

Steven W. Yates

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Education

B.S., Chemistry, University of Missouri at Columbia, 1968
Ph.D., Nuclear Chemistry, Purdue University, 1973, with Prof. Patrick J. Daly (deceased)

Professional Positions

Analytical Chemist, Continental Oil Company, summer 1968
Teaching Assistant/Graduate Instructor, 1968-71; Research Assistant, 1971-3, Purdue University
Postdoctoral Fellow, Argonne National Laboratory, 1973-75
Assistant Professor of Chemistry, University of Kentucky, 1975-79
Associate Professor of Chemistry, University of Kentucky, 1979-85
Director of General Chemistry, University of Kentucky, 1985-87
Director of Undergraduate Studies in Chemistry, University of Kentucky, 1999-2002
Chair, Department of Chemistry, University of Kentucky, 2005-2009
Professor of Chemistry, University of Kentucky, 1985-present
Director, University of Kentucky Accelerator Facility, 1995-present
Professor of Physics and Astronomy, University of Kentucky, 2004-present
Arts and Sciences Distinguished Professor, 2008-present
Interim Chair, Department of Chemistry, University of Kentucky, 2014-2015

Visiting Appointments

NSF Undergraduate Research Fellow, Lawrence Berkeley Laboratory, summer 1967
Visiting Scientist, Oak Ridge National Laboratory, summer 1976
Gastwissenschaftler, Kernforschungsanlage Jülich, Germany, 1981-1982
Participating Guest, Lawrence Livermore National Laboratory, 1984-2005
Visiting Scientist, Lawrence Livermore National Laboratory, 1989-1990
Guest Scientist and Visiting Professor, Los Alamos National Laboratory, 1997, 1998
Visiting Scientist, TRIUMF, University of British Columbia, 2009-2010

Current Research Interests

Nuclear structure and nuclear spectroscopy; radioactive decay and in-beam spectroscopy; neutron induced reactions and neutron scattering; properties of collective states; nuclear lifetime measurements; nuclear isomerism; multiphonon, particle-phonon coupling, and exotic excitations in spherical and deformed nuclei; experimental tests of collective nuclear models, nuclear structure related to double- β decay and fundamental symmetries

Current Additional Professional Positions

American Chemical Society (ACS); Division of Nuclear Chemistry and Technology (NUCL), Awards Nominations Committee, 2014-2015, Chair
Handbook of Nuclear and Radiochemistry, Kluwer Academic Publishers, International Advisory Board, 2000-present
Association for Research at University Nuclear Accelerators (ARUNA) Executive Committee, 2011-present

Professional Memberships

American Chemical Society; Division of Nuclear Chemistry and Technology (Chairman and Program Chairman, 1992; Councilor, 1995-2003, 2008-2013), Lexington Section (Chairman and Program Chairman 1985; Councilor, 1987-9; Alternate Councilor, 2005-7); Division of Chemical Education, Member of the Inaugural Class of ACS Fellows, 2009
American Physical Society; Division of Nuclear Physics
Alpha Chi Sigma, Professional Chemistry Fraternity (Master Alchemist of Delta Chapter, 1967)
Intercollegiate Knights, Service Fraternity
Sigma Xi, Scientific Research Society
Kentucky Academy of Science
American Association of University Professors
Fellow of the International Union of Pure and Applied Chemistry (IUPAC), Elected 2002

Publications

Author or co-author of over 250 refereed publications and of many additional abstracts, reports, reviews, *etc.*

Grants and Contracts

Principal investigator on \$8M and co-investigator on another \$3M of external grants (primarily from the NSF) and contracts during the past 35 years

