

**Rick C. White**

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**Academic Training**

B.S., Chemistry, 1971 Sam Houston State University (Honors in Chemistry)

M.A., Chemistry, 1973, Sam Houston State University

Ph.D., Organic Chemistry, 1977, The University of Iowa

Postdoctoral Research Fellow, 1977-78, The University of Arkansas

**Professional Experience**

Asst. Prof., 1984-88, Assoc. Prof., 1988-94, Prof. 1994- , Chair of Chemistry, 1999-2004, Sam Houston State University

Asst. Prof., 1978-84, Drake University, tenured, 1984.

Visiting Prof., Washington University (St. Louis), Summer, 1982.

Visiting Prof., University of Kansas Center for Bioanalytical Research, Summer, 1987.

Visiting Prof., Texas Woman's University, Summer, Fall, 1992.

NORCUS Faculty Fellow, 1993-1994, Pacific Northwest Laboratories, Richland, WA.

Visiting Professor, Universität Würzburg, Würzburg, Germany, Summer, 1998.

Visiting Professor, Universität Würzburg, Würzburg, Germany, Summer, 2002.

Visiting Professor, Universität Siegen, Siegen, Germany, Summer 2007.

Visiting Professor, Universität Siegen, Siegen, Germany, Summer 2011

Deutscher Akademischer Austausch Dienst (DAAD) Research Ambassador, 2009-2012.

DAAD Alumni Association Board of Directors , 2010-2012.

**External Grant Support**

Rick C. White, "Photolysis of Cyclic Oxalate Esters", \$7,000, Research Corporation, 1980.

Rick C. White, "Photochemistry of Cyclic Oxalate Esters", \$15,000 American Chemical Society Petroleum Research Fund, 1983.

Rick C. White, "Curriculum Enhancement through Nuclear Magnetic Resonance", \$28,000, National Science Foundation, 1985.

Rick C. White, "Photolysis of Cyclic Carbonate Esters", \$20,000, American Chemical Society Petroleum Research Fund, 1990.

Rick C. White and Paul A. Loeffler, "Red Water Destruction Using the NitRem Process", \$4,968,289, National Defense Center for Environmental Excellence, 1993 (five year grant).

Rick C. White, Deutscher Akademischer Austausch Dienst (DAAD), 1998, "Photochemistry of Diaroyldiazenes", DM 11,100.

Rick C. White, "Departmental Research Grant", R. A. Welch Foundation, \$120,000, 2001.

Rick C. White, "Photochemistry of Hindered Epoxides", Deutscher Akademischer Austausch Dienst, € 6,000, 2002.

### **Honors**

B.S. with Honors in Chemistry

L.E. King Chemical Society Award

3M Fellowship

Invited to the German Ambassador's residence in Washington, D.C. to celebrate German Day of Unity, Oct. 3, 2011

### **Internal Grant Support**

Rick C. White, "Photochemistry of Cyclic Carbonate Esters", \$4535, 1986.

Rick C. White, "Kinetics of the Photolysis of Cyclic Carbonate Esters", \$5,000, 1988.

Rick C. White, "Cyclic Carbonate Esters as a Route to Arene Oxides", \$3,000, 1989.

Rick C. White, "A Mechanistic Study of the Intermediates in the Photorearrangement of Epoxides and Carbonates", \$6,700, 1990.

Rick C. White, "Synthetic Applications of Epoxide Photochemistry", \$6,000, 1991.

Rick C. White, "Singlet/ Triplet Reactivity in the Photolysis of Monoaryl Oxiranes", \$7,500, 1992.

Rick C. White, "Photochemistry of Substituted Benzamides", \$5,000, 1995.

Rick C. White, "Photochemical Cyclization Reactions", \$5,000, 1997.

Rick C. White, "New Methods for the Preparation of Carbonyl Radicals", \$4,500, 2000.

Rick C. White, "Radical Cyclization Reactions", \$4,500, 2001.

Rick C. White, "Orbital Alignment in Photochemical Reactions", \$4,500 2002.

