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October 20, 2021

1) EDUCATION

- Cornell University, Department of Materials Science and Engineering, Postdoctoral Associate, 2003–2006
  Mentor: Professor Christopher K. Ober
- Lehigh University, Department of Chemical Engineering, Ph.D., Chemical Engineering, 1997–2003; GPA: 3.97
  Thesis: "Effects of Agitation in Emulsion Polymerization of *n*-Butyl Methacrylate and its Copolymerization with *N*-methylolacrylamide."

  Advisors: Professors Andrew Klein and Mohamed S. El-Aasser
- University Institute of Chemical Technology (UICT), Mumbai, B. Chem. Eng., 1993–1997

2) PROFESSIONAL POSITIONS

- Executive Officer, Department of Chemical and Biomolecular Engineering, Clarkson University, July 2019–present
- Professor, Department of Chemical and Biomolecular Engineering, Clarkson University, May 2018–present
- Associate Professor, Department of Chemical and Biomolecular Engineering, Clarkson University, August 2013–May 2018
- Assistant Professor, Department of Chemical and Biomolecular Engineering, Clarkson University, August 2007–2013
- Research Associate, Department of Materials Science and Engineering, Cornell University, 2006–2007
- Postdoctoral Associate, Department of Materials Science and Engineering, Cornell University, January 2003–2005

3) RESEARCH INTERESTS

Research topics in my group are related to the design, development, and modeling of new functional materials for a variety of advanced engineering applications.

My research interests include polymer nanocomposites, biocomposites, electrochemical properties of conducting polymers, and ionic liquids at electrode–electrolyte interfaces. We investigate mechanical and thermal properties of polymer composites, the rates of ion-transport through materials (using experiments and molecular simulations), study electrokinetic behaviors of colloids and surfaces in chemical mechanical planarization and water-treatment applications, and design new polymeric materials for energy conversion and storage devices.

4) PEER-REVIEWED PUBLICATIONS ([*] and [**] denote Clarkson University graduate and undergraduate students, respectively; an underline indicates that a significant portion of the reported work was conducted in Dr. Krishnan's laboratory at Clarkson University. The same notations are used in sections 5 to 9.)

1. A. P. Pitchiya,[*] Y. Wang,[*] C. Johnson,[*] A. Sreeram,[*] D. Roy, and S. Krishnan, "Ionic Liquid Imbibed Dual-Conducting Graphene-Polyacetylene Nanocomposite Membranes," in preparation for submission.
2. G. Mohandass,[*] T. Kim, and S. Krishnan, "Continuous Solar Desalination of Brackish Water Via a Monolithically Integrated Redox Flow Device," *ACS ES&T Eng.* (2021).
3. A. P. Pitchiya,[*] N.-T. Le,[*] Z. A. Putnam,[*] M. Harrington, and S. Krishnan, "Microporous Graphite Composites of Tailorable Porosity, Surface Wettability, and Water Permeability for Fuel Cell Bipolar Plates," *Ind. Eng. Chem. Res.*, **60**, 10203-10216 (2021). (Journal Cover)
4. R. I. Venkatanarayanan,[*] J. L. Lebga-Nebane,[*] L. Wu,[*] and S. Krishnan, Lithium Coordination and Diffusion Coefficients of PEGylated Ionic Liquid and Lithium Salt Blends: A Molecular Dynamics Study, *Journal of Molecular Liquids*, **331**, 115694 (2021).
5. J. L. Lebga-Nebane,[*] M. Sankarasubramanian,[*] G. Chojecki,[*] B. Ning, P. A. Yuya, J. C. Moosbrugger, D. H. Rasmussen, and S. Krishnan, "Polyetheretherketone, Hexagonal Boron Nitride, and Tungsten Carbide Cobalt Chromium Composite Coatings: Mechanical and Tribological Properties," *J. Appl. Polym. Sci.*, **138**, 50504 (2021). (Journal Cover)
6. S. Krishnan, J. M. Asua, and M. V. Kothare, "Preface to the Mohamed El-Aasser Festschrift," *Ind. Eng. Chem. Res.*, **58**, 20859-20862 (2019).
7. T.-V.-L. Nguyen, P.-B.-D. Nguyen, X.-C. Luu, B.-L. Huynh, S. Krishnan, and P. T. Huynh, "Kinetics of Nutrient Change and Color Retention During Low-Temperature Microwave-Assisted Drying of Bitter Melon (*Momordica Charantia L.*)," *Journal of Food Processing and Preservation*, **43**, e14279 (2019).
8. J. M. Myrick,[*] V. K. Vendra,[*] N.-T. Le,[*] F. A. Sexton, and S. Krishnan, "Controlled Release of Glucose from Orally Delivered Temperature- and pH-Responsive Polysaccharide Microparticle Dispersions," *Ind. Eng. Chem. Res.*, **58**, 21056-21069 (2019).
9. M. Luo,[*] Z. A. Putnam,[*] J. Incavo, M. Huang, J. B. McLaughlin, and S. Krishnan, "Molecular Simulations and Experimental Characterization of Fluorinated Nitrile Butadiene Elastomers with Low H_2S Permeability," *Ind. Eng. Chem. Res.*, **58**, 14823-14838 (2019).
10. M. Sankarasubramanian,[*] M. Torabizadeh,[*] Z. A. Putnam,[*] J. C. Moosbrugger, M. Huang, and S. Krishnan, "Enhanced Toughness and Fracture Properties of Elastomers Imparted by Flat Nanoparticles," *Polymer Testing*, **78**, 105932 (2019).
11. M. Torabizadeh,[*] Z. A. Putnam,[*] M. Sankarasubramanian,[*] J. Moosbrugger, and S. Krishnan, "The Effects of Initial Crack Length on Fracture Characterization of Rubbers Using the *J*-integral Approach," *Polymer Testing* **73**, 327-337 (2019).
12. N.-T. Le,[*] J. Myrick,[*] T. Seigle,[**] P. T. Huynh, and S. Krishnan, "Mapping Electrospray Modes and Droplet Size Distributions for Chitosan Solutions in Unentangled and Entangled Concentration Regimes," *Advanced Powder Technology* **29**, 3007-3021 (2018).
13. O. Durham,[*] D. Chapman,[*] S. Krishnan, and D. Shipp, "Radical Mediated Thiol-Ene Emulsion Polymerizations," *Macromolecules* **50** (3), 775-783 (2017).
14. Y. Wang,[*] M. C. Turk,[*] M. Sankarasubramanian,[*] A. Srivatsa,[**] D. Roy, and S. Krishnan, "Thermophysical and Transport Properties of Blends of an Ether-Derivatized Imidazolium Ionic Liquid and a Li^+-Based Solvate Ionic Liquid," *Journal of Materials Science* **52** (7), 3719-3740 (2017). (Highlighted at Advances in Engineering website)

15. R. I. Venkatanarayanan,[*] S. Krishnan, A. Sreeram,[*] P. A. Yuya, N. G. Patel,[*] A. Tandia, and J. B. McLaughlin, "Simulated Dilatometry and Static Deformation Prediction of Glass Transition and Mechanical Properties of Polyacetylene and Poly(*Para*-Phenylene Vinylene)," *Macromolecular Theory and Simulations* **25** (3), 238-253 (2016). (Highlighted as Wiley's Advanced Science News)

16. A. Sreeram,[*] S. Krishnan, S. J. DeLuca, A. Abidnejad,[*] M. C. Turk,[*] D. Roy, E. Honarvarfard,[*] and P. J. Goulet, "Simultaneous Electronic and Ionic Conduction in Ionic Liquid Imbibed Polyacetylene-Like Conjugated Polymer Films," *RSC Advances* **5** (107), 88425-88435 (2015).

17. R. Bhonsle,[*] L. Teugels, S. Ibrahim, P. Ong, M. Delande, S. Krishnan, M. Siebert, H. Struyf, and L. Leunissen, "Inspection, Characterization and Classification of Defects for Improved CMP of III-V Materials," *ECS Journal of Solid State Science and Technology* **4** (11), P5073-P5077 (2015).

18. N. G. Patel,[*] A. Sreeram,[*] R. I. Venkatanarayanan,[*] S. Krishnan, and P. A. Yuya, "Elevated Temperature Nanoindentation Characterization of Poly(*para*-Phenylene Vinylene) Conjugated Polymer Films," *Polymer Testing* **41**, 17-25 (2015).

19. L. Wu,[*] R. I. Venkatanarayanan,[*] X. Shi,[*] D. Roy, and S. Krishnan, Glass Transition, Viscosity and Conductivity Correlations in Solutions of Lithium Salts in PEGylated Imidazolium Ionic Liquids, *Journal of Molecular Liquids* **198**, 398-408 (2014).

20. A. Sreeram,[*] N. G. Patel,[*] R. I. Venkatanarayanan,[*] S. J. DeLuca,[*] P. Yuya,[*] and S. Krishnan, "Kinetics of Formation of Poly(*para*-phenylene vinylene) by Thermal Conversion of a Sulfonium Precursor," *Polymer Testing* **37**, 170-178 (2014).

21. A. Sreeram,[*] N. G. Patel,[*] R. I. Venkatanarayanan,[*] J. B. McLaughlin, S. J. DeLuca, P. Yuya, and S. Krishnan, "Nanomechanical Properties of Poly(*para*-phenylene vinylene) Determined Using Quasi-static and Dynamic Nanoindentation," *Polymer Testing* **37**, 86-93 (2014).

22. S. S. Moganty,[*] P. S. Chinthamanipeta,[*] V. K. Vendra,[*] S. Krishnan, and R. Baltus, "Structure-Property Relationships in Transport and Thermodynamic Properties of Imidazolium Bistriflamide Ionic Liquids for CO_2 Capture," *Chem. Eng. J.* **250**, 377-389 (2014).

23. J. M. Myrick,[*] V. K. Vendra,[*] and S. Krishnan, "Self-Assembled Polysaccharide Nanostructures for Controlled-Release Applications," *Nanotechnology Reviews* **3** (4), 319-346 (2014).

24. U. R. K. Lagudu,[*] S. Isono,[*] S. Krishnan, and S. V. Babu, "Role of Ionic Strength in Chemical Mechanical Polishing of Silicon Carbide Using Silica Slurries," *Colloids Surf. A*: *Physicochem. Eng. Aspects* **445**, 119-127 (2014).

25. J. B. Matovu,[*] P. Ong, L. H. A. Leunissen, S. Krishnan, and S. V. Babu, "Fundamental Investigation of Chemical Mechanical Polishing of GaAs in Silica Dispersions: Material Removal and Arsenic Trihydride Formation Pathways," *ECS J. Solid State Sci. Technol.* **2**, P432-P439 (2013).

