

China-Europe Conference on Geotechnical Engineering (Aug 13-16, 2018, Vienna, Austria)  
Special Session organised under auspices of ISSMGE TC103 Numerical Methods in Geomechanics

## **Emerging Trends in Numerical Methods for Geotechnical Engineering**

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Numerical modeling has been an integrated component in modern geotechnical design and analysis. The rapid development of advanced numerical techniques with easy access of advanced computers enables geotechnical engineers and researchers to tackle unprecedentedly difficult geotechnical problems than ever before. In addition to conventional geotechnical problems, there are increasing new challenges and expanding scopes for all researchers and practitioners to address, including the exploration and development in deep ocean and space, environmental geotechnics concerning site remediation and waste disposal and containment, and natural hazard mitigation and risk assessment pertaining to landslides, debris flow flood, hurricanes, earthquakes and tsunamis. All these challenges need to be addressed by the development of new-generation numerical methods and computational tools.

TC103 Numerical Methods in Geomechanics is a technical committee under International Society of Soil Mechanics and Geotechnical Engineering, actively promoting the use of computational methods in geotechnical engineering. This TC103 special session aims to provide an open forum for both active researchers and practitioners to present their latest research and practice related to numerical modelling in geotechnical engineering, in an attempt to foster effective communication and exchange of ideas to reduce the gap between the two communities. The special session welcomes any work related to (but not limited to) the following topics, new methodological developments in numerical methods (FEM, DEM, MPM, SPH, multiscale modelling methods), coupled modelling of geotechnical problems (thermo, hydro, chemo, mechanical coupling), validation, benchmark and comparison of numerical methods and constitutive models, case studies where numerical modelling plays a crucial role, cross-disciplinary studies that open up new areas for computational geomechanics. Studies related to both soils and rocks are welcome. Please contact either of the session chairs for any enquiry on this special session.

Further information on submission deadline can be found on the conference website:

China-Europe Conference on Geotechnical Engineering, August 13-16, 2018, Vienna, Austria, website: <https://china-euro-geo.com/>.