

Justin G. Kennemur

Curriculum Vitae – May 31, 2022

Department of Chemistry & Biochemistry
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EDUCATION

- 2010 Ph.D. Polymer Chemistry. North Carolina State University. Raleigh, NC.
Advisor: Bruce M. Novak.
- 2002 B.S. Chemistry. Radford University. Radford, VA.

PROFESSIONAL APPOINTMENTS

- 2020 – present Associate Professor. Department of Chemistry & Biochemistry. Florida State University. Tallahassee, FL.
- 2014 – 2020 Assistant Professor. Department of Chemistry & Biochemistry. Florida State University. Tallahassee, FL.
- 2011 – 2014 Post-Doctoral Associate. Department of Chemistry. Department of Chemical Engineering & Materials Science. University of Minnesota. Minneapolis, MN. Advisors: Marc A. Hillmyer and Frank S. Bates.
- 2002 – 2005 Chromatography Analyst. Polymer Solutions Incorporated. Blacksburg, VA.

AWARDS AND HONORS

- 2021 *Polymer Chemistry (RSC)* Pioneering Investigator
- 2020 Editorial Advisory Board – *Polymer Chemistry*
- 2019 ACS Editors' Choice – *Macromolecules*
- 2018 ACS PMSE Young Investigator
- 2018 National Science Foundation CAREER Award
- 2018 Florida State University Undergraduate Teaching Award
- 2018 *Macromolecular Rapid Communications (Wiley)* Young Talents
- 2018 *Polymer Chemistry (RSC)* Emerging Investigator
- 2018 College of Arts & Sciences Dean's Faculty Travel Award

- 2015 ACS Petroleum Research Fund - Doctoral New Investigator Award
- 2015 First Year Assistant Professor Summer Award. Florida State University.
- 2010 American Chemical Society POLY/PMSE - AkzoNobel Student Award in Applied Polymer Science.
- 2010 American Chemical Society, North Carolina Section, Richard D. Gilbert Award in Polymer Science, First Place - Oral Presentation.
- 2010 Phi Lambda Upsilon Award for Excellence. North Carolina State University.
- 2009 American Chemical Society, North Carolina Section, Richard D. Gilbert Award in Polymer Science - Best Poster.
- 2009 NCSU Graduate Research Symposium Award Winner, PAMS Division.
- 2007 Award for Outstanding Research Accomplishments in Chemistry, Chemistry Poster Session. North Carolina State University.
- 2001 Dr. Rogers F. Lambert Endowed Scholarship in Chemistry. Radford University.
- 2000 Dale Snead Boxley Scholarship. Radford University.
- 1998 CRC Press LLC Chemistry Freshman Achievement Award. Radford University.

PUBLICATIONS – All are Peer-Reviewed – Corresponding Author(s) in Bold

Independent Career

34. Beery, D.; Stanisauskis, E.; McLeod, G. M.; Das, A.; Guillory, G. A.; Kennemur, J. G.; **Oates, W. S.**; **Hanson, K. H.** Enabling Lower Energy Light Harvesting in Stilbene-Based Photomechanical Polymers via Triplet Sensitization. *ACS Appl. Polym. Mater.* **2022**, in press, <https://doi.org/10.1021/acsapm.2c00660>
33. Paren, B. A.; Nguyen, N.; Ballance, V.; Hallinan, D. T.; Kennemur J. G.; **Winey, K. I.** Superionic Li-Ion Transport in a Single-Ion Conducting Polymer Blend Electrolyte. *Macromolecules*, **2022**, in press. <https://doi.org/10.1021/acs.macromol.2c00459>
32. Coia, B. M.; Werner, S.; **Kennemur, J. G.** Conformational Bias in Density Functional Theory Ring Strain Energy Calculations of Cyclopentene Derivatives: Towards Predictive Design of Chemically Recyclable Elastomers. *J. Polym. Sci.*, **2022**, in press. <https://doi.org/10.1002/pol.20220202> (Invited Submission - Treating the Plastics Problem: From Renewable Feedstocks and Degradability to Recycling)
31. Kim, K.; Nguyen, N.; Marxsen, S. F.; Smith, S.; Alamo, R. G.; **Kennemur, J. G.**; **Hallinan, D. T.** Ionic Transport and Thermodynamic Interaction in Precision Polymer Blend Electrolytes for Lithium Batteries. *Macromol. Chem. Phys.* **2021**, 222, 2100269. <https://doi.org/10.1002/macp.202100269>
30. Yarolimek, M. R.; Coia, B. M.; Bookbinder, H. R.; **Kennemur, J. G.** Investigating the Effect of α -Pinene on the ROMP of δ -Pinene. *Polym. Chem.* **2021**, 12, 5048–5058. <https://doi.org/10.1039/D1PY00931A>

