

PRE-30TH GETD ANNUAL GENERAL MEETING (AGM)
Technical Talk on Advancements of Realistic Simulation of Jet Grouting Piles (JGP)
and Deep Cement Mixing (DCM) for Ground Improvement Application
(Organised by Geotechnical Engineering Technical Division, IEM)
BEM Approved CPD/PDP Hours: Applying

Date : 15 June 2019, Saturday
Time : 9.00 am – 11.00am
Venue : Tan Sri Prof. Chin Fung Kee Auditorium,
3rd Floor, Wisma IEM, PJ
Invited Presenter : PROF. HARRY TAN SIEW ANN

SYNOPSIS

In recent years ground improvement of soft clay sites using cement grouting like JGP/DCM columns has grown by leaps and bounds. Current design analysis of these applications use the Mohr Coulomb model which cannot model brittle fracture progressive failures. As such these methods do not allow any tension stresses in the design and often resulted in excessively conservative designs. Recent advances in Concrete Damage Plasticity model now implemented in finite element method, enable progressive brittle fracture analysis. These tools allow for highly optimal design of JGP/DCM that will be discussed in this lecture.

SPEAKER'S BIODATA

Prof. Harry Tan Siew Ann was a Colombo Plan Scholar who graduated from Auckland University with First Class Honors B.Eng. in 1977 as the top engineering graduate of the school. He joined NUS as a Senior Tutor and earned his M.Eng. in 1982. His M.Eng. thesis research topic is in the Geotechnical area on the excess pore pressure behavior of marine clay in reclaimed land. He was awarded the NUS Overseas Graduate Scholarship to pursue his M.Sc. and Ph.D. degrees in geotechnical engineering at the University of California at Berkeley, which he completed 1982 and 1985, respectively. He has been a staff member of the Department of Civil Engineering at the National University of Singapore (NUS) since May 1980. He has published over 200 technical papers covering topics such as Deep Excavations, Pile Foundations, Geosynthetics, Ground Improvement of Soft Clays, and Land Reclamation. He serves on the editorial board of "Geotextiles and Geomembranes", of the International Society of Geosynthetics, and the Journal of "Geotechnical Engineering" of the South East Asian Geotechnical Society since 1997. He was awarded the "Outstanding Geotechnical Engineer" in 2018 by GeoSS for his contribution to education, research and improving practice in Singapore.

FEE ANNOUNCEMENT
(Effective: 1st October 2017)

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- (i) Registration Fee: No Charge
- (ii) Administrative Fee:
 - (a) Online RM15
 - (b) Walk-In RM20

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- (i) Registration Fee: RM50
- (ii) Administrative Fee: RM20

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