ATS/CIRA Colloquium

Shantanu Jathar

from Colorado State University

Hosted by Jeff Pierce

3 p.m. Thursday, August 24 ATS 101 and Zoom

How Fragrances and Industrial Solvents are Fouling the Air You Breathe

Secondary organic aerosol (SOA), formed from the oxidation of volatile organic compounds (VOCs), is an important fraction of the atmospheric aerosol mass (or fine particulate matter) in urban environments, with implications for climate, human health, and visibility. Over the past decade, the SOA fraction of the urban aerosol mass has been increasing despite substantial reductions in VOC emissions from traditionally regulated sectors (e.g., transportation, oil and gas, electric power). Volatile chemical products, which include personal care products, cleaning agents, paints, coatings, printing inks, adhesives, and pesticides, have recently been recognized as an important source of VOCs and SOA in large cities. In this talk, I will talk about our group's laboratory and modeling efforts to understand the key VCP VOC species that are important for SOA formation and how VCP use contributes to the urban SOA burden relative to other regulated anthropogenic sources.

Colloquia page: atmos.colostate.edu/colloquia