

# Webinar Talk on Development of Mini ROV for Underwater Monitoring Applications

CPD Hours: 2 CPD Ref No: IEM23/HQ/099/T(w)

Jointly Organised by: Oil, Gas and Mining Technical Division & Marine Engineering & Naval Architecture Technical Division

### **SYNOPSIS**

An underwater remotely operated vehicle, commonly referred to as an UROV, is a tethered underwater vehicle. The vehicles are attached to a cable that allows a human operator to control the robot's movements from a ship on the ocean surface or on the ground surface. With the advancement of underwater technology, ocean exploration and monitoring through the use of underwater vehicles, the UROV is becoming more popular and practical. These unmanned submersibles allow researchers a variety of advantages when applied to the sampling and studying of an environment as difficult as in underwater condition. As an advantage, unmanned vehicles do not require human risk and can be functionally designed for a variety of tasks. It is with increasing popularity that scientists are including unmanned vehicles in short-term underwater surveys and long-term ocean monitoring studies. Several mini ROVs for underwater application have been developed by UTM. These UROV equip with imaging and lighting systems that are used for monitoring, surveillance and inspection applications. The UROV have been used for several industrial underwater inspection projects as well as research activities. This talk will share the work experience and challenges of UROV development at UTM.

### **SPEAKER**

#### Assoc. Prof. Dr. Mohd Farid Muhamad Said

**Assoc. Prof. Dr. Mohd Farid Muhamad Said** received his PhD in Mechanical Engineering from University of Leicester UK in 2011. Employed at the Faculty of Mechanical Engineering, Universiti Teknologi Malaysia since 2007, he is currently the Director of Institute for Vehicle Systems and Engineering (IVeSE), UTM. His research area of expertise is in: Internal Combustion Engine, Biofuels, electric powertrain and underwater vehicles. He is Chief Editor, Journal of Transport System Engineering, A Chairman of Technical Committee (Powertrain, Electrified Propel Vehicle) of Malaysia National Standards and Reviewer to many reputable journals. He has won many research grants both at the university and national levels and have many high-impact journals and book chapter publications to his credit. Dr. Farid has supervised and graduated many PhD and MSc students as Main and Co-Supervisor, while also served as external and internal examiner to many PhD and MSc students.



## Saturday I 1 April 2023 I 9AM – 11AM Registration Fee: Student Member: Free | IEM Member: RM15 | Non-Member: RM70

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