AGS WEBINAR

A CLIENT'S GUIDE TO CONE PENETRATION TESTS

WEDNESDAY 29TH JANUARY 2025, 11AM - 1PM

#AGSWEBINAR

Image courtesy of Socotec Ltd

Webinar Chair, Emma Bell (Senior Geotechnical Engineer at SOCOTEC Ltd) and our expert speakers will be providing an introduction to forthcoming AGS Client's Guide to Cone Penetration Tests (CPT's).

This webinar will be for those looking to gain a basic understanding of what CPT's are and the general requirements of CPT when specifying. Our presenters will also be introducing the Client Guidance Note, and as well as giving an insight into a data assessment tool.

The event will be supported with case studies and personal practical experience from the presenters, and will provide a strong introduction to the concepts and terminology surrounding CPTs whilst highlight the usefulness of the new guide.

PROGRAMME

11.00: OPENING ADDRESS FROM EMMA BELL
Senior Geotechnical Engineer, SOCOTEC UK Limited

11.05: A GUIDE TO THE NEW AGS GUIDE TO CONE PENETRATION TESTING
Darren Ward Managing Director, In Situ Site Investigation

11.40: Q&A WITH DARREN WARD AND EMMA BELL

11.55: UNDERSTANDING SOIL THROUGH CPT: PARAMETERS, DESIGN AND INNOVATIONS
Suleyman Bilge Parlak, Senior Geotechnical Engineer, Fugro GB Limited

12.15: Q&A WITH SULEYMAN BILGE PARLAK AND EMMA BELL

12.25: CPT-BASED LIQUEFACTION ANALYSIS: PRINCIPLES AND CASE STUDY INSIGHTS
Saeed Askarian, Principal Geotechnical Engineer, Royal HaskoningDHV

12.45: Q&A WITH SAEED ASKARIAN AND EMMA BELL

12.55: CLOSING ADDRESS FROM EMMA BELL

13.00: EVENT ENDS

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SPEAKERS AND PRESENTATIONS

EMMA BELL – WEBINAR CHAIR
Senior Geotechnical Engineer, SOCOTEC UK Limited

Emma Bell is a Senior Geotechnical Engineer for SOCOTEC UK Limited and has worked in the GI for approximately 13 years. She is a member of the AGS's Geotechnical Working Group to help deliver items on behalf of the group. Emma has brought together several industry experts together to create a Client Guidance Note on CPTS (the important what, how and why's) to promote industry best practice.

DARREN WARD
Managing Director, In Situ Site Investigation

Darren has been working with Cone Penetration Tests (CPTs) for over 20 years and founded In Situ Site Investigation Limited back in 2008. Over this period, he has worked with all types of CPT cones and probes and all types of rigs as well as developing bespoke equipment. He has also carried out testing not just all over the UK and Ireland but all over the world. He is experienced in both on land and offshore CPTs.

He has been an author, or involved in the authorship, of over 20 technical papers on CPTs and is a member of the TC102 committee of the ISSMGE and a member of the working group of the recent revised ISO Standard.

A Guide to the new AGS Guide to Cone Penetration Testing

This presentation from Darren will be an introduction to the Clients Guide to Cone Penetration Tests, highlighting each section and the pertinent points within it. He will go on to support with case studies and his own personal practical experience.

Darren's presentation will be an interesting introduction to the concepts and terminology surrounding CPTs and highlight the usefulness of the new guide.

SULEYMAN BILGE PARLAK
Senior Geotechnical Engineer, Fugro GB Limited

Suleyman has over 15 years of experience as an Engineering Geologist / Geotechnical Engineer with a wide spectrum of multi-disciplinary infrastructure projects where he was responsible for coordination and supervision of ground investigations, data integration, site characterisation, rock mass characterisation, engineering parameters and engineering recommendations. He has most recently served as the lead engineer for the SSE – Peterhead CCS and Keadby 3 Low Carbon Gas Power Station projects.

Understanding Soil Through CPT: Parameters, Design, and Innovations

In this presentation Suleyman will introduce the fundamental soil parameters obtained through CPT, including soil strength, stiffness, compressibility, and permeability, derived from measured cone resistance, sleeve friction, and pore pressure data. He will explain how these measurements are used to create a detailed soil profile, which is crucial for understanding ground conditions.

The presentation will then show practical examples illustrating how CPT data informs basic design processes, such as foundation and pile design assessments. This section shows how engineers utilise soil profiles derived from CPT to optimize designs and ensure safety and performance in construction.

SAEED ASKARIAN
Principal Geotechnical Engineer, Royal HaskoningDHV

Saeed is a Principal Geotechnical Engineer with a PhD in Geotechnical Engineering and over 12 years of industry experience. He has worked on a variety of geotechnical projects, including site investigation, marine structures, land reclamation, ground improvement, foundation and retaining wall design, seismic assessment of geotechnical structures, and liquefaction assessment. He is currently working at Royal HaskoningDHV leading several geotechnical engineering projects mostly in the maritime sector.

CPT-Based Liquefaction Analysis: Principles and Case Study Insights

Saeed's presentation provides an overview of liquefaction analysis using Cone Penetration Testing (CPT), focusing on its application in a specific project. The discussion will first highlight the key principles of liquefaction susceptibility assessment and CPT-based liquefaction potential assessment. Following this, the results of the liquefaction assessment will be presented for a case study involving an overwater bridge and platform. It will be demonstrated how the results have been considered in the design of the piles supporting the overwater structures and how the long-term risks related to liquefaction have been addressed in the final solution.