

## **Poly- and perfluoroalkyl substances (PFASs): Recent developments, sources, transport, fate and toxicity**

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This session focuses on the recent developments in the field of legacy and alternative poly- and perfluoroalkyl substances (PFASs) and how these developments contribute to the understanding of the big picture. Specifically, this session puts emphasis on those emerging and novel PFASs for which analytical methods are lacking and whose properties, exposure and risks are still being investigated. We particularly welcome contributions within the following areas: i) development of new analytical techniques (e.g. alternative PFASs, total organic fluorine, total oxidation, and other non-target analysis), ii) improved understanding on their intrinsic properties including physicochemical properties such as partitioning behavior, degradability and degradation pathways, bioaccumulation behavior such as mechanism, tissue distribution and maternal transfer, and toxic effects on wildlife and humans, iii) importance of assessing alternatives in light of their efficiency and usability by end-users, iv) improved understanding on the environmental and human exposure to PFASs including their sources and occurrence, fate and transport processes, exposure routes, associated risks, and epidemiological evidence, v) latest developments on treatment methods to identify and remediate contaminated sites, and vi) risk management and options for regulation. Ultimately, the session aims to highlight recent milestone research, identify critical knowledge gaps and provide a roadmap for future research.