26. J. B. Matovu,[*] P. Ong, L. H. A. Leunissen, S. Krishnan, and S. V. Babu, "Use of Multifunctional Carboxylic Acids and Hydrogen Peroxide To Improve Surface Quality and Minimize Phosphine Evolution During Chemical Mechanical Polishing of Indium Phosphide Surfaces," *Ind. Eng. Chem. Res.* **52**, 10664-10672 (2013).

27. S. Rock,[*] W. Lin,[*] D. Crain,[*] S. Krishnan, and D. Roy, "Interfacial Characteristics of a PEGylated Imidazolium Bistriflamide Ionic Liquid Electrolyte at a Lithium Ion Battery Cathode of $LiMn_2O_4$," *ACS Appl. Mater. Interfaces* **5**, 2075-2084 (2013).

28. J. L. Lebga-Nebane,[*] S. Rock,[*] J. Franclemont,[**] D. Roy, and S. Krishnan, "Thermophysical Properties and Proton Transport Mechanisms of Protic Ionic Liquids," *Ind. Eng. Chem. Res*. **51**, 14084-14098 (2012).

29. O. Z. Durham,[*] S. Krishnan, and D. A. Shipp, "Polymer Microspheres Prepared by Water-Borne Thiol-Ene Suspension Photopolymerization," *ACS Macro Letters*, **1**, 1134-1137 (2012).

30. L. Wu,[*] J. Jasinski, and S. Krishnan, "Carboxybetaine, Sulfobetaine, and Cationic Block Copolymer Coatings: A Comparison of the Surface Properties and Antifouling Behavior," *J. Appl. Polym. Sci.*, **124**, 2154-2170 (2012).

31. L. V. N. R. Ganapatibhotla,[*] L. Wu,[*] J. Zheng, X. Jia, D. Roy, J. B. McLaughlin, and S. Krishnan, "Ionic Liquids with Fluorinated Block-oligomer Tails: Impact of Self-assembly on Transport Properties," *J. Mater. Chem.* **21**, 19275-19285 (2011).

32. N. K. Penta,[*] J. B. Matovu,[*] P. R. Dandu,[*] S. Krishnan, and S. V. Babu, "Role of Polycation Adsorption in Poly-Si, SiO_2 and Si_3N_4 Removal During Chemical Mechanical Polishing: Effect of Polishing Pad Surface Chemistry," *Colloids Surf., A*, **288**, 21-28 (2011).

33. E. Martinelli, G. Galli, S. Krishnan, M. Y. Paik, C. K. Ober, and D. A. Fischer, "New Poly(dimethylsiloxane)/poly(perfluorooctylethyl acrylate) Block Copolymers: Structure and Order Across Multiple Length Scales in Thin Films," *J. Mater. Chem.*, **21**, 15357-15368 (2011).

34. L. V. N. R. Ganapatibhotla,[*] J. Zheng,[*] D. Roy, and S. Krishnan, "PEGylated Imidazolium Iodide Ionic Liquid Electrolytes: Thermophysical and Electrochemical Properties," *Chem. Mater.*, **22**, 6347-6360 (2010).

35. S. Krishnan, M. Y. Paik, C. K. Ober, E. Martinelli, G. Galli, K. E. Sohn, E. J. Kramer, and D. A. Fischer, "NEXAFS Depth Profiling of Surface Segregation in Block Copolymer Thin Films," *Macromolecules*, **43**, 4733-4743 (2010).

36. C. J. Weinman, N. Gunari, S. Krishnan, R. Dong, M. Y. Paik, K. E. Sohn, G. C. Walker, E. J. Kramer, D. A. Fischer, and C. K. Ober, "Protein Adsorption Resistance of Anti-Biofouling Block Copolymers Containing Amphiphilic Side Chains," *Soft Matter*, **6**, 3237-3243 (2010).

37. D. Park, J. A. Finlay, R. J. Ward, C. J. Weinman, S. Krishnan, M. Y. Paik, K. E. Sohn, M. E. Callow, J. A. Callow, D. L. Handlin, C. L. Willis, D. A. Fischer, E. R. Angert, E. J. Kramer, and C. K. Ober, "Antimicrobial Behavior of Semifluorinated-Quaternized Triblock Copolymers Against Marine and Airborne Microorganisms," *ACS Appl. Mater. Interfaces*, **2**, 203-711 (2010).

38. C. J. Weinman, J. A. Finlay, D. Park, M. Y. Paik, S. Krishnan, H. S. Sundaram, M. Dimitriou, K. E. Sohn, M. E. Callow, J. A. Callow, D. L. Handlin, C. L. Willis, E. J. Kramer, and C. K. Ober, "ABC Triblock Surface Active Block Copolymers with Grafted Ethoxylated Fluoroalkyl Amphiphilic Side Chains for Marine Anti-Fouling/Fouling-Release Applications," *Langmuir*, **25**, 12266-12274 (2009).

39. E. Martinelli, S. Menghetti, G. Galli, A. Glisenti, S. Krishnan, M. Y. Paik, C. K. Ober, D.-M. Smilgies, and D. A. Fischer, "Surface engineering of styrene/PEGylated-fluoroalkyl styrene block copolymer thin films," *J. Polym. Sci. Part A: Polym. Chem.*, **47**, 267-284 (2009).

40. S. Krishnan, C. J. Weinman, and C. K. Ober, "Advances in Polymers for Anti-Biofouling Surfaces," *J. Mater. Chem.*, **18**, 3405-3413 (2008).

41. J. A. Finlay, S. Krishnan,[§] M. E. Callow, J. A. Callow, R. Dong, N. Asgill, K. Wong, E. J. Kramer, and C. K. Ober, "Settlement of *Ulva* Zoospores on Patterned Fluorinated and PEGylated Monolayer Surfaces," *Langmuir*, **24**, 503-510 (2008). ([§]joint first authors)

42. R. Dong, S. Krishnan, C. K. Ober, B. A. Baird, and M. Lindau, "Patterned Biofunctional Polymer Brushes," *Biomacromolecules*, **8**, 3082-3092 (2007). (Among the most accessed articles in Oct-Dec, 2007)

43. M. Y. Paik, S. Krishnan, F. You, X. Li, A. Hexemer, Y. Ando, S. H. Kang, D. A. Fischer, E. J. Kramer, and C. K. Ober, "Surface Organization, Light-Driven Surface Changes and Stability of Semifluorinated Azobenzene Polymers," *Langmuir*, **23**, 5110-5119 (2007).

44. P. Busch, S. Krishnan, M. Paik, G. E. S. Toombes, D.-M. Smilgies, S. M. Gruner, and C. K. Ober, "Surface-Induced Tilt Propagation in Thin Films of Semifluorinated Liquid Crystalline Side Chain Block Copolymers," *Macromolecules*, **40**, 81-89 (2007).

45. S. Krishnan, R. J. Ward, A. Hexemer, K. E. Sohn, K. L. Lee, E. R. Angert, D. A. Fischer, E. J. Kramer, and C. K. Ober, "Surfaces of Fluorinated Pyridinium Block-Copolymers with Enhanced Antibacterial Activity," *Langmuir*, **22**, 11255-11266 (2006).

46. S. Krishnan, A. Ramakrishnan, A. Hexemer, J. A. Finlay, K. E. Sohn, R. Perry, C. K. Ober, E. J. Kramer, M. E. Callow, J. A. Callow, and D. A. Fischer, "Anti-Biofouling Properties of Comblike Block Copolymers with Amphiphilic Side Chains," *Langmuir*, **22**, 5075-5086 (2006). (Paper highlighted by the National Synchrotron Light Source, Brookhaven National Laboratory)

47. S. Krishnan, N. Wang, C. K. Ober, J. A. Finlay, M .E. Callow, J. A. Callow, A. Hexemer, K. E. Sohn, E. J. Kramer, and D. A. Fischer, "Comparison of the Fouling Release Properties of Hydrophobic Fluorinated and Hydrophilic PEGylated Block Copolymer Surfaces: Attachment Strengths of the Diatom *Navicula* and the Green Alga *Ulva*," *Biomacromolecules*, **7**, 1449-1462 (2006). (Among the most cited articles in 2006)

48. L. R. Pattison, A. Hexemer, E. J. Kramer, S. Krishnan, P. M. Petroff, and D. A. Fischer, "Probing the Ordering of Semiconducting Fluorene-Thiophene Copolymer Surfaces on Rubbed Polyimide Substrates by Near-Edge X-ray Absorption Fine Structure," *Macromolecules*, **39**, 2225-2231 (2006).

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50. S. Krishnan, Y.-J. Kwark, and C. K. Ober, "Fluorinated Polymers: Liquid Crystalline Properties, and Applications in Lithography," *Chemical Record*, **4**, 315-330 (2004).

51. S. Krishnan, A. Klein, M. S. El-Aasser, and E. D. Sudol, "Effects of Agitation on Oxygen Inhibition, Particle Nucleation, Reaction Rates, and Molecular Weights in Emulsion Polymerization of *n*-Butyl Methacrylate," *Ind. Eng. Chem. Res.*, **43**, 6331-6342 (2004).

52. S. Krishnan, A. Klein, M. S. El-Aasser, and E. D. Sudol, "Influence of Chain Transfer Agent on the Cross-Linking of Poly(*n*-Butyl Methacrylate-*co*-N-Methylol acrylamide) Latex Particles and Films," *Macromolecules*, **36**, 3511-3518 (2003).

53. S. Krishnan, A. Klein, M. S. El-Aasser, and E. D. Sudol, "Effect of Surfactant Concentration on Particle Nucleation in Emulsion Polymerization of *n*-Butyl Methacrylate," *Macromolecules*, **36**, 3152-3159 (2003).

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5) BOOK CHAPTERS (INVITED)

1. S. Krishnan, "X-ray Scattering Investigation of Carbon Nanotube-Based Polymer Composites," in Handbook of Carbon Nanotubes: Science, Technology, and Engineering, edited by J. Abraham, N. Kalarikkal, and S. Thomas (Springer, 2021)

2. S. Krishnan, "Environmentally Benign Marine Antifouling Coatings," in *Biofilm Control in Biomedical and Industrial Environments,* edited by P. S. Murthy, R. Sekar and V. Thiyagarajan (Alpha Science International Ltd., Oxford, U.K., 2019), ISBN 978-1-78332-393-7, Chapter 7, pp. 7.1–7.30.
3. S. Krishnan, "Biofilm Formation on Medical Devices and Infection: Preventive Approaches," in *Biofilm and Materials Science*, edited by H. Kanematsu and D. M. Barry (Springer International Publishing, Cham, 2015), Chapter 12, pp. 93–108.
4. S. Krishnan, "Polymer Coatings to Prevent Marine Bioadhesion" in *Polymer Adhesion, Friction and Lubrication*; edited by H. Zeng (John Wiley & Sons, 2013), Chapter 6, pp. 227–281.
5. V. K. Vendra,* L. Wu,* S. Krishnan, "Polymer Thin Films for Biomedical Applications," in *Nanostructured Thin Films and Surfaces,* Nanomaterials for the Life Sciences, Vol. 5), edited by C. S. S. R. Kumar (Wiley, Weinheim, 2010), Chapter 1, pp. 1–51.

