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Current Research Interests

Polymers from sustainable feedstocks; Polymer degradation; Environmental chemistry; Theoretical polymer chemistry; Single-site catalysts for olefin polymerization; Organometallic chemistry

Education

- Postdoctoral Associate (1/00 7/01): Massachusetts Institute of Technology with Prof. Richard R. Schrock Research: Design, Synthesis, and Application of Asymmetric Ring-Closing Metathesis Catalysts
- Ph.D., Chemistry (9/94 12/00): California Institute of Technology with Prof. John E. Bercaw Thesis: *Metallocene-Mediated Olefin Polymerization: The Effects of Distal Ligand Perturbations on Polymer Stereochemistry*
- M.S., Chemistry (6/93 9/94, concurrent with B.S.): Stanford University with Prof. Robert M. Waymouth Thesis: *Polymerization and Oligomerization of Olefins with Cationic Zirconocenes*
- B.S., Chemistry (9/90 6/94): Stanford University with Prof. Robert M. Waymouth Conferred with Distinction; Conferred with Departmental Honors Honors Thesis: *Cyclopolymerization with Homogeneous Ziegler-Natta Catalysts*

Professional Experience

Co-Founder & CTO, U.S. Bioplastics[™]; **2013–present** <u>http://usbioplastics.com</u> Co-Founder & CTO, Florida Sustainables[™]: **2010–present** <u>http://floridasustainables.com</u> Associate Professor of Chemistry, Division of Organic Chemistry, University of Florida: **2007–present** Assistant Professor of Chemistry, Division of Organic Chemistry, Texas A&M University: **2001–2007**

Awards and Honors

- 2012 International Educator of the Year, University of Florida, College of Liberal Arts and Sciences, Junior Faculty Rank
- 2011 Science/Innovation Floridian of the Year, *Florida Trend Magazine* http://www.floridatrend.com/a56191_florida-science-newsmaker-in-2011
- 2011 InterAcademy Panel/Annual Meeting of the New Champions Young Scientist Mentor http://www.chem.ufl.edu/~miller/Miller2011AMNC/
- 2011 Kavli Fellow, Indonesian-American Kavli Frontiers of Science Symposium http://www.chem.ufl.edu/~miller/YSAP/Miller2011/
- 2011 Cade Prize for Innovation (\$50,000), Winner http://www.cademuseum.org/experience/prize.aspx
- **2010** Young Scientist/Entrepreneur Partnership Award, sponsored by the InterAcademy Panel and TWAS, the Academy of Sciences for the Developing World
- 2010 InterAcademy Panel/Annual Meeting of the New Champions Young Scientist http://www.chem.ufl.edu/~miller/Miller2010AMNC/
- 2010 Cade Prize for Innovation, Final Four

2008 Kavli Fellow, Japanese-American Kavli Frontiers of Science Symposium

2006–2011 National Science Foundation CAREER Award

2003 Petroleum Research Fund (Type G) Grant

2002 Research Corporation Innovation Award

1997 Dow Travel Fellowship Recipient, California Institute of Technology

1994–1997 National Defense Science and Engineering Graduate (NDSEG) Fellowship

1994 National Science Foundation Predoctoral Fellowship (declined to accept the NDSEG Fellowship)

1994 The Marsden Memorial Prize in Chemistry for Undergraduate Research, Stanford University

- 1993 Undergraduate Summer Scholarship for Research in Polymer Science, American Chemical Society
- Divisions of Polymer Chemistry and Polymeric Materials, Stanford University

1992 Stanford Center for Materials Research Summer Grant

Memberships

Global Young Academy

The American Chemical Society <u>http://portal.acs.org</u> The Global Young Academy <u>http://www.globalyoungacademy.net/</u> (≤ 200 members worldwide) The Triple Nine Society <u>http://www.triplenine.org/</u> (about 1000 members worldwide) The George and Josephine Butler Polymer Research Laboratory <u>http://butlerlabs.chem.ufl.edu/</u> The Center for Macromolecular Science and Engineering <u>http://www.cmse.ufl.edu/</u>

Publications http://www.chem.ufl.edu/~miller/publications.shtml

- Martin, R. T.; Camargo, L. P.; Miller, S. A. "Marine-Degradable Polylactic Acid" Green Chem. 2014, 16, 1768–1773. (Invited Special Issue) <u>http://dx.doi.org/10.1039/C3GC42604A</u> Cover graphic for the April 2014 issue of Green Chemistry <u>http://dx.doi.org/10.1039/C4GC90011A</u>
- 48. Pemba, A. G.; Rostagno, M.; Lee, T. A.; Miller, S. A. "Cyclic and spirocyclic polyacetal ethers from lignin-based aromatics" *Polym. Chem.* 2014, *5*, 3214–3221. (Invited Special Issue and Guest Editor) http://dx.doi.org/10.1039/C4PY00178H
- 47. Miller, S. A. "Sustainable polymers: replacing polymers derived from fossil fuels" *Polym. Chem.* **2014**, *5*, 3117–3118. (Editorial for Special Issue) http://dx.doi.org/10.1039/C4PY90017K
- Garcia, J. J.; Miller, S. A. "Polyoxalates from Biorenewable Diols via Oxalate Metathesis Polymerization" *Polym. Chem.* 2014, *5*, 955–961. (Invited Special Issue and Guest Editor) <u>http://dx.doi.org/10.1039/C3PY01185B</u>
- 45. Miller, S. A. "Degradable Biopolymers" *Chemistry & Industry Magazine* **2013**, 7, 20–23. <u>http://www.soci.org/Chemistry-and-Industry/CnI-Data/2013/7/Degradable-Biopolymers</u>
- 44. Miller, S. A. "Sustainable Polymers: Opportunities for the Next Decade" (Viewpoint), ACS Macro Lett. 2013, 2, 550–554. <u>http://dx.doi.org/10.1021/mz400207g</u> Journal Cover for ACS Macro Letters http://pubs.acs.org/action/showLargeCover?issue=382819696
- Madkour, T. M.; Salem, S. A.; Miller, S. A. "The role of the deformational entropy in the miscibility of polymer blends investigated using a hybrid statistical mechanics and molecular dynamics model" *Phys. Chem. Chem. Phys.* **2013**, *15*, 5982–5991. http://dx.doi.org/10.1039/c3cp44536d
- 42. Chai, J.; Abboud, K. A.; Miller, S. A. "Sterically expanded CGC catalysts: Substituent effects on ethylene and alpha-olefin polymerization" *Dalton Trans.* **2013**, *42*, 9139–9147. <u>http://dx.doi.org/10.1039/C3DT50163A</u>







- 41. Vanderhenst, R.; Miller, S. A. "Polycarbonates from Biorenewable Diols via Carbonate Metathesis Polymerization" Green Materials 2013, 1, 64-78. http://dx.doi.org/10.1680/gmat.12.00022
- 40. Pemba, A. G.; Flores, J. A; Miller, S. A. "Acetal Metathesis Polymerization (AMP): A method for synthesizing biorenewable polyacetals" Green Chemistry 2013, 15, 325-329. http://dx.doi.org/10.1039/C2GC36588J
- 39. Nejabat, G. R.; Nekoomanesh, M.; Arabi, H.; Salehi-Mobarakeh, H.; Zohuri, G. H.; Omidvar, M.; Miller, S. A. "Synthesis and Microstructural Study of Stereoblock Elastomeric Polypropylenes from Metallocene Catalyst (2-PhInd)₂ZrCl₂ Activated with Cocatalyst Mixtures" J. Polym. Sci. Part A: Polym. Chem. 2013, 51, 724-731. http://dx.doi.org/10.1002/pola.26432
- 38. Nejabat, G. R.; Nekoomanesh, M.; Arabi, H.; Salehi-Mobarakeh, H.; Zohuri, G. H.; Omidvar, M.; Miller, S. A. "Synthesis of Stereoblock Elastomeric Poly(propylene)s Using a (2-PhInd)₂ZrCl₂ Metallocene Catalyst in the Presence of Co-Catalyst Mixtures, 1-Study of Activity and Molecular Weight" Macromol. React. Eng. 2012, 6, 523-529. http://dx.doi.org/10.1002/mren.201200046
- Chen, H.-Y.; Mialon, L.; Abboud, K. A.; Miller, S. A. "Comparative Study of Lactide Polymerization 37. with Lithium, Sodium, Magnesium, and Calcium Complexes of BHT" Organometallics 2012, 31, 5252-5261. http://dx.doi.org/10.1021/om300121c
- 36. Zohuri, G.H.; Albahily, K.; Schwerdtfeger, E.D.; Miller, S.A. Metallocene Alkene Polymerization Catalysts, In Polymer Science: A Comprehensive Reference, Vol. 3; Matyjaszewski, K.; Möller, M., Eds.-in-Chief: Elsevier: Amsterdam, 2012: pp. 673-697. http://dx.doi.org/10.1016/B978-0-444-53349-4.00081-9
- 35. Mialon, L.; Vanderhenst, R.; Pemba, A. G.; Miller, S. A. Biorenewable "Polyalkylenehydroxybenzoates (PAHBs): Aromatic/Aliphatic Polyesters from Lignin" Macromol. Rapid Commun. **2011**, *32*, 1386–1392. http://dx.doi.org/10.1002/marc.201100242 Journal Cover for Macromolecular Rapid Communications http://dx.doi.org/10.1002/marc.201190045 Story written for Materials Views: Plastic from the Wood: Environmentally Friendly Packaging http://www.materialsviews.com/plastic-from-the-wood-environmentallyfriendly-packaging
 - Macromolecular Rapid Communications
- Chen, H.-Y.; Peng, Y.-L.; Huang, T.-H.; Sutar, A. K.; Miller, S. A.; Lin, C.-C. "Comparative study 34. of lactide polymerization by zinc alkoxide complexes with a betadiketiminato ligand bearing different substituents" J. Mol. Cat. A: Chem. 2011. 339. 61-71. http://dx.doi.org/10.1016/j.molcata.2011.02.013

