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Appointments

Department of Chemistry
University of Illinois, Urbana-Champaign
Assistant Professor: July 2005 to 2008
Associate Professor: August 2009-2011
Professor: July 2011-present

Dept. of Chemistry & Chemical Biology
Harvard University, Cambridge
Assistant Professor: August 2002 to July 2005

Education

NIH Postdoctoral Fellow (January 1999-2002)
Dept. of Chemistry and Chemical Biology
Harvard University
Advisor: Professor Eric N. Jacobsen

Graduate Student (1992-1993)
Dept. of Biology
Johns Hopkins University
Advisor: Christian B. Anfinsen

ACS Predoctoral Fellow (1994-December 1998)
Ph.D. in Organic Chemistry
Dept. of Chemistry
Johns Hopkins University
Advisor: Professor Gary H. Posner

B.A. with highest honors in Biochemistry (1988-1992)
Smith College
Advisor: Professor Stuart Rosenfeld

Awards and Fellowships

ACS Award for Creative Work in Synthetic Organic Chemistry (2018), Mitsui Chemicals Catalysis Science Award (2018), University Scholar, UIUC (2017), Mukaiyama Award (2016), Fellow of the Royal Society of Chemistry (2014), Royal Society of Chemistry Merck Award (2013), American Association for the Advancement of Science Fellow (2012), Cope Scholar Award (2009), Roche Excellence in Chemistry Award (2009), Abbott Young Investigator Award (2008), AstraZeneca Excellence in Chemistry Award (2008), Camille Dreyfus Teacher-Scholar Award (2008), Boehringer Ingelheim Pharmaceuticals New Investigator Award (2008), Amgen Young Investigator Award (2008), Sanofi Aventis "Visions in Chemistry" (2008), Pfizer Award for Creativity in Organic Chemistry (2008-2009), BMS Unrestricted "Freedom to Discover" Grant (2008-2009), Eli Lilly Grantee Award (2007-2009), Alfred P. Sloan Research Fellow (2008-2010), Fellow, UIUC Center for Advanced Study (2006), NSF CAREER Award (2006-2010), Camille and Henry Dreyfus New Faculty Award (2002-2007), National Institutes of Health Postdoctoral Fellowship (1999-2002), American Chemical Society, Division of Medicinal Chemistry Predoctoral Fellowship (1997-1998), Sarah and Adolph Roseman Award for Outstanding Achievement in Chemistry, JHU (1997), Sigma Xi, Smith College (1992), First Group Scholar, Smith College (1992), Ford Foundation Summer Research Grant, Smith College (1991), Dean's List, Smith College.

Commercial Catalysts:

- 1,2-Bis(phenylsulfinyl)ethane palladium(II) acetate; Common name: White Catalyst; Uses: Allylic C—H Functionalizations, Oxidative Heck Reactions; Commercialized by Strem Chemicals, Sigma Aldrich, TCI.
- ((2*S*,2'*S*-(–)-[*N,N'*-Bis(2-pyridylmethyl)]-2,2'-bipyrrrolidine)bis(acetonitrile)iron(II)hexafluoroantimonate), Fe(PDP); Common name: White-Chen Catalyst; Uses: Aliphatic C—H Hydroxylations; Commercialized by Strem Chemicals, Sigma Aldrich, American Elements.
- Manganese(III) tetra-*tert*-butyl-phthalocyanine chloride, [Mn(*t*-BuPc)]Cl; Common Name: White-Paradine Catalyst; Uses: Intramolecular C—H Aminations; Commercialized by Sigma Aldrich.
- Manganese (III) perchloro-phthalocyanine chloride, [Mn(ClPc)]Cl; Uses: Intermolecular C—H amination. Is being commercialized by Aldrich (expected product number: 901425).

Features: • *Video Interviews:* Eminent Organic Chemists Collection: Interviews with MCW by the ACS's Division of Organic Chemistry: <http://layingthegroundwork.com/chemists/link/white.html>; ChEFS Initiative by Arthur Winter at Iowa State University: <http://winter.public.iastate.edu/chefs-initiative/hidden/index.html>

Perspectives on Aliphatic C—H Oxidation:

1. White, M.C. "Adding Aliphatic C—H Bonds to Synthesis." *Science* **2012**, *335*, 807. (citations: 445)
2. White, M.C. "C—H Bond Functionalization & Synthesis in the 21st Century: A Brief History and Prospectus." *SYNLETT* (Special Cluster on C—H Oxidation) **2012**, *23*, 2746 (citations: 69)
3. White, M.C. "Base-Metal Catalysis: Embrace the Wild Side" *Adv. Synth. Catal.* **2016**, *358*, 2364.
4. White, M.C.; Zhao, J.P. "Aliphatic C—H Oxidations for Late-Stage Functionalization." *J. Am. Chem. Soc.* **2018**, *140*, just accepted.