29. Paren, B. A.; Thurston, B. A.; Kanthawar, A.; Neary, W. J.; Kendrick, A.; Maréchal M.; Kennemur, J. G.; **Stevens, M. J.; Frischknecht, A. L.; Winey, K. I.** Fluorine-Free Precise Polymer Electrolyte for Efficient Proton Transport: Experiments and Simulations. *Chem. Mater.* **2021**, *33*, 6041–6051. <https://doi.org/10.1021/acs.chemmater.1c01443>
28. Yarolimek, M. R.; Bookbinder, H. R.; Coia, B. M., **Kennemur, J. G.** Ring-Opening Metathesis Polymerization of δ -Pinene: Well-Defined Polyolefins from Pine Sap. *ACS Macro Lett.*, **2021**, *10*, 760–766. <https://doi.org/10.1021/acsmacrolett.1c00284>
27. Yarolimek, M. R.; **Kennemur, J. G.** Exploration of mandelic acid-based polymethacrylates: Synthesis, properties, and stereochemical effects. *J. Polym. Sci.*, **2020**, *58*, 3349–3357. <https://doi.org/10.1002/pol.20200638>
26. Paren, B. A.; Thurston, B. A.; Neary, W. J.; Kendrick, A.; Kennemur J. G.; Stevens, M. J.; **Frischknecht, A. L.; Winey, K. I.** Percolated Ionic Aggregate Morphologies and Decoupled Ion Transport in Precise Sulfonated Polymers Synthesized by Ring-Opening Metathesis Polymerization effects. *Macromolecules*, **2020**, *53*, 8960–8973. <https://doi.org/10.1021/acs.macromol.0c01906>
25. Fultz, B. A.; Breery, D. A.; Coia, B. M.; Hanson, K.; **Kennemur, J. G.** “Catalyst Free Removal of Trithiocarbonate RAFT CTAs from Poly(vinylpyridine)s Using Tris(trimethylsilyl)silane and Light” *Polym. Chem.* **2020**, *11*, 5962–5968. (Invited Submission: Pioneering Investigators 2021) <https://doi.org/10.1039/D0PY01104E>
24. Fultz, B. A.; Terlier, T. Dunoyer de Segonzac, B.; **Verduzco, R.; Kennemur, J. G.** “Nanostructured Films of Oppositely Charged Domains from Self-Assembled Block Copolymers” *Macromolecules*, **2020**, *53*, 5638–5648. <https://doi.org/10.1021/acs.macromol.0c00707>
23. Guillory, G. A.; **Kennemur, J. G.** Investigating the Effects of Bulky Allylic Substituents on the Regioregularity and Thermodynamics of ROMP on Cyclopentene. *Eur. Polym. J.* **2019**, *120*, 109251. <https://doi.org/10.1016/j.eurpolymj.2019.109251>
22. Neary, W. J.; Isais, T. A.; **Kennemur, J. G.** Depolymerization of Bottlebrush Polypentenamers and their Macromolecular Metamorphosis. *J. Am. Chem. Soc.* **2019**, *141*, 14220–14229. <https://doi.org/10.1021/jacs.9b05560>
21. Kieber III, R. J.; Ozkardes, C.; Sanchez, N.; **Kennemur, J. G.** Cationic Copolymerization of Isosorbide Towards Value-added Poly(vinyl ethers). *Polym. Chem.* **2019**, *10*, 3514–3524. <https://doi.org/10.1039/C9PY00590K>