### **Service**

#### **Drake University, Des Moines, Iowa**

- Premedical Advisory Committee, 1983-84
- Hawkeye Science Fair Judge, 1978-84
- Drake University Sigma Xi Chair, 1982
- Science Day Coordinator, 1980-84
- Dean's Advisory Council, 1984 (elected position)

- Sigma Xi President, Drake Chapter, 1982

### **Sam Houston State University, Huntsville, TX**

- Science Fair Judge, Huntsville High School, Conroe Independent School District, Montgomery County Public School System, Huntsville, TX Alpha Omega School, 1984-2008
- Served as an instructor for the Huntsville Enrichment Activities Program (HEAP) in which I held Summer “classes” for children using chemical demonstrations to provoke interests in science.
- Went to junior high schools to put on sessions involving chemical demonstrations to get junior high students interested about careers in science
- Pre-pharmacy Advisor, 1986-94
- Wrote the CHM 219 Lab Manual for student Use, 1988
- Wrote the CHM 116 Lab Manual for Student Use, 1988
- SHSU Faculty Senate, 1993-1996, 2010-2012
- Invited Speaker, Science 2000, The Woodlands, TX, 1993
- Invited Speaker, Southwest Texas State University, 1994
- SHSU Parking Appeals Committee, 1993-1996
- Invited Speaker, Southeast Louisiana University 1995
- Invited Speaker, Texas Woman’s University, 1997, 2006
- Chair, Department of Chemistry, 1999-2004
- Organized a Weekend Departmental Retreat for Strategic Planning at Waterwood Resort, 1999
- “Saturday at Sam” Speaker, 1999-2005
- Parents’ Day Speaker, 1999-2005
- Chemistry Advisor, 1999-2004
- Served as a Speaker and Judge for the ACS Meeting in Miniature, Texas Woman’s University 2006
- Chemistry Department Evaluation Team, Abilene Christian University, Abilene, TX 2004-2006
- Initiated new degree program, B.S. in Forensic Chemistry, 2001
- Initiated a new study abroad course in Germany and France, “Discoveries in Chemistry and Textiles”, taught for the first time in 2005 with 26 students. Taught alternate years.
- Wrote the text for CHM 495: Discoveries in Chemistry and Textiles for students in the class, made copies, and had them bound for disbursement to the students
- Initiated a University-wide faculty/student exchange agreement with Universität Siegen, Siegen, Germany, 2007
- Faculty and Staff Annual Fund Campaign Certificate of Recognition of Commitment and Service
- International Programs International Week: Developing Faculty Led Study Abroad Courses Speaker and Moderator, 2008-2010
- Hosted a student from the University of Belgrade, secured housing for him, and showed to him the Houston area, 2006
- Hosted two students from Universität Siegen, 2007, secured housing for them and showed to them the Houston area
- Office of International Programs, Certificate of Appreciation, 2009
- Distinguished Lecture Series Committee 2007-10
- Convocation Committee. 2007-11
- Alcohol Abuse and Awareness Committee and speaker, 2005-present
- Alpha Chi (Texas Omicron Chapter) Recognition for Commitment to the Academic and Personal

Success of a student, 2008

- Faculty Achievement Record Committee 2008-2011
- Appointed to the inaugural class of the Deutscher Akademischer Austausch Dienst Research Ambassadors and attended the DAAD Research Ambassador's Inaugural Conference, New York City, Aug., 2009
- Selected to serve on the DAAD Alumni Association Board of Directors and attended the DAAD Alumni Association Board of Director's Meeting and Conference on Environmental Sustainability, New York City, Apr. and October, 2010
- Invited Conference participant, "New Frontiers: Shifting Trends in the Global Research Landscape and their Impact on Researchers' Career Patterns", joint DAAD and Alexander von Humboldt Conference, October, 2011.

**Papers Presented** (from SHSU, last four years, \* = student research participant)

## 2009

Rick C. White and Janis H. White, "How to Develop a Faculty Led Study Abroad Course," SHSU International Programs International Week, April, 2009

Benny E. Arney, Emilie Rascher\*, and Rick C. White, "Investigation of a Triplet Pathway in the Photochemistry of Monoaryloxiranes", 44<sup>th</sup> Midwest Regional Meeting of the American Chemical Society, Iowa City, Iowa, October, 2009

Rick C. White, Benny E. Arney, and Milos Trajkovic\*, "New Insights to Aryloxirane Photochemistry", 44<sup>th</sup> Midwest Regional Meeting of the American Chemical Society, Iowa City, Iowa, October, 2009

