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born: April 4, 1972, Muncie, Indiana, USA
married (Lynn) with two children (Thea, 10; Emerson, 6)



Current Research Interests

Environmental chemistry; Organic chemistry; Polymers from biorenewable feedstocks; Single-site catalysts for olefin polymerization; Theoretical polymer 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
Honors Thesis: *Cyclopolymerization with Homogeneous Ziegler-Natta Catalysts*

Professional Experience

Co-Founder & CTO, Florida Sustainables™: 2010–present <http://floridasustainables.com> 
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

2011 Cade Prize for Innovation, Winner <http://www.cademuseum.org/experience/prize.aspx>
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, 2010
2010 Cade Prize for Innovation, Final Four
Kavli Fellow, 2008
National Science Foundation CAREER Award, 2006-2011
Petroleum Research Fund (Type G) Grant, 2003
Research Corporation Innovation Award, 2002
Dow Travel Fellowship Recipient, 1997
National Defense Science and Engineering Graduate (NDSEG) Fellowship, 1994-1997
National Science Foundation Predoctoral Fellowship (declined to accept the NDSEG Fellowship), 1994
B.S. Conferred with Distinction, Stanford University, 1994
B.S. Conferred with Departmental Honors, Stanford University, 1994
The Marsden Memorial Prize in Chemistry for Undergraduate Research, Stanford University, 1994
Undergraduate Summer Scholarship for Research in Polymer Science, American Chemical Society Divisions of Polymer Chemistry and Polymeric Materials, Stanford University, 1993
Stanford Center for Materials Research Summer Grant, 1992

Memberships

The American Chemical Society <http://portal.acs.org>
The Global Young Academy <http://www.globalyoungacademy.org/> (116 members worldwide)
The Triple Nine Society <http://www.triplenine.org/> (about 1000 members worldwide)
The George and Josephine Butler Polymer Research Laboratory <http://butlerlabs.chem.ufl.edu/>
The Center for Macromolecular Science and Engineering <http://www.cmse.ufl.edu/>

Publications

All publications (35) and patents (3) can be found at the following URL:

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

Notable publications include the following:

• *Biorenewable polyethylene terephthalate mimics derived from lignin and acetic acid.* *Green Chem.* **2010**, 12, 1704-1706.

<http://dx.doi.org/10.1039/C0GC00150C>

• *Weakly Coordinating Cations as Alternatives to Weakly Coordinating Anions.* *Angew. Chem. Int. Ed.* **2009**, 48, 956-959.

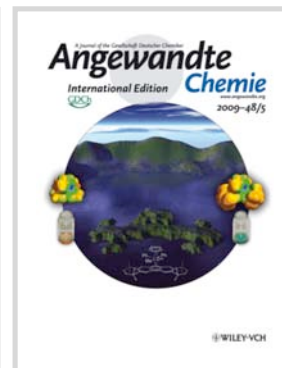
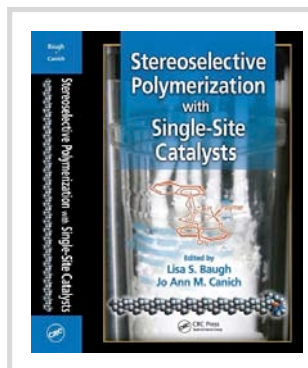
<http://dx.doi.org/10.1002/anie.200802605>

• *Fluorenyl Containing Catalysts for Stereoselective Propylene Polymerization. Stereoselective Polymerization with Single Site Catalysts.* CRC Press: Boca Raton, Florida, **2007**, pp. 37-82.

<http://books.google.com/books?isbn=1574445790>

• *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>



Presentations

All list of all past presentations (103) and scheduled presentations can be found at the following URL:

<http://www.chem.ufl.edu/~miller/presentations.shtml>

Notable presentations include the following:

• The Global Young Academy General Assembly, Berlin, Germany, March 20, **2011**

• "Plastics from Wood," WCJB-TV ABC, Gainesville, Florida, March 15, **2011**

<http://www.wcjb.com/news/8958/technology-spotlight-3-15-11-plastics-from-wood>

• Cade Prize for Innovation 2011 – Final 4, Gainesville, Florida, March 4, **2011**

<http://www.youtube.com/watch?v=Q2HDG49gaLE>

• PacifiChem 2010, Honolulu, Hawaii, December 16, **2010**

• PepsiCo, Purchase, New York, October 18, **2010**

• Hebei University of Technology, Tianjin, China, September 17, **2010**

• World Economic Forum/Annual Meeting of the New Champions, Tianjin, China, September 13-15, **2010**

• MACRO 2010, 43rd World Polymer Congress, Glasgow, United Kingdom, July 11-16, **2010**

• Japanese-American Kavli Frontiers of Science Symposium, National Academy of Sciences, Irvine, California, December 5, **2008**

• MACRO 2008, 42nd World Polymer Congress, Taipei, Taiwan, July 1, **2008**

• DSM, Geleen, the Netherlands, June 18, **2008**

• Hungarian-American Workshop on Molecular Catalyst Design for Green Chemistry, Eötvös University, Budapest, Hungary, May 24, **2002**



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