

REGISTER NOW



Recent Advancements in Pile Design & Installation

Thursday 15th Jun 2023

The Melbourne Hotel (Karingal 2 Rm), 33 Milligan St. Perth

Registration 5.30 pm
Presentations: 6.00 pm – 7.00 pm
Networking over drinks and finger food: 7.00 pm – 8.00 pm

New proposed ISO/API unified CPT-based Method for Axial Pile Capacity

Prof. Barry Lehane, Professor of Geotechnical Engineering, The University of Western Australia

Offshore foundation costs are motivating the offshore energy sector to find better design methods. This presentation summarizes an industry project leading to ISO-19901-4 (CPT-based) design methods for driven pile axial capacity. The basic mechanisms supporting the format of the expressions proposed for shaft friction and end bearing in sands and clays are described. It is shown how these expressions, which are calibrated against a database of the most reliable load tests reported in the literature, lead to better predictions of capacity of this database compared to other methods and also lead to good predictions for a separate database of load tests involving piles driven into deposits comprising interbedded layers of sand, silt and clay.

New CPT Design Method for Axial Capacity of Screw Piles in Sand

Eduardo Bittar, Senior Geotechnical Engineer, Arup

Screw piles are commonly used for low and medium-rise construction and are ideal when resistance to significant uplift loads is needed. Their ease of removal, low noise, and quick installation have led to increased use in solar farms and sparked interest in offshore wind applications, driving a need to improve design methods. This presentation offers a simple method to predict screw pile capacity and required installation torque using CPT data.

Avoiding Pile Free Fall in Offshore Design

Carl Erbrich, Technical Director, Fugro

Pile free-fall is a danger for offshore pile foundation design. It happens when a "hard layer" that can support the weight of a pile is followed by a "soft layer" that cannot. Once the pile goes through the hard layer, it drops uncontrollably until the soil can stop it. The talk will show that even soil without this stratigraphy can cause free-fall due to drainage, remoulding, and water entrapped. The talk will give an overview of relevant mechanics and risks involved in pile installation assessments currently not appreciated by the industry.

Category	Registration Fee
Student SUT Members	\$ 25
SUT Members	\$ 30
Non-members	\$ 50
Online*	\$ 10

*Link to the online event will be shared with registrant's e-mail address.

Payment during the registration process is required in order to secure your place/s. If paying by credit card, it will be deducted at the time of registration and a confirmation email with the receipt/tax invoice from Eventbrite will be forwarded to the stipulated email address. If paying by invoice, it will be sent to your email address at time of registration and payment will be required within 14 days from receipt of invoice. If payment is not received within this time, your registration may be cancelled.

Thank you to our event sponsors:



For further enquiries, please contact OSIGp directly by emailing: Eduardo Bittar (Eduardo.Bittar@arup.com)