Invited Lectures (2005-2018) (>200 worldwide): **Selected Plenary and Keynote Lectures:** 44th EUCHEM Conference on Stereochemistry Burgenstock, Brunnen, Switzerland (2009); Synthesis in Organic Chemistry Symposium, Oxford, UK (2009); ISHHC XIV, Stockholm, Sweden (2009); 19th Symposium on Optically Active Compounds, Tokyo, Japan (2009); Welch Conference, "Advances in Synthetic Chemistry", Houston, TX (2009); FACS XIII, Obernai, France (2010); Norwegian Chemical Society, Division of Organic Chemistry, Oslo, Norway (2011); Closs Lecture, University of Chicago, Chicago, IL (2011); Royal Society of Chemistry, 20th Lakeland Heterocyclic Symposium, Grasmere, UK (2011); 42nd National Organic Symposium, Princeton University, Princeton, NJ (2011); Brazilian Meeting on Organic Synthesis, Brasilia, Brazil (2011); Organic Chemistry Division, French Chemical Society, Paris, France (2011); CSCB Symposium, Dublin, Ireland (2011); CaRLa Winter School, Heidelberg, Germany (2012); Wageningen Symposium on Organic Chemistry, Wageningen, Netherlands (2012); 6th Takeda Science Foundation Symposium, Osaka, Japan (2012); IASOC 2012 Roche Plenary Speaker: Organic Synthesis at the Crossroads of Chemical Sciences: New Frontiers and Challenges." Naples (Ischia Island), Italy (2012); Invited Lecture Series at IOCB, the Academy of Sciences of the Czech Republic, Prague, Czech Republic (2012); Korean Academy of Science and Technology (KAST), Seoul, Korea (2013); Merck RSC Lectures, 4 lectures, UK and Ireland (2014); New Chemistry of the Elements, Royal Society, London, UK (2014); XXV Reunion Bienal de Quimica Organica, Alicante, Spain (2014); ICOMC 2014 and Post-Symposium; Sapporo and Okayama, Japan (2014); Bayer Life Science Lectures, Berlin & Wuppertal, Germany (2014); Sheffield Stereochemistry Conference; Sheffield, UK (2015); Torkil Holm Symposium, Copenhagen, Denmark (2016); William H. Nichols Symposium, White Plains, New York (2016); 2016 Vanderslice Lecturer, Boston College, Boston, MA (2016); Mukaiyama Award Lecture, 33rd Seminar on Synthetic Organic Chemistry (SSOC), Hokkaido, Japan (2016); Late Stage Functionalization Conference, Oxford University, Oxford, UK (2016); 137th Annual Meeting of the Pharmaceutical Society of Japan, Sendai, Japan (2017); 17th Bristol Synthesis Meeting, Bristol, UK (2017); Spinks Lectures, University of Saskatchewan, Saskatoon, SK, Canada (2017); Girona Seminar on Predictive Catalysis (Plenary), Girona, Spain (2018); 7th Annual Stone Symposium (Plenary), Baylor University, Waco, Texas (2018); Karcher Lecturer, University of Oklahoma, Norman, OK (2018); IMPACT Lecturer, University of Notre Dame, South Bend, IN (2018).

Advisory Positions: Research Advisory Board member, Carle Illinois College of Medicine (2017); NIH special emphasis panel, ZRG1 CB-Q, Maximizing Investigators' Research Award (2017); ACS Selection Committee (2016), Chair (2017-present); Permanent member, NIH study section Synthetic and Biological Chemistry A (SBCA) (2011-2015); Ad hoc member, NIH study section Synthetic and Biological Chemistry A and B (SBCA/SBCB) (2007, 2009, 2017); Editorial Advisory Board: *Advanced Synthesis and Catalysis*; *Chemical Science* (2010-present); Staff Committee, University of Illinois at Urbana-Champaign (2013-present).