20. **Kennemur, J. G.** Poly(vinylpyridine) Segments in Block Copolymers: Synthesis, Self-Assembly, and Versatility. *Macromolecules*, **2019**, *52*, 1354–1370. <http://dx.doi.org/10.1021/acs.macromol.8b01661>
19. Neary, W. J.; **Kennemur, J. G.** Polypentenamer Renaissance: Challenges and Opportunities. *ACS Macro Lett.*, **2019**, *8*, 46–56. <http://dx.doi.org/10.1021/acsmacrolett.8b008855>
18. Neary, W. J.; Fultz, B. A.; **Kennemur, J. G.** Well-Defined and Precision-Grafted Bottlebrush Polypentenamers from Variable Temperature ROMP and ATRP. *ACS Macro Lett.*, **2018**, *7*, 1080–1086. <http://dx.doi.org/10.1021/acsmacrolett.8b00576>
17. Kendrick IV, A.; Neary, W. J.; Delgado, J. D.; Bohlmann, M.; **Kennemur, J. G.** Precision Polyelectrolytes with Phenylsulfonic Acid Branches at Every Five Carbons. *Macromol. Rapid Commun.*, **2018**, *34*, 1800145 (Invited Submission - Young Talents 2018) <http://dx.doi.org/10.1002/marc.201800145>
16. Kieber III, R. J.; Neary, W. J.; **Kennemur, J. G.** Viscoelastic, Mechanical, and Glasstomeric Properties of Precision Polyolefins Containing a Phenyl Branch at Every Five Carbons. *Ind. Eng. Chem. Res.*, **2018**, *57*, 14, 4916–4922. <http://dx.doi.org/10.1021/acs.iecr.7b05395>
15. Brits, S.; Neary, W. J.; Palui, G.; **Kennemur, J. G.** A new echelon of precision polypentenamers: Highly isotactic branching at every five carbons. *Polym. Chem.*, **2018**, *9*, 1719–1727. (Invited Submission - Emerging Investigators 2018) <http://dx.doi.org/10.1039/C7PY01922J>
14. **Kennemur, J. G.**; Bates, F. S.; Hillmyer, M. A. Revisiting the Anionic Polymerization of Methyl Methacrylate. *Macromol. Chem. Phys.*, **2018**, *219*, 1700282. (Invited Submission - Living Anionic Polymerization – Part II: Further Expanding the Synthetic Versatility for Novel Polymer Architectures) <http://dx.doi.org/10.1002/macp.201700282>
13. Kieber III, R. J.; Silver, S. A.; **Kennemur, J. G.** Stereochemical effects on the mechanical and viscoelastic properties of renewable polyurethanes derived from isohexides and hydroxymethylfurfural. *Polym. Chem.*, **2017**, *8*, 4822–4829. <http://dx.doi.org/10.1039/C7PY00949F>
12. Neary, W. J.; **Kennemur, J. G.** Variable Temperature ROMP: Leveraging Low Ring Strain Thermodynamics to Achieve Well-Defined Polypentenamers. *Macromolecules* **2017**, *50*, 4935–4941. <http://dx.doi.org/10.1021/acs.macromol.7b01148>
11. Misichronis, K.; Chen, J.; Imel, A.; Kumar, R.; Thostenson, J.; Hong, K.; Dadmun, M.; Sumpter, B. G.; **Kennemur, J. G.**; Hadjichristidis, N.; Mays, J. W.; **Avgeropoulos, A.** Investigation on the Phase Diagram and Interaction Parameter of Poly(styrene-*b*-1,3-

- cyclohexadiene) Diblock Copolymers. *Macromolecules* **2017**, *50*, 2354–2363. <http://dx.doi.org/10.1021/acs.macromol.7b00104>
10. Neary, W. J.; **Kennemur, J. G.** A Precision Ethylene-Styrene Copolymer with High Styrene Content from Ring-Opening Metathesis Polymerization of 4-Phenylcyclopentene. *Macromol. Rapid Commun.* **2016**, *37*, 975–979. <http://dx.doi.org/10.1002/marc.201600121>

During Post-Doctoral Studies

9. Kennemur, J. G.; **Hillmyer, M. A.**; **Bates, F. S.** Sub-5 nm Domains in Ordered Poly(cyclohexylethylene)-*block*-poly(methyl methacrylate) Block Polymers for Lithography. *Macromolecules*, **2014**, *47*, 1411-1418. <http://dx.doi.org/10.1021/ma4020164>)
8. Kennemur, J. G.; **Hillmyer, M. A.**; **Bates, F. S.** Rheological Evidence of Composition Fluctuations in an Unentangled Diblock Copolymer Melt near the Order-Disorder Transition. *ACS Macro Lett.* **2013**, *2*, 496-500. <http://dx.doi.org/10.1021/mz4001892>
7. Kennemur, J. G.; **Hillmyer, M. A.**; **Bates, F. S.** Synthesis, Thermodynamics, and Dynamics of Poly(4-*tert*-butylstyrene-*b*-methyl methacrylate). *Macromolecules* **2012**, *45*, 7228-7236. <http://dx.doi.org/10.1021/ma301047y>

