

## IES WEBINAR ON SEAPORT, MARITIME AND SOIL IMPROVEMENT PROJECTS

## Date: 22 October 2021, Friday

Time: 2pm to 5pm

CPD Program: STUs (Structural) PDUs for PEs and CEngs (All To Be Confirmed) Fees: \$20 (IES Members) / \$40 (Non Members) (Fees exclude 7% GST)

## To register, please click <u>HERE</u>

Time	Topic and Synopsis
2.00pm to 3.00pm <b>Example 1</b> <b>Example 1</b> <b>Example 2</b> <b>Example 2</b> <b>Example 3</b> <b>Example 4</b> <b>Example 4</b>	CONSTRUCTION OF CONTAINER TERMINAL NO. 9 KWAI CHUNG, HONG KONG This presentation describes the Design and Construction of Container Terminal No. 9, the latest extension to Hong Kong's container port facilities. This extension is the largest extension, adding 6 No. berths for Panamax container ships and 68 hectares of Back-up area for container handling. In addition, the reclamation works have reclaimed land for container storage, access roads and main drainage and land for the Stonecutter Bridge.
3.00pm to 4.00pm	<b>GROUND IMPROVEMENT USING VIBRO TECHNIQUES</b> When weak soil is encountered, pile foundations are often considered first. However, some soil and loading conditions may require ground improvement which utilizes in-situ soil as a source of environmental friendly solution at a faster construction speed. It may be more cost-effective. Vibro techniques which are widely used in Singapore and this region are considered part of the family of ground improvement techniques. While reclaimed or in-situ sand is normally loose, it cannot support the targeted structures. However, with the utilization of vibro compaction which will hasten the densification, it is quickly densified, allowing it to structures support that are of medium level of loading. Clays that are soft or firm can be supported by stone columns. During this talk, fundamental vibro techniques will be explained, followed by actual case studies for chemical plants and oil storage tanks.
4.00pm to 5.00pm	SEVERAL SUGGESTIONS ON FOUNDATIONS, RETAINING WALLS AND SHORE PROTECTION FOR SINGAPORE SOUTHERN WATERFRONT DEVELOPMENT AT EXISTING SINGAPORE PORT LANDS
Er. Dr Ho Kwong Meng	<ul> <li>involved are located at existing port lands of Tanjong Pagar, Keppel and Brani.</li> <li>In this webinar , the speaker will discuss and suggest the following on the future development: <ul> <li>(i) The wharf apron areas supported by piles or concrete blockwork quaywalls thus existing wharf decks have to be removed due to corrosion and design life</li> <li>(ii) Obstructions below the existing wharf decks, i.e. Toe Bunds, etc., should be removed for installation of new piles in future</li> <li>(iii) Instead of reclaiming, the use of piles and basements of the buildings and structures may be seated directly onto the existing seabed</li> <li>(iv) New basement walls and concrete infilled cofferdams may be used as new shore protection structures.</li> </ul> </li> </ul>

The objective is to achieve the Optimum Schemes.