

Daniel L. Freeman

BUSINESS ADDRESS

Department of Chemistry & Biochemistry
University of South Carolina
Columbia, South Carolina 29208

HOME ADDRESS

4 Mayland Court
Columbia, South Carolina 29209
Telephone: (803) 463-6780

CAREER OBJECTIVE

Development and implementation of innovative approaches to teaching college and high school chemistry.

EDUCATION

Ph.D. University of South Carolina Inorganic Chemistry May 1995
Professor Jerome D. Odom, Advisor

B.S. University of Alabama Chemistry May 1990

THESIS

"Preparation, Characterization and Photochemical Mechanistic Studies of Dialkylaminodialkylindanes", 1995 Professor Jerome D. Odom, Advisor

PROFESSIONAL EXPERIENCE

August 2020 -present Senior instructor, University of South Carolina. Teaching duties: General Chemistry, Nursing Chemistry, Chemistry 105, Chemistry 106, and Chemistry 107. Other activities include developing recorded lectures and laboratories to be used with asynchronous courses.

August 2002-2020 Senior instructor and director of general chemistry laboratories University of South Carolina. Teaching duties: General Chemistry, Physical Chemistry I, Nursing Chemistry, Chemistry 105, Honors Chemistry. Other activities include developing instructional materials for use at the University as well as at the high school level, implementation of the CAPA instructional system at USC, implementation of OWL in teaching General Chemistry.

August 1996-2002 Instructor and director of general chemistry laboratories University of South Carolina. Teaching duties: General Chemistry, Physical Chemistry I, Nursing Chemistry, Chemistry 105, Honors Chemistry.

May 1995-August 1996	Teaching Postdoc, University of South Carolina mentor, Professor Jerome D. Odom. Duties included teaching both first and second semester General Chemistry.
May 1992-May 1995	Graduate Research Assistant, University of South Carolina, Dr. Jerome D. Odom, research advisor; Research pursuant to doctoral degree encompassing Inorganic syntheses, ^1H , ^{13}C and ^{119}Sn NMR Spectroscopy, pyrolysis GC, GC/MS and TGA analyses.
August 1990-May 1992	Graduate Teaching Assistant, University of South Carolina. Instructor of undergraduate General Chemistry laboratories and problem-solving sessions.
May 1990-August 1990	Quality Control Chemist, Americhem Corporation, Tuscaloosa, Alabama. Analysis of naphthenic acids using diverse techniques including GC, UV-Vis, AA and Calorimetry.
May 1988-May 1990	Undergraduate Research Assistant, University of Alabama. Dr. Maureen Murphy, Research Advisor. Preparation and Characterization of organometallic compounds.

ACADEMIC HONORS/AWARDS

Outstanding College Student of America (1998)
 Outstanding Performance in New College Seminars, University of Alabama (1989)
 Vice President of the Society for the Advancement of Chemical Science (1991)
 Joseph Bouknight Teaching Award, University of South Carolina (1991)
 Nominated for the Amoco Teaching Award (1997)
 College of Arts and Science Teaching Award for Non-Tenure Track Instructional Faculty, 2010

PROFESSIONAL AFFILIATIONS

American Chemical Society, South Carolina Section Chair, 2002
 Academic Coach for Pi Kappa Phi fraternity, University of South Carolina
 South Carolina Coordinator for the United States National Chemistry Olympiad, USNCO
 Junior Academy of Science Fair Judge

PRESENTATION

"The Effects of Pesticides on the Environment", New College Seminars, 1989, University of Alabama, Tuscaloosa, Alabama.

"Synthesis and Characterization of Various Alkylaminoindanes", 1993, Southern Regional Meeting of the American Chemical Society, East Tennessee State University, Johnson City, Tennessee.

"A Proposed Mechanism for the Formation of Diethylamino-*tert*-butylindium Prepared by the Reaction of Tri-*tert*-butylindium with Diethylaminotrimethyl-stannane Using ^1H , ^{13}C , ^{119}Sn NMR Spectroscopy and GC/MS", October 1994 Southern Regional Meeting of the American

Chemical Society, The University of Alabama, Birmingham, Alabama.

"Serendipity and Research", University of South Carolina, Department of Chemistry and Biochemistry. Fall 2003.

MEETINGS/WORKSHOPS

Effective College Teaching: Teaching and Learning in Higher Education, October 14, 1995, University of North Carolina at Chapel Hill.

A Day 2-to-40 Workshop Symposium on Chemical Education, May 10-11, 1997, University of Michigan.

CAPA as Asynchronous-Learning-Network Teaching Tool, February 27, 1999, Michigan State University.

Academic Coach Training, January 21-23, 2000, Pittsburg Pennsylvania.

Preparing Students Today to be Doctors Tomorrow, March 18, 2000, University of South Carolina.

Planned-Multi-Initiative Dissemination (MID) Project, November 10-11, 2000, Coastal Carolina University.

OWL Workshop – Thomason Learning – Orlando, Florida, October 2004.

PUBLICATIONS

D.L. Freeman, J.D. Odom, L. Lebioda and W.R. Nutt, "Photoinduced Reaction of Tri-tert-butylindium with (Diethylamino)trimethylstannane and (Di-n-butylamino)trimethylstannane", *Inorganic Chemistry*, **1997**, 36, 2717.

Freeman, D.L. *"Calculator Based Laboratory Experiments in General Chemistry"* Simon & Schuster: 1998.

Freeman, D.L., Reger, D.L. *"Laboratory Experience in General Chemistry"*, Paladen House: 2000.

Freeman, D.L., Reger, D.L. *"Experience in General Chemistry Laboratories"*, Hayden Mcneil: 2002.

Freeman, D.L. *"Laboratory Experiments for Nursing Chemistry"*, QDE Press: 2005.

