

VITA

KEVIN M. CZERWINSKI

EDUCATION:

- 1989-1995 University of Wisconsin-Milwaukee, Ph.D., Milwaukee, Wisconsin. Major, Organic Chemistry. Minor, Inorganic Chemistry. Research Advisor, Professor James M. Cook.
- 1985-1989 University of Wisconsin-Stevens Point, B.S., Stevens Point, Wisconsin. Major, Chemistry. Minor, Mathematics.

EXPERIENCE:

- 2006-2009 Professor of Chemistry, University of Wisconsin-Stevens Point
- 2001-2005 Associate Professor of Chemistry, University of Wisconsin-Stevens Point
- 1995-2001 Assistant Professor of Chemistry, University of Wisconsin-Stevens Point
- 1995 Lecturer, Organic Chemistry, University of Wisconsin-Milwaukee
- 1992-1995 Research Assistant, University of Wisconsin-Milwaukee
- 1989-1992 Teaching Assistant, University of Wisconsin-Milwaukee
- 1988-1989 Tutor, Educational Opportunities Program, University of Wisconsin-Stevens Point.

PUBLICATIONS:

1. “(η^6 -2-Bromo-1,1'-biphenyl)-tricarbonylchromium” Czerwinski, C.J.; Guzei, I.A.; Cordes, T.J.; Czerwinski, K.M.; Mlodik, N.A. *Acta Cryst.* **2003**, C59, m499-m500.
2. "An Improved Synthesis of Canthin-6-one" Czerwinski, K.M.; Zifcsak, C. A.; Stevens, J.; Oberbeck, M.; Randlett, C.; King, M.; Mennen, S.M. *Syn. Comm.* **2003**, 33(7), 1225-1231.
3. "Enantiospecific Formation of *Trans*-1,3-Disubstituted Tetrahydro- β -carbolines by the Pictet-Spengler Reaction and Conversion of *Cis* Diastereomers into Their *Trans* Counterparts by Scission of the C-1/N-2 Bond" Cox, E.D.; Hamaker, L.K.; Li, J.; Yu, P.; Czerwinski, K.M.; Deng, L.; Bennett, D.W.; Cook, J.M.; Watson, W.H.; Krawiec, M. *J. Org. Chem.* **1997**, 62, 44-61.

4. Czerwinski, K. M.; Cook, J. M. "Stereochemical Control of the Pictet-Spengler Reaction in the Synthesis of Natural Products." In *Advances in Heterocyclic Natural Product Synthesis*; Pearson, W., Ed.; JAI Press: Greenwich, 1996; Vol. 3. pp 217-277.
5. "Evaluation of Functionalized Tryptophan Derivatives and Related Compounds as Competitive Inhibitors of Indoleamine 2,3-Dioxygenase," Peterson, A.C.; Migawa, M.T.; Martin, M.J.; Hamaker, L.K.; Czerwinski, K.M.; Zhang, W.; Arend, R.A.; Fiset, P.L.; Ozaki, Y.; Will, J.A.; Brown, R.R.; Cook, J.M. *Med. Chem. Res.* **1994**, 3, 531.
6. "Mechanism Driven trans Stereospecificity in the Pictet-Spengler Reaction. Stereospecific Formation of *trans*-1,2,3-Trisubstituted-tetrahydro- β -carbolines by Condensation of *N*_b-Diphenylmethyl Tryptophan Isopropyl Esters with Aldehydes" Czerwinski, K. M.; Deng, L.; Cook, J. M. *Tetrahedron Lett.* **1992**, 33, 4721.
7. "Stereospecificity in the Pictet-Spengler Reaction. Kinetic Versus Thermodynamic Control" Deng, L.; Czerwinski, K. M.; Cook, J. M. *Tetrahedron Lett.* **1991**, 32, 175.

PRESENTATIONS:

