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	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

UNIVERSITY OF NORTH DAKOTA
CHEMISTRY

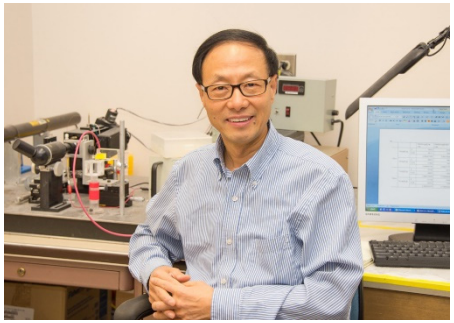
The 2020 Abbott Chemistry Lectures

March 26 & 27, 2020

Dr. X. Chris Le

Distinguished University Professor

University of Alberta, Canada



Chris Le benefited from interdisciplinary training and research experience in chemistry, environmental health, and toxicology. He obtained undergraduate training in chemistry from Wuhan University (China). He then received two M.Sc. degrees, the first in environmental chemistry from the Chinese Academy of Sciences (China) and the second in analytical chemistry from Brock University (Canada). He graduated with his PhD in analytical/environmental chemistry from the University of British Columbia (Canada) in 1993. Following postdoctoral research in bioanalytical chemistry, Dr. Le joined the Faculty of Medicine and Dentistry, University of Alberta, as an Assistant Professor in 1995. He was promoted to the rank of Professor in 2003, and became Distinguished University Professor in 2011.

Dr. Le's primary research focuses on analytical chemistry and environmental health sciences. His group develops chromatography and mass spectrometry techniques for characterizing diverse arsenic species, molecular techniques for detecting DNA damage, and affinity assays for studying DNA-protein interaction. These analytical advances offer new approaches to studies of environmental exposure, biotransformation, and health effects. His collaborative work on ultrasensitive assays for environmental contaminants, proteins, and nucleic acids have enabled novel environmental and biological studies. His group has published 280 research articles and obtained 15 patents.

Dr. Le has trained 100 graduate students and postdoctoral fellows. Thirty of his former trainees currently hold independent academic positions in Canada, China, and the United States.

Dr. Le's research accomplishments have been recognized by the Canadian Society for Chemistry with the Maxxam Award (2011), the Environment Research and Development Award (2011), and the W.A.E. McBryde Medal (2002). He was awarded the University Cup (2018), the Award for Excellence in Mentoring (2014), and the Martha Cook Piper Research Prize (2000) by the University of Alberta. He has also received the E.W.R. Steacie Fellowship (2000-2001) from the Natural Sciences and Engineering Research Council of Canada. He held the inaugural Canada Research Chair in Bioanalytical Technology and Environmental Health (2000-2017). He is an elected Fellow of the Academy of Science of the Royal Society of Canada and a Fellow of the Royal Society of Chemistry (UK). Dr. Le is Associate Editor of *Analytical Chemistry* (American Chemical Society).

Thursday, March 26, 7:00 PM
Abbott Hall Room 101

"Paradox of Arsenic: from Napoleon to Cancer Treatment."

Friday, March 27, 12:00 PM
Abbott Hall Room 138

"Analytical Advances Enable Studies of Arsenic Exposure and Health Effects."