

this is my time.

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NASA scientist to deliver the 2006 Morris Katz Memorial Lecture

Keeping a watch on the Earth's atmosphere, Aura, the third and last of three large satellite observatories that are part of NASA's Earth Observing System, was launched in July 2004. Since its entry into space, Aura has been retrieving information and producing valuable data of the Earth and its atmospheric properties.

Anne Douglass (right) is a NASA researcher who specializes in stratospheric chemistry and transport. Her research emphasizes the development and analysis of predictive models and the quantitative evaluation of satellite, aircraft and ground-based observations. Douglass, NASA's deputy project scientist for the Aura project, will visit York University on Thursday, Sept. 21, to deliver the 2006 Morris Katz Memorial Lecture in Environmental Research. Douglass, who works at NASA's Goddard Space Flight Center, will speak about results obtained from Aura's first years in orbit.



Aura carries four instruments – the Microwave Limb Sounder (MLS), the Tropospheric Emission Spectrometer (TES), the Ozone Monitoring Sounder (OMS) and the High Resolution Dynamics Limb Sounder (HIRDLS), all of

which measure atmospheric constituents. Each instrument works individually and alongside its counterparts to provide ozone measurements, tropospheric maps of carbon monoxide and cloud ice, and measurements in the stratosphere.

Data retrieved from Aura provides information that is then used to answer questions about the health of the Earth's atmosphere, particularly questions concerned with the recovery of the Earth's ozone layer, tropospheric air quality and climate change. Aura's TES instrumentation has made simultaneous measurements of carbon monoxide and ozone in the lower and upper troposphere. The OMS continues to observe the total ozone column and measures important pollutants such as nitrogen dioxide. The MLS instrumentation measures the profiles of stratospheric ozone and constituents that affect ozone from the mesosphere into the upper troposphere. Douglass' talk will emphasize the way information from Aura and other satellites has contributed to the development, evaluation and application of global chemistry climate models. Click here to read more about Aura's top 10 discoveries.



Left: An artist's rendering of the Aura satellite in orbit. Image courtesy of NASA Earth Observatory

Douglass, the author of more than 100 refereed publications, has extensive collaborations with researchers in universities and other agencies around the world. She was also a key contributor to the United Nations' ozone assessment documents and has played an important role in research efforts to measure the impact of aircraft on the chemistry of the atmosphere. Douglass has worked for NASA since the early 1980s and in addition to her role in the Aura project; she is also the deputy project scientist for NASA's Upper Atmosphere Research Satellite Project

(UARS). As a member of the UARS Project, Douglass shared the 2002 William T. Pecora award for Understanding the Earth through Remote Sensing. She is a member of the steering committee for NASA's Global Modeling Initiative.

A Fellow of the American Meteorology Society, Douglass has served as the editor of the *Journal of Atmospheric Sciences* and as a member of the Middle Atmosphere Committee. She is the winner of the Clare Booth Luce Award for Women in Mathematics and Science.

This year's Morris Katz Memorial Lecture will take place Sept. 21 in the Senate Chamber, N940, Ross Building, on York's Keele campus. For more information about the lecture visit www.cac.yorku.ca. To confirm your attendance at the lecture, contact Carol Weldon, administrative assistant at York's Centre for Atmospheric Chemistry, by e-mail to weldoncv@yorku.ca or call ext. 55410.

More about Morris Katz

Morris Katz, 1901-1987, was an outstanding scientist. He spent 35 years in public service, where he pioneered air pollutant sampling and measurement methodology and was among the first to demonstrate the presence of ozone damage to vegetation in Ontario. He taught chemistry at York until his death. He authored or co-authored more than 150 books and articles and was the recipient of numerous awards for his work. The Morris Katz Lectureship was made possible by the establishment of an Endowment Fund created through contributions from his family, friends and colleagues, private companies, universities and government. Major contributions in support of this year's lecture have been made by York's Centre for Atmospheric Chemistry and the Ontario Ministry of the Environment.

About York's Centre for Atmospheric Chemistry

York's Centre for Atmospheric Chemistry was established in 1985 in response to a growing public concern about the atmospheric environment. It offers programs that provide students with the necessary theoretical background and practical laboratory experience to enable them to make meaningful contributions to important environmental concerns upon their graduation. York also offers MSc and PhD degrees in atmospheric chemistry.

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