# Brent S. Sumerlin, Ph.D.

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## Education & Training

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| **2003 – 2005** | **Carnegie Mellon University, Pittsburgh, PA**<br>Visiting Assistant Professor/Postdoctoral research associate<br>*Advisor*: *Krzysztof Matyjaszewski* |
| **2003** | **Ph.D., University of Southern Mississippi, Hattiesburg, MS**<br>Polymer Science and Engineering<br>*Advisor*: *Charles L. McCormick* |
| **1998** | **B.S., North Carolina State University, Raleigh, NC**<br>Textile Chemistry, Polymer Chemistry Concentration |

## Positions

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| **2012 – present** | **University of Florida, Gainesville, FL**<br>Steven and Rebecca Scott Associate Professor of Chemistry |
| **2009 –2012** | **Southern Methodist University, Dallas, TX**<br>Harold Jeskey Trustee Associate Professor in Chemistry |
| **2007 – 2009** | **Southern Methodist University, Dallas, TX**<br>Harold Jeskey Trustee Assistant Professor in Chemistry |
| **2005 - 2007** | **Southern Methodist University, Dallas, TX**<br>Assistant Professor |

## Awards and Recognition

- Kavli Fellow (Frontiers of Science, National Academies of Science USA) (2011)
- Alfred P. Sloan Research Fellow (2010)
- Gerald J. Ford Research Fellow (2010)
- ACS Leadership Development Award (2010)
- Named an "Emerging Investigator" by the Royal Society of Chemistry journal *Polymer Chemistry* (2011)
- NSF CAREER Award, 2009
- Named an "Emerging Investigator" by the Royal Society of Chemistry journal *Soft Matter* (2009)
- Sam Taylor Fellowship (2007)
- Ralph E. Powe Junior Faculty Award (Oak Ridge Associated Universities) (2007)
- #1 Most referenced article published in *Macromolecules* during 2007
- National Science Foundation (NSF) Travel Award - NATO Advanced Studies Institute, Pisa, Italy (2003)
- Full academic scholarship, North Carolina State University (1994-1998)
- Joseph T. Moore Merit Award, North Carolina State University (1994-1998)

## Other Affiliations and Activities

- Associate Editor, *Polymer Chemistry* (Royal Society of Chemistry, 2012-)
- Editorial Board for *Polymer Chemistry* (Royal Society of Chemistry, 2010-2012)
- Editorial Advisory Board for *Macromolecules* (ACS, 2011-)

- Editorial Advisory Board for *ACS Macro Letters* (ACS, 2011-)
- Editorial Advisory Board for *Polymer Chemistry* (Royal Society of Chemistry, 2009-2010)
- Editorial Board *Journal of Polymer Science Part A: Polymer Chemistry* (2010-)
- Executive Editorial Advisory Board *Macromolecular Rapid Communications* (Wiley, 2011-)
- Executive Editorial Advisory Board *Macromolecular Bioscience* (Wiley, 2011-)
- Executive Editorial Advisory Board *Macromolecular Chemistry & Physics* (Wiley, 2011-)
- Executive Editorial Advisory Board *Macromolecular Materials & Engineering* (Wiley, 2011-)
- Executive Editorial Advisory Board *Macromolecular Theory & Simulations* (Wiley, 2011-)
- Executive Editorial Advisory Board *Macromolecular Reaction Engineering* (Wiley, 2011-)
- Executive Editorial Advisory Board *Macromolecular Symposia* (Wiley, 2011-)
- Editorial Advisory Board for *Polymer* (Elsevier, 2010-)
- Editorial Advisory Board for the *Journal of Macromolecular Science* (Taylor & Francis, 2007-)
- Co-Editor (with K. Matyjaszewski and N. V. Tsarevsky) of ACS Symposium Series book: *Progress in Controlled Radical Polymerization: Mechanisms and Techniques* (to be published in 2012)
- Co-Editor (with K. Matyjaszewski and N. V. Tsarevsky) of ACS Symposium Series book: *Progress in Controlled Radical Polymerization: Materials and Applications* (to be published in 2012)
- Co-Editor (with N. V. Tsarevsky) of RSC book *Fundamentals of Controlled Radical Polymerization* (to be published in 2012)
- Invited co-editor (with Jean-Francois Lutz and Shiyong Liu) of *Macromolecular Rapid Communications* for special "Polymer Science: The Next Generation" issue, 2012
- Invited co-editor (with Rachel O'Reilly, Thomas H. Epps, and Patrick Theato) of *Chemical Society Reviews* for special "Stimuli-responsive materials" issue, 2012
- Invited co-editor (with Jan van Hest) of *Polymer Chemistry* for special "Polymer Bioconjugates" issue, 2011
- Member of the Center for Drug Discovery, Design, & Delivery at Southern Methodist University (2011-)
- Co-Director (with Marek Urban) & Scientific Advisory Board for annual International Symposium on Stimuli-Responsive Materials
- Co-organizer (with Nicolay Tsarevsky and Eric Simanek) for symposium for the 2011 Southwest Regional Meeting of the ACS (Title: "Supramolecular and Dynamic-Covalent Materials")
- Co-organizer (with Krzysztof Matyjaszewski and Nicolay V. Tsarevsky) for symposium in the Division of Polymer Chemistry for the Fall 2011 National ACS Meeting (Title: "International Year of Chemistry: Controlled Radical Polymerization")
- Co-organizer (with Craig J. Hawker and Jean-Francois Lutz) for symposium in the Division of Polymer Chemistry for the Spring 2008 National ACS Meeting (Title: "Efficient Chemical Transformations in Polymer Chemistry: Click Chemistry and Beyond")
- *Chairman* of Young Chemist Committee for the Dallas/Fort Worth Section of the ACS, 2007-
- Member of Polymer Chemistry and the Polymeric Materials: Science and Engineering Divisions of the ACS
- American Chemical Society (ACS)
- Royal Society of Chemistry
- POLYED Committee of the Polymer Chemistry Division of the ACS
- Reviewer for manuscripts/proposals to National Science Foundation| Petroleum Research Fund of the American Chemical Society| Research Corporation | U.S. Civilian Research and Development Foundation| *ACS Appl. Mat. Interf.* | *ACS Maco Lett.* | *ACS Nano* | *Adv. Drug Delivery Rev* | *Adv. Mater.*| *Angew Chem. Int. Ed.* | *Aust. J. Chem.*| *Bioconjugate Chem.* | *Biomacromolecules*| *Chem. Commun.*| *Chem. Mater.* | *Chemical Sci.* | *ePolymers* | *Euro. Polym. J.*| *Israel J. Chem.* | *J. Am. Chem. Soc.*| *J. Appl. Polym. Sci.*| *J. Colloid Interf. Sci.*| *J. Macromol. Sci, Pure Appl. Chem.*| *J. Mater. Chem.* | *J. Org. Chem.*| *J. Polym. Sci., Part A: Polym. Chem. Ed.*| *Langmuir* | *Macromolecules*| *Macromol. Chem. Phys.*| *Macromol. Rapid Commun.*| *Nature Chemistry* | *Nature Materials* | *Polymer*| *Polym. Bull.* | *Polym. Chem.* | *Polym. Rev.*| *Prog. Polym. Sci.* | *Pure Appl. Chem.* | *QSAR & Comb. Sci.*| *RSC Advances* | *Soft Matter*
- Faculty Advisor - SMU Chemistry Society (ACS student affiliate), 2007-
- Search committee for Associate Vice President of Research Administration, 2009
- Faculty Senate Subcommittee on Research, 2009-
- SMU Pure and Applied Science Curriculum Committee, 2010-
- Provost's Taskforce on Graduate Education, 2010-
- Chemistry Graduate Admissions Committee, 2005-

- SMU President's Scholars Interviewer, 2007, 2008

## Books Edited/Authored

1. *Progress in Controlled Radical Polymerization: Materials and Applications*; Matyjaszewski, K., Sumerlin, B. S., Tsarevsky, N. V., Eds.; ACS Symposium Series 1101; American Chemical Society: Washington, DC, 2012.

