GEOTECHNICAL AND GEOPHYSICAL CHARACTERIZATION IN SOIL-GEOSYNTHETIC INTERACTION SYSTEMS

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ABSTRACT

Polymeric reinforcement materials are now used routinely as soil reinforcement and stabilization, as well as barrier systems and hydraulics, within the framework of Civil Engineering.

These geosynthetic materials can play a role in meeting the global challenges facing society in terms of United Nations sustainability goals, approaches for counting carbon in both mitigating, and adapting to the impacts of climate change.

The session will focus on singular characterization case studies and innovative applications of geosynthetic materials in Geotechnical Engineering applications and the development of the necessary theoretical and numerical approaches and strategies to model polymeric materials and their interaction with other related engineering components present in geotechnical structures. Topics include -but are not limited to- characterization of fill materials for geosynthetic reinforcement, characterization of fill materials in geosynthetic barrier systems, ground characterization for geosynthetic filter compatibility, characterization of support materials for geomembranes, characterization of ground-geosynthetic interaction.