6) PATENTS

Granted Patents

1. S. Krishnan, M. Sankarasubramanian,* J. C. Moosbrugger, M. Torabizadeh,* Z. Putnam,* and M. Y. Huang, Filled Elastomers With Improved Thermal and Mechanical Properties, Patent No. US 10995194 B2 (2021).
2. S. Krishnan, L. Ganapatibhotla,* D. Roy, and J. Zheng,* Solid Organic Electrolytes, Patent No. US 9293786 B1 (2016).
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4. F. A. Sexton, S. Krishnan, and V. K. Vendra,* Sustained Release of Nutrients In Vivo, Patent No. US 8563066 B2 (2013).
5. C. K. Ober, S. Krishnan, and Q. Lin, "Polymers and Polymer Coatings," U.S. Patent 8,192,843 B2, Jun 5, 2012.
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7. C. K. Ober, S. Krishnan, Q. Lin, and E. J. Kramer, "Polymers Containing Quaternized Nitrogen," U.S. Patent 7,763,687 B2, Jul 27, 2010.
8. C. K. Ober, S. Krishnan, and Q. Lin, "Polymers with Ether Containing Side Chains and Compositions Thereof," U.S. Patent 7,709,055 B2, May 4, 2010.

Patent Applications

9. S. Krishnan, M. Harrington, A. P. Pitchiya, Z. Putnam, and D. Orlowski, "Material Compositions and Methods for Porous Graphite-Polymer Composite Bipolar Plates," US Patent App. 62/726,245 (2018).
10. S. Krishnan, J. L. Lebga-Nebane,* M. Sankarasubramanian,* G. S. Chojecki,* D. H. Rasmussen, and J. C. Moosbrugger, Powder Coating Compositions for Reducing Friction and Wear in High-Temperature High-Pressure Applications, US Patent App. 15/347,416 (2016).
11. M. Y. Huang, Y. Dong, J. J. Read, M. Luo,* J. McLaughlin, S. Krishnan, and Z. Putnam,* Short-chain Fluorocarbon-grafted Elastomer Blowout Preventer Packers and Seals for Enhanced H_2S Resistance, US Patent App. 15/342,880 (2016).

12. F. A. Sexton, T. S. Tracy, S. Krishnan, V. K. Vendra,* and J. M. Myrick,* Methods and Related Compositions for Improved Drug Bioavailability and Disease Treatment, Patent No. WO2016011297 A3 (2015).

Provisional Patent Application

13. D. A. Shipp, O. Z. Durham, and S. Krishnan, "Water-Borne Thiol-Ene Polymerization," *Provisional Patent Application*, 61/636,046 (2012).

7) SEMINARS AND CONFERENCE PRESENTATIONS

1. R. I. Venkatanarayanan,* S. Krishnan, Y. Wang,* J. L. Lebga-Nebane,* and L. Wu,* "Poly(ethylene glycol) Containing Ionic Liquids and Lithium Salt Blends: An Experimental and Molecular Dynamics Simulation Study," Paper 29d, American Institute of Chemical Engineers Annual Meeting (2020).
2. A. P. Pitchiya* and S. Krishnan, "Tailoring Pore Structure and Properties for Improved Water Management in PEM Fuel Cells Using Porous Bipolar Plates," Paper 208b, American Institute of Chemical Engineers Annual Meeting (2020).
3. T. Kim, G. Mohandass,* and S. Krishnan, "Electrochemical Water Desalination Using an Iron-Based Redox Couple," Paper 351aq, American Institute of Chemical Engineers Annual Meeting (2020).
4. A. P. Pitchiya* and S. Krishnan, "Design and Characterization of Porous Graphite Bipolar Plates for Water Management in PEM Fuel Cells," Paper MA2020-02 2202, Polymer Electrolyte Fuel Cells & Electrolyzers 20 (PEFC&E 20), Electrochemical Society (2020).
5. G. Mohandass,* T. Kim, and S. Krishnan, "Redox Flow Desalination Driven by Sunlight Using Dye-Sensitized Photoanode," Paper 713d, American Institute of Chemical Engineers Annual Meeting (2020).
6. S. Krishnan, M. Luo, and Z. A. Putnam, "Molecular Simulations for the Design and Property Prediction of Elastomer Seals for Sour Gas Environments," Paper 295b, American Institute of Chemical Engineers Annual Meeting, Orlando, FL (2019).
7. A. P. Pitchiya* and S. Krishnan, "A Novel Microporous Graphite Bipolar Plate Design for Effective Water Management in PEM Fuel Cells," Paper 229g, American Institute of Chemical Engineers Annual Meeting, Orlando, FL (2019).
8. N.-T. Le (speaker),* P. T. Huynh, J. M. Myrick,* and S. Krishnan, "Design of Electrosprayed Polysaccharide Nano/Microparticles for Drug and Vaccine Delivery," Paper 429c, American Institute of Chemical Engineers Annual Meeting, Pittsburgh, PA (2018).
9. S. Krishnan, A. P. Pitchiya (speaker),* D. Roy, Y. Wang,* and C. Johnson,* "Ionic Liquid Imbibed Dual-Conducting Graphene–Polyacetylene Nanocomposite Membranes," Paper 680g, American Institute of Chemical Engineers Annual Meeting, Pittsburgh, PA (2018).
10. S. Krishnan, "Responsive Polysaccharide Microparticles for Controlled Release Applications," Annual Meeting of the Center for Advanced Materials Processing, Canandaigua, New York (May 2018).
11. S. Krishnan, "Design and Characterization of Elastomers Used for BOP Seals," Control Title Holder Forum on Material Technology, Baker Hughes, a GE Company (April 5, 2018).
12. S. Krishnan, "Filler Effects on Viscoelastic and Fracture Properties of Polymer Nanocomposites," Inspirations in Science & Engineering: Walsh Symposium on Polymer Nanostructures for Emerging Science & Technology, Clarkson University, Potsdam, New York (March 15, 2018).

13. Y. Wang,[*] L. Teugels (speaker), K. Vandersmissen, S. D. Gendt, S. Krishnan, and H. Struyf, "Effect of Deposition Methods on Material Removal Rate During Nickel CMP," International Conference on Planarization/CMP Technology (ICPT 2017), Leuven, Belgium (October 2017)
14. D. A. Shipp (speaker), O. Z. Durham,[*] D. V. Chapman,[**] and S. Krishnan, "Step-Growth Radical Thiol-Ene Emulsion Polymerizations," 31st Conference of the European Colloid and Interface Society, Madrid, Spain (September 2017).
15. D. Chapman,* M. Arguien,** R. Beltran,** O. Durham,* S. Krishnan, and D. Shipp, "Bio-functionalizable Polymer Colloids Prepared by Radical-mediated Thiol-ene Click Polymerization," 254th ACS National Meeting, Washington, DC (August 2017).
16. M. H. Zhao, K. R. Cox, S. Krishnan (panelist), K. Deshpande, and V. Kelkar, "Panel Speakers Forum: Chemical Process and Product Design Careers in Academia vs. Industry," American Institute of Chemical Engineers Annual Meeting, San Francisco, CA (2016).
17. R. I. Venkatanarayanan,[*] S. Krishnan (speaker), A. Sreeram, and P. Yuya, "Thermal and Mechanical Property Predictions for Conjugated Polymers Using Atomistic Simulations," presented at the American Institute of Chemical Engineers Annual Meeting, San Francisco, CA (2016).
18. M. Sankarasubramanian (speaker),[*] S. Krishnan, Z. A. Putnam, J. C. Moosbrugger, and M. Y. Huang, "Characterization of Compressive Mechanical Properties of Hydrogenated Nitrile Butadiene Elastomers Reinforced with Three Different Types of Carbon Fillers," presented at the American Institute of Chemical Engineers Annual Meeting, San Francisco, CA (2016).
19. S. Krishnan (speaker), M. Sankarasubramanian,[*] Z. A. Putnam,[*] and J. C. Moosbrugger, Characterization of Viscoelastic Hysteresis and Stress Softening of Filled-Elastomers Using Cyclic Loading Experiments, presented at the American Institute of Chemical Engineers Annual Meeting, Salt Lake City, UT (2015).
20. J. B. McLaughlin, M. Luo (speaker),[*] S. Krishnan, "Design of Elastomer Composites with Improved Strength, Heat, and Oil Resistance," presented at the American Institute of Chemical Engineers Annual Meeting, Salt Lake City, UT (2015).
21. S. Krishnan (speaker), J. L. Lebga-Nebane,[*] J. C. Moosbrugger, D. H. Rasmussen, and M. Sankarasubramanian,[*] "Low-Friction and Wear-Resistant Polyether Ether Ketone Composite Coatings for High-Pressure High-Temperature Applications," presented at the American Institute of Chemical Engineers Annual Meeting, Salt Lake City, UT (2015).
22. A. Sreeram (speaker),[*] S. Krishnan, S. J. DeLuca, M. C. Turk, D. Roy, E. Honarvarfard, and P. J. G. Goulet, "Simultaneous Electronic and Ionic Conduction in Ionic Liquid Imbibed Conjugated Polymer Films," presented at the American Chemical Society Annual Meeting, Boston, MA (2015).
23. S. Krishnan (speaker),[*] Y. Wang, M. Sankarasubramanian, M. C. Turk and D. Roy, "Thermomechanical and Electrical Properties of Ionic Liquid Imbibed Poly(ethylene glycol) Gels Designed for Use in Lithium Batteries," presented at the American Institute of Chemical Engineers Annual Meeting, Atlanta, GA (2014).
24. S. Krishnan (speaker),[*] A. Sreeram, N. G. Patel, R. I. Venkatanarayanan, P. Yuya, J. B. McLaughlin, and S. J. DeLuca, "Nanomechanical Properties of Poly(*para*-Phenylene Vinylene) Determined Using Quasi-Static and Dynamic Nanoindentation," presented at the American Institute of Chemical Engineers Annual Meeting, Atlanta, GA (2014).
25. M. A. Torkmahalleh, S. Gödelek, D. Eroglu, A. R. R. Habib, M. Askari, N. Z. Pakzad, S. Gorjinezhad, G. Ahmadi, and S. Krishnan (speaker), "Experimental Investigations of a Salinity Gradient Solar Pond Under the Northern Cyprus Climate Conditions," presented at the American Institute of Chemical Engineers Annual Meeting, Atlanta, GA (2014).

