *Chemical Society Reviews* (Royal Society of Chemistry) titled: "Stimuli-Responsive Materials;" August 2013

Granted Patents:

A. L. Holmberg, J. F. Stanzione, III, R. P. Wool, and **T. H. Epps, III**, "Bio-Based Block Polymers Derived from Lignin and Fatty Acids." *U.S. Pat. #9,512,249 – Issued 12/06/2016*

W.-F. Kuan and **T. H. Epps, III**, "Tapered Block Copolymer Electrolytes." *U.S. Pat. #9,935,332 – Issued 04/03/2018*

A. L. Holmberg, K. H. Reno, and **T. H. Epps, III**, "Functionalized Dimethoxyphenol Monomers and Methods for Preparing Such Monomers" *U.S. Pat. #10,253,131 – Issued 04/09/2019*

C. M. Shelton and **T. H. Epps, III**, "Device and method for making shear-aligned, solvent-cast films" *U.S. Pat. #10,929,664 – Issued 11/10/2020*

M. B. Gordon, G. E. Knappe, S. Wang, N. J. Wagner, **T. H. Epps, III**, C. J. Kloxin, "Stress-Responsive Compositions and Uses Thereof" *U.S. Pat. #10,968,301 – Issued 04/06/2021*

G. Peterson, **T. H. Epps, III**, "Multivariate Carboxylate Derivatized Phenyl-Based Metal-Organic Frameworks" *U.S. Pat. #11,459,342 – Issued 10/04/2022*

G. W. Peterson, A. X. Lu, J. S. Epps, **T. H. Epps, III**, "Layered Mixed-Matrix Membranes and Mixed-Matrix Composites from Polymers and Active Materials *U.S. Pat. #11,504,673 – Issued 11/22/2022*

A. L. Holmberg, K. H. Nicastro, S. Wang, L. Shuai, B. Saha, D. G. Vlachos, **T. H. Epps, III**, "Bio-based Polymers from Raw Lignocellulosic Biomass" *U.S. Pat. #11,525,024 – Issued 12/13/2022*

A. L. Holmberg, K. H. Reno, and **T. H. Epps, III**, "Functionalized Dimethoxyphenol Monomers and Methods for Preparing Such Monomers" *U.S. Pat. #11,732,141 – Issued 08/22/2023*

E. O. Ebikade, E. R. Gottlieb, R. M. O'Dea, **T. H. Epps, III**, D. Vlachos, "Low-Pressure Depolymerization of Lignocellulosic Biomass" *Canadian Patent #3,148,181 – Issued 02/06/2024*

G. W. Peterson, **T. H. Epps, III**, Composition of "Multivariate Carboxylate Derivatized Phenyl-Based Metal-Organic Frameworks" *U.S. Pat. #11,987,594 – Issued 05/21/2024*

G. W. Peterson, J. Landers, **T. H. Epps, III**, "Polymer-Based Composite Beads Comprised of Metal-Organic Frameworks and Metal Oxides for Toxic Chemical Removal" *U.S. Pat. #11,998,785 – Issued 06/04/2024*

G. W. Peterson, **T. H. Epps, III**, Process for "Multivariate Carboxylate Derivatized Phenyl-Based Metal-Organic Frameworks" *U.S. Pat. #12,012,423 – Issued 06/18/2024*

Published Patent Applications:

C. T. Greco, M. O. Sullivan, **T. H. Epps, III**, "Hybrid Formulation of Responsive Polymeric Nanocarriers for Therapeutic and Diagnostic Delivery." US20200181649A1, Published 06/11/2020.

T. H. Epps, III, L. T. J. Korley, J. Mahajan, H. S. Behbahani, M. D. Green "Bio-based polysulfones and uses thereof" PCT/US202037332, Published 08/11/2022.

E.O. Ebikade, E.R. Gottlieb, R. M. O'Dea, **T. H. Epps, III**, D. G. Vlachos, "Low-pressure depolymerization of lignocellulosic biomass" WO2021030690 A2, Published 02/18/2021

E.O. Ebikade, E.R. Gottlieb, R. M. O'Dea, **T. H. Epps, III**, D. G. Vlachos, "Low-pressure depolymerization of lignocellulosic biomass" U.S. Pat. Appl. 17/634271, Published 10/13/2022

E. R. Gottlieb, **T. H. Epps, III**, "A Method and Device for Making Shear-Aligned Solvent-Cast Films" PCT/US2002/053212, Published on 6/22/2023

M. Nandi, R. M. O'Dea, L. T. J. Korley, **T. H. Epps, III**, "Depolymerization of Polyurethanes: Regeneration of Isocyanates via Chemical Recycling" PCT/US2023/14905, Published – 09/18/2023

Invited Conference Presentations:

1. American Chemical Society National Meeting, August 2007, Boston, MA
   Invited Speaker "Gradient Approaches to the Examination of Surface Energy Effects on Triblock Copolymer Thin Films"

2. Transatlantic Frontiers of Chemistry Symposium, August 2008, Cheshire, UK
   Invited Poster Presenter "Gradient Approaches to the Examination of Surface Energy Effects on Block Copolymer Thin Films"

3. National Academy of Engineering, Frontiers in Engineering Symposium, September 2008, Albuquerque, NM
   Invited Participant

4. American Chemical Society National Meeting, March 2009, Salt Lake City, UT
   Invited Speaker "Salt doping in PEO-containing block copolymers: counterion and concentration effects"

5. Gordon Research Conference (GRC), Polymers East, June 2009, South Hadley, MA
   Invited Lecturer "Manipulating Ordering in Block Copolymer Systems Using Interface Modifications"

6. NOBCChE Northeast Regional Meeting at MIT, October 2009, Cambridge, MA
   Invited Lecturer "Functional Nanoscale Materials from Block Copolymers"

7. Gordon Research Conference (GRC), Colloidal, Macromolecular & Polyelectrolyte Solutions, February 2010, Ventura, CA
   Discussion Leader "Ions in Polymers"

8. American Chemical Society National Meeting, March 2010, San Francisco, CA
   Invited Speaker "Surface Energy and Annealing Effects on Block Copolymer Thin Films"

9. American Chemical Society National Meeting, August 2010, Boston, MA
   Invited Speaker *[M. Stefik, Akzo Nobel Graduate Student Symposium]* "Networked Nanocomposites Derived from Block Terpolymers" [U. Wiesner graduate student]

10. American Chemical Society National Meeting, August 2010, Boston, MA
    Invited Speaker *[J. Albert, Akzo Nobel Graduate Student Symposium]* "Surface Energy/Chemistry Gradients for Block Copolymer Thin Film Studies"

11. AFOSR Organic Materials Chemistry and Molecular Design and Synthesis Programs Review, September 2010, National Harbor, MD
    Invited Speaker "Ion-Conducting Network Membranes Using Tapered Block Copolymers"

12. Pacifichem 2010, December 2010, Honolulu, HI
Invited Speaker "Using Interfacial Manipulations to Control Ordering in Block Copolymers"

13. American Chemical Society National Meeting, March 2011, Anaheim, CA
Invited Speaker "Manipulating the Interfacial Regions of Self-Assembled Block Copolymer Structures"

14. High Polymer Research Group 51st Meeting, April 2011, Pott Shrigley, Cheshire, UK
Invited Poster Presenter "Manipulating Self-Assembled Block Copolymer Structures"

15. AFOSR Organic Materials Chemistry and Molecular Design and Synthesis Programs Review, May 2011, National Harbor, MD
Invited Poster Presenter "Ion-Conducting Network Membranes Using Tapered Block Copolymers"

16. Gordon Research Seminar (GRS), Polymers East, June 2011, South Hadley, MA
Invited Speaker *[E. Kelley]* "Synthesis and self-assembly of bio-responsive block copolymers"

17. NSTI Nanotech 2011, June 2011, Boston, MA
Invited Speaker "Manipulating the Interfacial Regions of Self-Assembled Block Copolymer Structures"

18. Pacific Polymer Conference 2011, November 2011, Jeju Island, Korea
Invited Speaker "Controlling Block Copolymer Interactions Using Tapering to Stabilize Networks"

19. Mid-Atlantic Soft Matter Conference 8, December 2011, Gaithersburg, MD
Invited Speaker "Using Interfacial Manipulations to Generate Functional Materials from Nanostructured Polymers"

20. Gordon Research Conference (GRC), Colloidal, Macromolecular & Polyelectrolyte Solutions, February 2012, Ventura, CA
Invited Lecturer "Block Copolymer Assemblies for Ion-Conduction Applications"

21. American Chemical Society (ACS) National Meeting, March 2012, San Diego, CA
Invited Speaker *Paul Flory Award Symposium to honor Prof. Bob Cohen* "Designer Nanoscale Materials: Interfacial Manipulations in Block Copolymer Systems"

22. High Polymer Research Group 52nd Meeting, April 2012, Pott Shrigley, Cheshire, UK
Invited Poster Presenter "Using Interfacial Manipulations to Control Self-Assembly in Block Copolymers"

23. IUPAC World Polymer Congress, June 2012, Blacksburg, VA
Invited Speaker "Interfacial modification in self-assembled block copolymers"

24. Warwick Polymers Conference 2012, July 2012, Warwick, UK
Invited Lecturer "Designer Nanoscale Materials: Interfacial Manipulations in Block Copolymer Systems"

25. Gordon Research Conference (GRC), Polymer Physics, July 2012, Holyoke, MA
Invited Lecturer "Interfacial Manipulations: Controlling Ordering in Bulk and Thin Film Block Copolymers"

26. American Institute of Chemical Engineers (AIChE) Annual Meeting, October 2012, Pittsburgh, PA
Invited Speaker (Julie Albert) *Nanostructured Thin Films* "Manipulating Nanoscale Ordering in Block Copolymer Thin Films"

27. Gordon Research Seminar (GRS), Macromolecular Materials, January 2013, Ventura, CA ***Invited Speaker (Matt Green)*** "Solution assemblies of block copolymers for nucleic acid and drug delivery"

28. Gordon Research Conference (GRC), Macromolecular Materials, January 2013, Ventura, CA
Invited Lecturer "Manipulating nanostructures in block copolymers: Linking morphology to performance in conducting systems"

29. High Polymer Research Group 53rd Meeting, April 2013, Pott Shrigley, Cheshire, UK
Invited Poster Presenter "Designer Nanostructured Plastics from Block Copolymers"

30. Gordon Research Seminar (GRS), Polymers East, June 2013, South Hadley, MA
Invited Speaker *[E. Kelley]* "Bio-responsive Block Copolymer for Targeted Drug Delivery"

31. International Conference on Advanced Polymers via Macromolecular Engineering (APME), August 2013, Durham, UK
Invited Lecturer "Using Tapered Block Copolymers to Create Conducting Nanomaterials"

32. American Chemical Society (ACS) National Meeting, September 2013, Indianapolis, IN
Invited Speaker *Stimuli-Responsive Polymers* "Controlled targeting ligand display in polymer-peptide bioconjugates for drug delivery"

33. American Chemical Society (ACS) National Meeting, September 2013, Indianapolis, IN
Invited Speaker *Mark Young Scholars Award in honor of Rachel O'Reilly* "Manipulating thermodynamics through tapering: Tunable control of block copolymer ordering"

34. International Symposium on Stimuli-Responsive Materials, October 2013, Santa Rosa, CA
Invited Lecturer "Amphiphilic Copolymers - Controlling Stability in Solution Assemblies"

35. American Institute of Chemical Engineers (AIChE) Annual Meeting, November 2013, San Francisco, CA
Invited Plenary Lecturer in MESD "Tuning Block Copolymer Solution Assemblies through Manipulation of Interfacial Interactions"

36. National Academy of Engineering (NAE) US-EU, Frontiers of Engineering, November 2013, Chantilly, FR
Invited Poster Presenter "Materials Innovation Using Nanostructured Plastics"

37. American Physical Society (APS) March Meeting, March 2014, Denver, CO
Invited Speaker *Polymers for Energy Storage and Conversion* "Using Tapered Block Copolymers to Create Conducting Nanomaterials"

38. NIST-UD Center for Neutron Science, Annual Meeting, March 2014, Newark, DE
Invited Speaker "Shaken or Stirred: New Insights into Block Copolymer Solution Assembly"

39. University of Minnesota Block Polymers 2014 Symposium, April 2014, Minneapolis, MN ***Invited Lecturer "***Shaken or Stirred: New Insights into Block Copolymer Solution Assembly"

40. International Symposium on Stimuli-Responsive Materials, October 2014, Santa Rosa, CA
Invited Lecturer "Photo-Responsive Block Copolymers for Gene Therapy"

41. Sigma Xi Annual Meeting, November 2014, Phoenix, AZ
Plenary Young Investigator Award Lecture "Creating Functional Nanoscale Systems Using Block Copolymers: Impacting Sustainability and Human Health through Self-Assembly"

42. American Institute of Chemical Engineers (AIChE) Annual Meeting, November 2014, Atlanta, GA
Invited Speaker "Controlled Self-Assembly and Ionic Conductivity Via Interfacial Modification of Lithium-Doped Block Polymers"

43. National Academy of Sciences (NAS) Japan-US, Frontiers of Science, December 2014, Tokyo, Japan
Invited Poster Presenter "Nanostructured Polymers for Improving Sustainability, Human Health, and the Environment"

44. GRC, Polymers East 2015, June 2015, South Hadley, MA
Invited Speaker *[Angela Holmberg]* "RAFT Polymerization of Complex Mixtures in Pursuit of Sustainable Polymers from Bio-Oils"

45. Functional Polymeric Materials Conference, August 2015, Ascot, UK
Invited Speaker "Tapered block copolymers: Controlling segment sequence to improve materials properties"

46. American Chemical Society (ACS) National Meeting, August 2015, Boston, MA
Invited Speaker **"**Manipulating solution-assembled and stimuli-responsive copolymer nanostructures for nucleic acid delivery and gene silencing"

47. American Chemical Society (ACS) National Meeting, August 2015, Boston, MA
Invited Speaker "Tapered block copolymers: Controlling segment sequence to improve materials properties"

48. American Institute of Chemical Engineers (AIChE) National Meeting, November 2015, Salt Lake City, UT
Invited Speaker "Manipulating Ordering and Orientation in Nanostructured Thin Films by Combining Substrate and Solvent Annealing Effects"

49. American Institute of Chemical Engineers (AIChE) National Meeting, November 2015, Salt Lake City, UT
Plenary Lecture – Owens Corning Award "Functional Nanoscale System Using Block Polymers: Impacting Sustainability and Human Health through Self-Assembly"

50. American Institute of Chemical Engineers (AIChE) National Meeting, November 2015, Salt Lake City, UT
Invited Speaker [Angela Holmberg] – Graduate Student Award Session "Biobased Polymers from Multicomponent Mixtures for Tuning Properties and Reducing Costs"

51. Pacific Polymer Conference 14, December 2015, Kauai, HI
Invited Speaker "High-throughput and Gradient Approaches to Manipulating Ordering and Orientation in Nanostructured Thin Films"

52. Pacifichem 2015, December 2015, Honolulu, HI
Invited Speaker "Tapered block copolymers: Controlling segment sequence to improve materials properties"

53. American Chemical Society (ACS) National Meeting, March 2016, San Diego, CA
Invited Speaker "Manipulating ordering and orientation in nanostructured thin films by combining substrate and solvent annealing effects"

54. American Physical Society (APS) National Meeting, March 2016, Baltimore, MD
John H. Dillon Medal Plenary Speaker "Tapered Block Copolymers: Tuning Self-Assembly and Properties by Manipulating Monomer Segment Distributions"

55. American Chemical Society (ACS) National Meeting, March 2016, San Diego, CA
Invited Speaker "Generating complex self-assemblies from block polymers: Triply-periodic structures from anionic polymerization"

56. Sustainable Polymers II, ACS Division of Polymer Chemistry, May 2016, Clearwater, FL
Invited Speaker "Lignin-based block polymers for thermoplastics applications"

57. Warwick Polymers Conference 2016, July 2016, Warwick, UK
Invited Lecturer "Tapered block copolymers: Controlling segment sequence to improve materials properties"

58. Gordon Research Conference (GRC), Polymer Physics, July 2016, Holyoke, MA
Discussion Leader "Block Copolymer Thin Films"

59. Gordon Research Conference (GRC), Membranes: Materials and Processes, July 2016, New London, NH
Invited Opening Plenary Lecture "Engineering nanostructured membranes through macromolecular design: Tapered block copolymers for lithium battery electrolytes"

60. American Chemical Society (ACS) National Meeting, August 2016, Philadelphia, PA
Invited Speaker "Engineering sequence control through tapered block copolymers to manipulate materials properties"

61. VI Leopoldo Garcia-Colon Mexican Meeting on Mathematical and Experimental Physics 2016, September 2016, Mexico City, Mexico
Invited Lecturer "Tapered Block Copolymers: Manipulating Monomer Segment Distributions to Control Structure and Enhance Performance"

62. National Academy of Engineering (NAS) Arab-US, Frontiers of Engineering, November 2016, Abu Dhabi
Invited Poster Presenter "Nanostructured Polymers for Improving Sustainability, Human Health, and the Environment"

63. High Polymer Research Group Conference 2017, April 2017, Pott Shrigley, UK
Invited Lecturer "Tapered Block Copolymers: Manipulating Monomer Segment Distributions to Control Structure and Enhance Performance"

64. Gordon Research Conference (GRC), Polymers, July 2017, South Hadley, MA
Invited Lecturer "Photo-responsive Polymers for Controlled Nucleic Acid Delivery"

65. North American Thermal Analysis Society (NATAS), August 2017, Newark, DE
Invited Lecturer "Functional Nanoscale Polymers: Macromolecule Design and Self-Assembly for Materials Optimization"

66. American Chemical Society (ACS) National Meeting, August 2017, Washington, D.C.
Invited Speaker "Block copolymers as photo-responsive nanocontainers for spatiotemporal control over nucleic acid delivery"

67. American Chemical Society (ACS) National Meeting, August 2017, Washington, D.C.
Invited Speaker "Manipulating ordering and alignment in nanostructured thin films using simultaneous solvent annealing and shear"

68. American Chemical Society (ACS) National Meeting, August 2017, Washington, D.C.
Invited Speaker "Lignin-inspired polymers as biobased alternatives for plastics applications"

69. International Symposium on Stimuli Responsive Polymers, October 2017, Santa Rosa, CA.
Invited Speaker "Block copolymers as photo-responsive nanocontainers for spatiotemporal control over nucleic acid delivery"

70. American Institute of Chemical Engineers (AIChE) Fall Annual Meeting, October 2017, Minneapolis, MN
Invited Speaker "Tapered Block Copolymers: Tuning Self-Assembly and Properties by Manipulating Monomer Segment Distributions"

