

S. Michael Kilbey II

Group Leader and UT/ORNL Joint Faculty

Macromolecular Nanomaterials Group
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Education

University of Wisconsin, Madison, WI	Chemical Engineering	B.S., 1990
University of Minnesota, Minneapolis, MN	Chemical Engineering	Ph.D., 1996

Professional Experience

8/2011-present	Professor, Department of Chemistry Courtesy appointment in Chemical and Biomolecular Engineering University of Tennessee, Knoxville, TN
10/2008-present	Group Leader, Macromolecular Nanomaterials group Center for Nanophase Materials Science, Oak Ridge National Laboratory
1/2008-8/2011	Associate Professor, Department of Chemistry University of Tennessee, Knoxville, TN
2001-2007	Associate Professor, Department of Chemical Engineering Clemson University, Clemson, SC
1996-2001	Assistant Professor, Department of Chemical Engineering Clemson University, Clemson, SC
1990-1995	Graduate Research Assistant, Department of Chemical Engineering and Materials Science, University of Minnesota, Minneapolis, MN (advisors: Matthew Tirrell and Frank Bates)
Summer 1990	Researcher and Engineer (level G13), United States Department of Agriculture Forest Products Laboratory, Madison, WI.
1989-1990	Undergraduate Researcher, Department of Chemical Engineering University of Wisconsin, Madison (with Camden Coberly)

Professional and Synergistic Activities

2006-p	Member, Sigma Xi
2006-2007	President, User's Executive Committee, Center for Nanophase Materials Science, ORNL 2002 Visiting Research Scholar, Institute for Microsystems Technology, University of Freiburg, Germany
2001-2006	Topic Leader for Surface Modification Research Group, Center for Advanced Engineering Fibers and Films, Clemson University

American Chemical Society

1996-p	Member: American Chemical Society, American Institute for Chemical Engineers, American Physical Society
2011	Symposium Co-Organizer and Co-Chair, Mark Senior Scholar Award: Symposium in Honor of Jimmy Mays (part of POLY programming at 2011 Fall National Meeting, Denver, CO).
2008	Member, Strategic Planning Committee, Polymeric Materials: Science and Engineering
2008	Symposium Co-Organizer and Co-Chair, Polymer Surfaces and Interfaces – Loops, Branches and Brushes (part of PMSE programming at 235th National Meeting, New Orleans).

American Institute of Chemical Engineers

2010 -p	Chair, Area 8a - Polymers (part of the Materials Engineering and Sciences Division)
2009-2010	Vice-Chair for Programming, Area 8a - Polymers (part of the Materials Engineering and Sciences Division)
2011	Symposium Organizer and Co-Chair, Structure and Properties in Polymers I
2010	Symposium Organizer and Co-Chair, Nanoscale Structure in Polymers II
2010	Symposium Organizer and Co-Chair, Thin Films and Interfaces I

Honors and Awards

7/2006-8/2007	Visiting Scientist, Center for Nanophase Materials Sciences, Oak Ridge National Laboratory
2006-2007	President, User's Executive Committee, Center for Nanophase Materials Science, Oak Ridge National Laboratory
2000-2006	Undergraduate Coordinator, Department of Chemical Engineering, Clemson University
2001-2006	Topic Leader, "Surface Modification" research group, Center for Advanced Engineering Fibers and Films, Clemson University (an NSF-funded Engineering Research Center)
2002	Murray-Stokely Award for Excellence in Teaching, Clemson University
4/2002-9/2002	Visiting Research Scholar, Institute for Microsystems Technology, University of Freiburg, Germany
2000, 2001	Clemson University Board of Trustees Award for Faculty Excellence
2000	Dow Outstanding Young Faculty Award
1999	DuPont Young Investigator Award
1999	Prince Award for Innovation in Teaching, Clemson University

Research Interests

Principal research activities focus on understanding assembly-structure-property relationships of ultrathin polymer films and polymeric materials in solution. Our desire and goal as scientists is to understand the design rules whereby controllable, precise syntheses coupled with the ability to manipulate the organization of soft matter lead to new and useful structures, properties and products. To respond to this challenge, we routinely study polymer layers that straddle phase boundaries, analyzing the nanoscale structure and responsiveness using a combination of a direct force measurement method, neutron scattering or scanning probe microscopy. More recently we have developed expertise in examining the dynamics of assembly using a specialized form of ellipsometry and characterizing solution structure using light scattering. Our fundamental research efforts into the thermodynamics, kinetics and transport of polymers at surfaces and interfaces contribute to the central goal, and in so doing, impact the development of biomaterial or adhesive coatings, sensors, drug delivery vehicles, and composites.

Graduate and Postdoctoral Advisors

Graduate Students

1/2004-8/2008	José Alonzo (Ph.D. degree completed 8/08; employed by First Solar, Inc.)
8/2005-5/2008	Joshua Barringer (M.S. degree completed 5/08; employed by Boreal Genomics)
8/2005-5/2010	Juan Pablo Hinestrosa (Ph.D. degree completed 5/10; postdoctoral research associate at Oak Ridge National Laboratory)
8/2008-present	Chaitra Deodhar (pursuing Ph.D. degree)
8/2009-present	W. Michael Kochemba (pursuing Ph.D. degree)
8/2010-present	Camille Kite (pursuing Ph.D. degree)

