



VOCs from North American Wildfires and Agricultural Fires during Airborne and Lab Experiments in the context of NASA's planned FIREX-AQ (Fire Influence on Regional to Global Environments and Air Quality)

Prof. Donald R. Blake

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Date: May-3, 2019 (Friday)

Time: 15:00-16:30

Venue: Z414, 4/F, Block Z,
The Hong Kong Polytechnic
University, Hung Hom, Kowloon,
Hong Kong

ABSTRACT

In the western US, big wildfires are increasing in frequency. Major fires blanketed the US west in smoke in 2015. The 2018 wildfire season was the deadliest and most destructive wildfire season on record in California. Changes to the climate are increasing fire-season aridity, fostering conditions favorable to fire. In order to understand the contribution of these fire emissions to air quality and to/from climate change it is important to identify North American terrestrial emissions and their relative contribution to atmospheric composition.

FIREX-AQ (Fire Influence on Regional to Global Environments and Air Quality) is to be conducted in the continental US employing the NASA DC-8 aircraft from late July to mid-September 2019. The project will integrate near-field in-situ aircraft measurements of plumes from both wildfires and prescribed burns, with upwind, downwind and remote sensing observations from the DC-8.

Prof. Blake will present an overview of results from previous airborne and laboratory field campaigns in North America including NASA's ARCTAS, DC3, and SEAC4RS, also FLAME-4 and NSF's WE-CAN, which sampled the record-breaking fires of summer 2018. In the longer term these observations will be employed to validate satellites and improve air quality forecast models.

SPEAKER'S BIOGRAPHY

Prof. Blake is a Distinguished Professor at UCI and an Honorary Professor at CEE. He has coauthored more than 550 peer-reviewed journal articles and has given more than 150 invited academic and public lectures. He is a pioneer in understanding pollution in global and urban environments and was mentored by Nobel Laureate F. Sherwood Rowland.

*** All Interested Are Welcome ***

For further information, please contact Prof. H. Guo at hai.guo@polyu.edu.hk.

Certificates of attendance will be provided to participants if they attend the whole lecture.