

JUSTIN M. NOTESTEIN

Department of Chemical & Biological Engineering
Robert R. McCormick School of Engineering and Applied Science
Northwestern University
Evanston, IL 60208-3100

(847) 491-5357 (office)
(847) 491-3728 (fax)

j-notestein@northwestern.edu

EDUCATION

Princeton University	Chemical Engineering, <i>magna cum laude</i>	B.S.E. 2001
	Certificate in Materials Science and Engineering	
University of California, Berkeley	Chemical Engineering	Ph.D. 2006

PROFESSIONAL EXPERIENCE

2007 Assistant Professor, Chemical and Biological Engineering, *Northwestern University*
2007 Member, Center for Catalysis and Surface Science, *Northwestern*
2006-07 Post-Doctoral Research Associate, Chemistry, *U. Illinois, Urbana Champaign*

NEWS and RECOGNITION

DuPont Young Professor Grant, 2010
3M Non-Tenured Faculty Award, 2010
McCormick Advisor of the Year, 2009-2010; Faculty Honor Roll, 2010, 2008
Young Investigator Award, International Catalysis Congress, 2008
Camille and Henry Dreyfus New Faculty Award, 2007
"Dow Chemical Awards "Methane Challenge" Grants" see *Chem. Eng. News*, January 2008
Phi Beta Kappa Fellowship, CA alpha chapter, 2006
"Science Concentrate" in *Chem. Eng. News*, Dec 6, 2004
National Science Foundation Graduate Student Fellowship, 2001-2004
Dow Outstanding Teaching Assistant Award, 2002
Ticona Senior Thesis Award, Princeton University, 2001

RESEARCH ADVISING: 6 PhD (all current), 3 PD (1 current), 7 undergraduate, 3 high school

PROFESSIONAL and COMMUNITY SERVICE. AIChE and Omega Chi Epsilon advisor. Host laboratory, Career Day for Girls, 02/2010 and 02/2011. ChE PhD selection committee, British and selective scholarships committee. Session chair: 2007-11 National AIChE, 2009 Fall National ACS, 2011/09 NACS. Symposium organizer: 2011 Spring National AIChE, 2010 National ACS, 2010 Midwest Regional AIChE, 2009 Chicago Regional AIChE. Reviewer for NSF, NACS, ICC, *Appl. Catal. A*, *J. Catal.*, *Energy and Fuels*, *Ind. Eng. Chem. Res.*, *J. Phys. Chem.*, *Organometallics*, *Int. J. Hydrogen Energy*, *Langmuir*, *ACS Nano*

PATENTS and PUBLICATIONS

* corresponding author

21. C. P. Canlas, J. Lu, J. W. Elam, S. Lee, R. E. Winans, N. Ray, P. C. Stair, R. P. Van Duyne, J. M. Notestein*, "Oxide Nanocavity Catalysts," submitted, **2011**.
20. A. B. Thompson, S. Cope, T. D. Swift, J. M. Notestein*, "Selective Adsorption of n-Butanol from Dilute Aqueous Solution with Grafted Calixarenes," submitted, **2011**.
19. P. D. Young and J. M. Notestein*, "The Role of Amine Surface Density on Carbon Dioxide Adsorption on Functionalized Mixed Oxide Surfaces," submitted, **2011**.
18. N. J. Schoenfeldt, Z. Ni, A. W. Korinda, R. J. Meyer, J. M. Notestein*, "Manganese Triazacyclononane Oxidation Catalysts Grafted under Reaction Conditions on Solid Co-catalytic Supports," submitted, **2011**.
17. N. J. Schoenfeldt, J. M. Notestein*, "Solid Co-catalysts for Immobilizing and Activating Manganese Triazacyclononane Oxidation Catalysts," submitted, **2011**.
16. D. Prieto-Centurion, J. M. Notestein*, "Surface speciation and alkane oxidation with isolated Fe sites on silica," *J. Catal.*, 279, **2011**, 103-110.
15. N. J. Schoenfeldt, A. W. Korinda, J. M. Notestein*, "A heterogeneous, selective oxidation catalyst based on Mn triazacyclononane grafted under reaction conditions," *Chem. Commun*, 46, **2010**, 1640-1642.
14. N. Morlanes, J. M. Notestein*, "Grafted Ta-calixarenes: tunable, selective catalysts for direct olefin epoxidation with aqueous H₂O₂," *J. Catal.*, 275, **2010**, 191-201.
13. N. Morlanes, J. M. Notestein*, "Kinetic study of cyclooctene epoxidation with aqueous hydrogen peroxide over silica-supported calixarene-Ta(V)," *Appl. Catal. A* **2010**, 387, 45-54.
12. J. M. Notestein*, C. Canlas, J. Siegfried, J. S. Moore, "Covalent grafting of m-phenylene-ethynylene oligomers to oxide surfaces," *Chem. Mater.* **2010**, 22, 5319-5327.
11. A. Solovyov, J. M. Notestein, K. A. Durkin, A. Katz*, "Graftable chiral ligands for surface organometallic materials: calixarenes bearing asymmetric centers directly attached to the lower rim," *New J. Chem.* **2008**, 32, 1314-1325.
10. J. M. Notestein, L. R. Andrini, A. Solovyov, F. G. Requejo, A. Katz*, E. Iglesia*, "The role of outer-sphere surface acidity in alkene epoxidation catalyzed by calixarene-Ti(IV) complexes," *J. Am. Chem. Soc.* **2007**, 129, 15585-15595.
9. J. M. Notestein, A. Katz*, E. Iglesia*, "Photoluminescence and charge transfer complexes of calixarenes grafted on TiO₂ nanoparticles," *Chem. Mater.* **2007**, 19, 4998-5005.
8. J. M. Notestein, L. R. Andrini, V. I. Kalchenko, F. G. Requejo*, A. Katz*, E. Iglesia*, "Structural assessment and catalytic consequences of the oxygen coordination environment in grafted Ti-calixarenes," *J. Am. Chem. Soc.* **2007**, 129, 1122-1131.
7. J. M. Notestein, A. Katz*, "Enhancing heterogeneous catalysis through cooperative hybrid organic-inorganic interfaces," *Chem. Eur. J.* **2006**, 12, 3954-3965.
6. J. M. Notestein, A. Katz*, E. Iglesia*, "Energetics of small molecule and water complexation in hydrophobic calixarene cavities," *Langmuir* **2006**, 22, 4004-4014.
5. "Immobilized Calixarenes and Related Compounds and Process for their Production" Katz, Alexander; Iglesia, Enrique; and Notestein, Justin M. United States Patent 6,951,690, **2005**.
4. J. M. Notestein, E. Iglesia, A. Katz*, "Grafted metallocalixarenes as single-site surface organometallic catalysts," *J. Am. Chem. Soc.* **2004**, 126, 16478-16486.
3. A. Katz*, P. DaCosta, A. C. P. Lam, J. M. Notestein, "The first single-step immobilization of a calix[4]arene onto the surface of silica," *Chem. Mater.* **2002**, 14, 3364-3368.