Postdoctoral Researchers

Dr. Jung Fong Kang
Dr. José Alonzo
Dr. Erick Soto-Cantu

PUBLICATIONS – RESEARCH ARTICLES

1. Kilbey, S. M. II; Ankner, J. F. “Neutron Reflectivity as a Tool to Understand Polyelectrolyte Brushes”, *Curr. Opin. Colloid Int. Sci.* 2011, accepted.
2. Alonzo, J.; Chen, J.; Messman, J.; Yu, X.; Hong, K.; Deng, S.; Swader, O.; Dadmun, M.; Ankner, J. F.; Britt, P.; Mays, J. W.; Malagoli, M.; Sumpter, B. G.; Brédas, J. L.; Kilbey, S. M. II “Assembly and Characterization of Well Defined High Molecular Weight Poly(pphenylene) Polymer Brushes”, *Chem. Mater.* 2011, (published online 19 September).
3. He, Z.; Xiao, K.; Durant, W.; Hensley, D. K.; Anthony, J. E.; Hong, K.; Kilbey, S. M. II; Chen, J.; Li, D. “Enhanced Performance Consistency in Nanoparticle/TIPS Pentacene-Based Organic Thin Film Transistors”, *Adv. Funct. Mater.* 2011, published online 7 Jul (DOI: 10.1002/adfm.201002656).
4. Soto-Cantu, E.; Lokitz, B. S.; Hinestrosa, J. P.; Deodhar, C.; Messman, J. M.; Ankner, J. F.; Kilbey, S. M. II “Versatility of Alkyne-Modified Poly(Glycidyl Methacrylate) Layers for Click Reactions”, *Langmuir* **2011**, *27*, 5986-5996.
5. Verduzco, R.; Botiz, I.; Dimasi, E.; Pickel, D. L.; Hong, K.; Kilbey, S. M.; Darling, S. B. “Polythiophene-block-Polyfluorene and Polythiophene-block-Poly(fluorene-cobenzothiadiazole): Insights into Crystallization of All-Conjugated Block Copolymers”, *Macromolecules* **2011**, *44*, 530–539.
6. He, L.; Hinestrosa, J. P.; Pickel, J. M.; Zhang, S.; Bucknall, D. G.; Kilbey, S. M.; Mays, J. W.; Hong, K. “Fluorine-Containing ABC Linear Triblock Copolymers: Synthesis and Selfassembly in Solutions”, *J. Poly. Sci. : Part A : Polym. Chem.* **2011**, *49*, 414–422.
7. Hinestrosa, J. P.; Alonzo, J.; Osa, M.; Kilbey, S. M. II “Solution Behavior of Polystyrene-Polyisoprene Miktoarm Block Copolymers in a Selective Solvent for Polyisoprene”, *Macromolecules* **2010**, *43*, 7294-7304.
8. Verduzco, R.; Luchette, P.; Hong, S. H.; Harden, J.; DiMasi, E.; Palfy-Muhoray, P.; Kilbey, S. M. II; Sprunt, S.; Gleeson, J. T.; Jakli, A. “Bent-Core Liquid Crystal Elastomers”, *J. Mater. Chem.* **2010**, *20*, 8488-8495.
9. Ankner, J. F.; Browning, J. F.; Halbert, C. E.; Lokitz, B. S.; Carmichael, J. R.; Kilbey, S. M.; Rother, G.; Wesolowski, D. J. “Neutron Reflectivity Sample Cells for Geochemically Relevant Environments”, *Geochim. Cosmochim. Ac.* **2010**, *74*(12), A25.
10. de Castro, S.; Maruoka, H.; Hong, K.; Kilbey, S. M.; Hechler, B.; Gachet, C.; Harden, T. K.; Jacobson, K. “Functionalized Congeners of P2Y1 Receptor Antagonists: 2-Alkynyl (N)-Methanocarpa 2'-Deoxyadenosine 3',5'-Bisphosphate Analogues and Conjugation to a Polyamidoamine (PAMAM) Dendrimer Carrier”, *Bioconj. Chem.* **2010**, *21*, 1190-1205.
11. Rahane, S. B.; Metters, A. T.; Kilbey, S. M. II “Modeling of Reinitiation Ability of Polymer Layers Grown by Surface-Initiated Photoiniferter-Mediated Photopolymerization”, *J. Poly. Sci. Part A: Polym. Chem.* **2010**, *48*, 1586-1593.
12. Tosh, D. K.; Yoo, L. S.; Chinn, M.; Hong, K.; Kilbey, S. M. II; Barrett, M. O.; Fricks, I. P.; Harden, T. K.; Gao, Z.-G.; Jacobson, K. A. “Polyamidoamine (PAMAM) Dendrimer Conjugates of “Clickable” Agonists of the A3 Adenosine Receptor and Coactivation of the P2Y14 Receptor by a Tethered Nucleotide”, *Bioconj. Chem.* **2010**, *21*, 372-384.
13. Lokitz, B. S.; Messman, J. M.; Hinestrosa, J. P.; Alonzo, J.; Verduzco, R.; Brown, R. H.; Osa, M.; Ankner, J. F.; Kilbey, S. M. II “Dilute Solution Properties and Surface Attachment of RAFT Polymerized 2-Vinyl-4,4-Dimethylazlactone (VDMA)”, *Macromolecules*, **2009**, *42*, 9018-9026.
14. Hinestrosa, J. P.; Alonzo, J.; Mays, J.; Kilbey, S. M. II “Role of Surface Reorganization on Preferential Adsorption of Macromolecular Ensembles at the Solid/Fluid Interface”, *Macromolecules* **2009**, *42*, 7913–7918.

15. Messman, J. M.; Lokitz, B. S.; Pickel, J. M.; Kilbey, S. M. II "Highly Tailorable Materials based on 2-Vinyl-4,4-dimethyl azlactone: (Co) Polymerization, Synthetic Manipulation and Characterization", *Macromolecules* **2009**, *42*, 3933-3941.
16. Alonzo, J.; Mays, J. W.; Kilbey, S. M. II "Forces of Interaction between Surfaces Bearing Looped Polymer Brushes in Good Solvent", *Soft Matter* **2009**, *5*, 1897-1904.
17. Barringer, J. E.; Messman, J. M.; Banaszek, A. L.; Meyer, H. M. III; Kilbey, S. M. II "Immobilization of Biomolecules on Poly(vinylidimethylazlactone)-Containing Surface Scaffolds", *Langmuir* **2009**, *25*, 262-268.
18. Rahane, S. B.; Kilbey, S. M. II; Metters, A. T. "Kinetic Modeling of Surface-Initiated Photoiniferter-Mediated Photopolymerization of Methyl Methacrylate in Presence of Tetraethylthiuram Disulfide", *Macromolecules* **2008**, *41*, 9612-9618.
19. Uhrig, D.; Hong, K.; Mays, J. W.; Kilbey, S. M.; Britt, P. F. "Synthesis and Characterization of an ABC Miktoarm Star Terpolymer of Cyclohexadiene, Styrene, and 2-Vinylpyridine", *Macromolecules* **2008**, *41*, 9480-9482.
20. Ankner, J. F.; Tao, X.; Halbert, C. E.; Browning, J. F.; Kilbey, S. M. II; Swader, O. A.; Dadmun, M.; Kharlampieva, E.; Sukhishvili, S. A. "The SNS Liquids Reflectometer", *Neutron News* **2008**, *19*, 14-16.
21. Rahane, S. B.; Floyd, J. A.; Metters, A. T. Kilbey, S. M. II "Swelling Behaviour of Multiresponsive Poly(methacrylic acid)-block-poly(N-isopropylacrylamide) Brushes Synthesized Using Surface-Initiated Photoiniferter-Mediated Photopolymerization", *Advanced Functional Materials* **2008**, *18*, 1232-1240. (Featured on issue cover)
22. Huang, Z.; Alonzo, J.; Liu, M.; Lay, M.; Ji, H.; Zhang, Y.; Yin, F.; Smith, G. D.; Mays, J. W.; Kilbey, S. M. II; Dadmun, M. D. "Density Profile of "Looped" Triblock Copolymer Brushes at the Liquid-Solid Interfaces By Neutron Reflectivity Measurements", *Macromolecules* **2008**, *41*, 1745-1752.
23. Ji, H.; Sakellariou, G.; Advincula, R. C.; Smith, G. D.; Kilbey, S. M. II; Dadmun, M. D.; Mays, J. W. "Synthesis and Characterization of Well-defined [Polystyrene-*b*-poly(2-vinylpyridine)]_n Star-Block Copolymers with Poly(2-vinylpyridine) Corona Blocks", *J. Poly. Sci. : Part A. Polym. Chem.* **2007**, *45*(17), 3949-3955.
24. Yin, F.; Bedrov, D.; Smith, G. D.; Kilbey, S. M. II "A Langevin Dynamics Simulation Study of the Tribology of Polymer Loop Brushes", *J. Chem. Phys.* **2007**, *127*, 084910
25. Ji, H.; Farmer, B. S.; Nonidez, W. K.; Advincula, R. C.; Smith, G. D.; Kilbey, S. M. II; Dadmun, M. D.; Mays, J. W. "Anionic Synthesis of Epoxy End-Capped Polymers", *Macromol. Chem. Phys.* **2007**, *208*, 807-814.
26. Sankhe, A. Y.; Husson, S. M.; Kilbey, S. M. II "Direct Polymerization of Surface-Tethered Polyelectrolyte Layers in Aqueous Solution via Surface-Confined ATRP", *J. Poly. Sci. Part A. : Polym. Chem.* **2007**, *45*, 566-575.
27. Rahane, S. B.; Metters, A. T.; Kilbey, S. M. II "Impact of Added Tetraethylthiuram Disulfide Deactivator on the Kinetics of Growth and Reinitiation of Poly(methyl methacrylate) Brushes Made by Surface-Initiated Photoiniferter-Mediated Photopolymerization", *Macromolecules* **2006**, *39*, 8987-8991.
28. Alonzo, J.; Huang, Z.; Liu, M.; Mays, J. W.; Toomey, R. G.; Dadmun, M. D.; Kilbey, S. M. II "Looped Polymer Brushes Formed by Self Assembly of Poly(2-vinylpyridine)-polystyrenepoly(2-vinylpyridine) Triblock Copolymers at the Solid-Fluid Interface. 1. Kinetics of Preferential Adsorption", *Macromolecules* **2006**, *39*, 8434-8439.
29. Sankhe, A. Y.; Husson, S. M.; Kilbey, S. M. II "Effect of Catalyst Deactivation on Polymerization of Electrolytes by Surface-Confined Atom Transfer Radical Polymerization in Aqueous Solutions", *Macromolecules* **2006**, *39*, 1376-1383.