2. *Progress in Controlled Radical Polymerization: Mechanisms and Techniques*; Matyjaszewski, K., Sumerlin, B. S., Tsarevsky, N. V., Eds.; ACS Symposium Series 1100; American Chemical Society: Washington, DC, 2012.

## Peer-Reviewed Publications

1. Abhijeet P. Bapat, Jacob G. Ray, Daniel A. Savin, Emily A. Hoff, Derek L. Patton, Brent S. Sumerlin "Dynamic-covalent nanostructures prepared by Diels–Alder reactions of styrene-maleic anhydride-derived copolymers obtained by one-step cascade block copolymerization" *Polymer Chemistry* **2012**, DOI: 10.1039/C2PY20351K.

2. Jennifer N. Cambre, Debashish Roy, Brent S. Sumerlin "Tuning the Sugar-Response of Boronic Acid Block Copolymers" *Journal of Polymer Science Part A: Polymer Chemistry*, **2012**, *50*, 3373-3382.

3. Debashish Roy, Brent S. Sumerlin "Glucose-Sensitivity of Boronic Acid Block Copolymers at Physiological pH" *ACS Macro Letters* **2012**, *1*, 529-532.

4. Brent S. Sumerlin "Proteins as Initiators of Controlled Radical Polymerization: Grafting-from via ATRP and RAFT" *ACS Macro Letters* **2012**, *1*, 141–145.

5. Jean-Fraçois Lutz, Shiyong Liu, Brent Sumerlin "Polymer Science: The Next Generation" *Macromolecular Rapid Communications* **2012**, *33*, 721. [Editorial]

6. Megan R. Hill, Soma Mukherjee, Philip J. Costanzo, Brent S. Sumerlin "Modular Oxime Functionalization of Well-Defined Alkoxyamine-Containing Polymers" *Polymer Chemistry* **2012**, *3*, 1758-1762.

7. William A. L. Brooks, Brent S. Sumerlin "RAFT Polymerization Under Microwave Heating Conditions" *Progress in Controlled Radical Polymerization: Mechanisms and Techniques ACS Symp. Ser.*; Matyjaszewski, K.; Sumerlin, B. S.; Tsarevsky, N. V., Eds.; ACS: Washington D.C., **2012**, Vol. 1100. pp 277-291.

8. Patrick Wilke, William L. A. Brooks, Romina Kühnle, Brent Sumerlin, Hans G. Börner "Activity control of mussel glue derived enzymes: A study on thermoresponsive tyrosinase-PNIPAM conjugates" *Progress in Controlled Radical Polymerization: Materials and Applications ACS Symp. Ser.*; Matyjaszewski, K.; Sumerlin, B. S.; Tsarevsky, N. V., Eds.; ACS: Washington D.C., **2012**, Vol. 1101. pp 271-285.

9. William A. L. Brooks, Brent S. Sumerlin "Microwave-Assisted RAFT Polymerization" *Israel Journal of Chemistry* **2012**, *52*, 256-263. – special issue in honor of Krzystof Matyjaszewski's 2010 Wolf Prize.

10. Abhijeet P. Bapat, Debashish Roy, Jacob G. Ray, Daniel A. Savin, Brent S. Sumerlin "Dynamic-Covalent Macromolecular Stars with Boronic Ester Linkages" *Journal of the American Chemical Society* **2011**, *133*, 19832–19838.

11. Jennifer N. Cambre, Brent S. Sumerlin "Biomedical Applications of Boronic Acid Polymers" *Polymer*, **2011**, *52*, 4631-4643.

12. Jan van Hest, Brent Sumerlin "Polymer Bioconjugates" *Polymer Chemistry* **2011**, 2, 1427. [Editorial]

13. Debashish Roy, Brent S. Sumerlin "Microwave-Assisted Synthesis of Vinyl Ester Block Copolymers by RAFT/MADIX Polymerization" *Polymer* **2011**, *52*, 3038-3045.

14. Hongmei Li, Ming Li, Xiao Yu, Abhijeet P. Bapat, and Brent S. Sumerlin "Block Copolymer Conjugates Prepared by Sequentially Grafting from Proteins via RAFT" *Polymer Chemistry* **2011**, *2*, 1531-1535. Highlighted in *Nature Chemistry* **2012**, *11*, 753.

15. Tadeusz Pakula, Kaloian Koynov, Hans Boerner, Jinyu Huang, Hyung-il Lee, Joanna Pietrasik, Brent Sumerlin, Krzysztof Matyjaszewski "Effect of chain topology on the self-organization and the mechanical properties of poly(*n*-butyl acrylate)-*b*-polystyrene block copolymers" *Polymer*, **2011**, *52*, 2576-2583.

16. Hongmei Li, Abhijeet P. Bapat, Ming Li, Brent S. Sumerlin "Protein conjugation of thermoresponsive amine-reactive polymers prepared by RAFT" *Polymer Chemistry* **2011**, *2*, 323-327.

17. Ming Li, Hongmei Li, Priyadarsi De, Brent S. Sumerlin "Thermoresponsive Block Copolymer-Protein Conjugates Prepared by Grafting-From via RAFT Polymerization" *Macromolecular Rapid Communications* **2011**, *32*, 354-359.

18. Debashish Roy, Jennifer N. Cambre, Brent S. Sumerlin "Biological- and Field-Responsive Polymers: Expanding Potential in Smart Materials" In *Handbook of Stimuli-Responsive Materials*, Urban, M., Ed. Wiley-VCH: Weinheim, **2011**, pp 27-58.

19. Ming Li, Hongmei Li, Brent S. Sumerlin "Conjugation of RAFT-generated polymers to proteins by two consecutive thiol-ene reactions" *Polymer Chemistry* **2010**, *1*, 854-859.

20. Brent S. Sumerlin, Andrew P. Vogt "Facilitating Macromolecular Engineering through Click Chemistry and other Efficient Transformations" *Macromolecules* **2010**, *43*, 1–13.

21. Debashish Roy, Jennifer N. Cambre, Brent S. Sumerlin "Future Perspectives in Smart Materials: Recent Advances and New Directions in Stimuli-Responsive Polymers" *Progress in Polymer Science* **2010**, *35*, 278-301.

22. Chang-Uk Lee, Debashish Roy, Brent S. Sumerlin, Mark D. Dadmun "Facile Synthesis of Thiol-terminated Poly(styrene-*ran*-vinyl phenol) (PSVPh) Copolymers via Reversible Addition-Fragmentation Chain Transfer (RAFT) Polymerization and Their Use in the Synthesis of Gold Nanoparticles with Controllable Hydrophilicity" *Polymer* **2010**, *51*, 1244-1251.

23. Stephen G. Boyes, Misty D. Rowe, C.-C Chang, D. H. Thamm, S. L. Kraft, J. F. Harmon, N. J. Serkova, Andrew P. Vogt, Brent S. Sumerlin. "Surface Modification of Positive Contrast Nanoparticle Agents with RAFT Polymers Towards the Targeted Imaging and Treatment of Cancer" in *Polymeric Delivery of Therapeutics*; Morgan, S.E. and Lochhead, R.Y Eds.; ACS Symp. Series, Vol. 1053; American Chemical Society: Washington, DC, 2010, 65-101.

