

Curriculum Vita**ACADEMIC HISTORY**

- **Name:** Jason Locklin
- **Present Rank:** Associate Professor
- **Assignment:** 0.5-EFT Research and 0.25-EFT Instruction
- **Graduate Faculty Status:** Appointed to Graduate Faculty in January 2007

Education

- **Ph.D. in Chemistry**, specialization in Polymer Chemistry, University of Houston, Houston, TX, 2004
- **M.S. in Chemistry**, University of Alabama at Birmingham, Birmingham, AL, 2002
- **B.S. in Chemistry**, Millsaps College, Jackson, MS, 1999

Positions Held

- **July 2012-present:** Associate Professor, Department of Chemistry and College of Engineering, University of Georgia, Athens, GA
- **January 2007-June 2012:** Assistant Professor, Department of Chemistry and Faculty of Engineering, University of Georgia, Athens, GA
- **September 2011-present:** Director Integrated Bioscience and Nanotechnology Cleanroom
- **December 2004-December 2006:** Postdoctoral Scholar, Department of Chemical Engineering, Stanford University, Stanford, CA, (Research Advisor: Zhenan Bao)
- **August 2002-December 2004:** Graduate Research Associate, University of Houston, Houston, TX (Research Advisor: Rigoberto Advincula)
- **January 2000-August 2002:** Graduate Research Associate, University of Alabama Birmingham, Birmingham, AL (Research Advisor: Rigoberto Advincula)

Awards and Honors

- **National Science Foundation Faculty Early Career Development Award** (2010-2015)
- **Intelligence Community Young Investigator Award** (2007-2009)
- **NE Georgia Section ACS Chemist of the Year for Research** (2010)

SCHOLARLY AND RESEARCH ACTIVITIES**1. Research Grants, Awards, and Gifts*****Grants Funded (Total Amount: \$1,992,897)***

Date	Title	Source	Amount	Role
10/12-9/15	A Universal Method to Attach Multiple Functionality to Both Functional and Chemically Inert Fibers using Photochemical Activation Strategies	US Army	145,000	PI (100%)
04/11-03/14	Collaborative Research: Using Conjugated Polymer Brushes to Control Interfacial Properties and	National Science Foundation (NSF)	\$270,000	PI (100%)

	Morphology of Polymer Solar Cells			
05/10-05/15	CAREER: Tailoring Photo-Switchable Interfaces using Functional Polymer Brushes	NSF	\$490,000	PI (100%)
08/09-08/12	Smart Autonomous Nanomotors through Orthogonal Self-Assembly	NSF	\$300,009	PI (55%)
08/10-08/11	Sponsored Research Agreement	TYCO Electronics	\$40,000	PI (100%)
01/09-08/11	Reconstituting Enzymes for Direct Electron Transfer through Surface Initiated Polymerization of Conjugated Polymers	American Chemical Society Petroleum Research Fund	\$100,000	PI (100%)
07/07-07-10	Light Responsive Organic Actuators	Central Intelligence Agency	\$442,500	PI (100%)
09/10-08/11	Hydrophobic Bioplastics Made From Potato Starch	UGA BSRI Seed Grant	\$20,000	PI (100%)
01/09-05/10	Rapid Screening of Adhesin Binding using Surface Plasmon Resonance Imaging and Sub-Nanomolar Detection using a Novel Mismatch Detection Algorithm	UGA OVPR Infectious Disease Seed Grant	\$30,000	PI (100%)
01/08-12/09	Using Nanotechnology to Create Antimicrobial Coatings	State of Georgia Traditional Industries Program	\$144,500	PI (75%)
01/08-12/09	Controlled Release of Small Molecule Therapeutics using Surface Initiated Ring Opening Metathesis Polymerization	UGA OVPR Young Faculty Grant	\$10,888	PI (100%)

2. Patents and Copyrights (5)

- Patent disclosure: “Photochemical cross-linkable polymers, methods of making photochemical cross-linkable polymers, and methods of using photochemical cross-linkable polymers,” (PCT/US2010/24422), Inventors: Jason Locklin (75%), Ian Hardin (15%), Satyabrata Samanta (11%), and Vikram Dhende (9%), 2010.
- Patent disclosure: “Synthesis and Application Reactive Antimicrobial Copolymers for Textile Fibers,” US Prv 61/328,879 filed 4/26/10 (222102-8145), Inventors: Jason Locklin (75%), Ian Hardin (15%), Vikram Dhende (10%)
- Provisional patent disclosure: “Surface Immobilization Utilizing Light-Activated, Metal-Free Click Chemistry,” US Prv 61/370,919, Inventors: Jason Locklin, Vladimir Popik, Selvanathan Arumugam, filed 08/05/10
- Provisional patent disclosure: “A Micro-scale Non-spherical Polymer Particle Synthesis Method,” US Prv 61/327,774, filed 04/26/2010, Inventors: Leidong Mao, Jason Locklin, Taotao Zhu, and Gareth Sheppard
- Provisional patent disclosure: “Micro-scale Inductors,” US Prv 61/364,607, filed 07/14/2010, Inventors: Leidong Mao and Jason Locklin

3. Publications

Summary: 66 publications, 31.8 citations per publication (total citations: 2,098), H-index: 27.