33. Mialon, L.; Pemba, A. G.; Miller, S. A. "Biorenewable polyethylene terephthalate mimics derived from lignin and acetic acid" Green Chem. 2010, 12, 1704-1706. http://dx.doi.org/10.1039/C0GC00150C Cover graphic for the October 2010 issue of *Green Chemistry* http://dx.doi.org/10.1039/C0GC90024A Story written for Highlights in Chemical Science: Wood mimics packaging polymer http://www.rsc.org/Publishing/ChemScience/Volume/2010/08/wood mimics packaging.asp Story written for Fast Company: Wanted: Sustainable, Cheap Alternatives to Cotton http://www.fastcompany.com/1708845/wanted-sustainable-and-cheap-alternatives-to-cotton Story written for Science for Environment Policy DG Environment News Alert Service. European Commission: New fossil fuel-free plastic made of wood http://ec.europa.eu/environment/integration/research/newsalert/pdf/222na6.pdf



- 32. Schwerdtfeger, E. D.; Price, C. J.; Chai, J.; Miller, S. A. "Tandem Catalyst System for Linear Low Density Polyethylene with Short and Long Branching" *Macromolecules* **2010**, *43*, 4838–4842. http://dx.doi.org/10.1021/ma100545q
- 31. Ogle, J. W.; Miller, S. A. "Electronically tunable N-heterocyclic carbene ligands: 1,3-diaryl vs. 4,5diaryl substitution" *Chem. Commun.* **2009**, 5728–5730. http://dx.doi.org/10.1039/b914732b
- Martin, R. T.; Miller, S. A. "Factors Inhibiting the Alkyl-Branch Plasticization of Polyoxymethylene" Macromol. Symp. 2009, 279, 72–78. http://dx.doi.org/10.1002/masy.200950512
- Sun, L.; Liu, J.; Kirumakki, S. R.; Schwerdtfeger, E. D.; Howell, R. J.; Al-Bahily, K.; Miller, S. A.; Clearfield, A.; Sue, H.-J. "Polypropylene Nanocomposites Based on Designed Synthetic Nanoplatelets" *Chem. Mater.* 2009, *21*, 1154–1161. http://dx.doi.org/10.1021/cm803024e
- 28. Price, C. J.; Chen, H.-Y.; Launer, L. M.; Miller, S. A. "Weakly Coordinating Cations as Alternatives to Weakly Coordinating Anions" *Angew. Chem. Int. Ed.* 2009, *48*, 956–959. <u>http://dx.doi.org/10.1002/anie.200802605</u> Selected by the editors as a *Hot Paper* Inside cover graphic for *Angewandte Chemie*, 2009, issue 5 <u>http://dx.doi.org/10.1002/anie.200990007</u>



- Ruebush, L. E.; Grossman, E. L.; Miller, S. A.; North, S. W.; Schielack, J. F.; Simanek, E. E. "Scientists' Perspective on Introducing Authentic Inquiry to High School Teachers During an Intensive Three-Week Summer Professional Development Experience" *School Science and Mathematics* 2009, *109(3)*, 162–174. http://dx.doi.org/10.1111/j.1949-8594.2009.tb17952.x
- 26. Ogle, J. W.; Zhang, J.; Reibenspies, J. H.; Abboud, K. A.; Miller, S. A. "Synthesis of Electronically Diverse Tetraarylimidazolylidene Carbenes via Catalytic Aldimine Coupling" *Org. Lett.* **2008**, *10*, 3677–3680. http://dx.doi.org/10.1021/ol8012765
- 25. Price, C. J.; Zeits, P. D.; Reibenspies, J. H.; Miller, S. A. "Octamethyloctahydrodibenzofluorenyl: Electronic Comparisons Between a Sterically Expanded Ligand and its Cyclopentadienyl Analogues" Organometallics **2008**, 27, 3722–3727. http://dx.doi.org/10.1021/om8001526
- 24. Schwerdtfeger, E. D.; Irwin, L. J.; Miller, S. A. *"*Highly Branched Polyethylene from Ethylene Alone via a Single Zirconium-Based Catalyst" *Macromolecules* **2008**, *42*, 1080–1085. http://dx.doi.org/10.1021/ma702213c
- 23. Ilg, A. D.; Price, C. J.; Miller, S. A. "Linear Low Density Polyoxymethylene versus Linear Low Density Polyethylene" *Macromolecules* **2007**, *40*, 7739–7741. http://dx.doi.org/10.1021/ma702066y
- Chen, H.-Y.; Zhang, J.; Lin, C.-C.; Reibenspies, J. H; Miller, S. A. "Efficient and controlled polymerization of lactide under mild conditions with a sodium-based catalyst" *Green Chem.* 2007, 9, 1038–1040. http://dx.doi.org/10.1039/b705622b
- 21. Miller, S. A. "Insertion versus Site Epimerization with Singly-Bridged and Doubly-Bridged Metallocene Polymerization Catalysts" *J. Organomet. Chem.* **2007**, *692*, 4708–4716. http://dx.doi.org/10.1016/j.jorganchem.2007.06.043
- Schwerdtfeger, E. D.; Miller, S. A. "Intrinsic Branching Effects in Syndiotactic Copolymers of Propylene and Higher α-Olefins" *Macromolecules* 2007, *40*, 5662–5668. <u>http://dx.doi.org/10.1021/ma070060g</u>

- Irwin, L. J.; Zeits, P. D.; Reibenspies, J. H.; Miller, S. A. "Diffuse Diffraction from Parallel/Anti-Parallel Metallocene Pillars" Organometallics 2007, 26, 1129–1133. http://dx.doi.org/10.1021/om060435g
- Price, C. J.; Irwin, L. J.; Aubry, D. A.; Miller, S. A. "Fluorenyl Containing Catalysts for Stereoselective Propylene Polymerization" in *Stereoselective Polymerization with Single Site Catalysts*; Canich, J. M.; Baugh, L. S., Eds.; CRC Press: Boca Raton, Florida, **2007**, pp. 37–82. ISBN: 1574445790 http://www.crcnetbase.com/doi/abs/10.1201/9781420017083.ch2
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- 16. Price, C. J.; Reich, B. J. E.; Miller, S. A. "Thermodynamic and Kinetic Considerations in the Copolymerization of Ethylene and Carbon Dioxide" *Macromolecules* **2006**, *39*, 2751–2756. <u>http://dx.doi.org/10.1021/ma052697k</u>
- 15. Miller, S. A. "Application of the $S_{2^{\infty}}$ and C_{∞} Point Groups for the Prediction of Polymer Chirality" *Chem. Commun.* **2006**, *70*, 862–864. http://dx.doi.org/10.1039/b516276a
- Reich, B. J. E.; Greenwald, E. E.; Justice, A. K.; Beckstead, B. T.; Reibenspies, J. H.; North, S. W.; Miller, S. A. "Ene-diamine versus Imine-amine Isomeric Preferences" *J. Org. Chem.* 2005, *70*, 8409–8416. http://dx.doi.org/10.1021/jo051102g
- Greenwald, E. E.; Park, J.; Anderson, K. C.; Kim, H.; Reich, B. J. E.; Miller, S. A.; Zhang, R.; North, S. W. "The OH-Initiated Oxidation of 1,3-Butadiene in the Presence of O₂ and NO: A Photolytic Route To Study Isomeric Selective Reactivity" *J. Phys. Chem. A* 2005, *109*, 7915– 7922.

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- Irwin, L. J.; Reibenspies, J. H.; Miller, S. A. "Synthesis and Characterization of Sterically Expanded ansa-η¹-Fluorenyl-Amido Complexes" *Polyhedron* 2005, *24*, 1314–1324. Special issue: *Ansa Metallocenes and Related Compounds*. http://dx.doi.org/10.1016/j.poly.2005.03.011
- 11. Irwin, L. J.; Miller, S. A. "Unprecedented Syndioselectivity and Syndiotactic Polyolefin Melting Temperature: Polypropylene and Poly(4-methyl-1-pentene) from a Highly Active, Sterically Expanded η^1 -Fluorenyl- η^1 -Amido Zirconium Complex" *J. Am. Chem. Soc.* **2005**, *127*, 9972–9973. http://dx.doi.org/10.1021/ja052256g
- Grill, J. M.; Reibenspies, J. H.; Miller, S. A. "Racemic and Chiral Expanded Salen-type Complexes Derived from Biphenol and Binaphthol: Salbip and Salbin" *J. Organomet. Chem.* 2005, 690, 3009–3017. <u>http://dx.doi.org/10.1016/j.jorganchem.2005.03.034</u>
- 9. Irwin, L. J.; Reibenspies, J. H.; Miller, S. A. "A Sterically Expanded "Constrained Geometry Catalyst" for Highly Active Olefin Polymerization and Copolymerization: An Unyielding Comonomer Effect" *J. Am. Chem. Soc.* **2004**, *126*, 16716–16717. http://dx.doi.org/10.1021/ja044678g
- Miller, S. A. "Isotactic Block Length Distribution in Polypropylene: Bernoullian vs. Hemiisotactic" Macromolecules 2004, 37, 3983–3995. http://dx.doi.org/10.1021/ma035206
- Reich, B. J. E.; Justice, A. K.; Beckstead, B. T.; Reibenspies, J. H.; Miller, S. A. "Cyanide-Catalyzed Cyclizations via Aldimine Coupling" *J. Org. Chem.* 2004, *69*, 1357–1359. <u>http://dx.doi.org/10.1021/jo035245j</u>

Publication from Postdoctoral Studies with Prof. Richard R. Schrock

 Schrock, R. R.; Jamieson, J. Y.; Dolman, S. J.; Miller, S. A.; Bonitatebus, P. J.; Hoveyda, A. H. "New Chiral Molybdenum Catalysts for Asymmetric Olefin Metathesis that Contain 3,3'-Disubstituted Octahydrobinaphtholate or 2,6-Dichlorophenylimido Ligands" *Organometallics* 2002, *21*, 409–417. http://dx.doi.org/10.1021/om0107441

Publications from Graduate Studies with Prof. John E. Bercaw

- 5. Miller, S. A.; Bercaw, J. E. "Mechanism of Isotactic Polypropylene Formation with *C*₁-symmetric Metallocene Catalysts" *Organometallics* **2006**, *25*, 3576–3592. http://dx.doi.org/10.1021/om050841k
- Miller, S. A.; Bercaw, J. E. "Highly Stereoregular Syndiotactic Polypropylene Formation with Metallocene Catalysts via Influence of Distal Ligand Substituents" *Organometallics* 2004, 23, 1777–1789. http://dx.doi.org/10.1021/om030333f
- Miller, S. A.; Bercaw, J. E. "Isotactic-Hemiisotactic Polypropylene from C₁-Symmetric, ansa-Metallocene Catalysts: A New Strategy for the Synthesis of Elastomeric Polypropylene" Organometallics 2002, 21, 934–945. http://dx.doi.org/10.1021/om010788
- 2. Miller, S. A.; Bercaw, J. E. "Aminofluorenyl-Pentamethylcyclopentadienyl and Bis(aminofluorenyl) Derivatives of Group 4 Metals" *Organometallics* **2000**, *19*, 5608–5613. <u>http://dx.doi.org/10.1021/om000723r</u>

Publication from Undergraduate Studies with Prof. Robert M. Waymouth

1. Miller, S. A.; Waymouth, R. M. "Stereo- and Enantioselective Polymerization of Olefins with Homogeneous Ziegler-Natta Catalysts" in *Ziegler Catalysts, Recent Scientific Innovations and Technological Improvements*; Fink, G.; Mülhaupt, R.; Brintzinger, H.-H., Eds.; Springer: Berlin, **1995**, pp. 441–454.

