

# Half-Day Seminar on Overview of Design & Construction of Deep Excavation & Tunnelling Projects in Singapore

TUNNELLING AND UNDERGROUND SPACE TECHNICAL DIVISION



By Ir. Dr. Ooi Teik Aun

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Visit to KVMRT Site on 25<sup>th</sup> July 2014

On 26<sup>th</sup> July 2014, the Tunnelling And Underground Space Technical Division (TUSTD) of IEM organised a half-day seminar on "Overview of Design & Construction of Deep Excavation and Tunneling Projects in Singapore" at Wisma IEM.

It attracted about 80 participants, including students from the ICE Student Chapter of University of Nottingham Malaysia Campus.

This seminar was made possible as the two speakers - Er. Dr Victor Ong Chee Wee and Er. David Ng Chew Chiat - made a



Er. David Ng delivering his lecture on deep excavation at the seminar



Er. Dr Victor Ong delivering his lecture on boring tunnelling at the seminar



Some of the participants in the auditorium

special trip to visit KVMRT in Kuala Lumpur a day earlier so that they could share their expertise and experience on the subject matter with members of IEM.

The speakers are consultants based in Singapore and are involved in the MRT projects in both Malaysia and Singapore.

They elaborated on the design and construction of deep excavation and bored tunnelling projects in Singapore. They stressed that the design and construction of bored tunnelling and temporary works for deep excavation rely on moderately conservative ground parameters, robust design solutions and close engineer's supervision to limit movements of both the temporary works system and surrounding ground or structures to within acceptable limits, which is particularly true when working in an urban environment.

Instrumentation results also need to be precise and accurate to enable the construction works to proceed in a controlled manner and the instrumentation layout needs to be designed with careful consideration of the excavation and each instrument located with a specific purpose.

The talk ended with an active Q&A session as well as interactive discussion on the various issues of design and construction of deep excavation and bored tunnelling. Certificates of appreciation as well as IEM heritage books were presented to Er. Dr Victor Ong and Er. David Ng at the end of the session. ■

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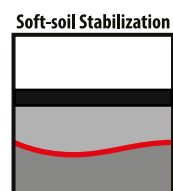
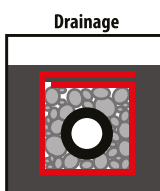
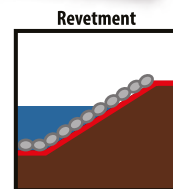
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