([‡]Indicates graduate students for whom Dr. Locklin served as major professor. [#]Indicated undergraduate student for whom Dr. Locklin served as an advisor. *Indicates the corresponding author)

Books (1) and Book Chapters (2)

1. "Organic Field-Effect Transistors," Z. Bao and J. Locklin, Editors, CRC Press, 1st Edition (2007)
2. "Electro-optical Applications of Conjugated Polymer Thin Films." N. Marshall[‡], S.K. Sontag[‡], and J. Locklin*, Wiley, VCH, in *Functional Polymer Films, Volume 2: Characterization and Applications* (2011)
3. "Formation of Photo-Responsive Surfaces by Surface-Initiated Ring Opening Metathesis Polymerization and Atom Transfer Radical Polymerization: Reversible Optodes for Metal Ion Sensors." S. Samanta, K. Fries[‡], S. Orski[‡] and J. Locklin*, *Smart Coatings III, Chapter 6, p 73-85. ACS Symposium Series, Vol. 1050* (2010).

Refereed Journal Articles (66)

66. Arumugam, S.; Orski, S.V.; Mbuja, N.E.; McNitt, C.; Boons, G.-J.; Locklin, J.; Popik, V.V. "Photo-click chemistry strategies for spatiotemporal control of metal-free ligation, labeling, and surface derivatization" *Pure Appl. Chem.*, 2013, 85, 1499-1513. [DOI: 10.1351/PAC-CON-13-01-08](https://doi.org/10.1351/PAC-CON-13-01-08)
65. White, E.M.; Yatvin, J.; Grubbs III, J.B.; Bilbrey, J.A., Locklin, J. "Advances in smart materials: Stimuli-responsive hydrogel thin films" *J. Polym. Sci. Part B Polym. Phys.*, 2013, 51, 1084-1099. [DOI: 10.1002/polb.23312](https://doi.org/10.1002/polb.23312)
64. Zhou, J.; Samanta, S.; Guo, C.; Locklin, J.; Xu, B. "Measurements of Contact Specific Low-bias Negative Differential Resistance of Single Metalorganic Molecular Junctions" *Nanoscale*, 2013, 5, 5715-5719. [DOI: 10.1039/C3NR01284K](https://doi.org/10.1039/C3NR01284K)
63. Arnold, R.M.; Locklin, J. "Self-sorting Click Reactions that Generate Spatially Controlled Chemical Functionality on Surfaces" *Langmuir*, 2013, 29, 5920-5926. [DOI: 10.1021/la4012857](https://doi.org/10.1021/la4012857)
62. Bilbrey, J.A.; Kazez, A.H.; Locklin, J.; Allen, W.D. "Exact ligand cone angles" *J. Comp. Chem.*, 2013, 34, 1189-1197. [DOI: 10.1002/jcc.23217](https://doi.org/10.1002/jcc.23217)
61. Orski, S.; Sheppard, G.; Arumugam, S.; Arnold, R.; Popik, V.; Locklin, J. "Rate Determination of Azide Click Reactions onto Alkyne Polymer Brush Scaffolds: A Comparison of Conventional and Catalyst-free Cycloadditions for Tunable Surface Modification," *Langmuir*. 2012, 28, 14693-14702. [DOI: 10.1021/la3032418](https://doi.org/10.1021/la3032418)
60. Yang, L.; Sontag, S.K.; LaJoie, T.W.; Li, W.; Huddleston, N.E.; Locklin, J.; You, W. "Surface-Initiated Poly(3-methylthiophene) as a Hole-Transport Layer for Polymer Solar Cells with High Performance," *ACS Appl. Mater. Interfaces*, 2012, 4, 5069-5073. [DOI: 10.1021/am301401n](https://doi.org/10.1021/am301401n)
59. Huddleston, N.E.; Sontag, S.K.; Bilbrey, J.; Sheppard, G.; Locklin, J. "Palladium-Mediated Surface-Initiated Kumada Catalyst Polycondensation: A Facile Route Towards

Oriented Conjugated Polymers," *Macromol. Rapid Comm.*, 2012. DOI: [10.1002/marc.201200472](https://doi.org/10.1002/marc.201200472)

58. Bilbrey, J.A.; Sontag, S.K.; Huddleston, N.E.; Allen, W.D.; Locklin, J. "On the Role of Disproportionation Energy in Kumada Catalyst-Transfer Polycondensation," *Macro. Lett.*, 2012, 1, 995-1000. DOI: [10.1021/mz3002929](https://doi.org/10.1021/mz3002929)