Patents <u>http://www.chem.ufl.edu/~miller/publications.shtml</u>

- Polyglycolic acid and copolymers thereof from C1 Feedstocks. Inventors: Stephen A. Miller, Alexander G. Pemba, Ersen Gokturk. U.S. Provisional Patent Application, Serial No. 61/608,196, March 8th, 2012 (University of Florida, UF# 13913). http://technologylicensing.research.ufl.edu/technologies/13913
- Acetal Metathesis Polymerization. Inventors: Stephen A. Miller, Alexander G. Pemba. U.S. Patent Application, PCT/US2012/029355; filed March 16th, **2012** (University of Florida, UF# 13521). <u>http://technologylicensing.research.ufl.edu/technologies/13521</u>
- 5. Poly(dihydroferulic acid): A biorenewable polyethylene terephthalate mimic derived from lignin and acetic acid and Copolymers Thereof. Inventors: Stephen A. Miller, Laurent Mialon. U.S. Patent Application, PCT/US2011/36181; filed May 12th, **2011** (University of Florida, UF# 13449). International Application No. PCT/US2013/069641; filed November 12th, **2013** (University of Florida, UF# 14974). http://technologylicensing.research.ufl.edu/technologies/13449 http://patentscope.wipo.int/search/en/WO2011143379 http://worldwide.espacenet.com/publicationDetails/biblio?CC=WO&NR=2011143379A3&KC=A3& FT=D
- 4. *Polyesteracetals*. Inventors: Stephen A. Miller, Ryan T. Martin. U.S. Patent 8,653,226, **2014** (University of Florida). <u>http://patft.uspto.gov/netacgi/nph-Parser?patentnumber=8653226</u> <u>http://technologylicensing.research.ufl.edu/technologies/13053</u>

- 3. Novel Catalyst Systems for High Activity and Stereoselectivity in the Homopolymerization and Copolymerization of Olefins. Inventors: Stephen A. Miller and Levi J. Irwin. U.S. Patent 7.214.74. 2007 (Texas A&M University, now University of Florida). http://patft.uspto.gov/netacgi/nph-Parser?patentnumber=7214749 http://technologylicensing.research.ufl.edu/technologies/13720
- 2. Catalyst System for the Polymerization of Alkenes to Polyolefins, Inventors; Stephen A. Miller and John E. Bercaw. U.S. Patent 6,693,153, 2004 (California Institute of Technology). http://patft.uspto.gov/netacgi/nph-Parser?patentnumber=6693153
- 1. Catalyst System for the Polymerization of Alkenes to Polyolefins. Inventors: Stephen A. Miller and John E. Bercaw. U.S. Patent 6,469,188, 2002 (California Institute of Technology). http://patft.uspto.gov/netacgi/nph-Parser?patentnumber=6469188

Professorial Presentations by Dr. Miller (2001 - present)

(• Scheduled)

• Miller, S. A. "Programming the properties and degradation behavior of environmentally responsible polymers," invited oral presentation, High Polymer Research Group Conference 2014, Pott Shrigley, United Kingdom, April 27-May 1, 2014. http://www.highpolymer.org.uk/

• Miller, S. A. "Status of the Young Scientist Ambassador Program (YSAP) Working Group," invited oral presentation, Global Young Academy - General Assembly, Santiago, Chile, May 21-25, 2014. http://www.globalyoungacademy.net

• Miller, S. A. "Green Chemistry: The Pathway to Green Materials," invited oral presentation, Inaugural Inter-American Network of Academies of Sciences (IANAS), New Horizons in Science, Engineering, and Medicine in Mexico, Canada, and the United States, Mexico City, Mexico, June 22-24, 2014. http://www.ianas.org/

• Miller, S. A. "Polyesters from Bio-aromatics," contributed oral presentation, 248th National ACS Meeting, San Francisco, August 10-14, 2014.

https://www.acs.org/content/acs/en/meetings/fall-2014.html

• Miller, S. A. "TBA," invited oral presentation, Frontiers in Biorefining: Chemicals and Products from Renewable Carbon, St. Simons Island, Georgia, October 21-24, 2014. http://www.frontiersinbiorefining.org/

• Miller, S. A. "TBA," invited oral presentation, 4th Zing Polymer Chemistry Conference, Riviera Maya, Mexico, December 10-13, 2014. http://www.zingconferences.com/conferences/4th-zing-polymer-chemistry-conference/

146. Miller, S. A. "Single-site catalysts for increasing the branch content of polyolefins," invited oral presentation, 247th National ACS Meeting, Dallas, Texas, March 19, 2014. https://www.acs.org/content/acs/en/meetings/spring-2014.html

145. Miller, S. A. "Polyesters from bio-methanol," contributed oral presentation, 247th National ACS Meeting, Dallas, Texas, March 16, 2014. https://www.acs.org/content/acs/en/meetings/spring-2014.html

144. Miller, S. A. "Synthesis and Characterization of New Polymers from Biorenewable Feedstocks," invited oral presentation, International Symposium for Green-Innovation Polymers (GRIP2014) & The 13th Symposium of the Research Center for Highly Environmental and Recyclable Polymers, Japan Advanced Institute of Science & Technology, Kanazawa City, Japan, March 7, 2014.

143. Miller, S. A. "Sustainable Polymers: Controlling Thermal Properties and Degradation Behavior," invited oral presentation, University of Tokyo, Japan, March 4, **2014**.

142. Miller, S. A. "Programming the properties and degradation behavior of sustainable polymers," invited oral presentation, PPG Industries, Coatings Innovation Center, Allison Park, Pennsylvania, January 28, **2014**.

141. Miller, S. A. "Sustainable Polymers from Sugarcane Bagasse," invited oral presentation, U.S. Sugar Corporation, Clewiston, Florida, October 31, **2013**.

140. Miller, S. A. "Sustainable Polymers: Degradable Mimics of Commodity Polymers," invited oral presentation, University of Florida, Materials Science and Engineering Department, October 9, **2013**.

139. Miller, S. A. "Bio-based aromatics: Sustainable building blocks for replacing polyester and polystyrene," invited oral presentation, 4th International Symposium on Functional Materials Science, Shanghai Institute of Ceramics, Shanghai, China, September 27, **2013**. http://www.rsc.org/ConferencesAndEvents/RSCEvents/International/China/Unilever-2013/index.asp

138. Miller, S. A. "Programming the properties and degradation of renewable polyesters, polycarbonates, and polyoxalates," invited oral presentation, 4th International Symposium on Functional Materials Science, University of Science and Technology of China, Hefei, China, September 25, **2013**. http://www.rsc.org/ConferencesAndEvents/RSCEvents/International/China/Unilever-2013/index.asp

137. Miller, S. A. "Water-degradable polyacetals from biorenewable feedstocks," invited oral presentation, 4th International Symposium on Functional Materials Science, Peking University, Beijing, China, September 23, **2013**.

http://www.rsc.org/ConferencesAndEvents/RSCEvents/International/China/Unilever-2013/index.asp

136. Miller, S. A. "Pinpointing the thermal properties of renewable polyesters derived from lignin," invited oral presentation, 246th National ACS Meeting, Indianapolis, Indiana, September 11, **2013**. <u>http://portal.acs.org/portal/PublicWebSite/meetings/fall-2013/index.htm</u> "Monomer and Polymer Mimicry with Renewables" a symposium co-organized with Robert Mathers <u>http://abstracts.acs.org/chem/246nm/meetingview.php?page=session&par_id=576</u>

135. Miller, S. A. "Sustainable polymers: Bio-degradability vs. water-degradability," invited oral presentation, National Science Council, Kaohsiung Medical University, Kaohsiung, Taiwan, July 25, **2013**.

134. Miller, S. A. "Building novel polyolefins with sterically expanded single-site catalysts," invited oral presentation, National Science Council, National Changhua University of Education, Changhua, Taiwan, July 23, **2013**.

133. Miller, S. A. "Dialing the thermal properties of renewable polymers," invited oral presentation, National Science Council, National Chung Hsing University, Taichung, Taiwan, July 22, **2013**.

