

PETER KOFINAS

Curriculum Vitae

Personal Information

Contact Information

Kofinas, Peter
Professor and Chair
Department of Chemical and Biomolecular Engineering
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Academic Appointments at UMD

Professor	Chemical and Biomolecular Engineering	7/2017 – present
Affiliate Appointments:	Materials Science and Engineering	
	Fischell Department of Bioengineering	
Professor	Fischell Department of Bioengineering	7/2006 – 6/2017
Associate Professor	Chemical and Biomolecular Engineering	7/2002 - 6/2006
Associate Professor	Materials Science and Engineering	7/2001 - 6/2002
Assistant Professor	Materials Science and Engineering	8/1996 - 6/2001

Administrative Appointments at UMD

Chair	Chemical and Biomolecular Engineering	7/2017 - present
Associate Dean	A James Clark School of Engineering	9/2012 – 9/2017
Associate Chair	Fischell Department of Bioengineering	7/2006 - 8/2012
Director of Graduate Studies	Fischell Department of Bioengineering	7/2006 - 8/2012

Other Employment

M.I.T., Cambridge, MA	Post-Doc.	Chemical Engineering	7/94 - 6/1996
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Educational Background

Massachusetts Institute of Technology (M.I.T.)	Cambridge, MA	
Ph.D. in the field of Polymers		5/1994
Massachusetts Institute of Technology (M.I.T.)	Cambridge, MA	
M.S. in Chemical Engineering Practice		9/1989
Massachusetts Institute of Technology (M.I.T.)	Cambridge, MA	
B.S. in Chemical Engineering		6/1989

Awards, Honors and Recognition

Research Fellowships, Prizes and Awards

- Senior Outstanding Research Award 2012, A. James Clark School of Engineering, U. of Maryland
- Outstanding Invention of 2007, Office of Technology Commercialization, U. of Maryland
- Outstanding Invention of 2001, Office of Technology Commercialization, U. of Maryland
- CAREER Award, National Science Foundation, 1999

Teaching Awards

- Philip Merrill Presidential Scholars Program Mentor 2014-2015, Office of Undergraduate Studies, U. of Maryland
- Engaged Faculty Award 2011, A. James Clark School of Engineering, U. of Maryland
- University of Maryland “Keystone Professor”: The Clark School Academy of Distinguished Professors, 2005 – 2012
- A. James Clark School of Engineering, U. of Maryland, Junior Faculty Outstanding Teaching Award, 1999

Service Awards and Honors

- Faculty Outstanding Service Award 2013, A. James Clark School of Engineering, U. of Maryland

Recent Synergistic Activities

- Have mentored over 90 undergraduates in research
- Have graduated 22 PhD 9 MS thesis students, 3 of my students hold tenured faculty positions
- Symposium Organizer: E-MRS, Strasbourg France (5/2017), “Design and hierarchical assemblies of nanomaterials”
- GEM Fellowship Representative U. of Maryland – STEM recruiting of Underrepresented Minority Students 2012-2017
- Research Mentor for Ser-Quest, UMD Center for Minorities in Engineering, Summers of 2019, 2020: Mentored teams of 4 high school students to conduct college-level research. Designed a research problem for students and provided training and guidance.

Research, Scholarly and Creative Activities

Articles in Refereed Journals

104. "Polymer nanomaterials for use as adjuvant surgical tools" M. Erdi, A. Sandler, and **Peter Kofinas** Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, e1889, 2023. DOI: 10.1002/wnan.1889
103. "Highly conductive polyacrylonitrile-based hybrid aqueous/ionic liquid solid polymer electrolytes with tunable passivation for Li-ion batteries" K.B. Ludwig, R. Correll-Brown, M. Freidlin, M.N. Garaga, S. Bhattacharyya, P.M. Gonzales, A.V. Cresce, S. Greenbaum, C.S. Wang, and **Peter Kofinas**. *Electrochimica Acta*, (453) 142349, 2023. DOI: 10.1016/j.electacta.2023.142349
102. "Controlled Release of a Therapeutic Peptide in Sprayable Surgical Sealant for Prevention of Postoperative Abdominal Adhesions" M. Erdi, M. Saruwatari, S. Rozyyev, C. Acha, O.B. Ayyub, A. Sandler, and **P. Kofinas**. *ACS Applied Materials & Interfaces*, 15, 14809-14098, 2023. DOI: 10.1021/acsami.3c00283
101. "3D-Printed Microinjection Needle Arrays via a Hybrid DLP-Direct Laser Writing Strategy" S. Sarker, A. Colton, Z. Wen, X. Xu, M. Erdi, A. Jones, **P. Kofinas**, E. Tubaldi, P. Walczak, M. Janowski, Y. Liang, R. D. Sochol. *Adv. Mater. Technol.* 2201641, 2023. DOI: 10.1002/admt.202201641
100. "Phosphate Capture Enhancement Using Designed Iron Oxide-Based Nanostructures" P.D. Ramirez, C. Lee, R. Fedderwitz, A.R. Clavijo, D.P.P. Barbosa, M. Julliot, J. Vaz-Ramos, D. Begin, S. Le Calvé, A. Zaloszc, P. Choquet, M.A.G. Soler, D. Mertz, **P. Kofinas**, Y. Piao, S. Begin-Colin *Nanomaterials* 13, 587, 2023. DOI:10.3390/nano13030587
99. "Sprayable Tissue Adhesive with Biodegradation Tuned for Prevention of Post-Operative Abdominal Adhesions" M. Erdi, S. Rozyyev, M. Balabhadrapatruni, M.S. Saruwatari, J.L. Daristotle, O.B. Ayyub, A.D. Sandler, and **P. Kofinas** *Bioengineering & Translational Medicine* e10335, 2022. DOI:10.1002/btm2.10335 PMC9842025
98. "Evaluation of Healing Outcomes Combining A Novel Polymer Formulation with Autologous Skin Cell Suspension to Treat Deep Partial and Full Thickness Wounds in a Porcine Model; A Pilot Study" B.C. Carney, M.A. Oliver, M. Erdi, L.D. Kirkpatrick, S.P. Tranchina, S. Rozyyev, J. W Keyloun, M.S. Saruwatari, J.L. Daristotle, L.T. Moffatt, P. Kofinas, A.D. Sandler, J.W. Shupp *Burns* 48(8), 1950-1965, 2022. DOI: 10.1016/j.burns.2022.01.012 PMC9300815
97. "Aqueous electrolyte design for super-stable 2.5 V LiMn₂O₄ || Li₄Ti₅O₁₂ pouch cells" J. Xu, X.Ji, J. Zhang, C. Yang, P. Wang, S. Liu, K. Ludwig, F. Chen, **P. Kofinas**, C.S. Wang, *Nature Energy*, 7, 186-193 2022. DOI: 10.1038/s41560-021-00977-5
96. "Biodegradable, tissue adhesive polyester blend for safe, complete wound healing" J.L. Daristotle, L. Lau, S. Zaki, M. Erdi, P. Srinivasan, M. Balabhadrapatruni, O.B. Ayyub, A.D. Sandler, and **P. Kofinas**, *ACS Biomaterials Science & Engineering* (8), 3908-3916 2021. DOI: 10.1021/acsbiomaterials.1c00865 PMID 34323468 PMC8594560

95. "Microwave-assisted preparation of carbon coating layer on raspberry-shaped iron oxide particles for lithium-ion battery anodes" J.M. Kim, Y. Cho, C. Koo, C. Lee, P.D. Ramirez, D. Ko, J. Oh, S. Park, **P. Kofinas**, S. Begin-Colin, Y. Piao, *Journal of Electroanalytical Chemistry*, 115520, 2021. DOI: 10.1016/j.jelechem.2021.115520
94. "Fully printed resonance-free broadband conical inductors using engineered magnetic inks" C. Yi, R. Fedderwitz, D. Park, C. Ding, G-Q. Lu, J. Fleischer, P. Li, **P. Kofinas**, S. Das, D. R. Hines, *Additive Manufacturing*, 44, 102034, 2021. DOI: 10.1016/j.addma.2021.102034
93. "Water Domain Enabled Transport in Polymer Electrolytes for Lithium-Ion Batteries" M.D. Widstrom, O. Borodin, K.B. Ludwig, J.E. Matthews, S. Bhattacharyya, M. Garaga, A.V. Cresce, A. Jarry, M. Erdi, C. Wang, S.G. Greenbaum, and **P. Kofinas**, *Macromolecules*, 54, 2882–2891, 2021. DOI: 10.1021/acs.macromol.0c01960
92. "Enabling high performance all-solid-state lithium metal batteries using solid polymer electrolytes plasticized with ionic liquid" M.D. Widstrom, K.B. Ludwig, J.E. Matthews, A. Jarry, M. Erdi, A.V. Cresce, G. Rubloff, and **P. Kofinas** *Electrochimica Acta*, 136156, 2020. DOI: 10.1016/j.electacta.2020.136156
91. "Pressure-Sensitive Tissue Adhesion and Biodegradation of Viscoelastic Polymer Blends" J.L. Daristotle, S.T. Zaki, L.W. Lau, O.B. Ayyub, M. Djouini, P. Srinivasan, M. Erdi, A.D. Sandler, and P. Kofinas, *ACS Applied Materials and Interfaces*, 12(14), 16050-16057, 2020. DOI: 10.1021/acsami.0c00497 PMID: 32191429 PMCID: PMC7271901.
90. "Sprayable and biodegradable, intrinsically adhesive wound dressing with antimicrobial properties", J.L. Daristotle, L.W. Lau, M. Erdi, J. Hunter, A. Djoum Jr, P. Srinivasan, X. Wu, M. Basu, O.B. Ayyub, A.D. Sandler, and **P. Kofinas**, *Bioengineering and Translational Medicine*, 5(1), e10149, 2020. DOI:10.1002/btm2.10149 PMID: 31989038 PMCID: PMC6971445.
89. "Rapid and Tunable Method to Fabricate Angle-Independent and Transferable Structurally Colored Films", L. Torres Jr, A. Margaronis, B.M. Bellato Meinhardt, L. Granzow, O.B. Ayyub, and **P. Kofinas**, *Langmuir*, 36(5), 1252-1257, 2020. DOI:10.1021/acs.langmuir.9b03516 PMID: 31961697.
88. "Hybrid 3D Printing of Synthetic and Cell-Laden Bioinks for Shape Retaining Soft Tissue Grafts", S. Van Belleghem, L. Torres Jr, M. Santoro, B. Mahadik, A. Wolf, **P. Kofinas**, J.P. Fisher, *Advanced Functional Materials*, 1907145, 2019. DOI: 10.1002/adfm.201907145 PMID: 33041744 PMCID: PMC7546434.
87. "Structurally colored protease responsive nanoparticle hydrogels with degradation-directed assembly", L. Torres Jr, J.L. Daristotle, O.B. Ayyub, B.M. Bellato Meinhardt, H. Garimella, A. Margaronis, S. Seifert, N.M. Bedford, T.J. Woehl, and **P. Kofinas**, *Nanoscale*, 11, 17904-17912, 2019. DOI:10.1039/C9NR04624K PMID: 31552983
86. "Improving the Adhesion, Flexibility, and Hemostatic Efficacy of a Polymer Blend Surgical Sealant by Incorporating Silica Particles" J. L. Daristotle, S. T. Zaki, L. W. Lau, L. Torres Jr, A. Zografos, P. Srinivasan, O.B. Ayyub, A.D. Sandler, and **P. Kofinas** *Acta Biomaterialia*, 90, 205-216, 2019. DOI: 10.1016/j.actbio.2019.04.015 PMID: 30954624 PMCID: PMC6549514
85. "Multistage Chemical Heating for Instrument-Free Biosensing"

