



ANNOUNCEMENT

AGS (HK) Technical Seminar

Rectangular TBM for Urban Pedestrian Subway Construction

by

Ir K M CHIANG
Shanghai Tunnel (HK) Co., Ltd.

Date: Thursday, 8 June 2023

Time: 18:30 – 19:30 (Hong Kong Time)

Venue: The webinar will be conducted through Zoom.

Successful applicants will be informed by emails with a Zoom's link to the webinar. Participants should arrange for their own device with a stable network environment to join the webinar.

Enquiry: agshk.org@gmail.com

Fee: Free of charge

Registration: https://us02web.zoom.us/webinar/register/WN_E5NyV2WsSWCTUib_OJv3Hw

Please register by 6 June 2023. Successful applicants will receive webinar details after registration. CPD certificate will be sent to the attendees, who attended more than 80% of the webinar time, within 2 weeks after the webinar.

Book Prize: The youth professionals under 35 years old are encouraged to submit their reports (max. 500 words) in quality on this event. Please refer to the AGS (HK)'s website "The AGS Book Prize Reports – Assessment Framework" for details before the submission. The successful candidate will be awarded with the Book Prize that comprises of a book "Geology of Site Investigation Boreholes in Hong Kong" that written by Chris Fletcher, and a coupon of HK\$500 from Eslite Spectrum (誠品生活) or equivalent. The awarded report will further be uploaded to the website of AGS (HK). Please send your report to Mr. Haydn Chan by email: haydn.chan@arup.com.



Synopsis:

Construction of underground facilities in urban area is always a challenge for city development due to congested utilities, existing traffic concerns and proximity to structural foundations. The situation would be exacerbated by the complicated underground geological conditions if encountered. Therefore, trenchless excavation for tunnel / subway construction is commonly used in Hong Kong, where the cut and cover construction method was found not feasible. Traditionally, the New Austrian Tunnelling Method (NATM) will be adopted which requires manual handling of heavy temporary support system in the confined underground environment and inevitably the tunnel workers will be exposed to various kinds of safety risk, such as face instability, falling objects and groundwater ingress into excavation area, etc.

In recent years, Civil Engineering and Development Department (CEDD) initiated an innovative trenchless tunnelling construction method using the Rectangular TBM by Shanghai Tunnel (HK) Co. Ltd., to construct the pedestrian subway in sensitive urban area. The merits of this method overcoming the site-specific challenges and potential usage of this technique for construction of other underground facilities will be presented in this seminar.

About the Speaker:

Ir CHIANG Kai Ming is the Deputy General Manager of **Shanghai Tunnel Engineering Co., Ltd. (Hong Kong / Macau Branch Offices)**. He is a fellow member of HKIE. Ir CHIANG has over 25 years' experience in construction industry. His projects experience covered a wide spectrum, from general civil and highways structures to building construction. In recent years, he was more specializing in underground technology and tunnelling works, including both circular and rectangular TBMs, vertical shaft sinking machine and their application to suit different ground conditions and construction environments.

Currently, he holds the Project Director position for several on-going projects in Hong Kong, including Kai Tak Development – Stages 5B Infrastructure Works at Former North Apron Area, Development of Anderson Road Quarry Site, and Tseung Kwan O – Lam Tin Tunnel – Tseung Kwan O Interchange and Associated Works.