71. Pacific Polymer Conference 15, December 2017, Xiamen, China
Invited Speaker "Photo-responsive polymeric nanocarriers for gene therapy and wound healing applications"

72. American Physical Society March Meeting, March 2018, Los Angeles, CA
Invited Speaker in Dillon Medal Symposium in Honor of Bradley Olsen "Quantifying Lithium Salt and Polymer Density Distributions in Ion-Conducting Block Polymers"

73. E-MRS Spring 2018, June 2018, Strasbourg, France
Invited Speaker "Tapered Block Copolymers: Tailored Soft Materials for Battery Electrolyte Applications"

74. DOE BES Materials Chemistry PI Meeting, July 2018, Gaithersburg, PA
Invited Presenter "Nanostructured Polymer Electrolytes: Tuning Interfaces to Manipulate Transport"

75. Gordon Research Conference (GRC), Lignin, August 2018, Easton, MA
Invited Lecturer "From Trees to Plastics: Designer Polymers from Lignin-Rich Feedstocks"

76. American Chemical Society (ACS) National Meeting, August 2018, Boston, MA
Invited Speaker "Tapered Block Copolymers: Fine Tuning Macromolecular Architectures to Facilitate Self-Assembly and Transport"

77. American Chemical Society (ACS) National Meeting, August 2018, Boston, MA
Invited Speaker "Photo-responsive polymeric nanoplexes for gene therapeutics delivery and wound healing applications"

78. American Institute of Chemical Engineers (AIChE) Fall Annual Meeting, October 2018, Pittsburgh, PA
Invited Speaker "Quantifying Polymer and Additive Density Distributions in Ion-Conducting and Tapered Block Polymer Thin Films"

79. Frontiers in Biorefining – Chemicals and Products from Renewable Carbon, November 2018, St. Simons Island, GA
Invited Lecturer "From Trees to Plastics: Designer Polymers from Lignin-Rich Feedstocks"

80. American Chemical Society (ACS) National Meeting, March-April 2019, Orlando, FL
Invited Speaker "Manipulating monomer segment distributions to tune self-assembly and macromolecular properties in ion-conducting block copolymer systems"

81. American Chemical Society (ACS) National Meeting, August 2019, San Diego, CA
Invited Speaker "From trees to plastics: High-performance polymers from lignin-rich feedstocks"

82. American Chemical Society (ACS) National Meeting, August 2019, San Diego, CA
Invited Speaker "Tuning self-assembly and macromolecular properties in ion-conducting block copolymer systems by controlling monomer segment distribution"

83. American Chemical Society (ACS) National Meeting, August 2019, San Diego, CA
Invited Speaker in Henkel Award Symposium in Honor of Jovan Kamcev "Single-ion doping and homopolymer blending approaches to improved ion-transport in block polymer electrolyte materials"

84. Materials Research Society (MRS) Fall Meeting, December 2019, Boston, MA
Invited Speaker "Tuning Self-Assembly and Macromolecular Properties in Ion-Conducting Block Copolymer Systems by Controlling Monomer Segment Distribution"

85. American Physical Society March Meeting, March 2020, Denver, CO
Invited Speaker in Dillon Medal Symposium in Honor of Rodney Priestley "Investigation of monomer segment distributions, chain conformations, and lithium salt solvation in self-assembled, tapered block polymer electrolytes" [cancelled due to COVID-19]

86. American Chemical Society (ACS) National Meeting, March 2020, Philadelphia, PA
Invited Speaker "High-performance polymers from lignin-rich feedstocks" [cancelled due to COVID-19]

87. American Chemical Society (ACS) National Meeting, March 2020, Philadelphia, PA
Invited Speaker "Photo-responsive polymer nanoplexes for gene therapy and wound healing applications" [cancelled due to COVID-19]

88. American Chemical Society (ACS) National Meeting, March 2020, Philadelphia, PA
Invited Speaker "Single-ion doping and homopolymer blending approaches to improved ion-transport in block polymer electrolyte materials" [cancelled due to COVID-19]

89. Sustainable Polymer Conference (ACS Symposium), May 2020, Safety Harbor, FL
Invited Speaker "Designer Polymers from Waste - Can We Make Money from Lignin?" [cancelled due to COVID-19]

90. American Conference on Neutron Scattering (ACNS), July 2020, Boulder, CO
Invited Speaker "Quantifying Polymer and Additive Density Distributions and Nanoscale Morphology Evolution in Block Polymer Thin Films"

91. Gordon Research Conference (GRC), Polymer Physics, July 2020, South Hadley, MA
Discussion Leader "Quasi crystal formation in block copolymers" [postponed due to COVID-19]

92. American Chemical Society (ACS) National Meeting, August 2020, San Francisco, CA
Invited Speaker in ACS Macro Letters, Macromolecules, Biomacromolecules Young Investigator Symposium in Honor of Rodney Priestley "Single-ion doping and homopolymer blending approaches to improved ion-transport in block polymer electrolyte materials"

93. American Chemical Society (ACS) National Meeting, August 2020, San Francisco, CA
Invited Speaker "Tuning self-assembly and macromolecular properties in ion-conducting block copolymer systems by controlling monomer segment distribution"

94. American Chemical Society (ACS) National Meeting, August 2020, San Francisco, CA
Invited Speaker in Industrial Polymer Science Symposium in Honor of James Wang "From Biomass Waste to Performance-Advantaged Polymers: Efficient Routes to Lignin Valorization"

95. National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE) National Meeting, September 25, 2020, Atlanta, GA (virtual)
Master Lecture Series – Percy Julian Lectureship "From Biomass Waste to High-Performance Polymers"

96. AfroBiotech 2020, October 28, 2020, Atlanta, GA (virtual)
Invited Speaker "Photo-responsive polymer nanoplexes for gene therapy and wound healing applications"

97. American Institute of Chemical Engineers (AIChE) Fall Annual Meeting, November 2020, San Francisco, CA [talk cancelled]
Invited Speaker in MESD Plenary Session "From Biomass Waste to Performance-Advantaged Polymers: Efficient Routes to Lignin Valorization"

98. BIOFOR International Conference, February 2021, Quebec, CA (virtual)
Invited Speaker "From Biomass to Performance-Advantaged Polymers: Routes to Lignin Valorization"

99. American Physical Society (APS) March Meeting, March 2021, Nashville, TN (virtual)
Invited Speaker "Understanding Structure-Property Relationships in Biomass-Derived Polymers"

100. American Physical Society (APS) March Meeting, March 2021, Nashville, TN (virtual)
Invited Speaker in Dillon Medal Symposium in Honor of Rodney Priestley "Investigation of monomer segment distributions, chain conformations, and lithium salt solvation in self-assembled, tapered block polymer electrolytes"

101. American Chemical Society (ACS) National Meeting, April 2021 (virtual)
Invited Speaker "Photo-responsive polymer nanoplexes for gene therapy and wound healing applications"

102. American Chemical Society (ACS) National Meeting, April 2021 (virtual)
Invited Speaker *[G. Peterson]* "Reactive metal-organic framework composites from elastomeric phase-inverted polymers"

103. American Chemical Society (ACS) National Meeting, April 2021 (virtual)
Invited Speaker "Single-ion doping and homopolymer blending approaches to improved ion-transport in block polymer electrolyte materials"

104. American Physical Society (ACS) August Meeting, August 2021, Atlanta, GA (virtual)
Invited Speaker in Kathryn C. Hach Award for Entrepreneurial Success in Honor of Craig Hawker – "Lignolix – Unlocking the value of lignin"

105. American Institute of Chemical Engineers (AIChE) Fall Annual Meeting, 2021, Boston, MA
Award Winner in AIChE Minority Affairs William W. Grimes Award for Excellence *"*From Nanostructured Polymeric Materials to Applications"

106. ACS Macro Letters 10th Anniversary Lecture Series (Future Opportunities for Polymer Science – Sustainable Plastics), December 9, 2021 (virtual)
Invited Speaker - "Advancing Sustainability Through Bio-based Polymers: Routes to Biomass Valorization"

107. American Physical Society (APS) March Meeting, March 2022, Chicago, IL
Invited Speaker in Dillon Medal Symposium in Honor of Jian Qin "Quantifying the effects of intra-domain structure and dynamics on ion transport in nanostructured block polymer electrolytes"

108. Tosoh Polymer Conference, June 2022, Los Angeles, CA
Invited Speaker "Advancing Materials Sustainability: Small Molecules and Polymers from Biomass and Plastics Waste"

109. Erice Summer School, July 2022, Sicily, Italy
Invited Speaker "Closed-loop sustainability in polymers: leveraging biomass and plastics waste feedstocks"

110. Gordon Research Conference (GRC), Polymer Physics, July 2022, South Hadley, MA
Discussion Leader "Biomaterials"

111. International Symposium on Stimuli Responsive Polymers, October 2022, Windsor, CA
Invited Speaker "Responsive polymer nanoplexes - linking *in vitro* experiments to *in vivo* outcomes"

112. American Chemical Society (ACS) Spring National Meeting, March 2023, Indianapolis, IN
Invited Speaker "Advancing Sustainability: Small Molecules and Polymers from Biomass"

113. GRS, Polymers, June 2023, South Hadley, MA
Invited Speaker [T. Christoff-Tempesta] "Depolymerization and upcycling of lignin-derived methacrylate polymers"

114. American Chemical Society (ACS) Green Chemistry & Engineering (GC&E) Conference, June 2023, Long Beach, CA
Invited Speaker "Advancing Sustainability: Small Molecules and Polymers from Biomass"

115. American Chemical Society (ACS) Fall National Meeting, August 2023, San Francisco, CA
Invited Speaker "Advanced Recycling – Understanding Fundamentals to Valorize Plastics Waste"

116. American Chemical Society (ACS) Fall National Meeting, August 2023, San Francisco, CA
Invited Speaker **in Journal of Polymer Science Innovation Award Session in Honor of Emily Pentzer** "Enhancing Circularity of Biobased Polymers Through Advanced Recycling"

117. American Chemical Society (ACS) Fall National Meeting, August 2023, San Francisco, CA
Invited Speaker **in Macromolecules/Biomacromolecules Young Investigator Award Symposium in Honor of Dominik Konkolewicz** "Polymer nanoplexes - linking *in vitro* experiments to *in vivo* outcomes"

118. Sustainable Polymer Conference (ACS Symposium), October 2023, Safety Harbor, FL
Invited Speaker "Yes, the polymer is biobased, but is it sustainable?"

119. International Symposium on Stimuli Responsive Polymers, October 2023, Windsor, CA
Invited Speaker "Tuning Properties of Sustainable Materials from Biomass"

120. AIChE Fall National Meeting, November 2023. Orlando, FL
Award Winner and Invited Speaker at Minority Affairs Community Breakfast "From Nano to Macro – Full Circle in Polymer Science"

121. Pacific Polymer Conference 18 (PPC 18), December 2023, Puerta Vallarta, Mexico
Invited Speaker "Polymer nanoplexes - linking *in vitro* experiments to *in vivo* outcomes"

122. Adhesion Society National Meeting, February 2024, Savannah, GA
Invited Speaker "Enhancing Circularity of High-Performance, Biobased Polymers Through Advanced Recycling"

123. American Physical Society (APS) March Meeting, March 2024, Minneapolis, MN
Invited Speaker **in Enabling Early Career Polymer Physics Researchers Honorary Session** – "Quantifying the effects of local structure and dynamics on ion transport in polymer electrolytes"

124. American Chemical Society (ACS) Spring National Meeting, March 2024, New Orleans, LA
Invited Speaker **in PMSE Centennial: Celebration of Success and New Frontiers in Polymeric Materials Science and Engineering** – Sustainability - Enhancing Circularity of Polymers Through Advanced Recycling

125. Tosoh Polymer Conference, June 2024, Raleigh, NC
Invited Speaker "Improving Materials Circularity – Linking Polymer Science and Life-Cycle Analysis"

126. Gordon Research Conference (GRC), Polymer Physics, July 2024, South Hadley, MA
Discussion Leader "Membranes"

127. Gordon Research Conference (GRC), Green Chemistry, July 2024, Barcelona, Spain
Invited Speaker in Design for Circularity Session "Improving Materials Circularity – Linking Sustainable Polymer Science and Life-Cycle Analysis"

Invited Lectures, Seminars, and Panels since May 2006:

1. NIST Combinatorial Methods Center Annual Meeting, May 2006, Gaithersburg, MD
Invited Speaker "Combinatorial Studies of Block Copolymer Interactions with Surfaces"

2. Delaware State University (Department of Chemistry), September 2006, Dover, DE
Invited Speaker "Block Copolymers: A Feasible Route to Generating Nano-Materials"

3. Delaware Biotechnology Institute, December 2006, Newark, DE
Invited Speaker "Block Copolymer Networks: Potential Bioseparations Membranes?"

4. National Academy of Sciences, January 2007, Washington, D.C.
Invited Moderator "Forgotten Genius: NOVA's Film Biography of Dr. Percy Julian" (non-technical)

5. Goodyear Tire and Rubber Company, July 2007, Akron, OH
Invited Speaker "Block Copolymers: A Feasible Route to Generating Functional Nano-materials"

6. University of California at Santa Barbara (UCSB), Dow Foundation Lecture, October 9, 2007, Santa Barbara, CA
Invited Lecturer "Combinatorial Studies of Surface Interactions in Block Copolymer Thin Films"

7. University of Delaware, Chemistry Teachers Day Lecture, October 12, 2007, Newark, DE
Invited Speaker "Using Synthetic Macromolecules as Precursors to Functional Membranes"

8. University of Sydney, Key Centre for Polymer Colloids, December 17, 2007, Sydney, Australia
"Combinatorial Studies of Surface Interactions in Block Copolymer Thin Films"

9. New Jersey Institute of Technology (NJIT), January 28, 2008, Newark, NJ
Invited Speaker "Combinatorial Studies of Surface Interactions in Block Copolymer Thin Films"

10. Virginia Commonwealth University (VCU), February 27, 2008, Richmond, VA
Invited Speaker "Block Copolymers: A Feasible Route to Generating Functional Nano-materials"

11. Auburn University, Functional Polymers Symposium, May 1, 2008, Auburn, AL
Invited Lecturer "Block Copolymers: A Feasible Route to Generating Functional Nano-materials"

12. University of Massachusetts, Amherst (Polymer Science and Engineering), April 24, 2009, Amherst, MA
Invited Speaker "Block Copolymers: A Route to Ion-Conducting Nano-materials"

13. Dow Chemical, May 21, 2009, Midland, MI
Invited Speaker "Block Copolymers: A Route to Functional Nano-materials"

14. University of Akron (Polymer Science), September 18, 2009, Akron, OH
Invited Speaker "Generating Nanostructured Functional Materials Using Block Copolymers"

15. Massachusetts Institute of Technology (MIT) (Chemical Engineering), October 24, 2009, Cambridge, MA
Invited Panelist - ACCESS Alumni Panel

16. Virginia Section of the American Chemical Society, December 4, 2009, Richmond, VA
Invited Speaker "Using Block Copolymer to Create Functional Nanomaterials"

17. DuPont (Experimental Station), January 14, 2010, Wilmington, DE
Invited Speaker "Surface Responsive Block Copolymer Thin Films"

18. Delaware State University (Department of Chemistry), January 21, 2010, Dover, DE
Invited Speaker "Using Block Copolymer to Create Functional Nanomaterials"

19. Yale University (Chemical Engineering), July 2, 2010, New Haven, CT
Invited Speaker "Using Interfacial Manipulations to Generate Functional Materials from Nanostructured Polymers"

20. University of Florida (Materials Science), September 7, 2010, Gainesville, FL
Invited Speaker "Using Interfacial Manipulations to Generate Functional Materials from Nanostructured Polymers"

21. Case Western Reserve University (Macromolecular Science and Engineering), October 1, 2010, Cleveland, OH
Invited Speaker "Using Interfacial Manipulations to Generate Functional Materials from Nanostructured Polymers"

22. University of Southern Mississippi (Polymer Science and Engineering), October 6, 2010, Hattiesburg, MS
Invited Speaker "Using Interfacial Manipulations to Generate Functional Materials from Nanostructured Polymers"

23. Tulane University (Chemistry), October 7, 2010, New Orleans, LA
Invited Speaker "Using Interfacial Manipulations to Generate Functional Materials from Nanostructured Polymers"

24. Louisiana State University (Chemistry), October 8, 2010, Baton Rouge, LA
Invited Speaker "Using Interfacial Manipulations to Generate Functional Materials from Nanostructured Polymers"

25. University of Colorado at Boulder (Chemical and Biological Engineering), October 12, 2010, Boulder, CO
Invited Speaker "Using Interfacial Manipulations to Generate Functional Materials from Nanostructured Polymers"

26. North Carolina State University (Chemical and Biological Engineering), October 18, 2010, Raleigh, NC
Invited Speaker "Using Interfacial Manipulations to Generate Functional Materials from Nanostructured Polymers"

27. Penn State University (Polymer Physics Seminar Series), November 16, 2010, State College, PA
Invited Speaker "Using Interfacial Manipulations to Generate Functional Materials from Nanostructured Polymers"

28. Princeton University (Chemical and Biological Engineering), December 8, 2010, Princeton, NJ
Invited Speaker "Using Interfacial Manipulations to Generate Functional Materials from Nanostructured Polymers"

29. Rensselaer Polytechnic Institute (Chemistry and Chemical Biology), January 25, 2011, Tory, NY
Invited Speaker "Using Interfacial Manipulations to Generate Functional Materials from Nanostructured Polymers"

30. Massachusetts Institute of Technology [MIT] (Polymer Science and Technology [PPST]), February 2, 2011, Cambridge, MA
Invited Speaker "Using Interfacial Manipulations to Generate Functional Materials from Nanostructured Polymers"

31. University of Delaware (Materials Science and Engineering), February 9, 2011, Newark, DE
Invited Speaker "Using Interfacial Manipulations to Generate Functional Materials from Nanostructured Polymers"

32. Southern Methodist University (Chemistry), March 25, 2011, Dallas, TX
Invited Speaker "Using Interfacial Manipulations to Generate Functional Materials from Nanostructured Polymers"

33. University of Sheffield (Chemistry), April 14, 2011, Sheffield, UK
Invited Speaker "Using Interfacial Manipulations to Generate Functional Materials from Nanostructured Polymers"

34. University of Warwick (Chemistry), April 15, 2011, Warwick, UK
Invited Speaker "Using Interfacial Manipulations to Generate Functional Materials from Nanostructured Polymers"

35. Future Faculty Workshop: Diverse Leaders of Tomorrow, June 20, 2011, Cambridge, MA
Invited Speaker "Controlled Generation of Functional Materials from Nanostructured Polymers"

36. Iowa State University (Chemical Engineering), September 15, 2011, Ames, IA
Invited Speaker "Using Interfacial Manipulations to Generate Functional Materials from Nanostructured Polymers"

37. Korea University (Chemical & Biological Engineering), November 17, 2011, Seoul, KR
Invited Speaker "Using Interfacial Manipulations to Generate Functional Materials from Nanostructured Polymers"

38. Georgia Institute of Technology (Chemical & Biomolecular Engineering), January 18, 2012, Atlanta, GA
Invited Speaker "Using Interfacial Manipulations to Generate Functional Materials from Nanostructured Polymers"

39. Delaware Section of the American Chemical Society, February 23, 2012, Newark, DE
Invited Speaker "Using Block Copolymers to Create Conducting Nanomaterials"

40. University of Connecticut (Institute of Materials Science), October 19, 2012, Storrs, CT
Invited Speaker "Using Interfacial Manipulations to Generate Functional Materials from Nanostructured Polymers"

41. University of Maryland (Materials Science), December 7, 2012, College Park, MD
Invited Speaker "Using Interfacial Manipulations to Generate Functional Materials from Nanostructured Polymers"

42. Massachusetts Institute of Technology [MIT] (Materials Science and Engineering), December 13, 2012, Cambridge, MA
Invited Speaker "Using Interfacial Manipulations to Generate Functional Materials from Nanostructured Polymers"

43. Massachusetts Institute of Technology [MIT] (Martin Luther King, Jr. Luncheon Seminar), January 16, 2013, Cambridge, MA
Invited Speaker "Creating functional nanoscale materials: design and synthesis of structured plastics"

44. Texas A&M University (Materials Science and Engineering), February 8, 2013, College Station, TX
Invited Speaker "Using Interfacial Manipulations to Generate Functional Materials from Nanostructured Polymers"

45. Carleton College (Chemistry), February 15, 2013, Minneapolis, MN
Invited Speaker "Using Block Copolymers to Create Conducting Nanomaterials"

46. Massachusetts Institute of Technology [MIT] (Martin Luther King, Jr. Institute Seminar), February 22, 2013, Cambridge, MA
Invited Speaker "Materials Innovation Using Nanoscale Structured Plastics"

47. California Institute of Technology (Chemical Engineering), May 16, 2013, Pasadena, CA
Invited Speaker "Generating Functional Materials from Nanostructured Polymers"

48. Drexel University (Materials Science and Engineering), May 22, 2013, Philadelphia, PA
Invited Speaker "Generating Functional Materials from Nanostructured Polymers"

49. University of Rochester (Chemical Engineering), December 11, 2013, Rochester, NY
Invited Speaker "Generating Functional Materials from Nanostructured Polymers"

50. Ohio State University (Chemical and Biomolecular Engineering), January 23, 2014, Columbus, OH
Invited Speaker "Generating Functional Materials from Nanostructured Polymers"

51. Rice University (Chemical and Biomolecular Engineering), January 30, 2014, Houston, TX
Invited Speaker "Generating Functional Materials from Nanostructured Polymers"

52. University of Houston (Chemical and Biomolecular Engineering), January 31, 2014, Houston, TX
Invited Speaker "Generating Functional Materials from Nanostructured Polymers"

53. DuPont Company (Performance Chemicals), February 5, 2014, Wilmington, DE
Invited Speaker "Generating Functional Materials from Nanostructured Polymers"

54. Air Products and Chemicals (Global Technology Center), March 11, 2014, Allentown, PA
Invited Speaker "Generating Functional Materials from Nanostructured Polymers"

55. University of Florida (Chemistry), March 14, 2014, Gainesville, FL
Invited Speaker "Generating Functional Materials from Nanostructured Polymers"

56. National Institute of Standards and Technology (Center for High Resolution Neutron Scattering), June 13, 2014, Gaithersburg, MD
Invited Speaker "Neutron Scattering: Enabling New Insights into Block Copolymer Solution Assembly and Processing"

57. University of Pennsylvania (Chemical and Biomolecular Engineering), September 24, 2014, Philadelphia, PA
Invited Speaker "Generating Functional Materials from Nanostructured Polymers"

58. Eastman Chemical, January 13, 2015, Kingsport, TN
Invited Speaker "Generating Functional Materials from Nanostructured Polymers"

59. Synthomer, May 1, 2015, Harlow, UK
Invited Speaker "Generating Functional Materials from Nanostructured Polymers"

60. University of Chicago (Molecular Engineering), October 2, 2015, Chicago, IL
Invited Speaker "Modulating Ion-Doping Effects in Block Polymers via Interfacial Modifications Between Blocks"

61. Pennsylvania State University (Materials Science), October 29, 2015, State College, PA
Invited Speaker "Generating Functional Materials from Nanostructured Polymers"

62. Dow Chemical, January 19, 2016, Collegeville, PA
Invited Speaker "Functional Nanoscale Systems Through Self-Assembly and Processing"

63. University of Massachusetts, Amherst (Graduate Students for Diversity in Science and Engineering), February 11, 2016, Amherst, MA
Invited Speaker "When it comes to diversity, everybody needs a plan"

64. University of Massachusetts, Amherst (Polymer Science and Engineering), February 12, 2016, Amherst, MA
Invited Speaker "Generating Functional Materials from Nanostructured Polymers"

65. University of Michigan (Chemical Engineering), March 31, 2016, Ann Arbor, MI
Invited Speaker "Generating Functional Materials from Nanostructured Polymers"

66. University of Illinois (Chemical and Biomolecular Engineering), April 7, 2016, Urbana, IL
Invited Speaker "Generating Functional Materials from Nanostructured Polymers"

67. Chemours, April 14, 2016, Wilmington, DE
Invited Speaker "Nanostructured Polymers: Sustainable Materials, Polymeric Coatings, and Conducting Membrane Applications"

68. DuPont Company (Science and Innovation Group), September 27, 2016, Wilmington, DE
Invited Speaker "Directed Self-Assembly of Block Copolymer Thin Films"

69. Northwestern University (Chemical and Biomolecular Engineering), October 6, 2016, Evanston, IL
Invited Speaker - "Generating Functional Materials from Nanostructured Polymers"

70. University of Notre Dame (Chemical and Biomolecular Engineering), October 11, 2016, South Bend, IN
Invited Speaker - "Generating Functional Materials from Nanostructured Polymers"
Thiele Lectureship

71. Arkema, October 26, 2016, King of Prussia, PA
Invited Speaker - "Functional Nanoscale Polymers: Impacting Alternative Energy, Sustainability, and Human Health through Self-Assembly"

72. University of Delaware (Chemical and Biomolecular Engineering), January 25, 2017, Newark, DE
Keynote Speaker Winter Research Review - "Nanostructured Block Copolymers: Impacting Sustainability and Human Health through Self-Assembly"

73. Virginia Tech (Chemical Engineering), February 1, 2017, Blacksburg, VA
Invited Speaker - "Generating Functional Materials from Nanostructured Polymers"

74. Solenis, March 1, 2017, Wilmington, DE
Invited Speaker - "Functional Nanoscale Polymers: Sustainable Solutions through Macromolecule Design and Self-Assembly"

75. Texas A&M University (Chemical Engineering), April 12, 2017, College Station, TX
Invited Speaker - "Block Copolymers: Impacting Sustainability and Human Health through Self-Assembly"
Lindsay Lectureship

76. Tufts University (Chemical and Biological Engineering), September 11, 2017, Medford, MA
Invited Speaker - "Generating Functional Materials from Nanostructured Polymers"

77. Florida State University (Chemical and Biomedical Engineering), April 27, 2018, Tallahassee, FL
Invited Speaker - "Generating Functional Materials from Nanostructured Polymers"

78. University of Nebraska-Lincoln (Chemical and Biomolecular Engineering), September 7, 2018, Lincoln, NE
Invited Speaker - "Generating Functional Materials from Nanostructured Polymers"

79. University of Rhode Island (Chemistry), September 17, 2018, Kingston, RI
Invited Speaker - "Synthesizing Functional Materials from Nanostructured Polymers"

80. Ashland LLC, October 1, 2018, Dublin, OH
Invited Speaker - "From Trees to Plastics: Designer Polymers from Lignin-Rich Feedstocks"

81. University of California, Santa Barbara (Chemical Engineering), October 9, 2018, Santa Barbara, CA
Invited Speaker - "Generating Functional Materials from Nanostructured Polymers"

82. Arizona State University (Chemical Engineering), November 19, 2018, Tempe, AZ
Invited Speaker - "Generating Functional Materials from Nanostructured Polymers"

83. W.L. Gore & Associates (Core Technology Division), January 7, 2019, Elkton, MD
Invited Speaker - "Synthesizing Functional Materials from Nanostructured Polymers"

84. Yale University (Chemical and Environmental Engineering), January 23, 2019, New Haven, CT
Invited Speaker - "Synthesizing Functional Materials from Nanostructured Polymers"

85. Purdue University (School of Chemical Engineering), March 19, 2019, West Lafayette, IN
Invited Speaker - "Generating Functional Materials from Nanostructured Polymers"

86. Drexel University (Materials Science and Engineering), April 17, 2019, Philadelphia, PA
Invited Speaker - "Nanostructure-Forming Polymers for Sustainability and Human Health"

87. University of Washington (Molecular Engineering), May 21, 2019, Seattle, WA
Invited Speaker - "Generating Functional Materials from Nanostructured Polymers"

88. Dow Chemical (Technical Community Organization), September 4, 2019, Collegeville, PA
Invited Speaker - "Synthesizing Functional Materials from Nanostructured Polymers"

89. Duke University (Biomedical Engineering), September 25, 2019, Durham, NC
Invited Speaker - "Nanostructured Polymers for Human Health: Engineering Micelle Stability"

90. University of California, Los Angeles (Chemical & Biomolecular Engineering), October 11, 2019, Los Angeles, CA
Invited Speaker - "Generating Functional Materials from Nanostructured Polymers"

91. University of Texas, Dallas (Chemistry), November 22, 2019, Dallas, TX
Invited Speaker - "Synthesizing Functional Materials from Nanostructured Polymers"

92. Virginia Tech (Chemical Engineering), February 3, 2020, Blacksburg, VA
Invited Speaker - "Nanostructure-Forming Polymers for Sustainability and Human Health"

93. University of Virginia (Chemical Engineering), April 2, 2020, Charlottesville, VA
Invited Speaker - "Nanostructure-Forming Polymers for Sustainability and Human Health" (postponed due to COVID-19)

94. Agilent (Little Falls site), April 22, 2020, King of Prussia, PA
Invited Speaker - "Research in Soft Matter and Polymers at the University of Delaware" (postponed due to COVID-19)

95. University of Birmingham (Chemistry), April 30, 2020, Birmingham, UK
Invited Speaker - "Nanostructure-Forming Polymers for Sustainability and Human Health" (postponed due to COVID-19)

96. U.S. Patent and Trademark Office (USPTO) (Chemistry and Chemical Engineering Division), June 23, 2020 (virtual)
Invited Speaker - "From Biomass Waste to Performance-Advantaged Polymers: Efficient Routes to Lignin Valorization"

97. Northwestern University (International Institute for Nanotechnology), July 22, 2020, Chicago, IL (virtual)
Invited Speaker - "From Biomass Waste to Performance-Advantaged Polymers: Efficient Routes to Lignin Valorization"

98. University of Minnesota (Chemical Engineering), September 22, 2020, Minneapolis, MN (virtual)
Invited Speaker - "From Biomass Waste to Performance-Advantaged Polymers: Efficient Routes to Lignin Valorization"
CEMS Centennial & Jubilee Alumni Lecture

99. Capitol Hill; National Science Foundation Panel for Congressional Staffers, October 6, 2020, Washington, D.C. (virtual)
Invited Panelist - "The Future of Plastics: The Roles of Innovation and Discovery in Addressing Plastic Waste"

100. Capitol Hill; Delaware Prosperity Partnership for Congressional Staffers, October 28, 2020, Washington, D.C. (virtual)
Invited Panelist - "Congressional Educational Briefing: End of Life for Bioplastics"

101. Technion – Israel Institute of Technology (Chemical Engineering), November 3, 2020, Israel (virtual)
Invited Speaker - "From Biomass Waste to Performance-Advantaged Polymers: Efficient Routes to Lignin Valorization"

102. University of California, Irvine (Chemistry), November 10, 2020, Irvine, CA (virtual)
Invited Speaker - "From Biomass Waste to Performance-Advantaged Polymers: Efficient Routes to Lignin Valorization"

103. University of Fribourg, Adolphe Merkle Institute, December 3, 2020, Fribourg, Switzerland (virtual)
Invited Speaker - "From Biomass Waste to Performance-Advantaged Polymers: Efficient Routes to Lignin Valorization"

104. University of Texas, Austin (Chemical Engineering), January 26, 2021, Austin, TX (virtual)
Invited Speaker - "From Biomass Waste to Performance-Advantaged Polymers: Efficient Routes to Lignin Valorization"

105. University of California, Berkeley (Chemical Engineering), February 17, 2021, Berkeley, CA (virtual)
Invited Speaker - "From Biomass Waste to Performance-Advantaged Polymers: Efficient Routes to Lignin Valorization"

106. MIT (Materials Science and Engineering), March 9, 2021, Cambridge, MA (virtual)
Distinguished Speaker - "From Biomass Waste to Performance-Advantaged Polymers: Efficient Routes to Lignin Valorization"

107. Delaware State University (Chemistry), March 24, 2021, Dover, DE (virtual)
Invited Speaker - "From Biomass Waste to Performance-Advantaged Polymers: Efficient Routes to Lignin Valorization"

108. Pennsylvania State University (Materials Science and Engineering), April 15, 2021, State College, PA (virtual)
Keynote Speaker at 125th Anniversary of College of Earth and Mineral Sciences - "From Biomass Waste to Performance-Advantaged Polymers: Efficient Routes to Lignin Valorization"

109. Columbia University (Chemical Engineering), April 20, 2021, New York, NY (virtual)
Invited Speaker - "From Biomass Waste to Performance-Advantaged Polymers: Efficient Routes to Lignin Valorization"

110. Carnegie Mellon University (Chemistry and Chemical Engineering), April 23, 2021, Pittsburgh, PA (virtual)
Invited Speaker - "From Biomass Waste to Performance-Advantaged Polymers: Efficient Routes to Lignin Valorization"

111. 3M (Tech Forum), June 3, 2021, Minneapolis, MN (virtual)
Invited Speaker - "From Biomass Waste to Performance-Advantaged Polymers: Efficient Routes to Lignin Valorization"

112. New York University (NYU) (Chemistry/Chemical Engineering), October 1, 2021, New York, NY (virtual)
Invited Speaker - "From Waste to Polymers: Creating Sustainable Materials from Biomass"

113. ExxonMobil (Chemical R&D), October 8, 2021, Baytown, TX (virtual)
Invited Speaker - "From Waste to Polymers: Creating Sustainable Materials from Biomass"

114. Widener University (Chemistry), November 1, 2021, Chester, PA
Invited Speaker - "From Waste to Polymers: Creating Sustainable Materials from Biomass"

115. Johns Hopkins University (Materials Science and Engineering), November 3, 2021, Baltimore, MD
Invited Speaker - "From Waste to Polymers: Creating Sustainable Materials from Biomass"

116. University of Virginia (Chemical Engineering), November 18, 2021, Charlottesville, VA
Invited Speaker - "From Waste to Polymers: Creating Sustainable Materials from Biomass"

117. Georgia Tech and Emory University CD&I Lecture (Biomedical Engineering), December 13, 2021, Atlanta, GA (virtual)
Invited Speaker - "Responsive polymer nanoplexes for gene therapy and wound healing applications"

118. University of California, Berkeley and Lawrence Berkeley National Laboratory, January 18, 2022, Berkeley, CA (virtual)
Invited Speaker - "Advancing Sustainability Through Bio-based Polymers: Routes to Biomass Valorization"

119. University of Minnesota – Twin Cities Jeannette Brown Lecture (Chemistry), April 7, 2022, Minneapolis, MN
Invited Speaker - "Advancing Sustainability Through Bio-based Polymers: Routes to Biomass Valorization"

120. University of Arkansas, April 14, 2022, Fayetteville, AR (virtual)
Invited Speaker - "From Waste to Polymers: Creating Sustainable Materials from Biomass"

121. California Institute of Technology (Caltech) (Chemical Engineering), May 26, 2022, Pasadena, CA
Invited Speaker - "From Waste to Polymers: Creating Sustainable Materials from Biomass"

122. Stanford University (Chemical Engineering), May 27, 2022, Palo Alto, CA
Invited Speaker - "Advancing Sustainability: Small Molecules and Polymers from Biomass and Plastics Waste"

123. University of Toronto (Chemistry), June 3, 2022, Toronto, Ontario, Canada (virtual)
Invited Speaker - "From Waste to Polymers: Creating Sustainable Materials from Biomass"

124. Chevron Phillips Chemical, August 8, 2022, Kingwood, TX (virtual)
Invited Speaker - "Advancing Materials Sustainability: Small Molecules and Polymers from Biomass and Plastics Waste"

125. University of California, Berkeley (Chemical and Biomolecular Engineering), August 24, 2022, Berkeley, CA
Invited Speaker - "Advancing Sustainability: From Bio-based Materials to Nanostructured Polymers for Battery Membrane Applications"

126. University of Illinois at Urbana-Champaign, September 12, 2022, Urbana-Champaign, IL
Invited Speaker - "From Biomass Waste to Performance-Advantaged Polymers: Efficient Routes to Lignin Valorization"

127. University of Massachusetts - Amherst (Chemical Engineering), September 22, 2022, Amherst, MA
Invited Speaker – "Advancing Sustainability: Small Molecules and Polymers from Biomass and Plastics Waste"

128. University of Massachusetts - Amherst (General Public Distinguished Lecture), September 23, 2022, Amherst, MA
Invited Speaker - "Sustainability of Plastics: Can we find new materials and engineer strategies to reduce the impact of plastics?"

