

## Technical Talk on “Water And Environment Modeling Using CFD”

Jointly organised by the Information and Communications Technology Special Interest Group (ICTSIG) & Water Resources Technical Division (WRTD), IEM

**BEM Approved CPD/PDP: 2.0**

**Ref. No: IEM19/HQ/260/T**

**Date** : 13 June 2019, Thursday  
**Time** : 5.30 pm – 7.30 pm  
**Venue** : Auditorium Tan Sri Prof. Chin Fung Kee, Third Floor,  
Wisma IEM, Petaling Jaya, Selangor  
**Speaker** : Mr. Mohd Haziq bin Ghazali & Ir. C. Kamalesen

### SYNOPSIS

The talk is designed to deliver a focused, yet wide-ranging exposure of **Computational Fluid Dynamics (CFD)** that will leave participants with a thorough understanding of how **CFD** is used in key water and environment industries. The talk will describe what is CFD, its strengths and weaknesses, and as well the basic workflow of CFD.

The talk will also touch on the methodology of Free Surface simulation in complex geometry, the problem that occurs in many cases that are highly transient and the examples on hydraulics are flows over spillways, in rivers, around bridge pilings, flood overflows, flows in sluices, locks, and a host of other structures.

The talk will allow participants to witness the hydraulics numerical models or simulations of typical dam and weir cases, municipal conveyance and wastewater problems, river and environmental issues, as well coastal and maritime applications.

The speaker will share the case studies and success stories in using CFD as a tool to verify new structure design, to identify and rectify the problem of underperforming existing structure, and to do prediction and mitigation plan of the probable natural disaster.

### SPEAKER BIODATA

**Mr. Mohd Haziq bin Ghazali** received his Master’s and Bachelor’s Degree in Mechanical Engineering specialising in Modelling, Numerical Methods and Simulation from University of Rennes 1 of France. He is currently a Senior Application Engineer in Daztech Solutions Sdn. Bhd. who has more than 5 years of experience working with two related CFD software, namely FLOW-3D and FLOW-3D CAST as well as a 3D image model generation software called Simpleware. He is involved heavily in software technical presentations and technical support, software training as well as CFD simulation consultation. Additionally, he had worked with many engineers and researchers who have expertise in water-based civil engineering applications which involve natural disasters, dams, spillways, municipal flows, and others.

**Ir. C. Kamalesen** graduated from Universiti Sains Malaysia in Civil Engineering, in 2000, and obtained a distinction for his MSc in Environmental Science (Integrated Water Resources Management) from Open University Malaysia in 2007. He is a subject matter expert in Integrated Water Resources Management with more than 16 years’ experience in water resources management, flood management, urban and transport infrastructure drainage, and agriculture irrigation and drainage. Ir. C. Kamalesen is currently a Technical Director at AECOM Perunding Sdn Bhd. He is a registered Professional Engineer in Malaysia and an ASEAN Chartered Professional Engineer. He is also a Corporate Member of the Institution of Engineers Malaysia where he is also registered as ASEAN Engineer, APEC Engineer and International Professional Engineer. He is also registered as Qualified Person with the National Water Services Commission of Malaysia (SPAN). Ir. Kamalesen plays an active role in the Institution of Engineers through the Water Resources Technical Division where he is a Committee Member, and the Malaysian Capacity Development Network in Sustainable Water Resources Management (MyCDNet) as its Honorary Treasurer. He is also currently involved with the Academy of Sciences Malaysia (ASM) Integrated Urban Water Management Position Paper Task Force.

**Ir. Yasser Asrul Ahmad**

Chairman of Information and Communications Technology Special Interest Group (ICTSIG), IEM

**Dato’ Ir. Hj Mohd. Azmi Bin Ismail**

Chairman of Water Resources Technical Division (WRTD), IEM

### ANNOUNCEMENT TO NOTE

#### FEES

(Effective 1<sup>st</sup> October 2017)

#### Members

Registration Fee : NO CHARGE

Administrative Fee :

**Online:** RM15

**Walk In:** RM20

#### Non-Members

Registration Fee : RM50

Administrative Fee : RM20

- Limited seats are available on a "first come first served" basis (maximum 100 participants).
- To secure your seat, kindly register online at [www.myiem.org.my](http://www.myiem.org.my)

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