26. R. E. Baltus (speaker), S. S. Moganty, S. Krishnan, V. K. Vendra, and P. Chinthamanipeta, "Characterization of Dialkylimidazolium Bistriflamide Ionic Liquids for CO_2 Capture," presented at the American Institute of Chemical Engineers Annual Meeting, Atlanta, GA (2014).
27. S. Krishnan, "Mechanically Robust Polymer Membranes with High Lithium Conductivity for Battery Applications," Clarkson University Center for Advanced Materials 2014 Annual Technical Meeting, Saratoga Springs, New York (May 15, 2014).
28. S. Krishnan (speaker), L. Wu, D. Roy, S. Rock, "PEG and fluoroalkyl functionalized ionic liquids as electrolyte solvents for lithium-ion batteries," TMS 2014 Annual Meeting, San Diego, CA. (February 20, 2014). Invited talk in the session on Nanostructured Materials for Rechargeable Batteries and Supercapacitors.
29. S. Krishnan, "Structure-Property Relationships in Self-assembling Poly(ethylene glycol) Functionalized Ionic Liquids for Energy Applications," Pure and Applied Chemistry International Conference, Khon Kaen, Thailand (January 8, 2014). Invited talk.
30. L. Wu,* R. I. Venkatanarayanan,* J. L. Lebga-Nebane,* X. Shi,* J. B. McLaughlin, D. Roy, and S. Krishnan (speaker), "Ionic Liquid Electrolytes for Lithium-Ion Batteries: Effect of Lithium Salts on Thermal and Transport Properties," AIChE 2013 Annual Meeting, San Francisco, California (November 2013).
31. M. Luo,* M. Sankarasubramanian,* S. Krishnan (speaker), and J. B. McLaughlin (speaker), "Structure-Property Relationships for PDMS-Silica Nanocomposites," AIChE 2013 Annual Meeting, San Francisco, California (November 2013).
32. S. Krishnan, "Some Experimental Studies on Tailoring Material Properties in Self-Assembling Soft Matter Systems," National Chemical Laboratory, Pune, India (July 25, 2013). Invited talk.
33. S. Krishnan, "Surface Analysis of Nanostructured Polymer Thin Films Using Near-Edge X-ray Absorption Fine Structure Spectroscopy," 2013 European Polymer Federation Congress, Pisa, Italy (June 16-21, 2013). Invited talk.
34. S. Krishnan, "Electrolytes for Lithium-Ion Batteries," (in the session titled Cutting Edge Research in Energy Storage), NY-BEST Energy Storage Technology Conference, New York Battery & Energy Storage Technology, Fairport, New York (November 2012). Invited talk.
35. S. Krishnan (speaker), J. L. Lebga,* L. Wu,* J. B. McLaughlin, S. Rock,* and D. Roy, "Thermophysical and Electrochemical Properties of Self-Assembling Amphiphilic Ionic Liquids," to be presented at the AIChE 2012 Annual Meeting, Pittsburgh, Pennsylvania (October 2012).
36. J. M. Myrick (speaker),* S. Krishnan, F. A. Sexton, "Controlled Release from Self-Assembled Polymer Microparticles that are Responsive to pH and Temperature," to be presented at the AIChE 2012 Annual Meeting, Pittsburgh, Pennsylvania (October 2012).
37. S. Krishnan (speaker) and L. Wu,* "A Comparison of Protein-Repellent Properties of Zwitterionic and Cationic Fluorinated Block Copolymer Surfaces," AIChE 2011 Annual Meeting, Minneapolis, Minnesota (October 2011).
38. J. B. McLaughlin (speaker), S. Krishnan, L. Wu,* L. V. N. R. Ganapatibhotla,* X. Jia, D. Roy, and J. Zheng, "Self-Consistent Field Modeling of Microstructure Formation in Fluorinated Block Ionic Liquids for Photovoltaic Cells," AIChE 2011 Annual Meeting, Minneapolis, Minnesota (October 2011).
39. J. L. Lebga (speaker), S. Krishnan, J. Zheng,* and D. Roy, "Structure-Property Relationships in Protic Ionic Liquids for High-Temperature PEM Fuel Cells," AIChE 2011 Annual Meeting, Minneapolis, Minnesota (2011).

40. S. Krishnan, "Amphiphilic Copolymers: Self-Assembly at Surfaces, in Thin Films, and Solutions," Clarkson University, Department of Chemical & Biomolecular Engineering Seminar, Potsdam, New York (March 2011).

41. S. Krishnan, "Nanostructured Fluids and Ionomers as Electrolytes for Energy Conversion and Storage Devices," Clarkson University, Department of Physics, Potsdam, New York (February 2011).

42. S. Krishnan, "Pollution Prevention Using Non-leaching, Non-Toxic Polymers as Anti-Biofouling Surface Coatings." Presented at the Green Engineering Workshop organized by NYS Pollution Prevention Institute, Potsdam, New York, October 27, 2009.

43. S. Krishnan, "Fluorinated Block Copolymers as Marine Antifouling Coatings and Conducting Polymer Electrolytes," CAMP Fall 2009 Symposium, Potsdam, New York, October 15, 2009.

44. S. Krishnan, M. Y. Paik, K. E. Sohn, C. K. Ober, E. J. Kramer, and D. A. Fischer, "Investigating Surface Segregation and Self Organization of Amphiphilic Polyelectrolytes Using NEXAFS Spectroscopy," AIChE 2007 Annual Meeting, Salt Lake City, Utah (2007).

45. C. J. Weinman, S. Krishnan, D. Park, M. Y. Paik, K. Wong, D. A. Fischer, D. L. Handlin Jr., G. L. Kowalke, D. E. Wendt, K. E. Sohn, E. J. Kramer, and C. K. Ober, "Antifouling Block Copolymer Surfaces that Resist Settlement of Barnacle Larvae," 223rd ACS National Meeting, Chicago, IL, *Polym. Mater Sci. Eng. Preprints*, **96**, 597-598, (2007).

46. K. E. Sohn, S. Krishnan, M. Y. Paik, C. K. Ober, E. J. Kramer, and D. A. Fischer, "Depth Profiling Using NEXAFS Spectroscopy," American Physical Society March Meeting, Denver, Colorado, (2007).

47. C. K. Ober, R. Dong, S. Krishnan, Y. Yi, B. Baird, M. Lindau, and E. J. Kramer, "Building and Patterning the Biology-Materials Interface," European Polymer Congress 2007, European Polymer Federation, Portorož, Slovenia (2007).

48. P. Busch, S. Krishnan, M. Paik, G. Toombes, S. Gruner, and C. Ober, "Thin Films of Semifluorinated Liquid Crystalline Side Chain Block Copolymers," Annual Meeting of the Deutsche Physikalische Gesellschaft and DPG Spring meeting of the Division Condensed Matter, Regensburg, Germany (2007).

49. S. Krishnan, M. Y. Paik, C. K. Ober, A. Hexemer, K. E. Sohn, E. J. Kramer, M. Häckel, L. Kador, D. Kropp, and H.-W. Schmidt, "Tailoring Surface Properties Using Functional Side Groups on Block Copolymers," *Polym. Mater. Sci. Eng. Preprints*, **95**, 105-106, (2006).

50. S. Krishnan, C. K. Ober, A. Hexemer, E. J. Kramer, and D. A. Fischer, "Compositional Depth Profiling of Block Copolymer Surfaces Using NEXAFS," *Polym. Mater. Sci. Eng. Preprints*, **94**, 672-673, (2006).

51. S. Krishnan, C. J. Weinman, C. K. Ober, J. A. Finlay, M. E. Callow, J. A. Callow, K. E. Sohn, and E. J. Kramer, "Environmentally Responsive Block Copolymers as Marine Antifouling Surfaces," The 2nd Joint ONR/AMBIO Workshop on Marine Adhesion and Antifouling, Jacksonville, FL, (2006).

52. K. E. Sohn, A. Hexemer, S. Krishnan, M. Y. Paik, C. K. Ober, E. J. Kramer, and D. A. Fischer, "Effect of Annealing Temperature on the Surface Composition of Block Copolymers with Semifluorinated Side Chains," American Physical Society March Meeting, Baltimore, MD, (2006).

53. C. K. Ober, S. Krishnan, R. Ayothi, and M. Y. Paik, "Fluoropolymer Surfaces for the Biology Materials Interface," in Proceedings of the 4th Biennial Conference on the Science, Technology, and Impact of Fluorine-Containing Polymeric Materials: Fluoropolymer 2006, American Chemical Society, Charleston, SC, (2006).

54. C. K. Ober, W. Senaratne, S. Krishnan, C. Weinman, P. Sengupta, and B. Baird, "The Use of Polymer Nanostructure to Control Biological-Polymer Surface Interactions," World Polymer Congress-Macro 2006, 41st International Symposium on Macromolecules.

55. C. K. Ober, R. Dong, S. Krishnan, and B. Baird, "Patterned Biofunctional Polymer Brushes," Polymer Outreach Program Symposium, Cornell University, Ithaca, New York (2006).

56. S. Krishnan, J. A. Finlay, A. Hexemer, N. Wang, C. K. Ober, E. J. Kramer, M. E. Callow, J. A. Callow, and D. A. Fischer, "Interaction of *Ulva* and *Navicula* Marine Algae with Surfaces of Pyridinium Polymers with Fluorinated Side-chains," *Polymer Preprints* **46**, 1248-1249, (2005). This paper received an award for "outstanding talk" at the symposium "Polymers for Bioactive Surfaces" at the American Chemical Society National Meeting, Washington, DC, August 2005.

57. S. Krishnan, C. K. Ober, R. Ayothi, Q. Lin, M. Y. Paik, C. J. Weinman, A. Hexemer, E. J. Kramer, and D. A. Fischer, "Fluoropolymers at Biological and Marine Interfaces," Materials Science & Engineering in 2020, Cornell University, Ithaca, New York (2005).

58. C. K. Ober, E. J. Kramer, S. Krishnan, and Q. Lin, "Multilayer Polymer Coatings for Marine Antifouling Applications," Proceedings of the Coatings/Biofouling Program Review, Office of Naval Research, San Francisco (2004).

59. Q. Lin, S. Krishnan, M. Paik, P. Busch, C. K. Ober, A. Hexemer, K. E. Sohn, E. J. Kramer, G. L. Kowalke, and D. E. Wendt, "Semifluorinated Triblock Copolymers as Surface Active Components for Multilayer Marine Antifouling Coatings," *Polymer Preprints*, **46**, 635-636, (2005).

60. S. Krishnan, C. K. Ober, R. Ayothi, Q. Lin, M. Paik, A. Hexemer, E. J. Kramer, and D. Fischer, "Hydrophobic and Hydrophilic Fluoropolymers as Non-Adhesive Interfaces in Marine Biofouling," *Polymer Preprints*, **46**, 613-614, (2005).

61. S. Krishnan, C. K. Ober, K. L. Lee, E. R. Angert, A. Hexemer, and E. J. Kramer, "Antibacterial Coatings Based on Quaternized Poly(4-Vinylpyridine) Block Copolymers," *Polym. Mater. Sci. Eng. Preprints*, **91**, 814-815, (2004).