Honors

Phi Lambda Upsilon, Chemistry Honor Society
Phi Kappa Phi, Honor Society
Pi Mu Epsilon, Mathematics Honor Society
Phi Eta Sigma, Honor Society
Procter and Gamble Fellow, 1972-3
University of Kentucky Research Foundation Award, 1981
UK Student Affiliates of ACS–Teacher of the Year Award, 1982-3
Special Faculty Initiative Grant, University of Kentucky, 1988-91
Award for Outstanding Service in Chemistry, University of Kentucky, 1992
Chancellor's Award for Outstanding Teaching, University of Kentucky, 1992
University Research Professor, University of Kentucky, 1992-3
Distinguished Professor of the College of Arts & Sciences, University of Kentucky, 1993-4
William B. Sturgill Award for Outstanding Contributions to Graduate Education at the University of Kentucky, 1994
Fellow of the International Union of Pure and Applied Chemistry, Elected 2002
Glenn T. Seaborg Award for Nuclear Chemistry, American Chemical Society, 2006
Arts and Sciences Distinguished Professor, University of Kentucky, 2008
Fellow of the American Chemical Society, Member of the Inaugural Class, 2009
Award for Fifteen Years of Service on the American Chemical Society Council, 2010
Southeastern Conference Academic Consortium (SECAC) Faculty Achievement Award, 2012
Listed in: American Men and Women of Science; Who's Who in America, Who's Who of Emerging Leaders in America; Who's Who in the South and Southeast; Who's Who in the South and Southwest; Who's Who in Technology Today; Who's Who in Frontiers of Science and Technology; Who's Who in Science and Engineering; Who's Who in American Education; Directory of Graduate Research; The National Faculty Directory; Dictionary of International Biography; Men of Achievement; Sterling's Who's Who; AcademicKeys Who's Who in Sciences Higher Education

Professional Service and Positions

American Chemical Society/Lexington Section; Chairman, 1985; Councilor, 1987-9
American Chemical Society/Division of Nuclear Chemistry and Technology; Chairman and Program Chairman, 1992; Divisional Councilor, 1995-2003, 2008-2013; Member-at-Large of the Executive Committee, 2004-2006; Awards Nominations Committee, 2014-2015, Chair
American Chemical Society/National Offices; Council Standing Committee on Meetings and Expositions, 1996-2002, 2010-2013; Joint Board-Council Committee on Science, 1999-2007, Canvassing Committee for the Glenn T. Seaborg Award for Nuclear Chemistry 2000-2003 (Chair, 2003); ACS Council Standing Committee on Divisional Activities, 2009-2010; Selection Committee for the Glenn T. Seaborg Award for Nuclear Chemistry 2008-2010 (Chair, 2009, 2010)
Journal of Radioanalytical and Nuclear Chemistry; Editorial Advisory Board, 1993-4; Associate Editor, 1994-2003; Reviews Editor, 1993-2002
National Research Council/National Academy of Sciences; Committee on Nuclear and

Radiochemistry, 1990-3; Institute of Medicine, Committee on Biomedical Isotopes, 1993-5; Board on Chemical Sciences and Technology, 1999-2002

Nuclear Science Advisory Committee of the NSF and DOE; Nuclear Chemistry Representative, 1990-3; Subcommittee on Nuclear Data Needs, 1991-2; Long Range Plan Working Group, 1995

High-Flux Beam Reactor Program Advisory Committee, Brookhaven National Laboratory, 1992-1998

Program Review Committee of the Kentucky Center for Applied Energy Research, 1994

Program Advisory Committee for the 88-Inch Cyclotron, Lawrence Berkeley National Laboratory, 1994-1998

GEANIE Detector Council, Los Alamos National Laboratory, 1997-2000

Review Committee for the Neutron Beamline Project at the LBNL 88-Inch Cyclotron, Lawrence Berkeley National Laboratory, April 25, 2005

Program Advisory Committee, Los Alamos Neutron Science Center (LANSCE), Basic Nuclear and Particle Physics Subcommittee, 2001-3, Nuclear Technology Subcommittee, 2002

International Union of Pure and Applied Chemistry (IUPAC); Commission on Radiochemistry and Nuclear Techniques, 1998-2001; Nominating Committee, U. S. National Committee, 2001; Elected IUPAC Fellow, 2002

National Science Foundation; Special Emphasis Panel for Proposals to the Nuclear Physics Program, 1999; Site Visit Panel for the National Superconducting Cyclotron Laboratory (NSCL) at Michigan State University, March 21-23, 2001; Site Visit Panel for the Nuclear Structure Laboratory at the University of Notre Dame, Nov. 2 and 3, 2001; Site Visit Panel for the National Superconducting Cyclotron Laboratory (NSCL) at Michigan State University, June 18-19, 2013 (Chair); Experimental Nuclear Physics Panel, March 5-7, 2014

Nuclear Engineering Education Research (NEER) Proposal Review Panel, 2000, 2003

Rapporteur for the Panel on Nuclear Properties of the Transactinium Elements at the Workshop on Transactinium Science, 1990.