J.P. Goertz, K. M. Colvin, A.B. Lippe, J.L. Daristotle, **P. Kofinas**, I.M. White
ACS Appl. Mater. Interfaces, 10(39), 33043–33048, 2018. DOI: 10.1021/acsami.8b11611

84. “Spray Processed Composites with High Conductivity and Elasticity”
M. Vural, A.M. Behrens, W. Hwang, J.J. Ayoub, D. Chasser, A.W. Cresce, R.M. Briber, and **P. Kofinas** *ACS Appl. Mater. Interfaces*, 10, 13953-13962, 2018.
DOI: 10.1021/acsami.8b00068

83. “Zeolite-loaded alginate-chitosan hydrogel beads as a topical hemostat” P. Fathi, M.J. Sikorski, K. Christodoulides, K.R. Langan, Y. S. Choi, J.M. Titcomb, A.S. Ghodasara, O.A. Wonodi, H. Thaker, M. Vural, A.M. Behrens, and **P. Kofinas**. *Journal of Biomedical Materials Research: Part B - Applied Biomaterials*, 106(5), 1662-1671, 2018.
DOI:10.1002/jbm.b.33969 PMID: 28842967

82. “A magnetically recoverable photocatalyst prepared by supporting TiO₂ nanoparticles on a superparamagnetic iron oxide nanocluster core@fibrous silica shell nanocomposite”
B. Seo, C. Lee, D. Yoo, **P. Kofinas**, Y. Piao.
Royal Society of Chemistry Advances 7, 9587, 2017. DOI: 10.1039/c6ra27907d

81. “Solution Blow Spun Polymer: A Novel Pre-Clinical Surgical Sealant for Bowel Anastomoses” N.G. Kern, A.M. Behrens, P. Srinivasan, C.T. Rossi, J.L. Daristotle, **P. Kofinas**, A.D. Sandler. *Journal of Pediatric Surgery*, 52, 1308-1312, 2017.
DOI: 10.1016/j.jpedsurg.2016.11.044 PMID: 27956071 PMCID: PMC5459684

80. “A review of the fundamental principles and applications of solution blow spinning”
J.L. Daristotle, A.M. Behrens, A.D. Sandler, and **P. Kofinas**.
ACS Applied Materials & Interfaces, 8 (51), 34951–34963, 2016.
DOI: 10.1021/acsami.6b12994 PMID: 27966857 PMCID: PMC5673076

79. “Protein Adsorption on Chemically Modified Block Copolymer Nanodomains: Influence of Charge and Flow” J.S. Silverstein, B.J. Casey, **P. Kofinas**, B.J. Dair. *Journal of Nanoscience and Nanotechnology*, 16(2), 1460-1470, 2016. DOI: 10.1166/jnn.2016.10895

78. “Stretchable Magneto-dielectric Composites Based on Raspberry-Shaped Iron Oxide Nanostructures” M. Vural, O. Gerber, B.P. Pichon, S. Lemonier, E. Barraud, L.C. Kempel, S. Begin-Colin, and **P. Kofinas**, *Journal of Materials Chemistry C*, 4, 2345, 2016.
DOI: 10.1039/c6tc00419a

77. “Rapid Fabrication of Poly(DL-lactide) Nanofiber Scaffolds with Tunable Degradation for Tissue Engineering Applications by Air-brushing” A.M. Behrens, J. Kim, N. Hotaling, J. Seppala, **P. Kofinas**, W. Tutak. *Biomedical Materials*, 11, 035001, 2016.
DOI: 10.1088/1748-6041/11/3/035001 PMID: 27121660 PMCID: PMC4963247

76. “Core/Shell Iron/Oxide Nanoparticles for Improving the Magneto-Dielectric Properties of Polymer Composites” T-I Yang, C-Y Chuang, S-C Yang, L.C. Kempel, and **P. Kofinas**.
Advanced Engineering Materials, 18(1), 2016. DOI: 10.1002/adem.201500234

75. “Biodegradable Polymer Blend Based Surgical Sealant with Body Temperature Mediated Adhesion” A.M. Behrens, N.G. Lee, B.J. Casey, P. Srinivasan, M.J. Sikorski, J.L. Daristotle, A. D. Sandler, and **P. Kofinas**. *Advanced Materials*, 27, 8056–8061, 2015.
DOI: 10.1002/adma.201503691 PMID: 26554545 PMCID: PMC4961426

74. "Enzyme Induced Degradation Stiffening in Hydrogels with Structural Color"
O.B. Ayyub, and **P. Kofinas**. *ACS Nano*, 9 (8), 8004–8011, 2015.
DOI: 10.1021/acsnano.5b01514 PMID: 26196060 PMCID:PMC6209446
73. "Simple and Inexpensive Quantification of Ammonia in Whole Blood"
O.B. Ayyub, A.M. Behrens, B.T. Heligman, M.E. Natoli, J.J. Ayoub, G. Cunningham, M. Summar, and **P. Kofinas**. *Molecular Genetics and Metabolism*, 115, 95–100, 2015.
DOI: 10.1016/j.ymgme.2015.04.004 PMID: 25936660 PMCID: PMC4462127
72. "Sprayable Elastic Conductors Based on Block Copolymer Silver Nanoparticle Composites"
M. Vural, A. M. Behrens, O. B. Ayyub, J. J. Ayoub, and **P. Kofinas**. *ACS Nano*, 9(1), 336-344, 2015. DOI: 10.1021/nn505306h PMCID: PMC4310637
71. "Synthesis and Characterization of Microphase Separated Primary Amine Functionalized Polystyrene-b-Poly(2-vinylpyridine) Polymer" O.B. Ayyub, M.B. Ibrahim, and **P. Kofinas**. *Polymer*, 55, 6227-6231, 2014. DOI: 10.1016/j.polymer.2014.10.005
70. "Hemostatic Strategies for Traumatic and Surgical Bleeding" A.M. Behrens, M.J. Sikorski, and **P. Kofinas**. *Journal of Biomedical Materials Research Part A*, 102(11), 4182-4194, 2014. DOI: 10.1002/jbm.a.35052 PMID: 24307256.
69. "In situ Deposition of PLGA Nanofibers via Solution Blow Spinning" A.M. Behrens, B.J. Casey, M.J. Sikorski, K. Wu, W. Tutak, A. Sandler, and **P. Kofinas**. *ACS Macro Letters*, 3(3), 249-254, 2014. DOI: 10.1021/mz500049x
68. "Nanostructured Flexible Magneto-dielectrics for Radio Frequency Applications" M.Vural, B. Crowgey, L. Kempel, and **P. Kofinas**. *Journal of Materials Chemistry C*, 2, 756-763, 2014. DOI:10.1039/C3TC32113D
67. "Blood Aggregating Hydrogel Microparticles for Use as a Hemostatic Agent"
A.M. Behrens, M.J. Sikorski, T. Li, Z. J. Wu, B.P. Griffith, and **P. Kofinas**. *Acta Biomaterialia*, 10(2) 701–708, 2014.
DOI: 10.1016/j.actbio.2013.10.029 PMID: 24185001
66. "The cell release kinetics and the swelling behavior of physically crosslinked xanthan-chitosan hydrogels in simulated gastrointestinal conditions" S. Argin, **P. Kofinas**, Y. Martin Lo. *Food Hydrocolloids*, 40, 138-144, 2014. DOI: 10.1016/j.foodhyd.2014.02.018
65. "Enzymatic Activity Preservation and Protection through Entrapment within Degradable Hydrogels" A. Mariani, M. Natoli, and **P. Kofinas**. *Biotechnology and Bioengineering*, 10(11), 2994-3002, 2013.
DOI:10.1002/bit.24971 PMID: 23744741
64. "In vivo and In Vivo Evaluation of Polymer Hydrogels for Hemorrhage Control"
B.J. Casey, A.M. Behrens, Z.I. Tsinas, J.R. Hess, Z.J. Wu, B.P. Griffith, and **P. Kofinas**. *Journal of Biomaterials Science, Polymer Edition*, 24(15), 1781-1793, 2013.
DOI:10.1080/09205063.2013.801707 PMID: 21058718

63. "Self-Assembled Block Copolymer Photonic Crystal for Selective Fructose Detection" O.B. Ayyub, M.B. Ibrahim, R.M. Briber, and **P. Kofinas**. *Biosensors and Bioelectronics*, 46, 124-129, 2013. DOI:10.1016/j.bios.2013.02.025 PMID: 23531858
62. "Investigating polymer thiolation in gene delivery" I. Bacalocostantis, V. Mane, M. Kang M., A. Goodley, S. Muro, W.E. Bentley, and **P. Kofinas**, *Journal of Biomaterials Science, Polymer Edition*. 24(8), 912-926, 2013. DOI:10.1080/09205063.2012.727266 PMID: 23647248
61. "Block Copolymer Electrolyte with Sulfur Based Ionic Liquid for Lithium Batteries" A. Fisher, M.B. Khalid, and **P. Kofinas**. *Journal of the Electrochemical Society*, 159(12) A2124-A2129, 2012. DOI:10.1149/2.066212jes
60. "Structure investigation of poly((2-dimethylamino)ethyl methacrylate)/sodium dodecylsulfate complexes in concentrated poly((2-dimethylamino)ethyl methacrylate) solutions using small angle neutron scattering" W. Lee, **P. Kofinas**, and R.M. Briber. *Polymer*, 53(14), 2942-2948, 2012. DOI:10.1016/j.polymer.2012.04.052
59. "Effect of Thiol Pendant Conjugates on Plasmid DNA Binding, Release, and Stability of Polymeric Delivery Vectors" I. Bacalocostantis, V. Mane, M. Kang M., A. Goodley, S. Muro, and **P. Kofinas**. *Biomacromolecules*, 13, 1331-1339, 2012. DOI:10.1021/bm3004786 PMID: 22515194
58. "Rapid Modular Synthesis and Processing of Thiol-Ene Functionalized Styrene-Butadiene Block Copolymers" J.S. Silverstein, B.J. Casey, M.E. Natoli, B.J. Dair, and **P. Kofinas**. *Macromolecules*, 45(7), 3161-3167, 2012. DOI: 10.1021/ma300304h
57. "Virus-Assembled Flexible Electrode-Electrolyte Interfaces for Enhanced Polymer-Based Battery Applications" A. Ghosh, J. Guo, A.D. Brown, E. Royston, C.S. Wang, **P. Kofinas**, and J.N. Culver. *Journal of Nanomaterials*, 2012(795892), 2012. DOI: 10.1155/2012/795892
56. "Anion Effects on Solid Polymer Electrolytes containing Sulfur Based Ionic Liquid for Lithium Batteries" A. Fisher, M.B. Khalid, M. Widstrom, and **P. Kofinas**. *Journal of the Electrochemical Society*, 159(5), A593-A597, 2012. DOI: 10.1149/2.089205jes
55. "Dry Polymer/Sulfur-Based Ionic Liquid Hybrid Electrolytes for Lithium Batteries", A. Fisher, M.B. Khalid, M. Widstrom, and **P. Kofinas**. *Electrochemical Society Transactions*, 41(11) 77-83, 2012. DOI: 10.1149/1.3687393
54. "Color Changing Block Copolymer Films for Chemical Sensing of Simple Sugars" O.B. Ayyub, J.W. Sekowski, T-I Yang, X. Zhang, R. Briber, and **P. Kofinas**. *Biosensors and Bioelectronics*, 28, 349- 354, 2011. DOI: 10.1016/j.bios.2011.07.043 PMID: 21820888.
53. "Dry Polymer Electrolytes With Sulfur Based Ionic Liquid for Lithium Batteries" A.S. Fisher, M.B. Khalid, M. Widstrom, and **P. Kofinas**. *J. of Power Sources*, 196, 9767- 9773, 2011. DOI: 10.1016/j.jpowsour.2011.07.081

