Impact of Indole Secondary Organic Aerosols on Air Quality

Original Article



Stressed plants and animal husbandry facilities emit large amounts of indole, a volatile organic compound that, when oxidized, forms secondary organic aerosols (SOA) that absorb light

What is the effect of the resulting SOA and relative humidity on air quality and visibility?



Degradation of visibility

Effect of relative humidity



Indole-produced SOA absorbs sunlight more strongly than SOA from other volatile organic compounds Different indole oxidation products form under dry and humid conditions

Relative humidity plays a role in the formation of SOA, which contributes to the degradation of air quality and visibility

Light absorption and scattering properties of indole secondary organic aerosol prepared under various oxidant and relative humidity conditions Baboomian et al. (2023) Aerosol Science & Technology | DOI: 10.1080/02786826.2023.2193235 Read more: tandfonline.com/uast