57. Arnold, R.; Sheppard, G.; Locklin, J. "Comparative Aminolysis Kinetics of Different Active Ester Polymer Brush Platforms in Postpolymerization Modification with Primary and Aromatic Amines," *Macromolecules*, 2012, 45, 5444-5450. DOI: [10.1021/ma3005839](https://doi.org/10.1021/ma3005839)

56. Arnold, R.; Huddleston, N.E.; Locklin, J. "Utilizing Click Chemistry to Design Functional Interfaces through Post-Polymerization Modification," *J. Mater. Chem.*, 2012, Advance Article. DOI: [10.1039/C2JM31708G](https://doi.org/10.1039/C2JM31708G)

55. Kastner, J.; Miller, J.; Geller, D.; Locklin, J.; Keith, L.; Johnson, T. "Catalytic esterification of fatty acids using solid acid catalysts generated from biochar and activated carbon," *Catalysis Today*, 2012, 190, 122-132. DOI: [10.1016/j.cattod.2012.02.006](https://doi.org/10.1016/j.cattod.2012.02.006)

54. Arumugam, A.; Orski, S.; Locklin, J.; Popik, V. "Photoreactive Polymer Brushes for High Density Surface Patterned Derivatization Using Diels-Alder Photo-click Reaction," *J. Am. Chem. Soc.*, 2012, 134, 179-182. DOI: [10.1021/ja210350d](https://doi.org/10.1021/ja210350d)

53. Marshall, N.; Locklin, J. "Reductive electrografting of benzene (p-bisdiazonium hexafluorophosphate): a simple and effective protocol for creating diazonium-functionalized thin films," *Langmuir*, 2011, 27, 13367-13373. DOI: [10.1021/la2024617](https://doi.org/10.1021/la2024617)

52. Fries, K.; Driskell, J.; Sheppard, G.; Locklin, J. "Fabrication of Spiropyran-containing Thin Film Sensors used for the Simultaneous Identification of Multiple Metal Ions," *Langmuir*, 2011, 19, 12253-12260. DOI: [10.1021/la202344w](https://doi.org/10.1021/la202344w)

51. Sontag, K.; Sheppard, G.; Usselman, N.; Marshall, N.; Locklin, J. "Surface-Confined Nickel Mediated Cross-Coupling Reactions: Characterization of the Initiator Environment in Kumada Catalyst-Transfer Polycondensation," *Langmuir*, 2011, 27, 12033-12041. DOI: [10.1021/la202911t](https://doi.org/10.1021/la202911t)

50. Dhende, V.; Samanta, S.; Jones, D.M.; Hardin, I.R.; Locklin, J. "One-Step Synthesis of Permanent, Nonleaching, Ultrathin Antimicrobial Coatings for Textiles and Plastics," *Applied Materials & Interfaces*, 2011, 3, 2830-2837. DOI: [10.1021/am200324f](https://doi.org/10.1021/am200324f)

49. Sheppard, G.; Oseki, T.; Baba, A.; Patton, D.; Kaneko, F.; Mao, L.; Locklin, J. "Thiolene-based microfluidic flow cells for surface plasmon resonance imaging," *Biomicrofluidics*, 2011, 2, 26501-26507. DOI: [10.1063/1.3596395](https://doi.org/10.1063/1.3596395)

48. Orski, S.; Fries, K.; Sontag, S.K.; Locklin, J. "Templating nanostructures using polymer brushes," *J. Mater. Chem.* 2011, 21, 14135-14149. DOI: [10.1039/C1JM11039J](https://doi.org/10.1039/C1JM11039J)

47. Marshall, N.; Sontag, S.K.; Locklin, J. "Surface-initiated polymerization of conjugated polymers," *Chem. Comm.* 2011, 47, 5681-5689. DOI: [10.1039/C1CC10483G](https://doi.org/10.1039/C1CC10483G)