52. "Controlled synthesis of core-shell iron-silica nanoparticles and their magneto-dielectric properties in polymer composites"
T-I Yang, R.N.C. Brown, L. C. Kempel, and **P. Kofinas**. *Nanotechnology*, 22,105601, 2011.
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51. "FVII Dependent Coagulation Activation in Citrated Plasma by Polymer Hydrogels"
B.J. Casey, A.M. Behrens, J. Hess, Z. J. Wu, B. Griffith, and **P. Kofinas**.
Biomacromolecules, 11, 3248-3255, 2010.
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50. "Small angle neutron scattering study of deuterated sodium dodecylsulfate micellization in dilute poly((2-dimethylamino)ethyl methacrylate) solutions"
W. Lee, **P. Kofinas**, and R.M. Briber. *Polymer*, 51, 2872-2878, 2010.
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49. "Imprinted Polymer Hydrogels for the Separation of Viruses" L. D. Bolisay, and **P. Kofinas**,
Macromolecular Symposia, 291-292, 302-306, 2010.
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48. "Block Copolymer Solid Battery Electrolyte with High Li-ion Transference Number" A. Ghosh, C. Wang, and **P. Kofinas**. *J. Electrochemical Society*, 157(7), A846-A849, 2010.
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47. "Surfactant-modified Nickel Zinc Iron Oxide / Polymer Nanocomposites for Radio Frequency Applications" T-I Yang, L. Kempel, and **P. Kofinas**.
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46. "Effects of Charge Density on the Recognition Properties of Molecularly Imprinted Polyampholyte Hydrogels" D.S. Janiak, O.B. Ayyub, and **P. Kofinas**.
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45. "Effects of Charge Density on the Recognition Properties of Molecularly Imprinted Polymeric Hydrogels" D.S. Janiak, O.B. Ayyub, and **P. Kofinas**.
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44. "Oxidation Effect on Templating of Metal Oxide Nanoparticles within Block Copolymers"
P. Akcora, R.M. Briber, and **P. Kofinas**.
Polymer, 50(5), 1223-1227, 2009.
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43. "Block Copolymer Nanotemplating of Tobacco Mosaic and Tobacco Necrosis Viruses"
A.V. Cresce, J.N. Culver, W.E. Bentley, and **P. Kofinas**.
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42. "Effect of complexation conditions on xanthan-chitosan polyelectrolyte complex gels"
S. Argin-Soysal, **P. Kofinas**, and Y.M. Lo. *Food Hydrocolloids*, 23, 202-209, 2009.
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41. "Magneto-dielectric Properties of Polymer-Fe₃O₄ Nanocomposites"
T-I Yang, R.N. Brown, L.C. Kempel, and **P. Kofinas**.
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40. "PEO based Block Copolymer as Solid State Lithium Battery Electrolyte"
A. Ghosh, and **P. Kofinas**. *Electrochemical Society Transactions*, **11**(29), 131-137, 2008.
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39. "Nanostructured Block Copolymer Dry Electrolyte" A. Ghosh, and **P. Kofinas**.
J. Electrochemical Society, 155(6) A428-A431, 2008.
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38. "Self-assembly of virus-structured high surface area nanomaterials and their application as battery electrodes" E. Royston, A. Ghosh, **P. Kofinas**, M.T. Harris, and J.N. Culver.
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37. "Selective binding of Carcinoembryonic Antigen Using Polymeric Hydrogels"
B.J. Casey, and **P. Kofinas**. *Journal of Biomedical Materials Research*, 87A(2), 359-363, 2008.
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36. "Towards oriented assembly of proteins onto magnetic nanoparticles"
C-W Hung, T. Holoman, **P. Kofinas**, and W.E. Bentley.
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35. "Optimization of Virus Imprinting Methods to Improve Selectivity and Reduce Non-Specific Binding" L.D. Bolisay, J.N. Culver, and **P. Kofinas**.
Biomacromolecules, 8(12), 3893–3899, 2007.
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34. "Molecular Imprinting of Peptides and Proteins in Aqueous Media"
D. S. Janiak, and **P. Kofinas**. *Analytical and Bioanalytical Chemistry*, 389(2), 399-404, 2007.
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33. "Dielectric Properties of Polymer Nanoparticle Composites"
T-I Yang, and **P. Kofinas**.
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7. "Development of Methods for Quantitative Characterization of Network Morphology in Pharmaceutical Hydrogels" **P. Kofinas**, and R.E. Cohen. *Biomaterials*, 18(20), 1361-1369, 1997. DOI: 10.1016/S0142-9612(97)00077-X
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1. "A Reexamination of Single-Chain Scattering in Heterogeneous Block Copolymers" C.V. Berney, **P. Kofinas**, and R.E. Cohen, *Polymer Communications*, 27(11), 330-331, 1986.

Conferences, Workshops, and Talks

Invited Talks

57. "Functional Polymers for the Design of Aqueous Polymer Electrolytes in Lithium Ion Batteries and Sprayable Adjuvant Surgical Tools in the Treatment of Adhesions and Burns", Dept of Chemistry, American University, Washington DC, April 2023.

56. "Functional Polymers with Application in Energy Storage and Surgery", Leigh University, Dept of Chemical and Biomolecular Engineering, February 22, 2023

55. "Designing Solid Polymer Electrolytes for Lithium Ion Batteries using Water and Ionic Liquids as Plasticizers" University of Massachusetts at Lowell, Dept of Chemistry, September 16, 2021

54. "Functionalized Biodegradable Polymer Surgical Sealant for Bowel Anastomoses" J.L. Daristotle, A. Zografos, S. Zaki, A.M. Behrens, P. Srinivasan, A.D. Sandler, P. Kofinas *European Materials Research Society Spring Meeting*, Strasbourg, France, May 2017.

53. "Functional Polymers for Biomedical Devices and Energy Storage: Safer Batteries, Biosensors for Point-of-Care Diagnostics, and Surgical Sealants", *Virginia Polytechnic Institute and State University, Dept of Chemical Engineering*, 10/10/2016.

52. "Low loss flexible magnetodielectric multi-ferroic nanoparticle composites" *4th International Workshop on Novel Magnetic and Multifunctional Materials* Université Pierre et Marie Curie, Paris, France, 7/5/2016.

51. "Functional Polymers for Biomedical Devices: Safer Batteries, Point-of-Care Diagnostics, and Surgical Sealants" *University of California, Riverside, Dept of Bioengineering*, 10/19/2015.

50. "In Situ Deposition of Polymer Fibers For Surgical Sealant Use"
Mid-Atlantic Soft Matter Workshop University of Maryland, College Park, MD, 7/29/2015.
49. "Functional Polymers for Biomedical Devices: Batteries, Point-of-Care Diagnostics, and Surgical Sealants" *European Engineering School in Chemistry, Polymers and Materials, University of Strasbourg, Strasbourg, France, 4/2/2015.*
48. "Functional Polymers for Biomedical Devices: Batteries, Point-of-Care Diagnostics, and Surgical Sealants" *University of Patras, Patras, Greece, 3/16/2015.*
47. "Point-of-Care Diagnostics for Hyperammonemia and Aminoacidopathies"
Graduate School of Convergence Science & Technology, Seoul National University, Seoul Korea, 11/25/2014.
46. "Thinking Outside The Box: Solution Blow Spun Biodegradable Nanofibers for Surgical Applications" *Hemostatic Medical Devices Workshop, U.S. Food and Drug Administration, White Oak, MD, 9/4/2014.*
45. "Point-of-Care Diagnostics for Hyperammonemia and Aminoacidopathies" *Mid-Atlantic Directors and Staff of Scientific Cores 2014 Meeting, Baltimore, MD, 6/6/2014.*
44. "Nanostructured Colorimetric Polymer For Pathogen Detection" *Keynote Speaker, International Conference on Cellular & Molecular Bioengineering (ICCMB3), Singapore, 12/8/2012.*
43. "Safe, High-Performance, Polymer Electrolyte for Lithium Batteries" *Duracell, Bethel, CT, 7/10/2012.*
42. "Low Loss Magnetodielectric Polymer Nanocomposites for Radio Frequency Applications" *International Workshop on Novel Nanomagnetic and Multifunctional Materials 2012 (IWNMM2012), Seoul, Korea, 6/13/2012.*
41. "Synthesis and Characterization of Safer Polymer Electrolytes for Lithium Batteries" *American Chemical Society Meeting, San Diego, CA, 3/28/2012.*
40. "Microstructure and magnetodielectric properties of low loss polymer nanoparticle composites" *Organic Metamaterials Workshop, Army Research Laboratory, Adelphi MD, 03/02/2012.*
39. "Synthetic Microparticle Hydrogel for Hemorrhage Control" *National Institutes of Health, Transfusion Medicine Clinical Center, Bethesda, MD, 1/2012.*
38. "Safe High-Performance Polymer Electrolytes for Lithium Batteries"
Army Research Laboratory, Electrochemistry Division, Adelphi MD, 12/5/2011.
37. "Functional Polymers for Energy and Medical Application" *Naval Research Laboratory, Washington, DC, Biosensors and Biomaterials Division, 10/15/2010.*
36. "Low Loss Magnetodielectric Polymer Composites" *France-Korea-USA Joint Workshop on Nanostructured Magnetic Materials & Advanced Polymers, Strasbourg, France, 7/20/2010.*