Rick C. White, Janis H. White, Maria Granic-White, and John W. White, "Development of a Two Week Elective course in Germany and Paris" 44<sup>th</sup> Midwest Regional Meeting of the American Chemical Society, Iowa City, Iowa, October, 2009

Rick C. White, "Opportunities for Scholarly Work in Germany funded by the DAAD" presented to Office of International Studies, University of Iowa, Iowa City. IA October, 2009

Rick C. White, Milos Trajkovic, Benny E. Arney, "New Insights to the Photochemistry of Styrene Oxide. 44<sup>th</sup> Midwest Meeting of the American Chemical Society, Iowa City, Iowa, October, 2009

Rick C. White "New Developments in Aryl Oxirane Photochemistry" Presentation to the Organic Chemistry Department, University of Siegen, Siegen, Germany, June, 2009

Rick C. White, "Scholarships for Academic Study in Germany supported by the DAAD", presented to the Chairs of the College of Arts and Sciences, Sam Houston State University, October, 2009.

Rick C. White, "Scholarships for Academic Study in Germany supported by the DAAD", presented to the Chairs of the College of Humanities and Social Services, Sam Houston State University, October, 2009.

Rick C. White, "Scholarships for Academic Study in Germany supported by the DAAD", presented to the Office of International Programs, Stephen F. Austin State University, Nacogdoches, TX October, 2009

Rick C. White, "Scholarships for Academic Study in Germany supported by the DAAD", presented to the International Programs, University of Iowa, Iowa City, Iowa, October, 2009.

Rick C. White, "Scholarships for Academic Study in Germany supported by the DAAD", presented to the International Programs, University of Texas at Tyler, Tyler, TX, November, 2009

## **2010**

Rick C. White, "Scholarships for Academic Study in Germany supported by the DAAD", presented to Department of Chemistry and Biochemistry and Department of Physics, Abilene Christian University, Abilene Texas, February, 2010.

Rick C. White, David Leggett, Jeremy Mitchell Dual Pathways in the Photochemistry of Cyclic Sulfite Esters, 113<sup>th</sup> Meeting of the Texas Academy of Sciences, March. 2010

Benny E. Arney, Jr, Rick C. White, and Emilie Rascher, "Deuterium Labeling Results in the Photochemistry of Styrene Oxide," 113<sup>th</sup> Meeting of the Texas Academy of Sciences, March. 2010

Rick C. White and Jacob Broadway, "Photochemistry of Phenylcycloalkene Oxides" 113<sup>th</sup> Meeting of the Texas Academy of Sciences, March. 2010

Rick C. White and Janis H. White, "How to Develop a Faculty Led Study Abroad Course", SHSU International Programs International Week Program, April, 2010.

Rick C. White, "Scholarships for Academic Study in Germany supported by the DAAD", presented to the students and faculty at Wabash College, Crawfordsville, IN, March 18, 2010

Rick C. White, "Scholarships for Academic Study in Germany supported by the DAAD", presented to the Division of Foreign Languages and Literatures, Purdue University, West Lafayette, IN, March 22 2010.

Rick C. White, "Scholarships for Academic Study in Germany supported by the DAAD", presented to the Department of Foreign Languages, University of Texas at Arlington, Arlington, TX, 2010

Rick C. White. "Scholarships for Academic Study in Germany supported by the DAAD", presented to the Department of Chemistry at Texas A&M University, College Station, TX, March 30, 2010

Rick C. White, "Scholarships for Academic Study in Germany supported by the DAAD", presented to International Studies at Tarleton State University, Stephenville, TX, March 31, 2010

Rick C. White, "Scholarships for Academic Study in Germany supported by the DAAD" presented to the 21<sup>st</sup> Biennial Conference on Chemical Education, Denton, TX August 3, 2010.

Rick C. White, "Developing a two week study abroad course in Germany and Paris", presented to the 21<sup>st</sup> Biennial Conference on Chemical Education, Denton, TX August 3, 2010.

Rick C. White, "Scholarships for Academic Study in Germany supported by the DAAD", presented to Baylor University. September 23, 2010

Rick C. White, "Scholarships for Academic Study in Germany supported by the DAAD, presented to a Study Abroad Fair, Tarleton State University, September 30, 2010.

Rick C. White, "Scholarships for Academic Study in Germany supported by the DAAD, presented to Rice University, October 19, 2010.

