

INTERNATIONAL CONFERENCE

PRAGUE GEOTECHNICAL DAYS 2023

29th PRAGUE GEOTECHNICAL LECTURE



under the auspices of the Institute of Theoretical and Applied Mechanics
of the Czech Academy of Sciences

22–23 May 2023

**Czech Academy of Sciences
Charles University, Faculty of Science**

Scientific committee:

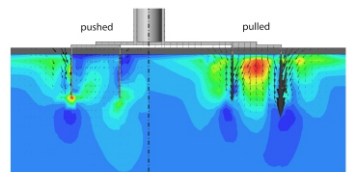
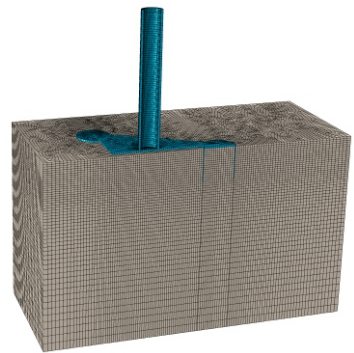
prof. David Mašín

prof. Ivo Herle

Dr. Gianvito Scaringi

This event with international participation is part of the ČKAIT (the Czech Chamber of Chartered Engineers and Technicians Engaged in Construction) continuing professional education project and is worth **two credit points**.

Commercial exhibition will accompany the event.



PRAGUE GEOTECHNICAL DAYS 2023

Monday, 22 May 2023

Czech Academy of Sciences, Národní třída 3, Prague 1

- 8:30–9:00 **Registration, commercial exhibition**
- 9:00–9:15 **Opening address**
 Ing. Zdeněk Sekyra, SG Geotechnika a.s.
 prof. Jana Frankovská, CSSSMGE
 prof. David Mašín, Charles University

INVITED LECTURES Cyclic Loading of Geotechnical Structures

- 9:15–9:50 **The NGI Framework for Cyclic Loading Foundation Design**
 Dr. Lars Andresen, NGI, Norway
- 9:50–10:25 **Design of Offshore Wind Turbine Foundations for Cyclic Loading**
 prof. Byron Byrne, University of Oxford, United Kingdom
- 10:25–11:00 **Predicting the Accumulated Rotation of Monopiles under Lifetime Conditions**
 Dr. Ana Page, NGI, Norway
- 11:00–11:30 Coffee break, refreshment
- 11:30–12:05 **Thermo-Mechanical Modeling of Seasonal Heat Storage in Clay**
 prof. Andrew Whittle, MIT, Boston, USA
- 12:05–12:40 **Design of Pile Foundations for Large Storage Tanks under Seismic Loading**
 prof. Hauke Zachert, TU Darmstadt, Germany
- 12:40–13:40 Lunch break
- 13:40–14:15 **Exploiting Soil Behaviour to Improve Cyclic Geo-Structural Performances: from Seismic to Offshore Applications**
 prof. Andrea Diambra, University of Bristol, United Kingdom

- 14:15–14:50 **Numerical Analyses of Monopiles under Cyclic Lateral Load: from Simple 2D to Complex 3D Approaches**
 Dr. Maciej Ochmanski, Silesian University of Technology, Gliwice, Poland

14:50–14:55 QUIDO ZÁRUBA PRIZE CEREMONY

- 14:55–15:10 **Presentation of Quido Záruba Prize Winner**

15:10–15:30 Coffee break

15:30–17:00

29th PRAGUE GEOTECHNICAL LECTURE

Critical State Constitutive Modeling of Sands within Bounding Surface Plasticity, and Application to Centrifuge Data for Geotechnical Structures under Cyclic Loading

prof. Yannis F. Dafalias
 University of California, Davis; National Technical University of Athens;
 Institute of Thermomechanics, CAS, Prague

Tuesday, 23 May 2023

Charles University, Faculty of Science, Albertov 6, Prague 2

WORKSHOP

Fabric Anisotropy within Anisotropic Critical State Theory

prof. Yannis F. Dafalias
 University of California, Davis; National Technical University of Athens;
 Institute of Thermomechanics, CAS, Prague

9:00–9:30 Coffee, refreshment

- 9:30–12:00 Workshop followed by discussion

Programme subject to change.

Information

Organisers:	SG Geotechnika a.s. , Geologická 4, Prague 5, Czech Republic tel.: +420 725 045 270, e-mail: konference@geotechnika.cz Charles University , Faculty of Science, Albertov 6, 128 43 Prague 2 Czech and Slovak Society for Soil Mechanics and Geotechnical Engineering , FCE CTU Prague, Department of Geotechnics
Under auspices:	Institute of Theoretical and Applied Mechanics, Czech Academy of Sciences
Organising committee:	Chairman: Ing. Zdeněk Sekyra Members: prof. RNDr. David Mašín, M.Phil., Ph.D., prof. Ing. Jana Frankovská, Ph.D., Mgr. Šárka Dvořáková, Mgr. Klára la Torre, Univ.-Prof. Dr.-Ing. habil. Ivo Herle, Dr. Gianvito Scaringi, Ph.D.
Registration fee:	Early registration fee: 1.960,- CZK (80 €) Members of ČKAIT: 1.600,- CZK (65 €) Late registration fee (after 5. 5. 2023): 2.450,- CZK (100 €) Monday 22 May 2023 Conference Dinner is subject to a fee of 110 € (2.700,- CZK). The tickets are available on a first come, first served basis.
Payment:	Payment should be made by bank transfer; details are specified in the registration form.
Lunch:	Sandwiches will be provided during the lunch break on Monday 22 May 2023.
Proceedings:	Participants will obtain printed proceedings.
Registration:	Registration of participants if required on: www.geotechnika.cz/formular Alternatively filled-in registration forms should be sent to: Mgr. Šárka Dvořáková, e-mail: sarka.dvorakova@geotechnika.cz Deadline for early registration is on 5. 5. 2023. Late registration is accepted, subject to the late registration fee.
Commercial exhibition:	In the form of brochures, self-arranged posters or exhibition in Hall No. 205 – only on Monday 22 May 2023 from 8 am to 5.30 pm. More details on the exhibition are enclosed with the invitation in the Presentation Registration Form.
Organising information:	prof. RNDr. David Mašín, M.Phil., Ph.D., tel.: +420 221 951 552 e-mail: masin@natur.cuni.cz