35. "Nanostructured Polymers for Energy and Medical Application" *Tufts University, Department of Chemical Engineering, Boston, MA, 4/9/2010.*
34. "Functional Polymer Nanostructures for Biomedical Applications" *University of Buffalo, Department of Chemical and Biological Engineering, Buffalo, NY, 4/15/2009.*
33. "Nanostructured Polymers for Biological Recognition and Energy Applications" *The Technion- Israel Institute of Technology, Haifa, Israel, 7/2/2008.*
32. "Imprinted Polymer Hydrogels for the Separation of Proteins and Viruses" *Polymer Networks Group Conference, Larnaca, Cyprus, 6/26/2008.*
31. "Functional polymer nanocomposites for flexible antennas and batteries" *Army Research Lab, Adelphi, MD, 10/16/2007.*
30. "Nanosensors for detecting plant pathogens and nanostructures for energy storage" *Board of Agriculture and Natural Resources, The National Academies, Washington DC, 8/17/2007.*
29. "Functional Self-Assembled Polymer Nanocomposites with Application to Intelligent Tire Systems" *The Goodyear Tire and Rubber Co., 5/20/2007.*
28. "Functional Polymer Nanostructures with Application in Biological Recognition and Energy Storage" *Columbia University and Benjamin Levich Institute for Physico-Chemical Hydrodynamics, New York, NY, 3/20/2007.*
27. "Enhancing the Non-Structural Functionalities of Composites Through Block Copolymer Self-Assembly" *Society for the Advancement of Material and Process Engineering Conference, Dallas, TX, 11/7/2006.*
26. "Functional Polymer Nanostructures for Nanobiotechnology Applications" *Laboratory for Physical Sciences, College Park, MD, 9/7/2006.*
25. "Molecular Imprinted Polymers for Plant and Insect Virus Recognition" *International Food Nanotechnology Conference, Orlando FL, 6/29/2006.*
24. "Virus Recognition Using Antibody Sensor Arrays on Self-Assembled Nanoscale Block Copolymer Patterns" *International Food Nanotechnology Conference, Orlando FL, 6/28/2006.*
23. "Molecularly Imprinted Polymers for Recognition of Viruses" *Johns Hopkins University, Baltimore MD, Chemical and Biomolecular Engineering, 9/8/2005.*
22. "Molecularly Imprinted Polymers for Recognition of Viruses and other Bioactive Substances" *Drexel University, Philadelphia, PA, Chemical and Biological Engineering, 4/22/2005.*
21. "Molecularly Imprinted Polymers for Sugar Recognition" *Imperial College, London, United Kingdom, Dept of Chemistry, 10/28/2004.*
20. "Magnetic Properties and Hyperfine structure of CoFe_2O_4 Nanoparticles Within Block Copolymers" *Laboratory for Physical Science, College Park, MD, 8/23/2002.*

19. "Anion Binding Polymeric Hydrogels for Ammonium Perchlorate Wastewater Remediation" *Naval Surface Warfare Center, Indian Head MD*, 8/22/2002.
18. "Isomeric Sugar Biorecognition Using Polymer Imprints", *Naval Research Laboratory, Washington DC*, 5/20/2002.
17. "Polymeric Functional Nanostructures " *US-Germany Joint Meeting on Nanotechnology, M. I. T. Cambridge, MA*, 12/4/2001.
16. "Molecularly Imprinted Polymeric Hydrogels Displaying Isomerically Resolved Binding of Sugars" *Rutgers University, New Brunswick, NJ*, Biomedical Engineering, 9/24/2001.
15. "Synthesis of ABC Triblock Copolymers for use as a Nanoscale All-Solid State Polymeric Battery" *Naval Research Laboratories, Materials Division, Washington, DC*, 7/24/2001.
14. "Toxic and Nutrient Anion Removal from Wastewater Effluents Using Polymeric Hydrogels" *Rutgers University, New Brunswick, NJ* , Dept of Chemical Engineering, 7/19/2001.
13. "Polymeric Hydrogels for the Treatment of Type II Diabetes and Chronic Kidney Failure" *Johns Hopkins University, Baltimore, MD*, Dept of Materials Science and Engineering, 1/25/2001.
12. "Functional Nanostructures Within Block Copolymers" *M. I. T., Cambridge, MA*, Program in Polymer Science and Technology, 11/25/00.
11. "Self-Assembled Functional Nanostructures Within Block Copolymer Templates" *Drexel University*, Department of Materials Science and Engineering, 10/2/00.
10. "Self - Assembled Nanostructures Within Block Copolymers: Applications to the Tire Industry" *The Goodyear Tire and Rubber Co.*, 5/12/00.
9. "Self - Assembled Nanostructures Within Block Copolymer Templates" *Naval Research Laboratories, Chemistry Division, Washington, DC*, 7/27/99.
8. "Block Copolymer Nanostructures" *University of Patras*, Dept of Chemical Engineering, *Patras, Greece*, 6/15/1999.
7. "Orientation Texture and Gas Transport in Semicrystalline Block Copolymer Blends" *American Chemical Society, Rubber Division Meeting, Nashville, TN*, 9/30/98.
6. "Interplay of Orientation Texture and Gas Transport in Semicrystalline Block Copolymers" *University of Delaware*, Chemical Engineering Dept, 9/16/98.
5. "Microstructure Orientation and Gas Transport in Semicrystalline Block Copolymer Membranes" *The Goodyear Tire and Rubber Co.*, 1/29/97
4. "Gas Transport in Semicrystalline Block Copolymer Membranes" *The Dow Chemical Co.*, Corporate Research and Development, *Midland MI*, 11/5/97.
3. "Shear Induced Morphologies in Semicrystalline Block Copolymers" *Bayer AG, Zentrale Forschung und Entwicklung, Krefeld-Uerdingen, Germany*, 8/20/97.

2. "Gas Transport Control in Semicrystalline Block Copolymers" *Army Research Laboratory, Materials Division, Aberdeen Proving Grounds, MD, 2/5/97.*

1. "Shear Induced Morphologies of Semicrystalline Block Copolymers and Blends" *National Institute of Standards and Technology Polymer Division, 5/3/96.*

Refereed Presentations

123. "Stabilization of PAN-based Aqueous Solid Polymer Electrolytes (ASPEs) with Non-aqueous Plasticizers for Lithium-ion Batteries" K.B. Ludwig, R.A. Correll-Brown, M. Freidlin, M. Garaga, J.E. Matthews, S. Bhattacharyya, A.V. Cresce, S.G. Greenbaum, C. Wang, P. Kofinas. *International Symposium on Polymer Electrolytes, October 2022, Niagara, Ontario, Canada.*

122. "Chemically fueled assembly of protein hydrogels driven by a redox cycle
Author links open overlay panel" S.Nikfarjam T.J. Woehl, M. Anisimov, P. Kofinas, M. Erdi, R. Gibbons *Biophysical Journal*, 121(3), Supplement 1, February 2022, p.151a

122. "PEO-based block copolymer as solid stated lithium battery electrolyte" 10/07/2021
212th Meeting of the Electrochemical Society, Washington DC

121. "The Role of Particle Size and Charge on Self-Assembly in an Enzyme-Responsive Particle Hydrogel Composite with Structural Color"
L.Torres Jr, J.L. Daristotle, P. Kofinas
European Materials Research Society Spring Meeting, Strasbourg, France, May 2017.

120. "Investigation of an Air-Stable Solid Polymer Electrolyte of Lithium-Ion Batteries"
M. Widstrom, A.W. Cresce, M. Erdi, Peter Kofinas
European Materials Research Society Spring Meeting, Strasbourg, France, May 2017.

119. "Development and Validation of a Near-Patient Test Casette and Meier for Blood Ammonia Quantification" O.B. Ayyub, B. Heligman, S. Hofherr, N. Ah-Mew, P. Kofinas, M. Summar *39th Annual Meeting of the Society-for-Inherited-Metabolic-Disorders (SIMD)*, Ponte Vedra Beach, FL, April 2016.

118. "Investigation of a Polymer Electrolyte/Cathode Interface in a Solid-State Lithium Battery"
M.D. Widstrom, A.W. Cresce, and P. Kofinas *Materials Research Society Fall Meeting, Boston MA, December 2015.*

117. "Stretchable Magneto-Dielectrics Using Collectively Assembled Iron Oxide Nanostructures" M. Vural, O. Gerber, B. Pichon, S. Lemonnier, E. Barraud, L.C. Kempel, S. Begin-Colin, and Peter Kofinas. *Materials Research Society Fall Meeting, Boston MA, December 2015.*

116. "Enzyme Responsive Self-Stiffening Photonic Hydrogels" O.B. Ayyub, L. Torres, and P. Kofinas. *Materials Research Society Fall Meeting, Boston MA, December 2015.*

115. "Solution Processed Highly Conductive Stretchable Composites Based on Block Copolymer Fibers with Dual Silver Nanoparticle Networks" M. Vural, A.M. Behrens, J. Ayoub,

D. Chasser, and P. Kofinas. *Materials Research Society Fall Meeting*, Boston MA, December 2015.

114. "Development of a rapid point-of-care blood phenylalanine meter for at home and bedside use" O.B. Ayyub, J. Cabrera-Luque , B.T. Heligman, G. Cunningham, P. Kofinas, M. Summar *38th Annual Meeting of the Society-for-Inherited-Metabolic-Disorders (SIMD)*, Salt Lake City, UT, March 2015.

113. "Engineering a compact and high resolution blood ammonia meter" O.B. Ayyub, B.T. Heligman, A.M. Behrens, G. Cunningham, J. Cabrera-Luque, P. Kofinas, M. Summar *38th Annual Meeting of the Society-for-Inherited-Metabolic-Disorders (SIMD)*, Salt Lake City, UT, March 2015.

112. "Direct deposition of body temperature responsive polymeric medical sealants" A.M. Behrens, B.J. Casey, M.J. Sikorski, A.D. Sandler, and P. Kofinas *249th ACS National Annual Meeting*, Denver CO, March 2015

111. "Point-of-Care Diagnostic to Measure Blood Ammonia Levels" O.B. Ayyub, A.M. Behrens, B.T. Heligman, J.J. Ayoub, M. Summar, and P. Kofinas *Materials Research Society Fall Meeting*, Boston MA, December 2014

110. "In Situ Deposition of Polymer Nanofibers For Surgical Sealant Use" A.M. Behrens, M.J. Sikorski, K.L. Wu, A.D. Sandler, and Peter Kofinas *Materials Research Society Fall Meeting*, Boston MA, December 2014

109. "Stretchable Conductors Using Dual Nanoparticle Networks" M.Vural, A.M. Behrens, O.B. Ayyub, J.J. Ayyoub, and Peter Kofinas *Materials Research Society Fall Meeting*, Boston MA, December 2014

108. "Rapid Point of Care Detection of Hyperammonemia in Whole Blood" O. Ayyub, A. Behrens, G. Cunningham, K. Cusmano-Ozog, M. Summar, and P. Kofinas *Society for Inherited Metabolic Disorders Annual Meeting*, Pacific Grove CA, March 2014

107. "Hierarchically Architected MEMS-Based Lithium-Ion Microbattery with Solid Polymer Electrolyte" E. Pomerantseva, M. Khalid, M. Gnerlich, K. Gerasopoulos, P. Kofinas, R. Ghodssi. *Materials Research Society Fall Meeting*, Boston MA, December 2013.