Invited "Expert" for the International Atomic Energy Agency Advisory Group on Low Energy Accelerators in Elemental Analysis, Chaing Mai, Thailand, 1991.

Conference Program Committees:

- International Symposium on Capture Gamma-ray Spectroscopy and Related Topics, 1990, 1993, 1996
- International Conference on Nuclear Data for Science and Technology, 1994
- International Workshop on Nuclear Physics with GEANIE at LANSCE, 1997

Conference International Advisory Committees:

- International Symposium on Capture Gamma-ray Spectroscopy and Related Topics, Santa Fe, August 30 - September 3, 1999
- International Symposium on Nuclear Structure Physics, Göttingen, March 5-8, 2001
- Frontiers of Nuclear Structure, Berkeley, CA, July 29-August 2, 2002
- International Symposium on Capture Gamma-ray Spectroscopy and Related Topics, Prague, September 2-6, 2002
- International Conference on Frontiers in Nuclear Structure, Astrophysics, and Reactions, Kos, Greece, September 12-17, 2005
- International Symposium on Capture Gamma-ray Spectroscopy and Related Topics, Notre Dame University, September 4 - 9, 2005

International Symposium on Capture Gamma-ray Spectroscopy and Related Topics,
University of Cologne, Germany, August 25-29, 2008

Ulaanbaatar Conference on Nuclear Physics and Applications, Ulaanbaatar, Mongolia,
September 8-11, 2008

International Symposium on Capture Gamma-ray Spectroscopy and Related Topics,
University of Guelph, Guelph, Canada, August 23 – September 2, 2011

International Advisory Committee, Nuclear Structure 2014 (NS2014) TRIUMF, Vancouver,
Canada, July 20-25, 2014.

Fifteenth International Symposium on Capture Gamma-ray Spectroscopy and Related Topics,
Dresden, Germany, August 25–29, 2014.

Adjunct and Review Member of the Senior Scientists and Engineers Study Group for the Report
to the United States House of Representatives, Committee on Science, Space, and
Technology Subcommittee on Energy, on the Department of Energy's Isotope Production and
Distribution Program, 1994-5

Foreign reviewer of candidates for the position of Associate Professor of Physics at the
University of Jyväskylä, Jyväskylä, Finland, 1998

Opponent at the Ph.D. thesis defense of Harri Kanpaanpää, "In-Beam Spectroscopy of Very
Heavy Elements," University of Jyväskylä, Jyväskylä, Finland, August 16, 2001

Member of the Board of Reviewers for the Ph.D. dissertation defense of Luis Caballero
Ontanaya, "Double Octupole Sates in ^{146}Gd ," University of Valencia, Spain, January 23, 2006

Foreign reviewer of candidates for the position of W2 Professor of Experimental Nuclear Physics
at the University of Cologne, Cologne, Germany, 2007

DOE Proliferation Deterrence Merit Review Team, Oak Ridge National Laboratory, May 3, 2007

Foreign reviewer of candidates for the position of Professor of Experimental Nuclear Physics at
the University of Jyväskylä, Jyväskylä, Finland, 2011

Reviewer: Physical Review Letters, Physical Review C, Nuclear Physics A, Physics Letters B,
Analytical Chemistry, Canadian Journal of Chemistry, Journal of Radioanalytical and
Nuclear Chemistry, Nuclear Technology, ACS/PRF research proposals, ACS Books, ACS
Symposium Series, ACS Advances in Chemistry Series, DOE research proposals, DOE-SBIR
proposals, DOE-NEER proposals, NSF research proposals, Research Corporation proposals,
Pilot Research Proposals on Alzheimer's Disease, NRC/NAS monographs, NRC/NAS
reports, IUPAC projects, Natural Sciences and Engineering Research Council (NSERC) of
Canada proposals, European Physical Journal A

Consulting: Wadsworth Publishing Company; Dow Chemical Company; Scott, Freeman, and
Company; International Atomic Energy Agency; Brooks Cole/Thomson Higher Education;
U.S. Department of Energy

8/17/14