

## **K.001 The Future of Atmospheric Chemistry – A Report by the U.S. National Academies.**

Presenting Author:

**Robert Duce**, Texas A&M University, Departments of Oceanography and Atmospheric Sciences, Texas, USA, [robertduce@hotmail.com](mailto:robertduce@hotmail.com)

Co-Authors:

**Barbara Finlayson-Pitts**, University of California, Irvine, Department of Chemistry, Irvine, CA, USA

**On behalf of the Committee on the Future of Atmospheric Chemistry Research**

Abstract:

It has been more than thirty years since the field of atmospheric chemistry has evaluated its research accomplishments and future directions. Recognizing that there have been tremendous changes in our understanding of the chemistry of the atmosphere and our ability to investigate it through field, theoretical, laboratory, and modeling efforts over the past three decades, in 2015 the National Science Foundation once again requested that the National Academies undertake a study to identify priorities and strategic steps forward for atmospheric chemistry research for the next decade. The Committee on the Future of Atmospheric Chemistry Research was formed with the task of summarizing the rationale and need for supporting a comprehensive U.S. research program in atmospheric chemistry; commenting on the broad trends in laboratory, field, satellite, and modeling studies of atmospheric chemistry; determining the priority areas of research for advancing the basic science of atmospheric chemistry; and identifying the highest priority needs for improvements in the research infrastructure needed to address those priority research topics.

A central part of the Committee's activities was to seek the thoughts and advice of the U.S. atmospheric chemistry community on future priority areas in atmospheric chemistry research during a series of "town hall" meetings during the spring and summer of 2015 and through an online portal. Approximately 300 individuals participated in these efforts, providing valuable insights and suggestions to the Committee. After a number of meetings and extensive deliberations, the report *The Future of Atmospheric Chemistry Research: Remembering Yesterday, Understanding Today, Anticipating Tomorrow* was released in late summer of 2016. The conclusions and recommendations of this report will be presented