Organised by Oil, Gas and Mining Technical Division, IEM (OGMTD)



Pre-AGM Talk On
THE MAJOR HARD-ROCK & PRIMARY TIN MINES IN MALAYSIA

DATE	: **05 DECEMBER 2026**
TIME	: **09.00 AM – 11.00 AM**
PLATFORM	: **ZOOM**
BEM APPROVED CPD HOURS	: **2**
REF NO	: **IEM26/HQ/554/T (W)**

(Open-Cast & Underground Stockwork Vein Primary Tin Mines)

REGISTRATION FEES

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

SYNOPSIS

Malaysia was once the world's largest tin producer, supplying over 30% to 50% of global output through the 19th and 20th centuries. By 1883, Malaysia (then Malaya) became the world's leading tin producer. Alongside rubber, tin provided vital export earnings and government revenue that shaped early infrastructure and colonial administration. Over its history, it produced roughly 5.6 million tons of tin in concentrate from 1851 to 2020. A global market crash in 1986 (±$6,000) halved tin prices, and competition from other nations caused large-scale mining to sharply contract.

Previously, the tin mining are mainly on Secondary Tin Deposit (Eluvial & Alluvial Deposits). Mining evolved from traditional dulang washing, lampaning and gravel pumping to massive steam-powered and electric dredging machines through placer mining method. Rich Alluvial tin deposits were concentrated along the western Peninsular belt—most notably in the Kinta Valley (Perak, spawning towns like Ipoh and Taiping) and the Klang Valley (Selangor, spawning Kuala Lumpur).

Today, the nearly 90% of tin production are from Primary Tin Deposit (Hard-Rock Deposit). The primary raw tin mining contributes less than 1% to the national GDP, though the country maintains a rich industrial legacy. There are two (2) notable major hard-rock primary tin mining operation in Malaysia will be discussed in this session. The operation includes open-cast and underground mining technique as well as their respective mid-stream relations.



SPEAKER PROFILE

Ir. Ts. MOHAMMAD HAFIZ B. ZAKARIA

Ir. Ts. Mohammad Hafiz Zakaria holds a Degree in Mineral Resources Engineering and has over 16 years of professional experience in the mining, quarrying, mineral processing, and smelting industries at both national and international levels. Throughout his career, he has been involved in a wide range of projects covering the full spectrum in mining value chain, from resource development and quarry operations to mineral processing and metallurgical activities.

His professional experience includes key leadership and management roles with several renowned mining, smelting and refinery companies in Malaysia and several other contries. He started his career with Rahman Hydraulic Tin Sdn. Bhd. in 2009, the largest and longest surviving open pit tin mine in Malaysia at Klian Intan, Hulu Perak, Perak. The flagship mine was owned by Malaysia Smelting Corporation Bhd. , one of the biggest tin smelter in the World. He served for 10 years climbed to one of key individual in the company, responsible for the tin concentraes production of the company, contributing to Malaysian's largest tin concentrates production.

In 2019, he joined a tungsten mining and smelting/refinery company operating several underground mines in several countries including Malaysia, Russia and Burundi. He started as a key management role in one of the mining subsidiary company, Malamin Sdn. Bhd., operating an underground tin and tungsten mine in Sintok, Kedah. He was later promoted to the C-Suite role as Chief Operating Officer in the regional parent company, MalametGroup Pte. Ltd. managing Malamet Sdn. Bhd., the company's trading arm and Malamet Smelting Sdn. Bhd., the company's smelting arm (2021–2024).

He has extensive experience in executing, managing, consulting, and monitoring mining and quarrying operations, mineral processing plants, smelting facilities, as well as overseeing organizational functions including legal, finance, sales, and human capital development.
Ir. Ts. Mohammad Hafiz Zakaria is a Professional Engineer, an ASEAN Chartered Professional Engineer, a Professional Technologist, a Certified Quarry Manager, a Certified ESG Practitioner, and an Accredited Competency Professional. His multidisciplinary expertise and extensive industry experience enable him to provide strategic technical and operational guidance for mining, quarrying, mineral processing, and smelting projects while ensuring compliance with industry standards and best practices. In 2025, he founded Multimine Consultancy Sdn. Bhd. and actively provide his proficient, professional and technical expertise in the industry, consulting several renowned mining companies, including Rahman Hydraulic Tin Sdn. Bhd.