132. Miller, S. A. "Sustainable Polymers: Dialing the Thermal Properties and Degradation Behavior," invited oral presentation, Gordon Research Conference in Polymers, South Hadley, Massachusetts, June 12, **2013**.

http://www.grc.org/programs.aspx?year=2013&program=polymers

131. Miller, S. A. "Programming the thermal properties and degradation pathways of renewable polyesters, polycarbonates, and polyacetals," invited oral presentation, inaugural Sustainable Polymers ACS Division of Polymer Chemistry Conference, Safety Harbor, Florida, May 21, **2013**. http://polyacs.net/Workshops/13sustainable/home.htm

130. Miller, S. A. "Status of the Young Scientist Ambassador Program (YSAP) Working Group," invited oral presentation, Global Young Academy - General Assembly, Halle (Saale), Germany, May 15, **2013**. <u>http://www.globalyoungacademy.net/</u> 129. Miller, S. A. "Redesigning Fossil Fuel-Based Plastics with Biorenewable Feedstocks," invited oral presentation, UNICAMP - Universidade Estadual de Campinas, Sao Paulo, Brazil, April 29, **2013**. <u>http://www.iqm.unicamp.br/eng/</u>

128. Miller, S. A. "Pinpointing the thermal properties of renewable polycarbonates and polyoxalates," oral presentation, POLY 562, 245th National ACS Meeting, New Orleans, Louisiana, April 11, **2013**. http://portal.acs.org/portal/PublicWebSite/meetings/spring2013/index.htm

127. Miller, S. A. "AAAS Science Podcast: Designing Bio-Friendly Plastics," American Association for the Advancement of Science (AAAS) Annual Meeting, Boston, Massachusetts, February 16, **2013**. <u>http://www.sciencemag.org/site/multimedia/podcast/index.xhtml#130214</u> <u>http://c778316.r16.cf2.rackcdn.com/SciencePodcast_130216c.mp3</u>

126. Miller, S. A. "Redesigning Petroleum-Based Plastics with Renewable Feedstocks," invited oral presentation, Symposium on "Sustainable Chemical Manufacturing in a Resource-Limited World," American Association for the Advancement of Science (AAAS) Annual Meeting, Boston, Massachusetts, February 16, **2013**.

http://www.aaas.org/meetings/2013/

125. Miller, S. A. "Sustainable Polymers Designed to Compete with Petroleum-Based Commodity Thermoplastics," invited oral presentation, Institute of Chemical and Engineering Sciences (ICES) Scientific Conference, Singapore, October 29, **2012**. http://icesconference.com.sg/speakers.php

124. Miller, S. A. "The Miller Reseach Group: New Polymers for the Commodity Plastics Market," invited oral presentation, Saudi Basic Industries Corporation (SABIC), Riyadh, Saudi Arabia, September 12, **2012**. <u>http://www.sabic.com</u>

123. Miller, S. A. "Building Novel Polyolefins with Complex Catalysts," invited oral presentation, 2nd KACST-Oxford Petrochemicals Forum, Riyadh, Saudi Arabia, September 10, **2012**. <u>http://www.koprcsa.org/2012/en/indexen.asp</u>

122. Miller, S. A. "Biobased Materials Designed to Compete with Petroleum-based Commodity Thermoplastics," oral presentation, POLY 53, 244th National ACS Meeting, Philadelphia, Pennsylvania, August 19, **2012**.

121. Miller, S. A. "Polymers from Sustainable Feedstocks," invited oral presentation, Arizona Chemical Company, Savannah, Georgia, August 1, **2012**. <u>http://www.arizonachemical.com/</u>

120. Miller, S. A. "Competing Against Petroleum-based Plastics with Sustainable Feedstocks," poster presentation, MACRO 2012, 44th World Polymer Congress, Blacksburg, Virginia, USA, June 26, **2012**. <u>http://www.cpe.vt.edu/macro2012/</u>

119. Miller, S. A. "Next-Generation Plastics from Plants Instead of Petroleum," invited oral presentation, Department of Chemistry Leadership Board Meeting, Innovation HUB, Gainesville, Florida, June 22, **2012**.

118. Miller, S. A. "The Future of Sustainable Plastics," Global Young Academy - Future of Chemistry Workshop, University of Pretoria, South Africa, May 24, **2012**. <u>http://www.globalyoungacademy.net/gya-ga-2012-in-south-africa</u>

117. Miller, S. A. "Bridging the International Scientific Gap: The Global Young Academy – Young Scientist Ambassador Program," Invited Presentation, South African Young Academy of Science (SAYAS) Special General Assembly, Johannesburg, South Africa, May 22, **2012**.

http://www.chem.ufl.edu/~miller/YSAP/ http://www.assaf.org.za/2012/05/international-young-scientistsconverge-in-south-africa/ 116. Miller, S. A. "Next-Generation Plastics from Plants Instead of Petroleum," Invited Plenary Presentation, Global Young Academy - General Assembly, Johannesburg, South Africa, May 21, **2012**. http://www.globalyoungacademy.net/gya-ga-2012-in-south-africa

115. Miller, S. A. "Marine-degradable polyesters and fermentation-free polyesters," invited oral presentation, Next-Generation Renewable Polymers, 243rd National ACS Meeting, San Diego, California, March 28, **2012**.

http://portal.acs.org:80/portal/PublicWebSite/meetings/spring2012/index.htm

114. Miller, S. A. "Replacing Petroleum-Based Plastics: Polymers from Sustainable Feedstocks," invited oral presentation, Max Planck Institute for Polymer Research, Mainz, Germany, March 21, **2012**. <u>http://www.mpip-mainz.mpg.de/</u>

113. Miller, S. A. "Functional Group Metathesis Polymerization of Biorenewable Feedstocks," invited oral presentation, 5th Workshop on Fats and Oils as Renewable Feedstock for the Chemical Industry, Karlsruhe, Germany, March 18-20, **2012**. http://abiosus.org/kit-workshop-2012.html

112. Miller, S. A. "Replacing Petroleum-Based Plastics: Polymers from Sustainable Feedstocks," invited oral presentation, Leibniz-Institut für Polymerforschung Dresden, Germany, March 15, **2012**. <u>http://www.ipfdd.de/</u>

111. Miller, S. A. "Plastics and Recycling," invited oral presentation, J.J. Finley Elementary School, Gainesville, Florida, January 24, **2012**. http://www.sbac.edu/~finleyij/index.html

110. Miller, S. A. "Next-Generation Commodity Plastics from Plants Instead of Petroleum," invited oral presentation, National Science Foundation SusChEM Workshop, Arlington, Virginia, January 17-19, **2012**.

http://engineering.ucsb.edu/suschem/

109. Miller, S. A. "Miller Research Group," invited oral presentation, Presentation to Michelin Americas, Gainesville, Florida, October 25, **2011**.

http://michelinman.com/michelincom/about-us/about-us-landing.page

108. Miller, S. A. "Building Polyolefins from Complex Catalysts and Evolving Polyolefins away from Petroleum," invited oral presentation, Advances in Polyolefins 2011, Santa Rosa, California, September 25-28, **2011**.

http://www.polyacs.net/Workshops/11Polyolefins/home.htm

107. Miller, S. A. "Legacy Plan for IAP/WEF Young Scientists," invited Young Scientist Mentor, World Economic Forum/Annual Meeting of the New Champions, Dalian, China, September 14-16, **2011**. http://www.weforum.org/events/annual-meeting-new-champions-2011

106. Miller, S. A. "Biorenewable Polymers via Catalytic Functional Group Metathesis" invited oral presentation, ITB One Day Catalysis Symposium on "Catalysis Development Towards Sustainable Chemical Processes", Bandung, Indonesia, July 12, **2011**. <u>http://www.itbcatalysis.or.id/</u>

105. Miller, S. A. "Next-Generation Commodity Plastics from Plants Instead of Petroleum," invited oral presentation, the Inaugural United States/Indonesia Kavli/US National Academy of Sciences Symposium, Bogor, Indonesia, July 9-11, **2011**. http://aipi.or.id/index.php/subMenu/372

104. Miller, S. A. "Polymers from Biorenewable Feedstocks," poster presentation, Gordon Research Conference in Polymers, South Hadley, Massachusetts, June 12-16, **2011**. <u>http://www.grc.org/programs.aspx?year=2011&program=polymers</u> 103. Miller, S. A. "Replacing Petroleum-Based Plastics: Polymers from Biorenewable Feedstocks," invited oral presentation, Center for Particulate and Surfactant Systems / Cytec Industries Symposium, University of Florida, Gainesville, Florida, April 14, **2011**.

102. Miller, S. A. "Polyolefin construction with catalysts that favor alpha-olefins vs. ethylene," invited oral presentation, Symposium on "New Synthetic Developments in Polyolefins and Metathesis-Based Polymers", 241st National ACS Meeting, Anaheim, California, March 27, **2011**.

101. Miller, S. A. "Polymers from Biorenewable Feedstocks," invited oral presentation, The Global Young Academy General Assembly, Berlin, Germany, March 20, **2011**.

100. Miller, S. A. "Bridging the International Scientific Gap: The Young Scientist Ambassador Program," invited oral presentation, The Global Young Academy General Assembly, Berlin, Germany, March 20, **2011**.

99. Miller, S. A. "**Plastics from Wood**" invited oral/video presentation, WCJB-TV ABC, Gainesville, Florida, March 15, **2011**. http://www.wcjb.com/news/8958/technologyspotlight-3-15-11-plastics-from-wood Miller, S. A., Cade Prize for Innovation 2011 – Final 4 Video, Gainesville, Florida, March 4, **2011** http://www.youtube.com/watch?v=Q2HDG49gaLE



98. Miller, S. A. "Exploiting a catalyst's affinity for alpha-olefins," invited oral presentation, Pacifichem 2010, Honolulu, Hawaii, December 16, **2010**.

97. Miller, S. A. "Biorenewable polyethylene terephthalate (PET) mimics derived from lignin," invited oral presentation, Pacifichem 2010, Honolulu, Hawaii, December 15, **2010**.

96. Miller, S. A. "Next Generation Commodity Polymers: Petroleum vs. Biomass," invited oral presentation, Southern Methodist University, Dallas, Texas, October 22, **2010**.

95. Miller, S. A. "Next Generation Commodity Polymers: Petroleum vs. Biomass," invited oral presentation, University of Texas at Dallas, Texas, October 21, **2010**.

94. Miller, S. A. "Sustainable polyethylene terephthalate (PET) mimics derived from lignin," invited oral presentation, PepsiCo, Purchase, New York, October 18, **2010**.

93. Miller, S. A. "Polyolefin Construction with Catalysts that Favor Alpha-Olefins vs. Ethylene," invited oral presentation, Hebei University of Technology, Tianjin, China, September 17, **2010**.

