



# HALF DAY SEMINAR ON “SEISMIC DESIGN USING QUAKEADVICE ONLINE PLATFORM WITH NEW UPDATES”

by Prof Nelson Lam &  
Associate Prof. Dr Daniel Looi

DATE : 28 OCTOBER 2024 (MONDAY)

PLATFORM : PHYSICAL

PHYSICAL - UNI LECTURE THEATER 3, SUNWAY UNIVERSITY.

TIME : 9.00 A.M. - 2.00 P.M.

CPD HOURS : 3 HOURS

CPD REF NUMBER : IEM24/HQ/481/S

LIMIT  
120 SEATS  
only

Cancellation Policy

No cancellation will be accepted prior to the date of the event. However, replacement or substitute may be made at any time with 7 days prior notification and substitute will be charged according to membership status.

CLOSING DATE : 21 OCTOBER 2024

SUPPORTED BY :

Civil Engineering, School of Engineering and  
Technology, Sunway University

Disaster Risk Reduction Advisory Board (DRAAB), IEM  
Agensi Pengurusan Bencana Negara (NADMA)

SUPPORTED BY:



The Disaster Risk  
Reduction Advisory  
Board (DRRAB)



# BIODATA OF THE SPEAKER

## Prof Nelson Lam



Nelson Lam is Professor and leader of the Structures and Buildings Discipline in the Department of Infrastructure Engineering at The University of Melbourne. He has 42 years of experience in structural engineering, and has been working in the specialized field of earthquake engineering, impact dynamics and structural dynamics. He is member of the Structural College Board of Engineers Australia, member of standing committee for future revisions to the Australian standard for seismic actions, member of the Seismic and Dynamic Events Panel commissioned by the London Headquarter of Institution of Structural Engineers, and international expert advising the geotechnical engineering office of the government of Hong Kong SAR over the design of barriers for protection against landslides and rockfalls. His achievement in research in the field of impact engineering culminated in the publication of the authored monograph by CRC Press (Taylor & Francis) titled "collision actions on structures" in 2022. His other accomplishments in the field of earthquake engineering was recognized by the award of the Chapman Medal (1999) and Warren Medal (2006) by Engineers Australia; the Best Paper Award (2004-2007) by the ISET Journal of Earthquake Technology; and Chapman Medal for the 2nd, 3rd and 4th time in 2010, 2019 and 2022.

He is Chief Editor of the Australian Journal of Structural Engineering, and is member of the editorial board for the journal of Earthquakes and Structures (KAIST). He is recipient of Award for Teaching Excellence by Engineers Australia in 2012 and Academic Staff Teaching Award by Melbourne School of Engineering in 2013. His early career as structural engineer was with Scott Wilson International throughout the 1980's and attained British chartered engineer status during that period. He was awarded the degree of BSc in civil engineering with first class honours at the University of Leeds, England in 1981, MSc degree in concrete structures at Imperial College of Science & Technology, London in 1982 and PhD in earthquake engineering at the University of Melbourne in 1993.

## Associate Prof. Dr Daniel Looi

Dr. Daniel Looi is Associate Professor and Programme Development Leader for Sunway University's inaugural Civil Engineering programme in Malaysia. He was Associate Professor at Swinburne University of Technology, Sarawak, from 2018-2024. In his earlier career, Daniel worked as a structural engineer in a multinational company, specialised in structural analysis and design computation for buildings and plants. He holds degrees from the University of Hong Kong and University of Malaya and is a Chartered Professional Engineer (Structural) with Engineers Australia. Specializing in structural earthquake engineering, he contributed to Malaysia's National Annex to Eurocode 8 for seismic design and chaired the Malaysian Eurocode 2 Part 4 for concrete fastenings. Daniel is an Associate Editor for HKIE Transactions and serves on the editorial boards of Scientific Reports and Earthquake Engineering and Resilience. He has published research papers and books in seismic engineering, concrete mechanics, modular building and fastening technology. His research in concrete structures was recognised by the HKIE Outstanding Paper Award for Young Researcher/Engineer 2015.



# **SYNOPSIS**

The first statutory code of practice for the seismic design of building structures in Malaysia (EC8) was released in 2017 and there will a new revision of EC8 in Europe. The IEM seismic study group, initiated by the late Ir MC Hee, has been working consistently to support the structural engineering community in Malaysia to design seismic-resistant building structures. A few core members in the study group (Prof Nelson Lam, Prof Hing-Ho Tsang, Associate Prof Daniel Looi, Ir EP Lim and Mr Prashidha Khatiwada) expanded the resources to include the development of an online platform [www.quakeadvice.org](http://www.quakeadvice.org). QuakeAdvice consists of free resources such as lectures, news, publications and most importantly free JavaScript programs compliant to official codes of practice (Malaysia EC8, Singapore EC8 and Australia AS1140.4) for structural engineers working in low-to-moderate seismicity regions.