30. Forster, A. M.; Mays, J. W.; Kilbey, S. M. II "Effect of Temperature on the Shearing of Polystyrene Brushes", *Journal of Polymer Science: Part B - Polymer Physics* **2006**, *44*, 649-654.
31. Samadi, A.; Husson, S. M.; Liu, Y.; Luzinov, I.; Kilbey, S. M. II "Low Temperature Growth of Thick Polystyrene Brushes via ATRP", *Macromolecular Rapid Communications* **2005**, *26*, 1829-1834.
32. Rahane, S. B.; Kilbey, S. M. II; Metters, A. T. "Kinetics of Photoiniferter-Mediated Photopolymerization", *Macromolecules* **2005**, *38*, 8202-8210.
33. Haining, J. Nonidez, W. K.; Advincula, R. C.; Smith, G. D.; Kilbey, S. M. II; Dadmun, M. D.; Mays, J. W. "MALDI-TOF MS Characterization of Carboxyl-End-Capped Polystyrenes Synthesized Using Anionic Polymerization", *Macromolecules* **2005**, *38*, 9950-9956.
34. Sankhe, A. Y.; Booth, B.; Wiker, N.; Kilbey, S. M. II "Inkjet Printing for Patterned Polymer Interfaces", *Langmuir* **2005**, *21*, 5332-5336.
35. Tian, P.; Uhrig, D.; Mays, J. W.; Watanabe, H. Kilbey, S. M. II "Role of Branching on the Structure of Polymer Brushes Formed From Comb Copolymers", *Macromolecules* **2005**, *38*, 2524-2529.
36. Schorr, P. A.; Kwan, T. C. B.; Kilbey, S. M. II; Shaqfeh, E. S. G.; Tirrell, M. "Shear Forces Between Tethered Polymer Chains as a Function of Compression, Sliding Velocity and Solvent Quality", *Macromolecules* **2003**, *36*, 389-398.
37. Kang, J. F.; Perry, J. D.; Tian, P.; Kilbey, S. M. II "Growth and Morphology of Polythiophene on Thiophene-Capped Monolayers: 1. Single Component Monolayers", *Langmuir* **2002**, *18*, 10196-10201.
38. Forster, A.; Kilbey, S. M. II "Effect of Solvent Quality on the Frictional Forces Between Polymer Brushes", in *Polymer Interfaces and Thin Films*, C.W. Frank, Ed. Materials Research Society Symposium Proceedings, 710 (2002).
39. Sankhe, A.; Husson, S.; Kilbey, S. M. II "Polymerization of Poly(itaconic acid) on Surfaces by Atom Transfer Radical Polymerization in Aqueous Solution", in *Polymer Interfaces and Thin Films*, C.W. Frank, Ed. Materials Research Society Symposium Proceedings, 710 (2002).
40. Kang, J. F.; Harrison, K. E.; Kilbey, S. M. II "Surface Structure and Electrochemical Polymerization of Mixed, Thiophene-Capped Monolayers", in *Organic Optoelectronic Materials, Processing and Devices*, S. Moss, Ed. Materials Research Society Symposium Proceedings, 708 (2002).
41. Harrison, K. E.; Kang, J. F.; Haasch, R.; Kilbey, S. M. II "Surface Structure and Composition of Thiophene-bearing Monolayers", *Langmuir* **2001**, *17*, 6560-6568.
42. Kilbey, S. M. II ; Watanabe, H.; Tirrell, M. "Structure and Scaling of Polymer Brushes Near the Theta Condition", *Macromolecules* **2001**, *34*, 5249-5259.
43. Lodha, A.; Kilbey, S. M. II; Ramamurthy, P. C.; Gregory, R. V. "Effect of Annealing on Electrical Conductivity and Morphology of Polyaniline Films", *Journal of Applied Polymer Science* **2001**, *82*, 3602-3610.
44. Watanabe, H.; Kilbey, S. M. II; Tirrell, M. "A Scaling Model for Osmotic Energy of Polymer Brushes", *Macromolecules* **2000**, *33*, 9146-9151.
45. Sullivan, J. T.; Harrison, K. E.; Mizzell, J. P. III; Kilbey, S. M. II "Contact Angle and Electrochemical Characterization of Multicomponent, Thiophene-Capped Monolayers", *Langmuir* **2000**, *16*, 9797-9803.
46. Kilbey, S. M. II; Schorr, P.; Tirrell, M. "Frictional Behavior of Self-Assembled Polymer Brushes" in *Molecular Interactions and Time - Space Organization in Macromolecular Systems*,

Morishima, Y., Norisuye, T., Tashiro, K., eds., Springer-Verlag, Berlin, 187-195 (1999).
47. Kilbey, S. M. II; Schorr, P.; Tirrell, M. "Effect of Solvent Condition on the Dynamic Response of Polymer Brushes" in *Dynamics of Small Confining Systems IV*, J.M. Drake, G.S. Grest, J. Klafter, R. Kopelman, Eds. Materials Research Society, Pittsburgh, PA (1999).

48. Kilbey, S. M. II; Bates, F. S.; Tirrell, M.; Yoshizawa, H.; Hill, R.; Israelachvili, J. "Force and Friction Measurements Reflecting Structural Changes in Diblock Copolymeric Liquids", *Macromolecules* **1995**, *28*, 5626-5631.

Works Submitted

Chen, J.; Yu, X.; Hong, K.; Messman, J. M.; Pickel, D. L.; Xiao, K.; Dadmun, M. D.; Mays, J. W.; Sumpter, B.; Kilbey, S. M. II "Ternary Phase Behavior of P3HT/P3HT-b-PEO/PCBM: Manipulating Donor/Acceptor Nano-Phase Separation with a Conjugated Block Copolymer Compatibilizer" *ACS Nano*, submitted.

Kochemba, W. M.; Kilbey, S. M. II; Pickel, D. L. "Enhanced Control of End-group Composition in Poly(3-hexylthiophene)s Prepared by GRIM", *Macromolecules*, submitted.

Rahane, S. B.; Kilbey, S. M. II "Polymer Brushes by Surface-Initiated Iniferter-Mediated Polymerization" In *Polymer Brushes: Substrates, Technologies and Properties*, Mittal, V., Ed.; Taylor & Francis: City, 2011; Chapter 12, submitted.

OTHER WRITTEN CONTRIBUTIONS

1. Kilbey, S. M. II; Rahane, S. B.; Floyd, J. A.; Metters, A. T. "Synthesis and Swelling Behavior of Photopolymerized Poly(N-isopropylacrylamide) and Poly(methacrylic acid) Brushes", in *Proceedings of the 34th Annual International Waterborne, High - Solids and Powder Coatings*

Symposium, **2007**, 67-76.

2. Messman, J. M.; Banaszek, A.; Barringer, J.; Mays, J. W.; Kilbey, S. M. II "Synthesis, Assembly, and Bio-functionalization of Stimuli-Responsive Polymer Brushes", in *Proceedings of the 34th Annual International Waterborne, High - Solids and Powder Coatings*

Symposium, **2007**, 77-88.

3. Hirt, D. E.; Cox, C. L.; Bruce, D. A.; Gooding, C. H.; Harrison, G. M.; Husson, S. M.; Kilbey, S. M. II; Rice, R. W.; Switzer, D. M. "Using a Hierarchical Model of Cognition to Enhance Polymer Education", *ANTEC 2004 - Proceedings of the 62nd Annual Technical Conference & Exhibition, Chicago, Society of Plastics Engineers*, **2004**, *50*, 3580-3584.

4. Switzer, D.M.; Husson, S.M.; Bruce, D.A.; Gooding, C.H.; Harrison, G.M.; Hirt, D.E.; Kilbey, S. M. II; Rice, R.W. "Implementing and Assessing a Hierarchical Cognitive Model to Educate Engineering Undergraduates", *Proceedings of ASEE Annual Conference*, Nashville, June 22-25, **2003**.