During Graduate Studies

6. Wilcox, R. J.; Folmer, J. C. W.; Kennemur, J. G.; **Martin, J. D.** Synthesis of Luminescent Nitroxobenzene Oligomers by Aluminum Chloride Catalyzed Dehydration of Nitrobenzene. *Polyhedron*, **2015**, *103*, 35-43. <http://dx.doi.org/10.1016/j.poly.2015.07.077>
5. Kennemur, J. G.; **Novak, B. M.** Hierarchical Chirality in Polycarbodiimides. *Isr. J. Chem.* **2011**, *51*, 1041-1051. <http://dx.doi.org/10.1002/ijch.201100030>
4. Kennemur, J. G.; DeSousa, J. D.; Martin J. D.; **Novak, B. M.** Reassessing Helical Polycarbodiimide Regioregularity Using Solution Infrared Spectroscopy. *Macromolecules* **2011**, *44*, 5064-5067. <http://dx.doi.org/10.1021/ma2005052>
3. Kennemur, J. G.; **Novak, B. M.** Advances in Polycarbodiimide Chemistry. *Polymer* **2011**, *52*, 1693-1710. <http://dx.doi.org/10.1016/j.polymer.2011.02.040>
2. Kennemur, J. G.; Kilgore, C. A., **Novak, B. M.** Adjusting Conformational Switching Behavior of Helical Polycarbodiimides Through Substituent Induced Polarity Effects. *J. Polym. Sci. Part A: Polym. Chem.* **2011**, *49*, 719-728. <http://dx.doi.org/10.1002/pola.24484>

1. Kennemur, J. G.; Clark, IV, J. B.; Tian, G.; **Novak, B. M.** A New, More Versatile Optical Switching Helical Polycarbodiimide Capable of Thermally Tuning Polarizations $\pm 359^\circ$. *Macromolecules* **2010**, *43*, 1867-1873. <http://dx.doi.org/10.1021/ma902657d>

PATENTS

Provisional / Pending

8. Kennemur, J. G.; Hallinan, D. H., Winey K. A. Polymer Blends Containing a Precise Polyelectrolyte and Methods. U.S. Prov. Patent Appl. Number 63/280,382
7. Kennemur, J. G.; Yarolimek, M. R. Polymers Derived from Biomass. U.S. Prov. Patent Appl. Number 63/161,088. March 2021.
6. Kennemur, J. G.; Nguyen, N. Q-H. Conversion of precision sulfonic acid sodium salt to N-(phenylsulfonyl)-N-(trifluoromethylsulfonyl)imide lithium salt. U.S. Prov. Patent Appl. Number 63/086733. Oct. 2 2020.
5. Kennemur, J. G.; Fultz, B. A. Block Copolymers, Membranes, and Methods U.S. Patent Appl. Number 17/241,163. Oct 2021.

Issued

4. Kennemur, J. G.; Cyclopentene Monomers and Methods of Polymerization. U.S. Patent 11,136,426. Oct 15, 2021.
3. Kennemur, J. G.; Neary W. J. Polystyrene Sulfonate Analogs and Methods. U.S. Patent 10,640,587. May 5, 2020.
2. Hustad, P. H.; Bates, F. S.; Hillmyer, M. A.; Kennemur, J. G. Poly(cyclohexylethylene)-Polyacrylate Block Copolymers, Methods of Manufacture Thereof and Articles Comprising the Same. U.S. Patent (2014) 20140360975A1.
1. Hustad, P. H.; Trefonas, P. F.; Bates, F. S.; Hillmyer, M. A.; Kennemur, J. G. 2011. Polystyrene-Polyacrylate Block Copolymers, Methods of Manufacture Thereof and Articles Comprising the Same. U.S. Patent (2013) 9,127,113.

GRANTS

Active

- 2021 – 2022 *Sustainable Plastics from Biorenewable Pine Resin*. FSU-CRC Planning Grant. \$24,805. J. Kennemur (PI)
- 2018 – 2023 *CAREER: Bridging the Gap Between Bottlebrush and Comb Polymers with Precision Macroinitiators to Generate New Elastomeric Materials*. National Science Foundation (DMR-Polymers). 1750852. \$534,049. J. Kennemur (PI)

2018 – 2021 *Impact of Ion Transport and Dissociation on Polymer Electrolyte Battery Rate Capability.* National Science Foundation (CBET). 1804871. \$346,659. D. Hallinan (PI), J. Kennemur (co-PI)

Past

2015 – 2017 *Petroleum Derived Triblock Terpolymer Templates for Dual-Metal Patterning of Square-Patterned Rectangular Nanostructures.* Petroleum Research Fund – Doctoral New Investigator Grant. American Chemical Society. 55378-DNI7. \$110,000.
J. Kennemur (PI)

2015 *FYAP: New Material Opportunities from Renewable Biomass: Revisiting the Emulsion Polymerization of Vinyl Furan.* FSU CRC First Year Assistant Professor Program, \$20,000
J. Kennemur (PI)

INVITED CONFERENCE / WORKSHOP PRESENTATIONS (Principle Investigator)

2022 “Accessing Precise, Amorphous, and More Flexible Phenylsulfonated Materials through ROMP” ACS Division of Polymer Chemistry: Polymers for Fuel Cells, Energy Storage, and Conversion Workshop. Napa, CA. May 16, 2022.

