PUBLICATIONS (RESEARCH)
(Underlined names are those of undergraduate student assistants, double underlined are high school teachers.)


"Metal Chelates of 2,2,7-Trimethyl-3,5-Octanedione, H(tod)," Wenzel, T.J.; Williams, E.J.; Sievers, R.E.; Inorganic Synthesis, 1985, 23, 144-149.


"Binuclear Complexes of Lanthanide(III) and Silver(I) and Their Function as Shift Reagents for Olefins, Aromatics, and Halogenated Compounds," Wenzel, T.J.; Sievers, R.E.; *Analytical Chemistry*, 1981, 53, 393-399.


**PUBLICATIONS (EDUCATION)**

“Peer-Assessment and Self-Assessment of Group Activities,” Wenzel, T. J. *Analytical Chemistry*, in press


“Controlling the Climate in Your Classroom,” Wenzel, T. J.; *Analytical Chemistry*, 2003, 75, 311A-314A.


“Community-Based Projects in Analytical Chemistry Courses,” Wenzel, T. J.; *Analytical Chemistry*, 2002, 74, 279A-280A.


“Environmental Chemistry in the Undergraduate Laboratory,” Wenzel, T. J.; Austin, R.N.; *Environmental Science and Technology*, 2001, 35, 326A-331A.


“All the World’s a Sample,” Wenzel, T. J., Award Address: J. Calvin Giddings Award for Excellence in Education, American Chemical Society, *Division of Analytical Chemistry Newsletter*, 2000, Spring Issue, p. 1, 10-12.


**PUBLICATIONS (BOOKS/CHAPTERS)**


**PUBLICATIONS (OTHER)**


From the Editor-in-Chief in *Council on Undergraduate Research Quarterly*, 2003, 23, 151.

“News Item: Art Ellis Begins Term as Director of the Division of Chemistry of the National Science Foundation,” in *Council on Undergraduate Research Quarterly*, 2002, 23, 99.


“What is an Appropriate Teaching Load for a Research-Active Faculty Member at a Predominantly Undergraduate Institution?,” Wenzel, T.J., *Council on Undergraduate Research Quarterly*, 2001, 21, 104-107.


President’s Column, *Council on Undergraduate Research Quarterly*, 1996, 17, 111.


President’s Column, *Council on Undergraduate Research Quarterly, 1996, 17, 7.*


"Sources of Research Funding Primarily for Chemists," *Council on Undergraduate Research Newsletter, 1989, 10, 82-92.*


**GRANTS - EXTERNAL**

**2003-2007** National Science Foundation - $185,000  
“Chiral NMR Shift Reagents”

**2002-2005** Camille and Henry Dreyfus Foundation - $105,000  
“Scholar/Fellow Program”

**2002-2004** National Science Foundation - $78,630  
“Undergraduate Research Summit: Bates College, Lewiston, ME; Summer 2003”

**2001-2004** National Science Foundation - $246,700  
“Acquisition of a High Field Nuclear Magnetic Resonance Spectrometer for Use in Chemistry Research” (Partially matched by Bates)

2001 – Pfizer Pharmaceutical - $5,000  
“Chiral Calixarenes as NMR Shift Reagents”

2000 – National Science Foundation - $134,250  
“Chiral NMR Shift Reagents”

1999 – National Science Foundation - $74,404  
“General Chemistry in the Study of the Environment” (Matched by Bates)

1998 – National Science Foundation - $21,789  
“Capillary Electrophoresis in the Undergraduate Curriculum in Chemistry and Biological Chemistry” (Matched by Bates)
1997 – National Science Foundation - $128,500
"Chiral NMR Shift Reagents"

1997 – Pfizer Pharmaceutical - $5,000
"Lanthanide-Cyclodextrin Complexes as Chiral NMR Shift Reagents"

1996 – Pfizer Pharmaceutical - $5,000
"Mixed Lanthanide β-Diketonate-Resolving Agent Complexes as Chiral NMR Shift Reagents"

1996 – Auburn Manufacturing - $3,000
"Support for the Executive Committee Meeting, Council of Undergraduate Research"

1995 – National Science Foundation - $7,890
"Chiral NMR Shift Reagents" - Supplement to purchase equipment

1995 – Pfizer Pharmaceutical - $5,000
"Crown Ethers as Chiral NMR Shift Reagents"