24. Debashish Roy, Aman Ullah, Brent S. Sumerlin "Rapid Block Copolymer Synthesis by Microwave-Assisted RAFT Polymerization" *Macromolecules* **2009**, *42*, 7701-7708.

25. Priyadarsi De, Sudershan R. Gondi, Debashish Roy, Brent S. Sumerlin "Boronic Acid Terminated Polymers: Synthesis by RAFT and Subsequent Dynamic Covalent Self-Assembly" *Macromolecules* **2009**, *42*, 5614–5621.

26. Misty D. Rowe, Chia-Chih Chang, Douglas H. Thamm, Susan L. Kraft, Joseph F. Harmon, Jr., Andrew P. Vogt, Brent S. Sumerlin, Stephen G. Boyes "Tuning the Magnetic Resonance Imaging Properties of Positive Contrast Agent Nanoparticles by Surface Modification with RAFT Polymers" *Langmuir* **2009**, *25*, 9487–9499.

27. Debashish Roy, Jennifer N. Cambre, Brent S. Sumerlin "Triply-Responsive Aqueous Solution Self-Assembly from Boronic Acid Block Copolymers" *Chemical Communications* **2009**, 2106-2108.

28. Andrew P. Vogt, Brent S. Sumerlin "Temperature and Redox Responsive Hydrogels from ABA Triblock Copolymers Prepared by RAFT Polymerization" *Soft Matter* **2009,** *5*, 2347-2351.

29. Jean-Francois Lutz, Brent S. Sumerlin "The Role of Click Chemistry in Polymer Synthesis" In *Click Chemistry for Biotechnology and Materials Science*, Lahann, J., Ed. Wiley-VCH: Weinheim, 2009.

30. Priyadarsi De, Ming Li, Sudershan R. Gondi, Brent S. Sumerlin "Temperature-Regulated Activity of Responsive Polymer-Protein Conjugates Prepared by Grafting-from via RAFT Polymerization" *Journal of the American Chemical Society* **2008**, *130*, 11288–11289.

31. Andrew P. Vogt, Brent S. Sumerlin "Tuning the Temperature Response of Branched Poly(N-Isopropylacrylamide) Prepared by RAFT Polymerization" *Macromolecules* **2008,** *41*, 7368-7373.

32. Ming Li, Priyadarsi De, Sudershan R. Gondi, Brent S. Sumerlin "End Group Transformations of RAFT-Generated Polymers with Bismaleimides: Functional Telechelics and Modular Block Copolymers" *Journal of Polymer Science, Part A: Polymer Chemistry* **2008**, *46*, 5093-5100.

33. Jagannath Dey, Hao Xu, Jinhui Shen, Paul, Thevenot, Sudershan R. Gondi, Kytai T. Nguyen, Brent S. Sumerlin, Liping Tang, Jian Yang "Development of biodegradable crosslinked urethane-doped polyester elastomers" *Biomaterials* **2008**, *29*, 4637-4649.

34. Sergei S. Sheiko, Brent S. Sumerlin, Krzysztof Matyjaszewski "Cylindrical Molecular Brushes: Synthesis, Characterization, and Properties" *Progress in Polymer Science* **2008**, *33*, 759-785.

35. Kyle B. Guice, Stephen R. Marrou, Sudershan R. Gondi, Brent S. Sumerlin, and Yueh-Lin Loo "pH Response of Hydrogels of Diblock and Triblock Copolymers containing Polystyrene and Poly(2-hydroxyethyl methacrylate-co-2-dimethylaminoethyl methacrylate)" *Macromolecules* **2008**, *41*, 4390-4397.

36. Charles L. McCormick, Brent S. Sumerlin, Brad S. Lokitz, Jonathan E. Stempka "RAFT-Synthesized Diblock and Triblock Copolymers: Thermally-Induced Supramolecular Assembly in Aqueous Media" *Soft Matter* **2008**, *4*, 1760-1773.

37. Debashish Roy, Jennifer M. Cambre, Brent S. Sumerlin "Sugar-Responsive Block Copolymers by Direct RAFT Polymerization of Unprotected Boronic Acid Monomers" *Chemical Communications* **2008**, 2477-2479.

38. Ming Li, Priyadarsi De, Sudershan R. Gondi, Brent S. Sumerlin "Responsive Polymer-Protein Bioconjugates Prepared by RAFT Polymerization and Copper-Catalyzed Azide-Alkyne Click Chemistry" *Macromolecular Rapid Communications* **2008**, *29*, 1172-1176. Highlighted in the June 2008 edition of *Materials View.*

39. Priyadarsi De, Sudershan R. Gondi, Brent S. Sumerlin "Folate-Conjugated Thermoresponsive Block Copolymers: Highly Efficient Conjugation and Solution Self-Assembly" *Biomacromolecules* **2008,** *9*, 1064-1070.

40. Jennifer N. Cambre, Debashish Roy, Sudershan R. Gondi, Brent S. Sumerlin "Facile Strategy to Well-Defined Water-Soluble Boronic Acid (Co)polymers" *Journal of the American Chemical Society* **2007**, *129*, 10348-10349.

41. Andrew P. Vogt, Sudershan R. Gondi, Brent S. Sumerlin "Hyperbranched Polymers via RAFT Copolymerization of an Acryloyl Trithiocarbonate" *Aust. J. Chem.* **2007**, *60*, 396–399.

42. Sudershan R. Gondi, Andrew P. Vogt, Brent S. Sumerlin "Versatile Pathway to Functional Telechelics via RAFT Polymerization and Click Chemistry" *Macromolecules* **2007**, *40*, 474-481.

43. Patricia L. Golas, Nicolay V. Tsarevsky, Brent S. Sumerlin, Krzysztof Matyjaszewski "Multisegmented Block Copolymers by "Click" Coupling of Polymers Prepared by ATRP" *Aust. J. Chem.* **2007**, *60*, 400–404.

44. Joanna Pietrasik, Brent S. Sumerlin, Robert Y. Lee, Krzysztof Matyjaszewski "Solution Behavior of Temperature-Responsive Molecular Brushes Prepared by ATRP" *Macromol. Chem. Phys.* **2007**, *208,* 30–36.

45. Joanna Pietrasik, Brent S. Sumerlin, Hyung-il Lee, Roberto R. Gil, Krzysztof Matyjaszewski "Structural mobility of molecular bottle-brushes investigated by NMR relaxation dynamics" *Polymer* **2007**, *48*, 496-501.

46. Sumerlin, B. S.; Matyjaszewski, K., "Molecular brushes-densely grafted copolymers" In *Macromolecular Engineering*, Matyjaszewski, K.; Gnanou, Y.; Leibler, L., Eds. Wiley-VCH: Weinheim, 2007; Vol. 2, pp 1103-1135.

47. Andrew P. Vogt, Brent S. Sumerlin "An Efficient Route to Macromonomers via ATRP and Click Chemistry" *Macromolecules* **2006**, *39*, 5286-5292.

48. Brent S. Sumerlin, Nicolay V. Tsarevsky, Haifeng Gao, Patricia Golas, Guillaume Louche, Robert Y. Lee, and Krzysztof Matyjaszewski "Click Functionalization of Well-Defined Copolymers Prepared by Atom Transfer Radical Polymerization" *Controlled/Living Radical Polymerization: From Synthesis to Materials ACS Symp. Ser.*; ACS: Washington D.C., 2006, Vol. 944.

49. Patricia L. Golas, Nicolay V. Tsarevsky, Brent S. Sumerlin, Krzysztof Matyjaszewski "Catalyst Performance in "Click" Coupling Reactions of Polymers Prepared by ATRP: Ligand and Metal Effects" *Macromolecules* **2006**, *39*, 6451-6457.

