

European Regional Technical Committee 7 (ERTC7)

Application of Numerical Methods in Practice

A session dedicated to Professor Scott Sloan

In this session two aspects of numerical modelling are addressed. In the first part applications of numerical methods to practical problems are presented whereas emphasis is put on pitfalls, limitations and best practice. In the second part parameter determination for advanced soil models is discussed. After presentations of available tools for parameter calibration and determination for specific constitutive models a more general discussion will allow participants to express their views and raise issues relevant in practice.

Chair: **Helmut F. Schweiger** (Graz University of Technology, Graz – Chairman ERTC7)

- 13:00 – 13:10 **D. Potts** (Imperial College, London, UK)
Professor Scott Sloan (1954 – 2019)
- 13:10 – 13:30 **S. Henke** (Helmut-Schmidt-University, Hamburg, Germany)
The use of numerical methods for the design process in practice - Chances and Frontiers
- 13:30 – 13:50 **H-P. Jostad** (Norwegian Geotechnical Institute, Oslo, Norway)
How to do numerical analyses of monopiles in sand for offshore wind turbines?
- 13:50 – 14:10 **D. Taborda** (Imperial College, London, UK)
Modelling sand behaviour: pitfalls, best practices and practical applications
- 14:10 – 14:30 **M. Arroyo** (UPC Barcelona, Spain)
Sand is made of grains: using DEM to advance site characterization
- 14:30 – 14:50 Break
- 14:50 – 15:10 **T. Kadlíček** (Charles University, Prague, Czech Republic)
ExCalibre - automatic calibration software for advanced soil constitutive models at soilmodels.com
- 15:10 – 15:30 **R. Brinkgreve** (Bentley Systems / Plaxis)
Automated model and parameter determination
- 15:30 – 16:00 Open discussion:
Parameter Determination for Advanced Numerical Analysis