
Dansk Geoteknisk Foreningsmøde nr. 8. 2022

Wednesday 26th October 2022, 16:00 – 20:00

TECHNICAL UNIVERSITY OF DENMARK (DTU)
Department of Environmental and Resource Engineering
DTU Campus, 2880 Kgs Lyngby
Building 341 Auditorium 21

4th ANNUAL DANISH GEOTECHNICAL RESEARCH SEMINAR

The Section for Geotechnics and Geology within DTU's Department of Environmental and Resource Engineering (DTU Sustain) is hosting the Danish Geotechnical Society's 4th Annual Research Seminar. The seminar is open for members of DGF as well as external partners and students.

Join us this day to hear more about ongoing and recently completed research within Geotechnical Engineering at the Universities in Denmark, which will be showcased through speed presentations and a poster session. Experience from research activities within the industry will also be presented.



The fee for participation is **DKK 425,00 excl. VAT** for both members of the Danish Geotechnical Society and non-members. Students and senior citizens participate for free. The seminar includes dinner and coffee.

Register for the seminar at <https://danskgeotekniskforening.dk/da/event/forskerdag-p%C3%A5-dtu> for both members and non-members (please remember to include details of invoicing, DGF members need to log-in to ensure correct registration) no later than **Monday 17th of October 2022**.

Program

16.00-16.10 **Official start – Welcome**

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16.10-16.45 **Presentation of research activities in the industry**

- Plane strain: Effects on drained strength properties for high OCR clays / Niels Mortensen NmGeo
- Collaborative research in geotechnical engineering: Arup experience in Denmark and abroad / Francesco Petrella Arup
- Engineering challenges for offshore foundations / Lindita Kellezi GEO

16.45-17.00 **Short Coffee Break**

17.00-18.10 **Geotechnical Research at the Universities in DK**

Energy

- Suction installation of modular bucket foundation for large offshore wind turbines. / Aleksandra Koterak AAU
- Insights into the vertical cyclic loading response of suction buckets in dense sand. / Sorin Greco AAU
- Large-diameter monopile design under cyclic loading in coarse-grained material. / Junyu Zhou AAU
- Numerical and experimental analysis on seismically liquefaction-induced deformation of pile-supported jacket foundation. / Yimo Wu AAU
- Numerical modelling of an underground pumped hydro-electric storage. / Ghaem AU

Infrastructures

- Why will screw piles revolutionize the way we build foundations. / Lars Bo Ibsen AAU
- Full-scale test of screw-piles in the laboratory. / Daniel K. Andreasen AAU
- Cement stabilization of large infrastructure projects. / Martin Tanderup AAU
- Influence of residual stresses and load-transfer model for bored piles in high plasticity clay / Jannie Knudsen AU
- Tunnelling-induced distortions of framed buildings: numerical, analytical, and centrifuge modelling / Andrea Franza AU
- Examples of MSc projects at AU / Kenny Sørensen AU
- Current and prospective research activities within transportation infrastructure / Eyal Levenberg DTU
- A geophysical and geotechnical investigation of retrogressive thaw slumps in East Greenland / Thomas Højland Lorentzen DTU
- Effect of Concreting Pressure on Ground Response Caused by Installation of Diaphragm Wall Panels/ Yuepeng Dong DTU

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- 18.15-18.40 **Dinner (Kantine Building 342)**
- 18.40-19.20 **Poster and networking session. (Kantine Building 342)**
- 19.20-19.45 **Geotechnical Research at the Universities in DK**

Soil and Rock Characterization

- Rules of thumb: do they get it right? / Irene Rocchi DTU
 - Towards a rock physical model for fine grained permafrost: Insights from velocity and NMR measurements/ Ida Lykke Fabricius DTU
 - Assessment of compaction phases in chalk from elastic parameters/ Tobias Orlander DTU
 - Interpretation of centrifuge CPT data in sands / Varvara Zania DTU
- 19.45-20.00 **Closing**

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Overview of contributions to Poster Session:

#	Title	Presenter	Affiliation
1	Suction installation of modular bucket foundation for large offshore wind turbines.	Alexandra Koterias	AAU
2	Insights into the vertical cyclic loading response of suction buckets in dense sand.	Sorin Grecu	AAU
3	Large-diameter monopile design under cyclic loading in coarse-grained material.	Junyu Zhou	AAU
4	Numerical and experimental analysis on seismically liquefaction-induced deformation of pile-supported jacket foundation.	Yimo Wu	AAU
5	Why will screw piles revolutionize the way we build foundations.	Lars Bo Ibsen	AAU
6	Full-scale test of screw-piles in the laboratory.	Daniel K. Andreasen	AAU
7	Cement stabilization of large infrastructure projects.	Martin Tanderup	AAU
8	Numerical modelling of an underground pumped hydro-electric storage.	Ghaem	AU
9	Influence of residual stresses and load-transfer model for bored piles in high plasticity clay	Jannie Knudsen	AU
10	Tunnelling-induced distortions of framed buildings: numerical, analytical, and centrifuge modelling	Andrea Franza	AU
11	Experimental characterisation of Danish soils	Victor Nielsen, Astrid Mikkelsen & Jakob Krabbe	AU
12	Modelling of soil-pile interaction	Julie Christoffersen & Anders Detlevsen	AU
13	Multivariate probabilistic assessment of a regional database in Copenhagen	Efthymios Panagiotis	DTU
14	Experimental procedure for checking the saturation degree of piezocone tips	Irene Rocchi	DTU
15	Combined Hazard Index for Roads on Permafrost - Towards climate-resilient and cost-efficient linear infrastructure maintenance in the Arctic	Johanna Scheer	DTU
16	Spectral induced polarization signals and petrophysical properties	Ermis Proestakis	DTU
17	A Mechanistic Code for Asphalt Pavements Loaded by Farming Vehicles	Mantas Hesthaven	DTU
18	Elasticity during rebound of Palaeogene Clay	Ida Lykke Fabricius	DTU
19	Assessment of Ground-Borne Vibrations from Urban Rail Transit	Ivan Estupina	DTU
20	Temperature effects on stiffness properties of chalk and sandstone	Tobias Orlander	DTU
21	Effects of pore water chemistry on swelling and compressibility of Paleogene clays	Juliana Mai	DTU
22	Utilizing seismic surface waves on asphalt pavements for layer moduli estimation	Peter Klint	DTU

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