92. Miller, S. A. "The Next Generation of Green Plastics," invited multi-media presentation, World Economic Forum/Annual Meeting of the New Champions, Science and Tech Zone, Tianjin, China, September 13-15, **2010**.

http://www.weforum.org/events/annual-meeting-new-champions-2010

91. Miller, S. A. "Orthogonal control of butyl and long branching in linear low density polyethylene through tandem catalysis," invited oral presentation, 240th National ACS Meeting, Boston, Massachusetts, August 22-26, **2010**.

90. Miller, S. A. "Sustainable Polyethylene Terephthalate (PET) Mimics Derived from Lignin," invited oral presentation, MACRO 2010, 43rd World Polymer Congress, Glasgow, United Kingdom, July 11-16, **2010**.

89. Miller, S. A. "Tandem Catalyst System for Linear Low Density Polyethylene with Short and Long Branching," oral presentation, MACRO 2010, 43rd World Polymer Congress, Glasgow, United Kingdom, July 11-16, **2010**.

88. Miller, S. A. "Sustainable Polyethylene Terephthalate (PET) Mimics Derived from Lignin," invited oral presentation, Florida Annual Meeting and Exposition (FAME) of the ACS, Tampa, Florida, May 13-15, **2010**.

87. Miller, S. A. "Next Generation Thermoplastics from Biorenewable Feedstocks," invited oral presentation, Rollins College, Winter Park, Florida, October 23, **2009**.

86. Miller, S. A. "Future Thermoplastics from Single-Site Catalysts," invited oral presentation, Advances in Polyolefins 2009, Santa Rosa, California, September 22, **2009**.

85. Miller, S. A. "Polyesteracetals: Next Generation Thermoplastics from C1 Feedstocks," poster presentation, Gordon Research Conference in Polymers (East), South Hadley, Massachusetts, June 24, **2009**.

84. Miller, S. A. "Next Generation Thermoplastics: Improving Polypropylene and Utilizing Biomass," invited oral presentation, Texas A&M University, College Station, Texas, April 17th, **2009**.

83. Miller, S. A. "Next Generation Commodity Polymers: Petroleum vs. Biomass," invited oral presentation, University of Maryland, College Park, Maryland, April 9th, **2009**.

82. Miller, S. A. "Polyesteracetals via Ring-opening Polymerization," invited oral presentation, 10th Annual Florida Hetercyclic and Synthetic Conference, Gainesville, Florida, March 11, **2009**.

81. Miller, S. A. "Next Generation Thermoplastics from Biorenewable Feedstocks," invited oral presentation, Japanese-American Kavli Frontiers of Science Symposium, National Academy of Sciences, Irvine, California, December 5, **2008**. <u>http://vimeo.com/channels/kfoschemistry#33042266</u>

80. Miller, S. A. "Polymers from Sustainable Economies: Utilization of Biorenewable Carbonyl Compounds," invited oral presentation, MACRO 2008, 42nd World Polymer Congress, Taipei, Taiwan, July 1, **2008**.

79. Miller, S. A. "Sterically Expanded Transition Metal Catalysts for Olefin Polymerization," invited oral presentation, DSM, Geleen, the Netherlands, June 18, **2008**.

78. Miller, S. A. "Future Thermoplastics from Single-Site Catalysts," invited oral presentation, RWTH Aachen, Germany, June 17, **2008**.

77. Miller, S. A. "Branched Polyoxymethylene via Cationic Copolymerization of Trioxane with Cyclic Ethers," invited oral presentation, 9th Annual Florida Hetercyclic and Synthetic Conference, Gainesville, Florida, March 11, **2008**.

76. Miller, S. A. "Sterically Expanded Transition Metal Catalysts for Olefin Polymerization," invited oral presentation, Advances in Polyolefins 2007, Santa Rosa, California, September 25, **2007**.

75. Miller, S. A. "Polymers from Alternative Economies," poster presentation, Gordon Research Conference in Polymers (East), South Hadley, Massachusetts, June 20, 2007.
74. Miller, S. A.; Schwerdtfeger, E. D. "Highly syndiotactic copolymers of propylene and higher alphaolefins," invited oral presentation, 233rd ACS National Meeting, Chicago, IL, March 28, POLY 535, 2007.

73. Miller, S. A. "Sterically Expanded Transition Metal Catalysts for Olefin Polymerization," invited oral presentation, ExxonMobil, Baytown Polymer Center, Baytown, Texas, February 27, **2007**.

72. Miller, S. A. "Sterically Expanded Transition Metal Catalysts for Olefin Polymerization," invited oral presentation, University of Akron, Akron, Ohio, January 23, **2007**.

71. Miller, S. A. "Sterically Expanded Transition Metal Catalysts for Olefin Polymerization," invited oral presentation, University of Florida, Gainesville, Florida, January 16, **2007**.

70. Miller, S. A. "Sterically Expanded Transition Metal Catalysts for Olefin Polymerization," invited oral presentation, Louisiana State University, Baton Rouge, Louisiana, December 18, **2006**.

69. Miller, S. A. "A sodium-based catalyst for the highly efficient and controlled ring-opening polymerization of lactide," invited oral presentation, Polymer Technology Industrial Consortium, Texas A&M University, November 3, **2006**.

68. Miller, S. A.; Price, C. J.; Schwerdtfeger, E. D.; Zeits, P. D.; Launer, L. M. "Metallocene/MAO olefin polymerization: Catalyst reorganization vs. catalyst activity," invited oral presentation, 62nd Southwest Regional Meeting of the American Chemical Society, Houston, Texas, October 20, **2006**.

67. Miller, S. A. "Sterically Expanded Transition Metal Catalysts for Olefin Polymerization," invited oral presentation, Texas A&M University, College Station, Texas, October 2, **2006**.

66. Miller, S. A. "Sterically Expanded Transition Metal Catalysts for Olefin Polymerization," invited oral presentation, University of Wyoming, Laramie, Wyoming, September 27, **2006**.

65. Miller, S. A. "Sterically Expanded Transition Metal Catalysts for Olefin Polymerization," invited oral presentation, Colorado State University, Fort Collins, Colorado, September 26, **2006**.

64. Miller, S. A. "Sterically Expanded Transition Metal Catalysts for Olefin Polymerization," invited oral presentation, Cornell University, Ithaca, New York, September 14, **2006**.

63. Miller, S. A. "Polymers from Alternative Economies," invited guest lecturer, NSF-REU Symposium Series, College Station, Texas, July 28, **2006**.

62. Miller, S. A. "Catalysis in the Miller Research Group," Texas Molecular/Sea Lion, invited oral presentation, College Station, TX, May 11, **2006**.

61. Miller, S. A. "Sterically Expanded Transition Metal Catalysts for Olefin Polymerization," invited oral presentation, University of Southern Mississippi, Hattiesburg, Mississippi, April 7, **2006**.

60. Miller, S. A. "Sterically Expanded Transition Metal Catalysts for Olefin Polymerization," invited oral presentation, University of Alabama, Tuscaloosa, Alabama, April 6, **2006**.

59. Miller, S. A.; Irwin, L. J.; Price, C. J.; Schwerdtfeger, E. D.; Zeits, P. D. "Unusual Catalytic Behavior of a Sterically Expanded Constrained Geometry Catalyst," invited oral presentation, ACS Award Symposium for James C. Stevens, 231st ACS National Meeting, Atlanta, GA, March 27, BMGT 10, **2006**.

58. Miller, S. A.; Price, C. J.; Schwerdtfeger, E. D.; Irwin, L. J.; Zeits, P. D. "Steric Expansion of Transition Metal Catalysts: Steric versus Electronic Effects," invited oral presentation, ACS Award Symposium for Richard R. Schrock, 231st ACS National Meeting, Atlanta, GA, March 26, INOR 3, **2006**.

57. Miller, S. A. "Sterically Expanded Transition Metal Catalysts for Olefin Polymerization," invited oral presentation, California Institute of Technology, Pasadena, California, March 17, **2006**.

56. Miller, S. A. "Sterically Expanded Transition Metal Catalysts for Olefin Polymerization," invited oral presentation, University of California at San Diego, San Diego, California, March 13, **2006**.

55. Miller, S. A. "Sterically Expanded Transition Metal Catalysts for Olefin Polymerization," invited oral presentation, North Carolina State University, Raleigh, North Carolina, February 8, **2006**.

54. Miller, S. A. "Sterically Expanded Transition Metal Catalysts for Olefin Polymerization," invited oral presentation, University of North Carolina, Chapel Hill, North Carolina, February 7, **2006**.

53. Miller, S. A. "Sterically Expanded Transition Metal Catalysts for Olefin Polymerization," invited oral presentation, Indiana University, Bloomington, Indiana, January 27, **2006**.

52. Miller, S. A. "Sterically Expanded Transition Metal Catalysts for Olefin Polymerization," invited oral presentation, Purdue University, West Lafayette, Indiana, January 26, **2006**.

51. Miller, S. A. "Sterically Expanded Transition Metal Catalysts for Olefin Polymerization," invited oral presentation, Eastman Chemical Company, Longview, Texas, January 16, **2006**.

50. Miller, S. A. "Sterically Expanded Transition Metal Catalysts for Olefin Polymerization," invited oral presentation, Dow Chemical Company, Freeport, Texas, December 2, **2005**.

49. Miller, S. A. "Polymer Chemistry at Texas A&M University: An Overview," invited oral presentation, Dow Chemical Company, Freeport, Texas, December 2, **2005**.

48. Miller, S. A. "Sterically Expanded Transition Metal Catalysts for Olefin Polymerization," invited oral presentation, Total Petrochemicals, La Porte, Texas, November 17, **2005**.

47. Miller, S. A. "Sterically Expanded Transition Metal Catalysts for Olefin Polymerization," invited oral presentation, Advances in Polyolefins 2005, Rohnert Park, California, September 28, **2005**.

46. Miller, S. A. "Sterically Expanded Transition Metal Catalysts for Olefin Polymerization," Dow Chemical Company Presentation, Texas A&M University, College Station, Texas, August 18, **2005**.

45. Miller, S. A.; Irwin, L. J.; Price, C. J.; Schwerdtfeger, E. D. "Sterically Expanded Transition Metal Catalysts for Olefin Polymerization," invited oral presentation, Emory University, Atlanta, Georgia, August 12, **2005**.

