**Session Proposal**

# Session Title

New pollutants in soils

# Session Organizers

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# Session Description

This symposium will address the environmental fate and impacts of new pollutants in the soil environment. There is an increasing awareness of the contamination of new pollutants in soils due to their potential detrimental effects to environment, wildlife and human health. These new pollutants include, but are not limited to, persistent organic pollutants such as per- and polyfluoroalkyl substances, microplastics, antibiotics and resistance genes, pharmaceuticals and personal care products, endocrine disruptors and engineered nanoparticles. Soil as the primary sink of new pollutants plays a major role in their fate and transport in the environment. However, there is a lack of thorough understanding of the sources, fate, transport, transformation, toxicity, remediation and management for the above-mentioned new pollutants. In addition, some major differences are expected in the environmental occurrence, impacts, remediation, and management of new pollutants versus those legacy contaminants such as heavy metals and conventional organic contaminants. This symposium will provide a platform to exchange the current scientific progress on new pollutants for better prevention, assessment, mitigation, and regulation of their environmental and human health impacts. The related topics are strongly welcome including sources of new pollutants to soils, fate and distribution, new analytical techniques, sorption and transport, modeling and machine learning, plant uptake, bioaccumulation in livestock and wildlife, exposure and toxicity assessment, remediation technology, mitigation strategy, regulation set up, and management guidelines.

# Format

Oral presentation, Poster presentation, and Panel Discussion (maybe)

# Proposed Speakers

* Linda S. Lee, University Distinguished Professor, Purdue University
* Diana S. Aga, SUNY Distinguished Professor, University of Buffalo
* Edward Topp, INSERM/ANR Distinguished Chair on AMR, and Director of research INRAE