

The Institution of Engineers, Malaysia

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Talk on Modern Fasteners in Tunnelling and Civil Engineering Organised by Tunnelling & Underground Space Technical Division, IEM

BEM Approved CPD/PDP Hours: 2 Ref No: IEM19/HO/343/T

- Date
- Time
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- Venue
- Speaker
- : 7 August 2019 (Wednesday) : 5.30pm – 7.00pm (Refreshments will be served at 5.00pm)
- : Malakoff Auditorium, Ground Floor, Wisma IEM, Petaling Jaya

: Ir. Khoo Chee Min & Dipl.-Ing. Alexander Kleine Stegemann

SYNOPSIS

In urban excavation of state-of-the-art tunnels, both extensive technical know-how and operational equipment are required for safe and efficient operation. Not only are they required for transportation but also for both single and multiple media-use tunnel like power, gas, water and resources (mining). Depending on the type of tunnel, this may include different kind of equipment like electrification components, signal and lighting systems, communication technique, ventilation, installation systems. The safe and sustainable installation of all equipment required is of vital importance.

The presentation will give some insights into the application of innovative cast-in channel fastening systems in representative tunnel projects. The positive impact on the planning process, construction efficiency or global cost as well as practical aspects such as installation and maintenance will be explained in case studies of various global projects. Positive experiences in tunnels with precast concrete elements and in-situ structures had revealed the applicability of the cast-in channel system including in different tunnel construction forms. In particular, the application in TBM built tunnels significantly contributes to higher site productivity associated with reduced labour, shortened construction time and lower cost. As labour costs, construction time, and safety issues have become more critical, cast-in channels are preferred alternatives to traditional methods such as post-installed anchors. They are adjustable and less dependent on the skill of the installer, which allow simple compensation for construction tolerances and fast, predictable installation programme.

BIODATA OF SPEAKERS



Khoo Chee Min obtained his Bachelor's degree (1st Class Honours) in Civil Engineering from Universiti Teknologi Malaysia in 2002. He is holding the post of Assistant General Manager at MRT Corporation; coleads a team in managing the geotechnical and tunnelling designs for the underground works of KVMRT - SSP Line. He is a P.Eng registered with the Board of Engineers Malaysia, a C.P.Eng registered with Engineers Australia, an Int.PE registered under APEC/ EMF Registers as well as an ASEAN Chartered Professional Engineer. He is a Fellow of The Institution of Engineers, Malaysia (IEM) and currently the Chairman of Tunnelling & Underground Space Technical Division as well as Deputy Organising Chairman of World Tunnel Congress 2020. He has published more than 20 technical papers and is the co-author for

a winning paper entitled "The Present & Future Sustainable Use of Underground Space in Malaysia" which was awarded the Tan Sri Ir. Hj. Yusoff Price 2019, the highest recognition for outstanding technical papers on engineering contributed by corporate members of IEM in the civil engineering discipline.



Alexander Kleine Stegemann has eight years of experience in underground construction. He first got in touch with tunneling in his practical semester in the Gotthard-Base-tunnel before he did his degree in Geotechnical & Geological Engineering in Bochum, Germany. After completion of his study, he started his career in Research & Development at Steelmill Annahütte, a manufacturer of steel anchor systems for rock support in both mining and tunnelling. In 2013, he assumed the position of plant manager for the manufacturing of steel anchor systems for both mining and tunneling at Minova (Orica). Since 2015, he takes charge of Tunnelling & Civil Engineering projects at Halfen GmbH as Project Manager and currently continues his services on the presales perspective in the European & Asian regions.

ANNOUNCEMENT TO NOTE

EFFECTIVE 1st OCTOBER 2017

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Administrative Fee Online - RM15.00 Walk In - RM20.00

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