62. C. K. Ober, S. Krishnan, J. P. Youngblood, A. Hexemer, E. J. Kramer, J. A. Finlay, and M. E. Callow, "Surface-Active Materials with Antifouling Properties," *Polymer Preprints*, **45**, 103-104, (2004).

8) POSTER PRESENTATIONS

63. R. Ansaripour,[*] A. P. Pitchiya,[*] S. Krishnan, and P. Yuya, "Robust Amphiphilic Elastomer Coatings with Dual-Healing Mechanism Based on Urea and Aromatic Disulfide Bonds," Paper 161ak, American Institute of Chemical Engineers Annual Meeting (2020).

64. A.P. Pitchiya,* Yanni Wang,* Cody Johnson,* D. Roy, and S. Krishnan, "Carbon-based Polymer Nanocomposites for Energy Applications," The 2019 Annual Meeting of the Center for Advanced Materials Processing, Syracuse, New York (May 2019).

65. N.-T. Le,[*] Y. Wang,[*] J. M. Myrick,[*] A. P. Pitchiya,[*] R. Bhonsle,[*] A. Sreeram,[*] Z. Putnam,[*] R. Ansaripour,[*] T. Seigle,[**] and S. Krishnan, "Soft Materials Design, Development, and Applications: From Lithium-Ion Battery Electrolytes and Controlled-Release Polysaccharide Microgels to CMP Abrasive Slurries," The 30th Annual Meeting of the Center for Advanced Materials Processing, Canandaigua, New York (May 2017).

66. Z. Putnam,[*] M. Torabizadeh,[*] M. Sankarasubramanian,[*] J. L. Lebga,[*] D. Rasmussen, J. Moosbrugger, and S. Krishnan, "Design and Characterization of Advanced Polymer Composites for HPHT Coatings and Elastomers," The 30th Annual Meeting of the Center for Advanced Materials Processing, Canandaigua, New York (May 2017).

67. R. Bhonsle (speaker),* S. Krishnan, H.-O. Guvenc, Y. Lan, J. Proelss, L. Leunissen, "Tribological Investigation of Novel Latex Based Slurries in Chemical Mechanical Polishing," 19th International Symposium on Chemical-Mechanical Planarization, Albany, NY (Aug 2014).

68. N. Patel,* A. Sreeram,* S. DeLuca, S. Krishnan, and P. Yuya, "Synthesis and Nano-Mechanical Properties Characterization of Conjugated Polymer Thin Films," 2013 MRS Fall Meeting, Symposium GG: Surface/Interface Characterization and Renewable Energy, Boston, MA (December 2, 2013).

69. O. Z. Durham,* S. Krishnan, and D. A. Shipp, Polymer Microspheres Prepared by Water-Borne Thiol-Ene Suspension Photopolymerization, Chemistry Meets Biology ACS Conference, Canton, New York (2013).

70. J. M. Myrick,* F. A. Sexton, and S. Krishnan, "Controlled Release from Stimuli-Responsive Polymer Microparticles," The 2012 Annual Meeting of the Center for Advanced Materials Processing, Albany, New York (May 2011). The poster won first place in the "best overall" category.

71. J. L. Lebga,* S. Rock,* D. Roy, and S. Krishnan, "An Investigation of the Mechanism of Proton Transport in Trialkylammonium and 3-Alkylimidazol-1-ium Protic Ionic Liquids for PEM Fuel Cell Membranes," The 2012 Annual Meeting of the Center for Advanced Materials Processing, Albany, New York (May 2011). The poster won third place in the "most creative" category.

72. L. Wu,* S. Rock,* D. Roy, J. B. McLaughlin, and S. Krishnan, "Structure-Property Correlations in Block-Oligomer Ionic Liquid Electrolytes," The 2012 Annual Meeting of the Center for Advanced Materials Processing, Albany, New York (May 2011).

73. L. Wu,* L. V. N. R. Ganapatibhotla,* J. Zheng,* D. Roy,* and S. Krishnan, "Electrochemical Properties of Novel PEGylated Electrolyte Blends for DSSCs and Lithium-Ion Batteries," The 2011 Fall Meeting of the Center for Advanced Materials Processing, Clarkson University, Potsdam, New York (October 2011).

74. L. Wu* and S. Krishnan,* "Interfacial Properties and Colloidal Interactions of Zwitterionic and Cationic Block Copolymers," The 16th International Symposium on Chemical-Mechanical Planarization, Lake Placid, New York (August 2011).

75. J. L. Lebga,* S. Krishnan, J. Zheng, and D. Roy, "Structure-Property Relationships in Protic Ionic Liquids for High-Temperature PEM Fuel Cells," The 2011 Annual Meeting of the Center for Advanced Materials Processing, Albany, New York (May 2011). The poster won second place in the "most creative" category.

76. S. S. Moganty,* P. Kumar,* V. K. Vendra, S. Krishnan, and R. E. Baltus, "Novel Ionic Liquids for CO_2 Capture," AIChE 2009 Annual Meeting, Nashville, Tennessee (November 2009).

77. L. Wu,* V. K. Vendra,* L. Ganapatibhotla,* and S. Krishnan "Functional fluorinated polymers as biomaterial coatings and conducting polymer electrolytes," Poster presented at the Center for Advanced Materials Processing Fall 2009 Symposium, Potsdam, New York (October 15, 2009). The poster won first place in the "most creative" category.

78. S. S. Moganty,* J. Close,* P. Goonetilleke,* S. Krishnan, R. Baltus, and D. Roy, "Electrochemical Supercapacitors Based on Polymerizable Ionic Liquids," AIChE 2008 Annual Meeting, Philadelphia, Pennsylvania (November 2008). The poster won the first prize among 161 posters presented at a technical session of the Materials Engineering and Science Division of the AIChE.

79. S. Krishnan, J. A. Finlay, D. Park, C. J. Weinman, R. Dong, K. Wong, N. Asgill, M. E. Callow, J. A. Callow, D. L. Handlin, C. L. Willis, L. Brewer, D. E. Wendt, K. E. Sohn, E. J. Kramer, and C. K. Ober, "Ambiguous Polymer Surfaces for Marine Antifouling Applications," *Polym. Mater. Sci. Eng. Preprints*, **98**, 83-84, (2008).

80. C. J. Weinman, J. A. Finlay, D. Park, M. Y. Paik, S. Krishnan, B. R. Fletcher, M. E. Callow, J. A. Callow, D. L. Handlin, C. L. Willis, D. A. Fischer, K. E. Sohn, E. J. Kramer, and C. K. Ober, "Antifouling ABC

Triblock Copolymers with Grafted Functionality," *Polym. Mater. Sci. Eng. Preprints,* **98**, 639-641, (2008).

81. C. Weinman, S. Krishnan, D. W. Park, Q. Lin, E. J. Kramer, D. Handlin, C. Willis, and C. K. Ober, "Multilayer Polymer Coatings with Controlled Surface Properties for Marine Antifouling Applications," Polymer Outreach Program Symposium, Cornell Center for Materials Research, Ithaca, New York, (2006).

9) SEMINAR AND POSTER PRESENTATIONS BY UNDERGRADUATE STUDENTS

82. R. Hulchanski,[**] N.-T. Le,[*] and S. Krishnan, "Antifouling Polymer Coatings with Room-Temperature Underwater Self-Healing Properties," Clarkson University Research and Project Showcase (RAPS), Clarkson University, Potsdam, New York (July 2021).
83. T. Seigle,[**] A. Purdy,[**] J. M. Myrick,[*] and S. Krishnan, "Designing and Characterizing Chitosan Particles for Drug and Vaccine Delivery Applications," submitted for presentation at the 8th World Congress on Particle Technology (Applications of Particle Technology for Pharmaceuticals), 2018 AIChE Spring Annual Meeting, Orlando, Florida (April 22-26, 2018).
84. A. Purdy[**] and S. Krishnan, "Polyelectrolyte Complexes," 20th Annual Summer Symposium on Undergraduate Research Experiences (SURE) Conference, Clarkson University, Potsdam, New York (July 2017)
85. T. Seigle,[**] N. Chicoine,[**] J. M. Myrick,[*] and S. Krishnan, "Designing and Characterizing Chitosan Particles for Drug and Vaccine Delivery Applications," oral presentation at the 19th Annual Summer SURE Conference, Clarkson University, Potsdam, New York (July 2016)
86. B. Stewart,[**] Z. Putnam,[*] and S. Krishnan, "Thermomechanical Characterization of Novel Latex Processed HNBR Elastomer Nanocomposites," oral presentation at the 19th Annual Summer SURE Conference, Clarkson University, Potsdam, New York (July 2016)
87. M. Arguien,[**] D. V. Chapman,[**] O. Durham,[*] S. Krishnan, and D. Shipp, "Applications of Thiol-Ene and Thiol-Yne Emulsion Polymerized Particles in the Formation of Thin Films," oral presentation at the 19th Annual Summer SURE Conference, Clarkson University, Potsdam, New York (July 2016)
88. W. Adansi,[**] Z. Putnam,[*] N.-T. Le,[*] and S. Krishnan, "Percolation Threshold of Novel Polymer Nanocomposites Incorporating Carbon-Based Particles," poster presented at the 19th Annual Summer SURE Conference, Clarkson University, Potsdam, New York (July 2016)
89. A. Nielsen, Z. Putnam, N.-T. Le, and S. Krishnan, "Synthesis and Characterization of Elastomer Nanocomposites Using Free Radical Crosslinking Reactions," poster presented at the 19th Annual Summer SURE Conference, Clarkson University, Potsdam, New York (July 2016)
90. E. Cash,[**] Y. Chen,[**] Y. Wang,[*] S. Krishnan, L. Jiang,[*] and H. Dong, "Biocompatible Surfaces of Antibacterial Cationic PEGylated Copolymers," poster presentation at the National McNair Conference, Niagara Falls, NY (July 23-27, 2014).
91. E. Cash,[**] Y. Chen,[**] Y. Wang,[*] S. Krishnan, L. Jiang,[*] and H. Dong, "Biocompatible Surfaces of Antibacterial Cationic PEGylated Copolymers," poster presentation at the 17th Annual Summer SURE Conference, Clarkson University, New York (July 31, 2014).
92. Y. Lin[**] and S. Krishnan, "Synthesis of Anti-biofouling Polymer Through RAFT Reactions," oral presentation at the 16th Annual Spring SURE Conference, Clarkson University, New York (April 12, 2014).