1. "First Total Synthesis of Aervine: a General Approach to Methoxy Substituted Canthin-6-ones," Cobb, P.; Mennen, S.; Zick, B.; Czerwinski, K.M., 39th Annual National Organic Chemistry Symposium, Salt Lake City, UT, Abstract No. A-55, 12 June 2005.
2. "Synthesis and Structure of (2-Bromo-1,1'-biphenyl)tricarboxylchromium," Czerwinski, C.J.; Guzei, I.; Cordes, T.J.; Czerwinski, K.M., Mlodik, N.A.; Miller, P.D., American Chemical Society - La Crosse-Winona Section Meeting, LaCrosse, WI, 18 February, 2004.
3. "Progress Toward the First Total Synthesis of Aervine," Mennen, S.; Miller, T.; Zick, B.; Czerwinski, K.M., 34th Annual Great Lakes Regional Meeting of the American Chemical Society, Minneapolis, MN, Abstract No. 45, 2 June 2002.
4. "An Improved Synthesis of Canthin-6-one," Zifcsak, C. A.; Czerwinski, K. M.; Oberbeck, M.; Stevens, J.; King, M.; Randlett, C.; Mennen, S.M., American Chemical Society - Central Wisconsin Section Meeting, Marshfield, WI, 23 January 2002.
5. "Investigation of the Medicinal Properties of Canthinone Indole Alkaloids," Czerwinski, K.M., Department of Chemistry, University of Wisconsin-Stevens Point, Stevens Point, WI, 17 November 2000.
6. "Progress Toward the Synthesis of Methoxy Substituted Canthin-6-one Indole Alkaloids," Zifcsak, C. A.; Allen, M. S.; Czerwinski, K. M.; Oberbeck, M.; Stevens, J.; King, M.; Randlett, C., 220th Annual American Chemical Society National Meeting, Washington, DC, Abstract No. 408, 22 August 2000.

7. "Synthesis of Canthin-6-one Indole Alkaloids," Zifcsak, C.; Gorte, G.; Allen, M.S.; Czerwinski, K.M., 31st Annual Great Lakes Regional Meeting of the American Chemical Society, Milwaukee, WI, Abstract No. 208, 1 June 1998.
8. "Exploring Molecular Structure on the World Wide Web," Zamis, T.M.; Czerwinski, K.M., 5th Annual Minds on Science Workshop for High School Science Teachers, Stevens Point, WI, Program No. 4, 10 October 1997.
9. "Resources on the World Wide Web for Industrial Chemists, University Professors, and High School Science Teachers," Czerwinski, K.M.; Zamis, T.M., American Chemical Society - Central Wisconsin Section Meeting, Stevens Point, WI, 20 February 1997.
10. "Medicinal Chemistry - Isolation of Natural Products," Czerwinski, K.M., 4th Annual Minds on Science Workshop for High School Science Teachers, Stevens Point, WI, Program No. 4, 11 October 1996.
11. "Enantiospecific Synthesis of Macroline/Sapargine/Ajmaline-Related Indole Alkaloids via the Pictet-Spengler Synthesis," Czerwinski, K.M.; Li, Jin; Hamaker, L.K.; Zhang, P.; Cook, J.M., 210th ACS National Meeting, Chicago, IL, Abstract No. 212, 20 August 1995.
12. "Scission of the C(1)-N(2) Bond in the Epimerization of 1,2,3,4-Tetrahydro- β -carbolines," Cox, E.C.; Hamaker, L.K.; Reddy, S.R.; Zhang, P.; Czerwinski, K.M.; Cook, J.M., 210th ACS National Meeting, Chicago, IL, Abstract No. 216, 20 August 1995.
13. "Evidence for Cleavage Across the C(1)-N(2) Bond in the Epimerization of 1,2,3,4-Tetrahydro- β -carbolines," Cox, E.C.; Hamaker, L.K.; Reddy, S.R.; Zhang, P.; Czerwinski, K.M.; Cook, J.M., 209th ACS National Meeting, Anaheim, CA, Abstract No. 356, 2 April 1995.
14. "Enantiospecific Formation of Tetrahydro- β -carbolines by Pictet-Spengler Cyclization," Czerwinski, K.M.; Koehler, K.; Cook, J.M., 1994 Joint Central-Great Lakes Regional Meeting, Ann Arbor, MI, Abstract No. 403, 2 June 1994.
15. "Stereochemical Control of the Pictet-Spengler Reaction," Czerwinski, K.M.; Koehler, K.; Cook, J.M., 206th National American Chemical Society Meeting, Chicago, IL, Abstract No. 70, 22 August 1993.
16. "Complete Trans Stereoselectivity in the Aprotic Pictet-Spengler Reaction," Czerwinski, K.M.; Koehler, K.; Cook, J.M., 33rd National Organic Chemistry Symposium, Bozeman, MT, Abstract No. A-54, 13 June 1993.
17. "Stereospecific Pictet-Spengler Reactions in Aprotic Media," Czerwinski, K.M.; Koehler, K.; Deng, L.; Cook, J.M., 204th National American Chemical Society Meeting, Washington, DC, 23 August 1992.

18. "Stereospecificity in the Pictet-Spengler Reaction," Czerwinski, K.M.; Koehler, K.; Deng, L.; Cook, J.M., 25th Great Lakes Regional Meeting, Milwaukee, WI, Abstract No. 184, 3 June 1992.
19. "Stereoselectivity in the Pictet-Spengler Reaction. Kinetic Versus Thermodynamic Control," Czerwinski, K.M.; Koehler, K.; Deng, L.; Cook, J.M., Joint 23rd/24th Great Lakes/Central Regional Meeting of the American Chemical Society, Indianapolis, IN, Abstract No. 356, 30 May 1991.