## **2011**

Rick C. White, "Scholarships for Academic Study in Germany supported by the DAAD", presented to the students and faculty at St. Edwards University, Austin, TX., March 2011.

Rick C. White, Janis H. White, and Valencia Keening-Bown, "International and Interdisciplinary: Connecting FCS to the Study of Nobel Prize-Winning Scientists and their Discoveries", presented at the 102<sup>nd</sup> AAFCS Annual Conference, Phoenix, AZ, June 25, 2011

Rick C. White, "Scholarships for Academic Study in Germany supported by the DAAD", presented to the students and faculty at Texas A&M Commerce, Commerce, TX September 2, 2011

Rick C. White, "Scholarships for Academic Study in Germany supported by the DAAD", presented to the students and faculty in German and Chemistry at TCU, Fort Worth, TX September 13, 2011

Rick C. White, "Scholarships for Academic Study in Germany supported by the DAAD", presented to the students and faculty at Tarleton State University, Stephenville, TX, September 29, 2011

Rick C. White, "Scholarships for Academic Study in Germany supported by the DAAD", presented to the students and faculty at the University of North Texas, Denton, TX, October 27, 2011

Rick C. White, "Scholarships for Academic Study in Germany supported by the DAAD", presented to the students and faculty at the Texas State University, San Marcos, TX November 8, 2011

Rick C. White "Dual pathways in the photochemistry of cyclic sulfite esters", presented at the Southwest Regional Meeting of the ACS, Austin, T X.

Rick C. White "Mechanism of the photochemistry of styrene oxide", presented at the Southwest Regional Meeting of the ACS, Austin, T X.

## 2012

Rick C. White "Scholarships for Academic Study in Germany supported by the DAAD", presented to the students and faculty at University of "Scholarships for Academic Study in Germany supported by the DAAD", presented to the students and faculty at University of Mary Hardin-Baylor, Jan. 23, 2012

Rick C. White "Scholarships for Academic Study in Germany supported by the DAAD", presented to the students and faculty at Texas Lutheran University, January 27, 2012

## Publications (\* = student research participant)

- 1) White, R. C. and Buckles, R. E., "The Role of Encounter Complexes in Singlet Quenching", *J. Photochem.*, **1977**, 7, 359.
- 2) White, R. C., and Buckles, R. E., "Encounter Complexes n Singlet Quenching II: Quenching of 2, 6-Dimethoxynaphthalene by Benzyl Chlorides", *J. Photochem.*, **1978**, 8, 67.
- 3) White, R. C., Scoby\* J., and Roberts, T. D., "Reduction as a Probe for Benzothiirene Intermediates: Thermal and Photochemical Decomposition of 1, 2,3-Benzothiadiazoles", *Tetrahedron Lett.*, **1979**, 2785
- 4) White, R. C., "Epoxide Formation in the Photolysis of Cyclic Oxalate Esters", *Tetrahedron Lett.*, **1980**, 1021.
- 5) White, R. C. and Dellinger D. J.\*, "Photolysis of Benzyl- $\alpha$ -toluenethiosulfonate", *J. Chem. Res.*, **1985**, 64.
- 6) White, R. C. and Rix, T.\*, "Photolysis of meso- and d, l-Hydrobenzoin Carbonate", *J. Org. Chem.*, **1987**, 52, 2309.
- 7) White, R. C. and Ma, Sha\*, "Photochemistry of 4-Phenyl-1,3-dioxolan-2-one", *J. Heterocyclic Chem.*, **1987**, 24, 1203.
- 8) White, R. C., and Ma, Sha\*, "Photolysis of 4-Phenyl-1,3-dioxolan-2-one: An Undergraduate Experiment in Free Radical Chemistry", *J. Chem. Ed.*, **1988**, 65, 827.
- 9) White, R. C., Drew, P\*, and Moorman, R.\*, "Photolysis of cis-1, 2-Dihydroxyindane Carbonate and cis-1, 2-Dihydroxy-1,2,3,4-tetrahydronaphthalene Carbonate", *J. Heterocyclic Chem.*, **1988**, 25, 1781.
- 10) White, R. C., Lynch, K.\* and Wedyck, Elisa\*, "Ring Contraction in the Photolysis of 1, 2-Dihydronaphthalene Oxide", *J. Photochem. Photobiol. A: Chem.*, **1993**, 71, 127.

