

**2004 William G. Lowrie Lecturer  
John H. Seinfeld  
Louis E. Nohl Professor  
California Institute of Technology**



John H. Seinfeld is the Louis E. Nohl Professor in the Divisions of Chemistry and Chemical Engineering and Engineering and Applied Science at the California Institute of Technology. He is a graduate of the University of Rochester, where he received a B.S. degree in chemical engineering, and of Princeton University, where he received a Ph.D. in chemical engineering. Professor Seinfeld is widely acknowledged for his research on the chemistry and physics of the atmosphere. Through both experimental and theoretical studies, he has made numerous contributions to our knowledge of the chemistry of the urban atmosphere, the formation, growth, and dynamics of atmospheric aerosols, and the role of aerosols in climate. Professor Seinfeld has received numerous honors and awards. He is a member of the U.S. National Academy of Engineering and a Fellow of the American Academy of Arts and Sciences. He received the 1970 Donald P. Eckman Award of the American Automatic Control Council, a 1972 Camille and Henry Dreyfus Foundation Teacher-Scholar Grant, the American Society for Engineering Education's Curtis W. McGraw Award (1976) and George Westinghouse Award (1987), the American Institute of Chemical Engineers Allan P. Colburn Award (1976), Institute Lectureship (1980), William H. Walker Award (1986), and Warren K. Lewis Award (2000). He received the 1980 NASA Public Service Award and a Special Creativity Award from the National Science Foundation. He is the recipient of the 1993 American Chemical Society Award for Creative Advances in Environmental Science and Technology and the 2001 Nevada Medal. Professor Seinfeld received the Fuchs Award of the International Aerosol Research Assembly in 1998, an award given every four years and considered the highest honor bestowed for work in the field of aerosol science. He is a Fellow of the American Association for the Advancement of Science and the American Geophysical Union. He was President of the American Association for Aerosol Research. He has received the University of Rochester's Distinguished Alumnus Award. He was chairman of the NASA Working Group on Scientific Research Objectives in Tropospheric Pollution and served on the EPA Clean Air Scientific Advisory Committee and the NASA Advisory Council. He was chairman of the National Research Council Committee on Tropospheric Ozone Formation and Measurement and of the NRC Panel on Aerosol Radiative Forcing and Climate. He is currently Vice Chair of the NRC Committee on Atmospheric Chemistry. Professor Seinfeld is the author of numerous scientific papers and books, including *Atmospheric Chemistry and Physics: From Air Pollution to Climate Change* (1998). He is the recipient of honorary doctorates from the University of Patras (Greece) and Carnegie Mellon University.

**William G. Lowrie Lectures  
OSU Department of Chemical Engineering  
Lecturer: John H. Seinfeld**

**Lecture I: April 29, 2004  
Reception: Room 336 Koffolt Lab, 11:00 AM  
Room 207, Koffolt Lab, 11:30 AM**

**LECTURE I: Aerosols and Climate**

The accumulation of greenhouse gases in the earth's atmosphere is leading to global climate change. Particles in the air, aerosols, exert complex and important effects on climate as well. In order to more accurately predict future climate, the aerosol effects must be understood. I will present a general survey of the climatic role of airborne particles.

**EVERYONE IS WELCOME TO ATTEND THE LECTURES**

**Lecture II: April 30, 2004  
Room 320, Schoenbaum Hall, 2:30 PM**

**LECTURE II: Both Sides Now: The Art and Science of Clouds**

Clouds have preoccupied artists, poets, and playwrights throughout the ages. Clouds are the most visible manifestation of the ceaseless flow of water between the earth and sky. Clouds and water ultimately will determine the direction and severity of climate change on the planet. In an interplay of art and practicality, I will give an introduction to cloud physics and climate.