46. Hensarling, R.M.; Rahane, S.B.; LeBlanc, A.P.; Sparks, B.J.; White, E.M.; Locklin, J.; Patton, D.L. "Thiol-isocyanate "click" reactions: rapid development of functional polymeric surfaces," *Polymer Chemistry* 2011, 2, 88-90. [DOI:10.1039/C0PY00292E](https://doi.org/10.1039/C0PY00292E)
45. Orski, S.V.; Poloukhine, A.A.; Arumugam, S.; Mao, L.; Popik, V.V.; Locklin, J. "High Density Orthogonal Surface Immobilization via Photoactivated Copper-Free Click Chemistry," *J. Am. Chem. Soc.* 2010, 132, 11024-11026. [DOI: 10.1021/ja105066t](https://doi.org/10.1021/ja105066t)
44. Fries, K.H.; Driskell, J.D.; Samanta, S.; Locklin, J. "Spectroscopic Analysis of Metal Ion Binding in Spiropyran Containing Copolymer Thin Films," *Anal. Chem.*, 2010, 82, 3306-3314. [DOI: 10.1021/ac1001004](https://doi.org/10.1021/ac1001004)
43. Marshall, N.; Sontag, S. K.; Locklin, J. "Substituted poly(p-phenylene) Thin Films via Surface-Initiated Kumada-type Catalyst Transfer Polycondensation," *Macromolecules*, 2010, 43, 2137-2144. [DOI: 10.1021/ma902710j](https://doi.org/10.1021/ma902710j)
42. Orski, S.V.; Fries, K.H.; Sheppard, G.R.; Locklin, J. "High Density Scaffolding of Functional Polymer Brushes: Surface Initiated Atom Transfer Radical Polymerization of Active Esters," *Langmuir*, 2010, 26, 2136-2143. [DOI: 10.1021/la902553f](https://doi.org/10.1021/la902553f)
41. Ito, Y.; Virkar, A.A.; Mannsfeld, S.C.B.; Oh, J.H.; Toney, M.; Locklin, J.; Bao, Z. "Crystalline Ultra Smooth Self-Assembled Monolayers of Alkanesilanes for Organic Field Effect Transistors," *J. Am. Chem. Soc.*, 2009, 131, 9396-9404. [DOI: 10.1021/ja9029957](https://doi.org/10.1021/ja9029957)
40. Sontag, S. K.; Marshall, N.; Locklin, J. "Formation of Conjugated Polymer Brushes by Surface-Initiated Catalyst-Transfer Polycondensation," *Chem. Comm.*, 2009, 3354-3356. [DOI: 10.1039/b907264k](https://doi.org/10.1039/b907264k)
39. Fries, K.; Samanta, S.; Orski, S.; Locklin, J. "Reversible Colorimetric Ion Sensors Based on Surface-Initiated Polymerization of Photochromic Polymers," *Chem. Comm.*, 2008, 6288. [DOI: 10.1039/b818042c](https://doi.org/10.1039/b818042c)
38. Samanta, S.; Locklin, J. "Formation of Photochromic Spiropyran Polymer Brushes via Surface-Initiated, Ring-Opening Metathesis Polymerization: Reversible Photocontrol of Wetting Behavior and Solvent Dependent Morphology Changes," *Langmuir*, 2008, 24, 9558-9565. [DOI: 10.1021/la8017387](https://doi.org/10.1021/la8017387)
37. Roberts, M.E.; Mannsfeld, S.C.B.; Queraltó, N.; Reese, C.; Locklin, J.; Knoll, W.; Bao, Z. "Water-stable organic transistors and their application in chemical and biological sensors," *Proc. Natl. Acad. Sci. USA*, 2008, 105, 12134-12139. [DOI: 10.1073/pnas.0802105105](https://doi.org/10.1073/pnas.0802105105)
36. Virkar, A.; Ling, M.-M.; Locklin, J.*; Bao, Z.* "Oligothiophene based organic semiconductors with cross-linkable benzophenone moieties", *Synthetic Metals*, 2008, 158, 958-963. [DOI:10.1016/j.synthmet.2008.06.019](https://doi.org/10.1016/j.synthmet.2008.06.019)
35. Becerril, H.A.; Roberts, M.E.; Liu, Z.; Locklin, J.; Bao, Z. "High-Performance Organic Thin Film Transistors through Solution Sheared Deposition of Small Molecule Organic Semiconductors," *Adv. Mater.*, 2008, 20, 2588-2594. [DOI:10.1002/adma.200703120](https://doi.org/10.1002/adma.200703120)

