

# WEBINAR TALK ON “CARBON MITIGATION IN REJUVENATING MINERALS”

**Date : 9 August 2025 (Saturday)**

**Time : 9.00 am - 11.00 am**

**Platform : Zoom Webinar**

## Registration Fees:

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

## Synopsis:

JMG has introduced technology that enables the utilisation and recycling of carbon dioxide (CO<sub>2</sub>) emissions produced during the calcination of limestone. Statistical data indicate that the Malaysian limestone industry emits approximately 2.38 million metric tons of CO<sub>2</sub> annually. Furthermore, the acetylene gas industry also contributes to CO<sub>2</sub> emissions and generates industrial waste in the form of carbide lime. This project explores the potential to convert both CO<sub>2</sub> and carbide lime waste into high-purity synthetic limestone with a calcium carbonate content exceeding 99%. The technology also can be applied to value add the medium and low-grade limestone. Through this innovation, the Mineral Research Centre aims to address both environmental and resource sustainability by valorising lower-grade limestone and industrial by-products, thereby supporting carbon mitigation efforts while expanding the commercial potential of Malaysia's mineral resources.

## Speaker: Dr. Rohaya Othman



Dr. Rohaya Othman is a Senior Research Officer at the Mineral Research Centre, Department of Minerals and Geoscience Malaysia, with 22 years of service. She holds a PhD in Materials Science from UKM and degrees in Textile Technology from UiTM and ITM. Her research focuses on value-added limestone, including developing synthetic limestone from carbide lime waste. This innovation is used in paper, paint, and skincare products. Dr. Rohaya holds seven patents, with one commercialized and another ready for market. Recognized with 30 awards, she is a prominent figure in advancing Malaysia's mineral research and limestone utilization.