

Helen Murray Free Endowed Lecture, 2018

Joseph S. Francisco

Joseph S. Francisco completed his undergraduate studies in chemistry at the University of Texas at Austin with honors, and he received his Ph.D. in Chemical Physics at the Massachusetts Institute of Technology in 1983. Francisco spent 1983-1985 as a Research Fellow at Cambridge University in England, and returned to MIT as a Provost Postdoctoral Fellow.

Dr. Francisco has received a National Science Foundation Presidential Young Investigator Award, an Alfred P. Sloan Fellowship, and a Camille and Henry Dreyfus Foundation Teacher-Scholar Award. In 1993, Francisco was a recipient of a John Simon Guggenheim Fellowship, which he spent at the Jet Propulsion Laboratory at the California Institute of Technology. In 1995, he received the Percy L. Julian Award for Pure and Applied Research, the highest research award from the National Organization for the Professional Advancement of Black Chemists and Chemical Engineers. He was selected to be a Sigma Xi National Lecturer from 1995 to 1997. In 2007, Purdue University presented Dr. Francisco the McCoy Award - the highest research award given to a faculty member for significant research contributions. He is the recipient of the Edward W. Morley Medal from the American Chemical Society Cleveland Section for 2011. He is a Fellow of the American Chemical Society, American Physical Society and the American Association for the Advancement of Science. He is a Fellow of the American Academy of Arts and Sciences and a member of the National Academy of Sciences.

Dr. Francisco was appointed Atmospheric and Ocean Science Editor for *Pure and Applied Geophysics* from 1998-2001. He has also served as a member of the Editorial Advisory Boards of the *Journal of the American Chemical Society*, *Journal of Physical Chemistry*, *Spectrochimica Acta Part A*, *Journal of Molecular Structure Theochem*, and *Theoretical Chemistry Accounts*. He is a co-author of the textbook *Chemical Kinetics and Dynamics*, published by Prentice-Hall, and translated in Japanese. This textbook, has been in print for nearly three decades and is the fundamental textbook in the field that has taught an entire generation the principles of chemical kinetics and dynamics. He has also published over 600 peer reviewed publications in the fields of atmospheric chemistry, chemical kinetics, quantum chemistry, laser photochemistry and spectroscopy.

The German government selected Dr. Francisco for an Alexander von Humboldt U.S. Senior Scientist Award, and the University of Bologna, Italy, appointed him as a Senior Visiting Fellow at the Institute of Advanced Studies. He is Professeur Invite at the Universite de Paris-Est, France; a Visiting Professor at Uppsala Universitet, Sweden; Honorary International Chair Professor, National Taipei University, Taiwan; and an honorary life member of the Israel Chemical Society.

He was President of the National Organization for the Professional Advancement of Black Chemists and Chemical Engineers from 2005-2007, and served on its Board of Directors from 2003-2007. Dr. Francisco has served on the Board of Directors for the Council for Chemical Research, and the Board of Directors for the American Chemical Society from 2009-2011. He currently serves on the Alexander von Humboldt Foundation International Advisory Board, as well as, the Board of Trustees of the Gordon Research Conferences. He was President of the American Chemical Society for 2010.

President Barack Obama appointed Dr. Francisco as a member of the President's Committee on the National Medal of Science serving the term from 2010-2015. He has been a member of the Naval Research Advisory Committee for the Department of Navy (appointed by the Secretary of the Navy, 1994-1996). He was honored on the floor of the 113th U.S. House of Representatives. The University of South Florida, University of Central Michigan, Knox College, University of Arkansas at Little Rock and Tuskegee University awarded him honorary degrees of Doctor of Science, *Honoris Causa*.