106. "Nanostructured Elastic Magneto-Dielectrics for Radio Frequency Applications" M. Vural, B. Crowgey, L. Kempel, and P. Kofinas. *Materials Research Society Fall Meeting*, Boston MA, December 2013.

105. "Conformal Stretchable Conductors on 3-D Substrates" M. Vural, A. Behrens, and P. Kofinas. *Materials Research Society Fall Meeting*, Boston MA, December 2013.

104. "In situ Blow Spun PLGA Nanofibers as a Surgical Hemostatic" A.M. Behrens, M.J. Sikorski, W. Tutak, and P. Kofinas. *Biomedical Engineering Society Annual Meeting*, Seattle WA, September 2013.

103. "Point of Care Diagnostics for Inborn Errors of Metabolism"

O.B. Ayyub, A.M. Behrens, M.Natoli, J.J. Ayoub, J. Cabrera-Luque, G. Cunningham, M. Summar, J. Marugan, A. Simeonov, and P. Kofinas.

Biomedical Engineering Society Annual Meeting, Seattle WA, September 2013.

102. "Point of Care Sensing of Phenylketonuria"

O.B. Ayyub, A.M. Behrens, M.Natoli, J. Ayoub, J. Cabrera-Luque, G. Cunningham, M. Summar, J. Marugan, A. Simeonov, and P. Kofinas.

International Congress of Inborn Errors of Metabolism, Barcelona, Spain, September 2013.

101. "Color Responsive Polymer Films for Small Biomolecule Detection"

O.B. Ayyub, M. Ibrahim, and P. Kofinas

Biomedical Engineering Society Annual Meeting, October 2012, Atlanta Georgia.

100. "Hydrogel Microparticles for Hemostatic Application"

A.M. Behrens, Michael J. Sikorski, J.R. Hess, Z.J. Wu, B.P. Griffith, and P. Kofinas

Biomedical Engineering Society Annual Meeting, October 2012, Atlanta Georgia.

99. "Lithiated Block Copolymer Electrolytes with Ionic Liquids for Batteries"

A.S. Fisher, M.B. Khalid, and P. Kofinas

Pacific Rim Meeting on Electrochemical and Solid State Science (PRiME) October 2012, Honolulu, Hawaii.

98. "Block Copolymer Electrolytes with Sulfur-based Ionic Liquids for Lithium Batteries"

A.S. Fisher, M.B. Khalid, and P. Kofinas

63rd Annual Meeting of the International Society of Electrochemistry August 2012, Prague, Czech Republic.

97. "Protein Adsorption on Nanopatterned Block Copolymers"

J.S. Silverstein, B.J. Casey, B.J. Dair, and P. Kofinas

ACS National Meeting August 2012, Philadelphia, PA.

96. "Dry Polymer Electrolytes with Triethyl Sulfonium based Ionic Liquid Additives in Lithium Batteries" A.S. Fisher, M.B., Khalid, and P. Kofinas

16th International Meeting on Lithium Batteries (IMLB 2012), June 2012, Jeju, Korea.

95. "Understanding How Nanopatterning Affects Protein Deposition" B.J. Casey, J.S.

Silverstein, P. Kofinas, and B.J. Dair.

Nanotech Conference & Expo, Santa Clara, CA, June 2012.

94. "Color Changing Polymer for Chemical and Biological Agent Detection"

O.B. Ayyub, J.W. Sekowski, and P. Kofinas.

Chemical and Biological Defense Science and Technology Conference 2011, Las Vegas, Nevada, November 2011.

93. "Enzymatic Hydrogel Entrapment for On-Demand Decontamination of Chemical and Biological Agents" A.M. Mariani, J.W. Sekowski, and P. Kofinas.

Chemical and Biological Defense Science and Technology Conference 2011, Las Vegas, Nevada, November 2011.

92. "Self-assembled Virus Templates for the Improvement of Surface Enhanced Raman Spectroscopy"

Angela L. Fu, Adam Brown, Wei W. Yu, Ian M. White, James N. Culver, and P. Kofinas.
Biomedical Engineering Society Annual Fall Meeting, Hartford, Connecticut. October 2011.

91. "On-Demand Enzymatic Function: Entrapment Procedures Utilizing Hydrolysable Crosslinker PEGDA." A.M. Mariani, S. Jammula, and P. Kofinas
Biomedical Engineering Society Annual Fall Meeting, Hartford, Connecticut. October 2011.

90. "Synthesis and characterization of pH sensitive disulfide cross-linked polymer vector for the delivery of genes to MCF-7 breast cancer cells"
I. Bacalocostantis, A. Goodley, M. Kang, S.Muro, P. Kofinas
Biomedical Engineering Society Annual Fall Meeting, Hartford, Connecticut. October 2011

89. "Dry Polymer/Sulfur-Based Ionic Liquid Hybrid Electrolyte for Lithium Batteries" Fisher, A.S., Khalid, M.B., Widstrom, M. and P Kofinas
The Electrochemical Society Fall Meeting, October 2011, Boston, MA.

88. "Dry Polymer Electrolytes with Sulfur Based Ionic Liquids for Lithium Batteries"
Fisher, A.S., Khalid, M.B., Widstrom, M. and Kofinas, P., *International Society of Electrochemistry Annual Meeting*, September 2011, Niigata, Japan

87. "Towards a Dry Polymer/Sulfur-based Ionic Liquid Hybrid Electrolyte for Lithium-Ion Batteries" Fisher, A.S., Khalid, M.B., Widstrom, M. and Kofinas, P. *International Symposia on Advancing the Chemical Sciences-4: Challenges in Renewable Energy*, July 2011, Boston, MA.

86. "Polymer/Sulfur-Based Ionic Liquid Hybrid Electrolytes for Lithium Batteries" Aaron S Fisher, Mian B Khalid, Matthew Widstrom, and P. Kofinas *4th Biennial Conference on Ionic Liquids*, Washington, DC, June 2011.

85. "Safer high voltage polymer electrolyte for lithium batteries"
Aaron S Fisher, Mian B Khalid, Matthew Widstrom, and P. Kofinas, Mid Atlantic Regional Meeting, *American Chemical Society*, College Park, MD, May 2011

84. "Polymer-Ionic Liquid Hybrid Electrolytes for Lithium Batteries"
Aaron Fisher, and P. Kofinas.
Materials Research Society Fall Meeting, Boston, MA, December 2010.

83. "Photonic Polymers for Chemical and Biological Sensing"
Omar Ayyub, Jennifer Sekowski, and P. Kofinas.
Biomedical Engineering Society Meeting, Austin TX, October 2010.

82. "Effects of Nanoscale Topography and Charge on Endothelial Cell Spreading and Proliferation" Joshua Silverstein, Esmaeel Paryavi, Helim Aranda-Espinoza, Benita Dair, and P. Kofinas. *Biomedical Engineering Society Meeting*, Austin TX, October 2010.

81. "Polymer Hydrogel for Hemostatic Application" Adam Behrens, Brendan Casey, Zois Tsinas, John Hess, Zhongjun Wu, Bartley Griffith, and P. Kofinas. *Biomedical Engineering Society Meeting*, Austin TX, October 2010.

80. "Coagulation-inducing polymer hydrogel for hemostatic application" B.J. Casey, A.M. Behrens, Z.I. Tsinas, J.R. Hess, W.E. Kelley, Z.J. Wu, B.P. Griffith, and P. Kofinas. *American Chemical Society National Meeting, Polymer Chemistry*, Boston MA, August 2010

79. "Coagulation-Inducing, Synthetic Polymer Hydrogel" B.J. Casey, A.M. Behrens, B.P. Griffith, and P. Kofinas. *Biomedical Engineering Society Meeting*, Pittsburgh, PA, 2009.
78. "Molecularly Imprinted Polymers for the Selective Recognition of Proteins" Omar Ayyub, and P. Kofinas. *Biomedical Engineering Society Meeting*, Pittsburgh, PA, 2009.
77. "Growth of anionic micelles in polymer solutions and hydrogels" Wonjoo Lee, P. Kofinas, and Robert M. Briber. *American Chemical Society National Meeting, Polymer Materials Science and Engineering*, Washington DC, August 2009.
76. "Effect of particle domain wall movement and characteristic length on the radio frequency magnetodielectric properties of polymer composites" Ta-I Yang, Rene Brown, and P. Kofinas. *American Chemical Society National Meeting, Polymer Materials Science and Engineering*, Washington DC, August 2009.
75. "Nanostructured solid battery electrolytes with enhanced performance" Ayan Ghosh, and P. Kofinas. *American Chemical Society National Meeting, Polymer Materials Science and Engineering*, Washington DC, August 2009.
74. "Coagulation-inducing, hemostatic synthetic polymer hydrogel" B.J. Casey, A.M. Behrens, and P. Kofinas. *American Chemical Society National Meeting, Polymer Materials Science and Engineering*, Washington DC, August 2009.
73. "Silent packaging for gene silencing: Tobacco mosaic virus RNAi delivery" C. W.Hung, E. R. Howarth, H. C. Wu, A. D. Brown, C. Y. Tsao, P. Kofinas, J.N. Culver, W.E. Bentley *American Chemical Society National Meeting*, Philadelphia, PA, August 2008.
72. "Low Loss Polymer Nanoparticle Composites for Radio Frequency (RF) Applications" Ta-I Yang, Leo C. Kempel, and P. Kofinas. *Materials Research Society Fall Meeting 12/08*, Boston, MA.
71. "Solutions for flexible energy systems: Block copolymers" Ayan Ghosh, and P. Kofinas. *Materials Research Society Fall Meeting 12/08*, Boston, MA.
70. "Self-assembly of virus-templated nanoparticles and surfaces" James N. Culver, Elizabeth Royston, Michael T Harris, Ayan Ghosh, and P. Kofinas. *American Chemical Society Meeting 08/08*, Philadelphia PA.
69. "Small Angle Neutron Scattering of Micelles in Polymer Solutions and Hydrogels" Wonjoo Lee, P. Kofinas, R. M. Briber. *American Conference on Neutron Scattering 05/2008*, Santa Fe, NM.
68. "The Creation of Structured Hydrogels using micelles as Templates" Wonjoo Lee, P. Kofinas, R. M. Briber. *American Physical Society 03/2008*, New Orleans, LA.
67. "PEO-based block copolymer as solid stated lithium battery electrolyte" Ayan Ghosh, and P. Kofinas. *212th Meeting of the Electrochemical Society*, 10/07, Washington DC.