- 11) Johnson, James. E. and White, Rick C., "Photolysis of Alkyl n-Alkylbenzohydroxamates", *J. Photochem. Photobiol. A: Chem.*, **1994**, *83*, 217-222.
- 12) White, Rick C., Oppliger, Kyle\* and Johnson, James E. "The Photochemistry of Amides and Amide Derivatives.3. The Photolysis of Methyl 2-phenoxybenzohydroxamate.", *J. Photochem. Photobiol. A: Chem.*, **1997**, *101*, 197-200.
- 13) White, Rick C., Selvam, T., Ihmels, Heiko, and Adam, Waldemar, "Photolysis of N-phenylhydroxylamine: A Novel Photochemical Disproportionation Reaction in N-O Bond Cleavage Assisted by Hydrogen Bonding", *J. Photochem. Photobiol. A: Chem.*, **1999**, *122*, 7-10.
- 14) Linder, Sorana\*, White, Katherine\*, Palmer, Mandelin\*, Arney, Benny and White, Rick C., "Geometric Requirements in the Photolysis of Aryloxiranes and Cyclic Carbonate Esters", *Tetrahedron Lett.*, **2002**, *43*, 1169-70.
- 15) Adam, Waldemar, Corley, David\*, Trofimov, Alexei and White, Rick C., "Viscosity Dependence of the Denitrogenation Quantum Yield in Azoalkane Photolysis: Experimental Evidence for Reversible Formation of the Diazenyl Radical", *Organic Letters*, *4*, 4277-80 **2002**.
- 16) White, R. C., Arney, Benny, E. Jr., Ramanathan, Ahalya\*, Sherrod Stacy\*, Barham, Laura\*, McCall, Paula\*, Livanec Philip\*, Mangus, Kimberly\* and White, Katherine M.\* "Photochemistry of aryloxiranes: free radical 1,2-alkyl migrations in a constrained system.", *Photochem. Photobiol. Sci.*, **2004**, *3*, 851 - 853.
- 17) Ihmels, Heiko, Meis, Andrea, Mohrschladt, Christian, Otto, Daniela, Waidelich, Michael, Towler, Michael, White, Rick, Albrecht, Martin, and Ashnurfel, Alexander, "Anthyl-Substitution Heterocycles as Acid-Sensitive Fluorescence Probes", *J. Org. Chem.*, **2005**, *70*, 3929-38.
- 18) White, R. C.; Arney, B. E., Jr., White, K. M. "Photochemistry of 1, 2-Dihydronaphthalene Oxide: Concurrent Triplet and Singlet Processes via Singlet Excitation", *J. Org. Chem.*, **2006**, *71*, 8173-77
- 19) Rick C. White, Darren Williams, Janis H. White, John W. White and Maria Granic-White "Discoveries in Chemistry and Textiles: The Development of a Two-Week Elective Chemistry Course in Germany and Paris" *The Chemical Educator*, **2008**, *13*, 391-396.
- 20) Rick C. White, Benny E. Arney, Jr., "Dehydration of an Alcohol: An Undergraduate Laboratory Exercise in Which Regioisomers Give Different Products", *The Chemical Educator*, **2010**, *15*, 185-186.
- 21) Rick C. White, Benny E. Arney, Jr., Milos Trakjovic and Heiko Ihmels., "Photochemistry of styrene oxide: Evidence for the intermediacy of a carbene" manuscript submitted to, *June, Photochemical and Photobiological Sciences*, March, 2011



- 22) Rick C. White, Benny E. Arney, and David Leggett, "Preparation, Conformational Analysis and Photochemistry of 1,2-Benzenedimethanol Sulfite: An Integrated Experiment for the Undergraduate Laboratory", *The Chemical Educator* **2010**, *15*, 325-327.
- 23) Rick C. White, and Benny E. Arney, "NMR Studies of Closely Related Heterocyclic Molecules: An Introduction to the Preparation and NMR Spectroscopy of Similar Molecules in the Advanced Laboratory", *The Chemical Educator*. **2011**, *16*, 220-21
- 24) Rick C. White, Benny E. Arney, Heiko Ihmels, "Diradical Formation in the photochemistry of cyclic sulfite esters, *Tetrahedron Letters*, submitted