



# Pre-AGM Hybrid Talk on “Portable Fire Extinguisher (PFE) categorized by Class A, B, C, D, E and F, Class L Lithium ion Fuel – ISO 3941:2026”

**Date** : 01<sup>st</sup> August 2026 (Saturday)  
**Time** : 9.00am - 11.000m  
**HYBRID** : Physical & Zoom platform  
**Venue** : Auditorium Malakoff  
**Speakers** : Ir. Gary Lim Eng Hwa & Mr Eric Low  
**Synopsis**

## Registration Fees:

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

Portable Fire Extinguisher (PFE) as mandated in the Uniform Building By-Law (UBBL) in all built environment and must be reflected in the drawings the number and location to be submitted to Fire Rescue Department Malaysia (FRDM). The total number of PFE is determined with reference to MS 1539: Part 3:2003 hence the minimum quantity. The talk will explain the selection of PFE for all types of fuel, namely A, B, C, D, E and F.

PFE is said to be like a First Aider, response must be quick and to control the situation. A reminder that PFE is ONLY useful to put out a fire at the INCIPENT stage of the Life Cycle of a Fire, namely the 4 stages namely Incipient, Growth, Fully Developed, Decay. In this respect, PFE must be selected correctly reference to the Type of Fuel, placed at strategic location, functional at all times (this has been addressed with yearly checking with new PFE certificate) AND occupants know the technique to use the PFE – Apply technique T – PASS. These would be explained during the talk.

A guest speaker with extensive experience will cover Lithium ion fuel which is already in the ISO3941:2026, has yet to be included in the Malaysian Standard, however the above concept of being a First Aider still applicable. With the installation of Battery Energy Storage Systems (BESS) and at EV charging stations which would most like to be lithium ion battery hence selecting the Class L PFE is appropriate type and placing these PFE Class L at strategic locations are vital.

## Speaker 1 : Ir. Gary Lim Eng Hwa

Ir. **Gary Lim Eng Hwa** has a Bachelor of Engineering (Mech) from the University of Canterbury in 1978. He started working in the manufacturing environment and had over 20 years working experiences in various types of industries. He then worked as Fire Risk Engineer with a MNC insurer and conducted Property Loss Control Programmes for the clients for over 10 years. Currently he is a committee member with Building Services Technical Division (BSTD) and Safety in Engineering Special Interest Group (SESIG). In 2016, he attended a certification course and awarded as the Approved ISO31000 Lead Trainer from the Global Institute for Risk Management standards G31000. He conducts fire related topics courses and talks so as to impart his experiences to the members

## Speaker 2 : Mr Eric Low

**Mr. Eric Low** is a fire safety specialist focused on lithium-ion battery fire extinguishing, EV fire safety and BESS fire suppression. He holds an LLB from the University of the West of England, Bristol, and DAFO Certificate 5 competence in design, installation and maintenance. He is also an EVAM Committee Member and AFEVA Member. Eric has spoken on lithium-ion battery fires in Dubai, Hong Kong, Malaysia, the Philippines, Indonesia and Singapore, supporting safer electric mobility through technical leadership, suppression expertise and industry collaboration.

In line with his technical focus, this session will briefly explain Class L PFE for lithium-ion battery fire risks. Lithium-ion battery fires can involve thermal runaway, intense heat, cell-to-cell propagation, toxic gas release and possible re-ignition, making conventional fire protection methods insufficient. The session will highlight practical Class L PFE approaches, including liquid-type agents and gel-based suppressants, which help provide cooling, penetration, containment and re-ignition control for EV charging areas, BESS installations, battery storage, transportation and manufacturing environments.