

# WEBINAR ON GEOLOGICAL ASSESSMENT OF THE EARTHQUAKE SOURCES AND HAZARD IN MALAYSIA

**BEM Approved CPD/PDP: 2 Ref. No.: IEM21/HQ/121/T (w)**

**FRIDAY,  
30 APRIL 2021  
2:30 PM TO 4:30 PM**



**SPEAKER:  
MR. BAILON GOLUTIN**

**REGISTRATION FEES  
(EFFECTIVE 1ST AUGUST 2020)  
IEM MEMBERS : RM 15.00  
IEM NON MEMBERS : RM 70.00**

**REGISTER ONLINE | [WWW.MYIEM.ORG.MY](http://WWW.MYIEM.ORG.MY)**



# **SYNOPSIS**

Malaysia is sandwiched between three major plate tectonic, the Eurasian Plates, Indian-Australia plates and Phillipine-Pacific plates. The WNW-ESE compression has created the development of NE-SW active thrust fault and NW-SE active strike slip fault in Sabah and Sarawak. Continuous plates movement resulted in regional warping of the upper crust which is thought to be driving extension movement that causing normal dip slip in Sabah and Sarawak. The compressive stress of NNE-SSW by the Indian-Australian plates has created north-south Bentong-Raub suture zone in Peninsular Malaysia. Whereas the compressive stress of NNE-SSW of IndianAustralian plates against the NNW-SSE Eurasian plates has accommodated NW-SE strike slip fault that run across the Bentong Suture. The seismogenic setting of faults segment in Sabah has the potential to produce up to strong earthquake. Continuous stress of faster moving the Phillipine-Pacific plates against Eurasian plate caused some extensional fault became active in Sabah and Sarawak. Whereby, in Peninsular Malaysia the compressive stress by faster moving of Indian-Australian plates against slow moving of Eurasian plate has reactivate NW-SE trending ancient transform fault that cut across the Bentong-Raub suture. The strike slip movement within the Bentong Suture has accommodate slippage of some extensional fault associated with strike slip fault. Ground evidence of active faults that has the potential source of seismic activities are based on tectonic geomorphological features such as linear structured associated with triangular facets, offset streams, beheaded streams, sag ponds, shutter ridge, hot springs, mud volcanoes and active ground deformation on flat area.

## **SPEAKER'S DETAIL**

21 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 Head of Engineering Geology Section of the Department of Mineral and Geoscience Malaysia, Sabah (JMG). He has been involved in various JMG projects such as the Projek Pemetaan Sesar Aktif dan Kawasan Risiko Gempabumi Sabah, Research of Active Faults in Malaysia, Engineering Geological Assesment of 11 resorts in Kundasang Ranau, and Projek Pemetaan Geologi

Terain Sabah. He is currently the Project Head of the Projek Pemetaan Sesar Aktif dan Kawasan Risiko Gempabumi Sabah 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 (Geology) from the University Malaysia Sabah (UMS) in 1999.