5. Hirt, D.E.; Bruce, D.A.; Gooding, C.H.; Haile, J.M.; Harrison, G.M.; Husson, S.M.; Kilbey, S. M. II; Rice, R.W.; Switzer, D.M. "Applying a Hierarchical Model of Mental Growth to Educate Undergraduate Engineering Students: Preliminary Assessment", *Proceedings of ASEE Annual Conference*, Montreal, June 16-19, **2002**.

6. Kilbey, S. M. II; Tirrell, M.; Bates, F. S. "Shearing of Block Copolymer Brushes", *Proceedings of the First Joint Topical Conference on Processing, Structure, and Properties of Polymeric Materials*, AIChE Press, **1996**.

7. Numerous preprints submitted in conjunction with presentations given at National Meetings of the American Chemical Society and published in the Proceedings of the PMSE and POLY Divisions.

INVITED PRESENTATIONS

Kilbey, S. M. II “Formation and Characterization of Semi-Rigid, Conjugated Polymer Brushes”, invited presentation given at 2011 Fall National Meeting of the American Chemical Society. Denver, CO. August 2011.

Kilbey, S. M. II “Synthesis and Assembly of Conjugated Polymer Brushes: Model Systems for Tuning Donor/Acceptor Nanophases”, invited presentation given at Telluride Science Research Workshop: Solution Based Synthesis of Nanomaterials and their Organization for Hybrid Device Structures. Telluride, CO. July 2011.

Kilbey, S.M. II “Polyelectrolyte Brushes: All Charged Up with Nowhere to Go”, invited seminar given at Southern Methodist University, April 2011.

Kilbey, S. M. II; Alonzo, J.; Hinestrosa, J. P.; Deodhar, C. “Kinetics of Assembly and Structure of Polymer Brushes at the Solid-Fluid Interface Measured by Phase Modulated Ellipsometry”, invited presentation given at the 2010 Fall National Meeting of the American Chemical Society. Boston, MA. August 2010.

Kilbey, S. M. II; Chen, J.; Pickel, D.; Hong, K.; Alonzo, J.; Sumpter, B. G. “Novel Polymers and Polymeric Assemblies for Photovoltaic Applications”, invited poster presentation given at the First Annual Workshop for Office of Science Graduate Research Fellows. Argonne, IL. August 2010.

Kilbey S. M. II “Center for Nanophase Materials Sciences at Oak Ridge National Laboratory: Getting to Know the Macromolecular Nanomaterials Group”, invited presentation given at the 2009 Annual Meeting of the American Institute of Chemical Engineers. Nashville, TN. November 2009.

Kilbey S. M. II “Understanding the Self-Assembly and Dynamics of Adsorption of Architecturally Complex Block Copolymers”, invited presentation given at the Workshop on Neutron Spin Echo Spectroscopy. Oak Ridge, TN. November 2009.

Kilbey, S. M. II “Functionalization of Polymers and Polymer-modified Interfaces using Reactive Azlactone-containing Macromolecule”, invited presentation given at the 4th Annual International Symposium on Stimuli-Responsive Polymers. Hattiesburgh, MS. October 2009.

Kilbey, S. M. II “Self-Assembly and Dynamics of Architecturally Complex Block Copolymers”, invited seminar presented at Georgia Institute of Technology, Atlanta, GA. October 2009.

Messman, J. M.; Lokitz, B. S.; Hinestrosa, J. P.; Ankner, J. F.; Kilbey, S. M. II “Functional Soft Interfaces Based on Reactive Polymer Scaffolds”, invited presentation given at DoE Meeting of the Nanoscale Science Research Centers. Annapolis, MD. June 2009.

Kilbey, S. M. II “Solution Behavior, Surface Assembly & Interactions of Architecturally Complex Block Copolymers”, invited seminar given at City College New York. New York, NY. May 2009.

Kilbey, S. M. II “Functionalization of Polymers and Polymer-modified Interfaces Using Reactive Azlactone-containing Macromolecules”, invited seminar given at Duke University Center for Bio-Inspired Materials and Materials Systems. May 2009.

Kilbey, S. M. II “Functional Soft Materials: Polymers as Nanoscale Building Blocks”, invited presentation given at Oak Ridge Institute for Continued Learning and Roane State Community College. Oak Ridge, TN. March 2009.

Kilbey, S. M. II “Beyond Atoms and Molecules: The Promise of Nanotechnology”, invited presentation given at the SAACS meeting. Knoxville, TN. December 2008.

Kilbey, S. M. II “Solution, Surface Assembly, and Interactions of Architecturally Complex Block Copolymers” invited presentation given at the 3rd Annual International Symposium on Stimuli-Responsive Polymers. Hattiesburgh, MS. October 2008.

Kilbey, S. M. II “Response of Bi-level and Random Copolymer Brushes based on poly(NIPAM) and poly(MAA)” invited presentation given at the Fall 2008 National Meeting of the American Chemical Society. Philadelphia, PA. August 2008.

Kilbey, S. M. II “Insight into the Growth of Responsive Polymer Brushes via Kinetic Modeling”, invited presentation given at 2nd Annual International Symposium on Stimuli-Responsive Polymers. Hattiesburgh, MS. November 2007.

Kilbey, S. M. II “Self-Assembly of Complex Macromolecules at Solid-Fluid Interfaces”, invited presentation given at 2007 ORNL Users Week (meeting of the user communities of the Spallation Neutron Source and Center for Nanophase Materials Sciences). Oak Ridge, TN. October, 2007

Kilbey, S. M. II “Understanding the Kinetics of Grafted Polymer Nanolayer Growth via Rate-Based Models”, invited seminar given at University of Tennessee, Department of Chemistry. Knoxville, TN. July 2007.

Kilbey, S. M. II “Polymer Brushes: What’s □? What’s Next?”, invited seminar given at University of Tennessee, Dept. of Chemical Engineering. Knoxville, TN. April 2007.

Kilbey, S. M. II “Responsive Polymer Brushes by Surface Initiated Polymerization”, invited seminar given at Georgia Institute of Technology, Dept. of Polymer Science and Engineering. Atlanta, GA. April 2007.

Kilbey, S. M. II “Responsive Polymer Brushes by Surface Initiated Polymerization”, invited seminar given at University of Tennessee, Dept. of Materials Sciences. Knoxville, TN. February 2007.

Kilbey, S. M. II “Effect of Architecture on the Assembly and Structure of Polymer Brushes”, invited presentation given at University of California – Santa Barbara. Santa Barbara, CA. January 2007.

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Kilbey, S. M. II “Responsive Polymer Brushes by Surface Initiated Polymerization”, invited presentation given at 2007 Polymers (West) Gordon Research Conference. Ventura, CA. January 2007.

Kilbey, S. M. II. “Interactions between Surface-Tethered Polymer Layers”, invited presentation given at Oak Ridge National Laboratory, Center for Nanophase Materials Sciences. Oak Ridge, TN. December 2006.

Kilbey, S. M. II “Probing Molecular-level Structure and Properties of Polymer-Modified Interfaces”, invited seminar given at Iowa State University. Ames, IA. October 2006.

Kilbey, S. M. II “Probing Molecular-level Structure and Properties of Polymer-Modified Interfaces”, invited presentation given at the 19th Annual International Symposium on Polymer Analysis and Characterization Meeting. Oak Ridge, TN. June 2006.

Kilbey, S. M. II “Interface Modification Using Surface Tethered Polymers”, invited seminar given at the University of South Florida, Tampa FL. October 2005.

Sankhe, A. Y.; Husson, S. M.; Kilbey, S. M. II “Synthesis and Stretching of Polyelectrolyte Brushes”, presented at the 230th ACS National Meeting, Washington D.C. August 2005.

Kilbey, S. M. II “Synthesis and Structure of Surface-Tethered Polymers for Advanced Material Coatings”, invited presentation given at the Inaugural User Meeting of the Center for Nanophase Materials Science of Oak Ridge National Laboratory. May 24, 2005.

Kilbey, S. M. II “Interfacial Structure of Self-Assembled Block Copolymer Amphiphiles: Effect of Macromolecular Structure and Solvent Condition”, invited seminar given at the Center for Nanophase Materials Science, Oak Ridge National Laboratory. April 2004.