1994 – National Science Foundation $124,700
"Chiral NMR Shift Reagents"

1994 – National Science Foundation - $74,875
"Instrumentation for Geochemical Study of Water, Soil, and Rock in an Undergraduate Curriculum" [Co-PI] (Matched by Bates College)

1994 – Kraft General Foods - $36,350
"Data System for Gas Chromatograph-Mass Spectrometer"

1993 – New England Consortium for Undergraduate Science Education - $1,160
"Travel support to the National Conference on Undergraduate Research - Two Students"

1993 – New England Consortium for Undergraduate Science Education - $10,000
"Support for Speakers at the Fifth National Conference of the Council on Undergraduate Research"

1992 – National Science Foundation - $5,000
"Chiral NMR Shift Reagents - Research Experience for Undergraduates"

1992 - Camille and Henry Dreyfus Foundation - $15,000
"Summer Research Program for High School Teachers"

1992 – Pfizer Pharmaceutical - $5,000
"Chiral NMR Shift Reagents"
1992 – Council on Undergraduate Research (AIURP Program) - $2,500
"Chiral NMR Shift Reagents"

1992 – Auburn Manufacturing - $2,500
"Support for the Fifth National Conference on Undergraduate Research"

1991 – National Science Foundation - $88,800
"Chiral NMR Shift Reagents"

1991 – American Chemical Society - $300
"Selective Sorbents for Gas Chromatography" (ACS Polymer Division)

1991 – Pfizer Pharmaceutical - $4,000
"Selective Sorbents for Gas Chromatography"

1991 – Briston-Myers Squibb Company - $1,500
"Lanthanide Luminescence Detection of Bleomycins"

1990 – Camille and Henry Dreyfus Foundation - $45,000
"Grant Program in Chemistry for Liberal Arts Colleges" (Post-doctoral mentor program)

1990 – National Science Foundation - $140,800
"High Field Nuclear Magnetic Resonance Spectrometer" [Co-PI] (Partially matched by Bates College)

1990 – Research Corporation - $21,500
"Lanthanide-Cyclodextrin Complexes as Chiral NMR Shift Reagents"

1987 – National Science Foundation - $27,710
"Gas Chromatograph-Mass Spectrometer" (Matched by Bates College)

1986 – National Science Foundation - $11,000
"Spectrofluorometer for Biochemical Research" (Matched by Bates College)

1986 – Research Corporation - $9,000
Lanthanide Ions as Luminescent Chromophores for Liquid Chromatographic Detection"

1985 – National Science Foundation - $12,592
"Gradient High Performance Liquid Chromatograph" (Matched by Bates College)

1985 – Petroleum Research Fund - $15,000
"Polymeric Metal Chelates as Selective Sorbents and Stationary Phases for Gas Chromatography"

1985 – American Chemical Society - $750
"Project SEED Program" (To hire a high school student for the summer)
1984 – Petroleum Research Fund - $2,000
"American Chemical Society-Petroleum Research Fund Summer Research Fellowship"
(to hire a visiting student fellow)

1983 – Research Corporation - $5,875
"Lanthanide Ions as Fluorescent Probes in Liquid Chromatographic Detection"

1983 – Petroleum Research Fund - $15,000
"Polymeric Metal Chelates as Selective Sorbents and Stationary Phases for Gas Chromatography"

1983 – National Science Foundation - $21,425
Gas Chromatograph for the Study of Polymeric Metal Chelates as Sorbents and Stationary Phases"

1982 – Pittsburgh Conference - $2,000
"R.K. Scott Memorial Award" (To purchase equipment to update the instructional laboratory in analytical chemistry.

1981 - Research Corporation - $10,000
"Lanthanide Ions as Fluorescent Probes in Liquid Chromatographic Detection"

**GRANTS - INTERNAL**

Roger C. Schmutz Faculty Grants:

- 1981 ($500)  "Selective Sorbents for the Simplification of Complex Gas Chromatograms"
- 1982 ($500)  "Improved Chiral Nuclear Magnetic Resonance Shift Reagents for Olefins"
- 1983 ($1,000) "Selective Sorbents for Gas Chromatography"
- 1984 ($1,000) "NMR Shift Reagents for Organohalides and Organosulfides"
- 1985 ($1,000) "Lanthanide Ions as Luminescent Detection Chromophores"
- 1986 ($1,000) "Structural Studies with Binuclear Shift Reagents"
- 1989 ($1,000) "Metal Chelate Polymers as Selective Sorbents for Gas Chromatography"
- 1994 ($700)  "Solid Phase Lanthanide Luminescence Detection in Liquid Chromatography"
President's Discretionary Award:

