



**Report on Technical Talk on “Geotechnical Engineering Analysis and Design – A Personal Journey,
Presented By Ir. Dr Ooi Lean Hock**

by Dr Boon Chia Weng

Dr Boon Chia Weng is a currently a co – opted member in Geotechnical Engineering Technical Division (GETD).

The Technical Talk on Geotechnical Engineering Analysis and Design – A Personal Journey was organized by the Geotechnical Engineering Technical Division (GETD) on 9th June 2018 at the Malakoff Auditorium, Wisma IEM. The talk was organised as a highlight event for the 29th GETD annual general meeting (AGM). The talk was delivered by Ir Dr Ooi Lean Hock from Gamuda Bhd. A total of 110 participants attended the evening talk.

The speaker began his technical talk by giving a brief introduction to the civil engineering profession during his time, where civil engineers were in demand at key institutions such as JKR to improve infrastructures and government buildings, JPT on the drainage and irrigation to support the agriculture industry and TNB to build dams and power stations to provide energy needed by the country. The speaker emphasised that the subsequent rise in mega projects led further to good prospects for engineering works. According to the speaker, a major milestone during his era was the North South Highway. Privatisation of power producers led to the demand of coastal land to establish thermal power stations, where reclamation was common. The influx of people to the Klang Valley led to rapid development in high-rise structures and efficient transportation networks, such as highways, light rail, monorail and more recently the Mass Rapid Transit. The construction of double track project from Padang Besar to Johor Bahru was also a key infrastructure to provide a “balik kampung” alternative during festive seasons.

Ir Dr Ooi discussed several topics in geotechnical engineering from a historical development perspective, namely:

- Slope stability and consolidation analyses for cut slopes and embankments
- Foundation design for both shallow and deep foundations
- Retaining structures comprising of reinforced concrete wall as well as mechanical and geosynthetics reinforced retaining earth walls
- Tunnelling for hydropower projects and infrastructure
- Instrumentation and Monitoring

The key methods of analyses were discussed, with excerpts from well established geotechnical engineers encountered during the speaker’s career, which had left an impression on him. Challenges discussed in modern engineering development are related to compliance and standard designs resulting in the lack of exercise of judgement, and over-reliance on computer modelling. The technical talk presented by Dr Ooi led to reminiscence of the good-old-days to the senior generation and had successfully motivated the younger generation in the profession.



The chairman of GETD, presented a token of appreciation to Ir Dr Ooi Lean Hock for delivering the evening talk

Figure 1: Audience at the technical talk

Figure 2: Appreciation memento presented by the Chairman of GETD, Ir. Lee Pier Tien (on the left) to Ir Dr Ooi (on the right)