

JOYCE E. PENNER is the Ralph J. Cicerone Distinguished University Professor of Atmospheric Science in the Department of Climate and Space Sciences and Engineering at the University of Michigan. She was hired at the University of Michigan in 1996 after 18 years of employment at the Lawrence Livermore National Laboratory. Dr. Penner's research focuses on improving climate models through the addition of interactive chemistry and the description of aerosols and their direct and indirect effects on the radiation balance in climate models. Dr. Penner has been a member of numerous advisory committees related to atmospheric chemistry, global change, and Earth science. She was Co-Chair of the NRC Committee on Earth Science and Applications from Space, charged with overseeing NASA's Earth Science Program. She was the lead editor and a report coordinator for the Intergovernmental Panel on Climate Change (IPCC) report on Aviation and the Global Atmosphere (1999), was coordinating lead author for 2001 IPCC report Chapter on "Aerosols, their direct and indirect effects", was a lead author for the Chapter on Understanding and Attributing Climate Change for IPCC (2007), and a review editor for the 2013 IPCC report. Dr. Penner received a B.A. in applied mathematics from the University of California and her M.S. and Ph.D. in applied mathematics from Harvard University. She serves as the President, International Association of Meteorology and Atmospheric Science and is Past-President of the Atmospheric Sciences section of the American Geophysical Union.