2022 “Leveraging Equilibrium Polymerization Thermodynamics to Produce New Materials and Chemically Recyclable Elastomers” American Chemical Society Southwest Georgia Section (SOWEGA) Virtual Meeting. February 17, 2022.

2021 “Utilizing RAFT to Make Charge Mosaic Thin Films with Polyvinylpyridine Segments and Insight on Photo-Driven CTA Removal from these Systems” ACS Division of Polymer Chemistry: Controlled Radical Polymerization Workshop. Charleston, SC. November 15, 2021.

2021 “Structure-Property-Function of Polypentenamer Systems” Southeast Regional Meeting of the ACS (SERMACS), Birmingham, AL. November 11, 2021.

2019 “Nanostructured Charge Mosaics from Self-Assembled Block Polymers: Efficacy and Challenges” Advanced Membrane Materials and Technologies Workshop. University of Pennsylvania, Philadelphia, PA. December 17, 2019.

- 2019 “Polypentenamer Bottlebrushes in Metastable Equilibrium: Quantitative RCM Depolymerization and Transformation to New Architectures” International Symposium on Stimuli-Responsive Materials. Windsor, CA. October 22, 2019.
- 2019 “Value-Added Poly(vinyl ethers) through Cationic Copolymerization of Glycal-Derivatized Isosorbide” International Symposium on Materials from Renewables (ISMR 2019). Athens, GA. October 9, 2019.
- 2019 “Performance Elastomers from New Advances in Ring Opening Metathesis Polymerization of Low-Strain Cycloalkenes” Advances in Polyolefins Workshop 2019 (APO2019). Rohnert Park, CA. September 24, 2019.
- 2019 *Keynote Speaker*. “Self-Immolative Bottlebrushes and their Transformations” American Chemical Society Florida Annual Meeting and Exposition (FAME). POLY/PMSE-Materials Symposium. Palm Harbor, FL. May 10, 2019
- 2018 “Five Alive: Functional Polypentenamers towards a New Class of Bottlebrush Systems” American Chemical Society 256th National Meeting and Exposition. PMSE Young Investigator Award Symposium. Boston, MA. August 20, 2018.
- 2018 “Influencing Sustainable Polymers with Isohexide Stereochemistry: Synthesis and Material Investigations” American Chemical Society 256th National Meeting and Exposition. PMSE Symposium on Stereochemical Enhancement of Material Properties. Boston, MA. August 19, 2018.
- 2018 “Low strain, more gain: Harnessing Polypentenamers towards Complex Precision Architectures” American Chemical Society 255th National Meeting and Exposition. PMSE Symposium on Synthesis and Self-Assembly of Polymer with Complex Architectures. New Orleans, LA March 20, 2018.
- 2017 “Dynamic Polymers from Low Strain Cycloalkenes” American Chemical Society 254th National Meeting and Exposition. PMSE Symposium on Dynamic Chemistry in Polymer Materials. Washington D.C., August 23, 2017.
- 2017 “Can We Leverage Equilibrium Thermodynamics to Unlock New Well-defined Polymeric Materials?” American Chemical Society Florida Annual Meeting and Exposition (FAME). Materials Section. Palm Harbor, FL. May 05, 2017.
- 2017 “Taking Charge of Polymeric Materials with Precision Spacing of Functional Groups” Joint Symposium of the Florida Chapter of the American Vacuum Society (FLAVS) and the Florida Society for Microscopy. University of Central Florida – Student Union. Orlando, FL. March 6, 2017.

- 2015 “Understanding the Interaction Parameter for Next Generation Lithographic Patterning Materials: Sub-10 nm Domains from Highly Incompatible Block Polymer Segments” American Chemical Society Florida Annual Meeting and Exposition (FAME). POLY/PMSE Section. Palm Harbor, FL. May 9, 2015.

INVITED UNIVERSITY & INDUSTRY LECTURES (Principle Investigator)

14. The Dow Chemical Company, Technical Community Organization (TCO) External Seminar Series. Virtual Seminar. Collegeville, PA. Jul 30, 2020.
13. Virginia Polytechnic Institute and State University, Department of Chemistry and Macromolecules Innovation Institute, Blacksburg, VA. March 27, 2019.
12. ExxonMobil Chemical Company, Baytown, TX. Mar 22, 2019
11. North Carolina State University, Department of Chemistry, Raleigh, NC. Mar 11, 2019
10. University of Southern Florida, Department of Chemistry, Tampa, FL. March 7, 2019
9. Louisiana State University, Department of Chemistry, Baton Rouge, LA. Feb 22, 2019
8. University of Southern Mississippi, School of Polymer Science and Engineering, Hattiesburg, MS. Feb 20, 2019
7. Pennsylvania State University, Department of Material Science, College Park, PA. Feb 6, 2019
6. University of North Carolina, Department of Chemistry, Chapel Hill, NC. Jan 31, 2019
5. University of Central Florida, NanoScience Technology Center, Orlando, FL. Jan 24, 2019
4. University of Florida, Department of Chemistry, Gainesville, FL. Jan. 22, 2019
3. University of Akron, Department of Polymer Science, Akron, OH. Oct. 5, 2018
2. Case Western Reserve University, Department of Chemistry, Cleveland, OH. Oct. 4, 2018
1. Rice University, Department of Materials Science & NanoEngineering, Houston, TX. Feb. 15, 2018

