



One Day Seminar on Retaining Structures and Deep Excavation: 16th December 2015

Reported by Ir. Liew Shaw Shong, Secretary General, MGS

Malaysian Geotechnical Society (MGS) and Geotechnical Engineering Division (CKG), Public Works Department (JKR) jointly organized a one day seminar on “Retaining Structures and Deep Excavation” on the 16th December 2015 at Dewan Tan Sri Mahfuz Khalid, Kementerian Kerja Raya. The seminar was attended by more than 150 engineers from the Public Works Department. This particular topic on “Retaining Structures and Deep Excavation” was selected to share the current standards and practices of retaining wall design and construction by experienced experts and specialists. The seminar also offered a platform for the participants to share their experience, as well as to provide networking opportunities.

Ir. Dr. Chin Yaw Ming was invited as the Keynote Speaker for the seminar. His topic was “Basic Understanding on Deep Excavation” and he laid out the design concepts and the construction techniques for the retaining wall of deep excavations. He covered two topics including gravity retaining walls and embedded walls.

The second speaker of the day was Ir. Dr. Hj. Affendi bin Abdullah. He shared an overview on retaining wall design and explained typical applications of earth retaining structures. He also presented the differences between externally stabilized system and internally stabilized system.

The third speaker was Prof. Ir. Dr. Hj. Ramli bin Hj. Nazir. His topic was “Review on The Aspect of Geotechnical Consideration in Retaining Wall Design”. He illustrated his lecture with many photographs of the retaining walls and shared the design criteria checklist which he usually uses in design. He also shared on the importance of geotechnical characterization. He highlighted that designers should always look critically at material descriptions given in the ground investigation report and verify them by site visits.

The fourth speaker was Ir. Tan Yean Chin who shared on “MRT Line 1-Design and Construction of Deep Excavation in Limestone Formation”. He described the design considerations and some important soil parameters related to retaining wall and support system. He described a deep soil mixing wall used to overcome construction difficulties. He also highlighted the risks associated with deep basement construction.

The fifth speaker was Ir. Dr. Dominic Ong Ek Leong and his topic was “Importance of Understanding Geotechnical Fundamental and Local Geology for a Successful Deep Excavation Design”. He presented two case studies involving challenges of the construction of shafts in the Tuang Formation, and emphasized the importance of having proper ground monitoring.

The sixth speaker was Prof. Dr. Fauziah binti Ahmad and her topic was “Designing Retaining Structures using Recycled and its Related Material”. She said there are hordes of scrap tyres which damages the environment. She asserted that recycled tyres have been used in many geotechnical engineering projects. Her 8 Mat System was an eye-opener to many participants.



The last speaker was Dr. Nor. Azizi bin Yusoff. His topic on “Silent Piling Technology: Recent Applications and Research in Malaysia” provided insight on the principle of press-in piling technique, with case studies from all over the world. The seminar ended with questions and answers session and adjourned at 5.00pm.



Participants at the seminar



Booths set up by exhibitors