



1. Title

Behavior and Fate of Pollutants Entering the Soil Environment

2. Type

Commission Symposium: Comm. 2.2-Soil Chemistry

3. Organizer(s) & Convener

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4. Rationale

A wide range of emerging anthropogenic contaminants, including endocrine disrupting compounds, pharmaceuticals and personal care products (EDC/PPCPs), plant regulators, nanomaterials, etc., are introduced to soils either intentionally (e.g., during crop production) or unintentionally (e.g., via irrigation with treated wastewater). The environmental fate of these contaminants is affected by interfacial chemical and biochemical reactions with soil constituents.

5. Objectives

This session will focus on the chemical and biochemical mechanisms affecting the transport and fate of EDC/PPCPs, amendments, pesticides, metal(loid)s, plant regulators and additional materials entering the soil as affected by agronomic and other land use practices. Emphasis will be given to the importance of interfacial reactions and the complex interactions between soil mineral and organic constituents. Papers related to the fate of nanoparticles are especially welcome.





6. Description

A wide range of emerging anthropogenic contaminants, including endocrine disrupting compounds, pharmaceuticals and personal care products (EDC/PPCPs), plant regulators, nanomaterials, etc., are introduced to soils either intentionally (e.g., during crop production) or unintentionally (e.g., via irrigation with treated wastewater). The environmental fate of these contaminants is affected by interfacial chemical and biochemical reactions with soil constituents. This session will focus on the chemical and biochemical mechanisms affecting the transport and fate of EDC/PPCPs, amendments, pesticides, plant regulators and additional materials entering the soil as affected by agronomic and other land use practices. Emphasis will be given to the importance of interfacial reactions and the complex interactions between soil mineral and organic constituents. Papers related to the fate of nanoparticles are especially welcome.