Kilbey, S. M. II “Assembly, Organization, and Structure of Polymer Brushes”, invited seminar given at the University of Tennessee. April 2004.

Kilbey, S. M. II; P. Tian “Structure and Scaling of Polymer Brushes Formed from Branched Polymer Amphiphiles”, Invited presentation given at 2003 Spring National American Chemical Society Meeting, New Orleans, LA. March 2003.

Kilbey, S. M. II “Evolution and Morphology of Polythiophene Grown on Thiophene-Capped Monolayers”, invited seminar given at Virginia Commonwealth University, Richmond, VA. November 2002.

Kilbey, S. M. II “Tailoring Surface Structure of Ultrathin Conducting Polymer Films”, invited lecture given at Institute for Microsystem Technology, University of Freiburg, Freiburg, Germany, May 2002.

Kilbey, S. M. II “Developing Critical Thinking Skills”, Clemson University Freshman Programs, September 2001, Clemson, SC.

Kilbey, S. M. II “Tethered Layers of Conductive Polymers”, 3M Process Technology Center Forum, May 2001, St. Paul, MN.

Kilbey, S. M. II “Tailoring Surface Properties using Electrically-active, Self-assembled Monolayers” invited seminar given at the Department of Chemical Engineering, Columbia University, New York, NY, October 2000.

Kilbey, S. M. II “Developing Critical Thinking Skills”, invited seminar for Student Life in

East Campus Housing, Clemson University, August 2000.

Kilbey, S. M. II “Synthesis, Self-assembly, and Characterization of Electrically-active Monolayers”, invited seminar given at Department of Chemical Engineering, University of Virginia, Charlottesville, VA, December 1999.

Kilbey, S. M. II “Eklisia and Lobsters: Thoughts on Mentoring”, invited lecture given as part of Clemson University Mentor Development Program, August 1999, Clemson University, Clemson, SC.

Kilbey, S. M. II, Schorr, P., Tirrell, M. “Effect of Solvent Condition on the Dynamic Response of Polymer Brushes”, 1998 Fall Meeting of the Materials Research Society, Boston, MA.

CONTRIBUTED PRESENTATIONS

Pickel, D. L.; Kochemba, W. M.; Kilbey, S. M. II “Tailoring End-group Composition in Toly-Functionalized Poly(3-hexylthiophenes)”, presented at the Fall 2011 National Meeting of the American Chemical Society. Denver, CO. August, 2011.

Lokitz, B. S.; Messman, J. M.; Ankner, J. F.; Kilbey, S. M. II “Neutron Reflectivity Investigation of Reactive Layers Based on Poly(2-vinyl-4,4-dimethylazlactone) Synthesized via RAFT Polymerization”, presented at the Fall 2011 National Meeting of the American Chemical Society. Denver, CO. August, 2011.

Verduzco, R.; Botiz, I.; Pickel, D. L.; Kilbey, S. M.; Hong, K.; DiMasi, E.; Darling, S. “Synthesis and Self-assembly of Polythiophene-*b*-Poly(fluorene-co-benzothiadiazole) Block Copolymers”, presented at the Fall 2011 National Meeting of the American Chemical Society. Denver, CO. August, 2011.

Pickel, D. L.; Kochemba, W. M.; Kilbey, S. M. II “Synthesis and Characterization of Pyridine End-Functionalized Poly(3-Hexylthiophenes): Potential Ligands for SQD/P3HT BHJs”, presented at the Spring 2011 National Meeting of the American Chemical Society. Anaheim, CA. March 2011.

Deodhar, C.; Soto-Cantu, E.; Uhrig, D.; Ankner, J. F.; Kilbey, S. M. II “Structure and Swelling Behavior of Weak Polyelectrolyte Brushes”, presented at the 2011 March Meeting of the American Physical Society. Dallas, TX. March 2011.

Chen, J.; Yu, X.; Xiao, K.; Dadmun, M.; Pickel, D. L.; Sumpter, B. G.; Kilbey, S. M. II “Compatibilized P3HT/PCBM Films with P3HT-*b*-PEO Block Copolymer”, presented at the 2011 March Meeting of the American Physical Society. Dallas, TX. March 2011.

Chen, J.; Alonzo, J.; Kochemba, W. M.; Pickel, D. L.; Lavrik, N. V.; Li, D.; Yu, X.; Hong, K.; Mays, J. W.; Kilbey, S. M. II “Preparation, Patterning, and Electrical Characterization of Conjugated Polymer Brushes”, presented at the 2011 March Meeting of the American Physical Society. Dallas, TX. March 2011.

He, Z.; Durant, W.; Xiao, K.; Anthony, J. E.; Chen, J.; Kilbey, S. M. II; Li, D. “Polymer and Nanoparticle Mediated TIPS-Pentacene Crystallization: Towards Enhanced Performance Consistency in Small- Molecule-Based Solution Processible Organic Thin-Film Transistors”, presented at the 2010 Materials Research Society Fall Meeting. Boston, MA. December 2010.

Verduzco, R.; Darling, S.; Botiz, I.; Pickel, D.; Hong, K.; Kilbey, S. M. II "Synthesis and Thin Film Morphology of Rod-Rod Polythiophene-b-Polyfluorene Conjugated Copolymers", presented at the 2010 Annual Meeting of the American Institute of Chemical Engineers. Salt Lake City, UT. November 2010.

Chen, J.; Alonzo, J.; Yu, X.; Hong, K.; Messman, J.; Ivanov, I.; Meyer, H. M.; Banerjee, M.; Rathore, R.; Mays, J. W.; Kilbey, S. M. II "Electrical Properties and Nanomorphology of Well-Defined Conjugated Polymer Brushes", presented at the 2010 Fall Meeting of the American Chemical Society. Boston, MA. August 2010.

Yu, X.; Li, Y.; O'Neill, H. M.; Kilbey, S. M. II; Mays, J. W.; Britt, P. F.; Hong, K. "Synthesis and Characterization of Block Copolymers with Polythiophene Segments by the Combination of ATRP and Kumada Polymerization", presented at the 2010 Fall Meeting of the American Chemical Society. Boston, MA. August 2010.

Soto-Cantu, E.; Deodhar, C.; Uhrig, D.; Hinestrosa, J. P.; Lokitz, B. S.; Ankner, J. F.; Kilbey, S. M. II "Study of the Nanophase Structure of Poly(methacrylic acid) Brushes Synthesized by ATRP" presented at the 2010 Fall Meeting of the American Chemical Society. Boston, MA. August 2010.

Chen, J.; Yu, X.; Hong, K.; Messman, J.; Pickel, D. L.; Xiao, K.; Sumpter, B.; Dadmun, M.; Mays, J. W.; Kilbey, S. M. II "Ternary Phase Behavior of P3HT-b-PEO Compatibilized P3HT/PCBM Films" presented at the 2010 Fall Meeting of the American Chemical Society. Boston, MA. August 2010.

Lokitz, B. S.; Messman, J. M.; Hinestrosa, J. P.; Ankner, J. F.; Kilbey, S. M. II "Bio-inspired Polymer Scaffolds from Well-Defined Block Copolymers of Poly(glycidyl methacrylate_ and Poly(2-vinyl-4,4,-dimethylazlactone)" presented at the 2010 Fall Meeting of the American Chemical Society. Boston, MA. August 2010.

Yang, J.; Bonnessen, P. V.; Kilbey, S. M.; Hong, K. "Approach for the Synthesis of Selectively Deuterated Methyl Acrylate" presented at the 2010 Fall Meeting of the American Chemical Society. Boston, MA. August 2010.

Chen, J.; Alonzo, J.; Yu, X.; Hong, K.; Messman, J.; Ivanov, I.; Meyer, H. M. III; Banerjee, M.; Rathore, R.; Mays, J. W.; Kilbey, S. M. II "Polyparaphenylene Brushes Prepared with a Precursor Route: Electrical Impedance and Nanostructure", presented at the Organic Microelectronics & Optoelectronics Workshop IV. San Francisco, CA. July 2010.

