

Track 4. Chemistry and Exposure Assessment

The Practicalities of Non-Targeted Analysis To Support Decision Making

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Non-targeted analysis is a powerful emerging technology which has been used to characterize novel emerging contaminants, conduct exposure assessment for a wide range of chemical targets, and link chemical exposures to a variety of outcomes. As NTA is still an emerging technology, there has been hesitation in applying the tools outside of research driven contexts and most existing NTA applications have been driven by research interests. Nevertheless, NTA can provide a more comprehensive assessment of environmental occurrence to inform public health protective strategies based on source attribution, exposure potential, hazard and risk assessment, and environmental management strategies. Attendees in this session will learn about practical examples of non-targeted analysis studies, tools, and techniques to support real-world decision making in regulatory and non-regulatory landscapes. Presentations may focus on case study examples of non-targeted analysis to support decision-making efforts such as risk assessment, site investigations and chemical treatment, toxicity analysis, and regulatory processes. Additionally, presentations may also exhibit tools that enable easy, reproducible, and transparent reporting of non-targeted analysis with respect to quality assurance and control needed for widespread regulatory acceptance. This session is open to researchers of various sectors (e.g., government, academia, and industry) as well as to applications of non-targeted analysis to both legacy and emerging contaminants of concern.