44. Miller, S. A.; Irwin, L. J.; Price, C. J.; Schwerdtfeger, E. D. "Sterically Expanded Transition Metal Catalysts for Olefin Polymerization," poster presentation, Gordon Research Conference in Organometallic Chemistry, Salve Regina University, Newport, Rhode Island, July 11-12, **2005**.

43. Miller, S. A.; Irwin, L. J.; Price, C. J.; Schwerdtfeger, E. D. "Sterically Expanded Transition Metal Catalysts for Olefin Polymerization," invited oral presentation, Recent Advances in Single-Site Olefin Polymerization Catalysis Symposium, Texas A&M University, College Station, Texas, May 20, **2005**.

42. Miller, S. A.; Irwin, L. J.; Schwerdtfeger, E. D.; Price, C. J. "Sterically Expanded Transition Metal Catalysts for Olefin Polymerization," invited oral presentation, Polymer Technology Industrial Consortium, Texas A&M University, April 22, **2005**.

41. Miller, S. A. "Next-Generation Single-Site Catalysts for Synthesizing Recyclable Polyolefins," invited guest lecturer, American Chemical Society Student Affiliate Chapter Meeting, College Station, TX, January 27, **2005**.

40. Miller, S. A. "Next-Generation Single-Site Catalysts for Olefin Polymerization," invited oral presentation, Midwestern State University, Wichita Falls, Texas, November 12, **2004**.

39. Miller, S. A.; Reich, B. J. E.; Justice, A. K.; Grill, J. M.; Goss, J. M.; Beckstead, B. T.; Reibenspies, J. H. "Expanding Cyanide Catalysis," IUCCP Symposium, College Station, Texas, October 20, **2004**.

38. Miller, S. A.; Irwin, L. J.; Schwerdtfeger, E. D.; Price, C. J. "Sterically Expanded Transition Metal Catalysts for Olefin Polymerization," invited oral presentation, Polymer Technology Industrial Consortium, Texas A&M University, October 1, **2004**.

37. Miller, S. A.; Irwin, L. J.; Schwerdtfeger, E. D.; Price, C. J. "Sterically Expanded Transition Metal Catalysts for Olefin Polymerization," invited oral presentation, Gordon Research Conference in Organometallic Chemistry, Salve Regina University, Newport, Rhode Island, July 15, **2004**.

36. Miller, S. A.; Irwin, L. J.; Schwerdtfeger, E. D.; Price, C. J. "Sterically Expanded Transition Metal Catalysts for Olefin Polymerization," poster presentation, Gordon Research Conference in Organometallic Chemistry, Salve Regina University, Newport, Rhode Island, July 12-13, **2004**.

35. Miller, S. A. "Single Site Catalysts for Olefin Polymerization," invited guest lecturer, NSF-REU Symposium Series, College Station, Texas, June 11, **2004**.

34. Miller, S. A. "Tacticity control with C1-symmetric metallocenes: Syndiotactic-hemiisotactic polypropylene," invited oral presentation, Southwest Catalysis Society Symposium, Houston, Texas, May 14, **2004**.

33. Miller, S. A. "Tacticity control with C1-symmetric metallocenes: Syndiotactic-hemiisotactic polypropylene," invited oral presentation, MetCon2004, Houston, Texas, May 13, **2004**.

32. Miller, S. A. "Syndiotactic-hemiisotactic Polypropylene from Metallocene Catalysts," invited oral presentation, Polymer Technology Industrial Consortium, Texas A&M University, April 2, **2004**.

31. Miller, S. A. "Syndiotactic-hemiisotactic polypropylene from metallocene catalysts," oral presentation, 227th ACS National Meeting, Anaheim, CA, March 29, INOR 396, **2004**.

30. Miller, S. A. "Carbon-carbon bond-forming reactions via cyanide-catalyzed aldimine coupling," oral presentation, 227th ACS National Meeting, Anaheim, CA, March 28, ORGN 45, **2004**.

29. Miller, S. A. "New Materials via Stereoselective Olefin Polymerizations," invited oral presentation, 59th Southwest Regional Meeting of the American Chemical Society, Oklahoma City, Oklahoma, October 27, 2003.

28. Miller, S. A. "New Materials via Stereoselective Olefin Polymerizations," invited oral presentation, Polymer Technology Industrial Consortium, Texas A&M University, October 10, **2003**.

27. Miller, S. A. "Catalytic Formation of Carbon-Carbon Bonds," invited guest lecturer, NSF-REU Symposium Series, College Station, Texas, July 25, **2003**.

26. Miller, S. A. "Isotactic Block Length Distribution in Polypropylene: Bernoullian vs. Hemiisotactic," poster presentation, Gordon Research Conference in Polymers (East), South Hadley, Massachusetts, June 18, **2003**.

25. Miller, S. A. "Isotactic Block Length Distribution in Polypropylene: Bernoullian vs. Hemiisotactic," invited poster presentation, Symposium on Recent Advances in Epoxidation Catalysis, College Station, Texas, May 16, **2003**.

24. Miller, S. A. "Cyanide-Catalyzed Cyclizations via Aldimine Coupling," invited poster presentation, Symposium on Recent Advances in Epoxidation Catalysis, College Station, Texas, May 16, **2003**.

23. Miller, S. A. "Isotactic Block Length Distribution in Polypropylene: Bernoullian vs. Hemiisotactic," invited oral presentation, IUCCP Board Meeting, College Station, Texas, May 15, **2003**.

22. Miller, S. A. "Isotactic Block Length Distribution in Polypropylene: Bernoullian vs. Hemiisotactic," invited oral presentation, MetCon2003, Houston, Texas, May 9, **2003**.

21. Miller, S. A. "Synthesis and Application of Recyclable Polymers: Polymers 1 through 7," invited guest lecturer, American Chemical Society Student Affiliate Chapter Meeting, College Station, TX, November 7, **2002**.

20. Miller, S. A. "Enhancing Catalytic Activity with Steric Crowding," poster presentation, Gordon Research Conference in Organometallic Chemistry, Salve Regina University, Newport, Rhode Island, July 24-25, **2002**.

19. Miller, S. A. "Distal Ligand Effects in Metallocene-Mediated Olefin Polymerization," invited oral presentation, Hungarian-American Workshop on Molecular Catalyst Design for Green Chemistry, Eötvös University, Budapest, Hungary, May 24, **2002**.

18. Miller, S. A. "Organometallic Catalysts for Polymerizations and Small Molecule Transformations," invited oral presentation, IUCCP Board Meeting, College Station, Texas, April 25, **2002**.

17. Miller, S. A. "Distal Ligand Perturbations in Metallocene Mediated Olefin Polymerization," invited oral presentation, Dow Chemical Company, Chemical Sciences Laboratory, Freeport, TX, February 26, **2002**.

16. Miller, S. A. "Distal Ligand Perturbations in Metallocene Mediated Olefin Polymerization," invited oral presentation, ExxonMobil Chemical Company, Baytown Polymers Center, Baytown, TX, January 11, **2002**.

15. Miller, S. A. "Olefin Oligomerization Catalysis: New Avenues of Investigation," invited oral presentation, Sasol Co., Ltd., Austin, Texas, November 26, **2001**.

Postdoctoral Presentations by Dr. Miller (2001)

14. Miller S. A.; Schrock, R. R. "Asymmetric Ring Closing Metathesis (ARCM) with a Molybdenum Alkylidene Species Containing an Enantiomerically Pure Octahydrobinaphtholate Ligand," poster presentation, International Symposium on Olefin Metathesis (ISOM), M.I.T., Cambridge, MA, August 5-6, **2001**.

13. Miller, S. A.; Schrock, R. R. "Asymmetric Ring Closing Metathesis (ARCM) with a Molybdenum Alkylidene Species Containing an Enantiomerically Pure Octahydrobinaphtholate Ligand," oral presentation, 221st ACS National Meeting, San Diego, CA, April 4, INOR 625, **2001**.

Graduate Presentations by Dr. Miller (1997-2001)

12. Miller, S. A.; Bercaw, J. E. "Distal Ligand Perturbations in Metallocene Mediated Olefin Polymerization," invited oral presentation, University of California at San Diego, January 26, **2001**.

11. Miller, S. A.; Bercaw, J. E. "Distal Ligand Perturbations in Metallocene Mediated Olefin Polymerization," invited oral presentation, Florida State University, January 15, **2001**.

10. Miller, S. A.; Bercaw, J. E. "Distal Ligand Perturbations in Metallocene Mediated Olefin Polymerization," invited oral presentation, University of Illinois (Urbana-Champaign), January 11, **2001**.

9. Miller, S. A.; Bercaw, J. E. "Distal Ligand Perturbations in Metallocene Mediated Olefin Polymerization," invited oral presentation, University of Kansas, January 8, **2001**.

8. Miller, S. A.; Bercaw, J. E. "Distal Ligand Perturbations in Metallocene Mediated Olefin Polymerization," invited oral presentation, Texas A&M University, December 7, **2000**.

7. Miller, S. A.; Bercaw, J. E. "Distal Ligand Perturbations in Metallocene Mediated Olefin Polymerization," invited oral presentation, Georgia Institute of Technology, November 20, **2000**.

6. Miller, S. A.; Bercaw, J. E. "Metallocene Mediated Olefin Polymerization: The Effects of Distal Ligand Perturbation on Polymer Stereochemistry," poster presentation, Advances in Polyolefins II, Napa Valley, CA, October **2000**.

5. Miller, S. A.; Bercaw, J. E. "Isotactic Polypropylene Formation with C1-Symmetric Metallocene Catalysts," oral presentation, 218th ACS National Meeting, New Orleans, LA, August, INOR 523, **1999**.

4. Miller, S. A.; Bercaw, J. E. "Synthesis of Isotactic-Hemiisotactic and Syndiotactic-Hemiisotactic Polypropylene," oral presentation, 217th ACS National Meeting, Anaheim, CA, March, INOR 19, **1999**.

3. Miller, S. A.; Bercaw, J. E. "Highly Stereoregular Syndiotactic Polypropylene," poster presentation, 217th ACS National Meeting, Anaheim, CA, March, INOR 151, **1999**.

