# **SOLAR PHOTOVOLTAIC (PV) ENERGY TECHNOLOGIES APPLIED IN MALAYSIA**

#### **BY**:

### Ir. Mohd Khairul Fikri b. Mohd Salleh

#### **Speaker's Biodata:**



Ir. Mohd Khairul Fikri Mohd Salleh (BEng (Hons) Electrical) is a Training Engineer (Renewable Energy & Energy Efficiency) in ILSAS. He is certified with Training of Trainers from ILSAS. He is a Professional Engineer from the Board of Engineers Malaysia (BEM) and a corporate member of The Institution of Engineers Malaysia (IEM). Currently, he is working with Renewable Energy & Energy Efficiency section which provides training for Grid-Connected Photovoltaic (GCPV) System, wind turbine training, energy management

and energy efficiency training. He is also the Project Manager for ILSAS Renewable Energy Centre (IREC) & DOSH Examination Centre, an internal auditor for ILSAS Best Practice Audit and Secretary to the ILSAS Best Practices Committee (IBPC).

### **Synopsis:**

This talk is an awareness to the solar PV knowledge and application. The various uses of solar energy are firstly presented before a short description of the principle of the direct solar photon conversion into electricity (PV). The various PV technologies are reviewed in the current context dominated by crystalline silicon cells. The perspectives of the various technologies will also be discussed in this talk.

#### **Contents:**

- The Global Context of Solar Photovoltaic PV Energy Technologies
  - Global primary energy consumption
  - Global fossil fuel reserves
  - World production of electricity
  - Renewable Energy (RE) the way forward in Malaysia
  - Solar PV scheme in Malaysia (Feed in Tariff, Net Energy) Metering, Self Consumption, etc.)
- Solar Energy Conversion into Electricity
  - Principle of the direct solar photon conversion into electricity

He has gained vast experienced in project management for 4 years in private sector especially in solar hybrid system for Kementerian Pendidikan Malaysia (KPM) and Kementerian Kemajuan Luar Bandar dan Wilayah (KKLW). He is certified as Quality Management Systems (QMS) Auditor/Lead Auditor (ISO 9001:2008) by IRCA and received certificate of competence for Design and Installation of Off-Grid Photovoltaic by Pusat Tenaga Malaysia (PTM) and accredited ISPQ. He has recently attended Professional Training in Germany for Renewable Energy and is certified as an International Specialist in Solar Technology.

#### **DATE : 23 AUGUST 2019** TIME : 8:30 AM - 11.00 AM **VENUE : THEATER, ADMIN BUILDING,** UNIVERSITI TENAGA NASIONAL, KM7, JALAN IKRAM-UNITEN, SELANGOR



**BEM Approved CPD/PDP Hours: 2 Hours** Ref No: IEM19/HQ/223/T **IET Approved CPD Hours : 2 Hours** 

#### **JOINTLY ORGANIZED BY:**

IEEE Power & Energy Society Malaysia Chapter (IEEE PES) Building Services Technical Division (BSTD), IEM TNB Intergrated Learning Solution Sdn Bhd (ILSAS) The Institution of Engineering and Technology (IET), Malaysia Network Universiti Tenaga Nasional (UNITEN)

- (PV)
- Type and Concept of Solar Photovoltaic PV Energy in Malaysia
  - Grid-connected systems without storage
  - Grid-connected system with battery storage
  - Stand-alone system
  - Floating solar
- Advantages and Disadvantages of Solar PV Energy
  - Source
  - Cost
  - Electricity bill
  - Application
  - Development
- Present Status and Future Development in Malaysia
  - **RE policy and action plan**

## FREE ADMISSION!!!

Scan the QR Code for Registration or go to https://forms.gle/YdkwsvYb2cZgMKvEA **OR CLICK HERE** 





**MALAYSIA CHAPTER** 





The Institution of **Engineering and Technology** 



