

NAME: Richard D. Adams

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EDUCATION:

Pennsylvania State University, State College, PA, B.S., 1969
Massachusetts Institute of Technology, Cambridge, MA, Ph. D., 1973, Inorganic Chemistry, Thesis Title: Studies of Bridge-Terminal Coordination Rearrangements in Organometallic Compounds. Ph. D. Supervisor: F. Albert Cotton

EXPERIENCE:

Assistant Professor - SUNY at Buffalo, 1973-1975
Assistant Professor - Yale University, 1975-1980
Associate Professor - Yale University, 1980-1984
Professor - University of South Carolina, 1984-2005
Visiting Professor - Institut le Bel, Université Louis Pasteur, FRANCE, 1993
Visiting Professor - National Science Council of Taiwan, TAIWAN, 1994
Visiting Professor - Ecole National Supérieur Chimie de Paris, Paris, FRANCE, 1999
Arthur S. Williams Professor of Chemistry, Univ. of South Carolina, 1995 – 2006
Director, USC NanoCenter, Univ. of South Carolina, 2001 – 2005
Carolina Distinguished Professor 2006 – 2018
Carolina Distinguished Professor Emeritus 2018 – present
Research Professor 2018 - present

PROFESSIONAL ORGANIZATIONS:

American Chemical Society
Fellow of American Association for the Advancement of Science
Material Research Society

PUBLICATIONS:

Author and Coauthor of over 594 research publications.

Coeditor and coauthor of the text "Catalysis by Di- and Polynuclear Metal Cluster Complexes" with F. A. Cotton, Wiley, 1998.

Editor, "50th Anniversary of the Discovery of Ferrocene", Volumes 637-639 of the Journal of Organometallic Chemistry, Elsevier, Amsterdam, 2001.

Coeditor and coauthor of the text "The Chemistry of Metal Cluster Complexes" with H. D. Kaesz and D. F. Shriver, VCH Publishers, 1990.

Editor, Volume 10, Comprehensive Organometallic Chemistry II, 1982 - 1994, Abel, E., Stone, F. G. A, and Wilkinson, G., Exec. Ed., Elsevier, Oxford, 1995.

AWARDS and HONORARIA:

Fellow of Alfred P. Sloan Foundation, 1979-81

Recipient of Russell Award for Research in Science and Engineering from the University of South Carolina, 1989.

Chairman, Gordon Conference on Inorganic Chemistry, 1991.

Recipient of 1999 ACS National Award in Inorganic Chemistry.

Recipient of 1999 Charles H. Herty Medal of the Georgia Section of the American Chemical Society.

Recipient of 1999 Charles H. Stone Award of the Carolina-Piedmont Section of the American Chemical Society.

Visiting Professor of the Institut Universitaire de France, 2000.

U. S. Senior Scientist Award of the Alexander von Humboldt Foundation, Germany, 2000.

Pioneer Award from the American Institute of Chemists, 2000.

Outstanding Academic Chemist Award, South Carolina Section of the American Chemical Society, 2001.

Southern Chemist Award of American Chemical Society, Memphis Section of the American Chemical Society, 2001.

South Carolina Governor's Award for Excellence in Science – 2003

Fellow of the American Association for the Advancement of Science – 2003

Henry J. Albert Award, International Precious Metals Institute, 2005.

Carolina Trustee Professor, University of South Carolina, 2005.

Chini Memorial Award Lectureship of the Italian Chemical Society, 2007.

ACS National Award for Distinguished Service in the Advancement of Inorganic Chemistry, 2010.

Distinguished Scientist Award of the Southeastern Universities Research Association (SURA), 2011.

European Academy of Sciences and Arts - Member of Natural Sciences Section, 2011.

Florida Award of the Florida Section of the ACS, 2016.

Michael J. Mungo Graduate Teaching Award, University of South Carolina, 2018

SUPERVISOR: for over 42 Ph.D. degrees and 3 M. S. degrees.

LECTURES – Over 200 research lectures at major universities in last 30 years

EDITORIAL POSITIONS:

1. Coeditor Editor of the Journal of Cluster Science, 1992 - present.
2. American Regional Editor - Journal of Organometallic Chemistry, 1998 - 2107.
3. Editor in Chief - Journal of Organometallic Chemistry, 2107 - present.

RESEARCH HIGHLIGHTS:

- [1] “Heavy-Metal Ring Bags a Metal Atom” *Chemical & Engineering News* August 8, **2011**, p. 13.
- [2] “STM Reveals Bimetallic Nanoclusters” *Chemical & Engineering News* September 15, **2008**, p. 34.
- [3] “How Two Metal Atoms Cooperate” *Chemical & Engineering News* October 16, **2006**, p. 39.
- [4] “Platinum-rhenium complex adds lots of hydrogen.” *Chemical & Engineering News* May 2, **2005**, p. 31.
- [5] Dyson, P. J.; McIndoe, J. S. “Hydrogen sponge? A heteronuclear cluster that absorbs large quantities of hydrogen.” *Angew. Chem. Int. Ed.* **2005**, *44*, 5772.

Currently Active Research Grants include:

- 1) NSF - “Activation of C-H Bonds at Multinuclear Metal Sites”
Total Costs: \$448,395 Period: 6/1/18-5/31/21

RESEARCH INTERESTS:

1. Activation of Hydrogen and CH Bonds by Polynuclear Metal Complexes
2. The Organometallic Chemistry and Catalytic Properties of Heterometallic Cluster Compounds and Multimetallic Nanoparticles