2. Miller, S. A.; Bercaw, J. E. "Amino-Fluorenide Derivatives of Group IV Metallocenes," poster presentation, 213th ACS National Meeting, San Francisco, CA, April, INOR 196, **1997**.

Undergraduate Presentation by Dr. Miller (1994)

1. Miller, S. A.; Waymouth, R. M. "Diastereoselectivity in the Cyclopolymerization of alpha,omega-Olefins with Homogeneous Ziegler-Natta Catalysts," poster presentation, 207th ACS National Meeting, San Diego, CA, April, INOR 130, **1994**.

Synergistic Activities

- Faculty mentor for the National Science Foundation Research Experiences for Undergraduates (NSF-REU) program. This summer program targets the participation of groups underrepresented in chemistry as well as students from small four-year colleges. Altogether, I have advised nine participants (2003, 2; 2004, 1; 2005, 1; 2008, 1; 2010, 2; 2011, 1; 2013, 1).
- Active member of the George and Josephine Butler Polymer Research Laboratory (<u>http://butlerlabs.chem.ufl.edu/</u>) and the UF Center for Macromolecular Science and Engineering (<u>http://www.cmse.ufl.edu/</u>).
- Member, **Global Young Academy**, 2011-2014 (<u>http://www.globalyoungacademy.net/</u>). The GYA is the voice of young scientists around the world and has about 200 members, each serving four-year terms. Members work on a variety of global issues that impact young scientists, including the establishment of national young academies and connecting scientists from developed and underdeveloped countries. I am a co-founder and a working group leader of the GYA–Young Scientist Ambassador Program (<u>http://gya-ambassador.org</u>).
- Chief Technology Officer of **U.S. Bioplastics[™]** and **Inventor of Gatoresin[™]**. U.S. Bioplastics[™] is a new (2013) start-up company that converts ferulic acid from sugarcane into temperature-resistant polyester for disposable packaging applications. Initial investors have already contributed USD \$300,000 to our pilot scale production efforts.



Collaborators & Other Affiliations

- Collaborators: Industrial collaborations: Mr. Yuki Iseki, Sumitomo Petrochemicals. Journal publication <u>co-authors</u>: Chi-Cheih Lin, National Chung-Hsing University, Taiwan. Tarek M. Madkour, The American University in Cairo, Egypt. <u>Visiting Professors</u>: Gholam H. Zohuri, Ferdowsi University, Mashad, Iran (2010); Professor Tao Jiang, Tianjin University of Science & Technology, Tianjin, China (2010-2011); Profssor Gulsah Kurt, Aksaray University, Turkey (2011); Professor Abdulhamid A. Alsaygh, King Abdulaziz City for Science & Technology, Saudi Arabia (2011); Ertugrul Sahmetlioglu, Nigde University, Turkey (2012); Yessi Permana, Institut of Teknologi Bandung, Indonesia (2012).
- Graduate Advisors: Professor Robert M. Waymouth, Stanford University (undergraduate and M.S.); Professor John E. Bercaw, California Institute of Technology (Ph.D.)
- Postdoctoral Advisor: Professor Richard R. Schrock, Massachusetts Institute of Technology
- Editorial Board Member: Editorial Board member for the journal Green Materials since October, 2013.

Students Mentored:

- <u>30 undergraduates</u>: Charles Branham, Brad Brennan, Ludmila Camargo, Brittany Carl, Cristina Chee Kim Ling Perez, Juliette Commodore, Maria Cortez, Frankie Costanza, Charles Crews, Jeniree Flores, Jennifer Goss, Aaron Justice, Marti Kubena, Laura Launer, Ellese Lee, Alan Luna, Hannah Malcolm, Allan Maple, Daniel Marek, Lacey Martin, Ryan Meral, Robert Mitchell, Catherine Mooney, Russell Parks, Jared Peacock, Erik Price, Caron Remi, Joshua Sanders, Emily Squibb, Laurie Tweed
- <u>32 graduate students</u>: Khalid A. R. Al-Bahily[^] (SABIC), Brittany T. Beckstead (Aronsen), Emma M. Bradic (UF), Matthew C. Burnstein (UF), Benjamin R. Duffus, Amr Feteha (UF), John Garcia[^] (UF), Nicole L. Gibbons (UF), Ersen Gokturk^{*} (UF), Christian Gorsche[^] (Austria), Joseph M. Grill^{*} (BASF), Andrea D. Ilg,[^] Levi J. Irwin^{*} (Zettacore), Sabina Kinder (Leibniz Institute for Polymer Research), Tanner Lee (USAF), Ryan Martin^{*} (Florida Sustainables), Laurent Mialon[^] (Akzo Nobel), Robert B. Mitchell (UNT Medical School), Gholam-Reza Nejabat (Iran), Ha Nguyen (UF), James W. Ogle^{*} (Postdoc at Duke University), Alexander G. Pemba^{*} (UF), Craig J. Price^{*} (U.S. Navy Research Office), Pengxu Qi (UF), B. Jesse E. Reich^{*} (President, CEO, Baystate Biofuels), Nathan P. Rife[^] (M-I Swaco), Mayra Rostagno (UF) Eric D. Schwerdtfeger^{*} (ChevronPhillips), Gabriel N. Short (UF), Elizabeth R. Suda[^] (Sante Fe College), Rob Vanderhenst[^] (UF), Paul D. Zeits (TAMU)
- * 9 Ph.D. Students with degrees conferred
- ^ 8 M.S. Students with degrees conferred
- <u>4 postdoctoral scholars</u>: David A. Aubry (Invista), Jianfang Chai (Michigan Molecular Institute), Hsuan-Ying Chen (Kaohsiung Medical University, Taiwan), Jubo Zhang.

Grants and Contracts

- 1. Saudi Arabian Government/Saudi Basic Industries Corporation (SABIC): *Isotactic Polypropylene Formation Using Group IV and V Ansa-Metallocene Catalysts*. Dates: 01/01/02 - 12/31/04. Award: \$101,346 (Graduate Fellowship to Khalid Al-Bahily).
- 2. Research Corporation (Innovation Award, RI0808): Activation of Carbon Dioxide: Polyester Formation via Coordination Polymerization of Carbon Dioxide and Olefin. Dates: 05/15/02 - 05/14/07. Award: \$35,000.
- 3. The Welch Foundation: *New Polyolefin Architectures from Next-Generation Transition Metal Polymerization Catalysts.* Dates: 06/01/02 05/31/05. Award: \$150,000.
- 4. The National Science Foundation (ESI-0083336): Center for Applications of Information Technology in the Teaching and Learning of Science. Dates: 06/01/03 - 07/21/06. Subcontract Award: \$45,862 (6.67 total months of summer salary; PI: Richard E. Ewing). http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0083336
- 5. Petroleum Research Fund, American Chemical Society (Type G Grant): *Dimerization, Cyclization, and Polymerization via Aldimine Coupling*. Dates: 07/01/03 08/31/05. Award: \$35,000.
- 6. Texas Higher Education Coordinating Board Advanced Technology Program (a State of Texas Initiative): *Development of Novel Commercial Polyolefins from Nanoscale Catalysts*. Dates: 01/01/04 12/31/05. Award: \$100,000.
- 7. Dow Chemical Company and the Texas A&M Dow Chemical Company Endowed Professorship: Investigation of Isoselective, High-Temperature Olefin Polymerization Catalysts. Dates: 01/01/04 - 8/22/06. Award: \$215,208.
- 8. Saudi Basic Industries Corporation (SABIC): *Molecular Weight Determination via Gel Permeation Chromatography* (20 samples). Date: 5/30/05. Grant In-Kind: \$20,000.
- 9. The Welch Foundation: *Controlling Polyolefin Architectures with Sterically Expanded Transition Metal Polymerization Catalysts*. Dates: 06/01/05 05/31/08. Award: \$150,000.
- 10. The National Science Foundation (CHE-0548197): *CAREER: Catalytic Aldimine Coupling: A Versatile Carbon-Carbon Bond Forming Reaction*. Dates: 01/15/06 12/31/11. Award: \$500,000. http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0548197
- Specialty Minerals: *Polymer Nanocomposites*. Dates: 06/01/06 08/31/06. Subcontract Award: \$5,250 (Summer Graduate Fellowship to Eric D. Schwerdtfeger. Co-PIs: H. J. Sue, Mechanical Engineering; A. Clearfield, Chemistry)
- 12. National Science Foundation (CHE): *MRI: Acquisition of a Dual Source X-Ray Diffraction Instrument*. Date: 07/01/2008. Award: \$261,619. Co-Principal Investigator with five others.
- 13. Petroleum Research Fund American Chemical Society (type AC): *Replacing Polyvinyl Chloride with Novel Thermoplastics Derived from Natural Gas.* Dates: 09/01/2008 8/31/2010. Award: \$100,000.
- 14. Sumitomo Chemical Company: *Direct Polymerization of Ethylene to Branched Polyethylene*. Dates: 6/1/2008 5/31/2013. Award \$60,000.
- 15. Solicore, Inc.: *Structure/Property Approach to Minimizing Agglomeration in Polyimide-Based Electrolytes*. Dates 11/19/2008 3/17/2009. Award \$7,100.
- 16. Army Research Office (ARO) Defense University Research Instrumentation Program (DURIP): Acquisition of Preparative High Pressure Liquid Chromatography (prep HPLC) Instrumentation for the Butler Polymer Research Laboratory. Dates: 4/15/2009 – 4/14/2010. Award: \$96,000. Co-Principal Investigator with three others.
- 17. National Science Foundation (CHE-0848236): Next Generation Thermoplastics from Biorenewable Carbonyl Compounds. Dates: 7/1/2009 – 6/30/2012. Award: \$382,812. http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0848236

 IUPAC/National Science Foundation (CHE-1058079): Morphology Control of Olefin Based Homoand Copolymers in Catalytic Gas-Phase, Slurry and Emulsion Polymerization. Dates: 10/1/2010 – 9/30/2013. Award: \$480,000. This amount shared evenly with one collaborator. The other three collaborators (Dresden, Germany; Mainz, Germany; Sao Paulo, Brazil) are funded separately by IUPAC.

