



ANNOUNCEMENT

AGS (HK) Technical Seminar

Glass-Fiber Reinforced Polymer (GFRP) Rock-bolts used as temporary & permanent reinforcement in single-shell mined tunnels & caverns

by

Pierre Hofmann – Dextra Group

Date : 24th February 2022

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 : Haydn Chan (email: haydn.chan@arup.com)

Fee : Free of charge

Registration : <https://forms.gle/ujdQmnaQHguvgm4j8>

Please register by 21th February 2022. Successful applicants will receive webinar details on 22th February 2022. CPD certificate will be sent to the attendees after the webinar.

Book Prize : Book prize is open to youth professionals under 35 years old for the submission of a quality report (max. 500 words) on this event. Please refer to the AGS HK website for "The AGS Book Prize Reports – Assessment Framework" for details. The Book Prize reward comprises a book "Geology of Site Investigation Boreholes in Hong Kong" by Chris Fletcher and book coupons worth HK\$300 from Eslite Bookstore (誠品書店). Please send your report to haydn.chan@arup.com.



香港岩土及岩土環境工程專業協會
ASSOCIATION OF GEOTECHNICAL &
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Synopsis:

Mined caverns are becoming increasingly popular underground structures, and particularly in Hong Kong. They offer a unique solution to space constraints, especially in dense urban environments. In large excavations, and when permitted by the rock mass, permanent rock-bolts combined with sprayed concrete are logical alternatives to concrete lining. On the heels of the successful trial of the Jurong Rock Caverns in Singapore (2012-2014), several caverns are now being constructed using GFRP rock-bolts as rock-reinforcement. The performance characteristics of these rock-bolts, namely regarding tensile & shear resistance, durability in saline and alkali environments and environmental impact, have since been published in a number of studies.

In this seminar, we will discuss the characteristics of GFRP rock-bolts, the advantages & disadvantages compared to conventional techniques and the applications supplied by Dextra on three existing projects.

About the Speaker:

Pierre graduated with a Master of Engineering from “Ecole Centrale de Lille” and a Master of Science in Project Management from “SKEMA Lille”. He joined Dextra in 2007 to develop ‘Fiber Reinforced Polymers’ (FRP) soft-eye technology used in metro systems. He led the development of FRP anchors used first on Doha metro (Qatar) and then internationally. Lately, he has been promoting FRP as a permanent reinforcement and a substitution to steel, which was adopted in 2018 on the world largest underground oil-storage cavern. After 15 years at Dextra, Pierre is General Manager - Geotechnical Product-Line.