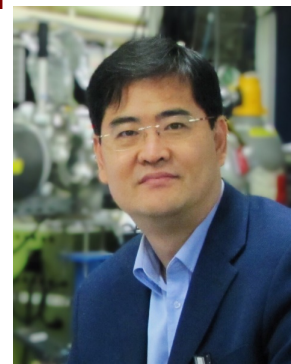


Mechanical Engineering Department Seminar

3:35pm April 11, 2018
1130 Mechanical Engineering
111 Church Street SE, Minneapolis, MN 55455

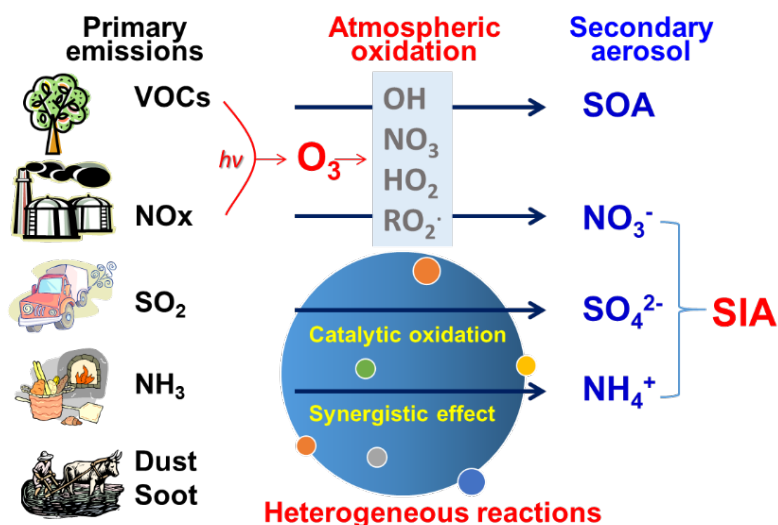


Research Frontiers of Regional Atmospheric Environment in China

Hong He

Chief Scientist of Center of Excellence in Regional Atmospheric Environment, Chinese Academy of Science

Over the past 5 years, the primary emission of air pollutants in China has decreased markedly. As a result, the concentration of PM_{2.5} decreased significantly, whereas the ozone concentration showed an upward trend. Achieving the long-term improvement of the air quality in all regions in China is not only required for China's economic development, but also an important research topic in the field of atmospheric environment. This is the background for the establishment of Center of Excellence in Regional Atmospheric Environment (CERAE) by the Chinese Academy of Sciences (CAS). In this talk, the research directions, platform construction and capacity building of CERAE will be introduced, and the latest discoveries will be shared and discussed.



New types of air pollution: Haze chemistry smog

Bio: Hong He is the Chief Scientist of the CERAE, Deputy Director of the Institute of Urban Environment (IUE), and Deputy Director of the Research Center for Eco-Environmental Sciences (RCEES), CAS. Professor He received his doctorate in chemistry (Ph.D) at the University of Tokyo in 1994. He studied and worked in Japan, the United States, and Canada for 11 years, and thereafter joined RCEES through the "Hundred Talents Program" of the CAS in 2001. His work has focused primarily on fundamental and applied research in environmental catalysis and heterogeneous atmospheric chemistry, with a series of achievements in areas of diesel emission control technologies, catalytic indoor air purification, and haze formation mechanisms. He is also the Chief Scientist of the "Formation Mechanism and Control Strategies of Haze in China" project as part of the Strategic Priority Research Program of the CAS.

Professor He was awarded the National Technology Invention Award (China) in 2011, the National Science and Technology Progress Award (China) in 2014 and the Ho Leung Ho Lee Foundation Prize for Scientific and Technological Innovation in 2017. He was elected as a member of the Chinese Academy of Engineering in 2017.