129. Avery Dennison (Virtual lecture), September 28, 2022
Invited Speaker - "From Waste to Polymers: Creating Sustainable Materials from Biomass"

130. Pennsylvania State University (Chemical Engineering), November 3, 2022, State College, PA
Invited Speaker - "Advancing Sustainability: Small Molecules and Polymers from Biomass and Plastics Waste"

131. Cornell University (Soft Matter Group), November 30, 2022, Ithaca, NY (virtual)
Invited Speaker - "Advancing Sustainability: Small Molecules and Polymers from Biomass"

132. Dow Chemical (TCO), January 23, 2023, Collegeville, PA
Invited Speaker - "Advancing Sustainability: Small Molecules and Polymers from Biomass and Plastics Waste"

133. University of Southern Mississippi (Polymer Science and Engineering), February 1, 2023, Hattiesburg, MS
Invited Speaker - "Advancing Sustainability: Small Molecules and Polymers from Biomass and Plastics Waste"

134. Harvard University (Chemistry and Chemical Biology), February 28, 2023, Cambridge, MA
Invited Speaker - "Advancing Sustainability: Small Molecules and Polymers from Biomass and Plastics Waste"

135. Johns Hopkins University (Chemical Engineering – William H. Schwarz Lecture), April 6, 2023, Baltimore, MD
Invited Speaker - "Responsive polymer nanoplexes - linking *in vitro* experiments to *in vivo* outcomes"

136. University of North Carolina, Chapel Hill (Chemistry – Slayton Evans Lecture), April 21, 2023, Chapel Hill, NC
Invited Speaker - "Advancing Sustainability: Small Molecules and Polymers from Biomass and Plastics Waste"

137. Cornell University (Chemistry – Covestro Lectures), September 13-14, 2023, Ithaca, NY
Invited Speaker - "Advanced Recycling – Understanding Fundamentals to Valorize Biomass and Plastics Waste" and "Responsive polymer nanoplexes - linking in vitro experiments to in vivo outcomes"

138. West Chester University (Chemistry), October 4, 2023, West Chester, PA
Invited Speaker - "Advancing Sustainability: Small Molecules and Polymers from Biomass and Plastics Waste"

139. University of Chicago (Molecular Engineering), January 5, 2024, Chicago, IL
Invited Speaker - "Advancing Sustainability: Small Molecules and Polymers from Biomass and Plastics Waste"

140. National Science Foundation (Distinguished Lecture), February 7, 2024, Alexandria, VA
Invited Lecturer - "There and Back Again: An Inclusive Journey from Polymers to Monomers to Materials"

141. Royal Society of Chemistry (RSC Desktop Seminar Series), February 22, 2024, Virtual
Invited Lecturer - "Advanced Recycling – Understanding Fundamentals to Valorize Biomass and Plastics Waste"

142. National Nanotechnology Initiative at the National Academies – Celebrating the 20th Anniversary of the 21st Century Nanotechnology Research and Development Act, March 5, 2024, Washington, D.C.
Invited Panelist - "The Future of Nanotechnology"

<u>Contributed Presentations since May 2006:</u>

1. DOE/ NREL Minority University Research Associates (MURA) and Sustainable Energy from Solar Hydrogen NSF-IGERT Program Workshop, August 2007, Newark, DE
Speaker - J. Lawson "Stabilizing Self-Assembled Block Copolymer Network Structures in Thin Films"

2. National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE), March 2008, Philadelphia, PA
Speaker - T. Epps "Substrate Gradient Studies of Surface Interactions in Block Copolymer Thin Films"

3. APS, March 2008, New Orleans, LA
Speaker - T. Epps "Generating Surface Gradients to Control Ordering in Block Copolymer Thin Films"

4. Society of Plastics Engineers - Topical Conference, October 2008, Wilmington, DE
Speaker - T. Epps "Lithium Salt Doping in PEO Containing Block Copolymers: Counterion and Concentration Effects"

5. AIChE, November 2008, Philadelphia, PA
Speaker - J. Lawson "Generating Surface Energy Gradients for Block Copolymer Thin Film Studies"

6. AIChE, November 2008, Philadelphia, PA
Speaker - T. Epps “Salt Doping In PEO Containing Block Copolymers: Counterion and Concentration Effects”

7. APS, March 2009, Pittsburgh, PA
Speaker - J. Lawson “Generating Surface Energy Gradients for Block Copolymer Thin Film Studies”

8. APS, March 2009, Pittsburgh, PA
Speaker - W. Young “Salt Doping in PEO Containing Block Copolymers: Counterion and Concentration Effects”

9. ACS, August 2009, Washington, D.C.
Speaker - J. Albert “Surface Energy Gradients for Block Copolymer Thin Film Studies”

10. APS, March 2010, Portland, OR
Speaker - W. Young “Interaction Parameters in Lithium Salt-Doped Block Copolymers”

11. APS, March 2010, Portland, OR
Speaker - J. Kelly “Gradient Approach to Surface and Interface Effects in Block Copolymer Thin Films”

12. APS, March 2010, Portland, OR
Speaker - M. Tureau “Nanoscale Networks in Etchable Triblock Copolymers”

13. American Congress on Neutron Scattering (ACNS), June 2010, Ottawa, ON, Canada
Speaker - T. Smart “Cross-linked PB-PEO Hybrid Micelles for Targeted Delivery”

14. AIChE, November 2010, Salt Lake City, UT
Speaker - T. Epps “Using Interfacial Manipulations to Control Ordering in Tapered Block Copolymers”

15. Smart Coatings 2011, February 2011, Orlando, FL
Speaker - J. Kelly “Investigation of Stimuli Responsive Block Copolymer Thin Film Morphology Using Gradients”

16. APS, March 2011, Dallas, TX
Speaker - J. Albert “Microfluidic Device for Gradient Thin Film Solvent Vapor Annealing”

17. APS, March 2011, Dallas, TX
Speaker - E. Kelley “Manipulating the structural conformation of block copolymer micelles using co-solvent mixtures”

18. ACS, March 2011, Anaheim, CA
Speaker - E. Kelley “Manipulating the Structural Conformation of PB-PEO Micelles Using Water-Tetrahydrofuran Co-Solvent Mixtures”

19. ACS, August 2011, Denver, CO
Speaker - J. Kelly “Investigation of Thermally Responsive Block Copolymer Thin Film Morphology Using Gradient Libraries”

20. AIChE, October 2011, Minneapolis, MN
Speaker - T. Epps “Using Interfacial Manipulations to Control Ordering in Tapered Block Copolymers”

21. AIChE, October 2011, Minneapolis, MN
Speaker - M. Sullivan “Synthesis and Self-Assembly of Bio-Responsive Block Copolymers”

22. APS, February 2012, Boston, MA
Speaker - J. Seppala “Raster solvent vapor annealing of block copolymer thin films”

23. APS, February 2012, Boston, MA
Speaker - W. Kuan “Manipulating triblock copolymer morphology using tapered block interfaces”

24. APS, February 2012, Boston, MA
Speaker - J. Albert “Effect of Solvent Removal Rate on the Morphology of Solvent Vapor Annealed ABA Triblock Copolymer Thin Films”

25. ACS, March 2012, San Diego, CA
Speaker - W. Kuan “Interfacial modification in self-assembled triblock copolymers”

26. ACS, March 2012, San Diego, CA
Speaker - S. Hann “Stabilization of non-equilibrium block copolymer micelles”

27. ACS, March 2012, San Diego, CA
Speaker - E. Kelley “Synthesis and Self-Assembly of Bio-Responsive Amphiphilic Block Copolymers”

28. ACS, March 2012, San Diego, CA
Speaker - T. Epps “Free and Substrate Surface Manipulations to Locally Control Nanostructures in Block Copolymer Thin Films”

29. ACS, March 2013, New Orleans, LA
Speaker - W. Kuan “Interfacial Modification Effects on the Self-Assembly of Lithium-Doped Block Copolymers”

30. ACS, March 2013, New Orleans, LA
Speaker - C-U. Lee “Crystallization-driven thermo-reversible gelation of coil-crystalline diblock copolypeptoids”

31. ACS Green Chemistry, June 2013, Bethesda, MD
Speaker - A. Holmberg “Lignin- and fatty acid-derived block copolymers for nanostructured thermoplastic elastomers”

32. AIChE, Annual Meeting, November 2013, San Francisco, CA
Speaker - M. Green “Solutions Assemblies of Novel Amphiphilic Block Copolymers for Drug Delivery”

33. AIChE, Annual Meeting, November 2013, San Francisco, CA
Speaker - A. Foster “Photocleavable Polyplexes As Dynamic Carriers for Controlled Nucleic Acid Delivery”

34. APS, March Meeting, March 2014, Denver, CO
Speaker - J. Emerson “Phase behavior of polymer blends for organic photovoltaic applications”

35. APS, March Meeting, March 2014, Denver, CO
Speaker - M. Luo “Manipulating Nanoscale Morphologies in Block Copolymer Thin Films Using Gradient Approaches”

36. ACS, Spring Meeting, March 2014, Dallas, TX
Speaker - K. Reno “Tackling toxicity: Design a BPA alternative from lignin”

37. ACS Green Chemistry, June 2014, Bethesda, MD
Speaker - K. Reno “Who says monomers can’t grow on trees? The utilization of lignin bio-oil as a styrene alternative”

38. ACS, Fall Meeting, August 2014, San Francisco, CA
Speaker - A. Holmberg “Designing Block Copolymers from Lignin Model Compounds”

39. AIChE Annual Meeting, November 2014, Atlanta, GA
Speaker - T. Epps "Kinetically-controlled dynamics in block polymer micelles"

40. AIChE Annual Meeting, November 2014, Atlanta, GA
Speaker - T. Epps "Controlled Self-Assembly and Ionic Conductivity Via Interfacial Modification of Lithium-Doped Block Polymers"

41. APS, March Meeting, March 2015, San Antonio, TX
Speaker - M. Luo "Determination of Lithium Ion Distributions in Nanostructured Block Polymer Electrolyte Thin Films by XPS Depth Profiling"

42. APS, March Meeting, March 2015, San Antonio, TX
Speaker - C. Shelton "Decoupling Substrate Surface Interactions in Block Polymer Thin Film Self-Assembly"

43. ACS, Spring Meeting, March 2015, Denver, CO
Speaker - C. Greco "Photoresponsive on/off dormancy in polyplexes for patterned control of cell behavior"

44. ACS Green Chemistry, July 2015, Bethesda, MD
Speaker - K. Reno "Exploration of bisguaiacols derived from lignin as potential BPA alternatives"

45. ACS Green Chemistry, July 2015, Bethesda, MD
Speaker - A. Holmberg "Precision properties of polymers prepared from multicomponent lignin-based bio-oils"

46. AIChE Annual Meeting, November 2015, Salt Lake City, UT
Speaker - M. Sullivan "Light-Induced Gene Silencing for Applications in Regenerative Medicine"

47. ACS Spring Meeting, March 2016, San Diego, CA
Speaker - M. Morris "Synthesis and characterization of single-ion conducting polymers for lithium-ion batteries"

48. ACS Spring Meeting, March 2016, San Diego, CA
Speaker - V. Muir "Optimizing gene silencing in light-responsive siRNA polyplexes by varying polymer block lengths"

49. APS March Meeting, March 2016, Baltimore, MD
Speaker - T. Gartner "Development of Simulation Methods in the Gibbs Ensemble to Predict Polymer-Solvent Phase Equilibria"

50. APS March Meeting, March 2016, Baltimore, MD
Speaker - C. Shelton "Tracking Solvent Distribution in Block Polymer Thin Films with *In Situ* Solvent Vapor Annealing during Neutron Scattering"

51. American Conference on Neutron Scattering (ACNS) Annual Meeting, July 2016, Long Beach, CA
Speaker - C. Shelton "Tracking Solvent Distribution in Block Polymer Thin-Films with In Situ Neutron Scattering during Solvent Vapor Annealing"

52. ACS Fall Meeting, August 2016, Philadelphia, PA
Speaker - T. Gartner "Utilizing Gibbs ensemble molecular dynamics and hybrid Monte Carlo/molecular dynamics simulations for efficient study of polymer-solvent phase equilibria"

53. ACS Fall Meeting, August 2016, Philadelphia, PA
Speaker - S. Wang "Tunable and reversible thermo-responsiveness of sugar-based block copolymers"

54. ACS Fall Meeting, August 2016, Philadelphia, PA

Speaker - M. Morris “Synthesis and characterization of single-ion conducting diblock terpolymers for lithium-ion batteries”

55. ACS Fall Meeting, August 2016, Philadelphia, PA
Speaker - K. Reno “The effect of methoxy substituents on the kinetics and thermomechanical properties of photocured lignin-derived polymer networks”

56. ACS Fall Meeting, August 2016, Philadelphia, PA
Speaker - J. Emerson “Effect of *ortho* and *para* constituents on the chemical and mechanical properties of lignin-based polymer films”

57. AIChE Annual Student Meeting, November 2016, San Francisco, CA
Speaker - V. Muir “Efficient Tuning of siRNA Dose Response By Combining Mixed Polymer Nanocarriers with Simple Kinetic Modeling”

58. AIChE Annual Meeting, November 2016, San Francisco, CA
Speaker - T. Epps “Controlling Ordering and Orientation in Nanostructured Thin Films through Combined Thermal and Solvent Annealing”

59. APS, March Meeting, March 2017, New Orleans, LA
Speaker - C. Shelton “Investigating Kinetic Pathways During Solvent Vapor Annealing with Soft Shear via *In Situ* Small-Angle Neutron Scattering”

60. APS, March Meeting, March 2017, New Orleans, LA
Speaker - T. Gartner “Salt Distribution, Domain Spacing, and Interfacial Characteristics in Lithium Ion-Doped Block Polymer Electrolyte Films”

61. APS, March Meeting, March 2017, New Orleans, LA
Speaker - M. Morris “Single-ion conducting diblock terpolymers for lithium-ion batteries”

62. ACS Spring National Meeting, April 2017, San Francisco, CA
Speaker - T. Epps “Manipulating ordering and alignment in nanostructured thin films by combining substrate and solvent annealing effects”

63. ACS Spring National Meeting, April 2017, San Francisco, CA
Speaker - S. Wang “Sugar-derived thermoresponsive block copolymers”

64. ACS Spring National Meeting, April 2017, San Francisco, CA
Speaker - C. Greco “Photo-responsive polymeric formulations to attenuate inflammation in cardiovascular tissues”

65. ACS Fall National Meeting, August 2017, Washington, D.C.
Speaker - G. Peterson “Tuning the Morphology and Activity of Electrospun Polystyrene/UiO-66-NH_2 Metal-Organic Framework Composites”

66. ACS Fall National Meeting, August 2017, Washington, D.C.
Speaker - Y. Ping “Evaluation of Estrogenic Activity of the novel Bisphenol-A alternative, bisguaiacol-F”

67. AIChE Student Annual Meeting, October 2017, Minneapolis, MN
Speaker - V. Muir “Efficient tuning of siRNA dose response by combining mixed polymer nanocarriers with simple kinetic modeling”

68. APS, March Meeting, March 2018, Los Angeles, CA
Speaker - M. Morris “Enhanced conductivity pathways in block polymer electrolytes with homopolymer additives”

69. DE CTR-ACCEL, Annual Meeting, May 2018, Newark, DE
Speaker - T. Epps "Spatiotemporal control of nanoparticle therapies for cardiovascular repair"

70. ACS Fall National Meeting, August 2018, Boston, MA
Speaker - G. Peterson "MOFwich: Sandwiched Metal-Organic Framework-Containing Mixed Matrix Composite Polymers for Chemical Warfare Agent Removal"

71. ACS Fall National Meeting, August 2018, Boston, MA
Speaker - M. Morris "Nanostructured homopolymer-blended block polymer electrolytes for lithium ion batteries"

72. ACS Fall National Meeting, August 2018, Boston, MA
Speaker - Y. Ping "Evaluation of estrogenic activity of the novel bisphenol-A alternative, four bisguaiacol-F compounds, by in-vitro bioassays"

73. MOF2018, December 2018, Auckland, NZ
Speaker - G. Peterson "MOFwich: mixed matrix composites with multifunctional properties"

74. APS, March Meeting, March 2019, Boston, MA
Speaker - P. Ketkar "Investigation of Monomer Segment and Salt Distributions in Self-Assembled, Tapered Block Polymer Electrolytes"

75. APS, March Meeting, March 2019, Boston, MA
Speaker - M. Morris "Leveraging conductivity-enhancing pathways in homopolymer-blended block polymer electrolytes"

76. APS, Spring National Meeting, March 2019, Orlando, FL
Speaker - M. Morris "Design of Nanostructured, Self-doped Block Polymer Electrolytes for Lithium-ion Battery Electrolytes"

77. ACS Fall National Meeting, August 2019, San Diego, CA
Speaker - G. Peterson "Enhanced polymer compatibility via modification of metal-organic frameworks for enhanced chemical biological protection"

78. APS, March Meeting, March 2020, Denver, CO
Speaker - P. Ketkar "Investigation of monomer segment distributions, chain conformations, and lithium salt solvation in self-assembled, tapered block polymer electrolytes"

79. ACS Spring National Meeting, March 2020, Philadelphia, PA
Speaker - K. Sweet "Dual-functional epoxy-methacrylate monomers from bio-based feedstocks and their respective epoxy-functional thermoplastics" [meeting canceled due to COVID-19]

80. ACS Spring National Meeting, March 2020, Philadelphia, PA
Speaker - E. Roh "Multi-layered photo-responsive polymer nanocarriers for controlled delivery of multiple siRNAs" [meeting canceled due to COVID-19]

81. ACS Spring National Meeting, April 2021 (virtual)
Speaker - A. Amitrano "Molecular docking simulations to assess the estrogenic activity of lignin-derivable bisphenol A alternatives and their polymerization via additive manufacturing"

82. ACS Spring National Meeting, April 2021 (virtual)
Speaker - R. O'Dea "Intensified valorization of lignocellulosic biomass to biobased polymers"

83. ACS Spring National Meeting, April 2021 (virtual)
Speaker - P. Ketkar "Tapered block polymer electrolytes for lithium batteries: Connection of ionic conductivity behavior to distributions of monomer segments and ions"

84. ACS Green Chemistry Conference, June 2021 (virtual)
Speaker - A. Amitrano "Molecular docking simulations to assess the estrogenic activity of lignin-derivable bisphenol A alternatives and their polymerization via additive manufacturing"

85. ACS Green Chemistry Conference, June 2021 (virtual)
Speaker - R. O'Dea "Intensified reductive catalytic fractionation: A low-pressure process for high-value bioproducts"

86. APS March Meeting, March 2022, Chicago, IL
Speaker - P. Ketkar "Tapered block polymer electrolytes for lithium-ion batteries: enhancement of ion transport through the tuning of intra-domain structure"

87. ACS Spring National Meeting, March 2022, San Diego, CA
Speaker - Z. Hinton "Quantifying Challenges to Valorization Posed by Chemical Additives in Waste Polyethylene"

88. ACS Spring National Meeting, March 2022, San Diego, CA
Speaker - E. Roh "Kinetic modeling to accelerate the development of nucleic acid therapeutics"

