**Session Proposal**

# Session Title

Micro- and Nano-plastics in the Soil: From Pollution to Solution

# Session Organizers

Rong Ji, Nanjing University, China, ji@nju.edu.cn (*Primary contact person*);

Chen Tu, Institute of Soil Science, Chinese Academy of Sciences, ctu@issas.ac.cn;

Matthias Rillig, Freie University Berlin, Germany, rillig@zedat.fu-berlin.de;

Wulf Amelung, University of Bonn, Germany, w.amelung@fz-juelich.de;

# Session Description

In recent years, the issue of microplastic pollution in the terrestrial environment has garnered significant attention worldwide and prompted global efforts to address the problem. Against this backdrop, this session aims to provide a platform for researchers and experts to promote academic exchange, inspire innovative research ideas, enhance research capabilities, and contribute to the national efforts in managing plastic waste and micro- and nano-plastic pollution. This session covers a variety of research areas, including but not limited to:

* the abundance, distribution and sources of microplastics in the soils, water, and organisms;
* the separation and analytical methods of microplastics in multiple environmental media;
* the migration and prediction of microplastics in terrestrial environments;
* the surface changes and biofilm formation on microplastics and their adsorption characterization of environmental pollutants, pathogens and ARGs;
* the biological uptake, accumulation and ecological risks of MPs;
* the food chain transferand health risks of MPs;
* the physico-chemical fragmentation and biodegradation of MPs in the environment and their risk reduction strategies and techniques;
* the key scientific issues and future research directions of environmental microplastics

# Format

Oral presentations, posters, and panel discussions.

# Proposed Speakers

**Yongming Luo,** Institute of Soil Science, Chinese Academy of Sciences, China;

**Baoshan Xing**, University of Massachusetts, USA;

**Rong Ji**, Nanjing University, China;

**Matthias Rillig**, Freie University Berlin, Germany;

**Wulf Amelung**, University of Bonn, Germany, w.amelung@fz-juelich.de.

……