50. Robert E. Richard, Marlene Schwarz, Shrirang Ranade, A. Ken Chan, Krzysztof Matyjaszewski, Brent Sumerlin "Acrylate-Based Block Copolymers Prepared by Atom Transfer Radical Polymerization as Matrices for Drug Delivery Applications" *Controlled/Living Radical Polymerization: From Synthesis to Materials ACS Symp. Ser.*; ACS: Washington D.C., 2006, Vol. 944.

51. Robert E. Richard, Marlene Schwarz, Shrirang Ranade, A. Ken Chan, Krzysztof Matyjaszewski, and Brent Sumerlin "Evaluation of Acrylate-Based Block Copolymers Prepared by ATRP as Matrices for Paclitaxel Delivery from Coronary Stents" *Biomacromolecules* **2005**, *6*, 3410-3418.

52. Haifeng Gao, Guillaume Louche, Brent S. Sumerlin, Nazeem Jahed, Patricia Golas, Krzysztof Matyjaszewski "Gradient Polymer Elution Chromatographic Analysis of α,ω-Dihydroxypolystyrene Synthesized via ATRP and Click Chemistry" *Macromolecules* **2005**, *38*, 8979-8982.

53. Brent S. Sumerlin, Nicolay V. Tsarevsky, Guillaume Louche, Robert Y. Lee, Krzysztof Matyjaszewski "Highly Efficient "Click" Functionalization of Poly(3-azidopropyl methacrylate) Prepared by ATRP" *Macromolecules*, **2005**; *38*, 7540-7545.

54. Nicolay V. Tsarevsky, Brent S. Sumerlin, and Krzysztof Matyjaszewski "Step Growth 'Click' Coupling of Telechelic Polymers Prepared by Atom Transfer Radical Polymerization" *Macromolecules* **2005**, *38*, 3558-3561.

55. Brent S. Sumerlin, Dorota Neugebauer, Krzysztof Matyjaszewski "Initiation Efficiency in the Synthesis of Molecular Brushes by Grafting from via Atom Transfer Radical Polymerization" *Macromolecules* **2005**, *38*, 702-708.

56. Krzysztof Matyjaszewski; James Spanswick; Brent S. Sumerlin "Preparation, Characterization, and Applications of Polymers Synthesized by Atom Transfer Radical Polymerization." Living and Controlled Polymerization: Synthesis, Characterization and Properties of the Respective Polymers and Copolymers, Jagur-Grodzinski, J., Ed. Nova Science: 2005.

57. Charles W. Scales; Anthony J. Convertine; Brent S. Sumerlin; Andrew B. Lowe; Charles L. McCormick "Synthesis of terminally functionalized (Co)polymers via reversible addition fragmentation chain transfer polymerization and subsequent immobilization to solid surfaces with potential biosensor applications." *Stimuli-Responsive Polymeric Films and Coatings. ACS Symp. Ser.*; ACS: Washington D.C., 2005, Vol. 912.

58. Dorota Neugebauera, Brent S. Sumerlin, Krzysztof Matyjaszewski, Benjamin Goodhart, Sergei S. Sheiko "How dense are cylindrical brushes grafted from a multifunctional macroinitiator?" *Polymer* **2004**, *45*, 8173-8179.

59. Brent S. Sumerlin, Andrew B. Lowe, David B. Thomas, Anthony J. Convertine, Michael S. Donovan, Charles L. McCormick "Aqueous solution properties of pH-responsive AB diblock acrylamido-styrenic copolymers synthesized via aqueous reversible addition-fragmentation chain transfer" *Journal of Polymer Science Part A: Polymer Chemistry* **2004**, *42*, 1724-1734.

60. Andrew B. Lowe, Brent S. Sumerlin, Charles L. McCormick "The Direct Polymerization of 2-Methacryloxyethyl Glucoside via Aqueous Reversible Addition-Fragmentation Chain Transfer Polymerization" *Polymer* **2003**, *44*, 6761.

61. Anthony J. Convertine, Brent S. Sumerlin, David B. Thomas, Andrew B. Lowe, Charles L. McCormick "Synthesis of Block Copolymers of 2- and 4-Vinylpyridine by RAFT Polymerization" *Macromolecules* **2003**, *36*, 4679.

62. Brent S. Sumerlin, Andrew B. Lowe, Paul A. Stroud, Charles L. McCormick "Modification of Gold Surfaces with Water-Soluble (Co)polymers prepared via Aqueous Reversible Addition-Fragmentation Chain Transfer (RAFT) Polymerization" *Langmuir* **2003**, *19*, 5559.

63. Brent S. Sumerlin, Andrew B. Lowe, David B. Thomas, Charles L. McCormick "Aqueous Solution Properties of pH-Responsive AB Diblock Acrylamido Copolymers Synthesized via Aqueous RAFT" *Macromolecules* **2003**, *36*, 5982.

64. David B. Thomas, Brent S. Sumerlin, Andrew B. Lowe, Charles L. McCormick "Conditions for Facile, Controlled RAFT Polymerization of Acrylamide in Water" *Macromolecules* **2003**, *36*, 1436.

65. Andrew B. Lowe, Brent S. Sumerlin, Michael S. Donovan, David B. Thomas, Pierre Hennaux, Charles L. McCormick "RAFT Polymerization in Homogeneous Aqueous Media" *Advances in Controlled Radical Polymerizations. ACS Symp. Ser.*; ACS: Washington D.C., 2003; Vol. 854.

66. Andrew B. Lowe, Brent S. Sumerlin, Michael S. Donovan, Charles L. McCormick "Facile Preparation of Transition Metal Nanoparticles Stabilized by Well-defined (Co)polymers Synthesized via Aqueous RAFT" *Journal of the American Chemical Society* **2002**, *124*, 11562.

67. Michael S. Donovan, Brent S. Sumerlin, Andrew B. Lowe, Charles L. McCormick "Controlled Polymerization of Sulfobetaine Monomers Directly in Aqueous Media via RAFT" *Macromolecules* **2002**, *35*, 8663.

68. Michael S. Donovan, Andrew B. Lowe, Brent S. Sumerlin, Charles L. McCormick "RAFT Polymerization of *N,N*-Dimethylacrylamide in Water" *Macromolecules* **2002**, *35*, 4570.

69. Michael S. Donovan, Andrew B. Lowe, Brent S. Sumerlin, Charles L. McCormick "RAFT Polymerization of *N,N*-Dimethylacrylamide Utilizing Novel Chain Transfer Agents Tailored for High Reinitiation Efficiency and Structural Control" *Macromolecules* **2002**, *35*, 4123.

70. Brent S. Sumerlin, Michael S. Donovan, Yoshiro Mitsukami, Andrew B. Lowe, Charles L. McCormick "Controlled Polymerization in Aqueous Media of Anionic Acrylamido Monomers via RAFT" *Macromolecules* **2001**, *34*, 6561.

## Patents

1. Brent S. Sumerlin, Debashish Roy, Jennifer N. Cambre "Boronic Acid-Containing Block Copolymers in Controlled Drug Delivery" U.S. Pat. Appl. Publ. (2010), US 2010029545 A1 20100204 CAN 152:216283 AN 2010:151338.

2. Andrew B. Lowe, Brent S. Sumerlin and Charles L. McCormick. "Preparation of Transition Metal Nanoparticles and Surfaces Modified (Co)Polymers Synthesized by RAFT" US 7417096.