CONTRIBUTED CONFERENCE PRESENTATIONS (Principle Investigator)

- 2021 *Oral Presentation.* Southeast Regional Meeting of the ACS (SERMACS), “Poly[(4-vinylpyridine)-*b*-(*t*-butyl methacrylate)] as a Promising Precursor System to Charge Mosaics: Nanostructured Thin Films of Oppositely Charged Domains” Birmingham, AL. November 12, 2021.
- 2021 *Oral Virtual Presentation.* 262nd American Chemical Society National Meeting and Exposition. “Turning Pine Sap into Precise Polyolefins through Ring Opening Metathesis Polymerization” Atlanta, GA & Virtual. August 22–26, 2021.

- 2019 *Poster Presentation.* Gordon Research Conference – Polymers. “Dynamic Bottlebrush Systems from a Polypentenamer Scaffold” South Hadley, MA. June 9-14, 2019.
- 2019 *Oral Presentation.* 257th American Chemical Society National Meeting and Exposition. “Thermodynamics of Bottlebrush Systems from Low Strain Cycloolefins” POLY Division. Orlando, FL. March 31, 2019.
- 2018 *Oral Presentation.* Bordeaux Polymer Conference. “Exploring the Five-Carbon Structure-Property Genome of Precision Polyolefins” Bordeaux, France. May 28 – 31, 2018.
- 2017 *Oral Presentation.* 253rd American Chemical Society National Meeting and Exposition. “Variable temperature ROMP: Achieving targeted molar mass and low dispersities from low ring-strain monomers” POLY Division. San Francisco, CA. April 03, 2017.
- 2017 *Poster Presentation.* Gordon Research Conference – Polymers. “Effect of Isohexide Stereochemistry on Properties of Renewable Polyurethanes” South Hadley, MA. June 11-16, 2017.
- 2017 *Oral Presentation.* American Physical Society March Meeting 2017. “Synthesis and Properties of a Precision Sulfonated Trimethylene-Styrene Polyelectrolyte” New Orleans, LA. March 16, 2017.
- 2016 *Poster Presentation.* Gordon Research Conference – Polymer Physics. “Exploring the Five-Carbon Branch Topology on Precision Polyolefins” South Hadley, MA. July 24-29, 2016.
- 2016 *Oral Presentation.* 251st American Chemical Society National Meeting and Exposition. “Precision Polyolefins from Substituted Cyclopentenenes” POLY Division. San Diego, CA. March 13, 2016.
- 2015 *Poster Presentation.* Gordon Research Conference – Polymers. “Emerging Research in the Kennemur Group” South Hadley, MA. June 14-19, 2015.
- 2015 *Oral Presentation.* American Chemical Society Florida Annual Meeting and Exposition (FAME). “Understanding the Interaction Parameter for Next Generation Lithographic Patterning Materials: Sub-10 nm Domains from Highly Incompatible Block Polymer Segments” POLY/PMSE Section. Palm Harbor, FL. May 9, 2015.

CAMPUS AND DEPARTMENTAL TALKS (Principle Investigator)

- 2019 "High-Five: Five Years of Research Polymerizing Five-Membered Cycloolefins". FSU Chemistry and Biochemistry Departmental Seminar Series. August 30, 2019.
- 2019 "The Plastics Age: The Good, the Bad, and the Future" FSU Coastal and Marine Laboratory Conservation Lecture Series. (General Public Lecture) May 16, 2019.
- 2018 "The Entropy-Enthalpy Battle of Ring Opening Polymerizations and the Aftermath of an Unexplored Structure-Property Genome" FAMU-FSU Department of Chemical and Biological Engineering Seminar. Sept. 28, 2018.
- 2016 "Precision Polyolefins from Substituted Cyclopentenes" FSU Materials and Energy Hiring Initiative Seminar Series. March 31, 2016.
- 2015 - 2019 "Laboratory Safety: Insights from my own Journey" EH&S and Department of Chemistry and Biochemistry Safety in Research Fall Seminar Series. Nov. 16, 2015; Nov. 28, 2016; Nov. 6, 2017; Oct. 28, 2018; Nov. 4, 2019.
- 2015 "Amplification of Block Polymer Interaction Parameters through Chemical Structure Modification: A Blueprint for Rational Design" FSU-FAMU Chemical and Biological Engineering Graduate Research Seminar Series. Sept. 4, 2015.
- 2014 "The Plastic Age: Current Challenges and Research Opportunities in Polymer Synthesis" Materials Science and Engineering Seminar Series. Sept. 17, 2014.

