

George A. Abbott, 1874-1973



Dr. George Alonzo Abbott, Professor Emeritus at the University of North Dakota, had a long and fruitful career of service to the State of North Dakota and the science of Chemistry. He was born July 7, 1874, in Alma, Illinois. Dr. Abbott received both the B.S. and M.A. pro merito from DePauw University. From 1896 until 1904 he taught chemistry in high schools in Evansville, Indiana; Duluth, Minnesota; and Indianapolis, Indiana. In 1903, through a contact with Professor Talbot, he received the Austen Research Fellowship at Massachusetts Institute of Technology. Under the guidance of A. A. Noyes, Professor of Physical Chemistry at M.I.T., he received the Ph.D. in 1908. In this first class of doctorates in chemistry were such notables as Edward Washburn, Charles Kraus and Richard Tolman. Dr. Abbott joined the chemistry staff of the North Dakota Agricultural College (North Dakota State University) in 1909. In 1910 he was appointed Professor and Chairman of the Department of Chemistry at the University of North Dakota. His devotion to teaching and the application of chemistry for the betterment of North Dakota was one of his outstanding contributions. His interests in quality water and in natural products such as lignite, for which North Dakota is recognized, gave him national recognition. For half a century he was the only toxicologist in a wide area of the upper midwest. He found time to do a weekly radio program "Science from the Sidelines" which was broadcast for over twenty years. Professor Abbott was a founder and charter member of the North Dakota Academy of Science. He was a member of the Red River Valley Section of the American Chemical Society, a Fellow of the American Institute of Chemists, member of Sigma Xi, and a charter member of the University of North Dakota Phi Beta Kappa chapter. Dr. Abbott retired from administration in 1948 and from teaching in 1952. He continued toxicological work until 1970.

The George A. Abbott Lectureship was established by gifts from the University of North Dakota Alumni.

PREVIOUS GEORGE A. ABBOTT LECTURERS

1963	Dr. Nelson Leonard, University of Illinois	1984	Dr. Gabor A. Somorjai, University of California-Berkeley
1964	Dr. Robert West, University of Wisconsin	1985	Dr. Harry B. Gray, California Institute of Technology
1965	Dr. Robert Parry, University of Michigan	1986	Dr. Allen J. Bard, University of Texas at Austin
1966	Dr. Ralph G. Pearson, Northwestern University	1987	Dr. William J. Bailey, University of Maryland
1967	Dr. Harold J. Bernstein, N.R.C. Ottawa, Canada	1988	Dr. Mark S. Wrighton, Mass. Institute of Technology
1968	Dr. Edward L. King, University of Colorado	1989	Dr. Peter B. Dervan, California Institute of Technology
1969	Dr. David N. Hume, Mass. Institute of Technology	1990	Dr. Robert H. Grubbs, California Institute of Technology
1970	Dr. Ronald Breslow, Columbia University	1991	Dr. Andrew Streitwieser, Univ. of California-Berkeley
1971	Dr. Arnold C. Wahl, Argonne Laboratory	1992	Dr. Marye Anne Fox, University of Texas at Austin
1972	Dr. John L. Margrave, Rice University	1994	Dr. Kendall N. Houk, University of California, LA
1973	Dr. Cheves Walling, University of Utah	1995	Dr. Edward Yeung, Iowa State University
1974	Dr. Fred McLafferty, Cornell University	1997	Dr. Henry F. Schaefer, III, University of Georgia
1975	Dr. Daryle H. Busch, Ohio State University	1999	Dr. Tobin J. Marks, Northwestern University
1976	Dr. Hans H. Jaffe, University of Cincinnati	2000	Dr. Alexander Pines, University of California-Berkeley
1977	Dr. Roald Hoffmann, Cornell University	2001	Dr. Paul A. Wender, Stanford University
1978	Dr. H.C. Brown, Purdue University	2002	Dr. Samuel H. Gellman, University of Wisconsin
1979	Dr. Leo A. Paquette, Ohio State University	2003	Dr. Victor J. Hruby, University of Arizona
1980	Dr. Robert E. Sievers, University of Colorado	2004	Dr. William H. Miller, University of California-Berkeley
1981	Dr. Dietmar Seyferth, Mass. Institute of Technology	2005	Dr. Barry K. Carpenter, Cornell University
1982	Dr. Koji Nakanishi, Columbia University	2006	Dr. Malcom Chisholm, The Ohio State University
1983	Dr. Melvin Calvin, University of California-Berkeley	2007	Dr. Catherine Fenselau, University of Maryland

UND The University of North Dakota

CHEMISTRY DEPARTMENT



The 2008 Abbott
Chemistry Lectures
March 13th & 14th, 2008

Dr. Richard J. Saykally

Professor of Chemistry

University of California – Berkeley



Born in Rhinelander, Wisconsin and educated at UW-Eau Claire and UW-Madison, Saykally has been a professor at the University of California, Berkeley since 1979. He and his students have pioneered many important advances in spectroscopy, including velocity modulation spectroscopy of ions, terahertz laser vibration-

rotation-tunneling spectroscopy of clusters, infrared photon counting spectroscopy, and cavity ringdown spectroscopy. These have permitted the first detailed study of important textbook molecules, including the hydronium (H_3O^+), hydroxide (OH^-) and ammonium (NH_4^+) ions, as well as small water clusters and carbon clusters. Recent work includes the spectroscopic determination of a universal water force field via the study of water clusters, the development of femtosecond nonlinear optical molecular imaging methods applied to interstellar dust particles and biological systems, femtosecond UV SHG/SFG studies of liquid electrolyte surfaces, and X-ray spectroscopy of volatile liquids and their surfaces.

A co-author of ca. 350 publications, the recipient of over 50 honors and awards, Saykally is a member of the National Academy of Sciences and the American Academy of Arts and Sciences, and has recently received the E.O. Lawrence Award in Chemistry from the U.S. Department of Energy, the Hinshelwood Lectureship from Oxford University, and the Inaugural International Solvay Chair in Chemistry from the Solvay Institutes of Belgium. He is a UC-Berkeley Distinguished Teacher, and has been active at the national level in science education. Over 50 students have completed the Ph.D. under his direction. Saykally currently holds The Class of 1932 Chair in the Department of Chemistry.

Thursday, March 13th, 7:00 PM

“Water Music: The Latest Word on the Most Important Substance in the Universe”

Friday, March 14th, 12:00 PM

“pH of the Liquid Water Surface: Selective Surface Adsorption of Hydroxide and Hydronium”