Chen, J.; Yu, X.; Hong, K.; Messman, J.; Pickel, D. L.; Xiao, K.; Sumpter, B.; Dadmun, M.; Mays, J. W.; Kilbey, S. M. II "Manipulating Donor-Acceptor Phase Separation in P3HT/PCBM Films Using a P3HT-based Compatibilizer" presented at the Organic Microelectronics & Optoelectronics Workshop IV. San Francisco, CA. July 2010.

Hinestrosa, J. P.; Alonzo, J.; Kilbey, S. M. II "Dynamics of Polystyrene-Poly(2-vinylpyridine) Star Block Copolymers", presented at the Spring 2010 National Meeting of the American Chemical Society. San Francisco, CA. March 2010.

Soto-Cantu, E.; Deodhar, C.; Lokitz, B. S.; Messman, J. M.; Ankner, J. F.; Kilbey, S. M. II “Synthesis and Characterization of Weak Polyelectrolyte Brushes by a ‘Clicking To’ Approach”, presented at the Spring 2010 National Meeting of the American Chemical Society. San Francisco, CA. March 2010.

Alonzo, J.; Yu, X.; Hong, K.; Deng, S.; Swader, O.; Dadmun, M. D.; Ankner, J. F.; Britt, P. F.; Mays, J. W.; Kilbey, S. M. II “Assembly and Characterization of Well Defined Poly(pphenylene) Polymer Brushes for Advanced Energy Systems”, presented at the Fall 2009

National Meeting of the American Chemical Society. Washington, D. C. August 2009.
Hinestrosa, J. P.; Uhrig, D. W.; Pickel, D. L.; Kilbey, S. M. II “Dynamics of A_nB_n Miktoarm Star Copolymers”, presented at the Fall 2009 National Meeting of the American Chemical Society. Washington, D. C. August 2009.

Hinestrosa, J. P.; Lokitz, B. S.; Messman, J. M.; Ankner, J. F.; Kilbey, S. M. II “Formation and Structure of Well-Defined Conjugate Brushes Based on “Clickable” Poly(vinylidimethylazlactone)”, presented at the Frontiers in Polymer Science International Symposium. Mainz, Germany. June 2009.

Hinestrosa, J. P.; Alonzo, J.; Mays, J. W.; Kilbey, S. M. II “Self-Assembly, Adsorption Kinetics and Interfacial Layer Structure of Polystyrene-Polyisoprene Mikto-arm Block Copolymers”, presented at the Frontiers in Polymer Science International Symposium. Mainz, Germany. June 2009.

Hinestrosa, J. P.; Lokitz, B. S.; Messman, J. M.; Ankner, J. F.; Kilbey, S. M. II “Well Defined Base Layers for Clicking Polymer Brushes”, presented at the Spring 2009 National Meeting of the American Chemical Society. Salt Lake City, UT. March 2009.

Messman, J. M.; Kilbey, S. M. II; Lokitz, B. S.; Hinestrosa, J. P.; Ankner, J. F. “Reactive Surfaces and Interfaces utilizing 2-Vinyl-4,4-Dimethylazlactone (VDMA): An Example of “Click” Chemistry”, presented at the 2009 Smart Coatings International Symposium. Orlando, FL. February 2009.

Kilbey, S. M. II; Floyd, J. A.; Rahane, S. B. “Synthesis and Swelling Response of Block and Random Copolymer Brushes Incorporating Thermo- and pH-responsive Constituents”, presented at the Centennial Annual Meeting of the American Institute of Chemical Engineers. Philadelphia, PA. November 2008.

Hinestrosa, J. P.; Osa, M.; Hong, K.; Mays, J. W.; Kilbey, S. M. II “Solution Properties, Adsorption and Interfacial Layer Structure of Self-Organized Polystyrene-Polyisoprene Miktoarm Block Copolymers” presented at the Centennial Annual Meeting of the American Institute of Chemical Engineers. Philadelphia, PA. November 2008.

Hinestrosa, J. P.; Alonzo, J.; Osa, M.; Hong, K.; Mays, J. W.; Kilbey, S. M. II “Solution Properties and Interfacial Layer Structure of Self-organized Polystyrene-Polyisoprene Mikto-arm Block Copolymers” presented at the Fall 2008 National Meeting of the American Chemical Society. Philadelphia, PA. August 2008.

Messman, J. M.; Lokitz, B. S.; Ankner, J. F.; Kilbey, S. M. II “Designing Functionality and Stimuli-responsiveness into Azlactone-based Polymers”, presented at the Fall 2008 National Meeting of the American Chemical Society. Philadelphia, PA. August 2008.

Hinestrosa, J. P.; Alonzo, J.; Liu, M.; Osa, M.; Mays, J. W.; Kilbey, S. M. II “Solution Properties and Adsorbed Morphology of Polystyrene – Polyisoprene Mikto-arm Copolymers”, presented at the Spring 2008 National Meeting of the American Chemical Society. New Orleans, LA. April 2008.

Hinestrosa, J. P.; Alonzo, J.; Liu, M.; Osa, M.; Mays, J. W.; Kilbey, S. M. II “Kinetics of Adsorption of Polystyrene – Polyisoprene Mikto-arm Copolymers”, presented at the Spring 2008 National Meeting of the American Chemical Society. New Orleans, LA. April 2008.

Alonzo, J.; Ji, H.; Hinestrosa, J. P.; Mays, J. W.; Dadmun, M. D.; Kilbey, S. M. II “Kinetics of Self Assembly of Star Block Copolymers that Tether by Their Corona Blocks at the Solid-Fluid Interface”, presented at the Spring 2008 National Meeting of the American Chemical Society. New Orleans, LA. April 2008.

Alonzo, J.; Ji, H.; Hinestrosa, J. P.; Mays, J. W.; Dadmun, M. D.; Kilbey, S. M. II “Equilibrium Structure of Polymer Brushes with Multiple Tethers by Self Assembly of Stars Block Copolymers at the Solid-Fluid Interface”, presented at the Spring 2008 National Meeting of the American Chemical Society. New Orleans, LA. April 2008.

Kilbey, S. M. II “Insight into the Growth of Responsive Polymer Brushes via Kinetic Modeling”, presented at 10th Biennial Bayreuth Polymer Symposium. Bayreuth, Germany. September 2007.

Rahane, S. B.; Floyd, J. A.; Metters, A. T.; Kilbey, S. M. II “Investigation of Doublyresponsive Photopolymerized Poly(methacrylic acid)-Block-Poly(N-isopropylacrylamide) Brushes”, presented at the 233rd ACS National Meeting, Chicago, IL. March 2007.

Alonzo, J.; Huang, Z.; Mays, J. W.; Dadmun, M. D.; Kilbey, S. M. II “Looped Polymer Brushes at the Solid-Fluid Interface Formed by Preferential Adsorption of Amphiphilic Stars Block Copolymers”, presented at the 233rd ACS National Meeting, Chicago, IL. March 2007.

Rahane, S. B.; Kilbey, S. M. II; Metters, A. T. “Kinetic Modeling of Surface-Initiated Photoiniferter-Mediated Photopolymerization in the Presence of Tetraethylthiuram Disulfide”, presented at the 233rd ACS National Meeting, Chicago, IL. March 2007.

Alonzo, J.; Huang, Z.; Ji, H.; Mays, J. W.; Dadmun, M. D.; Kilbey, S. M. II “Structure and Scaling Behavior of Polymer Brushes with Multiple Tethers”, presented at the 233rd ACS National Meeting, Chicago, IL. March 2007.

Samadi, A.; Kilbey, S. M. II; Husson, S. M. “Surface-Initiated Atom Transfer Radical Polymerization of Styrene: Observed Transition from First-Order to Zero-Order Reaction Kinetics”, presented at the 233rd ACS National Meeting, Chicago, IL. March 2007.

Kilbey, S. M. II; Rahane, S. B.; Floyd, J. A.; Metters, A. T. “Synthesis and Swelling Behavior of Photopolymerized Poly(N-isopropylacrylamide) and Poly(methacrylic acid) Brushes”, to be presented at the 34th International Waterborne, High-Solids, and Powder Coatings Symposium. New Orleans, LA. February 2007.