66. "Selective Binding of Peptides and Proteins Using Molecular Imprinted Polymers" Daniel S. Janiak, James N. Culver, and P. Kofinas *Biomedical Engineering Society Meeting 09/07*, Los Angeles, CA.
65. "RNA Packaging and Gene Delivery Using Tobacco Mosaic Virus Pseudo-Virion" Chi-Wei Hung, James N. Culver, Elizabeth Royston, P. Kofinas, and William E. Bentley *Biomedical Engineering Research Society Meeting 09/07*, Los Angeles, CA.
64. "Effects of solution properties and complexation time on the swelling degree of xanthan-chitosan hydrogels" Sanem Argin, P. Kofinas, and Y. Martin Lo *Institute of Food Technologists Annual Meeting, 07/08*, Chicago IL.
63. "PEO based block copolymer as an all-solid state battery electrolyte" A. Ghosh, and P. Kofinas. *American Chemical Society National Meeting, Polymer Chemistry, Chicago, IL, March 2007*.
62. "Molecularly imprinted polymers for selective recognition of signal peptides" Daniel S. Janiak, and P. Kofinas *233rd ACS National Meeting, 03/07, Chicago, IL, March 2007*.
61. "A Study of homogeneity and template removal during virus imprinted polymer synthesis" Linden D. Bolisay, James N. Culver, and P. Kofinas *233rd ACS National Meeting, Chicago, IL, March 2007*.
60. "Block copolymer templated surfactant-modified magnetic nanoparticles" Ta-I Yang, Leo C. Kempel, and P. Kofinas *233rd ACS National Meeting, 03/07, Chicago, IL*.
59. "Nanopatterning of Viruses and Proteins Using Microphase Separated Block Copolymers" Arthur V. Cresce, and P. Kofinas *APS March Meeting 03/06*, Baltimore, MD.
58. "Block Copolymer Nanocomposites for RF Magneto-dielectric Applications" T-I Yang, and P. Kofinas *APS March Meeting 03/06*, Baltimore, MD.
57. "Self Assembled CoFe₂O₄ Nanoparticles within Block Copolymer Films: Structural and Magnetic Properties" G.C. Papaefthymiou, A.J. Viescas, S.R. Ahmed, P. Kofinas *APS March Meeting 03/06*, Baltimore, MD.
56. "Separation of histidine-tagged green fluorescent protein by a norbornene diblock copolymer" Arthur V. Cresce, Angela T. Lewandowski, William E. Bentley, and P. Kofinas *BMES Annual Fall Meeting 09/05*, Baltimore, MD
55. "Virus recognition using molecularly imprinted polymer hydrogels" Linden D. Bolisay, James N. Culver, and P. Kofinas *BMES Annual Fall Meeting 09/05*, Baltimore, MD
54. "Synthesis of Ordered Fe₂O₃ Nanoparticles within Norbornene Methanol/Norbornene Dicarboxylic Acid Diblock Copolymers" Pinar Akcora, Robert M. Briber, and P. Kofinas *APS March Meeting 03/05*, Los Angeles, CA.

53. "Selective adsorption of histidine-tagged green fluorescent protein by a norbornene diblock copolymer" Arthur V. Cresce, Angela T. Lewandowski, William E. Bentley, and P. Kofinas *ACS National Meeting 08/04*, Washington, DC.
52. "Virus recognition using molecularly imprinted polymer hydrogels" Linden D. Bolisay, James N. Culver, and P. Kofinas *ACS National Meeting 08/04*, Washington, DC.
51. "Incorporation of iron oxide nanoparticles into microphase separated poly(norbornene)-*block*-poly(deuterated norbornene dicarboxylic acid) diblock copolymers" Pinar Akcora, Robert M. Briber, and P. Kofinas *ACS National Meeting 08/04*, Washington, DC.
50. "High dielectric constant block copolymer nanocomposites" Ta-I Yang, Pinar Akcora, and P. Kofinas *ACS National Meeting 08/04*, Washington, DC.
49. "Synthesis of Ordered Fe₂O₃ Nanoparticles within Norbornene Methanol/Norbornene Dicarboxylic Acid Diblock Copolymers" Pinar Akcora, Robert M Briber, and P. Kofinas *APS March Meeting 03/05*, Los Angeles, CA.
48. "Recognition of Viruses Using Molecularly Imprinted Polymers" P. Kofinas *AIChE Annual Meeting 11/04*, Austin, TX.
47. "Biomimetic Recognition of Viruses Using Molecularly Imprinted Polymer Hydrogels" E. Chang, L. D.V. Bolisay, J.N. Culver, W. E. Bentley, P. Kofinas *Biomedical Engineering Research Society Meeting 10/04*, Philadelphia, PA.
46. "CoFe₂O₄/block copolymer nanocomposite films: synthesis and characterization", G. Papaefthymiou, A.J. Viescas, S.R. Ahmed, P. Kofinas *American Chemical Society National Meeting 8/04*, Philadelphia, PA.
45. "Isomeric Glucose Recognition Using Molecularly Imprinted Polymer Hydrogels" P. Kofinas *MRS Fall Meeting 12/03*, Boston, MA.
44. "Biomimetic recognition of viruses using molecularly imprinted polymer hydrogels" L. Bolisay, P. Kofinas *MRS Fall Meeting 12/03*, Boston, MA.
43. "Biomimetic glucose recognition using molecularly imprinted polymer hydrogels" P. Kofinas *AIChE Annual Meeting 11/03*, San Francisco, CA.
42. "Magnetic Properties Characterization of Block Copolymer Templated Iron Oxide Nanoparticles Using Conventional Magnetometry and Neutron Scattering" P. Akcora, R. M. Briber, P. Kofinas *MRS Fall Meeting 12/03*, Boston MA.
41. "Design and Testing of an All-Solid State Polymer Nanoscale Battery" S. E. Bullock, P. Kofinas *MRS Fall Meeting 12/03*, Boston, MA.
40. "Biomimetic Glucose Recognition Using Molecularly Imprinted Polymer Hydrogels" P. Parmpi, P. Kofinas, *AIChE National Meeting, 11/03*, San Francisco, CA.
39. "Polymeric Anion Exchange Resins For Removal of Nutrient and Toxic Anions from Wastewater" D. R. Kioussis, P. Kofinas *AIChE National Meeting, 11/02*, Indianapolis, IN.

38. "Polymeric Nanoscale All-Solid State Battery" S. E. Bullock, S. R. Ahmed, P. Kofinas *MRS Spring Meeting*, 4/02, San Francisco, CA.
37. "Molecularly Imprinted Polymer Hydrogels Displaying Isomeric Sugar Biorecognition" P. Parmpi, P. Kofinas *MRS Spring Meeting*, 4/02, San Francisco, CA.
36. "Synthesis and Characterization of Optically Transparent Ferromagnetic Polymer-Cobalt Oxide Nanocomposites" S.R. Ahmed, S.E. Bullock P. Kofinas *MRS Spring Meeting*, 4/02, San Francisco, CA.
35. "An Investigation on the Influence of Block Ratio on the Magnetic Properties and Hyperfine Structure of CoFe_2O_4 Magnetic Nanoparticles Within Block Copolymer Templates" S. R. Ahmed, R. Ramesh, S. B. Ogale, G. C. Papaefthymiou, P. Kofinas *MRS Spring Meeting*, 4/02, San Francisco, CA.
34. "Synthesis & Characterization of Piezoelectric ZnO Nanostructures. Integration with Si Processing" A. V. Cresce, H. A. Ali, A. A. Iliadis, P. Kofinas *MRS Spring Meeting*, 4/02, San Francisco, CA.
33. "Properties of self-assembled ZnO nanostructures on Si and SiO_2 wafers", H. Afroz Ali, A. V. Cresce, A. A. Iliadis, P. Kofinas, U. Lee. *International Semiconductor Device Research Symposium* 12/01, Washington DC.
32. "Magnetic and Optical Properties of Cobalt Oxide Nanoclusters Within Block Copolymer Templates", S. R. Ahmed, P. Kofinas. *AIChE Annual Meeting* 11/01, Reno, NV.
31. "Magnetic Properties and Hyperfine Structure of CoFe_2O_4 Nanoclusters Within Block Copolymer Templates", S. R. Ahmed, P. Kofinas. *AIChE Annual Meeting* 11/01, Reno, NV.
30. "Self-Assembled ZnO Nanostructures Within a Diblock Copolymer Matrix on SiO_2 Surfaces", A. A. Iliadis, H.A. Ali, R. F. Mulligan, U. Lee, and P. Kofinas. *Electronic Materials Conference* 6/01, Notre Dame, IN.
29. "Polymeric Nanoscale Batteries" S. F. Bullock, and P. Kofinas. *MRS Meeting* 12/00, Boston, MA.
28. "Synthesis of Metal-Oxide Nanostructures in a Diblock Copolymer Matrix and Integration onto Semiconductor Surfaces" R. Mulligan, A.A. Iliadis, U. Lee, and P. Kofinas. *MRS Meeting* 12/00, Boston, MA.
27. "Microstructure and Magnetic Properties of CoFe_2O_4 Nanoclusters Within Block Copolymers" S. R. Ahmed, and P. Kofinas. *MRS Fall Meeting* 12/00, Boston, MA.
26. "Pollutant Anion Removal and Recovery from Wastewater by Polymer Hydrogels in Batch and Continuous-Flow Reactors" D. R. Kioussis, and P. Kofinas. *AIChE Meeting* 11/00, Los Angeles, CA.
25. "Isomerically Specific Molecularly Imprinted Polymers for Glucose" P. Kofinas, W. W. Wizenman. *AIChE Annual Meeting* 11/00, Los Angeles, CA.