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33. Jiang, G.; Baba, A.; Ikarashi, H.; Xu, R.; Locklin, J.; Kashif, K. R.; Shinbo, K.; Kato, K.; Kaneko, F.; Advincula, R. "Signal Enhancement and Tuning of Surface Plasmon Resonance in Au Nanoparticle/Polyelectrolyte Ultrathin Films," *J. Phys. Chem. C.*, 2007, 111, 18687-18694
32. Shin, T. J.; Yang, H.; Ling, M.; Locklin, J.; Yang, L.; Lee, B.; Roberts, M. E.; Mallik, A. B.; Bao, Z. "Tunable Thin-Film Crystalline Structures and Field-Effect Mobility of Oligofluorene-Thiophene Derivatives," *Chem. Mater.* 2007, 19, 5882-5889.
31. Liu, S.; Briseno, A.L.; Mannsfeld, S.C.B.; You, W.; Locklin, J.; Lee, H.W.; Xia, Y.; Bao, Z. "Selective crystallization of organic semiconductors on patterned templates of carbon nanotubes," *Adv. Funct. Mater.*, 2007, 17, [2891-2896](https://doi.org/10.1002/adfm.200700289).
30. Liu, S.; Wang, W.M.; Mannsfeld, S.C.B.; Locklin, J.; Erk, P.; Gomez, M.; Richter, F. Bao, Z. "Solution-assisted assembly of organic semiconducting single crystals on surfaces with patterned wettability," *Langmuir*, 2007, 23, 7428-7432.
29. Fujiwara, T.; Locklin, J.; Bao, Z. "Solution-deposited liquid crystalline semiconductors on a photo-alignment layer for organic thin film transistors," *Appl. Phys. Lett.*, 2007, 90, 232108
28. Mannsfeld, S.C.B.; Locklin, J.; Reese, C.; Roberts, M.; Lovinger, A.J.; Bao, Z. "Probing the Anisotropic Field Effect Mobility of Solution-Deposited Dihexyl- α -Quarterthiophene Single Crystals," *Adv. Funct. Mater.*, 2007, 17, 1617-1622.
27. Ling, M.-M.; Erk, P.; Gomez, M.; Koenemann, M.; Locklin, J.; Bao, Z. "Air-stable n-channel Organic Semiconductors Base on Perylene Diimide Derivatives without Strong Electron Withdrawing Groups," *Adv. Mater.*, 2007, 19, 1123-1127.
26. Sung, A.; Ling, M. M.; Tang, M. L.; Bao, Z.*; Locklin, J.* "Correlating Molecular Structure to Field-Effect Mobility: The Investigation of Side-Chain Functionality in Phenylene-Thiophene Oligomers and Their Application in Field Effect Transistors", *Chem. Mater.*, 2007, 19, [2342-2351](https://doi.org/10.1021/cm0702351).
25. Tang, M. L.; Roberts, M. E.; Locklin, J. J.; Ling, M. M.; Meng, H.; Bao, Z. "Structure Property Relationships: Asymmetric Oligofluorene-Thiophene Molecules for Organic TFTs", *Chem. Mater.*, 2006, 18, 6250-6257.
24. Liu, S.; Tok, J.B.H.; Locklin, J.; Bao, Z. "Assembly and Alignment of Metallic Nanorods on Surfaces with Patterned Wettability", *Small*, 2006, 2, 1448-1453.
23. Locklin, J.; Ling, M.-M.; Sung, A.; Roberts, M.E.; Bao, Z. "High Performance Organic Semiconductors Based on Fluorene-phenylene Oligomers with High Ionization Potentials", *Adv. Mater.* 2006, 18, 2989-2992.
22. Locklin, J.; Bao, Z. "Effect of Morphology on Organic Thin Film Transistor Sensors" *Anal. Bioanal. Chem.* 2006, 384(2), 336-42.

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20. Locklin, J.; Roberts, M.E.; Mannsfeld, S.C.B.; Bao, Z. "Optimizing the Thin Film Morphology of Organic Field-Effect Transistors: The Influence of Molecular Structure and Vacuum Deposition Parameters on Device Performance." *Journal of Macromolecular Science: Polymer Reviews*, 2006, 46, 79.
19. Millan, M.; Locklin, J.; Fulghum, T.; Baba, A.; Advincula, R. "Polymer Thin Film Photodegradation and Photochemical Crosslinking: FT-IR Imaging, Evanescent Waveguide Spectroscopy, and QCM Investigations" *Polymer*, 2005, 46(15), 5556-5568.
18. Locklin, J.; Li, D.; Mannsfeld, S.C.B.; Borken, E.-J.; Meng, H.; Advincula, R.; Bao, Z. "Organic Thin Film Transistors Based on Cyclohexyl-Substituted Organic Semiconductors." *Chem. Mater.* 2005, 17(13), 3366-3374.
17. Deng, S.; Locklin, J.; Patton, D.; Baba, A.; Advincula, R. "Thiophene Dendron Jacketed Poly(amidoamine) Dendrimers: Nanoparticle Synthesis and Adsorption on Graphite." *J. Am. Chem. Soc.* 2005, 127(6), 1744-1751.
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14. Katsuki, K.; Bekku, H.; Kawakami, A.; Locklin, J.; Patton, D.; Tanaka, K.; Advincula, R.; Usui, H. "Preparation of Carbazole Polymer Thin Films Chemically Bound to Substrate Surface by Physical Vapor Deposition Combined With Self-Assembled Monolayer." *Jpn. J. Appl. Phys.* 2005, 44(1B), 504-508.
13. Xia, C.; Fan, X.; Locklin, J.; Advincula, R.C. "Characterization, Supramolecular Assembly, and Nanostructures of Thiophene Dendrimers." *J. Am Chem. Soc.*, 126(28), [8735-8743](#).
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11. Park, M.-K.; Onishi, K.; Locklin, J.; Caruso, F.; Advincula, R. C. "Self-Assembly and Characterization of Polyaniline and Sulfonated Polystyrene Multilayer-Coated Colloidal Particles and Hollow Shells." *Langmuir* 2003, 19(20), 8550-8554.
10. Youk, J. H.; Locklin, J.; Prussia, A.; Advincula, R.C. "Energy Transfer in Poly(3-thiopheneacetic acid) and Oligothiophene Polyelectrolyte-Surfactant Complexes." *Langmuir* 2003, 19(19), 8119-8121.
9. Locklin, J.; Shinbo, K.; Onishi, K.; Kaneko, F.; Advincula, R.C.; Bao, Z. "Ambipolar

Organic thin film transistor-like behavior of cationic and anionic phthalocyanines fabricated using layer-by-layer deposition from aqueous solution." Chem. Mater. 2003, 15(7), 1404-1412.

