

Mary Pavan Watson

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University of Delaware
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EDUCATION

- 2001–2006 **Ph.D., Chemistry.** *University of California, Irvine, CA 92697.*
Dissertation Advisor: Larry E. Overman. Dissertation Thesis: Investigation of the Asymmetric Allylic Imidate Rearrangement Catalyzed by Palladium(II) Compounds with Planar Chiral Ligands.
- 1996–2000 **B.A., Chemistry,** Magna cum Laude. *Harvard College, Cambridge, MA 02138.*

RESEARCH EXPERIENCE

- July 2009–present **Assistant Professor of Chemistry.**
Department of Chemistry and Biochemistry, University of Delaware, Newark, DE.
- 2006–2009 **NIH NRSA Postdoctoral Fellow.** Advisor: Eric N. Jacobsen.
Department of Chemistry and Chemical Biology, Harvard University, Cambridge, MA.
- 2001–2006 **Graduate Research Assistant.** Advisor: Larry E. Overman.
Department of Chemistry, University of California, Irvine, CA.
- 1998–2000 **Undergraduate Research Assistant.** Advisor: David A. Evans.
Department of Chemistry and Chemical Biology, Harvard University, Cambridge, MA.
- 1997 (summer) **Undergraduate Research Assistant.** Advisor: Kenneth B. Wagener.
Department of Chemistry, University of Florida, Gainesville, FL.

HONORS AND AWARDS

- 2007–2009 National Institutes of Health NRSA Postdoctoral Fellowship
- 2004–2005 Allergan Graduate Fellowship in Synthetic Organic Chemistry
- 2003 Contribution to Teaching Award, Department of Chemistry, University of California, Irvine
- 1996–2000 Harvard College Scholarship
- 1996 National Merit Scholar

PUBLICATIONS

7. Watson, M. P.; Jacobsen, E. N. Asymmetric Intramolecular Arylcyanation of Unactivated Olefins via C–CN Bond Activation. *J. Am. Chem. Soc.* **2008**, *130*(38), 12594–12595.
6. Watson, M. P.; Overman, L. E.; Bergman, R. G. Kinetic and Computational Analysis of the Palladium(II)-Catalyzed Asymmetric Allylic Trichloroacetimidate Rearrangement: Development of a Model for Enantioselectivity. *J. Am. Chem. Soc.* **2007**, *129*(16), 5031–5044.
5. Anderson, C. E.; Kirsch, S. F.; Overman, L. E.; Richards, C. J.; Watson, M. P. Preparation of the COP Catalysts: [(*S*)-COP-OAc]₂, [(*S*)-COP-Cl]₂, and (*S*)-COP-hfacac. *Org. Synth.* **2007**, *84*, 148–155.
4. Anderson, C. E.; Overman, L. E.; Richards, C. J.; Watson, M. P.; White, N. Preparation of (η⁵-(*S*)-2-(4-methylethyl)oxazolinylcyclopentadienyl)-(η⁴-tetraphenylcyclobutadiene)cobalt. (cobalt, [1,1',1'',1''']-(η⁴1,3-cyclobutadiene-1,2,3,4-tetrayl)tetrakis[benzene]][(1,2,3,4,5-η)-1-[(4*S*)-4,5-dihydro-4-(1-methylethyl)-2-oxazolyl]-2,4-cyclopentadien-1-yl]-). *Org. Synth.* **2007**, *84*, 139–147.

3. Anderson, C. E.; Overman, L. E.; Watson, M. P. Asymmetric Rearrangement of Allylic Trichloroacetimidates: Preparation of (*S*)-2,2,2-Trichloro-*N*-(1-propylallyl)acetamide. *Org. Synth.* **2005**, *82*, 134–139.
2. Kirsch, S. F.; Overman, L. E.; Watson, M. P. Monomeric Cobalt Oxazoline Palladacycles (COP). Useful Catalysts for Catalytic Asymmetric Rearrangement of Allylic Trichloroacetimidates. *J. Org. Chem.* **2004**, *69*(23), 8101–8104.
1. Overman, L. E.; Owen, C. E.; Pavan, M. M.; Richards, C. J. Catalytic Asymmetric Rearrangement of Allylic *N*-Aryl Trifluoroacetimidates. A Useful Method for Transforming Prochiral Allylic Alcohols to Chiral Allylic Amines. *Org. Lett.* **2003**, *5*(11), 1809–1812. (Maiden name: Mary M. Pavan)

PRESENTATIONS

4. Invited Seminar, East Tennessee State University, February 5, 2010.
3. Chemistry Biology Interface Program Seminar, University of Delaware, October 7, 2009.
2. Watson, M. P.; Jacobsen, E. N. Asymmetric Intramolecular Arylcyanation of Unactivated Olefins via C–CN Bond Activation. Stereochemistry Gordon Research Conference Poster Session, 2008.
1. Watson, M. P.; Jacobsen, E. N. Intramolecular, Catalytic, Asymmetric Cyanoarylation of Olefins. Reactions and Processes Gordon Research Conference Poster Session, 2007.

POSTDOCTORAL RESEARCH SUPERVISED

Dr. Prantik Maity, 2009–present.

DOCTORAL RESEARCH SUPERVISED

Andrew Ehle, 2009–present.

Hari Harathi, 2009–present.

Danielle McAtee, 2009–present.

Tatsiana Haidzinskaya, 2010–present.

Srimoyee Dasgupta, 2010–present.

UNDERGRADUATE RESEARCH SUPERVISED

Alyssa Hellreich, 2010–present.

PROFESSIONAL AFFILIATIONS

American Chemical Society, member since 2006

Biology Chemistry Interface Program at the University of Delaware, since 2009

RESEARCH FUNDING SOURCES

ACS Petroleum Research Fund (9/1/10 – 8/31/12)

University of Delaware Research Foundation (6/1/10–5/31/12)