The half-day event will discuss the most recent development for QuakeAdvice, which includes:

1. Rapid Dynamic Analysis Engine -for the seismic design of a building (or tower type structure); input is by scanning the floor plan and typing into some boxes in an interactive manner; takes only 10-15 mins to complete; and access is for free on [www.quakeadvice.org](http://www.quakeadvice.org).
2. Site Specific Seismic Design -is an alternative to code stipulated site amplification factors (based on analysis of borelogs); the procedure is so well facilitated by a software on [www.quakeadvice.org](http://www.quakeadvice.org). that will make a lot more designers take this option.

# **PROGRAM OUTLINE**

8.30 am – 9.00 am	Registration
9.00 am – 9.05 am	Opening Address – Ir. Prof. Jeffrey CHIANG, IEM President
9.05 am – 9.15 am	Introduction and background by Dr Daniel Looi
9.15 am - 10.15am	Topic 1: Rapid Dynamic Analysis Engine by Prof Nelson Lam
10.15 am – 10.30am	Morning tea break
10.30 am - 11.30 am	Topic 2: Site specific Seismic Design by Prof Nelson Lam
11.15 am – 11.30 am	Q&A -Part I
11.30 am – 12.00 pm	Summary of the two topics; Exploring <a href="http://www.quakeadvice.org">www.quakeadvice.org</a> further
12.00 pm – 12.30 pm	Q&A and closing remarks – CSETD Chairman
12.30 pm – 12.35 pm	Token of appreciation to speaker & group photo session
12.35 pm – 2.00 pm	End of session & lunch

**“IEM reserves the right to alter or cancel the programme due to unforeseen circumstances at its discretion’.  
For intending participants who choose to ‘walk in without prior registration’,  
IEM SHALL NOT be responsible for any direct or consequential losses”.**

# **REGISTRATION FORM**

HALF DAY SEMINAR ON "Seismic Design using QuakeAdvice Online Platform with New Updates"(PHYSICAL)

28 OCTOBER 2024 (MONDAY)

Email : shahrul@iem.org.my / roselein@iem.org.my

## **REGISTRATION FEE'S (subject to 8% SST)**

	ONLINE FEE (RM)	NORMAL FEE (via email / walk in) (RM)
IEM Student Members	50.00	60.00
IEM Graduate Members	150.00	180.00
IEM Corporate Members	270.00	300.00
Non-IEM Members (None of the Above)	480.00	500.00

No	Name(s)	Membership No.	Grade	Fee (RM)*
SUB TOTAL				
(PLEASE ADD) + SST 8%				
TOTAL PAYABLE				

"IEM reserves the right to alter or cancel the programme due to unforeseen circumstances at its discretion".  
IEM SHALL NOT be responsible for any direct or consequential losses".

For further details, kindly contact:

The Institution of Engineers, Malaysia

Bangunan Ingenieur, Lots 60/62, Jalan 52/4, P.O. Box 223 (Jalan Sultan), 46720 Petaling Jaya, Selangor

Tel: 603-78900133

Email : shahrul@iem.org.my / roselein@iem.org.my

# REGISTRATION FORM

Cash RM \_\_\_\_\_

Cheque no. \_\_\_\_\_ for the amount of RM \_\_\_\_\_ (non refundable) payable to "The Institution of Engineers, Malaysia" and crossed as a/c payee only

FULL PAYMENT must be settled before commencement of the seminar, otherwise participants will not be allowed to enter the hall. If a place is reserved and the intended participant fails to attend the course, the fee is to be settled in full. If the participant failed to attend the course, the fee paid is non refundable. The Registration Fee includes lecture notes, refreshment and lunch (whichever available).

For ONLINE REGISTRATIONS, please note that payment MUST be made BEFORE the closing date. If payment is not received within the stipulated time, the registration fee will be reverted to the normal registration fee.

Contact Name:				
Organisation:				
designation				
Mailing Address:				
Contact Nos.:	Tel:		Fax:	
Hand phone No.				
E-mail:				

SIGNATURE \_\_\_\_\_

STAMP \_\_\_\_\_