UMassAmherst

College of Engineering Civil and Environmental Engineering Thursday, April 4, 2024 Haley & Aldrich Distinguished Lecture in Geotechnical Engineering



Leveraging global geotechnical and geoscience expertise for US offshore wind developments



BIOGRAPHY: Lone Krogh started working as a geotechnical engineer on her first offshore wind farm project in the Baltic Sea more than two decades ago. Since then, she has been engaged with the engineering design and site characterization for numerous offshore wind farm projects as well as other heavy marine and offshore engineering structures like major bridges and platform structures.

As a Chief Geotechnical Engineer within Ørsted, Lone provides specialist knowledge and expert advice to the project organizations and senior management. She drives the technical strategy, best practices and competence development within Ørsted's GEO department, with a particular focus on the integration of the geotechnical, geophysical and geological disciplines.

LONE KROGH Chief Geotechnical Engineer Ørsted

Lone represents GEO in Ørsted's R&D organization and has initiated and takes an active role in several joint industry projects. She leads the ISO Technical Panel 1 of the Marine Soil Investigations Standard ISO 19901-8 and represents Ørsted as a member of the ACP OWTAP WG4 committee for developing geotechnical and geophysical guidelines for offshore wind facilities in US waters.

ABSTRACT: Lone will present aspects of the wind farm site maturation process from a geotechnical engineering perspective, starting with the very first desk study of a new green field development through to the construction phase, e.g., choice of foundation concepts, wind farm layout as well as strategies for site characterization and risk management.

A second topic will be the ground conditions at the North and Mid-Atlantic Continental Shelf and their related geohazards and risks to a wind farm. Ørsted is developing projects with various challenging ground conditions, e.g., with large boulders, glauconite content and soft, organic soils.

Finally, Lone will discuss the main technical developments within geotechnics for offshore wind over the last decade and will share her views on some required innovations for the next decade to come.



5:00 PM - 6:30 PM Networking dinner reception 6:30 PM - 8:00 PM Lecture

Mount Ida Campus of University of Massachusetts Amherst 100 Carlson Avenue Shaw Hall Newton, MA 02459 Registration required: <u>Click here</u>

Space is limited Early registration encouraged