1985  ($2,500)  "Book entitled NMR Shift Reagents"
1988  ($2,500)  "Support for Sabbatical Leave at Duke University"
1992  ($2,500)  "Summer Student Stipend Support"

Dana Apprentice Program:

1986  ($2,500)  "Structural Analysis of Chemical Compounds"

Mellon Summer Research Grant:

1991  ($3,000)  "Dietary Reconstruction from Chemical Residues on Prehistoric Pottery"
1993  ($3,000)  "Lanthanide Luminescence Detection in Liquid Chromatography"

Mellon Professional Development Grant:

1991  ($2,000)  "Lanthanide Luminescence Detection in Liquid Chromatography (to undertake research at the Free University in Amsterdam during a Short Term leave)"

Hughes Grant:

1994  ($8,000)  "Lanthanide Luminescence Detection in Liquid Chromatography"
2000  ($15,000) “Lanthanide-Crown Ether Couples as Chiral NMR Shift Reagents”
2001  ($14,475) “High Performance Liquid Chromatography in the Chemistry Curriculum”
2003  ($13,540) “Carboxymethylated Cyclodextrins and their Lanthanide Complexes as Chiral NMR Shift Reagents”

Faculty Development Grant:

1997 ($10,000) To develop a new introductory course entitled “Chemical Structure and its Importance in the Environment”

Phillip J. Otis Faculty Curricular Development Grant:

1997  ($2,500) To develop a new introductory course entitled “Chemical Structure and its Importance in the Environment.”
Merck Grant:

1999  ($5,500)  “Calixarenes and Resorcarenes as Chiral NMR Shift Reagents”

Student Research Apprenticeship:

2000  ($3,000)  “Gendered Language in the Presentation of Acid-Base Chemistry”

PRESENTATIONS

“Teaching and Research at an Undergraduate Institution,” University of New Hampshire, April 11, 2003 (Invited).


“The Use of Lanthanide-Chiral Solvating Agent Couples as Chiral NMR Shift Reagents,” Bowdoin College, Nov. 15, 2002 (Invited).

“The Use of Lanthanide-Chiral Solvating Agent Couples as Chiral NMR Shift Reagents,” University of South Dakota, Nov. 4, 2002 (Invited).

“Panel Presentation: Models of Undergraduate Research and Creative Activity: A Dialogue with CUR Presidents,” University of South Dakota, Nov. 4, 2002 (Invited).


“Lanthanide-Chiral Solvating Agent Couples as Chiral NMR Shift Reagents,” 14th International Symposium on Chirality, Hamburg, Germany, Sept. 8-12, 2002 (Invited plenary address).


“Funding Undergraduate Research: Importance and Availability of External Sources of Support,” American Chemical Society, National Conference, Orlando, FL, Apr. 7-10, 2002 (Invited).


“Curricular Reform in Analytical Chemistry,” University of Michigan, Nov. 30, 2001 (Invited).


“Succeeding as a Faculty Member at an Undergraduate Institution,” American Chemical Society, National Conference, Washington, DC, Aug. 19-23, 2000 (Invited)


“All the World’s a Sample,” American Chemical Society, National Conference, New Orleans, LA, Aug. 22-26, 1999 (Invited - Award Address)

“Active Learning in Analytical Chemistry,” American Chemical Society, National Conference, New Orleans, LA, Aug. 22-26, 1999 (Invited - Award Symposium)


“Undergraduate Research: Chemistry Education at its Best,” American Chemical Society, National Conference, Boston, MA, Aug. 23-26, 1998 (Invited)

“A New Approach to Teaching Undergraduate Analytical Chemistry,” American Chemical Society, National Conference, Boston, MA, Aug. 23-26, 1998 (Invited)


"A New Approach to Undergraduate Analytical Chemistry," at the Macro-Research Opportunity Awards Reunion, University of Kansas, July 10-12, 1997 (Invited guest speaker)


"Undergraduate Analytical Chemistry: Relegating the Quant/Instrumental Mentality to the Scrap Heap," University of New Hampshire, January 30, 1997 (Invited)

"Undergraduate Analytical Chemistry: Relegating the Quant/Instrumental Mentality to the Scrap Heap," 14th Biennial Conference on Chemical Education," Clemson, SC, Aug. 4-8, 1996

"Undergraduate Research: Chemistry Education at Its Best," 14th Biennial Conference on Chemical Education," Clemson, SC, Aug. 4-8, 1996 (Invited)


"Lanthanide-Cyclodextrin Complexes as Chiral NMR Shift Reagents," Free University (Amsterdam), April 11, 1994 (Invited).