8. Fan, X.; Xia, C.; Fulghum, T.; Park, M.-K.; Locklin, J.; Advincula, R. C. "Polymer Brushes Grafted from Clay Nanoparticles Adsorbed on a Planar Substrate by Free Radical Surface-Initiated Polymerization." Langmuir 2003, 19(3), 916-923.

7. Fan, X.; Locklin, J.; Youk, J.H., Blanton, W.; Xia, C.; Advincula, R.C. "Nanostructured Sexithiophene/Clay Hybrid Multilayers: A Comparative Structural and Morphological Characterization." Chem. Mater. 2002, 14(5), [2184-2191](#).

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5. Youk, J.H.; Park, M.-K.; Locklin, J.; Advincula, R.C.; Yang, J.; Mays, J. "Preparation of Aggregation Stable Gold Nanoparticles Using Star-Block Copolymers." Langmuir 2002, 18(3), 877-883.

4. Locklin, J.; Youk, J.H., Xia, C.; Park, M.-K.; Fan, X.; Advincula, R.C. "Nanostructured Ultrathin Films of Water-Soluble Sexithiophene Bolaform Amphiphiles Prepared by Layer-by-Layer Self-Assembly." Langmuir 2002, 18(3), 877-883.

3. Youk, J.H.; Locklin, J.; Xia, C.; Park, M.-K.; Advincula, R.C. "Preparation of Gold Nanoparticles from a Polyelectrolyte Complex Solution of Terthiophene Amphiphiles." Langmuir 2001, 17(15); 4681-4683.

2. Xia, C.; Locklin, J.; Youk, J.H.; Fulghum, T.; Advincula, R.C. "Distinct Aggregation and Fluorescence Properties of a Water-Soluble Oligothiophene (6TN) Bolaform Amphiphile." Langmuir 2002, 18(3), 955-957.

1. Youk, J.H.; Locklin, J.; Xia, C.; Park, M.-K.; Advincula, R.C. "Preparation of Gold Nanoparticles from a Polyelectrolyte Complex Solution of Terthiophene Amphiphiles." Langmuir 2001, 17(15); 4681-4683.

4. Invited Seminars and Presentations (38)

Invited International Presentations (8)

1. International Conference of Young Researchers on Advanced Materials, Singapore, July 2, 2012.
2. Anna University, Department of Chemistry, Chennai, India, January 20, 2012.
3. SRM University, Department of Biochemical Engineering, Chennai, India, January 21, 2012.
4. Peking University, Institute of Microelectronics, Beijing, China, July 19, 2011
5. Niigata University, Department of Electrical Engineering, Niigata, Japan, December 8, 2009
6. Institute of Electronics, Information and Communication Engineers, Shinetsu-Branch, Niigata, Japan, December 8, 2009
7. Mie University, Department of Electrical and Electronic Engineering, Mie, Japan, September 11, 2008
8. International Symposium on Electrical Insulating Materials, Yokkaichi City, Japan, September 8, 2008

Selected Invited National Presentations and Seminars (37)

1. "Creating Complex Interfaces using Orthogonal Click Reactions," Smart Coatings 2013, Orlando, FL, February 20-22, 2013.
2. "Creating Conjugated Polymer Brushes Using Surface Initiated Polymerization," ACS Meeting, New Orleans, LA, April 9, 2013.
3. "Creating Conjugated Polymer Brushes Using Surface Initiated Polymerization," IUPAC-MMC-15, Greenville, SC August 13, 2013.
4. "Creating Complex Interfaces Using Orthogonal Click Reactions," ACS Meeting, Indianapolis, IA, September 6, 2013.
5. "Creating Complex Interfaces Using Orthogonal Click Reactions," SERMACS, Atlanta, GA November 15, 2013.
6. "Making Surfaces Smart," Natick Soldier Research and Development Center, May 13, 2013, Natick, MA.
7. "Introduction to Nanotechnology," Loganville Christian Academy, December 10, 2013, Loganville, GA.
8. American Chemical Society National Meeting, Division of Polymer Chemistry, Philadelphia, PA, August 20, 2012.
9. Materials Research Society *National Meeting, Boston, MA, December 1, 2011.*
10. Georgia State University, Department of Chemistry, Atlanta, GA, November 22, 2011.
11. American Chemical Society National Meeting, Division of Polymer Chemistry, Denver, CO, August 29, 2011
12. Proctor and Gamble, Cincinnati, OH, May 12, 2011
13. Georgia Tech, Center for Organic Photonics and Electronics, Atlanta, GA, May 26, 2011
14. University of Florida, Department of Chemistry, Gainesville, FL, April 26, 2011
15. University of North Carolina, Department of Chemistry, Chapel Hill, NC, March 3, 2011
16. North Carolina State University, Department of Chemical Engineering, Raleigh, NC, March 2, 2011
17. American Chemical Society Southeast/Southwest Regional Meeting, New Orleans, LA, December 2, 2010
18. University of Southern Mississippi, School of Polymers and High Performance Materials, Hattiesburg, MS, November 30, 2010
19. Clemson University, Department of Chemical Engineering, Clemson, SC, September 24, 2010
20. Georgia College & State University, Department of Chemistry, Milledgeville, GA, March 19, 2010
21. Kennesaw State University, Department of Chemistry, Kennesaw, GA, April 8, 2010
22. Southeast Regional ACS Undergraduate Research Conference, Kennesaw State University, Kennesaw, GA April 9, 2010
23. University of South Carolina, Department of Chemistry, Columbia, SC, October 15, 2009
24. American Chemical Society National Meeting, San Francisco, CA, March 22, 2010
25. Thermo Fisher Research Symposium, Albuquerque, NM, February 24, 2010
26. Nano-Enabled Technology Initiative Technical Working Group, Director of Central Intelligence, Chantilly, VA, January 19, 2010
27. The Fiber Society International Meeting, Plenary Lecture, Athens, GA, October 28, 2009
28. Southern Illinois Carbondale, Department of Chemistry, Carbondale, IL, October 22, 2009
29. University of Georgia, Department of Microbiology, March 5, 2009
30. Georgia Symposium on Nanotechnology in Infectious Disease, Athens, GA, February

