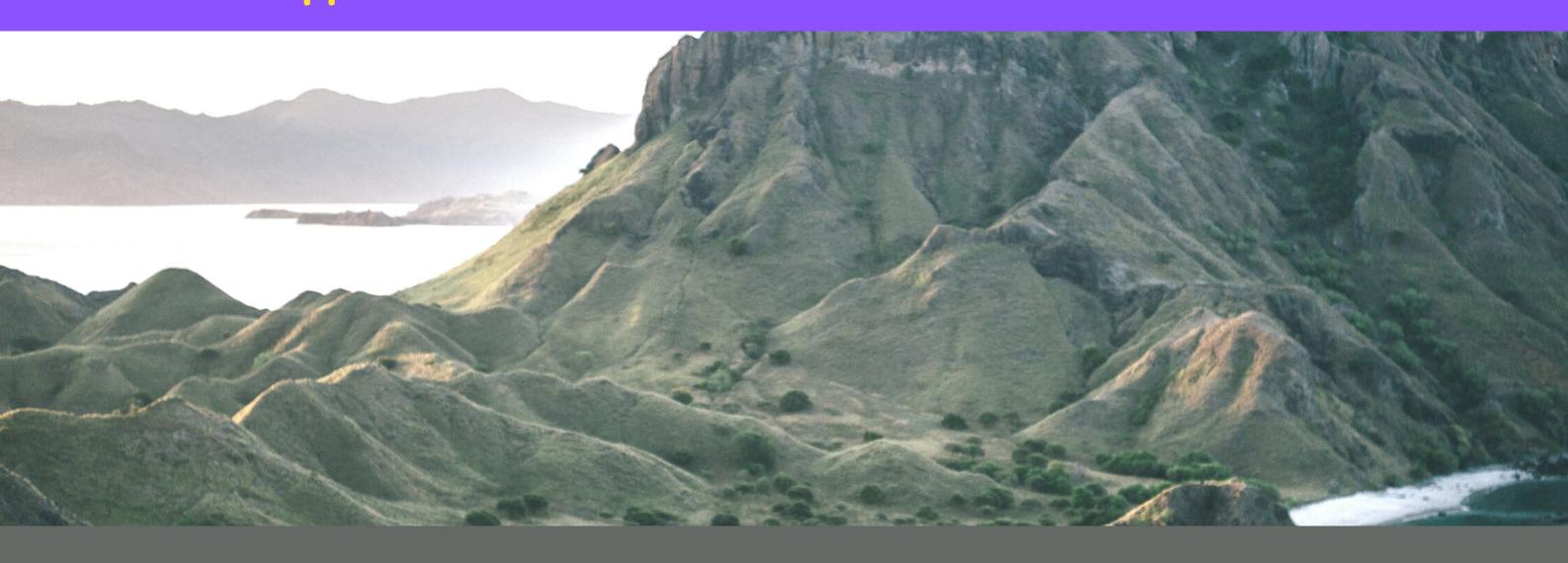


JOINTLY ORGANISED BY CIVIL AND STRUCTURAL ENGINEERING TECHNICAL DIVISION (CSETD)

GEOTECHNICAL ENGINEERING TECHNICAL DIVISION (GETD)

## WEBINAR ON SEISMIC HAZARD AND RISK ASSESSMENT FROM THE GEOLOGICAL PERSPECTIVE

BEM Approved CPD/PDP: 2 Ref. No.: IEM21/HQ/120/T (w)



WEDNESDAY, 28 APRIL 2021, 2.30PM - 4.30PM



SPEAKER: DR. FREDERICK FRANCIS TATING

Registration Fees
(effective 1st August 2020)

IEM Members : RM 15.00

IEM Non Members: RM 70.00

Register online I www.myiem.org.my

## SYNOPSIS

Seismic hazards can be defined as the probability of an earthquake occurring in a given geographic area, within a given window of time, and with ground motion intensity exceeding a given threshold, that may cause severe risk of damage as a result of seismic induced ground shaking. Apart from ground shaking, hazards from earthquakes include surface faulting or deformation (ruptures), liquefaction, tsunami and other cascading geological hazards such as landslides and debris flow that is triggered by the earthquake. Hazard mitigation strategy of seismic risk depends on the nature and characteristics of the hazards. Some seismic hazard areas should be avoided and others can be resisted based on the geotechnical/engineering solutions.

A decision for selecting appropriate seismic hazard risk mitigation strategies is based on the holistic suitability assessment of a proposed development area, which include engineering geological assessment. During the assessment, all information pertaining to the earthquake event such as the interaction between tectonic plates, active faults and geological materials are taken into consideration. Tectonic plates may reveal the mechanism and source of seismic activities. Active faults disclose the probable location of rupture area, whereas geological materials may give some insight on the liquefaction area. Thus, this presentation is about seismic hazards and the risk assessment in geological perspectives and its application in selecting appropriate mitigation strategies.

## SPEAKER'S BIODATA

Dr. Frederick Francis Tating is a registered professional geologist with the Board of Geologist, Malaysia (BoG). He has more than 24 years of experience working as a professional geologist with the Department of Minerals and Geoscience Malaysia (formerly Geological Survey of Malaysia) and currently is the Deputy Director of the Department of Minerals and Geoscience, Malaysia Sabah (JMG). He has been involved in various JMG projects such as the Projek Pemetaan Bencana dan Risiko Cerun (PBRC) and Projek Pemetaan Sesar Aktif dan Kawasan Risiko Gempabumi. He is currently the Project Head of Projek Pemetaan Sesar Aktif dan Kawasan Risiko Gempabumi and was involved in the development of Seismic Hazard Map, that is used in the Malaysian National Annex to Eurocode 8. He holds a Bachelor Degree with Honours in Earth Science (Geology) from the National University of Malaysia (UKM) in 1991 and obtained his Master Degree in Environmental Geology (Geological Hazards) from the Graduate School of Science and Technology, Kumamoto University, Japan in 2003. In 2015, he received his PhD.