"Supercritical Fluid Extraction of Metal-Containing Selective Sorbents," Free University (Amsterdam), July 8, 1993 (Invited).

"Chiral NMR Shift Reagents," Colby College, April 6, 1993 (Invited).


"Spectroscopic Studies of Pyrene on Silica Interfaces," University of Vermont, Nov. 1, 1990 (Invited).


“The Use of Terbium(III) and Europium(III) as Luminescent Chromophores for Liquid Chromatographic Detection,” Rocky Mountain Conference on Analytical Chemistry, Denver, CO, August 4-7, 1986. (Invited)


“Metal Chelates as NMR Shift Reagents and Selective Sorbents for Gas Chromatography,” University of New Hampshire, October 11, 1983. (Invited)


“Binuclear Complexes of Lanthanide(III) and Silver(I) and Their Function as Shift Reagents for Aromatic and Olefinic Compounds,” Southwest Regional American Chemical Society Meeting, Salt Lake City, UT, June 1980.


WORKSHOPS

Short-course Leader: “Problem-Based Learning in Analytical Chemistry,” Pittsburgh Conference, March 9-14, 2003, Orlando, FL.


Workshop Leader: “Problem-Based Learning in Analytical Chemistry,” Pittsburgh Conference, March 4-8, 2001, New Orleans, LA.
Workshop Leader: “Analytical Chemistry: Project-Based Laboratories,” July 9-21, 2000, Bates College, Lewiston, ME. Organized through the Center for Chemical Education at Miami University, Ohio.

Workshop Leader: “Problem-Based Learning in Analytical Chemistry,” Pittsburgh Conference, March 11-13, 2000, New Orleans, LA.

Workshop Leader: “Problem-Based Learning in Analytical Chemistry,” Pittsburgh Conference, March 7-8, 1999, Orlando, Florida


Workshop Leader: “Analytical Chemistry: Project-Based Laboratories,” July 6-17, 1998, Bates College, Lewiston, ME. Organized through the Center for Chemical Education at Miami University, Ohio.

CHAired SYMPOSIA


“Advances in Chromatography” Rocky Mountain Conference on Analytical Chemistry, Denver, CO, August 4-7, 1986.
STUDENT PRESENTATIONS
(by students working in my laboratory)


“Chiral Calixarenes and their Lanthanide Couples as Chiral NMR Shift Reagents,” American Chemical Society National Conference, Orlando, FL, Apr 7-10, 2002 (Kristin Smith)


“Lanthanide-Cyclodextrin Complexes as Chiral NMR Shift Reagents,” International Symposium on Chiral Discrimination, Chicago, IL, July 25-28, 1999 (Amanda Colby)

“Lanthanide-Chiral Carboxylate Complexes as Chiral NMR Shift Reagents,” International Symposium on Chiral Discrimination, Chicago, IL, July 25-28, 1999 (Laura DiLorenzo)


“Synthesis of an 18-Crown-6 Ether to be Used in Conjunction with Lanthanides as a Chiral Resolving Agent,” Twelfth National Conference on Undergraduate Research, Salisbury, MD, April 23-25, 1998 (Melissa Vining)


“Calixarenes as Chiral Resolving Agents in NMR Spectroscopy,” Twelfth National Conference on Undergraduate Research, Salisbury, MD, April 23-25, 1998 (Denby Johnson)
"Lanthanide Conjugates with Organic-Soluble Chiral Resolving Agents as NMR Shift Reagents," Eleventh National Conference on Undergraduate Research, Austin, TX, April 23-27, 1997 (Rhonda Crosson)

"Geometric Inclusion Studies of Cyclodextrin-Substrate Interactions Using NMR Spectroscopy," Eleventh National Conference on Undergraduate Research, Austin, TX, April 23-27, 1997 (Bethany Pond)