3. Krzysztof Matyjaszewski; Brent S. Sumerlin; Nicolay Tsarevsky; James Spanswick "Preparation of functional polymers" WO 2005087818.

4. Charles L. McCormick, Michael S. Donovan, Andrew B. Lowe, Brent S. Sumerlin, David B. Thomas "Chain Transfer Agents for RAFT Polymerization in Aqueous Media" US 6855840.

5. Charles L. McCormick, Michael S. Donovan, Andrew B. Lowe, Brent S. Sumerlin, David B. Thomas "Chain Transfer Agents for RAFT Polymerization in Aqueous Media" US 7179872.

6. Charles L. McCormick, Michael S. Donovan, Andrew B. Lowe, Brent S. Sumerlin, David B. Thomas "Chain Transfer Agents for RAFT Polymerization in Aqueous Media" US 7186786.

7. Andrew B. Lowe, Brent S. Sumerlin, Charles L. McCormick "Preparation of transition metal nanoparticles and surfaces modified with (Co)polymers synthesized by RAFT" US 7138468.

## Seminars & Contributions to Meetings - presenting author in **bold**

1. Ming Li, Hongmei Li, Hao Sun, **Brent S. Sumerlin** "Responsive block copolymer-protein conjugates" ACS National Meeting, Philadelphia, August 2012. *Invited*.

2. Abhijeet P. Bapat, Soma Mukherjee, Jessica J. Cash, Jacob G. Ray, Daniel A. Savin, **Brent S. Sumerlin** "Dynamic-Covalent Macromolecular Assemblies of Organoboron Polymers" ACS National Meeting, Philadelphia, August 2012. *Invited*.

3. Abhijeet P. Bapat, Jacob G. Ray, Daniel A. Savin, **Brent S. Sumerlin** "Dynamic-covalent branched macromolecules" Warwick Polymer Chemistry Conference –University of Warwick, Coventry, U.K. July 2012. *Invited*.

4. Jennifer N. Cambre, Debashish Roy, Abhijeet P. Bapat, Hongmei Li, Ming Li, Priyadarsi De, **Brent S. Sumerlin** "Stimuli-responsive macromolecules: Polymer-protein conjugates and sugar-responsive micelles" 3rd International Nanomedicine Conference, Sydney, Australia. July 2012. *Invited*.

5. Abhijeet P. Bapat, Jacob G. Ray, Daniel A. Savin, **Brent S. Sumerlin** "Arm-first, core-crosslinked stars containing dynamic-covalent Diels-Alder linkages" World Polymer Conference – IUPAC Macro 2012, Blacksburg, VA. June 2012. *Invited*.

6. **Brent S. Sumerlin,** Ming Li, Hongmei Li, Abhijeet P. Bapat, Hao Sun "Responsive polymer-protein hybrid materials" World Polymer Conference – IUPAC Macro 2012, Blacksburg, VA. June 2012. *Invited*.

7. **Abhijeet P. Bapat**, Soma Mukherjee, Jacob G. Ray, Daniel A. Savin, Brent S. Sumerlin "Dynamic-covalent macromolecular architectures" World Polymer Conference – IUPAC Macro 2012, Blacksburg, VA. June 2012.

8. **Brent S. Sumerlin**, Hongmei Li, Ming Li, Jennifer N. Cambre, Debashish Roy "Responsive Polymer-protein Conjugates and Sugar-responsive Polymeric Micelles" Gordon Research Conference on Biointerfaces. Les Diablerets, Switzerland. May 2012. *Invited*.

9. **Megan R. Hill**, Soma Mukherjee, Philip J. Costanzo, Brent S. Sumerlin "Modular Oxime Functionalization of Well-Defined Alkoxyamine-Containing Polymers" ACS National Meeting, San Diego, CA, March 2012.

10. Abhijeet P. Bapat, Debashish Roy, Jacob G. Ray, Daniel A. Savin, **Brent S. Sumerlin** "Responsive dynamic-covalent nanostructures based on boronic esters" ACS National Meeting, San Diego, CA, March 2012. *Invited*.

11. Hongmei Li, Ming Li, Priydarsi De, **Brent S. Sumerlin** "Stimuli-responsive block copolymer-protein hybrids" ACS National Meeting, San Diego, CA, March 2012. *Invited*.

12. **Brent S. Sumerlin** "Making proteins smarter by conjugation with stimuli-responsive polymers" 33rd Australasian Polymer Conference, Hobart, TAS, Australia, February 2012.

13. **Brent S. Sumerlin** Eastman Kodak Co., Materials Council Seminar Series, February 2012.

14. **Brent S. Sumerlin** University of Science and Technology of China, Hefei, China, January 2012.

15. **Brent S. Sumerlin** Peking University, Beijing, China, January 2012.

16. **Brent S. Sumerlin** Institute of Chemistry, Chinese Academy of Sciences, Beijing, China, January 2012.

17. **Brent S. Sumerlin** Shanghai Jiao Tong University, Shanghai, China, January 2012.

18. **Brent S. Sumerlin** Evonik Meets Science 2012, Pittsburgh, PA, December 2011.

19. **Brent S. Sumerlin** University of Montana, Department of Chemistry, Departmental Seminar, November 2011.

20. **Brent S. Sumerlin** International Symposium on Stimuli-Responsive Materials, University of Southern Mississippi, October 2011. *Plenary*.

21. **Brent S. Sumerlin** University of North Texas, Department of Chemistry, Departmental Seminar, October 2011.

22. **Brent S. Sumerlin** "Responsive Polymer-protein Conjugates and Sugar-responsive Polymeric Micelles" Polymers in Medicine and Biology: 2011. Santa Rosa, CA, September 2011. *Invited*.

23. Hongmei Li, Ming Li, Xiao Yu, Jinbao Cao, **Brent S. Sumerlin** "Responsive Polymer-Protein Conjugates by RAFT Polymerization" ACS National Meeting, Denver, CO, August 2011. *Invited*.

24. **Jennifer N. Cambre**, Debashish Roy, Brent S. Sumerlin "Boronic Acid Block Copolymers: Synthesis via RAFT and Aqueous Solution Self-Assembly" ACS National Meeting, Denver, CO, August 2011.

25. Patrick Wilke, Hongmei Li, Brent S. Sumerlin, **Hans Börner** "Activity control of enzymatic properties in protein-polymer conjugates" ACS National Meeting, Denver, CO, August 2011.

26. Ming Li, Hongmei Li, Priyadarsi De, **Brent S. Sumerlin** "Polymer-protein conjugates: The best of both worlds" Indonesian-American Kavli Frontiers of Science Symposium in Bogor, Indonesia,

July 2011. *Invited poster*.

27. Ming Li, Hongmei Li, Priyadarsi De, **Brent S. Sumerlin** "Stimuli-responsive polymer-protein conjugates prepared by RAFT" Gordon Research Conference – Polymers, South Hadley, MA, June 2011.

28. **Brent S. Sumerlin** University of Florida, George and Josephine Butler Polymer Research Laboratory, Department of Chemistry, Seminar, May 2011.

29. **Brent S. Sumerlin** University of Warwick, Department of Chemistry, Departmental Seminar, May 2011.

30. **Brent S. Sumerlin** Cambridge University, Melville Laboratory for Polymer Synthesis, Department of Chemistry, Seminar, May 2011.

31. **Brent S. Sumerlin** Tulane University, Department of Chemistry, Departmental Seminar, March 2011.

32. **Brent S. Sumerlin** University of Minnesota, Department of Chemistry, Departmental Seminar, February 2011.

33. **Brent S. Sumerlin** Northeastern University, Department of Chemistry & Chemical Biology, Departmental Seminar, January 2011.

34. Jennifer N. Cambre, Debashish Roy, Hongmei Li, Ming Li, **Brent S. Sumerlin** "Smart polymer-protein conjugates and sugar-responsive micelles" Pacifichem 2010, Honolulu, HI, December 2010. *Invited*.

35. **Brent S. Sumerlin** Texas A&M University, Department of Chemistry, Organic Seminar, December 2010.

36. Hongmei Li, Ming Li, **Brent S. Sumerlin** "Thermoresponsive polymer-protein conjugates prepared by RAFT polymerization" at the Southeast Regional Meeting of the American Chemical Society in New Orleans, LA, December 2010. *Invited*.

37. **Brent S. Sumerlin** Georgia Tech, School of Materials Science and Engineering, PTFE Seminar, November 2010.

38. **Brent S. Sumerlin**, Ming Li, Hongmei Li, Priyadarsi De "Stimuli-responsive block copolymer-protein conjugates" International Symposium on Stimuli-Responsive Materials, University of Southern Mississippi, Hattiesburg, MS. October 2010. *Plenary*.

39. **Brent S. Sumerlin** Virginia Tech, Macromolecules and Interfaces Institute Seminar, October 2010.

40. **Brent S. Sumerlin** Washington University in St. Louis, Department of Chemistry, Departmental Seminar, September 2010.

41. Ming Li, Hongmei Li, Abhijeet P. Bapat, Priydarsi De, **Brent S. Sumerlin** "Functional polymers and polymer-protein conjugates prepared by RAFT and thiol-ene reactions" ACS National Meeting, Boston, MA, August 2010. *Invited*.

42. Jennifer N. Cambre, Debashish Roy, Abhijeet P. Bapat, **Brent S. Sumerlin** "Macromolecular assemblies of organoboron block copolymers" ACS National Meeting, Boston, MA, August 2010. *Invited*.

43. **Brent S. Sumerlin** "Stimuli-responsive polymer-protein conjugates and 'sweet-tooth' micelles" ACS National Meeting, Boston, MA, August 2010. *Invited contribution to ORGN Young Academic Investigators symposium*.

44. **Debashish Roy**, Jennifer N. Cambre, Brent S. Sumerlin "Triply-responsive organoboron block copolymers" ACS National Meeting, Boston, MA, August 2010.

45. **Jennifer N. Cambre**, Debashish Roy, Brent S. Sumerlin "Sugar-responsive organoboron block copolymers" ACS National Meeting, Boston, MA, August 2010.

46. **Young Hoon Lim**, Jennifer N. Cambre, Debashish Roy, Brent S. Sumerlin "Biocompatible boronic Acid polymers Prepared by atom transfer Radical polymerization (ATRP)" ACS National Meeting, Boston, MA, August 2010.

47. **Hongmei Li**, Ming Li, Abhijeet P. Bapat, Brent S. Sumerlin "Smart polymer-protein conjugates by RAFT polymerization and activated ester chemistry." ACS National Meeting, Boston, MA, August 2010.

48. **Abhijeet P. Bapat**, Debashish Roy, Brent S. Sumerlin "Dynamic-covalent macromolecular stars" ACS National Meeting, Boston, MA, August 2010.

49. **Debashish Roy**, Aman Ullah, Brent S. Sumerlin "Microwave-assisted MADIX/RAFT polymerization of acrylamido and vinyl ester monomers" ACS National Meeting, Boston, MA, August 2010.

50. **Brent S. Sumerlin**, Hongmei Li, Ming Li, Priyadarsi De "Thermoresponsive polymer-protein conjugates prepared by grafting-to and grafting-from *via* RAFT polymerization" Young Polymer Scientist Symposium, IUPAC World Polymer Congress (Macro2010), Glasgow, Scotland, UK, July 2010. *Invited.*

51. **Brent S. Sumerlin** Texas Tech University, Department of Chemistry & Biochemistry, Departmental Seminar, April 2010.

52. **Young Hoon Lim**, Jennifer N. Cambre, Debashish Roy, Brent S. Sumerlin "Biocompatible boronic Acid polymers Prepared by atom transfer Radical polymerization (ATRP)" DFW ACS Meeting-in-Miniature, University of Texas, Dallas, April 2010.

53. Ming Li, Priyadarsi De, **Brent S. Sumerlin** "Functional polymers and polymer-protein conjugates prepared by RAFT and thiol-ene reactions" Light on a Hill conference in honor of Charlie Hoyle, Hattiesburg, MS, April 2010.

54. **Brent S. Sumerlin**, Ming Li, Hongmei Li; Priyadarsi De "Immobilization of RAFT-generated polymers to proteins" ACS National Meeting, San Francisco, CA, March 2010. *Invited contribution to PMSE Young Investigators symposium.*

55. **Brent S. Sumerlin**, Debashish Roy, Jennifer N. Cambre, Andrew P. Vogt "Sugar-responsive aggregates and temperature/redox-responsive hydrogels prepared by block copolymer self-assembly" ACS National Meeting, San Francisco, CA, March 2010. *Invited.*

56. **Brent S. Sumerlin** North Carolina State University, Department of Textile Engineering, Chemistry & Science, Departmental Seminar, March 2010.

57. **Brent S. Sumerlin** Case Western Reserve University, Department of Chemistry, Departmental Seminar, January 2010.

58. **Brent S. Sumerlin** Rutgers University, Newark, Department of Chemistry, Departmental Seminar, December 2009.

59. **Brent S. Sumerlin** University of South Carolina, Department of Chemistry, Organic Division Seminar, November 2009.

60. **Brent S. Sumerlin** Case Western Reserve University, Department of Macromolecular Science Seminar, October 2009.

61. **Brent S. Sumerlin**, Ming Li, Hongmei Li, Priyadarsi De "'Making 'smart' proteins even smarter" International Symposium on Stimuli-Responsive Materials, University of Southern Mississippi, Hattiesburg, MS. October 2009. *Plenary*.

62. **Brent S. Sumerlin** Case Western Reserve University, Department of Macromolecular Science Seminar, October 2009.

63. **Brent S. Sumerlin** University of Texas at Arlington, Department of Biomedical Engineering, October 2009.

64. **Brent S. Sumerlin** University of Texas at Austin, Organic Division Seminar, October 2009.

65. Priydarsi De, Ming Li, Hongmei Li, **Brent S. Sumerlin** "Responsive polymer-protein conjugates by grafting-from via RAFT polymerization" ACS National Meeting in Washington, DC, August 2009. *Invited.*

66. Priyadarsi De, Ming Li, Debashish Roy, **Brent Sumerlin** "Self-assembly of stimuli-responsive polymer-protein conjugates prepared by RAFT polymerization" ACS National Meeting in Salt Lake City, UT. March 2009. *Invited.*

67. Debashish Roy, **Brent Sumerlin** "Microwave-Assisted RAFT polymerization: Block copolymers in the blink of an eye" ACS National Meeting, Salt Lake City, UT 2009. *Invited.*

68. **Brent S. Sumerlin** "A New Pill to Swallow: Chemistry on the Cutting Edge of Medicine" Collegium da Vinci, Southern Methodist University. February 2009. *Plenary*.

69. **Brent S. Sumerlin**, Priyadarsi De, Debashish Roy, Jennifer N. Cambre "Smart Polymer Bioconjugates and 'Sweet Tooth' Micelles" Departmental Seminar, University of New South Wales, Sydney, Australia. February 2009.