19, 2009

31. University of North Florida, Department of Chemistry and Physics, Jacksonville, FL, November 7, 2008
32. Director of Central Intelligence Research Colloquia, Chantilly, VA, April 30, 2009
33. American Chemical Society National Meeting, Salt Lake City, UT, March 25, 2009
34. Smart Coatings 2009, Orlando, FL, February 27, 2009
35. Materials Research Society Spring 2008 Meeting, San Francisco, CA, March 25, 2008
36. American Chemical Society National Meeting, Division of Polymer Chemistry, Boston, MA, August 22, 2007
37. Director of Central Intelligence Postdoctoral Research Colloquia, Chantilly, VA, April 17, 2007

5. Professional Society Membership

- American Chemical Society, 2000-present
- Materials Research Society, 2005-present
- The Fiber Society, 2007-present

6. Supervision of Graduate Student and Postdoctoral Research

Postdoctoral Research Associates (1)

- Satyabrata Samanta, Ph.D., Chemistry, 2007-2010. (Currently research faculty at the University of North Dakota)

Major Professor to PhD. Students (16)

Graduate:	Year	Degree Program, Year Received (Current Position)
Nicholas Marshall	2007-2010	PhD, Chemistry, December 2010 (NOAA, Charleston, SC)
Sara Orski	2007-2011	PhD, Chemistry, July 2011 (NIST, Gaithersburg, MD)
Kristen Fries	2007-2011	PhD, Chemistry, July 2011, (Gainesville State Community College, Instructor)
Vikram Dhende	2008-2011	PhD, Family and Consumer Sciences, July 2011, (Voight Fibers, South Carolina)
Gareth Sheppard	2008-2012	PhD, Chemistry, December 2012 (Eastman Chemical, Tennessee)
Eric Huddleston	2011-2013	PhD, Chemistry, August 2013
Evan White	2009-present	PhD, Chemistry,
Rachelle Arnold	2009-present	PhD, Chemistry
Joe Grubbs	2010-present	PhD, Chemistry
Jenna Bilbrey	2010-present	PhD, Chemistry
Jeremy Yatvin	2011-present	PhD, Chemistry
Jing Gao	2011-present	PhD, Chemistry
Anandi Roy	2011-present	PhD, Chemistry
Alex Orlov	2012-present	PhD, Chemistry
Josh Valencia	2012-present	PhD, Chemistry
Karson Brooks	2013-present	PhD, Chemistry
Deborah Lehman	2013-present	PhD, Chemistry

Major Professor to Masters Students (1)

Graduate:	Degree Program, Year Received (Current Position)
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Abul Giasuddin	2008-2011	MS, Biological and Agricultural Engineering, July 2011, (Research Assistant, BAE Department, UGA)
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7. Mentor for Undergraduate Research Experience

Students from within the University (15)

Bethany Wigington	2007-2008	BS, May 2008 (Graduate Student, University of California, Santa Barbara)
Kenneth Yamamoto	2007-2009	BS, May 2009 (Research Scientist, US Army Corps of Engineers, Hanover, NH)
David Asman	2008	BS, May 2009
Patrick Graham	2008	BS, August 2009
Kendra Bryant	2008	
Michelle Skilag	2008	BS, May 2008
Jeff Photakis	2008-2009	
Neil Linder	2008-2009	
Paul Oyler	2009	BS, May 2009
Matthew Nguyen	2009	BS, May 2009 (Pharmacy School, Mercer Univ.)
Kyle Harris	2009	
Chris Parsons	2010	
Danny Walden	2011-present	BS, Biochemistry Major
Ashton Moradi	2011-present	BS, Biochemistry Major
Nathan Usselman	2011-present	BS, Chemistry Major

