

ACCESS XIV

Fourteenth Atmospheric Chemistry Colloquium for Emerging Senior Scientists

July 27-30, 2017

BROOKHAVEN NATIONAL LABORATORY

All Sessions are in Room Berkner B

Thursday, July 27

Light dinner (Hampton Inn, 2000 N. Ocean Ave., Farmingdale, NY)..... 6:00-10:00 pm

Friday, July 28

Pick up at Hampton Inn for BNL..... 7:30 am

Registration and check-in at BNL 8:00-8:30 am

SESSION I: INTRODUCTORY REMARKS AND WELCOME8:30-9:00 am

chaired by Ernie Lewis, BNL

Ernie Lewis, ACCESS Chair, Brookhaven National Laboratory

Martin Schoonen, Associate Laboratory Director for the Environment, Biology,
Nuclear Science, & Nonproliferation Directorate, BNL

Doon Gibbs, Laboratory Director, Brookhaven National Laboratory

Shaima Nasiri, Atmospheric System Research Program Director,
US Department of Energy

SESSION II: ACCESS PRESENTATIONS (laboratory studies)9:00-10:40 am

chaired by Sylvia Edgerton, NSF

Kelvin H. Bates, Isoprene Oxidation Mechanisms and Secondary Organic Aerosol
Formation Under HO₂-Dominated Conditions

Thomas Berkemeier, The Role of Phase State and Reactive Intermediates in the
Multiphase Chemistry of Atmospheric Aerosols

Hallie C. Boyer, Atmospheric Aqueous Aerosol Interfaces: Thermodynamic Modeling
and Biphasic Microfluidic Flows with Fluid-Fluid Interfaces

Jennifer A. Faust, Influence of Aerosol Liquid Water on the Formation and Composition
of Secondary Organic Aerosol

Pengfei Liu, Highly Viscous States Affect the Browning of Organic Particulate Matter

Break..... 10:40-11:00 am

SESSION III: ACCESS PRESENTATIONS (laboratory studies) 11:00 am-12:20 pm

chaired by Ken Mooney, NOAA

Sarah Suda Petters, Temperature- and Humidity-Dependent Phase States of Secondary Organic Aerosols

Wendell Walters, Constraining Ammonia Emission Sources in Urban Areas Utilizing Nitrogen Stable Isotopes

Chen Wang, The Effect of Different Atmospherically Relevant Salts on Aqueous Phase Partitioning of Organic Compounds

Yue Zhang, The Effects of Aerosol Phase State on Secondary Organic Aerosol Formation from the Acid-Catalyzed Reactive Uptake of Isoprene-Derived Epoxydiols

Lunch (Berkner Room A)..... 12:20-1:00 pm

Group Photograph (Berkner Room B) 1:00-1:15 pm

TOUR OF BROOKHAVEN NATIONAL LABORATORY 1:15-2:45 pm

SESSION IV: ACCESS PRESENTATIONS (field studies) 3:00-5:00 pm

chaired by Ken Jucks, NASA

Yvonne Boose, Using Cellular Network Backhaul Links for Rain Measurements in Africa

Ewan Crosbie, Design and Testing of a New Aircraft Cloud Water Sampling Inlet

Lauren Garofalo, Measurements of ¹⁴CO₂ in the Stratosphere and Free Troposphere: Vertical Profiles and Empirical Radiocarbon Production Rates

Louise Jane Kristensen, Investigating the Aerosols Seeding California's Clouds: Insights from CalWater2015

Christina McCluskey, Abundance and Characteristics of Marine Ice Nucleating Particles: Implications for High Latitude Aerosol-Cloud Interactions

Brett B. Palm, Development and Application of an Oxidation Flow Reactor to Study Secondary Organic Aerosol Formation from Ambient Air

Pick up at Berkner for banquet 5:15 pm

BANQUET (Jason's Vineyard, 1785 Main Rd., Jamesport, NY)..... 6:00-9:00 pm

Pick up, return to Hampton Inn..... 9:00 pm

Saturday, July 29

Pick up at Hampton Inn for BNL..... 7:30 am

SESSION V: ACCESS PRESENTATIONS (field studies) 8:00-9:40 am

chaired by Shaima Nasiri, DOE

Paul Romer, Effects of Organic Nitrate Chemistry and Temperature-Dependent NO_x Emissions on Continental Ozone Production

Provat K. Saha, Secondary Organic Aerosol Formation From In-Situ Oxidation of Near-highway Air

Kang Sun, Constraining Atmospheric Ammonia Emissions through Novel Observations

Megan D. Willis, Evidence for Marine Biogenic Influence on the Composition and Growth of Summertime Arctic Aerosol

Lu Xu, Large Contributions from Biogenic Carbon to Organic Aerosol in the Southeastern United States

Break..... 9:40-10:00 am

SESSION VI: ACCESS PRESENTATIONS (modeling studies) 10:00 am-11:40 pm

chaired by Sherri Hunt, EPA

Meng Gao, Improving Understanding of Haze Pollution in the North China Plain via Atmospheric Modeling and Data Assimilation

John K. Kodros, Climate and Health Impacts of Aerosol Emissions from Residential Combustion Sources in Developing Countries

Emily Saunders, Modeling Regional & Global Atmospheric Chemistry Mechanisms - Observing Adverse Respiratory Health Effects due to Tropospheric Ozone Air Pollution from Modeling Output

Ryan Sullivan, New Particle Formation Leads to Cloud Dimming

Alexander J. Turner, Ambiguity in the Causes for Decadal Trends in Atmospheric Methane and Hydroxyl

Final comments (Ernie Lewis) 11:40 am

ADJOURN..... 12:00 pm

Pick up box lunches, take bus to Hampton Inn 12:00 pm

Pick up at Hampton Inn for NYC 12:45 pm

New York City 2:00-10:00 pm

Pick up in NYC, return to Hampton Inn 10:00 pm

Sunday, July 30

Pick up at Hampton Inn for GRC 7:45 am

Ferry from Orient Point, NY to New London, CT 10:00 am

Lunch (*Mystic Diner, Mystic, CT*)..... *12:00 noon – 1:00 pm*

Arrive at Grand Summit Hotel at Sunday River, Newry, ME..... 6:00 pm