



One Day Short Course on “Soil-Structure Interaction in Geotechnical Design”

Reported by Ir. Yee Yew Weng, Secretary General, MGS

Over 90 Engineers from the Geotechnical Field took time away from their routine work on 27th of March 2014, to take part in a seminar at Tan Sri Prof. Chin Fung Kee Auditorium, Wisma IEM. “Soil-Structure Interaction in Geotechnical Design” was the first seminar jointly organized by the newly established Malaysian Geotechnical Society (MGS) and Geotechnical Engineering Technical Division, The Institution of Engineers, Malaysia (GETD IEM). This particular topic was chosen as Engineers are exposed to more complex infrastructure development especially in urban setting, where both Geotechnical and Structural Engineers have to understand the principals of soil and structural design and how they interact with each other.

Prof. Charles Ng W.W. from Hong Kong University of Science and Technology was one of the speakers for the short course. He inspired the participating Engineers with results from series of three-dimensional centrifuge model tests and numerical simulations carried out to investigate the effects of twin tunnel construction on existing single pile & pile group. He also presented responses of perpendicularly crossing two-tunnel interaction and the effects of shielding on three-tunnel interaction. He demonstrated that university research can have very practical application in real construction.

The other speaker was Prof. Leung C.F. from National University of Singapore and he shared on the phenomena and causes of negative skin friction. He highlighted research findings on single piles and pile groups subject to negative skin friction using centrifuge modelling technique. Besides, he also presented research studies to examine the effects of excavation on adjacent single piles and pile groups in sand and in soft clay.



Photo taken during lecture by Prof. Charles



Photo taken during question & discussion

During the question & discussion session, there were lively questions from the floor on application of the research findings to real construction problems. The seminar ended at 5.00pm with momento presentation to both speakers and a big round of applause from the participants.









