



GEOTECHNICAL SEMINAR

JOINTLY ORGANIZED BETWEEN
GEOTECHNICAL SOCIETY OF SINGAPORE (GEOSS)
& CENTRE FOR SOFT GROUND ENGINEERING



Site Soil Strength Characterization – with the aid of CSSM

by

Dr Ting Wen Hui

(1 PDU accredited by PEBoard)

Date: Tuesday, 20 October 2009
Time: 6:30pm Reception
7:00pm to 8:00pm Seminar
Venue: **EA-02-11-EXECUTIVE ROOM**
Faculty of Engineering
National University of Singapore

SYNOPSIS

The characterization of site soil strengths is relevant to geotechnical practice due to frequent non-uniformity of site deposits. Characterization of soil properties is a requirement of EC7 to deal with non-uniform site deposits. Various strategies in strength characterization have been applied in practice. In this presentation, the Critical State (CS) Model is treated as a framework for the understanding of the concept of strength; that may be applied to the strength characterization on site.

The CS Model was launched by Roscoe, Schofield and Wroth (1958) in Cambridge; followed by subsequent development as Original Cam Clay (OCC) by Schofield and Worth (1968) and as Modified Cam-clay by Roscoe and Burland (1968) – the last formulation arriving at a stress-strain theory. The Model reached its present stage (for presentation) with the Schofield (2005, 2006) publications.

The CS model and their successive developments are briefly presented, analyzed and interpreted. The final conclusion of the presentation is that the CS Model provides an idealized and convenient framework for characterization of strength in site problems so that strength parameters in geotechnical practice may be conceived to be an integral entity, when following prescribed paths in a given site problem; rather than as separate values when obtained by testing; thus providing the possibility of a fundamental evaluation of the quality of the solution of site problems.

THE SPEAKER

Dr Ting WH graduated from University of Malaysia in 1958, took Master degree in Soils and Highway Engineering from Ohio State University in 1961 and PhD in Soft Clays from Cambridge University, UK in 1968. After graduation, he had joined PWD, Malaysia for the widening of the Johor Causeway, PWD Soils and Materials Laboratory and was involved in Subang International Airport project. From 1978 worked as consulting engineer in the field of highways, airports and various civil engineering works. Dr Ting was the past President of the South-east Asia Geotechnical Society, past President of institution of Engineers, Malaysia and its Geotechnical Division. He was a theme lecturer on 9th Asian Regional Conference of ISSMFE in Bangkok. In April 2000, he was elevated as Fellow of the Academy of Sciences of Malaysia. He is currently an Independent Consulting Engineer.

For catering purpose, please confirm your attendance by reply e-mail to: geoss@nus.edu.sg

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