93. K. Purdy[**] and S. Krishnan, "Synthesis and Characterization of a Triblock Copolymer for Nanoparticle Stabilization," 15th Annual Spring SURE Conference, Clarkson University, New York (April 13, 2013).
94. A. Cameron,[**] L. Granger,[*] and S. Krishnan, "Polymer Electrolyte Membranes Incorporating Ionic Liquids," poster presented at the 15th Annual Summer SURE Conference, Clarkson University, New York (August 2, 2012).
95. W. Leith,[**] J. M. Myrick,[*] and S. Krishnan, "Thermoresponsive polymer solutions: viscometric determination of the lower critical solution temperature," 14th Annual Spring SURE Conference, Clarkson University, Potsdam, New York (April 14, 2012).
96. T. Glave,[**] L. V. N. R. Ganapatibhotla,[*] X. Jia, J. McLaughlin, and S. Krishnan, "Novel Nanocomposite Materials for Solar Cell Fabrication," oral presentation at the 13th Annual Spring SURE Conference, Clarkson University, Potsdam, New York (April 16, 2011).
97. Y. Lin[**] and S. Krishnan, "Anti-Biofouling Elastomeric Block Copolymer Coatings," poster presented at the 13th Annual Spring SURE Conference, Clarkson University, Potsdam, New York (April 16, 2011).
98. P. Kelleher[**] and S. Krishnan, "Synthesis of Polyacetylene from Unconventional Precursors for Application in Photovoltaic Devices," 13th Annual Spring SURE Conference, Clarkson University, Potsdam, New York (April 16, 2011).
99. P. Kelleher[**] and S. Krishnan, "Optical Properties of Iodine-doped Partially Dehydrated Poly(vinyl alcohol) Thin Films," oral presentation at the 12th Annual Summer SURE Conference, Clarkson University, Potsdam, New York (July 29, 2010).
100. S. Laramie[**] and S. Krishnan, "Finding Structure-property Correlations for Ionic Liquids Using Molecular Connectivity Indices," oral presentation at the 12th Annual Summer SURE Conference, Clarkson University, Potsdam, New York (July 29, 2010).
101. T. Glave,[**] J. B. McLaughlin, and S. Krishnan, "Novel Nanocomposite Materials for Solar Cell Fabrication," Talk presented at the 2010 University at Buffalo McNair Research Conference in Buffalo, New York (July 16, 2010).
102. S. Laramie,[**] L. Ganapatibhotla,[*] and S. Krishnan, "Comparing the current and voltage characteristics of a dye-sensitized solar cell to a crystalline silicon solar cell," poster presented at the 11th Annual Summer SURE Conference, Clarkson University, Potsdam, New York (July 30, 2009).
103. T. Glave, C. Smith, L. Wu, X. Jia, J. McLaughlin, and S. Krishnan, "Anti-biofouling Surfaces Through Polymers with Controlled Architectures," oral presentation at the 10th Annual Summer SURE Conference, Clarkson University, Potsdam, New York (July 31, 2008).
104. C. J. Smith,[**] L. Wu,[*] and S. Krishnan, "Photocrosslinkable Triblock Copolymer Hydrogels for Protein Encapsulation," oral presentation at the 10th Annual Summer SURE Conference, Clarkson University, Potsdam, New York (July 31, 2008).

10) RESEARCH PROJECTS

- Flocculation and Removal of Harmful Cyanobacteria from Water Using Surface-engineered Polymer Additives
  NYS Department of Economic Development
  PI: S. Krishnan; Co-PI: B. Ramarao
- Emulsion Stability Characterization and Prediction
  Estée Lauder Companies and NYSTAR, 1/1/2020 – 11/2/2020
  PI: S. Krishnan

- Materials Development for Functional Surface Design
  Xerox Corporation and NYSTAR, 1/1/2019 – 12/31/2019
  PI: S. Krishnan
- Emulsion Stability Characterization and Prediction
  Estée Lauder Companies and NYSTAR, 1/15/2019 – 12/31/2019
  PI: S. Krishnan
- Glass Transition Temperature of Elastomer Materials
  New York Air Brake and NYSTAR, 5/25/2018 – 10/31/2018
  PI: S. Krishnan
- Material Characterization Study of Composite Panels and Yarns
  Harris Corporation and NYSTAR, 1/2/2018 – 9/30/2018
  PI: Marcias Martinez; Co-PI: S. Krishnan (50 %)
- Emulsion Stability Characterization and Prediction
  Estée Lauder Companies and NYSTAR, 8/28/2017 – 2/28/2018
  PI: S. Krishnan (42 %); Co-PIs: Joseph Skufca, Parisa Mirbod
- Elastomer Material Development
  New York Air Brake and NYSTAR, 9/5/17 – 3/4/18
  PI: S. Krishnan
- Chemical Modification of Polymeric Compounds to Improve Product Properties
  SI Group and NYSTAR, 2/28/17 – 10/31/17
  PI: S. Krishnan (49.5%); Co-PIs: Devon Shipp, Richard Partch
- Porous Bipolar Plate Development
  US Hybrid Corporation, 11/4/16 – 11/3/17
  PI: S. Krishnan
- CMP Materials Research – Latex Slurries for Back-End-of-Line (BEOL) Materials
  BASF (through St. Lawrence Nano), 7/1/2015 – 6/30/2016
  PI: S. Krishnan
- Solar Rectenna Development
  Energy Materials Corporation, 12/21/2014 – 12/21/2015
  PI: S. Krishnan
- Controlled Release Formulations
  New World Pharmaceuticals, 10/1/2014 – 9/30/2015
  PI: S. Krishnan
- CMP Materials Research
  BASF (through St. Lawrence Nano), 12/20/2013 – 6/30/2015
  PI: S. Krishnan (40%); Co-PIs: Devon Shipp, Dan Goia
- Nanofillers for Blowout Preventer Elastomers
  GE Oil & Gas (through Development and Alumni Relations), 7/1/12013 – 6/30/2017
  PI: S. Krishnan (70 %); Co-PI: J. Moosbrugger
- Structure of Some Emulgel Compounds
  Novartis, 9/1/2013 – 9/14/2014
  PI: S. Babu; Co-PIs: S. Krishnan (30 %), H. Dong

- Elastomer Materials Science of Blowout Preventers
  GE Oil & Gas (through Development and Alumni Relations), 1/1/2013 – 12/31/2015
  PI: S. Krishnan (70 %); Co-PI: J. Moosbrugger

- Controlled Release Formulations
  New World Pharmaceuticals (through Shipley Center for Innovation), 7/2/2012 – 6/30/2014
  PI: S. Krishnan

- Solar Rectenna Development
  Energy Materials Corporation, 7/1/2012 – 2/28/2013
  PI: S. Krishnan

- Metallic Material Coatings
  GE, 7/1/2011 – 6/30/2014
  PI: S. Krishnan (50 %); Co-PIs: D. Rasmussen, J. Moosbrugger

- Solar Rectenna Array Prototype Development
  Energy Materials Corporation and NYSTAR, 3/25/2011 – 6/30/2012
  PI: S. Krishnan

- Smart Responsive Nanocomposites for Soldier Protection
  US Army, 6/12/2009 – 9/30/2011
  PI: S. Krishnan (42 %); Co-PIs: J. McLaughlin and D. Roy

- Delayed Release Carbohydrate Formulation for Athletic Performance Enhancement
  New World Pharmaceuticals, New Jersey, 6/1/2008 – 8/31/2011
  PI: S. Krishnan

- Development of Tubular Proton Exchange Membrane Fuel Cells
  NYSERDA, 4/1/2008 – 6/30/2011
  PI: Raghunathan Rengasamy; Co-PI: S. Krishnan (100 %)

- Smart Responsive Nanocomposites for Soldier Protection
  PI: S. Krishnan
  US Army, 3/7/2008 – 9/30/2009

  Clarkson University Seed Grants

- Solar-Energy Driven Water Deionization Using Photoactive Conjugated-Polymer Nanocomposite Electrodes
  PI: S. Krishnan; Co-PIs: Taeyoung Kim and Dhara Trivedi
  Clarkson University, Ignite Research Collaboration Pilot Grant Program

- Aerosolized Polymer Particle-Based Cytokine Therapeutics for the Treatment of Virus-Induced Lung Pathology
  PI: Alexei Tumanov (Trudeau Institute); Co-PI: S. Krishnan (50 %), Cody Spencer (Trudeau Institute)
  Clarkson University/Trudeau Institute Partnership (CUTIP), 8/11/2014 – 8/10/2015

- Flexible Thin Film Solar Cells
  Coulter School of Engineering, Clarkson University, Seed Grant 3/1/2009 – 2/28/2010
  PI: S. Krishnan

- Self-healing of fatigue damage in metallic materials
  Coulter School of Engineering, Clarkson University, Seed Grant, 3/1/2010 – 2/28/2011
  PI: Y. Liu; Co-PI: S. Krishnan (50 %)

11) TEACHING

- CH665 Special Topics in Polymers and Soft Materials (Spring 2015)
- CH571 Advanced Chemical Engineering Thermodynamics (Spring 2011)
- CH561 Methods of Analysis in Chemical Engineering (Fall 2018, 2017, 2016, 2015)
- CH410 Chemical Engineering Laboratory II (Fall 2019, co-taught with Professor Phong Huynh)
- CH410 Chemical Engineering Laboratory II (Fall 2007, co-taught with Professor Richard McCluskey)
- CH351 Mass Transfer (Fall 2007, co-taught with Professor Ross Taylor)
- CH360/CH445 Chemical Reactor Analysis I (Spring 2015, Fall 2010, Fall 2009)
- CH320/CH272 Applied Phase and Chemical Equilibria (Fall 2014, 2013, 2012, 2011, Spring 2009)
- ES452/552 Biomaterials and Biomedical Applications (Spring 2020, 2016, 2014, 2012, 2010, 2008)
- ES442 Introduction to Research and Graduate Study (Spring 2013, Fall 2012, 2011, 2010, 2009; co-taught with Professor Kathleen Issen)
- ES365/CH515 Polymer Materials (Fall 2008)
- ES260 Materials Science and Engineering I (Spring 2021, Fall 2020, Fall 2018, Spring 2017)
- CHE201 Methods of Analysis in Chemical Engineering (2001, co-taught with Professor Cesar A. Silebi, Lehigh University)
- CHE210 Chemical Engineering Thermodynamics (1998, TA for Professor Leonard Wenzel, Lehigh University)
- CHE151 Heat Transfer (1997, TA for Professor John C. Chen, Lehigh University)

New Courses Developed at Clarkson University

- CH665 Special Topics in Polymers and Soft Materials
- ES452/ES552 Biomaterials and Biomedical Applications
- ES442/ES542 Introduction to Research and Graduate Study (with Kathleen A. Issen)

12) AWARDS & HONORS

- Phalanx Commendable Leadership Award, Clarkson University (2020)
- Tau Beta Pi Faculty Award, Clarkson University (2020)
- Karel Czanderna and Dan Shirkey Ignite Research Fellowship for research in Solar-Energy-Driven Water Deionization Using Photoactive Conjugated-Polymer Nanocomposite Electrodes, Clarkson University (2019)
- Tau Beta Pi Faculty Award, Clarkson University, awarded annually to a faculty member who has embodied and instilled in students the ideals of integrity and excellence in engineering (2016)
- Omega Chi Epsilon Teacher of the Year Award, Clarkson University (2015)
- John W. Graham Jr. Faculty Research Award, Clarkson University, presented annually to a faculty member showing promise in engineering, management, liberal studies, or scientific research (2013)

