

S04 Geomechanics and granular materials

Organizers:

- Z. Mróz (IPPT PAN, Warsaw, Poland)
- S. Pietruszczak (McMaster University, Hamilton, Canada)
- J. Podgórski (Lublin University of Technology, Poland)
- J. Tejchman (Gdańsk University of Technology, Poland)
- Z. Więckowski (Lodz University of Technology, Poland)
- A. Winnicki (Cracow University of Technology, Poland)

This thematic session is devoted to the presentation and discussion of problems related to theoretical and numerical analyzes of geomaterials such as natural rocks, concrete, soils, and granular media.

The scope of the session is particularly related to experimental studies and numerical simulations of different processes in geomaterials (e.g. inelastic deformational response, plasticity, creep, damage growth, cracking, strain localization, chemical degradation, thermal effects, scale effect, grain contact interaction, treated at macro- and micro-scales) and interaction of geomaterials with engineering structures.

Research related to simulation of geophysical processes, which involves multiscale and multifield constitutive modelling including thermo-hydro-mechanical coupling in saturated and unsaturated geomaterials, is also welcome.