89. ACS Spring National Meeting, March 2022, San Diego, CA
Speaker - R. O'Dea "Intensified reductive catalytic deconstruction of lignin: A low-pressure process for high-value bioproducts"

90. ACS Spring National Meeting, March 2022, San Diego, CA
Speaker - X. Zhang "Developmental toxicity and genotoxicity evaluation of lignin-derivable of six bisguaiacols using in silico, in vitro, and in vivo methods"

91. AIChE National Meeting, November 2022, Phoenix, AZ
Speaker - Z. Hinton "Additive-Induced Catalyst Poisoning in Polyolefin Hydrocracking"

92. AIChE National Meeting, November 2022, Phoenix, AZ
Speaker - Z. Hinton "Leveraging Polymer Characterization to Gain Key Insights into Polyolefin Deconstruction Processes"

93. APS March Meeting, March 2023, Las Vegas, NV
Speaker - A. Balzer "Molecular Weight Determination of Polyolefin Deconstruction Products by Thermal Analysis"

94. APS March Meeting, March 2023, Las Vegas, NV
Speaker - Z. Hinton "Connecting Polymerization Physics to Macromolecular Deconstruction Product Distributions and Process Kinetics"

95. European Geosciences Union Meeting, April 2023, Vienna, Austria
Speaker - D. Levia "The concentration of neutral sugars in stemflow with respect to tree species and phenophase"

96. ACS Fall National Meeting, August 2023, San Francisco, CA
Speaker - A. Shapiro "High-throughput lignocellulosic biomass characterization: Leveraging thermogravimetric analysis to screen lignin content and predict deconstruction yields"

97. ACS Fall National Meeting, August 2023, San Francisco, CA
Speaker - J. Mahajan "Lignin-derivable, thermoplastic non-isocyanate polyurethanes with increased hydrogen bonding content and toughness as potential alternatives to petroleum-derived analogues"

98. ACS Fall National Meeting, August 2023, San Francisco, CA
Speaker - S. Mhatre “Lignin-derivable alternatives to petroleum-derived non-isocyanate polyurethane thermosets with enhanced toughness”

99. ACS Fall National Meeting, August 2023, San Francisco, CA
Speaker - T. Christoff-Tempesta “Depolymerization and upcycling of lignin-derivable polymers”

100. ACS Sustainable Polymers Workshop, October 2023, Safety Harbor, FL
Speaker – R. O’Dea “Depolymerization and upcycling of lignin-derivable polymers”

101. APS March Meeting, March 2024, Minneapolis, MN
Speaker – S. Yang “Enhanced ion conduction by decoupling ion transport from polymer segmental relaxation in single-ion-conducting, polymer blend electrolytes”

102. ACS Spring National Meeting, March 2024, New Orleans, LA
Speaker – J. Mahajan “Structure-activity and structure-property relationships in lignin-derivable, sustainable polymers”

Poster Presentations:

1. GRC, Polymer Physics, June 2006, New London, CT
Presenter - T. Epps “Combinatorial Studies of Block Copolymer Interactions with Surfaces”

2. GRC, Polymers-East, June 2007, South Hadley, MA
Presenter - T. Epps “Gradient Approaches to the Examination of Surface Energy Effects on Block Copolymer Thin Films”

3. EPSCoR Fall Research Forum, Delaware Biotechnology Institute, November 2007, Newark, DE
Presenter - M. Tureau “Active Nanostructured Capture Devices for Metabolites Using Triblock Copolymer Networks”

4. APS, March 2008, New Orleans, LA
Presenter - J. Lawson “Substrate Surface Energy Gradients Using Monolayer Vapor Deposition”

5. Society of Plastics Engineers - Topical Conference, October 2008, Wilmington, DE
Presenter - J. Lawson “Generating surface energy gradients for block copolymer thin film studies”

6. AIChE, November 2008, Philadelphia, PA
Presenter - W. Young “Microstructure Transitions of Lithium Salt Doped PS-B-PEO Copolymer”

7. AIChE, November 2008, Philadelphia, PA
Presenter - N. Singh “Synthesis and Characterization of Interfacially Modified Block Copolymers”

8. APS, March 2009, Pittsburgh, PA
Presenter - M. Tureau “Network Phase Behavior of ABC Triblock Copolymer-Homopolymer Blends for Nanoporous Membranes”

9. I2CAM/FAPERJ School of Soft Matter Physics, May 2009, Rio de Janeiro, Brazil
Presenter - M. Tureau “Nanoscale Networks in Etchable Triblock Copolymers”

10. GRC, Polymers, June 2009, South Hadley, MA
Presenter - J. Kelly “Combinatorial Approach to Surface and Interface Effects in Thin Film Polymer Nanocomposites”

11. Department of Defense PECASE Poster Session, January 2010, Washington, D.C.
Presenter - T. Epps “Ion-Conducting Network Membranes Using Tapered Block Copolymers”

12. GRC, Colloidal, Macromolecular & Polyelectrolyte Solutions, February 2010, Ventura, CA
    Presenter - T. Epps "Salt Doping in PEO Containing Block Copolymers: Counterion and Concentration Effects"

13. APS, March 2010, Portland, OR
    Presenter - J. Wu "Electrical and structural changes during phase transitions in conducting polymer cubic phases" [D. Martin graduate student]

14. GRC, Polymer Physics, June 2010, South Hadley, MA
    Presenter - E. Kelley "Synthesis and self-assembly of bio-responsive block copolymers"

15. GRC, Polymer Physics, June 2010, South Hadley, MA
    Presenter - J. Kelly "Investigation of Thermally-Responsive Block Copolymer Thin Film Morphology Using Gradients"

16. GRC, Polymer Physics, June 2010, South Hadley, MA
    Presenter - T. Epps "Controlling Block Copolymer Interactions Using Tapering to Stabilize Networks"

17. ACS, August 2010, Boston, MA
    Presenter - E. Kelley "Manipulating the structural conformation of PB-PEO micelles in water-THF co-solvent mixtures"

18. ACS, August 2010, Boston, MA
    Presenter - T. Smart "Cross-linked PB-PEO Hybrid Micelles for Targeted Delivery"

19. MRS, November 2010, Boston, MA
    Presenter - R. Roy "Design and Synthesis of Stimuli-Sensitive Micelles that Can Unveil Shielded Targeting Ligands"

20. MRS, November 2010, Boston, MA
    Presenter - R. Roy "Interfacially Modified Diblock and Triblock Copolymers using a Combination of Anionic Polymerization and Atom Transfer Radical Polymerization (ATRP)"

21. APS, March 2011, Dallas, TX
    Presenter - S. Mastroianni "Nanostructured photovoltaic materials using conjugated block copolymer assemblies"

22. APS, March 2011, Dallas, TX
    Presenter - W. Kuan "Synthesis and Characterization of Tapered Block Copolymers"

23. APS, March 2011, Dallas, TX
    Presenter - W. Young "Mixed-salts effect on the ionic conductivity of PEO-containing block copolymers"

24. GRS, Polymers East, June 2011, South Hadley, MA
    Presenter - T. Smart "Stabilization and functionalization of PB-PEO micelles with varying interfacial width"

25. GRC, Polymers East, June 2011, South Hadley, MA
    Presenter - E. Kelley "Synthesis and self-assembly of bio-responsive block copolymers"

26. GRC, Polymers East, June 2011, South Hadley, MA
    Presenter - T. Epps "Controlling Block Copolymer Interactions Using Tapering to Stabilize Networks"

27. GRC, Polymers East, June 2011, South Hadley, MA
    Presenter - J. Kelly "Investigation and Manipulation of Stimuli Responsive Block Copolymer Thin Film Morphology Using Gradient Libraries"

28. Warwick Polymers Conference 2012, July 2012, Warwick, UK
    Presenter - E. Kelley "Structural changes in block copolymer micelles induced by cosolvent mixtures"

29. Warwick Polymers Conference 2012, July 2012, Warwick, UK
    Presenter - S. Mastroianni "Synthesis and self-assembly of poly(methyl methacrylate-b-m-triphenylamine) block copolymers"
    Polymer Chemistry Poster Prize Winner

30. GRC, Macromolecular Materials 2013, January 2013, Ventura, CA
    Presenter - M. Green "Solution assemblies of block copolymers for nucleic acid and drug delivery"

31. GRC, Polymers East 2013, June 2013, South Hadley, MA
    Presenter - E. Kelley "Bio-responsive Block Copolymer for Targeted Drug Delivery"

32. GRC, Polymers East 2013, June 2013, South Hadley, MA
    Presenter - T. Epps "Using Tapered Block Copolymers to Create Conducting Nanomaterials"

33. ACS Green Chemistry Conference, June 2013, Bethesda, MD
    Presenter - K. Reno "Getting a Handle on Vanillin: Green Modifications"

34. ACS Green Chemistry Conference, June 2013, Bethesda, MD
    Presenter - A. Holmberg "Lignin- and fatty acid-derived monomers for nanostructured thermoplastic elastomers"

35. ACS Green Chemistry Conference, June 2014, Bethesda, MD
    Presenter - A. Holmberg "The Design and Synthesis of Sustainable Nanostructured Block Polymers"

36. ACS, Fall Meeting, August 2014, San Francisco, CA
    Presenter - A. Holmberg "Nanoscale self-assembly and morphology-dependent repellency of omniphobic triblock terpolymers"

37. Society of Rheology, October 2014, Philadelphia, PA
    Presenter - J. Emerson "Effect of material rheology on polymer blend thin film morphology"

38. NIST Sigma Xi Poster Session, January 2015, Gaithersburg, MD
    Presenter - C. Shelton "Predicting Substrate and Solvent Interaction Effects in Block Polymer Thin Films"

39. APS, March Meeting, March 2015, San Antonio, TX
    Presenter - C. Shelton "Tracking Solvent Uptake in Block Polymer Thin Films during Solvent Vapor Annealing"

40. APS, March Meeting, March 2015, San Antonio, TX
    Presenter - M. Luo "Macroscopic Alignment of Cylindrical Block Polymer Thin Film via Raster Solvent Vapor Annealing with Soft Shear"

41. GRC, Polymers East 2015, June 2015, South Hadley, MA
    Presenter - T. Epps "Tapered block polymers: Controlling segment sequence to improve materials properties"

42. GRC, Polymers East 2015, June 2015, South Hadley, MA
    Presenter - A. Holmberg "RAFT Polymerization of Complex Mixtures in Pursuit of Sustainable Polymers from Bio-Oils"

43. Functional Polymeric Materials Conference, August 2015, Ascot, UK
Presenter - T. Epps "Nanostructured Polymers for Improving Sustainability, Human Health, and the Environment"

44. AIChE, November 2015, Salt Lake City, UT
Presenter - D. Scott "Macroscopic Alignment of Cylindrical Block Polymer Thin Films *via* Raster Solvent Vapor Annealing with Soft Shear"
MESD Poster Prize Winner – Overall First Place

45. GRC, Polymers Physics 2016, July 2016, South Hadley, MA
Presenter - T. Epps "Manipulating nanostructured thin films by combining substrate modifications and solvent annealing"

46. AIChE Annual Student Meeting, November 2016, San Francisco, CA
Presenter - J. Saltwick "Combining Solvent Swelling and Shear Alignment to Direct Block Polymer Thin Film Self-Assembly"

47. APS, March Meeting, March 2017, New Orleans, LA
Presenter - C. Shelton "Quantifying lithium salt distributions in nanostructured ion-conducting polymer domains: a neutron reflectivity"
JPSB Poster Prize Winner – Overall First Place

48. APS, March Meeting, March 2017, New Orleans, LA
Presenter - T. Gartner "Gibbs Ensemble Simulations of the Solvent Swelling of Polymer Films"

49. APS, March Meeting, March 2017, New Orleans, LA
Presenter - M. Morris "Elucidating the effects of blending and salt-doping in A-B/A polymer blends for lithium-ion battery electrolytes"

50. AIChE Mid-Atlantic Region Annual Student Meeting, March 2017, Rowan, NJ
Speaker - V. Muir "Efficient Tuning of siRNA Dose Response By Combining Mixed Polymer Nanocarriers with Simple Kinetic Modeling"

51. ACS Spring National Meeting, April 2017, San Francisco, CA
Presenter - S. Wang "Effect of methoxy substituent position on thermal properties and solvent resistance of lignin-inspired poly(dimethoxy phenyl methacrylate)"

52. UD/NIST Neutron Day, November 2017, Newark, DE
Presenter - M. Morris "Leveraging neutron reflectometry to determine salt and polymer density profiles in block polymer electrolytes"

53. APS, March Meeting, March 2018, Los Angeles, CA
Presenter - M. Morris "Self-doped block polymer electrolytes for lithium-ion batteries"

54. UD Materials Science 20th Anniversary Symposium, May 2018, Newark, DE
Presenter - G. Peterson "Tuning form and function of polymer/metal-organic framework composites for protection against chemical warfare agents"

55. Department of Energy - Vehicle Technology Office Annual Meeting, June 2018, Arlington, VA
Presenter - M. Morris "Designing Efficient Nanostructured Polymer Electrolytes Using Tapered Block Polymers – Joint Experiment and Theory Effort in Controlled Interface Design"

56. GRC, Polymer Physics 2018, July 2018, South Hadley, MA
Presenter - M. Morris "Self-doped block polymer electrolytes for lithium-ion batteries"

57. GRC, Polymer Physics 2018, July 2018, South Hadley, MA
Presenter - S. Sung “Directed Self-Assembly of Block Polymer Thin Films with Patterned Poly(dimethylsiloxane) Pads”

58. ACS Fall National Meeting, August 2018, Boston, MA
Presenter - Y. Ping “Evaluation of Estrogenic Activity of the novel Bisphenol-A alternative, four Bisguaiacol-F compounds”

59. APS, March Meeting, March 2019, Boston, MA
Presenter - M. Morris “Effect of doping ratio on lithium-ion conductivity in nanostructured self-doped block polymer electrolytes”

60. ACS, Spring National Meeting, March 2019, Orlando, FL
Presenter - M. Morris “Leveraging conductivity-enhancing pathways in homopolymer-blended block polymer electrolytes”

61. GRC, Polymers 2019, June 2019, South Hadley, MA
Presenter - T. Epps “From trees to plastics: High-performance polymers from lignin-rich feedstocks”

62. APS, March Meeting, March 2020, Denver, CO
Presenter - P. Ketkar “Enhanced ion transport in block polymer electrolytes through the manipulation of salt and monomer segment distributions”

63. ACS, Spring National Meeting, March 2020, Philadelphia, PA
Presenter - C. Machado “Precision Polyanions to Enhance Cation Transport for Battery Applications” [meeting canceled due to COVID-19]

64. ACS, Spring National Meeting, March 2020, Philadelphia, PA
Presenter - E. Roh “Controlled co-delivery of multiple therapeutics using photo-responsive polymers” [meeting canceled due to COVID-19]

65. ACS, Spring National Meeting, March 2020, Philadelphia, PA
Presenter - J. Mahajan “Sustainable high-performance thermoplastics derived from biomass” [meeting canceled due to COVID-19]

66. ACS, Fall National Meeting, August 2020, San Francisco, CA
Presenter - E. Roh “Photo-responsive polymer nanocarrier formulations for controlled co-delivery of multiple therapeutics”

67. APS, March Meeting, March 2022, Chicago, IL
Presenter - P. Ketkar “Enhanced ion transport through the tuning of intra-domain structure and dynamics in nanostructured block polymer electrolytes”

68. Tosoh Polymer Conference, June 2022, Los Angeles, CA
Presenter - R. O’Dea “Lignin deconstruction: a platform for sustainable, high-performance polymers”

69. Tosoh Polymer Conference, June 2022, Los Angeles, CA
Presenter - E. Roh “Combination of design and modeling of layer-by-layer-inspired photo-responsive polymer nanocarriers to control and predict the delivery of multiple siRNA doses”

70. Polyurethanes Conference, October 2022, National Harbor, MD
Presenter - S. Mhatre and J. Mahajan “Lignin-derivable, sustainable non-isocyanate polyurethanes”

71. National Science Foundation, Nanoscale Science & Engineering Grantees Conference, December 2022 (Virtual)
Presenter - A. Shapiro and R. O’Dea “Lignin valorization: Biomass deconstruction to synthesize high-performance polymers”

72. National Science Foundation, Nanoscale Science & Engineering Grantees Conference, December 2022 (Virtual)
Presenter - S. Mhatre and J. Mahajan "Lignin-derivable, sustainable non-isocyanate polyurethanes: Films, nanofibers, and nanocomposites"

73. GRC, Polymers, June 2023, South Hadley, MA
Presenter - T. Christoff-Tempesta "Depolymerization and upcycling of lignin-derived methacrylate polymers"

74. ACS Green Chemistry and Sustainable Energy Summer School, July 2023, Golden, CO
Presenter - J. Mahajan "Lignin-derivable, potentially safer bisphenols for sustainable non-isocyanate polyurethanes"

75. ACS Fall National Meeting, August 2023, San Francisco, CA
Presenter - J. Mahajan and S. Mhatre "Lignin-derivable, potentially safer bisphenolic precursors for non-isocyanate polyurethanes with increased toughness"

76. ACS Sustainable Polymers Workshop, October 2023, Safety Harbor, FL
Presenter - R. O'Dea "Polymer chemical recycling: a path toward more circular materials"

77. ACS Sustainable Polymers Workshop, October 2023, Safety Harbor, FL
Presenter - A. Shapiro "Advances in circular solutions for crosslinked polyethylene"

78. APS March Meeting, March 2024, Minneapolis, MN
Speaker – S. Yang "Rapid and highly selective ion conduction *via* decoupling ion transport from polymer segmental relaxation in single-ion-conducting, polymer blend electrolytes"

Researchers Supervised:

Ph.D. Students (current Ph.D. students in bold)

