Organised by Geotechnical Engineering Technical Division (GETD)

# WEBINAR TALK ON SUSTAINABLE SOLUTION FOR BUILDING FOUNDATION

SPEAKER: DR. HUONG TRAN PHUONG NAM



15 JANUARY 2025 WEDNESDAY



5.00PM - 7.00PM



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Registration Fees Student Members : Free IEM Members : RM 15.00 IEM Non Members : RM 70.00 Click here to Register I www.myiem.org.my



## **SYNOPSIS**

High risky geologies, including weak and complicated soils (e.g. running sands, sandy silts, marine clays) or fractured rocks (very low RQD, cavities, karsts) present a major challenge for any drilling operation (bored piles) or excavation (diaphragm walls) for building foundation.

The available solutions such as mechanical methods (full length casing), or geotechnical improvement (deep soil mixing, jet grouting), or materials (conventional bentonite, polymer) are widely used. In some cases, they are subject to limitations and undesirable phenomena (collapsing, sloughing, soft toes, reduction in shaft friction) occur remarkably.

In weak geologies, a new generation of drilling fluid, POLDA suspends the cutting foils in the fluid such that silt does not form at the bottom, limiting the interaction between the drilling fluid and the surrounding medium and keeping the substrate stable.

### **SPEAKER'S PROFILE**

DR. HUONG TRAN PHUONG NAM is an inventor of POLDA, a new green-generation drilling fluid for construction foundations. After graduating PhD from The University of New South Wales, Australia in 2006, he has concentrated on researching and developing subjects relating to polymer composite materials for high-end applications, nanocomposites, and advanced drilling fluid additives. He used to work for Institute of Materials Research and Engineering (IMRE, A\*Star, Singapore). Currently, Dr. Nam is Founder and CEO of OTESCORP Vietnam.

### **Academic Qualifications**

Doctor of Philosophy (3/2003 - 12/2006) In Materials Science and Engineering, the University of New South Wales, Australia.

Master of Engineering (10/1999 - 12/2001) In Materials Science and Engineering, Hanoi University of Technology, Vietnam (Excellent Grade).

Bachelor of Engineering (9/1994 - 6/1999) In Polymer Engineering, Hanoi University of Technology, Vietnam (Excellent Grade)

#### **Field of Interest**

- Advanced Polymer Materials
- **Coating Materials (Paints)**
- **Polymer Composite Materials for high-end application (aerospace, marine, automotive)**
- Nanocomposite Materials (nano particles and fibres)
- Drilling Fluid Additives
- **Road Pavement Infrastructure**