"Lanthanide-Chiral Carboxylate Complexes as NMR Shift Reagents," Eleventh National Conference on Undergraduate Research, Austin, TX, April 23-27, 1997 (Kathryn Brogan)

"Lanthanide-Chiral Carboxylate Complexes as Chiral NMR Shift Reagents," Tenth National Conference on Undergraduate Research, Asheville, NC, April 18-20, 1996 (Sarah Weinstein)

"Lanthanide-Chiral Carboxylate Complexes as Chiral NMR Shift Reagents," Tenth National Conference on Undergraduate Research, Asheville, NC, April 18-20, 1996 (Kathryn Brogan)

"Lanthanide-Chiral Resolving Agent Mixtures as Organic-Soluble Chiral NMR Shift Reagents," 22nd Annual Conference of the Federation of Analytical Chemistry and Spectroscopy Societies. Cincinnati, OH, October 15-20, 1995 (Sarah Weinstein)

"Organic-Soluble Lanthanide Derivatives as Chiral Resolving Agents," Ninth National Conference on Undergraduate Research, Schenectady, NY, April 20-22, 1995 (Amy Bean)

"Utility of Relaxation Time Data with Cyclodextrin-Gadolinium(III) Complexes," Ninth National Conference on Undergraduate Research, Schenectady, NY, April 20-22, 1995 (Sarah Coulter)

"Cyclodextrin-Lanthanide Complexes as Chiral NMR Resolving Agents," Ninth National Conference on Undergraduate Research, Schenectady, NY, April 20-22, 1995 (Rebecca Miles)

"Solid-Phase Lanthanide Luminescence Detection in Liquid Chromatography," Ninth National Conference on Undergraduate Research, Schenectady, NY, April 20-22, 1995 (Brooke Perrins)


"Lanthanide-Containing Chiral NMR Shift Reagents," Seventh National Conference on Undergraduate Research, Salt Lake City, UT, Mar 25-27, 1993. (Sarah Dunham)

"Synthesis of Highly Luminescent Anion Exchange Lanthanide Complexes", 2nd Symposium on Undergraduate Research, Groningen, The Netherlands, Nov. 27, 1992 (Johannes Vissers)

"Metal Polymers as Selective Sorbents for Gas Chromatography, Sixth National Conference on Undergraduate Research, Minneapolis, MN, Mar 26-28, 1992. (Karen Townsend)
"Chiral NMR Shift Reagents," Sixth National Conference on Undergraduate Research, Minneapolis, MN, Mar 26-28, **1992.** (Matthew Bogyo)

**PROFESSIONAL ORGANIZATIONS AND ACTIVITIES**

*Analytical Chemistry* – Contributing Editor (Educational Topics) – (1999- )

American Chemical Society (1978- )

   Analytical Division – Coordinator of Speaker’s Fund for Regional Meetings (2002- )

Analytical Sciences Digital Library – Advisory Board Member (2003- )

Council on Undergraduate Research (1989- )
   Councilor - 1990-present
   President-elect - 1995-1996
   President - 1996-1997
   Immediate Past-president - 1997-1998

Associate Editor, CUR Newsletter
   Sources in Funding in Chemistry - 1989, 1990, 1991
   Series: Research in Analytical Chemistry at Undergraduate Institutions

Editor: "Research in Chemistry at Primarily Undergraduate Institutions,"


Coordinator: CUR Institute, "How to Institutionalize Undergraduate Research,"
   University of North Carolina, Asheville, Nov. 15-17, 1996.

Coordinator: CUR Institute, “Concerns of Mid-Career Faculty,” Bates College,
   May 8-10, 1998

Conference Co-chair, CUR 2004, The Tenth National Conference of the Council on Undergraduate Research,” to be held at the University of Wisconsin, La Crosse

Editor-in-Chief, Council on Undergraduate Research Quarterly, 2001-
National Science Foundation, Chemistry Division Workshops

Curricular Developments in the Analytical Sciences, Atlanta, GA, March 13-15, 1997 (Speaker/Participant)

Research Sites for Educators in Chemistry, Arlington, VA, March 8-10, 2002 (Participant)

Undergraduate Research Centers, Arlington, VA, March 30- April 1, 2003 (Participant)

Workshop on the Postdoctorate, Arlington, VA, May 11-13, 2003 (Member of the Steering Committee)