Messman, J. M.; Banaszek, A.; Barringer, J.; Mays, J. W.; Kilbey, S. M. II “Synthesis, Assembly, and Bio-functionalization of Stimuli-Responsive Polymer Brushes”, presented at the 34th International Waterborne, High-Solids, and Powder Coatings Symposium. New Orleans, LA. February 2007.

Messman, J. M.; Banaszek, A.; Barringer, J.; Mays, J. W.; Kilbey, S. M. II “Synthesis, Assembly, and Bio-functionalization of Stimuli-Responsive Polymer Brushes”, presented at the 2007 Polymers (West) Gordon Research Conference. Ventura, CA. January 2007.

Samadi, A.; Kilbey, S. M. II; Husson, S. M. “Low Temperature Growth of Thick Polystyrene Brushes via ATRP”, presented at the 231st ACS National Meeting, Atlanta, GA. March 2006.

Alonzo, J.; Huang, Z.; Liu, M.; Mays, J. W.; Dadmun, M. D.; Kilbey, S. M. II “Self Assembly of Poly(2-vinylpyridine)-Polystyrene-Poly(2-vinylpyridine) Triblock Copolymers at the Solid-Fluid Interface”, presented at the 231st ACS National Meeting, Atlanta, GA. March 2006

Mehta, R.; Henry, N.; Dadmun, M. D.; Kilbey, S. M. II; Ji, H.; Mays, J. W. “Multiple Loop Formation by Epoxy-terminated Polystyrene Telechelics on Self-assembled Monolayers of 11-Mercaptoundecanoic acid over Gold”, presented at the 231st ACS National Meeting, Atlanta, GA. March 2006.

Rahane, S. B.; Kilbey, S. M. II; Metters, A. T. “Controlled Synthesis of Poly(methyl methacrylate) Brushes Using Surface-Initiated Photoiniferter-Mediated Photopolymerization”, presented at the 231st ACS National Meeting, Atlanta, GA. March 2006.

Huang, Z.; Alonzo, J.; Lay, M.; Liu, M.; Ji, H.; Zhang, Y.; Fang, Y.; Smith, G. D.; Mays, J. W.; Kilbey, S. M. II; Dadmun, M. D. “Density Profiles of ‘Looped’ Polymer Brushes at the Liquid-Solid Interface by Neutron Reflectivity Measurements”, presented at the 231st ACS National Meeting, Atlanta, GA. March 2006.

Alonzo, J.; Kilbey, S. M. II “Kinetics of Assembly and Equilibrium Properties of ‘Looped’ Brushes at the Solid-Liquid Interface”, presented at the 2005 Fall Meeting of the Materials Research Society, Boston, MA. November 2005.

Alonzo, J.; Huang, Z.; Dadmun, M. D.; Kilbey, S. M. II “Density Profiles of ‘Looped’ Polymer Brushes Formed by Self Assembly of Triblock Copolymers at the Solid-Liquid Interface”, presented at the SNS-HFIR Users Group meeting. Oak Ridge National Laboratory, October 2005.

Alonzo, J.; Liu, M.; Dadmun, M.; Mays, J. W.; Kilbey, S. M. II “Kinetics of Assembly of ‘Looped’ Polymer Brushes at the Solid-Fluid Interface”, presented at the 230th ACS National Meeting, Washington D.C. August 2005.

Samadi, A.; Husson, S. M.; Kilbey, S. M. II “Low Temperature Growth of Thick Polystyrene Brushes via ATRP”, presented at the 230th ACS National Meeting, Washington D.C. August 2005.

Patton, D. L.; Park, J. Y.; Liu, M.; Advincula, R. C.; Mays, J. W.; Dadmun, M. D.; Kilbey, S. M. II; Smith, G. D. "Telechelic Polymer Velcros or Brushes: Synthesis, Characterization, and Adsorption Studies", presented at the 230th ACS National Meeting, Washington D.C. August 2005.

Rahane, S. B.; Kilbey, S. M. II; Metters, A. T. "Controlled Synthesis of Poly(methyl methacrylate) Brushes Using Surface-initiated Photoiniferter-mediated Photopolymerization", presented at the 230th ACS National Meeting, Washington D.C. August 2005.

Rahane, S. B.; Kilbey, S. M. II; Metters, A. T. "Kinetic Studies of Surface-initiated Photoiniferter-mediated Photopolymerizations of Methyl Methacrylate", presented at the 230th ACS National Meeting, Washington D.C. August 2005.

Tian, P.; Watanabe, H.; Kilbey, S. M. II "Towards a Universal Profile for Polymer Brushes: Effect of Surface Heterogeneity on Brush Structure", presented at the 2005 March meeting of the American Physical Society, Los Angeles, CA. March 2005.

Sankhe, A. Y.; Kilbey, S. M. II "Drop-on-Demand Based Inkjet Printing for Making Patterned Surfaces with Controlled Surface Wetting", presented at the 2005 March meeting of the American Physical Society, Los Angeles, CA. March 2005.

Sankhe, A. Y.; Husson, S. M.; Kilbey, S. M. II "Effect of pH on Swelling Behavior of Polyelectrolyte Brushes Produced via Surface Confined Atom Transfer Radical Polymerization", presented at the 2005 March meeting of the American Physical Society, Los Angeles, CA. March 2005.

Alonzo, J.; Kilbey, S. M. II "Kinetics of Assembly of 'Looped' Brushes at the Solid-Liquid Interface", presented at the 2005 March meeting of the American Physical Society, Los Angeles, CA. March 2005.

Dadmun, M. D.; Mays, J. W.; Kilbey, S. M. II; Smith, G. D.; Advincula, R. C. "Investigating the Chemistry and Adsorption of Multiply Bound Polymer Chains", presented at the 229th ACS National Meeting, San Diego, CA. March 2005.

Samadi, A.; Kilbey, S. M. II; Husson, S. M. "Imprinted Conducting Polymer Surfaces", presented at 2004 Annual Fall Meeting of the American Institute of Chemical Engineers, Austin, TX. November 2004.

Rahane, S. B.; Kilbey, S. M. II; Metters, A. T. "Kinetic Studies of Surface-Initiated Photoiniferter-Mediated Photopolymerization", presented at Fall 2004 National Meeting of the American Chemical Society. Philadelphia, PA. August 2004.

Kilbey, S. M. II "Role of Architecture and Block Softness on the Structure of Polymer Brushes", presented at 2004 Annual Meeting of the American Physical Society. Montreal, Canada. March 2004.

Tian, P.; Kilbey, S. M. II "Structure and Scaling of Brushes Formed From Comb Block Copolymers", presented at 2003 Annual Fall Meeting of the American Institute of Chemical Engineers, San Francisco, CA. November 2003.

Sankhe, A. Y.; Husson, S. M.; Kilbey, S. M. II "Polymerization of Poly(Itaconic Acid) Using ATRP: Effect of Initiator Type and Concentration", presented at 2003 Annual Fall Meeting of the American Institute of Chemical Engineers, San Francisco, CA. November 2003.

Wiker, N.; Sankhe, A. Y.; Kilbey, S. M. II "Mixed Monolayers Using Inkjet Printing: Gradient Surfaces for Surface-Confined Atom-Transfer Radical Polymerization (SC-ATRP)", presented at 2003 Annual Fall Meeting of the American Institute of Chemical Engineers, San Francisco, CA. November 2003.

Hirt, D. E.; Bruce, D. A.; Gooding, C. H.; Harrison, G. M.; Husson, S. M.; Kilbey, S. M. II; Rice, R. W.; Switzer, D. M. "Implementing and Assessing a Hierarchical Cognitive Model", presented at 2003 Annual Fall Meeting of the American Institute of Chemical Engineers, San Francisco, CA. November 2003.

Sankhe, A.Y.; Wiker, N.A.; Kilbey II; S.M. "Ink-Jet Printing of Mixed Monolayers for Surface-Confined Atom-Transfer Radical Polymerization", presented at Fall National American Chemical Society Meeting, New York, NY. September 2003.