24. "Characterization of Polymeric Hydrogel Network Topography" D. R. Kioussis, and P. Kofinas. *AIChE Annual Meeting 11/00*, Los Angeles, CA.
23. "Glucose Specific Polymeric Molecular Imprints" W. W. Wizeman, and P. Kofinas. *ACS Annual Meeting 8/00*, Washington DC.
22. "Selective Anion Sorption and Recovery from Wastewater by Polyelectrolyte Hydrogels" D.R. Kioussis, and P. Kofinas. *ACS Annual Meeting 8/00*, Washington DC.
21. "Synthesis and Characterization of ZnO Nanoparticles Within Diblock Copolymer Templates" R. F. Mulligan, A. A. Iliadis, and P. Kofinas. *ACS Annual Meeting 8/00*, Washington DC.
20. "Synthesis and characterization of block copolymer-CoFe₂O₄ nanoclusters: Parameters influencing the magnetic properties of the nanocomposite" S.R. Ahmed, and P. Kofinas. *ACS Meeting 8/00*, Washington DC.
19. "Ammonium Perchlorate Binding Polymeric Hydrogels for Wastewater Remediation" D. F. Smith, D. R. Kioussis, and P. Kofinas. *AIChE Annual Meeting 11/99*, Dallas TX.
18. "Structure, Thermal and Mechanical Properties of Polycarbonate Blends" J. R. Blackwood, and P. Kofinas. *AIChE Annual Meeting 11/99*, Dallas TX.
17. "Selective Removal and Recovery of Nutrient Anions from Wastewater in a Continuous Fixed-Bed Process" D. R. Kioussis, and P. Kofinas. *AIChE Annual Meeting 11/99*, Dallas TX.
16. "Nanoporous Gas Transport in Semicrystalline Block Copolymers" Peter Kofinas , Peter L. Drzal, Sufi R. Ahmed, *MRS Spring Meeting 4/99*, San Francisco, CA.
15. "Magnetic Properties of Fe₂O₃ and CoFe₂O₄ Nanoclusters Within Block Copolymer Templates" Sufi R. Ahmed, and P. Kofinas. *MRS Spring Meeting 4/99*, San Francisco, CA.
14. "Aquaculture Wastewater Remediation Using Anion Binding Polymeric Hydrogels" D.R. Kioussis, F.W. Wheaton, and P. Kofinas *Aquaculture America 1/99*, Tampa, FL
13. "Anion Binding Polymeric Hydrogels for Wastewater Remediation" D.R. Kioussis, and P. Kofinas *AIChE Annual Meeting 11/98*, Miami FL.
12. "Orientation Texture and Gas Transport in Semicrystalline Block Copolymer Blends" P. Kofinas *ACS Rubber Division Meeting Invited Talk 9/98*, Nashville, TN.
11. "SAXS Studies of the Transverse Orientation Texture in Plane Strain Compression of Semicrystalline Triblock Copolymers" P. Kofinas, P.L. Drzal. *ACS Annual Meeting 8/98*, Boston MA.
10. "Phosphate Binding Polymeric Hydrogels For Aquaculture Wastewater Treatment" D. R. Kioussis, F. W. Wheaton, and P. Kofinas. *World Aquaculture Society Meeting 2/98*, Las Vegas NV.
9. "Crystallization Within Confined E/EP/E Triblock Copolymer Morphologies" P.L. Drzal, J.D. Barnes, and P. Kofinas. *MRS Fall Meeting 12/97*, Boston, MA.

8. "Gas Transport in Microporous Semicrystalline E/EP/E Triblock Copolymer Membranes" P. L. Drzal and P. Kofinas. *AIChE National Meeting 11/97*, Los Angeles, CA.
7. "Characterization of Network Morphology and Measurement of Phosphate Diffusion in Pharmaceutical Polymeric Hydrogels" ^P. Kofinas, and R.E. Cohen. *MRS Meeting 12/96*, Boston, MA.
6. "Characterization of Gels for Pharmaceutical Applications" ^P. Kofinas and R. E. Cohen. *AIChE National Meeting 11/96*, Chicago, IL.
5. "Melt Processing of Semicrystalline Block Copolymers Near the Order-Disorder Transition" P. Kofinas, and R. E. Cohen. *AIChE National Meeting 11/94*, San Francisco, CA.
4. "Shear Induced Morphology of Semicrystalline Diblock and Triblock Copolymers" P. Kofinas, and R. E. Cohen. *MRS Fall Meeting 12/93*, Boston, MA.
3. "Morphology and Gas Permeability of E / EP Semicrystalline Diblock Copolymers" P. Kofinas, and R. E. Cohen. *AIChE National Meeting 11/93*, St. Louis, MO.
2. "Self-Assembly in Branched Liquid Crystalline Polymers" C. W. Lantman, D. Nerger, D. A. Wicks, A. Karbach, P. Kofinas, S. K. Starry. *ACS Annual Meeting 1990*, Atlanta, GA.
1. "SANS Studies of the Configurations of Single Chains in Heterogeneous Block Copolymers", C.V. Berney, P.L. Cheng, P. Kofinas, and R.E. Cohen. *MRS Fall Meeting 12/87*, Boston, MA.

Patents

Patents Issued

“Device and methods of using device for detection of hyperammonemia”

O. B. Ayyub, A. M. Behrens, P. Kofinas, M. L. Summar, J. M. Cabrera-Luque, G. Cunningham, A. Simeonov, J. Marugan
US Patent Number 10,620,187
Application No 15/933,834
Issued April 14, 2020

“Solution Blow Spun Polymer Fibers, Polymer Blends Therefor and Methods of Use Thereof”

Adam Behrens, Peter Kofinas, Michael Sikorski, Anthony Sandler, Priya Srinivasan
International Publication No. WO 2015/160706
PCT International Application No. PCT/US15/25576
Issued October 22, 2015

“Polymer Solid Electrolyte For Flexible Batteries”

P. Kofinas, Ayan Ghosh
US Patent No 9,252,456. Issued February 2, 2016

“Color Changing Polymer Films for Detecting Chemical and Biological Targets”

P. Kofinas, Omar Ayyub, Jennifer Sekowski, Ta-I Yang
US Patent No. 9,115,240. Issued August 25, 2015

“Imprinted Polymeric Materials for Binding Various Targets Such as Viruses”

P. Kofinas, Daniel Janiak
US Patent No 8,138,289. Issued March 20, 2012
Licensed to Raptor Detection Technologies

“Nanoscale Solid-State Polymeric Battery System.”

P. Kofinas, Steven Bullock
US Patent 7,063,918. Issued June 20, 2006

“Controlled Room Temperature Synthesis of Magnetic Metal Oxide Nanoclusters Within a

Diblock Copolymer Matrix” P. Kofinas, Sufi R. Ahmed
US Patent No 6,991,741 B2. Issued January 31, 2006

Patent Applications Filed

“Polymer Blends with Improved Performance in Health Care Applications”

U.S. Provisional Application No.: 62/816,568

Filing Date: [March 11, 2019](#)

Inventors: John Daristotle, Shadden Zaki, Peter Kofinas, Anthony Sandler, Lung Lau, Leopoldo Torres

“High Performance Air Stable Solid Polymer Electrolyte”

U.S. Patent Application No.: 16/241,913

Filing Date: [January 7, 2019](#)

Matthew D. Widstrom; Peter Kofinas; Arthur V. Cresce; and Kang XU

“Nanostructured Magneto-dielectrics for Radio Frequency Applications”

Mert Vural, Peter Kofinas

US. Provisional Application No. 62/084367, filed November 25, 2014

“Device and Methods of Using Device for Detection of Aminoacidopathies”

Omar Ayyub, Adam Behrens, P. Kofinas, Marshal Summar, Juan Luque-Cabrera, Gary Cunningham, Juan Jose Marugan, Anton Simeonov

International Patent Application Number PCT/US13/65548

Filed October 17, 2013

“Blood Coagulation-Inducing Polymer Hydrogel”

Brendan Casey, P. Kofinas, Adam Behrens, Bartley Griffith

US Patent Application PCT US2009/063049

Filed May 3, 2011

“Lithiated Block Copolymer with Ionic Liquid for Lithium Batteries”

Aaron Fisher, Mian Khalid, P. Kofinas

University of Maryland Invention Disclosure PS-2012-103 (filed 9/11/2012)

“Solid Polymer Electrolyte for Safer Lithium Batteries”

Aaron Fisher, P. Kofinas

University of Maryland Invention Disclosure PS-2011-007 (filed 2/1/2011)

“Improved Polymer Vector for Gene Delivery”

Irene Bacalocostantis, P. Kofinas

US Provisional Patent application 61/309080 (filed 3/1/2010)

“Nanostructured Colorimetric Coating for Pathogen Detection”

P. Kofinas, Daniel S. Janiak, Ta-I Yang LS-2008-022

US Provisional Patent application Serial 61/032448 filed 2/29/2008

“Polymer Sensor for Virus Detection”

P. Kofinas, Angela Li-Hui Fu

US Provisional Patent application Serial No 61/163,963

Teaching, Mentoring and Advising

Courses Taught

- “Chemical Engineering Thermodynamics I” (CHBE 301, Enrollment=30, 2022)
- “Design and Processing of Polymers for Biomedical Devices” (CHBE 457, Enrollment=30, 2018, 2019, 2020, 2021)
- “Biomaterials” (BIOE 453 Enrollment = 80) (2015, 2016, 2017)
- “Introduction to Engineering Design” (ENES 100. Enrollment=50) (2006-2014)
- “Biology for Engineers Laboratory” Polymer lab module (BIOE 121 Enrollment=23, 2007)
- “Nanotechnology: Applications and Societal Implications” (HONR 239X. Enrollment=20)
- “Chemical Engineering Thermodynamics” (ENCH 300. Enrollment = 30)
- “Polymers, Biopolymers and their Application in Nano- and Bio-technology” (ENCH 490, ENMA 495, ENCH 648P, BIOE 689P, ENMA 698K, Enrollment = 27)
- “Introduction to Polymer Science and Engineering” (ENCH 490, ENMA 495. Enrollment = 15)
- “Processing and Engineering of Polymers” (ENCH 496, ENMA 496. Enrollment = 15)

Advising: Research

Undergraduate

Undergraduate students who have conducted research in Kofinas Lab (96 total):

- Chemical Engineering Undergraduates (42 total):

Robert LaPointe	Eric Reichelt	Jesse Matthews
Massi Djouini	Christopher Louzon	Chidera Daniella
Albert Djoum	Bianca Meinhardt	Daniel Venooker
Adam M. Behrens	Rene Brown	Matthew J. Getz
Samuel J. Lopez	Lioudmilla Legkodimova	Benjamin L. Lebron
Jiayan Li	George K. Ngatha	Ayodeji O. Ibidapo
Camaro Nurimba	Alicia M Tucker	Bernard I. Onyenemezu
Nishant Merchant	Jissu R. Abraham	Sakirat Bello
Luke N. Georgalas	Michael F. Jerla	Mohamad O. Makhmalbaf
Ankit R. Patel,	Daniel F. Smith	Joshua Silverstein
Dimitris J. Tsilikis	Wilkins Njinguet	Abdelrahman Aboelata
Bianca Meinhardt	Olivier Izmerly	Rae Correll-Brown
Kobe Grismore	Christopher Acha	Nilam Patel
Christia Ellerman	Hannah LaPadula	Jacob Blinkoff

- Bioengineering Undergraduates (23 total):

Michael Ibrahim,	Mian Khalid,	Mary Natoli	Siri Jammula,
Addison Goodley	Laith Abu-Taleb	David Blumenstyk	Esmaeel Paryavi
Michael Kang	Kathleen Farhang	Omar Ayyub,	Rachel Emmel
Kelsey Harrison	Vasudha Kowtha	Michael Sikorski	Dalton Chasser
Emmanuel D. Tito	Metecan Erdi	Darya Goudarzi	Havisha Garimella
Nealyn Jahangir	John Abdou	Jacob Sandler	

- Materials Science Undergraduates (14 total):

