

TECHNICAL TALK ON "BLAST RESISTANT MATERIALS: CONCRETE AND GLASS"

Organised by the Engineering Education Technical Division, IEM in collaboration with
Engineers Australia Malaysia Chapter (EAMC), and Institute of Mechanical Engineers Malaysia Branch (IMEchE)
BEM Approved CPD/PDP: 2 Ref: IEM19/HQ/044/T

Date	: 02 July 2019 (Tuesday)
Time	: 5.30 pm – 7.30 pm
Venue	: Auditorium Tan Sri Prof. Chin Fung Kee, 3rd Floor, Wisma IEM, Petaling Jaya, Selangor
Speaker	: Ir. Assoc Prof. Dr. Muhammed Alias Yusof

SYNOPSIS

Terrorist attacks on building structure worldwide are the example of the fact that the destruction of the civil engineering structure are one of the target of the terrorist activities.. Building materials, such as concrete and glasses are the major components of the buildings. These materials are available everywhere, inexpensive, and its applications cover a large variation of building works. Moreover, these materials have low tensile strength and brittle. When these materials subjected to explosion, their building structures are not capable of withstanding the blast pressures due to the blast loadings. In most cases, the blast pressures which are exerted on building surfaces may be several orders of magnitude greater than the loads assigned for the building. The explosion is normally destroyed the exterior walls which are mainly made by normal reinforced concrete and annealed glass. Eventually, this will generally cause the building structures and the building façades to collapse. Thus, the performance of concrete and glass subjected to blast loading can be improved by providing steel fibers in the concrete and also specific interlayers in between the normal glass. These blast resistant materials have shown significant effect in the reduce of blast damaged and have potential to used in the high risk buildings.

SPEAKER BIODATA

Ir. Dr. Mohammed Alias Yusof is an Associate Professor in the Department of Civil Engineering, Universiti Pertahanan Nasional, Malaysia. He graduated with B. Eng (Hons) degree in Civil Engineering from Universiti Teknologi Malaysia (UTM) in 2002, a MSc. degree in Integrated Construction Project Management from Universiti Teknologi Mara (UiTM) in 2005 and PhD degree in Civil Engineering from Universiti Pertahanan Nasional Malaysia in 2013. He is a Professional Engineer registered with the Board of Engineer Malaysia. His main research interests are in the blast resistant materials such as concrete, glass, and also military and commercial explosives. He has developed a blast resistant concrete and had obtained the patent for the blast resistant concrete panel from Intellectual Properties Corporation of Malaysia (MyIPO) in 2016. He is knowledgeable in commercial and military explosives and had attended several courses in Explosives Engineering at Royal Military College of Science, Cranfield University, United Kingdom, and also at Wessex Institute of Technology, United Kingdom. In 2017, he has been awarded an honorary scientist by Venus International Foundation, Chennai, India for his valuable contribution in the field of blast resistant materials and also explosives.

Ir. Assoc. Prof. Dr. Mohamed Thariq Bin Haji Hameed Sultan
Chairman
Engineering Education Technical Division
Session 2018 / 2019

ANNOUNCEMENT TO NOTE

FEES

(Effective 1st October 2017)

Members

Registration Fee	:	FOC
Administrative Fee	:	
<u>Online</u>		RM15
<u>Walk In</u>		RM20

Non-Members

Registration Fee	:	RM50
Administrative Fee	:	RM20

- Limited seats are available on a "first come first served" basis (maximum 100 participants).
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