Hirt, D.E.; Bruce, D.A.; Gooding, C.H.; Harrison, G.M.; Husson, S.M.; Kilbey, S. M. II; Rice, R.W.; Switzer, D.M. "Assessing a Hierarchical Cognitive Model Applied to Engineering Undergraduates", presented at NSF Engineering and Computing Education Grantees Conference, Washington, D.C., September 21-23, 2003.

Sankhe, A.; Kilbey, S.M. II; Husson, S.M. "Growth of Poly(itaconic acid) from Monolayers by Atom Transfer Radical Polymerization in Aqueous Solution", presented at Fall Annual Meeting of American Institute of Chemical Engineers, Indianapolis, IN. November 2002.

Kang, J.F.; Tian, P.; Kilbey, S. M. II "Evolution and Morphology of Polythiophene Grown on Thiophene-Capped Monolayers", presented at Fall Annual Meeting of American Institute of Chemical Engineers, Indianapolis, IN. November 2002.

Husson, S. M.; Bruce, D. A.; Gooding, C. H.; Harrison, G. M.; Hirt, D. E.; Kilbey, S. M. II; Rice, R. W.; Switzer, D. M. "Applying and Assessing a Hierarchical Model of Mental Growth to Educate Undergraduate Engineering Students", presented at ASEE/SEFI/TUB International Colloquium, Berlin, October 1-4, 2002.

Hirt, D. E.; Bruce, D. A.; Gooding, C. H.; Harrison, G. M.; Husson, S. M.; Kilbey, S. M. II; Rice, R. W.; Switzer, D. M. "Applying a Hierarchical Model of Mental Growth to Educate Undergraduate Engineering Students", presented at NSF Engineering and Computing Education Grantees Conference, Washington, D.C., September 30-October 1, 2002.

Hirt, D. E.; Bruce, D. A.; Gooding, C. H.; Haile, J. M.; Harrison, G. M.; Husson, S. M.; Kilbey, S. M. II; Rice, R. W.; Switzer, D. M. "Applying a Hierarchical Model of Mental Growth to Educate Undergraduate Engineering Students: Preliminary Assessment", presented at the ASEE Annual Conference, Montreal, June 16-19, 2002.

Forster, A.; Kilbey, S. M. II "Effect of Solvent Quality on the Frictional Forces Between Polymer Brushes", Fall 2001 meeting of the Materials Research Society, November, 2001, Boston, MA.

Sankhe, A.; Husson, S.; Kilbey, S. M. II "Polymerization of Poly(itaconic acid) on Surfaces by Atom Transfer Radical Polymerization in Aqueous Solution", Fall 2001 meeting of the Materials Research Society, November, 2001, Boston, MA.

Harrison, K. E.; Kang, J. F.; Mizzell J. P. III; Kilbey, S. M. II "Surface Structure and Electrochemical Polymerization of Mixed, Thiophene-Capped Monolayers", Fall 2001 meeting of the Materials Research Society, November, 2001, Boston, MA.

Husson, S. M., Hirt, D. E., Bruce, D. A., Gooding, C. H., Haile, J. M., Harrison, G. M., Kilbey, S. M. II, Rice, R. W., Switzer, D. M. "Applying a Hierarchical Model of Mental Growth to Educate Undergraduate Engineering Students", presented at AIChE Annual Meeting, November 2001, Reno, NV.

Forster, A., Kilbey, S. M. II "Effect of Solvent Temperature on the Structure and Properties of Polymer Brushes", Spring 2001 meeting of the American Chemical Society, April, 2001, San Diego, CA.

Kilbey, S. M. II; Watanabe, H.; Tirrell, M. "Structure of Polymer Brushes Near the Theta Condition", Spring 2001 meeting of the American Chemical Society, April, 2001, San Diego, CA.

Harrison, K. E., Kang, J. F., Mizzell J. P. III, Kilbey, S. M. II "Interfacial Behavior of Electroactive Surface Layers Based on Thiophene-capped SAMs", Chains@Interfaces2001, a EuroConference, January 2001, Evora, Portugal.

Kilbey, S. M. II, Watanabe, H., Tirrell, M. "Structure and Scaling of Polymer Brushes in Near-Theta Solvents", Chains@Interfaces2001, a EuroConference, January 2001, Evora, Portugal.

Forster, A., Kilbey, S. M. II "Effect of Solvent Temperature on the Dynamic Behavior of Polymer Brushes", Fall 2000 meeting of the Materials Research Society, December 2000, Boston, MA.

Harrison, K. E., Kilbey, S. M. II "Interfacial Behavior of Electro-active Surface Layers Based on Thiophene-capped SAMs", Fall 2000 meeting of the Materials Research Society, December 2000, Boston, MA.

Harrison, K. E., Kilbey, S. M. II "Electrochemical Growth of Surface-tethered Polythiophene", Spring 2000 meeting of the American Physical Society, March 2000, Minneapolis, MN.

Harrison, K. E., Sullivan, J. T., Kilbey, S. M. II "Electrochemical Growth of Surface-tethered Polythiophene", 1999 Annual Meeting of the American Institute for Chemical Engineers, November 1999, Dallas, TX.

Sullivan, J. T., Harrison, K. E., Kilbey, S. M. II "Synthesis and Tethering of [-(3-thienyl)alkyl]trichlorosilanes for Growing Electrically Conductive Surface Layers", 1999 Fall meeting of the American Chemical Society, August 1999, New Orleans, LA.

Harrison, K. E., Sullivan, J. T., Kilbey, S. M. II "Electrochemical Growth of Surface-tethered Polythiophene", Centennial Meeting of the American Physical Society, March 1999, Atlanta, GA

Sullivan, J. T., Harrison, K. E., Kilbey, S. M. II “Synthesis and Tethering of [-(3-thienyl)alkyl]trichlorosilanes for Growing Electrically Conductive Surface Layers”, Centennial Meeting of the American Physical Society, March 1999, Atlanta, GA.

Kilbey, S. M. II, Tirrell, M., Bates, F. S. “Frictional Behavior of Block Copolymer Brushes”, 1997 Fall Meeting of the Materials Research Society, Boston, MA.

Kilbey, S. M. II, Tirrell, M., Bates, F. S. “Forces Between Block Copolymer Brushes at Solid-Fluid Interfaces”, 1997 Fall Meeting of the Materials Research Society, Boston, MA.

Kilbey, S. M. II, Bates, F. S., Tirrell, M. “Shearing of Block Copolymer Brushes”, 1996 Annual Meeting of the American Institute for Chemical Engineers, Chicago, IL.

Kilbey, S. M. II, Bates, F. S., Tirrell, M. “Universal Scaling Behavior of Block Copolymer Brushes in a Near-Theta Solvent”, 1996 Annual Meeting of the American Institute for Chemical Engineers, Chicago, IL.

Kilbey, S. M. II, Bates, F. S., Tirrell, M. “Shearing of Block Copolymer Brushes”, 1996 March Meeting of the American Physical Society, Division of High Polymer Physics, St. Louis, MO.

Kilbey, S. M. II, Bates, F. S., Tirrell, M., Israelachvili, J. “Pre-Transitional Ordering of Confined Diblock Copolymer Liquids”, 1995 March Meeting of the American Physical Society, Division of High Polymer Physics, San Jose, CA.

Kilbey, S. M. II, Bates, F. S., Tirrell, M., Israelachvili, J. “Structural Effects of Confined Diblock Copolymer Liquids”, Materials Research Society 1994 Fall Meeting, Boston, MA.

Kilbey, S. M. II, Bates, F. S., Tirrell, M., Israelachvili, J. “Direct Force and Friction Measurements on Thin Diblock Copolymer Films”, Center for Interfacial Engineering, Fall 1994 Annual Meeting, Minneapolis, MN.

Kilbey, S. M. II, Bates, F. S., Tirrell, M. “Normal Force Measurements on Concentrated Macromolecular Liquids”, Department of Chemical Engineering, University of California Santa Barbara, September 1992.