

## **Illite-smectite in geological systems, soils, laboratory, and engineered geotechnical systems: the complete picture**

Organizers: W. Crawford Elliott, GA State University, USA; Jan Środoń, Institute of Geological Sci., Polish Academy of Sci. Poland

Illite-smectite group(I-S) accounts for ca. 30% of the mass of sedimentary rocks, which makes it by far the most common and ubiquitous phyllosilicate mineral group. I-S carries most major elements and some important trace elements (e.g. Cs). I-S plays important roles in the cycling major and some trace elements in the earth's crust and soils. I-S is a key component of raw materials for various industries. The importance of I-S results from its abundance and a confluence of properties such as its fine crystal size, and its large layer charge for the adsorption, and its cation exchange capacity. I-S fixes potassium in the illitic interlayer thus it is useful for dating various geological processes by K-Ar geochronology. Consequently, research on illite-smectite group is extremely diversified.

This session – as indicated by its title - intends to bring together all friends of illite and smectite, studying these clays from all different perspectives. We hope such meeting will be inspiring for everybody.