1. Julie Albert (nee Lawson) - Exploration of Block Copolymer Thin Film Self-Assembly using Gradient Methods - 08/22/2011 *faculty at Tulane University*
2. Maëva Tureau - Nanostructured Copolymer Capture Devices for Environmental Metabolomics - 10/28/2011 *Air Products*
3. Wen-Shiue Young - Ion-conductivity in Block Copolymer Electrolyte Membranes - 04/03/2012 *Dow Chemical*
4. Elizabeth Kelley (co-advised with Sullivan) - Bio-responsive Polymeric Vesicles for Targeted Drug Delivery - 04/15/2014 *NIST Center for Neutron Research, NRC Fellow*
5. Sarah Mastroianni - Nanostructured Photovoltaic Materials using Conjugated Block Copolymer Assemblies - 06/10/2014 *Dow Chemical*
6. Wei-Fan Kuan - Nanoporous Network Templates for Alternative Energy (Lithium Battery and Fuel Cell Membrane) Applications - 05/21/2015
7. Angela Holmberg - Bottom-up Design and Synthesis of Sustainable Block Polymers - 12/04/2015
8. Michael Mayeda (co-advised with Lauterbach) - Templating Inorganic Materials with Block Polymer Thin Films and Catalyzing Military Jet Fuel to Liquefied Petroleum Gas - 04/18/2016
9. Ming Luo - Controlling Self-Assembly and Ordering of Block Polymer Nanostructures in Thin Films - 06/02/2016
10. Jillian Emerson (co-advised with Furst) - Polymer mixture thermodynamics in solution and applications for functional, microstructured films - 12/14/2016
11. Cameron Shelton - Small-Angle Neutron Scattering Methods for Examining Block Copolymer Thin Film Nanostructures - 05/05/2017
12. Chad Greco (co-advised with Sullivan) - Photo-Responsive Block Copolymers Assemblies for Controlled Nucleic Acid Delivery - 05/18/2017
13. Melody Morris - Nanostructured Polymer Electrolyte Designs for Lithium-Ion Batteries - 05/30/2019

14. Greg Peterson - Directed Assembly in Polymer-Containing Metal Organic Framework Composites - 02/ https://sites.udel.edu/udcrisp/03/2021
15. Priyanka Ketkar - Block Polymers for Lithium Battery Applications - 05/04/2022
16. Esther Roh (co-advised with Sullivan) - Block Polymer Assemblies for Nucleic Acid Delivery - 12/09/2022
17. Robert O'Dea - Increasing Polymer Circularity *via* Lignocellulosic Biomass Valorization and Plastics Waste Deconstruction - 12/16/2022
18. **Jignesh Mahajan (co-advised with Korley) - Processing of High-Performance Biobased Polymer Systems - 06/2024 (expected)**
19. **Mengying Yang - Block Polymers for Lithium Battery Applications - 01/2025 (expected)**
20. **Sampanna Mhatre (co-advised with Korley) - Polymer from Plastics Waste – 09/2025 (expected)**
21. **Alison Shapiro - Biobased Polymer Networks - 01/2026 (expected)**
22. **Venice Magunga - Nanostructured Polymers for Lithium Battery Applications - 01/2027 (expected)**
23. **Nina Fratto - (co-advised with Bayles) 3D Printing of Biobased Polymers - 01/2028 (expected)**

M.S. Students (thesis-based) (current students in bold):

1. Ryan Murphy (co-advised with Sullivan) - Solution Assembly of Amphiphilic Block Copolymers for Targeted Drug Delivery - 08/2014
2. Emma De Baets (co-advised with Sullivan) - Effect of Air/Water Interfaces on Block Copolymer Micelle Stability - 05/2017 - *joint Masters program with Leuven, Belgium*
3. Laurens Heusele (co-advised with Sullivan) - Mixing of Polymeric for Controlled Formulation of Payload Delivery Systems - 05/2017 - *joint Masters program with Leuven, Belgium*
4. Jamael Ajah - Valorization of Biomass Resources - 06/2023
5. Sonia Li - Investigating the impact of hydrogen bonding in blends containing lignin-derivable polymers - 12/2023
6. Maida Mahmood - Electrospinning of Biobased Polymers – 01/2024 (expected)

Postdoctoral Researchers (current postdocs in bold):

1. Nripen Singh - Interfacial Modifications in Melt-State Block Copolymers (2008-2009) *now at Boston Scientific*
2. Jong Keun Park - Synthesis and Characterization of Tapered Triblock Copolymers (2010) *now at Dow Chemical*
3. Jennifer Kelly - (co-advised with Fasolka, NIST) Combinatorial Studies of Thermally-Responsive Block Copolymer Thin Films (2008-2011) *now at FDA*
4. Vijay Taori - (co-advised with Sullivan) Peptide-Containing Block Copolymer Amphiphiles for Targeted Drug Delivery (2010-2011)
5. Thomas Smart - (co-advised with Sullivan) Neutron Scattering of Solution Assembly in Amphiphilic Block Copolymer Systems (2010-2012) *now at Eastman Chemical*
6. Raghunath Roy - (co-advised with Sullivan) Peptide-Containing Block Copolymer Amphiphiles for Targeted Drug Delivery (2009-2012) *now at Dow Chemical*
7. JungHyun Lee - (co-advised with Stafford, NIST) Mechanical Properties of Polymeric Thin Films (2010-2012) *now at Korea Institute of Science and Technology, Faculty*
8. Jon Seppala - Thin Film Assembly of Surface-Responsive Block Copolymers (2010-2012) *now at NIST, NCNR*
9. Sung Hyun Han - Novel Block Copolymers for Ion-Conducting Applications (2012-2013)
10. Matthew Green - (co-advised with Sullivan) Peptide-Containing Block Copolymer Amphiphiles for Targeted Drug Delivery (2012-2014) *now at Arizona State University, Assistant Professor in Chemical Engineering*
11. Tiffany Suekama - Shape-Changing Multi-Responsive Nanoparticles in Solution (2015-2016)
12. Shu Wang - Bio-based Block Copolymers for Thermoplastics and Drug Delivery Applications (2015-2018) *now at Bridgestone/Firestone*
13. Thu Vi - Design of Responsive Polymeric Nanocarriers for Gene Therapy Applications (2017-2018)
14. Silvia Grama - Design of Responsive Polymeric Nanocarriers for Gene Therapy Applications (2018-2019)

15. Seung Hyun Sung - Directed Self-assembly of Nanostructured Thin Films (2017-2019) *now at LG Chem*
16. **Eric Gottlieb - Nanostructure Control in Block Copolymer Thin Films (2018-present)**
17. Chao Wang - Structure/Property Relationships in Polymer Surface Coatings (2018-2019) *now at PPG*
18. Kayla Lantz - Polymer-MOF Composite Films (2019-2020) *now faculty at Fairmount State University*
19. Craig Machado - Designer Polymers for Flow Battery Membranes (2019-2021)
20. Aynur Guliyeva - Nanostructure Control in Block Copolymer Thin Films (2019-2021)
21. Manisha Ahir - Responsive Polymers for Therapeutics Delivery (2020-2021)
22. Garrett Bass - Designer Polymers from Lignocellulosic Biomass (2020-2022)
23. Zach Hinton - Structure-Property Relationships in Polymer Waste Depolymerization (2020-2022)
24. Mridula Nandi - Routes to Polymer Recycling (2021-2023)
25. Tianwei Yan - Chemocatalytic Generation of Valuable Polymers from Plastics Waste (2021-2023)
26. Tan Zhang - Routes to Polymer Recycling (2021)
27. **Alex Balzer - Thermal Characterization of Polymer Upcycling Mixtures (2022-present)**
28. **Ty Christoff-Tempesta - Valorization of Lignin-Rich Biomass (2022-present)**
29. **Robert O'Dea - Deconstruction of Polymer Waste (2023-present)**
30. **Soojin Kim - Valorization of Sustainable Polymers (2023-present)**
31. **Kevin Nixon - Generation of Polymers from Biomass and Plastics Waste (2023-present)**
32. **Luca Kim - Stimuli-Responsive Polymer and Membrane Materials (2023-present)**

Visiting Scientists and Graduate Researchers (current in bold):

1. Kaleigh Reno - Polymer Networks from Biobased Feedstocks (2014-2018)
2. Jordan Willie - High-Performance Polymers from Biobased Feedstocks (2018-2019)
3. Antigoni Konstantinou - Biobased Polymers from Waste Products (2019-2020)
4. Mruthula Rammohan - Photo-Responsive Block Copolymers Assemblies for Controlled Nucleic Acid Delivery (2019-2022)
5. Alexa Gomez - Biobased Polymers from Lignin-Rich Feedstocks (2022) – CBI Rotation
6. Tristan Herrera - Biobased Polymers from Lignin-Rich Feedstocks (2022-2023)

Undergraduate Students (current students in bold) *(non-UD researchers in italics):*

1. Paul Brigandi - Effects of Lithium Counterions on the Assembly of Microphase-Separated Copolymer Electrolytes – 2006-2008
2. Thomas Scherr - Solvent Vapor Annealing of Block Copolymer Thin Films – 2006-2008
3. Peter Wells - Solvent Quality Effects on the Solution Assembly of Amphiphilic Diblock Copolymers – 2007-2008
4. Michael Baney - Templating Proteins Using Self-Assembled Block Copolymer Thin Films – 2008-2010
5. Khrishna Mukkavilli - Influence of Substrate Modifications on the Assembly of Network-Forming Block Copolymer Thin Films – NSF REU for Summer 2008
6. Timothy Bogart - Ordering of Cylindrical Block Copolymer Thin Films – 2008-2010
7. Jason Papandrea - Surface Modifications in Thin Film Block Copolymers – Summer 2009
8. Jasmine Smith - Mechanical Measurements in Oriented Block Copolymer Films – NSF REU for Summer 2009
9. Thomas Ronan - Incorporating Nanoparticles in Block Copolymer Thin Films – NSF REU for Summer 2009
10. Joey Kim - Vapor Deposition of Chlorosilane Gradient Monolayers for Polymer Thin Film Studies – 2010-2012
11. Robert Pagels - Solution Self-Assembly of Amphiphilic Polymer/Peptide Hybrid Materials – 2010-2012
12. Allen (Benjamin) Schantz - Lithium Ion-Conductivity in Poly(ethylene oxide) - Containing Block Copolymers – Summer 2010
13. Ronald Lewis - Solvent Vapor Annealing to Manipulate Block Copolymer Thin Films – 2010-2013
14. Ryan Murphy - Organic Photovoltaics from Block Copolymers – NSF REU for Summer 2010
15. Sarah Hann - Stability of Block Copolymer Micelles in Solvent/PEO Solutions – 2010-2012
16. Eddie Qian - Organic Photovoltaics from Block Copolymers – 2010-2011
17. Eddie Sangern - Polymer Solvent Interaction Parameters Using Thin Film Swelling – 2011-2012
18. Ellen Reed - Lithium-ion Conductivity in Block Copolymer Membranes – 2011-2014

19. Matthew Hoffman - Nanoscale Structures from Block Copolymer Blending – 2011-2012
20. Kevin Hutter - Chlorosilane Gradients for Droplet Wettability Studies – 2011-2013
21. Michael Karavolias - Bio-based Monomers from Lignin Feedstocks – 2013-2016
22. Connor Hodges - Polymer/Peptide Hybrid Materials for Targeted Drug Delivery – NSF REU for Summer 2013
23. Douglas Scott - Thin Film Self-Assembly of Tapered Block Copolymers – 2013-2016
24. John McCarron - Thin Film Properties of Environmentally-Responsible Block Polymers – 2013-2016
25. Victoria Muir - Solution Assembly of Nucleic Acid-Complexing Block Polymers – 2014-2018
26. Dakota Hanemann-Rawlings - Lignin Feedstocks for Bio-based Resins – 2014-2016
27. Jason Andrechak - Formulation of Nucleic Acid-Containing Micelles for Gene Therapy Applications – 2014-2017
28. Bonnie Limpawuchara - Block Polymer Electrolytes for Battery Membranes – Summer 2015
29. John Saltwick - Thin Film Assembly of Block Polymers – 2015-2017
30. George Wieber - Properties of Lignin-Based Polymers – 2016-2017
31. Spencer Burton - New Monomers and Polymers from Lignin-based Feedstocks – NSF REU for Summer 2016
32. Sophia Freaney - Shear-Alignment of Block Copolymer Thin Films – 2017-2019
33. James Mannino - Metal Organic Frameworks for Sensing Applications – 2017-2019
34. Maura Swift - New Biobased Polymers for Thermoplastics Applications – 2017-2018
35. Christine Castagna - Nanostructured Polymer Blends for Battery Electrolytes – 2017-2018
36. Grace Kresge - Nanostructured Biobased Polymers for Battery Applications – NSF REU for Summer 2017
37. Shelby Babcock - Biobased Epoxies – NSF REU for Summer 2017
38. Joshua Watson - Nanostructured Polymers for Lithium Battery Membranes – 2019-2022
39. Alice Amitrano - Polymer Networks from Biobased Feedstocks – 2020-2021
40. Michelle Slomkowski - Polyplexes for Nucleic Acid Delivery – 2021
41. Allison Robbins - Polymer Recycling – 2021-2022
42. Scott Sampson - Block Polymer Thin-Film Composites – 2021-2023
43. Tre Bartony - 3D-Printing of Biobased Polymers – 2021-2022
44. Li Pei Soh - Synthesis of Biobased Polymers – 2021-2022
45. Julia Hirs - Recycling of Polymer Networks – 2022
46. **Genevieve Kroll - Isocyanate-Free Polyurethane Synthesis – 2022-present**
47. Anna Long - Characterization of Biobased Feedstocks – 2023
48. George Lauri - Sustainable Small Molecules from Lignin – Summer 2023
49. **Olivia Kelly - Ion-Conducting Polymer Blends - 2023-present**
50. Jess Williams - Structure-Property Relationships in Bio-derivable Polymer Networks - NSF REU for Summer 2023

Student and Postdoc Awards (Epps group):

1. Julie Albert - NSF Graduate Fellowship (2008-2011)
2. Owen Young - 2nd year Chemical Engineering Best Graduate Student Award (2009)
3. Maëva Tureau - Air Products Graduate Fellowship (2009-2010)
4. Jennifer Kelly - NRC Postdoctoral Fellowship at NIST (2010)
5. Chisom Amaechi - NSF Graduate Fellowship Honorable Mention (2010)
6. Elizabeth Kelly - NSF Graduate Fellowship Honorable Mention (2010)
7. Timothy Bogart - NSF Graduate Fellowship Honorable Mention (2010)
8. Julie Albert - Akzo Nobel Graduate Student Award Finalist (ACS Fall Meeting) (2010)
9. Thomas Smart - NIST Scattering School Participant (2010)
10. Elizabeth Kelley - National Scattering School Participant (2010)
11. Angela Holmberg - Pigford Fellowship (2010-2011)
12. Elizabeth Kelley - NDSEG Graduate Fellowship (2010-2013)
13. Julie Albert - Padden Award Finalist (APS March Meeting) (2011)
14. Elizabeth Kelley - Gordon Research Conference (Polymers) Journal of Materials Chemistry Poster Award (2011)
15. Sarah Hann - AFCEA General John A. Wickham Scholarship (2011-2012)
16. Sarah Hann - ACS POLY Undergraduate Travel Award (2012)

17. Elizabeth Kelley - ACS POLY/PMSE Excellence in Graduate Research Award (2012)
18. Joey Kim - NSF Graduate Fellowship (2012)
19. Robert Pagels - NSF Graduate Fellowship (2012)
20. Robert Pagels - Alexander Taylor Outstanding Senior Male at UD Award (2012)
21. Michael Mayeda - Ford Foundation Doctoral Fellowship Honorable Mention (2012)
22. Sarah Mastroianni - Warwick 2012 MacroUK Polymer Conference, Polymer Chemistry Poster Prize (2012)
23. Wei-Fan Kuan - ACS POLY Graduate Student Travel Award (2013)
24. Elizabeth Kelley - 63rd Lindau Nobel Laureate Young Researcher Award (2013)
25. Kaleigh Reno - NSF Graduate Student Travel Fellowship to ACS Green Chemistry Conference (2013)
26. Angela Holmberg - NSF Graduate Student Travel Fellowship to ACS Green Chemistry Conference (2013)
27. Kaleigh Reno - ACS Green Chemistry Conference Poster Prize - First Place (2013)
28. Angela Holmberg - NSF CIBA Green Chemistry Graduate Student Travel Award (2013)
29. Elizabeth Kelley - CCR (Council for Chemical Research) Graduate Student Award (2014)
30. Elizabeth Kelley - NRC Postdoctoral Fellowship (2014)
31. Angela Holmberg - University of Delaware Professional Development Award (2014)
32. Cameron Shelton - University of Delaware Professional Development Award (2015)
33. Ming Luo - University of Delaware Professional Development Award (2015)
34. Thomas Gartner - NSF Graduate Fellowship Honorable Mention (2015)
35. Kaleigh Reno - 65th Lindau Nobel Laureate Young Researcher Award (2015)
36. Thomas Gartner - Paul H. Schipper Fellowship (2015)
37. Angela Holmberg - AIChE Graduate Student Award Finalist (2015)
38. Angela Holmberg - University of Delaware Dissertation Fellowship (2015)
39. Douglas Scott - AIChE MESD Poster Session, Overall First Prize (2015)
40. Melody Morris - University of Delaware Professional Development Award (2016)
41. Victoria Muir - ACS POLY Undergraduate Best Oral Presentation – 2nd Place (2016)
42. Victoria Muir - Goldwater Scholar (2016)
43. Melody Morris - Robert L. Pigford Teaching Assistant Award, Chemical Engineering (2016)
44. Chad Greco - Saurabh A. Palkar Graduate Award for Mentoring, College of Engineering (2016)
45. Chad Greco - University of Delaware Professional Development Award (2016)
46. Cameron Shelton - Padden Award Finalist, American Physical Society (2017)
47. Chad Greco - ACS Excellence in Graduate Polymer Research Symposium (2017)
48. Cameron Shelton - Journal of Polymer Science 1st Place Poster Prize at APS DPOLY Poster Session, APS March Meeting (2017)
49. Kaleigh Reno - Richard Wool Award for Women in Green Engineering (2017)
50. Thomas Gartner - AIChE MESD Graduate Poster Session, Overall First Prize (2017)
51. Victoria Muir - AIChE MESD Undergraduate Poster Session, Overall First Prize (2017)
52. Melody Morris - Padden Award Finalist, American Physical Society (2019)
53. Melody Morris - ACS Excellence in Graduate Polymer Research Symposium (2019)
54. Esther Roh - Chemical and Biological Interface Fellowship (2019)
55. Esther Roh - Robert L. Pigford Teaching Assistant Award (2020)
56. Paula Pranda - Harward Munson Fellowship (2020)
57. Alice Amitrano - Chemical Engineering Industrial Sponsors Research Award (2021)
58. Paula Pranda - Chemical Engineering Industrial Sponsors Research Award (2021)
59. Robert O'Dea - ACS Excellence in Graduate Polymer Research Symposium (2022)
60. Alison Shapiro - University of Delaware, NSF NRT Graduate Fellowship (2022)
61. Jamael Ajah - Department of Chemical & Biomolecular Engineering Collins Fellowship (2022)
62. Alison Shapiro - APS DPOLY Graduate Student Travel Award (2022)
63. Robert O'Dea - Lignolix Pitch Mid-Atlantic Regional Winner EnergyTech University Prize (2022)
64. Jamael Ajah - APS DPOLY Graduate Student Travel Award (2022)
65. Priyanka Ketkar - NRC Postdoctoral Fellowship (NIST) (2022)
66. Sampanna Mhatre - University of Delaware, Materials Science, Best 3rd Year Talk Award (2022)
67. Sonia Li - University of Delaware, NSF NRT Graduate Fellowship (2022)
68. Ty Christoff-Tempesta - ACS PMSE Future Faculty Honoree (2023)
69. Ty Christoff-Tempesta - CAS Future Leaders Award (2023)
70. Jignesh Mahajan - MSEG Outstanding Graduate Student Research Assistant Award (2023)

71. Alison Shapiro - Richard Wool Award for Women in Green Engineering (2023)
72. Ty Christoff-Tempesta - Gordon Research Seminar (Polymers) Talk Award – Invited to give talk at Gordon Research Conference (Polymers) (2023)
73. Jignesh Mahajan - ACS Excellence in Graduate Polymer Research Symposium (2024)
74. Jignesh Mahajan - Top Oral Presenter at ACS POLY Excellence in Graduate Polymer Research Symposium (2024)
75. Mengying Yang - 2nd Place Poster Presenter at APS DPOLY March Meeting (2024)
76. Sampanna Mhatre - Excellence in Thermoset Polymer Research Award from the Thermoset Resin Formulators Association (TRFA) (2024)
77. Genevieve Kroll - AIChE Outstanding Junior – Delaware Valley Section (2024)
78. Mengying Yang - MSEG Outstanding Graduate Student Research Award (2024)
79. Mengying Yang - University of Delaware Graduate Student Travel Award (2024)

Thesis Committees of University of Delaware Students (Graduate)

I have served (or am serving) on the following graduate thesis committees at the University of Delaware. The primary advisor and department are given in parentheses.

