

## Michael W. McKittrick

State University of New York at Buffalo  
Department of Chemical & Biological Engineering  
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- Professional Experience**      **State University of New York at Buffalo**      Buffalo, NY      January 2007-  
Department of Chemical and Biological Engineering  
Assistant Professor
- Educational Experience**      **University of Colorado**      Boulder, CO      April 2005-November 2006  
Postdoctoral Research Associate/ Ruth L. Kirchstein Fellow  
Research Advisor: Prof. Christopher N. Bowman  
Postdoctoral Research: Development of novel photopolymerizable monomers for use in dental restoratives, functionalized monomers for thiol-ene photopolymerizations.
- Georgia Institute of Technology**      Atlanta, GA      March 2005  
Ph.D. Chemical & Biomolecular Engineering,  
Minor: Inorganic Chemistry  
Research Advisor: Prof. Christopher W. Jones  
Thesis: Single-Site Olefin Polymerization Catalysts via the Molecular Design of Porous Silica.
- Virginia Commonwealth University**      Richmond, VA      May 2000  
B.S. Chemical Engineering and B.S. Chemistry, Cum Laude.  
Minor: Mathematics
- Awards**
- President's Fellowship  
Georgia Institute of Technology  
Fall 2000-Summer 2004
  - Office of Naval Research/Molecular Design Institute Fellowship  
Georgia Institute of Technology  
Fall 2002- Summer 2003  
Fall 2003- Summer 2004
  - American Institute of Chemical Engineers, Catalysis and Reaction  
Engineering Division, Best Poster Paper in Catalysis, AIChE Annual Meeting, 2002
  - Ziegler Award for Best PhD Research Proposal  
Georgia Institute of Technology, School of Chemical & Biomolecular Engineering  
2003
  - Ziegler Award for Best Research Paper  
Georgia Institute of Technology, School of Chemical & Biomolecular Engineering  
2004
  - Ruth L. Kirchstein National Research Service Award  
National Institutes of Health/National Institute of Dental and Craniofacial Research  
2006

- Publications “Toward Single-Site Functional Materials-Preparation of Amine-Functionalized Surfaces Exhibiting Site-Isolated Behavior.” M.W. McKittrick, C.W. Jones, *Chemistry of Materials*, 2003, 15, 1132-1139.
- “Towards Single-Site, Immobilized Molecular Catalysts: Site- Isolated Ti Ethylene Polymerization Catalysts Supported on Porous Silica” M.W. McKittrick, C.W. Jones, *J. Am. Chem. Soc.*, 2004, 126, 3052-3053.
- “Effect of Site-Isolation on the Preparation and Performance of Silica-Immobilized Ti CGC-Inspired Ethylene Polymerization Catalysts” M.W. McKittrick, C.W. Jones, *J. Catal.*, 2004, 227, 186-201.
- “Role of Amine Structure and Site-Isolation on the Performance of Aminosilica-Immobilized Zr CGC-Inspired Ethylene Polymerization Catalysts” K. Yu, M.W. McKittrick, C.W. Jones, *Organometallics*, 2004, 23, 4089-4096.
- “Design of Silica-Tethered Metal Complex Catalysts” C. W. Jones, M.W. McKittrick, J.V. Nguyen, K. Yu, *Topics in Catalysis*, 2005, 34(1-4), 67-76.
- “Effect of Metallation Protocol on the Preparation and Performance of Silica-Immobilized Ti CGC-Inspired Ethylene Polymerization Catalysts” M.W. McKittrick, K. Yu, C.W. Jones, *J. Mol. Catal. A.*, 2005, 237 (1-2), 26-35.
- “Modulating the Reactivity of an Organometallic Catalyst via Immobilization on a Spatially Patterned Silica Surface” M.W. McKittrick, C.W. Jones, *Chemistry of Materials*, 2005, 17, 4758-4761.
- Book Chapters Authored “A Strategy for the Preparation of Isolated Organometallic Catalysts on Silica Supports – Towards Single-Site Solid Catalysts” M. W. McKittrick, S. D. McClendon, C. W. Jones, in *Catalysis of Organic Reactions*, J. Sowa Ed. CRC Press, Boca Raton, 2005.

#### Students Advised

##### Current

Li Liu (MS)  
Sushil Patil (Ph.D. precandidate)  
Ellen Cardone (Ph.D. precandidate)

##### Previous

Carlos Buitrago (UB CBE BS, 2008; Penn CBE PhD program)  
Hiromi Yoshida (UB CBE BS, 2008)  
Emily Weinheimer (HS Student through BEAM program)