Undergraduate students from outside the University (2)

Cassandra Skaggs	2008	Chemistry, Albany State University, Summer Undergraduate Research Experience at UGA
Keresten Goodman	2008	Chemistry, Albany State University, Summer Undergraduate Research Experience at UGA

High School Students (2)

Crystal Chukwah	2010	Winder Barrow High School, UGA Young Dawgs Program
Anne Saunders	2007	Classic City Performance Learning Center High School, Athens, GA

8. Instructional Funding Received for Supporting Student Research

Summer Undergraduate Research Program: 2007-2009: Summer Intern fellowships for Kenneth Yamamoto (\$5000), Bethany Wigington (\$5000), Kendra Bryant (\$5000), Cassandra Skaggs (\$5000), and Keresten Goodman (\$5000). Each stipend includes \$500 for materials and supplies for the PI's laboratory.

CURO Summer Fellowship: Nathan Usselman, Summer 2011

PUBLIC, PROFESSIONAL, AND UNIVERSITY SERVICES

1. University Service

- UGA Office of Vice President of Research Advisory Council (2011-present)
- UGA Faculty of Infectious Diseases Advisory Council (2011-present)
- UGA Honors Faculty Mentor (2008-present)
- Nanoscale Science and Engineering (NanoSEC) Advisory Board (2009-present)

- Nanoscale Science and Engineering Cleanroom Committee (2009-present)
- Nanoscale Science and Engineering Cleanroom Co-Director (2009-present)
- Honors Faculty Mentor (2007-present)

2. Department Service

Chemistry Department Committees

- Member, Organic Faculty Search Committee, 2011
- Member, Inorganic/Analytical Faculty Search Committee, 2010
- Member, Inorganic Faculty Search Committee 2009
- Member, Website Development Committee (2009-present)
- Member, Undergraduate Advising Committee (2009-2011)
- Member, Graduate Curriculum Committee (2009-present)
- Served on Ph.D. Committees for 30 graduate students (2007-2011)

Faculty of Engineering Committees

- Chair, Engineering Faculty Search Committee, 2013
- Member, Biochemical Engineering Search Committee, 2009
- Member, Biochemical Engineering Search Committee, 2010
- Member, Biochemical Engineering Search Committee, 2011
- Vice Chair, Biochemical Engineering ABET committee (2009-present)
- Academic Advisor, Faculty of Engineering (2007-present)
- Summer Orientation, Freshman and Transfer Student Orientation (2007-present)

3. Professional Service

Organization of Professional Conferences

- Co-Chair and Symposium Organizer, Materials Research Society Spring 2008 Meeting Symposium AA: Conjugated Organic Materials – Synthesis, Structure, Device, and Applications, March 24-28, 2008, San Francisco, CA
- Symposium Organizer, American Chemical Society Joint Southeast-Southwest Regional Meeting – Functional Polymer Surfaces and Interfaces, December 1-4, 2010

Manuscript Reviewer

- Served as a peer-reviewer of manuscripts for the following professional journals: *Journal of the American Chemical Society*, *Macromolecules*, *Biomacromolecules*, *Organic Letters*, *Chemistry of Materials*, *Journal of Organic Chemistry*, *Langmuir*, *Advanced Materials*, *Advanced Functional Materials*, *ACS Applied Materials and Interfaces*, *Chemical Communications*, *Journal of Materials Chemistry*, *Polymer Chemistry*, *Sensors and Actuators B*, *Thin Solid Films*, *ACS Nano*, *Journal of Biological Engineering*

Grant Review Panels

National Science Foundation

- Division of Materials Research - Materials World Network Panel
- Division of Electrical, Communications, and Cyber Systems - Optics and Photonics Panel
- Chemistry Division - Macromolecular, Supramolecular, and Nanochemistry Panel

Department of Defense and the American Society for Engineering Education

- National Defense Science and Engineering Graduate Fellowship Panel

Grant Proposal Reviews

- Served as a peer-reviewer of proposals for the following external funding agencies: National Science Foundation – Chemistry, National Science Foundation – Polymers, American Chemical Society Petroleum Research Fund, Army Research Office, Oak Ridge National Lab User Proposals

4. Public Service

High School Student Mentor

- Research mentor to Anne Saunders, high school student from the Classic City Performance Learning Center High School, Athens, GA. Anne completed a senior design project through which she learned about alternative energies by constructing a Stirling Engine that ran on candlelight (2007).
- UGA Young Dawgs Mentor to Crystal Chukwah from Winder Barrow High School (2010).
- Research mentor to Hunter Perlman, Oconee County High School, Watkinsville, GA