70. **Brent S. Sumerlin**, Priyadarsi De, Debashish Roy, Jennifer N. Cambre "Materials of the Future-Science of Today" IUPAC conference in Melbourne, Australia. February 2009. *Invited.*

71. **Brent S. Sumerlin**, Priyadarsi De, Debashish Roy, Jennifer N. Cambre "Smart Polymer Bioconjugates and 'Sweet Tooth' Micelles" Zing Polymer Chemistry Conference. February 2009. *Plenary*.

72. **Brent S. Sumerlin** Oklahoma State University, Departmental Seminar, January 2009.

73. **Brent S. Sumerlin,** Jennifer N. Cambre, Debashish Roy "Well-Defined and Biologically Relevant Block Copolymer Nanostructures" Southeast Regional Meeting of the ACS, Nashville, TN, November 2008. *Invited.*

74. **Brent S. Sumerlin**, Debashish Roy, Jennifer Cambre "'Sweet tooth' micelles and other sugar-responsive organoboron block copolymer assemblies" International Symposium on Stimuli-Responsive Materials, University of Southern Mississippi, Hattiesburg, MS. October 2008. *Plenary*.

75. **Brent S. Sumerlin** "Responsive block copolymer micelles functionalized with biologically-relevant ligands" ACS National Meeting, Philadelphia, PA, August 2008. *Invited.*

76. **Brent S. Sumerlin**, Priyadarsi De, Ming Li, Sudershan R. Gondi "Polymer-protein bioconjugates via grafting-from and grafting-to with RAFT-generated polymers" ACS National Meeting, Philadelphia, PA, August 2008. *Invited.*

77. **Brent S. Sumerlin**, Debashish Roy, Jennifer Cambre "'Sweet tooth' micelles and other sugar-responsive organoboron block copolymer assemblies" ACS National Meeting, Philadelphia, PA, August 2008. *Invited.*

78. **Brent S. Sumerlin**, Debashish Roy, Jennifer N. Cambre "New stimuli-responsive macromolecules– smart hyperbranches, bioconjugates, and "sweet tooth" micelles" Northeast Regional Meeting of the American Chemical Society, Burlington, VT, July 2008. *Invited.*

79. **Brent S. Sumerlin** University of California, Los Angeles Departmental Seminar. April 2008.

80. **Priyadarsi De**, Sudershan R. Gondi, Brent S. Sumerlin "Folate-conjugated responsive polymeric micelles: synthesis by RAFT polymerization and Click chemistry" ACS National Meeting, New Orleans, LA, April 2008.

81. Priyadarsi De, Ming Li, Sudershan R. Gondi, **Brent S. Sumerlin** "Polymer-protein bioconjugates via grafting-from by RAFT polymerization and azide-alkyne click chemistry" ACS National Meeting, New Orleans, LA, April 2008. *Invited.*

82. **Ming Li**, Priyadarsi De, Sudershan R. Gondi, Brent S. Sumerlin "Responsive polymer-protein bioconjugates prepared by RAFT polymerization and grafting-to via click chemistry" ACS National Meeting, New Orleans, LA, April 2008.

83. **Andrew P. Vogt**, Brent S. Sumerlin "Telechelic macromolecules via RAFT polymerization and click chemistry" ACS National Meeting, New Orleans, LA, April 2008.

84. **Ming Li**, Priyadarsi De, Sudershan R. Gondi, Brent S. Sumerlin "Versatile end group modification strategy for RAFT-generated polymers" ACS National Meeting, New Orleans, LA, April 2008.

85. **Andrew P. Vogt**, Brent S. Sumerlin "Thermoresponsive core-shell macromolecules prepared by RAFT polymerization" ACS National Meeting, New Orleans, LA, April 2008.

86. **Jennifer N. Cambre**, Debashish Roy, Sudershan R. Gondi, Brent S. Sumerlin "Boronic acid block copolymers prepared by RAFT polymerization" ACS National Meeting, New Orleans, LA, April 2008.

87. **Debashish Roy**, Jennifer N. Cambre, Brent S. Sumerlin "Controlled radical polymerization of free unprotected boronic acid monomers by RAFT" ACS National Meeting, New Orleans, LA, April 2008.

88. Priyadarsi De, Ming Li, Sudershan R. Gondi, **Brent S. Sumerlin** "Responsive polymer-protein bioconjugates by grafting-from via RAFT with the R-group approach" ACS National Meeting, New Orleans, LA, April 2008. *Invited.*

89. **Brent S. Sumerlin** Southeastern Oklahoma State University, Departmental Seminar. February 2008.

90. **Brent S. Sumerlin** Colorado School of Mines, Departmental Seminar. November 2007.

91. **Brent S. Sumerlin**, University of Southern Mississippi, Plenary Lecture at the International Symposium on Stimuli-Responsive Materials. October 2007.

92. **Brent S. Sumerlin** Southern Methodist University, Department of Biological Sciences, Departmental Seminar. October 2007.

93. **Brent S. Sumerlin** Texas Lutheran University, Departmental Seminar. October 2007.

94. **Brent S. Sumerlin** Baylor University, Departmental Seminar. October 2007.

95. **Brent S. Sumerlin** North Carolina State University. September 2007.

96. **Brent S. Sumerlin**, Andrew P. Vogt "Tuning the Stimuli-Response of Hyperbranched Polymers Prepared by RAFT" ACS National Meeting, Boston, MA, April 2007. *Invited.*

97. **Brent S. Sumerlin,** Andrew P. Vogt, Sudershan R. Gondi, Gordon Research Conference – Polymers (East), South Hadley, MA, June 2007.

98. **Brent S. Sumerlin** City University of New York, College of Staten Island, Departmental Seminar. May 2007.

99. **Brent S. Sumerlin** University of Texas at Dallas, Departmental Seminar. February 2007.

100. **Brent S. Sumerlin** University of Tennessee, Departmental Seminar. February 2007.

101. **Brent S. Sumerlin** Oak Ridge National Laboratory. February 2007.

102. **Brent S. Sumerlin**, Sudershan R. Gondi, Andrew P. Vogt "Orthogonal End Group Reactivity of Macromolecules Prepared by RAFT Polymerization" Gordon Research Conference – Polymers (West), Ventura, CA, January 2007.

103. **Brent S. Sumerlin** University of Texas, San Antonio, Departmental Seminar. November 2006.

104. **Brent S. Sumerlin**, Sudershan R. Gondi, Andrew P. Vogt "Orthogonal End Group Reactivity of Macromolecules Prepared by RAFT Polymerization" Southwestern Regional Meeting of the American Chemical Society, Houston, TX, October 2006. *Invited.*

105. **Brent S. Sumerlin** "Controlled Radical Polymerization and Click Chemistry: An Efficient Route to Macromonomers and Other Telechelics" 19th Rocky Mountain Regional Meeting of the American Chemical Society, Tucson, AZ, October 2006. *Invited.*

106. **Brent S. Sumerlin** Texas Christian University, Fort Worth, TX, Departmental Seminar. October 2006.

107. **Brent S. Sumerlin** Stephen F. Austin State University, Nacogdoches, TX, Departmental Seminar. October 2006.

108. **Brent S. Sumerlin**, Andrew P. Vogt "Macromonomer Synthesis via ATRP and Click Chemistry" ACS National Meeting, San Francisco, CA, September 2006.

109. **Patricia L. Golas** Nicolay V. Tsarevsky Brent S. Sumerlin, Krzysztof Matyjaszewski "Tuning the efficiency of click reactions using polymers prepared by atom transfer radical polymerization" ACS National Meeting, San Francisco, CA, September 2006.

110. **Brent S. Sumerlin** "Controlled Radical Polymerization and Click Chemistry: An Efficient Route to Macromonomers and Other Telechelics" Macro Group UK International Conference on Polymer Synthesis, Coventry, U.K., July 2006.