RESEARCH AND FUNDING:

1. Support for Undergraduate Research, " Inhibitory activity of substituted canthin-6-one indole alkaloids against human cAMP phosphodiesterase (PDE4) isoenzymes," Undergraduate Educational Initiative, Office of the Dean, College of Letters and Science, UW-Stevens Point, Spring 2008, \$8,000. Funded.
2. Support for Undergraduate Research, " Inhibitory activity of substituted canthin-6-one indole alkaloids against human cAMP phosphodiesterase (PDE4) isoenzymes," Undergraduate Educational Initiative, Office of the Dean, College of Letters and Science, UW-Stevens Point, Spring and Summer 2007, \$7,000. Funded.
3. "Canthinones and beta-Carbolines as Human Isozyme Selective PDE4 Inhibitors," National Institutes of General Medical Sciences-Academic Research Enhancement Award NIGMS, Bethesda, MD, 2006-2009, \$195,000. Not funded.
4. Support for Summer Undergraduate Research, "Matching Funding for NIGMS 1 R15 GM65886-01," Undergraduate Educational Initiative, Office of the Dean, College of Letters and Science, UW-Stevens Point, 2005, \$3,000. Funded
5. Support for Summer Undergraduate Research, "Matching Funding for NIGMS 1 R15 GM65886-01," Undergraduate Educational Initiative, Office of the Dean, College of Letters and Science, UW-Stevens Point, 2004, \$3,000. Funded
6. Support for Summer Undergraduate Research, "Matching Funding for NIGMS 1 R15 GM65886-01," Undergraduate Educational Initiative, Office of the Dean, College of Letters and Science, UW-Stevens Point, 2003, \$3,000. Funded.
7. "Canthinones as Human Isozyme Selective PDE4 Inhibitors," National Institutes of General Medical Sciences-Academic Research Enhancement Award NIGMS 1 R15 GM65886-01, Bethesda, MD, 2002-2005, \$118,525. Funded.
8. Support for Summer Undergraduate Research, Undergraduate Educational Initiative, Office of the Dean, College of Letters and Science, UW-Stevens Point, 2002 \$6,000. Funded.

9. "Support for the Purchase of a Silicon Graphics O2+ Workstation Computer," IT Mini-grant, College of Letters and Science, UWSP, 2001, \$423.00. Not funded.
10. "Transition State Modeling of the Pictet-Spengler Reaction," University Personnel Development Committee Grant, UW-Stevens Point, 2001, \$5,000. Funded.
11. "Glassware for the Large Scale Synthesis of Organic Compounds," G.D. Searle & Co, Skokie, IL, 2000, \$1,538. Funded.
12. Support for Summer Undergraduate Research, "Synthesis of Canthin-2,6-dione," Undergraduate Educational Initiative, Office of the Dean, College of Letters and Science, UW-Stevens Point, 2001, \$6,000. Funded.
13. Support for Summer Undergraduate Research, "Synthesis of a Model Picrasidine Alkaloid," Undergraduate Educational Initiative, Office of the Dean, College of Letters and Science, UW-Stevens Point, 2000, \$6,000. Funded.
14. Support for Summer Undergraduate Research, Undergraduate Educational Initiative, Office of the Dean, College of Letters and Science, UW-Stevens Point, 1999, \$3,000. Funded.
15. "Development of Protocols for the Preparation of Resins for Solid Phase Organic Synthesis," Aldrich Chemical Company, Inc., Milwaukee, WI, 1998-2005, \$15,000. Funded.
16. Support for Summer Undergraduate Research, Undergraduate Educational Initiative, Office of the Dean, College of Letters and Science, UW-Stevens Point, 1998, \$6,000. Funded.
17. "Synthesis of Cytotoxic Canthin-6-one Natural and Unnatural Products," University Personnel Development Committee Grant, UW-Stevens Point, 1997, \$4,973. Funded.
18. "Starting Materials for the Synthesis of Methoxylated Anti-tumor Canthin-6-ones," Abbott Laboratories, North Chicago, IL, 1997, \$5,000. Funded.
19. "Development of a Summer Undergraduate Research Institute," Chancellor's Stipend for Grant Writing, UW-Stevens Point, 1997, \$5,000. Not Funded.
20. Support for Summer Undergraduate Research, Undergraduate Educational Initiative, Office of the Dean, College of Letters and Science, UW-Stevens Point, 1997, \$6,000. Funded.

