



## Two Days Seminar on Advancement in Ground Investigation and Geotechnical Instrumentation

by Ir. Lee Peir Tien

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The Two Days Seminar on Advancement in Ground Investigation and Geotechnical Instrumentation was jointly organised by the Geotechnical Engineering Technical Division (GETD) and The Malaysian Site Investigators Association (MSIA) on 21<sup>st</sup> to 22<sup>nd</sup> October 2015 at Four Points Hotel, Puchong. The seminar was delivered by the 12 speakers with different background such as consultant, contractor, academician etc. A total of 106 participants attended the seminar.

Ground engineering has progressed greatly over the years and computer softwares available to engineers have developed to the extent that the analyses on ground responses to construction activities can be easily made. Although representative information of ground characteristics may be available for use with sophisticated software in the expectation that reasonable estimates are forthcoming, it is prudent to collect the measurements of the actual ground responses to verify that the analysis results are indeed realistic. It is also vital that unexpected adverse ground behaviour be detected early so that they may be addressed accordingly.

This seminar serves to disseminate information on the available techniques and tools to engineers to collect data required for assessment of ground behaviour as well as for the detection of subsurface features. A number of the techniques involve the use of wave-physics and advance technologies. In addition, several case histories were also presented to demonstrate the use of geotechnical instrumentation to facilitate timely detection of distresses, to furnish comprehensive tests results, to improve construction control etc.

In this seminar, the following topics were delivered by speakers from various backgrounds:

- a) Advancement in Geotechnical Instrumentation Telemetry System *by Rob Taylor*
- b) A Case History from Geotechnical Instrumentation Monitoring to a Riverside Double-Walled Sheetpile Cofferdam *by Ir Yee Thien Seng*
- c) Beyond Lugeon & 21<sup>st</sup> Century Developments in Inflatable Packer Technology and Testing *by Howard Kenworthy*
- d) Reliability of Self-Assembled Monitoring System for Deep Excavation Projects *by Ir Dr. Dominic Ong*
- e) Usefulness of Acoustics Borehole Televiwer in Site Investigation *by Rien Corstanje*
- f) Parallel Seismic to Detect Pile Length *by Ng Chak Ngoon*
- g) Automated Recording System for Jack in Pile *by Ir Liew Shaw Shong*
- h) Application of Marchetti Dilatometer in Foundation Design *by Francesca Buselli*
- i) Application of Glostrex Method for Instrumented Load Tests for Local Practices *by Ir Dr Lee Sieng Kai*
- j) Fiber Optic Distributed Sensing in Geotechnical Structures *by Dr Hisham*
- k) Crosshole Tomography and Surface Wave System *by Julius Karl Freiherr Von Ketelhodt*
- l) Use of Light Dynamic Cone Penetrometer, The JKR Probe *by Ir Dr Ooi Teik Aun*

Before the end of each topic, the speakers fielded a number of questions from the audience. Souvenirs were presented by GETD and MSIA to the speakers as a token of appreciation. The seminar ended at about 5.30 p.m. with applause from the floor.