111. **Brent S. Sumerlin** "Controlled Radical Polymerization as a Means to Prepare Novel Functional Materials" DFW ACS local section meeting, Dallas, TX, June 2006.

112. **Jamie R. Boyce,** Frank C. Sun, Sergei S. Sheiko, Benjamin W. Maynor, Joseph M. DeSimone, Brent Sumerlin, Krzysztof Matyjaszewski "Replicating fluid morphologies: from single molecules to macroscopic drops" ACS National Meeting, Atlanta, GA, March 2006.

113. **Krzysztof Matyjaszewski**, Hyung-il Lee, Shigeki Ohno, Joanna Pietrasik, Sergei Sheiko, Brent Sumerlin, Nicolay V. Tsarevsky "Molecular brushes with variable composition and topology by ATRP. Synthesis and properties" ACS National Meeting, Atlanta, GA, March 2006.

114. **Brent S. Sumerlin** Texas State University, San Marcos, TX, Departmental Seminar, November 2005.

115. **Brent S. Sumerlin**, Joanna Pietrasik, Krzysztof Matyjaszewski "Temperature-Responsive Water-Soluble Molecular Brushes Prepared by Atom Transfer Radical Polymerization" ACS National Meeting, Washington, D.C., August 2005.

116. **Robert E. Richard**, Marlene Schwarz, Shrirang Ranade, A. Ken Chan, Krzysztof Matyjaszewski, Brent S. Sumerlin "Evaluation of Acrylate-Based Block Copolymers Prepared by Atom Transfer Radical Polymerization as Matrices for Paclitaxel Delivery from Coronary Stents" ACS National Meeting, Washington, D.C., August 2005.

117. **Nicolay V. Tsarevsky**, Brent S. Sumerlin, Patricia L. Golas, Krzysztof Matyjaszewski "'Click' Coupling of Azide- and Alkyne-functionalized Well-Defined Polymers Prepared by Atom Transfer Radical Polymerization" ACS National Meeting, Washington, D.C., August 2005.

118. **Brent S. Sumerlin**, Nicolay V. Tsarevsky, Guillaume Louche, Haifeng Gao, Krzysztof Matyjaszewski "Click Functionalization of Well-Defined (Co)Polymers Prepared by Atom Transfer Radical Polymerization" ACS National Meeting, Washington, D.C., August 2005. *Invited.*

119. **Brent S. Sumerlin**, Nicolay V. Tsarevsky, Guillaume Louche, Haifeng Gao, Krzysztof Matyjaszewski "Preparation of Well-Defined Functional Polymers by ATRP and Click Chemistry" Gordon Research Conference, Polymer (East), Mt. Holyoke College, June 2005.

120. **Charles W. Scales**, Leslie J. Myrick, Brent Sumerlin, Andrew B. Lowe, and Charles L. McCormick "Synthesis of terminally functionalized, (Co)polymers via reversible addition fragmentation chain transfer (RAFT) and subsequent immobilization to solid surfaces with potential biosensor applications" ACS National Meeting, Anaheim, March 2004.

121. **Brent S. Sumerlin**, Krzysztof Matyjaszewski "Control of Molecular Structure in Functional Brushes" NATO Advanced Studies Institute Macromolecules 2003, Pisa, Italy, October 2003.

122. **Brent S. Sumerlin**, Paul A. Stroud, Andrew B. Lowe, Charles L. McCormick "Modification of Gold Films with Water-Soluble Copolymers Prepared via Aqueous RAFT" 225th ACS National Meeting, New Orleans, April 2003.

123. **Charles L. McCormick**, **Brent S.** Sumerlin "RAFT Polymerizations in Homogeneous Aqueous Media" 224th ACS National Meeting, Boston, August 2002.

124. **David B. Thomas**, Pierre Hennaux, Michael S. Donovan, Brent S. Sumerlin, Anthony Convertine, Charles L. McCormick "New Dithioesters for the RAFT Polymerization of Acrylamido Monomers" 224th ACS National Meeting, Boston, August 2002.

125. **Brent S. Sumerlin**, Michael S. Donovan, Yoshiro Mitsukami, Andrew B. Lowe, Charles L. McCormick "The Synthesis of Well-Defined Water-Soluble (Co)polymers for the Stabilization of Gold Nanoparticles" 224th ACS National Meeting, Boston, August 2002.

126. **Charles L. McCormick**, Andrew B. Lowe, Brent S. Sumerlin "Amphiphilic Block Copolymers Structurally Tailored via RAFT for Stimuli-Responsiveness in Aqueous Media" Macro Group UK International Conference on Polymer Synthesis, Coventry, U.K., 2002.

127. **Brent S. Sumerlin**, Michael S. Donovan, Andrew B. Lowe, Charles L. McCormick "The Controlled Radical (Co)Polymerization Of *N,N*-Dimethylacrylamide and *N,N*-Dimethylvinylbenzylammonium Chloride in Aqueous Media via RAFT" Robert M. Hearin Support Foundation Symposium – Polymer Science: New Century Frontiers, April 2002.

128. **Brent S. Sumerlin**, Yoshiro Mitsukami, Andrew B. Lowe, Charles L. McCormick "Synthesis of Water-Soluble Styrenic Homopolymers in Aqueous Media via RAFT" 4th National ACS Graduate Research Polymer Conference, University of Southern Mississippi, Hattiesburg, MS, June 2000.

## Teaching

- Courses Taught
  - CHEM 3371. Organic Chemistry
  - CHEM 6118. Overview of Materials Chemistry
  - CHEM 5333. Introduction to Polymer Chemistry
  - CHEM 6110. Chemical Communications

- Other activities
  - *Teaching Technology Grant* to institute podcasting and video solutions manuals for organic chemistry (2009)
  - Invited participant in Organic Chemistry Focus Group at McGraw-Hill Higher Education, Dubuque, IA (2010)

## Dissertation, Research, & Postgraduate-Scholar Advising

- *Ph. D. Advising*
  - Abhijeet Bapat (2008 - present)
  - William Brooks (2010 – present)
  - Jennifer Cambre (2007 - 2011)
  - Jessica Cash (2011 – present)
  - Dr. Ming Li (2006 - 2010)
  - Dr. Hongmei Li (2008 - 2010)
  - Soma Mukherjee (2010 – present)
  - Hao Sun (2011 – present)
  - Dr. Andrew Vogt (2005 – 2009)

- *Undergraduate Advising*
  - Megan Hill (2010, REU Student from Cal Poly SLO)
  - Myomi Tse (2006-2007)
  - Michelle Clinton (2010)
  - Matthew Cain (2006)
  - Cyrus Feizpour (2011-present)
  - Sara Gingrich (2007-2010)
  - Howard He (2009)
  - Megan Kypreos (2009-2010)
  - Young Hoon Lim (2008-2011)
  - Noah Menard (2011-present)
  - Jieun Park (2009)

- *Post Doctoral Advising*
  - Dr. Sudershan Reddy Gondi (2006 – 2008)
  - Dr. Priyadarsi De (2007 – 2008)
  - Dr. Debashish Roy (2007 – 2010
  - Dr. Shauntrece Hardrict (co-advised with Prof. Alan Tonelli at NCSU, 2010-2011)

- *Visiting Scholar*
  - Aman Ullah (2009, Università degli Studi di Genova, Italy)
  - Assoc. Prof. Ahmet Gültek (2011, Inonu University, Turkey)

- *Community College Student Advising*
  - Florance Fishman (2009 – 2010)

- *High School Student Advising*
  - Mitu Bhattatiry (2008-2010)
  - An Qi (2006)
  - Quang Le (2006)