CO-AUTHORED STUDENT GRANTS:

1. "Progress Toward the First Total Synthesis of Aervine," Mennen, S.; Miller, T.; Zick, B Student Research Fund-UWSP-Travel to Present Research Results, 5 April 2002, \$679, Funded.
2. "Progress Toward the Synthesis of Methoxy Substituted Canthin-6-one Indole Alkaloids," John Stevens, Student Research Fund-UWSP-Travel to Present Research Results, 27 March 2000, \$300, Funded.
3. "Travel Grant for Presentation of Research Results at the 220th National American Chemical Society Meeting," Melissa Oberbeck, Women Chemists Committee-American Chemical Society, April 2000, \$300, Funded.
4. "Development of a Methodology for the Determination of Enantiomeric Excess in α -Bromo Acid Derivatives by Chiral Shift NMR Spectroscopy." Jeff McGilvra, Julie Lukesh, Student Research Fund Program, UW-Stevens Point, 2000, \$500. Funded.
5. "Synthesis of Canthin-6-one Indole Alkaloids," Craig Zificsak, Student Research Fund-UWSP-Travel to Present Research Results, 27 March 1998, \$300, Funded.

AFFILIATIONS AND AWARDS:

- 1989-2009 Member American Chemical Society (ACS)
-Division of Organic Chemistry
-Division of Medicinal Chemistry
- 1998-2007 Member of the Council on Undergraduate Research (CUR)

TEACHING:

Chemistry 425/625-Advanced Organic Chemistry (Writing Emphasis)
Chemistry 399/499 Introduction to Research/Special Work
Chemistry 328-Organic Chemistry Laboratory I
Chemistry 326 Organic Chemistry
Chemistry 325 Organic Chemistry
Chemistry 220-Survey of Organic Chemistry
Chemistry 106-Fundamental Chemistry
Chemistry 105-Fundamental Chemistry
Chemistry 101-Basic Chemistry

UNIVERSITY AND PROFESSIONAL SERVICE

1. Chemical Hygiene Officer-Chair Departmental Safety Committee 2005-2009.
2. Member of the University of Wisconsin-Stevens Point Search and Screen Committee for the position of Associate Vice Chancellor for Teaching, Learning, and Academic Programs, Spring 2005.
3. Judge for the Graduate Student Poster Presentation Competition, Department of Chemistry and Biochemistry, University of Wisconsin-Milwaukee, Spring 2005.
4. Chair of the Departmental Safety Committee, Chemical Safety Officer, Department of Chemistry, University of Wisconsin-Stevens Point, 2005
5. Representative for the University of Wisconsin-Stevens Point at the National Institute of Drug Abuse (NIDA)/ National Institute of Alcoholism and Alcohol Abuse (NIAAA) — National Institutes of Health (NIH) funding workshop in Madison, Wisconsin. Sponsored by University of Wisconsin System Administration. Fall 2004.
6. Chemical Consultant, Art 355—Metal Casting, Department of Art, University of Wisconsin-Stevens Point, Fall 2004.
7. Member of the Special Hearing Committee of the Faculty Mediation Sub-Committee of the Faculty Senate, University of Wisconsin-Stevens Point, Spring 2004.
8. Chair, College Fund Raising Campaign, College of Letters and Science, University of Wisconsin-Stevens Point, Spring 2004.
9. Scientific Reviewer, John Wiley and Sons, “Fundamentals of Preparative Organic Chemistry,” Fall 2003.
10. Co-Chair Departmental Goals and Objectives Task Force, Department of Chemistry, University of Wisconsin-Stevens Point, 1998-2002
11. Scientific Reviewer, National Science Foundation, “Medium Size Ring, Nitrogen Heterocycles via Photolysis of Chloroacetimides and Thermolysis of Azidoacetimides” Fall 2001.
12. Scientific Reviewer, Pergamon Elsevier Science—Tetrahedron, “Synthesis of Protoberberines Using a Silyl-Directed Pictet-Spengler Cyclization” Fall 2001.
13. Member of the University of Wisconsin-Stevens Point ad hoc Student Health Services Review Committee, 2000-2001.

14. Scientific Reviewer, Pergamon Elsevier Science—Tetrahedron Letters, “Short Stereoselective Synthesis of (-)-Ajmalicine, (-)-3-iso-Ajmalicine, and their 5-methoxycarbonyl Derivatives from Secologanin.” Fall 2000.
15. Technical Instructor for the University of Wisconsin-Stevens Point PAPER Academy, UW-Extension Outreach Education, 1998-2000
16. Member of the Search and Screen Committee for the position of Assistant Professor, University of Wisconsin-Stevens Point, Department of Paper Science, Spring 1999.
17. Representative to the Library and Chair of the Departmental Library Committee, Department of Chemistry, University of Wisconsin-Stevens Point, 1996-2005