WEBINAR TALK ON
"SOLUTION AND APPROACH IN MANAGING GROUNDWATER AND HYDRAULIC PRESSURE IN CONSTRUCTION OF TUNNEL AND UNDERGROUND STRUCTURES"

Organised by
TUNNELLING AND UNDERGROUND SPACE TECHNICAL DIVISION (TUSTD), IEM

BEM APPROVED CPD: applying REF NO: applying

Date : 30 July 2025 (Wednesday)
Time : 04.00 pm - 06.00 pm
Platform : Zoom

Registration Fees:

- Student Member : **FOC**
- IEM Member : **RM 15.00**
- Non-Member : **RM 70.00**

Synopsis

Managing groundwater in underground construction remains a persistent challenge for engineers. Water ingress and the resulting hydrostatic pressure can cause long-term damage to tunnel linings and retaining structures, leading to deterioration, corrosion, and costly maintenance. Methods of managing water pressure is a difficult discipline and soil conditions can be uncertain and risky, both during construction and over the lifetime of the structure.

The webinar explores an approach to addressing water pressure in underground structures using a systematic, continuous drainage approach, integrated in monolithic shotcrete layers. The design enables water to be redirected before it accumulates behind the lining, helping drastically reduce construction time, cost and CO2 consumption and maintain structural integrity over time. The webinar will present examples of how this approach can be applied in different construction methods.

Speaker : Mr. Johnny Poulsen

With over 25 years of experience of building markets for waterproofing and concrete repair solutions, he has founded and managed businesses in distribution and subcontracting of a wide range of specialized solutions. Johnny Poulsen has during this time accumulated know how and expertise on tunnel and underground structures on the international market. With his experience, he has been leading the development of new, innovative business solutions, to accommodate the changing needs in underground construction and continues to develop and adapt in the increasingly changing conditions for construction.