http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=1058079

- Young Scientist/Entrepreneur Partnership Award, sponsored by the InterAcademy Panel and TWAS, the Academy of Sciences for the Developing World, 2010. Dates: 12/4/2010 – 12/3/2012. Award: \$10,000. Collaborator: Fashion Designer Natalia Allen, Design FuturistTM <u>http://www.designfuturist.com/</u>
- 20. 2011 Cade Prize for Innovation, Winner. Dates: 5/12/2011 present. Award: \$50,000. http://www.cademuseum.org/experience/prize.aspx
- 21. National Science Foundation (CHE-1305794): SusChEM: Polyesters from Sustainable C1 Feedstocks. Dates: 9/1/2013 – 8/31/2016. Award: \$420,000. http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=1305794



Course	Course Title	Semester	Enrollment	Fraction Co-taught		
CHEM 227	Organic Chemistry I	2003 Fall	76			
CHEM 383	Environmental Chemistry	2004 Spring	11	9/27 lectures		
		2005 Spring	29	9/27 lectures		
		2006 Spring	19	9/27 lectures		
CHEM 466	Polymer Chemistry	2003 Spring	72			
		2004 Spring	48			
		2005 Spring	62			
		2007 Spring	75			
Graduate Courses						
Course	Course Title	Semester	Enrollment	Fraction Co-taught		
CHEM 633	Inorganic Chemistry	2006 Fall	6	2/41 lectures		
CHEM 642	Organometallic Chemistry &	2001 Fall	30	11/26 lectures		
	Homogeneous Catalysis	2002 Fall	22	4/28 lectures		
		2003 Fall	25	8/28 lectures		
		2004 Fall	31	1/28 lectures		
			•••			
		2005 Fall	18	2/28 lectures		
CHEM 646	Physical Organic Chemistry	2005 Fall 2001 Fall	18 25	2/28 lectures 7/40 lectures		
CHEM 646	Physical Organic Chemistry	2005 Fall 2001 Fall 2004 Fall	18 25 25	2/28 lectures 7/40 lectures		
CHEM 646	Physical Organic Chemistry	2005 Fall 2001 Fall 2004 Fall 2005 Fall	18 25 25 30	2/28 lectures 7/40 lectures		

Core Courses Taught at Texas A&M University, 2001-2007

Undergraduate Courses

Core Courses Taught at the University of Florida, 2007-present

Undergraduate Courses						
Course	Course Title	Semester	Enrollment	Fraction Co-taught		
CHEM 2210	Organic Chemistry I	2008 Spring	116			
		2008 Fall	131			
		2009 Fall	169			
		2011 Fall	168			
		2013 Spring	157			
		2013 Fall	173			
CHEM 4272	The Organic Chemistry	2009 Spring	29			
	of Polymers	2012 Spring	24			
Graduate Courses						
Course	Course Title	Semester	Enrollment	Fraction Co-taught		
CHEM 5275	The Organic Chemistry	2007 Fall	15			
	of Polymers	2010 Fall	17			
	-	2012 Fall	23			
CHEM 6225	Physical Organic Chemistry	2010 Spring	20			
		2011 Spring	19			
		2014 Spring	29 (current)		

Instructor Evaluations – Selected Written Comments

UF Faculty Evaluations, Public Data for Stephen A. Miller: https://evaluations.ufl.edu/results/instructor.aspx?ik=568208597 (Note: CHM 1025 is erroneously ascribed to me.)

<u>UF CHM 2210, Fall 2013</u>: "He is very communicative and explains organic chemistry very clearly. He doesn't have confusing notes and he displays them in a way that is very clear and able to understand. The front page on e-learning also clearly displays what a student needs to understand for the course." "Professor Miller is an outstanding organic chemistry professor who truly understands the material. I am glad to have taken his class and won't hesitate to take another one of his courses in the future." "As someone who hates chemistry, Miller made the course understandable and interesting. One of the best professors I've had at UF and by far the best chemistry professor I've ever had." "Overall, this class (even though it required a lot of effort) was my favorite of the semester, and possibly even of all my 3 semesters at UF. Great Job!" "Miller was one of the best professors I've had at UF."

<u>UF CHM 2210, Spring 2013</u>: "I would recommend Dr. Miller to anyone." "Dr. Miller is a great Instructor. He clearly is very knowledgeable in his field, and he is the most organized teacher that I've ever met. Organic chemistry is not an easy subject so it requires a lot of time and effort from the individual student, as for the teacher's role, Dr. Miller has very successfully filled it." "Dr. Miller is literally the best professor at any University. He genuinely wants his students to do well in the class. His exams and policies are very fair. I will leave the class feeling very knowledgeable about Organic Chemistry, and that a perfect professor exists." "By far the BEST and favorite teacher since I have been at UF."

<u>UF CHM 2210, Fall 2011</u>: "Professor Miller is an amazing organic chemistry teacher." "Organic chemistry is probably the most engaging, challenging, and rewarding class I've taken at UF." "He was enthusiastic and made the course enjoyable" "Your awesome Miller!" "Loved the class." "I thought that he was great at keeping me awake in class. I had an 8:30 class and I never fell asleep in it. He was also very good at explaining the subject matter. He was very available to help students whenever they needed it." "Dr. Miller was very helpful outside of class. He had many office hours, review sessions, and responded to emails quickly." "Good job Prof. Miller, I enjoyed your class, despite its difficulty." "This is one of my favorite classes I have taken in college so far." "I'm really glad I took this class! I couldn't have asked for a better orgo 1 teacher"

<u>UF CHM 6225, Spring 2011</u>: "Prof. Miller has really put a lot of his time and effort to provide us with a Grade-A material in a very enthusiastic manner. I believe he really deserve a very excellent evaluation as his effort taught many new and interesting concepts to help understand many aspects of Organic chemistry." "I believe that Dr. Miller has really came up with a better and facile way to teach us these material. I highly recommend that this course be taught by him for the good of the new students and the Chemistry Dept." "He was passionate about the subject!!!!" "Dr Miller is an amazing teacher with all best qualities that one would expect. Excellent lecturing skill, huge passion to teach and help student to learn. High concern and caring about student wellness. He always wants to make sure that you work hard and understand the subject and be able to use it."

<u>UF CHM 6225, Spring 2010</u>: "Dr. Miller obviously cares about his students. He keeps us updated throughout the semester and grades assignments incredibly fast. His lecture notes were very helpful and allowed him to set a good pace." "Wonderful. I really enjoyed the class." "Review sessions are very helpful." "Dr. Miller seemed very detail-oriented. He also finds very good ways of explaining difficult concepts." "Very personable and always able to help – excellent instructor overall!" "Excellent professor"

<u>UF CHM 2210, Fall 2009</u>: "Great professor" "Clarity, patience, knowledgable" "Was very enthusiastic about organic chemistry." "Very helpful. Great teacher." "Excellent communication skills. Easy to understand." "Lectures were very entertaining and informative." "I will definitely take any course Dr. Miller teaches in the future." "Very interesting! Love your humor/personality, Miller!" "Dr. Miller is the best orgo teacher." "Organized, Smart, Enthusiastic, Challenging, and Fair." "You made Orgo not scary and now I actually enjoy learning it an showing it off to my geeky friends." "Dr. Miller is a great professor."

"Very personable and very approachable. Made orgo an easy and fun course. Best professor so far at UF."

<u>UF CHM 4272, Spring 2009</u>: "Stimulated my interest in polymers." "One of the best prof. at UF." "Made himself extremely available outside of class." "His enthusiasm and remarkable knowledge on this subject kept the class both interesting and enjoyable." "Dr. Miller is one of the top teachers at this school." "Very clear speaker, enthusiastic about the subject." "I'm never bored when he teaches, and his notes correspond to test material which is very helpful."

<u>UF CHM 2210, Fall 2008</u>: "Very enthusiastic and helpful." "Answers questions precisely to the point." "Teach orgo 2!" "Really nice and able to communicate ideas well." "Best teacher ever." "I loved it. One of the best science classes I've taken at UF." "Dr. Miller is a great professor! His ability to teach is something he should take pride in." "Makes organic fun." "You give really clear examples and are very organized in teaching your information. Your enthusiasm for Organic Chemistry is contagious." "I loooove orgo!" "Dr. Miller was funny and managed to make chemistry interesting for once." "Able to command the room and present the material well." "He talked to us like we were peers, not idiots." "I will recommend Dr. Miller to anybody for CHM 2210."

<u>UF CHM 2210, Spring 2008</u>: "He is very enthusiastic about his subject and teaches and answers questions for the sake of learning—not just because something is course material." "Made me look forward to Orgo." "Asked questions during lecture that he actually wanted answered—and made wrong answers not feel stupid by teaching through the thought process." "Great professor, very encouraging, very approachable, a good <u>teacher</u>—easily transmits ideas and connects concepts back together so the big picture is grasped. I wish you taught ORG 2!" "Dr. Miller is an excellent instructor and really helped me to succeed in this course." "He was the best professor I have had so far since I attended University of Florida." "Dr. Miller is the best professor I've ever had." "He really knew the material." "Extremely organized." "Best Teacher I have had so far at UF."

<u>UF CHM 5275, Fall 2007</u>: "Very interesting from a chemist's viewpoint with plenty of real-world applications." "Dr. Miller did a great job this semester!" "Great explanations, material was clear and interesting." "Always willing to help when asked and very approachable." "Great teacher."

<u>Texas A&M CHEM 646, Fall 2005</u>: "The chemistry that was presented was well organized and I liked the way he used both powerpoint and chalk talk." "The problem sets and exams were of very high quality and helped build on stuff taught in class." "The grading and posting of grades was very prompt." "Uncanny availability to students." "Approachable." "Dr. Miller, you are an excellent explainer!"

<u>Texas A&M CHEM 466, Spring 2005</u>: "Clearly explained information during class and provided great notes via WebCT—really seemed to care that we retained the info." "He was very organized and the problem set office hours were extremely helpful and aided in my learning." "Help sessions were great—so were the in-class demonstrations." "You are probably the best professor I have had so far."

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Prof. Robert M. Waymouth – Stanford University Department of Chemistry Stanford University Stanford, California, 94305-5080 waymouth@stanford.edu Phone: (650) 723-4515	(Undergraduate and M.S. Thesis Advisor)

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