



### 1. Title

How do Interactions with Organo-Mineral Surfaces Alter the Dynamics and Properties of Microbes and Macromolecules in Soil?

### 2. Type

Commission Symposium: Comm. 2.5-Soil chemical, physical and biological interfacial reactions

### 3. Organizer(s) & Convener

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### 4. Rationale

Adhesion of microbes and adsorption of macromolecules, in particular enzymes and other proteins, may profoundly modify their role in soil. Adhesion and adsorption influence mobility, growth, lifespan, may provide protection against breakdown, and modify the toxicity of pathogenic proteins. It is essential to investigate biological properties in the presence of soil, despite the additional experimental complexity.

### 5. Objectives

The aim of this session is to promote interdisciplinary studies of soils and soil interfaces. This approach is central to Commission 2.5

### 6. Description

This symposium will attract studies of bacteria, fungi, enzymes, and organic macromolecules, including toxins and there will be overlap with studies of soil organic matter dynamics. There will be new ideas aired, new challenges met, old ideas questioned, new techniques tested and emerging problems addressed. Priority will be given to studies of natural interfaces using new techniques or probes, to interdisciplinary studies and to topical scientific questions.

