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

Year	Lecturer	Year	Lecturer
1963	Dr. Nelson Leonard, University of Illinois	1990	Dr. Robert H. Grubbs, California Institute of Technology
1964	Dr. Robert West, University of Wisconsin	1991	Dr. Andrew Streitwieser, University of California-Berkeley
1965	Dr. Robert Parry, University of Michigan	1992	Dr. Marye Anne Fox, University of Texas at Austin
1966	Dr. Ralph G. Pearson, Northwestern University	1994	Dr. Kendall N. Houk, University of California, LA
1967	Dr. Harold J. Bernstein, N.R.C. Ottawa, Canada	1995	Dr. Edward Yeung, Iowa State University
1968	Dr. Edward L. King, University of Colorado	1997	Dr. Henry F. Schaefer, III , University of Georgia
1969	Dr. David N. Hume, Mass. Institute of Technology	1999	Dr. Tobin J. Marks, Northwestern University
1970	Dr. Ronald Breslow, Columbia University	2000	Dr. Alexander Pines, University of California-Berkeley
1971	Dr. Arnold C. Wahl, Argonne Laboratory	2001	Dr. Paul A. Wender, Stanford University
1972	Dr. John L. Margrave, Rice University	2002	Dr. Samuel H. Gellman, University of Wisconsin
1973	Dr. Cheves Walling, University of Utah	2003	Dr. Victor J. Hruby, University of Arizona
1974	Dr. Fred McLafferty, Cornell University	2004	Dr. William H. Miller, University of California-Berkeley
1975	Dr. Daryle H. Busch, Ohio State University	2005	Dr. Barry K. Carpenter, Cornell University
1976	Dr. Hans H. Jaffe, University of Cincinnati	2006	Dr. Malcom Chisholm, The Ohio State University
1977	Dr. Roald Hoffmann, Cornell University	2007	Dr. Catherine Fenselau, University of Maryland
1978	Dr. H.C. Brown, Purdue University	2008	Dr. Richard J. Saykally, University of California-Berkeley
1979	Dr. Leo A. Paquette, Ohio State University	2009	Dr. Richard N. Zare, Stanford University
1980	Dr. Robert E. Sievers, University of Colorado	2010	Dr. Michael P. Doyle, University of Maryland
1981	Dr. Dietmar Seyferth, Mass. Institute of Technology	2011	Dr. Thomas J. Meyer, University of North Carolina, CH
1982	Dr. Koji Nakanishi, Columbia University	2012	Dr. Michael Ward, New York University
1983	Dr. Melvin Calvin, University of California-Berkeley	2013	Dr. Debra R. Rolison, U.S. Naval Research Laboratory
1984	Dr. Gabor A. Somorjai, University of California-Berkeley	2014	Dr. Bruce Lipshutz, University of California, Santa Barbara
1985	Dr. Harry B. Gray, California Institute of Technology	2015	Dr. Donald J. Darensbourg, Texas A&M University
1986	Dr. Allen J. Bard, University of Texas at Austin	2016	Dr. David Yarkony, John Hopkins University
1987	Dr. William J. Bailey, University of Maryland	2017	Dr. Jonathan V. Sweedler, University of Illinois, Urbana
1988	Dr. Mark S. Wrighton, Mass. Institute of Technology	2018	Dr. Thomas R. Hoye, University of Minnesota
1989	Dr. Peter B. Dervan, California Institute of Technology	2019	Dr. Christopher Cummins, Mass. Institute of Technology
		2021	Dr. X. Chris Le, University of Alberta

UNIVERSITY OF NORTH DAKOTA
CHEMISTRY

The 2022 Abbott Chemistry Lectures

April 28 & 29, 2022

Dr. Angela K. Wilson

John A. Hannah Distinguished University Professor
2022 American Chemical Society President
Michigan State University

Dr. Wilson is the John A. Hannah Distinguished Professor of Chemistry at Michigan State University. She is also the associate dean for strategic initiatives in MSU's College of Natural Science and director of the MSU Center for Quantum Computing, Science, and Engineering.

Angela earned a Ph.D. in chemical physics from the University of Minnesota and a B.S. in chemistry from Eastern Washington University. She was a postdoctoral fellow at the Environmental Molecular Sciences Laboratory (EMSL) at Pacific Northwest National Laboratory in theoretical physical chemistry.

In 2000, she joined the faculty at the University of North Texas where she ultimately became a Regents Professor and the Associate Vice Provost for Faculty and head of UNT's Office of Faculty Success. She was also the founder and Director of the Center for Advanced Scientific Computing and Modeling (CASCaM). From 2016-2018, she served as the Director (head) of the Division of Chemistry at the U.S. National Science Foundation (NSF). At NSF, she was responsible for nearly $1B in investments, and led the strategic direction and national funding priorities in chemistry for NSF.

Her computational/theoretical physical chemistry research spans quantum mechanics and quantum dynamics method development, heavy element chemistry, environmental chemistry, drug development, heterogeneous and homogeneous catalysis, thermodynamics, CO_2 sequestration and utilization, and modeling of ultrafast phenomena. Her computational chemistry methodologies including ab initio composite methods, Gaussian basis sets, multireference wavefunction diagnostics, and complete basis set strategies are utilized worldwide. These efforts have been enabled by over 150 students and postdoctoral fellows who have worked with Angela.

Among Angela's national and international honors are Fellow of the American Chemical Society, Fellow of the American Physical Society, Fellow of the American Association for the Advancement of Science, Francis P. Garvan-John M. Olin Medal (ACS), International Union of Pure and Applied Chemistry (IUPAC) Distinguished Woman in Chemistry, and the Wilfred T. Doherty Award (ACS Dallas-Ft. Worth Section). In 2018, she was inducted into the Michigan Women's Hall of Fame. She is on the editorial advisory board of the Journal of Physical Chemistry and Cell Reports Physical Chemistry, as well as the editorial board of Scientific Reports. She has served as President of the Division of Physical and Biophysical Chemistry of the International Union of Pure and Applied Chemistry (IUPAC), Chair of the Chemistry Section of the American Association for the Advancement of Science (AAAS), and as Editor for Computational and Theoretical Chemistry. She has edited six books including "Pioneers of Quantum Chemistry".

Angela is the 2022 President of the American Chemical Society, the world's largest scientific society.

Thursday, April 28, 7:00 PM
Abbott Hall Room 101

"How Computing is Changing the World and How the World is Changed by Computing: A Perspective from a Chemist"

Friday, April 29, 12:20 PM
Abbott Hall Room 138

"From Thermodynamics to Spin Trapping: Challenges Across the Periodic Table"