Shadden Zaki	Benjamin Shefter	Takeisa Rowlett	Michael M. Dollinger
Matthew Widstrom,	Santiago Miret	Brian Heligman	Joseph Ayoub

Aristotelis Zografos
Ashley Hammell

Seyeon Kim
Akash Lujan

Jacob Myers

Vincent Lan

• Summer REU students (non UMCP, 17 total):

Sabeeha Chowdhury,	Sergey Denisovich,	Emily Chang,	Jana Rauzin
Kyle Boone,	Erin Heermance	Michael Urban,	Erica Snow
Angela Mariani	Rachel Emmel	Steven Csernica	Tibra Wheeler
Fauziah Rahma Zakaria	Shadden Zaki	Artemis Margaronis	Alex Mitelopoulos
Max Freidlin			

Master's

M.S. Students Who Have Graduated with last known placement (9 Total):

- Manogna Balabhadrapatruni, M.S. Thesis, 08/21, Chemical Engineering, Amgen, Boston, MA
- Joseph W. Hunter, MS. Thesis, 05/18, Bioengineering
- Kankindi Rwego, M.S. Thesis 12/13, Bioengineering, IP Associate UMD.
- Paraskevi Parmpi, M.S. Thesis 9/02, Materials Sci. & Eng., Project Manager, UPenn.
- Robert F. Mulligan, M.S. Thesis 8/01, Materials Sci. & Eng., now at Arsenal Medical, Boston, MA.
- William W. Wizeman M.S. Thesis 8/00, Materials Sci. & Eng., Now at Asthmatx, Inc., Mountain View, CA.
- Dimitri R. Kioussis, M.S. Thesis 6/98, Chemical Eng., continued as PhD student
- P. L. Drzal, M.S. Thesis 6/98, Materials Sci. & Eng., Now at Protection Engineering, Pittsburgh, PA.
- Ke Yu, MS Non-Thesis 6/04, Materials Sci. & Eng., *Wall Street*

Kofinas advising activities serving as member of MS Thesis Committees

- Heather St. Pierre, MS 2005 (T. Barbari, Advisor)
- Kai-Chi Lai, MS 2004 (R. Briber, Advisor)
- Alessi, Michael, MS 2002 (S. Greer Advisor)
- Hongxia Feng, MS 2002 (M. Al-Sheikhly, Advisor)
- Chia-Hsiang Huang MS 2001 (T. Barbari ,Advisor)
- Timir Misra, MS, 1998 (L. Martinez-Miranda, Advisor)

Doctoral

PhD. Students Who Have Graduated with last known placement (23 Total):

- Metecan Erdi, PhD 01/23, Chemical & Biomolecular Engr, PostDoc, Harvard U.
- Matthew Widstrom, PhD 01/20, Materials Science & Engr, FDA
- John L. Daristotle, PhD 12/19, Bioengineering, PostDoc MIT
- Leopoldo Torres Jr., PhD 8/19, Bioengineering, American Dental Association
- Mert Vural, PhD 1/16, Materials Science and Engineering, Postdoc at Penn State
- Adam Behrens, PhD 8/15, Bioengineering, CEO, Mori, Inc
- Omar Ayyub, PhD 8/14, Bioengineering, Sensionics, Inc.
- Angela Fu, PhD 9/13, Bioengineering, Accenture, Silver Spring MD.
- Aaron Fisher, PhD 12/12, Chemical & Biomolecular Engineering, now at Energetics Inc., Columbia, MD.
- Joshua Silverstein, PhD 6/12, Bioengineering, FDA, Silver Spring MD.

- Angela Mariani, PhD 6/12, Bioengineering, FDA, Silver Spring MD.
- Irene Bacalocostantis, PhD 6/12, Bioengineering, Stryker Corporation, NY, NY.
- Brendan Casey, PhD 12/10, Bioengineering, 3M, Minneapolis MN.
- Ayan Gosh, PhD 12/09, Chemical Eng., Intel Corp, San Francisco, CA.
- Daniel Janiak, PhD 05/09, Materials Science & Eng., Draper Fisher Jurvetson, San Diego, CA.
- Ta-I Yang, PhD 12/08, Chemical Eng., now Assistant Prof. Chung Yuan Christian University, Taiwan.
- Sanem Argin, PhD 12/08, Nutrition & Food Sci., now Assistant Prof., Yeditepe University, Istanbul Turkey.
- Linden D. Bolisay, PhD 08/07, Chemical Eng., now at L'Garde Inc., Tustin CA.
- Arthur V. Cresce, PhD 01/07 Materials Science & Eng., now at Army Research Lab, Adelphi, MD.
- Pinar Akcora, PhD 08/05, Chemical Eng., Associate Prof., Stevens Institute of Technology.
- Steven F. Bullock, PhD 12/03, Materials Sci. & Eng., now at Lockheed Martin, Palmdale CA.
- Sufi R. Ahmed, PhD 12/02, Materials Sci. & Eng., now at Intel Corp., Portland OR.
- Dimitri R. Kioussis, Ph.D. 12/00, Chemical Eng., Sr. Manager, EUV Lithography Development at ASML / Cymer, San Diego, CA

Current Ph.D. Students:

- Tejaswi Nori, PhD candidate, Chemical and Biomolecular Engineering
- Robert Morris, PhD candidate, Chemical and Biomolecular Engineering
- Kyle Ludwig, PhD candidate, Chemical and Biomolecular Engineering
- Rebecca Fedderwitz, PhD candidate, Materials Science and Engineering
- Patricia Gonzales, PhD candidate, Materials Science and Engineering

Kofinas advising activities serving as member of PhD. And MS Dissertation Committees

- Leah Borden Klein, PhD 2022 (S. Raghavan, Advisor)
- Beihan Zhao, PhD 2022 (Siddharta Das, Advisor)
- Sai Nikhil Subraveti, PhD 2022 (S. Raghavan, Advisor)
- Snehi Shrestha, MS 2022 (P-Y Chen, Advisor)
- Richa Lahoti, PhD 2022 (M. Leite, Advisor)
- Mark Wallace, PhD 2021 (L. Sita, Advisor)
- Joshua Webb, PhD 2021 (G. Scarcelli, Advisor)
- Louis Born, PhD 2021 (S. Jay, Advisor)
- Christina Conrad, PhD 2021 (G. Scarcelli, Advisor)
- Ruben Acevedo, PhD 2021 (R. Sochol, Advisor)
- Cesar Torres Luna, PhD 2021 (R. Briber, Advisor)
- Van Belleghem Sara, PhD 2020 (J.P. Fisher, Advisor)
- Lampouguin Yenkoidiok-Douti, PhD 2020 (S. Jay, Advisor)
- Niksa Roki, PhD 2020 (S. Muro, Advisor)
- Anjana Jeyaram, PhD 2019 (S. Jay, Advisor)
- Matthew Thum, PhD 2019 (Daniel Falvey, Advisor)
- George Banis, PhD 2019 (Reza Ghodssi, Advisor)
- Hieu Nguyen, PhD 2019 (I. White, Advisor)
- Divya Patel, PhD 2019 (S. Jay, Advisor)
- Lisa Tostanoski, PhD 2017 (C. Jewell, Advisor)
- James Andorko, PhD 2017 (C. Jewell, Advisor)

- Darryl Sampey, PhD 2016 (W.E. Bentley, Advisor)
- Zois Tsinas, PhD 2016 (M. Al-Sheikhly, Advisor)
- Rasa Ghaffarian, PhD 2015 (S. Muro, Advisor)
- Elliot Bartis, PhD 2015 (G. Oehrlein, Advisor)
- Amy Lee, PhD 2015 (J. Seog, Advisor)
- Daniel Serrano, PhD 2014 (S. Muro, Advisor)
- Juan Ceballos, PhD 2013 (A. Bar-Cohen, Advisor)
- Ian Gifford, PhD 2013 (M. Al-Sheikhly, Advisor)
- Soroush Yadzi, PhD 2013 (I. White, Advisor)
- Wei Wen Yu, PhD 2013 (I. White, Advisor)
- Yaolin Liu, PhD 2013 (B. Mi, Advisor)
- Kathleen Malinowski, PhD 2012 (W. D'Souza, Advisor)
- Hsuan-Chen Wu, PhD 2011 (W. Bentley, Advisor)
- Sang Hak Shin, PhD 2011 (R. Briber, Advisor)
- Christopher Byrd, PhD 2011 (W. Bentley, Advisor)
- Ling Ma, PhD 2011 (S. Shamma, Advisor)
- Marina Chumakov, PhD 2010 (M. Al-Sheikhly, Advisor)
- Steven Yang, PhD 2010 (J. Bernstein, Advisor)
- Robert Bruce, PhD 2010 (G. Oehrlein, Advisor)
- Liyu Yang, PhD 2009 (J. Bernstein, Advisor)
- Wonjoo Lee, PhD 2009 (R. Briber, Advisor)
- Michael Kasser, PhD 2009 (M. Al-Sheikhly, Advisor)
- Neil Campell, PhD 2008 (S. Rokita, Advisor)
- Xin Zhang, PhD 2008 (R. Briber, Advisor)
- Diana Yoon, PhD 2008 (J. Fisher, Advisor)
- Bani Cipriano, PhD 2007 (S. Raghavan, Advisor)
- Chen-Yu Tsao, PhD 2007 (W. Bentley, Advisor)
- Matthew Harney, PhD 2006 (L. Sita, Advisor)
- Emily Weinert, PhD 2006 (S. Rokita, Advisor)
- Inuka Dissanayake, PhD 2006 (P. Dimitrakopoulos, Advisor)
- Chong Yung, PhD 2006, (Barbari/Bentley, Advisor)
- Oluwatosin Ogunsola, PhD 2006 (S. Ehrman, Advisor)
- Sheng Li, PhD 2006 (R. Ghodssi, Advisor)
- Hongxia Feng, PhD 2005 (R. Briber, Advisor)
- Raj Bahadur, PhD 2005 (A. Bar-Cohen, Advisor)
- Thomas M. Weathers, PhD 2005 (S. Rokita, Advisor)
- Marc Garland, PhD 2004 (M Al-Sheikhly, Advisor)
- Stefania Korontzi, PhD 2004 (C. Justice, Advisor)
- Chaiwat Engtrakul, PhD 2003 (L. Sita Advisor)
- Seok Il Yun, PhD 2002 (R. Briber, Advisor)
- Kevin McDermott, PhD 2002 (R. Briber, Advisor)
- Yufei Hu, PhD 2002 (L. Martinez-Miranda, Advisor)
- Pierpoint Sujita, PhD 2002 (M. Al-Sheikhly Advisor)
- David Green, PhD 2001 (M. Harris Advisor)
- Keita F. Broadwater, PhD 2001 (P. Mead Advisor)
- Ursula Perez-Salas, PhD, 2000 (R. Briber, Advisor)
- Sangwook Choi, PhD, 1999 (R. Briber, Advisor)
- Li-Te Ho, PhD, 1998 (R. Briber, Advisor)