

# BayCEER Kolloquium

Lectures in Ecology and  
Environmental Research

WS 2017/18



UNIVERSITÄT  
BAYREUTH

Monday

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12:15 in S 103, FAN B

## Prof. Dr. Astrid Kiendler- Scharr

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# Biogenic contributions to secondary organic aerosol

Vegetation is the source of roughly 90 % of the total volatile organic carbon emissions to the atmosphere. The oxidation of biogenic volatile organic compounds (BVOC) contributes to the formation of secondary organic aerosol (SOA) with large implications for the atmospheric aerosol's climate and health effects. The oxidation of anthropogenic VOC also adds to SOA formation and leads to complex interactions of atmospheric oxidation pathways of biogenic and anthropogenic VOC, which must be untangled in order to fully describe SOA formation in the atmosphere. Furthermore, environmental stress such as heat and drought can induce additional emissions of biogenic VOC. Therefore, climate change will affect the biogenic contribution to SOA formation and has to be considered in projections of future climate.