TEACHING EXPERIENCE

Florida State University (*self-developed)

- CHM-4455/5450* Polymer Chemistry. Co-listed Undergraduate and Graduate Course. F19, F21
- CHM-5718* Synthetic Polymers. Graduate Course. S16, F17.
- CHM-5901* Directed Focus Course: Scholarly Writing Techniques. S17.
- CHM-2211 Organic Chemistry II. F20, S22.
- CHM-2210. Organic Chemistry I. F15, F16, S18, F18, S19, S20.

North Carolina State University

Organic Chemistry Laboratory I (F-06)
Organic Chemistry Laboratory II (S-07)
General Chemistry Laboratory I (F-05)
General Chemistry Laboratory II (S-06)

SERVICE TO PROFESSION

2020-present Faculty Advisor –The ACS POLY/PMSE Student Chapter at FAMU-FSU

2020-present Editorial Advisory Board – *Polymer Chemistry* (RSC Publications)

2018-2022 ACS POLY Division – Webmaster and new website co-designer

2018-2022 ACS POLY Division – Publicity/Marketing/Outreach Committee

2019 *Symposium Co-Organizer. “Synthesis and Properties of Densely Grafted Polymers”* Division of Polymer Chemistry (POLY). 257th American Chemical Society National Meeting and Exposition. Orlando, FL. March 31 - April 4, 2019.

2019 *Doolittle Award Judge. 257th American Chemical Society National Meeting and Exposition. Orlando, FL. March 31 - April 4, 2019.*

2018 *Symposium Co-Organizer. “Synthesis and Self-Assembly of Polymers with Complex Architectures”* Polymeric Materials Science and Engineering (PMSE) Division. 255th American Chemical Society National Meeting and Exposition. New Orleans, LA. March 18-21, 2018.

2018 *Symposium Organizer. “Bridging New Polymer Chemistry and Polymer Physics”* Division of Polymer Physics (DPOLY). American Physical Society (APS) March Meeting. Los Angeles, CA. March 5-9, 2018.

2017 *Poster Judge. Sci-Mix PMSE/POLY Division Session. 254th American Chemical Society National Meeting and Exposition. Washington D.C., August 20-14, 2017.*

2017 *Session Leader. Gordon Research Conference – Polymers. South Hadley, MA. June 11-16, 2017.*

2017 *Poster Judge. American Chemical Society - Florida Section Annual Meeting and Exposition (FAME). Palm Harbor, FL. May 4 - 6, 2017.*

2017 *Poster Judge. Sci-Mix PMSE/POLY Division Session. 253rd American Chemical Society National Meeting and Exposition. San Francisco, CA. April 2-6, 2017.*

- 2016 *Faculty Advisor*. PMSE/POLY Student Symposium. American Chemical Society - Florida Section Annual Meeting and Exposition (FAME). Palm Harbor, FL. May 5-7, 2016.
- 2016 *Poster Judge*. American Chemical Society - Florida Section Annual Meeting and Exposition (FAME). Palm Harbor, FL. May 5 - 7, 2016.
- 2016 *Poster Judge*. Sci-Mix PMSE/POLY Division Session. 251st American Chemical Society National Meeting and Exposition. San Diego, CA. March 13 – 17, 2016.
- Referee *Nature Chemistry, Nature Communications, Journal of the American Chemical Society, Chemical Science, ACS Macro Letters, Macromolecules, ACS Applied Polymer Materials, Polymer Chemistry, Journal of Polymer Science, Macromolecular Rapid Communications, Macromolecular Chemistry and Physics, Organometallics, Macromolecular Materials and Engineering, Applied Surface Science, European Polymer Journal, Polymer, Polymer International, Polymers, Polymer Engineering and Science.*
- Reviewer NSF, ACS-PRF, CASIS, NSERC
- Panelist NSF DMREF 2019, NSF CHE 2022

