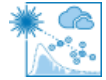




Technische Universität München



Fakultät für
Elektro- und Informationstechnik



Professur für Umweltsensorik
und Modellierung

Prof. Steven C. Wofsy Harvard University

The Professorship of Environmental Sensing and Modeling and the Chair of Measurement Systems and Sensor Technology invite you to the science talk

March 7, 2016 at 17:00

Theresianum 0606, Technische Universität München

(Entrance from Theresienstraße)

Receptions at 16:30 and after the presentation

(Refreshments will be served)

Atmospheric methane: emission processes, trends, and the emerging dominance of human-related sources

Abstract:

Concentrations of atmospheric methane have more than tripled since pre-industrial times, arguably the largest global change in atmospheric composition caused by human beings. This talk reviews the evidence for this change, and examines the implications for atmospheric chemistry and climate. Data from polar ice cores show that methane concentrations were low during glacial periods (~400 parts per billion) and high during interglacial intervals (600-700 parts per billion). Increases beyond values from recent earth history began in the 18th century, leveled off abruptly between 1990 and 2005, and then started to rise sharply again. We examine some current research into the processes responsible for human-related emissions of methane to the atmosphere: changes in Arctic soils, agriculture, and natural gas infrastructure.

Bio:

Prof. Wofsy is the Abbott Lawrence Rotch Professor of Atmospheric and Environmental Chemistry at Harvard University, and has served as Area Dean of Environmental Science and Engineering until 2015 and Associate Dean of Faculty of Arts and Sciences at Harvard. He is a member of the National Academy of Science, and was awarded NASA's Distinguished Service Medal, James B. Macelwane Medal and Roger Revelle Medal by the American Geophysical Union. He is author of more than 300 publications, and was a lead author of the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC).