

SEMINAR

February 16, 2010

10:00 am – 11:00 am

EMSL Auditorium



Frontiers in Chemical Physics & Analysis Seminar Series

presents....

Prof. Murray Johnston

Department of Chemistry and Biochemistry
University of Delaware

Adventures in Aerosol Mass Spectrometry: Field and Laboratory Investigations

Aerosol mass spectrometers measure the time-resolved chemical composition of airborne particles. Our laboratory has developed several instruments, each based on a different detection principle targeting a specific combination of particle size and chemical components – from the nanometer to micrometer size range and from semivolatile organic compounds to refractory inorganic materials. These instruments have been used in the field to characterize ambient air and in the laboratory to study chemical processes associated with particle formation and growth. This presentation will provide an overview of the methodology associated with these instruments and what they tell us about atmospheric processes.