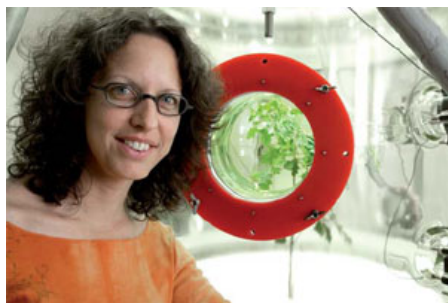


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## German atmospheric chemist will give this year's Harold I. Schiff Lecture



A German atmospheric chemist will give this year's [Harold I. Schiff Lecture](#) Thursday.

**Astrid Kiendler-Scharr (left)** will discuss how a warming climate may be inducing changes in emissions of organic aerosols from vegetation and whether the changes are reducing or amplifying climate change.

The title of her talk is *Chemistry Climate Interactions: Biogenic Emissions and their Contribution to Secondary Organic Aerosol*. She is giving the talk Oct. 31 at 2:30pm in 103 Life Science Building.

Here is a summary of her talk:

Atmospheric aerosols impact climate directly by scattering and absorbing solar radiation and indirectly by acting as ice and cloud condensation nuclei. Secondary organic aerosols (SOA) comprise an important component of atmospheric aerosols. Biogenic volatile organic compounds (BVOC) emitted by vegetation are a major source of SOA. It is known that BVOC emissions depend on climate, specifically on temperature and light. Therefore it is to be expected that a chemistry-climate interaction exists, in which climate change induces changes in BVOC emissions and thereby SOA formation, which feeds back to climate. The presentation details the state of the art knowledge on biogenic SOA and its climate relevance. The question of whether climate-induced changes in biogenic SOA formation may attenuate or amplify climate change is addressed based on experiments conducted in the Jülich Plant Atmosphere Chamber.

Kiendler-Scharr is a professor at the University of Cologne, a director at the Institute of Energy and Climate Research of the Research Center Juelich, and head of a group researching Stable Isotopes in Aerosol. She did her doctoral work on "Development and application of a novel aircraft borne ion trap mass spectrometer apparatus for the analysis of trace gases and ions: measurements in a laboratory, in the plume of jet engines and atmospheric trace gas measurements with aircrafts." Her Habilitation in 2010 was on "Formation of secondary organic aerosols from biogenic emissions of volatile organic compounds."

This is the 23rd Harold I. Schiff Lecture. The series is organized by the [Centre for Atmospheric Chemistry](#) and was established in honour of York's founding dean of science. Schiff was known for developing techniques to measure trace constituents in the upper atmosphere and for interpreting the physics and chemistry of the stratosphere.

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