1. Jennifer O'Donnell, Ph.D. 2007 (Eric Kaler, Chemical Engineering)
2. Kelly Hales, Ph.D. 2007 (Darrin Pochan, Materials Science)
3. Travis Larsen, Ph.D. 2008 (Eric Furst, Chemical Engineering)
4. Mingjiang Zhang, Ph.D. 2010 (Richard Wool, Chemical Engineering)
5. JeongJae Wie, Ph.D. 2012 (Norman Wagner and Michael Mackay, Chemical Engineering)
6. Jiahua Zu, Ph.D. 2012 (Darrin Pochan, Materials Science)
7. Joseph Stanzione, Ph.D. 2013 (Richard Wool, Chemical Engineering)
8. Longxi Xiao, Ph.D. 2013 (Xinqiao Jia, Materials Science)
9. Qian Gou, Ph.D. 2014 (Babatunde Ogunnaike, Chemical Engineering)
10. Bingzi Zhang, Ph.D. 2015 (Yushan Yan, Chemical Engineering)
11. Yingchao Chen, Ph.D. 2015 (Darrin Pochan, Materials Science)
12. Hao Shen, Ph.D. 2015 (Michael Mackay, Chemical Engineering)
13. Diana Haidar, Ph.D. 2017 (David Burris, Mechanical Engineering)
14. Joshua Condon, M.S. 2017 (Arthi Jayaraman, Chemical Engineering)
15. Sheng Zhong, Ph.D. 2017 expected (Darrin Pochan, Materials Science)
16. Omar Barreda, M.S. 2019 (Eric Bloch, Chemistry & Biochemistry)
17. Hang Lau, Ph.D. 2019 (Kristi Kiick, Materials Science)
18. Hao Wang, Ph.D. 2019 (Yushan Yan, Chemical Engineering)
19. Bryan Sutherland, Ph.D. 2019 (Christopher Kloxin, Materials Science)
20. Danielle Valcourt, Ph.D. 2020 (Emily Day, Biomedical Engineering)
21. Jee Young Lee, Ph.D. 2021 (Darrin Pochan, Materials Science)
22. K. Istiaque Alam, Ph.D. 2021 (David Burris, Mechanical Engineering)
23. Wesley Connor, Ph.D. 2022 (Suresh Advani and Ajay Prasad, Mechanical Engineering)
24. Zachary Stillman, Ph.D. 2022 (Catherine Fromen, Chemical Engineering)
25. Jeffery Chang, M.S. 2022 (Delphis Levia, Geology)
26. Faheem Muhammed, Ph.D. 2022 (Jack Gillespie and Mark Marotznik, Materials Science)
27. Mukund Kabra, Ph.D. 2023 (Christopher Kloxin, Chemical Engineering)
28. Yu-Tai Wong, Ph.D. 2023, expected (LaShanda Korley, Chemical Engineering)
29. Max Levy, Ph.D. 2024, expected (Mary Watson, Chemistry & Biochemistry)
30. Jackie Arnold, Ph.D. 2026, expected (LaShanda Korley, Chemical Engineering)
31. Will Rears, Ph.D. 2026, expected (Chris Kloxin, Chemical Engineering)

Teaching Experience and Qualifications:

The numbers in brackets indicate the enrollment. The number listed after each secondary bullet represents the average student responses to the online course evaluation questions (5-Strongly Agree; 3-Neutral; 1-Strongly Disagree).

Courses Instructed

- CHEG 600 [25] Introduction to Polymer Science (2/3 load), Fall 2006 (elective)
    - Instructor Prepared - 4.4
    - Instructor Knowledgeable - 4.5
    - Instructor Communicates Well - 4.1
    - Instructor Stimulates Interest - 4.0
- CHEG 345 [44] Chemical Engineering Lab I; Heat-Exchanger Module, Spring 2007 (core)
    - Instructor Prepared - 3.5
    - Instructor Knowledgeable - 3.6
    - Instructor Communicates Well - 3.4
    - Instructor Stimulates Interest - 3.4
- CHEG 600 [24] Introduction to Polymer Science, Fall 2007 (elective)
    - Instructor Prepared - 4.6
    - Instructor Knowledgeable - 4.8
    - Instructor Communicates Well - 4.3
    - Instructor Stimulates Interest - 4.4
- CHEG 325 [42] Chemical Engineering Thermodynamics II (w/Lenhoff), Spring 2008 (core)
    - Instructor Prepared - 4.5
    - Instructor Knowledgeable - 4.4
    - Instructor Communicates Well - 3.6
    - Instructor Stimulates Interest - 3.5
- CHEG 600/MSEG 630 [39] Introduction to Polymer Science, Fall 2008 (core)
    - Instructor Prepared - 4.7
    - Instructor Knowledgeable - 4.7
    - Instructor Communicates Well - 4.2
    - Instructor Stimulates Interest - 3.9
- CHEG 867 [18] Scattering Methods in Soft Materials (w/Wagner), Fall 2008 (elective)
- CHEG 325 [60] Chemical Engineering Thermodynamics II, Spring 2009 (core)
    - Instructor Prepared - 4.5
    - Instructor Knowledgeable - 4.5
    - Instructor Communicates Well - 4.1
    - Instructor Stimulates Interest - 3.5
- CHEG 867 [8] Assembly of Soft Materials, Fall 2009 (elective)
    - Instructor Prepared - 4.7
    - Instructor Knowledgeable - 5.0
    - Instructor Communicates Well - 4.3
    - Instructor Stimulates Interest - 4.8
- CHEG 325 [78] Chemical Engineering Thermodynamics II, Spring 2010 (core)
    - Instructor Prepared - 4.7
    - Instructor Knowledgeable - 4.8
    - Instructor Communicates Well - 4.1
    - Instructor Stimulates Interest - 3.6
- CHEG 325 [78] Chemical Engineering Thermodynamics II, Spring 2011 (core)
    - Instructor Prepared - 4.7
    - Instructor Knowledgeable - 4.8
    - Instructor Communicates Well - 4.2
    - Instructor Stimulates Interest - 3.7

- CHEG 600/MSEG 630 [25] Introduction to Polymer Science, Fall 2011 (elective)
    - Instructor Prepared - 4.8
    - Instructor Knowledgeable - 4.9
    - Instructor Communicates Well - 4.7
    - Instructor Stimulates Interest - 4.5
    - Instructor One of Best Teachers - 4.4
- CHEG 325 [89] Chemical Engineering Thermodynamics II (w/Buttrey), Spring 2012 (core)
    - Instructor Prepared - 4.7
    - Instructor Knowledgeable - 4.8
    - Instructor Communicates Well - 4.5
    - Instructor Stimulates Interest - 4.3
    - Instructor One of Best Teachers - 4.1
- CHEG 600/MSEG 630 [36] Introduction to Polymer Science, Fall 2013 (elective)
    - Instructor Prepared - 4.7
    - Instructor Knowledgeable - 4.9
    - Instructor Communicates Well - 4.4
    - Instructor Stimulates Interest - 4.4
    - Instructor One of Best Teachers - 4.1
- CHEG 867 [6] Assembly of Soft Materials, Fall 2014 (elective)
    - Instructor Prepared - 4.3
    - Instructor Knowledgeable - 4.3
    - Instructor Communicates Well - 4.5
    - Instructor Stimulates Interest - 4.3
    - Instructor One of Best Teachers - 4.0
- CHEG 231 [103] Chemical Engineering Thermodynamics I (w/Jiao), Fall 2014 (core)
    - Instructor Prepared - 4.5
    - Instructor Knowledgeable - 4.7
    - Instructor Communicates Well - 3.4
    - Instructor Stimulates Interest - 3.5
- CHEG 325 [85] Chemical Engineering Thermodynamics II (w/Furst), Spring 2015 (core)
    - Instructor Prepared - 4.7
    - Instructor Knowledgeable - 4.9
    - Instructor Communicates Well - 4.2
    - Instructor Stimulates Interest - 4.3
    - Instructor One of Best Teachers - 4.0
- CHEG 231 [115] Chemical Engineering Thermodynamics I (w/Enszer), Fall 2015 (core)
    - Instructor Prepared - 4.6
    - Instructor Knowledgeable - 4.9
    - Instructor Communicates Well - 4.2
    - Instructor Stimulates Interest - 4.0
    - Instructor One of Best Teachers - 3.9
- CHEG 867 [9] Assembly of Soft Materials, Spring 2017 (elective)
    - Instructor Prepared - 5.0
    - Instructor Knowledgeable - 5.0
    - Instructor Communicates Well - 5.0
    - Instructor Stimulates Interest - 5.0
    - Instructor One of Best Teachers - 5.0
- CHEG 600/MSEG 630 [27] Introduction to Polymer Science, Fall 2017 (elective)
    - Instructor Prepared - 4.9
    - Instructor Knowledgeable - 5.0
    - Instructor Communicates Well - 4.4
    - Instructor Stimulates Interest - 4.4
    - Instructor One of Best Teachers - 4.1

- CHEG 342 [90] Heat and Mass Transfer, Spring 2018 (core)
    - Instructor Prepared - 4.4
    - Instructor Knowledgeable - 4.5
    - Instructor Communicates Well - 3.9
    - Instructor Stimulates Interest - 3.7
    - Instructor One of Best Teachers - 3.5
- CHEG 600/MSEG 630 [16] Introduction to Polymer Science, Fall 2018 (elective)
    - Instructor Prepared - 4.9
    - Instructor Knowledgeable - 5.0
    - Instructor Communicates Well - 4.9
    - Instructor Stimulates Interest - 4.8
    - Instructor One of Best Teachers - 4.5
- CHEG 342 [64] Heat and Mass Transfer, Spring 2019 (core)
    - Instructor Prepared - 4.5
    - Instructor Knowledgeable - 4.8
    - Instructor Communicates Well - 4.2
    - Instructor Stimulates Interest - 3.8
    - Instructor One of Best Teachers - 3.6
- CHEG 600/MSEG 630 [28] Introduction to Polymer Science, Fall 2019 (elective)
    - Instructor Prepared - 4.8
    - Instructor Knowledgeable - 4.8
    - Instructor Communicates Well - 4.7
    - Instructor Stimulates Interest - 4.6
    - Instructor One of Best Teachers - 4.5
- 342 [85] Heat and Mass Transfer, Spring 2020 (core)
    - Instructor Prepared - 4.7
    - Instructor Knowledgeable - 4.8
    - Instructor Communicates Well - 4.6
    - Instructor Stimulates Interest - 4.3
    - Instructor One of Best Teachers - 4.1
- CHEG 600/MSEG 630 [24] Introduction to Polymer Science, Fall 2021 (elective)
    - Instructor Prepared - 4.8
    - Instructor Knowledgeable - 4.8
    - Instructor Communicates Well - 4.6
    - Instructor Stimulates Interest - 4.4
    - Instructor One of Best Teachers - 4.5
- CHEG 600/MSEG 630 [38] Introduction to Polymer Science, Fall 2023 (Core MSEG course)
    - Instructor Prepared - 4.8
    - Instructor Knowledgeable - 4.9
    - Instructor Communicates Well - 4.2
    - Instructor Stimulates Interest - 4.5
    - Instructor One of Best Teachers - 3.9

* Initiated the recombination of CHEG 600 and MSEG 630 starting in Fall 2008. The re-creation of CHEG/MSEG 630 allowed for the offering of a new elective in both the CHEG and MSEG departments.
* MSEG 630 was a core graduate course in Materials Science and Engineering in 2009, and it is a core graduate course in Materials Science and Engineering again as of 2023.

Professional Service:

Membership in Professional Societies

- American Institute of Chemical Engineers (AIChE)
    - AIChE Awards Selection Subcommittee (2020-2022)
    - Minority Affairs Committee - Minority Faculty Forum
    - Minority Faculty Forum - Development Subcommittee

- American Chemical Society (ACS), ACS-POLY, ACS-PMSE
  - ACS National Awards Selection Committee (2019-2022)
  - ACS POLY Program Chair (2017-2019)
  - ACS Development Advisory Board (2014-2019)
  - ACS Scholars Program, Program Advisor (2013-2016)
  - ACS Diversity and Inclusion Advisory Board (2011-2013)
  - ACS Board of Directors Diversity Partner (2009-2010)
  - ACS Minority Scholars Program Subcommittee Invited Member (2008)
- American Physical Society (APS), DPOLY, GSOFT
  - APS DPOLY Member-at-Large (2019-2022)
  - APS DPOLY Program Chair (2015)
- American Association for the Advancement of Science (AAAS)
- National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE)
- Sigma Xi
- Neutron Scattering Society of America (NSSA)
- Royal Society of Chemistry (RSC)
- American Institute of Medical and Biological Engineering (AIMBE)

Conference/ Workshop Chair:

1. Programming Chair - American Physical Society Polymers Division (APS DPOLY), 2015 APS Meeting, March 2-6, 2015, San Antonio, TX.
2. Workshop Chair - National Science Foundation, Future Faculty Workshop, August 14-16, 2016, Newark, DE.
3. Program Co-Chair - American Chemical Society POLY Division, 2017 ACS Spring Meeting, April 2-6, 2017, San Francisco, CA.
4. Program Co-Chair - 3rd Functional Polymeric Materials Conference (Fusion Conferences), July 7-10, 2017, Rome, Italy.
5. Workshop Co-Chair - National Science Foundation, Future Faculty Workshop, July 30-August 1, 2017, Cleveland, OH.
6. Program Co-Chair - American Chemical Society POLY Division, 2017 ACS Fall Meeting, August 20-24, 2017, Washington, D.C.
7. Program Chair - American Chemical Society POLY Division, 2018 ACS Spring Meeting, March 18-22, 2018, New Orleans, LA.
8. Program Co-Chair - 4th Functional Polymeric Materials Conference (Fusion Conferences), June 5-8, 2018, Nassau, Bahamas.
9. Workshop Co-Chair - National Science Foundation, Future Faculty Workshop, July 18-July 20, 2018, Newark, DE.
10. Program Co-Chair - American Chemical Society POLY Division, 2018 ACS Fall Meeting, August 19-23, 2018, Boston, MA.
11. Program Co-Chair - American Chemical Society POLY Division, 2019 ACS Spring Meeting, March 31-April 4, 2019, Orlando, FL.
12. Program Chair - American Chemical Society POLY Division, 2019 ACS Fall Meeting, August 25-29, 2019, San Diego, CA.
13. Program Chair - Sustainable Polymers Symposium, January 13-14, 2022, Newark, DE (virtual).
14. Program Co-Vice-Chair - Polymer Gordon Research Conference, June 2023, South Hadley, MA.
15. Program Co-Chair - Sustainable Polymers, October 15-18, 2023, Safety Harbor, FL.
16. Program Co-Chair - Polymer Gordon Research Conference, June 2025, South Hadley, MA.

Program Organization:

1. APS DPOLY Program Abstract and Session Sorter, 2005 APS March National Meeting, Los Angeles, CA.
2. APS DPOLY Program Abstract and Session Sorter, 2006 APS March National Meeting, Baltimore, MD.
3. APS DPOLY Program Abstract and Session Sorter, 2007 APS March National Meeting, Denver, CO.

4. APS DPOLY Program Abstract and Session Sorter, 2008 APS March National Meeting, New Orleans, LA.
5. APS DPOLY Program Abstract and Session Sorter, 2009 APS March National Meeting, Pittsburgh, PA.
6. APS DPOLY Focus Session "Long Range Order in Polymeric Structure and Morphology", 2010 APS March Meeting, Portland, OR.
7. APS DPOLY Program Abstract and Session Sorter, 2011 APS March National Meeting, Dallas, TX.
8. APS DPOLY Focus Session "Thin Film Block Copolymers", 2011 APS March Meeting, Dallas, TX.
9. 44th IUPAC World Polymer Congress Program International Advisory Committee, 2012 Meeting, Blacksburg, VA.
10. APS DPOLY Program Abstract and Session Sorter, 2012 APS March National Meeting, Boston, MA.
11. APS DPOLY Focus Session "Thin Film Block Copolymers", 2012 APS March Meeting, Boston, MA.
12. AICHE MESD "Emerging Areas in Polymer Science and Engineering" Symposium, 2012 AIChE Annual Meeting, Pittsburgh, PA.
13. APS DPOLY Focus Session "Block Copolymer Solution Assemblies", 2014 APS March Meeting, Denver, CO.
14. APS DPOLY Program Abstract and Session Sorter, 2014 APS March National Meeting, Denver, CO.
15. APS DPOLY Invited Session "Interfacing Experiment and Theory in Polymer Physics", 2015 APS March Meeting, San Antonio, TX.
16. APS DPOLY Invited Session "Ion-Containing Polymers", 2015 APS March Meeting, San Antonio, TX.
17. APS DPOLY Invited Session "Physics of Biomacromolecules", 2015 APS March Meeting, San Antonio, TX.
18. APS DPOLY Program Abstract and Session Sorter, 2017 APS March National Meeting, New Orleans, LA.

