2.179 Air quality sampling and analysis: Current and Emerging solutions for VOCs & SVOCs.

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Abstract:

Poor air quality can be linked to adverse human health effects and increased death rates, of sensitive individuals, during significant pollution events (1,2). Air quality is impacted by emissions from both anthropogenic and biogenic sources, and the understanding of the VOCs and SVOCs that are released is key to subsequent efforts to reduce these pollutants and improve air quality. This poster will highlight the current and emerging sampling and analytical technologies that are available for determining quantitatively VOCs and SVOCs concentrations in air, and their synergy with more routinely used environmental monitoring instrumentation.
Both online and offline sampling techniques will be discussed, including important validation techniques, sample security options and the importance of an inert system in the analysis of reactive species, such as monoterpenes, which are a crucial set of biogenic compounds for pollution events and key to increased ozone levels in the boundary layer (3).

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3. Lee, J.D., Lewis, A.C. and Monks, P.S. et al. (2006) Ozone photochemistry and elevated isoprene during the UK heatwave of August 2003. Atmospheric Environment, 40(39): 7598-7613.