DEPARTMENTAL & UNIVERSITY SERVICE

- 2021 – present Chair: Graduate Recruitment and Admissions Committee
- 2020 – present Web & Marketing Committee
- 2019 – present Department Faculty Additions Committee
- 2019 – 2020 Curriculum Oversight Committee
- 2019 – 2020 Department Graduate Curriculum & Awards Committee.
- 2016 – 2020 Department Seminar Committee – Organic Division Seminars.
- 2015 – present Creator and administrator of “FSU Polymers” interdisciplinary email list-server.
- 2018 – 2019 Department Capital Resource and Space Committee
- 2017 – 2020 Department Graduate Advising and Awards Committee
- 2016 – 2018 Department Curriculum Committee – Organic Division
- 2015 – 2020 Mentor for FSU Undergraduate Research Opportunities Program.
- 2015 – 2017 Department Graduate Recruitment & Admissions Committee.
- 2014 – 2018 Department Materials Characterization Laboratory Committee.
- 2019 Hiring Committee
- 2018 Hiring Committee

PROFESSIONAL AFFILIATIONS

2022 – present American Association for the Advancement of Science (AAAS)
2016 – present American Physical Society (DPOLY Division)
2005 – present American Chemical Society (PMSE and POLY Divisions).

SUPERVISION AS PRINCIPLE INVESTIGATOR

Post-Doctoral Researchers

Goutam Palui 2015 – 2017 (Staff Fellow – OSC, U.S. FDA)

Doctoral Students

William Neary 2014 - 2019 (Postdoc at UIUC – Moore Group)
Robert Kieber III 2014 – 2019 (Sr Manufacturing Coating Eng. – Corning)
Brandon Fultz 2014 – 2020 (Faculty – University of West Florida)
Mark Yarolimek 2016 – 2021 (Polymer Application Scientist - Promerus)
Nam Nguyen 2016 – 2021 (PTD Etch Module Engineer – Intel)
Gina Guillory 2017 – present
Benjamin Abraham 2019 – present
Brianna Coia 2019 – present
Courtney Leo 2019 – present
Emily Grumbles 2021 – present
Jaehoon Jang 2021 – present

Masters Students

Stefan Brits 2015 – 2018 (Architecture Program at UT-Austin)
Taylor Isais 2017 – 2021 (Research Scientist – Johnson Controls)
Benjamin Abraham 2019 – 2022 (R&D Scientist – Factorial Energy)

Undergraduate Students

Ana Pereira 2022 – present
August Specht 2022 – present
Skylar Alonzo 2022 – present
Luke Hudson 2022 – present
Joshua Weltman 2021 – present
Mackenzie Ehrhardt 2021 – present
Karl Kinner 2021 – present
Caroline Crowder 2021 – 2022 (Graduate Student at USF)
Sarah Werner 2021 - 2022
Ethan Corey 2020 - present
Heather Bookbinder 2019 – 2021 (Medical Asst. – TLH Derm. Assoc.)

Jason Define	2019 – 2021	(Polymer Lab Technician – BASF)
Brooke Sabin	2019 – 2020	
Lindsay Hughes	2018 - 2020	
Cuneyt Ozkardes	2017 – 2019	(FSU Medical School)
Aaron Kendrick	2016 – 2019	(Graduate Student at SCRIPPS)
Trevor Hine	2016 - 2018	
Beatriz Dunoyer de Segonzac	2016 – 2018	(Honors Thesis) (USF Medical School)
Michele Bohlmann	2016 – 2017	(USF Medical School)
Hana Nicole Grubb	2015 - 2016	
Garrett Abrahamsen	2015 – 2016	(Graduate Student at USM – Morgan Lab)
Samantha Silver	2014 – 2018	(Process Engineer – Corning)
Mauri Moore (REU)	2019	
Natalie Sanchez (REU)	2018	
Morgan Martin (REU)	2017	

Student Awards and Recognitions

2022 – Brianna Coia – ACS POLY Graduate Student Travel Award (ACS POLY)
2022 – Brianna Coia – Chery and Joel Rosenfield Endowment Award (FSU)
2022 – Gina Guillory – Graduate Teaching Excellence Award in Organic Chemistry (FSU)
2020 – Mark Yarolimek - Graduate Teaching Excellence Award in Organic Chemistry (FSU)
2019 – William Neary – ACS POLY/PMSE Excellence in Graduate Polymer Research Symp.
2019 – Aaron Kendrick – Undergraduate Research Award (FSU)
2019 – Mark Yarolimek – Florida ACS Meeting (FAME) Best Poster Award
2018 – Aaron Kendrick – FSU Arts and Sciences Travel Grant
2018 – William Neary – Outstanding Poster Award (NGRPC)
2018 – William Neary – Graduate Student Award for Excellence in Organic Chemistry (FSU)
2016 – Sam Silver – Florida ACS Meeting (FAME) Best Poster Award