Chaired or Co-chaired Conference Sessions:

1. Chair, "Block Copolymers II" (DPOLY) APS National Meeting, March 21-25, 2005, Los Angeles, CA.
2. Co-Chair, "Combinatorial Approaches to Materials – Biopolymers" ACS Fall National Meeting, August 28-September 1, 2005, Washington, D.C.
3. Session Leader, "Surface Energy Gradients on Substrates" National Educators Workshop, October 2005, Gaithersburg, MD.
4. Chair, "Block Copolymer Phase Behavior" (DPOLY) APS National Meeting, March 13-17, 2006, Baltimore, MD.
5. Chair, "Nanostructured Block Copolymer Thin Films" (DPOLY) APS National Meeting, March 13-17, 2006, Baltimore, MD.
6. Chair, "Polymer Thin Films and Interfaces III" (Area 8a), AIChE Annual Meeting, November 12-17, 2006, San Francisco, CA.
7. Chair, "Block Copolymer Thin Films" (DPOLY) APS National Meeting, March 5-9, 2007, Denver, CO.
8. Co-Chair, "Nanoscale Structure in Polymers I: Self-Organization of Polymers at Surfaces and Interfaces" (Area 8a), AIChE Annual Meeting, November 4-9, 2007, Salt Lake City, UT.
9. Co-Chair/Organizer, Materials Science Poster Session, APS National Meeting March 9-14, 2008, New Orleans, LA.
10. Chair, "Properties of Block Copolymers", (DPOLY) APS National Meeting March 9-14, 2008, New Orleans, LA.
11. Chair, "Materials/Polymers Chemistry", NOBCChE Annual Meeting, March 16-21, 2008, Philadelphia, PA.
12. Co-Chair, "Nanoscale Structure in Polymers II: Self-Organization of Polymers at Surfaces and Interfaces" (Area 22), AIChE Annual Meeting, November 16-21, 2008, Philadelphia, PA.
13. Co-Chair, "Nanoscale Structure in Polymers I: Self-Organization of Polymers at Surfaces and Interfaces" (Area 22), AIChE Annual Meeting, November 16-21, 2008, Philadelphia, PA.
14. Co-Chair, Materials Science Poster Session (Area 8), AIChE Annual Meeting, November 16-21, 2008, Philadelphia, PA.
15. Chair, "Nanoscale Structure in Polymers I" (Area 8a), AIChE Annual Meeting, November 16-21, 2008, Philadelphia, PA.
16. Chair, "Bulk Block Copolymers I", (DPOLY) APS National Meeting, March 16-20, 2009, Pittsburgh, PA.
17. Chair, "Nanomaterials", NOBCChE Northeast Regional Meeting, October 24, 2009, Cambridge, MA.

18. Chair, “Nanoscale Structure in Polymers I” (Area 8a), AIChE Annual Meeting, November 8-13, 2009, Nashville, TN.
19. Chair, Materials Science Poster Session (Area 8), AIChE Annual Meeting, November 8-13, 2009, Nashville, TN.
20. Discussion Leader, “Ions in Polymers”, Gordon Research Conference - Colloidal, Macromolecular & Polyelectrolyte Solutions, February 21-26, Ventura, CA.
21. Co-chair, “Long Range Order in Polymeric Structure and Morphology I”, (DPOLY) APS National Meeting, March 15-19, 2010, Portland, OR.
22. Chair, “Long Range Order in Polymeric Structure and Morphology II”, (DPOLY) APS National Meeting, March 15-19, 2010, Portland, OR.
23. Chair, “Nanoscale Structure in Polymers I” (Area 8a), AIChE Annual Meeting, November 7-12, 2010, Salt Lake City, UT.
24. Chair, “Thin Film Block Copolymers I”, (DPOLY) APS National Meeting, March 21-25, 2011, Dallas, TX.
25. Co-chair, “Thin Film Block Copolymers II”, (DPOLY) APS National Meeting, March 21-25, 2011, Dallas, TX.
26. Co-chair, “Thin Film Block Copolymers III”, (DPOLY) APS National Meeting, March 21-25, 2011, Dallas, TX.
27. Chair, “Fundamental Topics in the Physics and Theory of Novel Polymeric Systems”, (PMSE) ACS Spring National Meeting, March 27-31, 2011, Anaheim, CA.
28. Chair, “Polymer Thin Films and Interfaces I” (Area 8a), AIChE Annual Meeting, October 16-21, 2011, Minneapolis, MN.
29. Co-chair, “Polymer Thin Films and Interfaces I” (Area 8a), AIChE Annual Meeting, October 16-21, 2011, Minneapolis, MN.
30. Chair “Thin Film Block Copolymers I”, 2012 APS March Meeting, February 27-March 2, Boston, MA.
31. Chair “Polymer Gels and Self Assembly”, 2012 IUPAC World Polymer Congress, June 24-29, 2012, Blacksburg, VA.
32. Chair “Colloids”, Warwick 2012 Polymer Conference, July 9-12, 2012, Coventry, UK.
33. Chair, “Emerging Areas in Polymer Science and Engineering” (Area 8a), AIChE Annual Meeting, October 28-November 2, 2012, Pittsburgh, PA.
34. Chair, “New Concepts in Polymeric Materials” (PMSE), ACS Spring National Meeting, April 7-April 11, 2013, New Orleans, LA.
35. Chair “Block Copolymer Solution Assemblies I”, 2014 APS March Meeting, March 3-7, Denver, CO.
36. Chair “Thin Films of Block Copolymers and Hybrid Materials III – Surface, Wetting, and Confinement Interactions”, 2014 APS March Meeting, March 3-7, Denver, CO. *(not listed in program bulletin)*
37. Co-Chair, “Nanoscale Structure in Polymers” (Area 8a), AIChE Annual Meeting, November 13-18, 2016, San Francisco, CA.
38. Chair, “Ion-Containing Polymers”, 2017 APS Match Meeting, March 13-17, New Orleans, LA.
39. Chair, “Functional Polymers”, 3rd Functional Polymeric Materials Conference, July 7-10, 2017, Rome Italy.
40. Chair, “Nanostructured Polymer Films” (Area 8a), AIChE Annual Meeting, October 29-November 3, 2017, Minneapolis, MN.
41. Chair, “Polymeric Biomaterials”, Pacific Polymer Conference 15, December 10-14, 2017, Xiamen, China
42. Chair, “Functional Polymers”, 4th Functional Polymeric Materials Conference, June 5-8, 2018, Rome Italy.
43. Co-Chair, “Energy Materials I - Organic and Hybrid”, DOE PI Meeting – Materials Chemistry, July 9-11, 2018, Gaithersburg, MD.
44. Chair, “Oil- & Lignin-Containing Materials”, American Chemical Society National Meeting, March 22-26, 2020, Philadelphia, PA.
45. Discussion Leader, “Quasi crystal formation in block copolymers”, Gordon Research Conference – Polymer Physics, July 26-31, 2020, South Hadley, MA.
46. Chair and Session Organizer, “2023 ACS Carl S. Marvel Award for Creative Polymer Chemistry Symposium in Honor of Rodney Priestley”, American Chemical Society National Meeting, March 26-30, 2023, Indianapolis, IN.
47. Discussion Leader, “Biomaterials”, Gordon Research Conference – Polymer Physics, July 24-29, 2022, South Hadley, MA.

48. Chair and Session Co-Organizer, “2024 Kathryn C. Hach Award for Entrepreneurial Success Symposium in Honor of Cato Laurencin”, American Chemical Society National Meeting, March 17-21, 2024, New Orleans, LA.
49. Discussion Leader, “Membranes”, Gordon Research Conference – Polymer Physics, July 21-26, 2024, South Hadley, MA.

Short Courses and Workshops Organized:

Organizer: NSF-Sponsored Future Faculty Workshop “Diverse Faculty for the Future”; August 14-16, 2016, University of Delaware, Newark, DE

Co-organizer: NSF-Sponsored Future Faculty Workshop “Diverse Faculty for the Future”; July 30-August 1, 2017, Case Western Reserve University, Cleveland, OH

Co-organizer: NSF-Sponsored Future Faculty Workshop “Diverse Faculty for the Future”; July 18-20, 2018, University of Delaware, Newark, DE

Co-organizer: NSF-Sponsored Future Faculty Workshop “Diverse Faculty for the Future”; August 14-16, 2019, Princeton University, Princeton, NJ

Co-organizer: NSF-Sponsored Soft Matter for All Workshop; October 23, 2020 [Virtual with Princeton University]

Co-organizer: NSF-Sponsored Soft Matter for All Workshop; October 15, 2021 [Virtual with Princeton University]

Co-organizer: NSF-Sponsored Future Faculty Workshop “Diverse Faculty for the Future”; June 21-23, 2022, University of Delaware, Newark, DE

Co-organizer: NSF-Sponsored Growing Convergence Research – Forestry with Japan Towards Materials Life-Cycle Management; December 5 and 15, 2022 [Virtual with Japan FFPRI]

Co-organizer: NSF-Sponsored Soft Matter for All Workshop; February 3, 2023 [Virtual with Princeton University and University of Pennsylvania]

Co-organizer: NSF-Sponsored Future Faculty Workshop “Diverse Faculty for the Future”; June 26-28, 2023, Texas A&M University, College Station, TX

Co-organizer: NSF-Sponsored Future Faculty Workshop “Diverse Faculty for the Future”; August 26-28, 2024, University of Minnesota, Minneapolis, MN

Short Courses and Workshops Taught/Paneled:

“High-throughput approaches to Polymer Physics and Materials Science” DPOLY Short Course, American Physical Society (APS) Annual Meeting, March 8-9, 2008, New Orleans, LA. Course Organizer: Michael J. Fasolka (NIST)

“The Job Application Process, The Job Interview, and Idea Development” Future Faculty Workshop: Diverse Leaders of Tomorrow, June 19-21, 2011, Cambridge, MA. Course Organizer: Timothy Swager (MIT)

“Controlled Generation of Functional Materials from Nanostructured Polymers” Future Faculty Workshop: Diverse Leaders of Tomorrow, June 19-21, 2011, Cambridge, MA. Course Organizer: Timothy Swager (MIT)

"The Job Application Process, The Job Interview, and Idea Development" Future Faculty Workshop: Diverse Leaders of Tomorrow, July 15-27, 2012, Santa Barbara, CA. Course Organizer: Craig Hawker (UC Santa Barbara)

"The Job Application Process, The Job Interview, and Idea Development" Future Faculty Workshop: Diverse Leaders of Tomorrow, July 20-22, 2014, Cambridge, MA. Course Organizer: Timothy Swager (MIT)

"The Job Application Process, The Job Interview, and Idea Development" Future Faculty Workshop: Diverse Leaders of Tomorrow, August 14-16, 2016, Newark, DE. Course Organizer: Thomas Epps (UD)

"Time Management" Future Faculty Workshop: Diverse Leaders of Tomorrow, August 14-16, 2016, Newark, DE. Course Organizer: Thomas Epps (UD)

'Hierarchical Self-Assembly' Working Group, Frontiers in Polymer Science and Engineering National Science Foundation Workshop, August 17-18, 2016, Arlington, VA. Organizer: Frank Bates (U. of Minnesota)

"The Job Application Process, The Job Interview, and Idea Development" Future Faculty Workshop: Diverse Leaders of Tomorrow, July 30-August 1, 2017, Cleveland, OH. Course Organizers: LaShanda Korley (CWRU), Emily Pentzer (CWRU), Thomas Epps (UD)

"Time Management" Future Faculty Workshop: Diverse Leaders of Tomorrow, July 18-20, 2018, Newark, DE. Course Organizers: Thomas Epps (UD), LaShanda Korley (UD)

"Time Management" Future Faculty Workshop: Diverse Leaders of Tomorrow, August 14-16, 2019, Princeton, NJ. Course Organizer: Thomas Epps (UD), LaShanda Korley (UD), Rodney Priestley (Princeton)

"Grant and Proposal Writing" Future Faculty Workshop: Diverse Leaders of Tomorrow, June 21-23, 2022, Newark, DE. Course Organizer: Thomas Epps (UD), LaShanda Korley (UD)

"Grant and Proposal Writing" Future Faculty Workshop: Diverse Leaders of Tomorrow, June 26-28, 2023, College Station, TX. Course Organizer: Emily Pentzer (TAMU), Herdeline Ardoña (UC Irvine), Thomas Epps (UD), LaShanda Korley (UD), Rodney Priestley (Princeton)

Reviewer for Journals and Organizations:

ACS Applied Materials and Interfaces, ACS Macro Letters, ACS Nano, ACS Sustainable Chemistry & Engineering, Advanced Biosystems, Advanced Materials, Biomacromolecules, Chemistry of Materials, European Polymer Journal, Green Chemistry, Journal of the American Chemical Society (JACS), Journal of Physical Chemistry, Journal of Polymer Science Part B: Polymer Physics, Langmuir, Macromolecular Chemistry and Physics, Macromolecular Rapid Communications, Macromolecules, MRS Communications, Nano Letters, Nature Chemistry, Nature Communications, Nature Materials, Physical Review Letters, Physical Review E, Polymer, Polymer Chemistry, Proceedings of the National Academy of Sciences (PNAS), Science, Science Advances, Soft Matter, Wiley Book Publishing

* Top 100 Reviewer Citation for Macromolecules (2007)
* Top 100 Reviewer Citation for Macromolecules (2011)
* Top 100 Reviewer Citation for Macromolecules (2013)
* Top 250 Reviewer Citation for Macromolecules (2015)

National Science Foundation: Ad-hoc and panel reviewer for MPS (DMR and CHE), CBET, and OISE; Petroleum Research Fund, American Chemical Society: Ad-hoc reviewer; Department of Energy: Ad-hoc, panel reviewer, and site reviewer; Air Force Office of Scientific Research: Ad-hoc reviewer; Stanford Synchrotron Radiation Lightsource (SSRL) reviewer; Netherlands Organisation for Scientific Research: Ad-hoc reviewer; NIST Center for Neutron Research: SANS and USANS proposal reviewer

Department, College, and University Service at Delaware:

University Level

2021-2022	Search Committee - Provost
2020-present	Director, NSF MRSEC - Center for Hybrid, Active, and Responsive Materials (CHARM)
2020-present	Deputy Director, DOE EFRC - Center for Plastics Innovation (CPI)
2019-2020	Search Committee - Research Development Director
2017-2018	Co-Chair of College of Engineering Dean's Search Committee
2016-2017	University Promotion and Tenure Commission
2015-2016	University Strategic Planning Implementation Committee
2015-2016	Co-Chair of University Strategic Planning Implementation Subcommittee on Multidisciplinary Research and Scholarship
2015-2016	University Ad-hoc Committee on Diversity Training
2014-2015	University Strategic Planning Subcommittee
2012-2013	Search Committee - Provost
2012-2014	President's Diversity Initiative Advisory Committee
2012-2015	Diversity Director NSF IGERT Program at UD and DBI
2010	Search Committee - Director of Federal Government Relations

College Level

2019-present	Director, Center for Research in Soft matter and Polymers (CRiSP)
2017-2020	Director, Center for Molecular Engineering and Thermodynamics (CMET)
2016-2018	Faculty Diversity in Engineering Working Group
2015-2016	Ad-hoc Dean's Committee on Diversity in Engineering
2014-present	W. M. Keck Microscopy Advisory Board
2014-2017	Organizing Committee for GO LEAD (Graduate Opportunities: Learn, Engage, AND Discover) Program
2013-2014	Faculty Search Committee (Soft Materials Cluster)
2013	W. M. Keck Microscopy Facility Senior Researcher Search Committee
2012	W. M. Keck Microscopy Facility Research Associate Search Committee
2010-2011	Faculty Search Committee (Soft Materials Chemistry Cluster)
2010	Planning Committee - Success Strategies for Emerging Faculty Workshop
2009-2016	American Chemical Society, Project SEED Mentor
2009-2010	Faculty Search Committee (Materials Science and Engineering)
2009	American Chemical Society, Project SEED Site Coordinator

Department Level

2022-2023	Ad-hoc Committee on Department Voting and Leadership Structure
2019-present	Faculty Mentoring Committee (Aditya Kunjapur)
2019-2020	Promotion & Tenure Committee Chair (Materials Science and Engineering)
2018-present	Chemical Engineering and Materials Science Ad-hoc Awards Committee
2014-2019	NSF-REU Site Proposal and Program Co-Coordinator (with E. Furst)
2014-2016	Gore Professor Search Committee
2013-2015	Graduate Curriculum Committee (Chair)
2013-2019	Biomedical Engineering Faculty Mentoring Committee (John Slater)
2013-present	Undergraduate Advising
2012	Search Committee for Department Chair
2010-2013	Ad-hoc Diversity Committee (Chair)
2008-2011	Associate Graduate Recruiting Coordinator
2008-2009	Seminar Coordinator
2008-2009	Ad-hoc Graduate Thesis Committee Revision Committee
2007-2012	Undergraduate Advising
2007-2013	Graduate Admissions Committee
2007	Ad-hoc Undergraduate Brochure Committee
2007	Newark High School Outreach Panel Organizer
2006-2011	NSF-REU Site Proposal and Program Coordinator (with J. Lauterbach)

Other External Service

1. Lincoln University - Engineering Sciences Degree Program Advisory Committee, for Civil/ Environmental, Computer/Electrical, and Materials Science concentrations (2016-2017)
2. Delaware State University - Co-development of a Polymer Science course with Dr. Preston Hayward in the DSU Chemistry Department (2008-2010)
3. University of Delaware - Speaker at high school chemistry teachers day workshop in the Department of Chemistry and Biochemistry (Fall 2007)
4. University of Delaware - Speaker and panel member at Responsible Conduct of Research Seminar for graduate students, faculty, and other researchers (Spring 2009)
5. Massachusetts Institute of Technology - Educational Councilor, responsible for interviewing Newark, DE area applicants to MIT's undergraduate program (2009-2012)
6. Featured in Scratchcat - Fresh Science DVD "Making Work Easier" (2008)
7. American Chemical Society Project SEED Site Organizer at University of Delaware (College of Engineering) (2009)
8. American Chemical Society Scholars Program Advisor (2013-2016)
9. American Physical Society – DPOLY Education Committee (2014-2015)
10. 3D Engineers and Entrepreneurs (Wilmington, DE) – Advisory Board (2015-2016)

External Activities

- MIT $50k Winner for startup – Natel Energy, Inc.
- Co-founder and Chief Scientific Officer – Lignolix, Inc (recently awarded $2.5 million grant from U.S. Department of Energy on 09/10/2021)