- Certificate of appreciation presented for valuable contribution and dedicated service in peer review of manuscripts submitted to ACS journals (2011)
- Top 25 % of reviewers for the journal *Macromolecules* based on the quality of reviewing efforts (2010)
- Best Poster prize at the Polymer Outreach Program of the Cornell Center for Materials Research (May 2006)
- Poster prize at the 40th-anniversary celebrations of the Cornell MS&E department, judged by prominent alumni from companies, national research laboratories and institutions (September 2005)
- Award for an "outstanding talk" at the symposium "Polymers for Bioactive Surfaces" at the American Chemical Society National Meeting, Washington, DC (August 2005)
- The Ticona Award for outstanding graduate student research in polymer science and engineering (2002)
- The Emulsion Polymers Institute Best Poster Award, judged by industrial members of the Lehigh University Emulsion Polymers Industrial Liaison Program (2002)
- The Textile Veterans Association Award for research excellence in the field of polymer science (2001)
- Byllesby Fellowship, Lehigh University (2000)
- Membership in Phi Beta Delta Honor Society for International Scholars (1998)
- V. V. Mariwala Memorial Prize, University of Bombay, for meritorious performance in the B. Chem. Eng. Degree examination (1997)
- Coomi Mistry Foundation Prize, University of Bombay, for ranking first in a class of 64 in the second year chemical engineering examination (1995)
- Maharashtra State Educational Board Merit Scholarship, for standing second among more than 100,000 candidates in the 12th-grade public examination (1993-97)
- National Scholarship Merit Certificate from the Director of Education, Maharashtra State, for meritorious performance in the 10th-grade public examination (1991)

Student Awards

- R. Hulchanski,[**] N.-T. Le,[*] and S. Krishnan, "Antifouling Polymer Coatings with Room-Temperature Underwater Self-Healing Properties," "Sustainability Prize" for the poster presented at the 2021 Summer Research and Project Showcase, Clarkson University (July 2021).
- T. Orimolade, N.T. Le, M. Twiss, B.V. Ramarao, and S. Krishnan, "Sustainability Prize" and "General Audience Award" for the poster titled "Flocculation and removal of harmful cyanobacterial from water using surface-engineered polymer additives," presented at the 2020 Summer Research and Project Showcase, Clarkson University (August 2020).
- A.P. Pitchiya,[*] Yanni Wang,[*] Cody Johnson,[*] D. Roy, and S. Krishnan, Best Poster Award in the "Chemistry (Graduate)" category and "Sustainability Prize" for the poster titled "Carbon-based polymer nanocomposites for energy applications," presented at the 2019 Summer Research and Project Showcase, Clarkson University (August 2019).
- A.P. Pitchiya,[*] Yanni Wang,[*] Cody Johnson,[*] D. Roy, and S. Krishnan, Best Poster Award in the "Materials for Energy Applications" category for the poster titled "Carbon-based polymer nanocomposites for energy applications," presented at the 2019 Annual Meeting of the Center for Advanced Materials Processing, Syracuse, New York (May 2019).

- A. P. Pitchiya[*] and A. S. Finny, "Best in North Country Community Category" award for the prototype "IoT Rust Sensing Device/App for Corrosion Monitoring and Prevention," The President's Challenge, Clarkson University (April 2019).
- Tara Seigle, Tau Beta Pi Scholarship (2017–18)
- A. Purdy[**] and S. Krishnan, award for oral presentation of the paper titled "Polyelectrolyte Complexes," in the pharmaceutical session of the 20th Annual Summer SURE Conference, Clarkson University, Potsdam, New York (July 2017).
- B. Stewart,[**] Z. Putnam,[*] and S. Krishnan, award for best oral presentation of the paper titled "Thermomechanical Characterization of Novel Latex Processed HNBR Elastomer Nanocomposites," in the materials science session of the 19th Annual Summer SURE Conference, Clarkson University, Potsdam, New York (July 2016).
- Yarong Lin, Goldwater Scholarship (2013)
- J. M. Myrick, F. A. Sexton, and S. Krishnan, *Poster Award*, First place in the "best overall" category for the poster titled "Controlled Release from Stimuli-Responsive Polymer Microparticles," The 2012 Annual Meeting of the Center for Advanced Materials Processing, Albany, New York (May 2012).
- J. L. Lebga, S. Rock, D. Roy, and S. Krishnan, *Poster Award*, Third place in the "most creative" category for the poster titled "An Investigation of the Mechanism of Proton Transport in Trialkylammonium and 3-Alkylimidazol-1-ium Protic Ionic Liquids for PEM Fuel Cell Membranes," The 2012 Annual Meeting of the Center for Advanced Materials Processing, Albany, New York (May 2012).
- J. L. Lebga, S. Krishnan, J. Zheng, and D. Roy, *Poster Award*, Second place in the "most creative" category for the poster titled "Structure-Property Relationships in Protic Ionic Liquids for High-Temperature PEM Fuel Cells," The 2011 Annual Meeting of the Center for Advanced Materials Processing, Albany, New York (May 2011).
- Y. Lin and S. Krishnan, winner of the "*Runner Up"* Certificate, for the poster on Anti-Biofouling Elastomeric Block Copolymer Coatings, Spring 2011 SURE conference, Clarkson University, Potsdam, New York (April 2011).
- P. Kelleher and S. Krishnan, winner of the "*Runner Up"* Certificate, for the presentation titled "Synthesis of Polyacetylene from Unconventional Precursors for Application in Photovoltaic Devices," Spring 2011 SURE conference, Clarkson University, Potsdam, New York (April 2011).
- P. Kelleher, recipient of the *National Grid Endowed Fund for Student Research Opportunities in Sustainable Energy* award for Honors Research on "Polymer Thin Films for High-Efficiency Solar Cells" (Summer 2010).
- S. Laramie, recipient of the *National Grid Endowed Fund for Student Research Opportunities in Sustainable Energy* award for Honors research on "Structure-Property Correlations in Ionic Liquid Electrolytes for Energy Conversion and Storage Devices" (Summer 2010).
- L. Ganapatibhotla, S. Krishnan, J. Zheng, and D. Roy, *Poster Award*. The best overall poster, for "PEGylated and Fluorinated Organic Salts for Dye-sensitized Solar Cells and Supercapacitors," CAMP Annual Technical Meeting, Canandaigua, New York (May 2010).
- V. K. Vendra, F. A. Sexton, and S. Krishnan, *Poster Award*. Third place in the most creative poster category, for "Self-assembled Polymer Microparticles for Sustained Oral Delivery of Hydrophilic Bioactives," CAMP Annual Technical Meeting, Canandaigua, New York (May 2010).

- L. Wu, V. K. Vendra, L. Ganapatibhotla, and S. Krishnan, *Poster Award*. First place in the most creative poster category, for "Fluorinated Polymers as Anti-fouling Coatings and Ion-Conducting Polymer Electrolytes," CAMP Annual Technical Meeting, Canandaigua, New York (May 2009).
- S. S. Moganty, J. Close, P. Goonetilleke, S. Krishnan, and R. Baltus, *Poster Award*. First prize for the poster "Electrochemical Supercapacitors Based on Polymerizable Ionic Liquids," 2008 Annual Meeting of the American Institute of Chemical Engineers, Philadelphia, Pennsylvania (November 2008).
- T. Glave, C. Smith, L. Wu, X. Jia, J. McLaughlin, and S. Krishnan, First prize for "Anti-biofouling Surfaces Through Polymers with Controlled Architectures," National Society of Black Engineers Fall Regional Conference, 2008.

13) GRADUATE RESEARCH ADVISEES

1. Temitope Orimolade (M.S. candidate, 2020–present)
2. Gowri Mohandass (Ph.D. candidate, 2018–present)
3. Aswin Pitchiya (Ph.D. candidate, 2017–present)
4. Ngoc-Tram Le (Ph.D. candidate, 2015–present)

Graduate Alumni and Their Current Affiliations

5. Arvind Sreeram (Ph.D., 2012–2016); Intel Corporation, Albuquerque, NM
6. Azar Abidnejad (M.S., 2010–2013); Solvay, Vernon, TX
7. James Myrick (M.S., Ph.D., 2010–2017); FUJIFILM Dimatix, Inc. Lebanon, NH
8. Janice L. Lebga-Nebane (M.S., Ph.D., 2010–2014); Armorix, Edmonton, Alberta, Canada
9. Lalitha V. N. R. Ganapatibhotla (M.S., 2008–2010); 3M Corporation, Minneapolis, MN
10. Lin Wu (M.S., Ph.D., 2008–2014); Fuyao Glass America, Dayton, OH
11. Malavarayan Sankarasubramanian (Ph.D., 2012–2016); Intel Corporation, Chandler, AZ
12. Monavareh Torabizadeh (Ph.D., 2014–2018); Old Dominion University, Norfolk, VA
13. Ramaswamy Venkatanarayanan (Ph.D., 2012–2016); Micron Technology, Boise, ID
14. Rithu Bhonsle (Ph.D., 2012–2016); Intel Corporation, Albuquerque, NM
15. Ronak Ansaripour (M.S. 2017–2019); Northeastern University, Boston, MA
16. Sheik Ansar Usman Ibrahim (Ph.D.); BASF, Germany
17. Venkat K. Vendra (M.S., 2008–2010); Intel Corporation, Hillsboro, OR
18. Yanni Wang (Ph.D., 2012–2018); Micron Technology, Boise, ID
19. Zackary Putnam, (Ph.D., 2013–2018) Naval Nuclear Lab, Schenectady, NY

14) HONORS THESIS ADVISEES

1. Peter Mallery, Electrokinetic Behaviors of Cu and Black Diamond Surfaces in the Presence of Glycine (2018)
2. Tara Seigle, Designing and Characterizing Chitosan Particles for Drug and Vaccine Delivery Applications (2018)

3. Yarong Lin, Dilute Solution Properties of Sulfobetaine Zwitterionic Polymer Synthesized by Reversible Addition-Fragmentation Chain-Transfer (RAFT) Reaction (2014)
4. Katherine Purdy, Synthesis and Characterization of a Triblock Copolymer for Manganese Oxide Nanoparticle Stabilization (2013)
5. Patrick R. Kelleher, Synthesis of Polyacetylene from Unconventional Precursors for Application in Photovoltaic Devices (2011)

15) UNIVERSITY SERVICE

- Student Learning Outcomes Assessment Committee (2021–present)
- Undergraduate Curriculum Committee of the Department of Chemical and Biomolecular Engineering (2019–present)
- Center for Advanced Materials Processing Faculty Advisory Group (2017–present)
- Faculty Advisor for the Clarkson University Student Chapter of the Electrochemical Society (2019–present)
- Faculty Advisor for the New York Theta Chapter of Tau Beta Pi (Spring 2015–present)
- Member, Faculty Search Committees (2013, 2015–16, and 2019–present)
- Member, Faculty Senate (2013–2017) and Faculty Senate Information Technology Committee (Fall 2017–present)
- Member, Graduate Committee of the Department of Chemical & Biomolecular Engineering, Clarkson University (2010–2011 and 2014–2018); Graduate Committee Chair (2015–16 academic year)
- Faculty Advisor for Delta Chapter of Omega Chi Epsilon (2008–2018)
- Member, Coulter School of Engineering Undergraduate Research Committee (2008–2012)
- Participated in the Clarkson University Open House events and served as Session Chair and Judge in Clarkson University's Symposium on Undergraduate Research Experiences (2007–present).
- Honors Thesis Reader (2009–present)
- Presented guest lectures for different groups at Clarkson University
- Graduate Student Thesis and Examination Committee Memberships at Clarkson University
    1. Serving on Ph.D. Thesis and Exam Committee of Victor Fabiyi, Department of Chemical and Biomolecular Engineering
    2. Served on Ph.D. Thesis and Exam Committee of Cheng Wang, Department of Chemical and Biomolecular Engineering. Successfully defended, September 2021.
    3. Served on Ph.D. Thesis and Exam Committee of Charith Kasun Ranaweera Akurana Gamaralalage, Materials Science & Engineering Ph.D. program. Successfully defended, September 2021.
    4. Served on Ph.D. Thesis and Exam Committee of Yongneng Wu, Department of Chemistry and Biomolecular Science. Successfully defended, July 2021.
    5. Served on Ph.D. Thesis and Exam Committee of Hossein N. Alavijeh, Department of Chemical and Biomolecular Engineering. Successfully defended, July 2021.

6. Served on Ph.D. Thesis and Exam Committee of Nandan B. Kenchappa, Department of Chemical and Biomolecular Engineering. Successfully defended, April 2021.
7. Served on Ph.D. Thesis and Exam Committee of Cai Zhewei, Department of Chemical and Biomolecular Engineering. Successfully defended, April 2021.
8. Served on Ph.D. Thesis and Exam Committee of Akshay K. M. Gowda, Department of Chemical and Biomolecular Engineering. Successfully defended, January 2020.
9. Served on Ph.D. Thesis and Exam Committee of David Simpson, Department of Physics. Successfully defended, August 2019.
10. Served on Ph.D. Thesis and Exam Committee of Navid Kermanshahimonfared, Department of Mechanical and Aeronautical Engineering. Successfully defended, June 2019.
11. Served on Ph.D. Thesis and Exam Committee of Ishah Alshehri, Department of Chemistry and Biomolecular Sciences. Successfully defended, December 2018.
12. Served on MS Thesis and Exam Committee of Aditya K. Srikakulapu, Engineering Science Program. Successfully defended, December 2018.
13. Served on MS Thesis and Exam Committee of Sridevi Reddy Alety, Engineering Science Program. Successfully defended, March 2018.
14. Served on Ph.D. Thesis and Exam Committee of Vikram Pratap, Department of Chemical and Biomolecular Engineering. Successfully defended, January 2018.
15. Served on MS Thesis and Exam Committee of Ross E. Hisert, Department of Chemical and Biomolecular Engineering. Successfully defended, December 2017.
16. Served on Ph.D. Thesis and Exam Committee of Ramtej Popuri, Department of Chemical and Biomolecular Engineering. Successfully defended, December 2017.
17. Served on Ph.D. Thesis and Exam Committee of Miao Luo, Department of Chemical and Biomolecular Engineering. Successfully defended, December 2017.
18. Served on MS Thesis and Exam Committee of Sevim Korkmaz, Department of Chemical and Biomolecular Engineering. Successfully defended, April 2017.
19. Served on Ph.D. Thesis and Exam Committee of Jennifer Ritz, Department of Chemistry and Biomolecular Science. Successfully defended, April 2017.
20. Served on Ph.D. Thesis and Exam Committee of Kaushik V. Sagi, Department of Chemical and Biomolecular Engineering. Successfully defended, December 2016.
21. Served on MS Thesis and Exam Committee of Gautham Sekar, Department of Chemical and Biomolecular Engineering. Successfully defended, July 2016.
22. Served on Ph.D. Thesis and Exam Committee of Michael Turk, Department of Physics. Successfully defended, June 2016.
23. Served on Ph.D. Thesis and Exam Committee of Olivia Durham, Department of Chemistry and Biomolecular Science. Successfully defended, March 2016.
24. Served on Ph.D. Thesis and Exam Committee of Xingzhao Shi, Department of Physics. Successfully defended, August 2015.
25. Served on Ph.D. Thesis and Exam Committee of Simon Rock, Department of Physics. Successfully defended, April 2014.

26. Served on Ph.D. Thesis and Exam Committee of John B. Matovu, Department of Chemical and Biomolecular Engineering, October 2013.
27. Served on Ph.D. Thesis and Exam Committee of Hariprasad Amanapu, Department of Chemical and Biomolecular Engineering, July 2013.
28. Served on Ph.D. Thesis and Exam Committee of Gregory S. Chojecki, Department of Chemical and Biomolecular Engineering. Successfully defended, June 2013.
29. Served on MS Thesis and Exam Committee of Brendan Hofler, Department of Chemical and Biomolecular Engineering. Successfully defended, July 2013.
30. Served on MS Thesis and Exam Committee of Laila Arjuman Banu, Department of Chemical and Biomolecular Engineering. Successfully defended, June 2012.
31. Served on Ph.D. Thesis and Exam Committee of Daniel Crain, Department of Physics. Successfully defended, June 2012.
32. Served on Ph.D. Thesis and Exam Committee of Deepak Ravikumar, Department of Civil and Environmental Engineering. Successfully defended, April 2012.
33. Served on Ph.D. Thesis and Exam Committee of Shyam S. Venkataraman, Department of Chemistry and Biomolecular Science. Successfully defended, January 2012.
34. Served on Ph.D. Thesis and Exam Committee of Kenneth J. Rushing, Department of Chemistry and Biomolecular Science. Successfully defended, 2011.
35. Served on Ph.D. Thesis and Exam Committee of Qin Lou, Department of Chemistry and Biomolecular Science. Successfully defended, 2011.
36. Served on Ph.D. Thesis and Exam Committee of Pavan S. Chinthamanipeta, Department of Chemistry. Successfully defended, 2011.
37. Served on Ph.D. Thesis and Exam Committee of Shivaji Peddeti, Department of Chemical and Biomolecular Engineering. Successfully defended, 2011.
38. Served on Ph.D. Thesis and Exam Committee of Brown C. Peethala, Department of Chemical and Biomolecular Engineering. Successfully defended, 2011.
39. Served on Ph.D. Thesis and Exam Committee of Naresh K. Penta, Department of Chemical and Biomolecular Engineering. Successfully defended, 2011.
40. Served on Ph.D. Thesis and Exam Committee of John E. Garland, Department of Physics. Successfully defended, 2011.
41. Served on MS Thesis and Exam Committee of Deepthi S. Pippalla, Department of Chemical and Biomolecular Engineering. Successfully defended, 2011.
42. Served on Ph.D. Thesis and Exam Committee of Suppiah Singaram Saravanan, Department of Chemical and Biomolecular Engineering. Successfully defended, 2009.
43. Served on Ph.D. Thesis and Exam Committee of Ulaganathan Nallasivam, Department of Chemical and Biomolecular Engineering. Successfully defended, 2009.
44. Served on Ph.D. Thesis and Exam Committee of Surya Sekhar Moganty, Department of Chemical and Biomolecular Engineering. Successfully defended, 2009.
45. Served on Ph.D. Thesis and Exam Committee of Robert M. Lupitsky, Department of Chemistry and Biomolecular Science. Successfully defended, 2009.

46. Served on MS Thesis and Exam Committee of Gangadhar R. Muthinti, Department of Chemical and Biomolecular Engineering. Successfully defended, 2009.
47. Served on MS Thesis and Exam Committee of Ryan A. McBath Department of Chemical and Biomolecular Engineering. Successfully defended, 2009.
48. Served on MS Thesis and Exam Committee of Joshua Close, Department of Chemical and Biomolecular Engineering. Successfully defended, 2009.
49. Served on MS Thesis and Exam Committee of Himanshu Lodha, Department of Chemical and Biomolecular Engineering. Successfully defended, 2008.

16) PROFESSIONAL SERVICE

- Reviewer of manuscripts for more than 50 journals (publons.com/a/1333598/)
- Reviewer for NSF (2009–2018), DOE (2012, 2018, 2019), and non-US governmental agencies including Canada Foundation for Innovation (2010), Czech Science Foundation (2013), École Polytechnique Fédérale de Lausanne, Switzerland (2011), French National Research Agency (2019), and Romanian National Council for Development and Innovation (2012–2016).
- AIChE Programming, Product Design Area Chair (2017–2020); AIChE Annual Meeting Session Chair/Co-chair, Panel Speakers Forum – Chemical Process and Product Design Careers in Academia and Industry (2016–18), Composites for Environmental Applications (2017), Characterization of Composites (2016), Tools and Techniques for Product Design (2016–17, 2019–21), Multifunctional Composites (2015), Sustainable and Green Product Design (2015, 2018), Physical Properties for Chemical Product Design (2013–2017), Composites Science (2014), Structure, Properties, and Characterization of Nanocomposites (2013), Nanostructured Materials for Dye-Sensitized Solar Cells (2011); Judge, Materials Engineering and Sciences Division poster session, AIChE Annual Meeting (2011). https://www.aiche.org/proceedings/people/sitaraman-krishnan-2
- Career guidance for young professionals: panelist at a session on product design careers in industry and academia, AIChE Annual Meeting (2016–18).
- Member, Faculty Senate, Clarkson University; Member, Coulter School of Engineering Undergraduate Research Committee, Clarkson University
- Research mentor for undergraduate students from the Clarkson University Honors Program, and the NSF LSAMP, McNair and CSTEP programs for promoting institutional diversity
- Session Chair, "New Concepts in Polymeric Materials," ACS National Meeting, Atlanta, GA, 2006
- President, Student Chapter of the Society of Plastics Engineers, Lehigh University, 1999–2000

17) PROFESSIONAL MEMBERSHIPS

- American Institute of Chemical Engineers (AIChE)
- American Chemical Society (ACS)
- American Society for Engineering Education (ASEE)
- Society of Plastics Engineers (SPE)
- Full member, Sigma Xi, The Scientific Research Society
- Tau Beta Pi, The Engineering Honor Society

- Phi Beta Delta Honor Society for International Scholars