

## TECHNICAL TALK ON

# “VALUE ADDED BY WIND ENGINEERING – CASE STUDIES”

Organised by the Civil and Structural Engineering Technical Division (CSETD)

**BEM Approved CPD/PDP: 2 Hours**

**Ref : IEM20/HQ/021/T**

**Date** : 13<sup>th</sup> February 2020 (Thursday)  
**Time** : 5.30p.m. – 7.30 p.m.  
**Venue** : Malakoff Auditorium  
Ground Floor, Wisma IEM, Petaling Jaya, Selangor  
**Speakers** : **MR. MASOUD MOINFAR, DR. ROBIN STANFIELD & MR. ALEX TURPITT**

## SYNOPSIS

### *Session 1:*

In this session, **Masoud Moinfar** will give an overview of Venturi Asia’s new boundary layer wind tunnel in Semenyih, which is the first commercial wind tunnel to be built in South-East Asia.

### *Session 2:*

With over 25 years combined experience, **Dr. Robin Stanfield and Mr. Alex Turpitt** have contributed to a vast portfolio of wind engineering projects globally.

In this session they will review a series of interesting case studies covering structures, either built or nearing completion, and provide insights that highlight the value that wind engineering can bring to a variety of projects. This will focus on both monetary value in the form of cost savings, and the benefit a design can be afforded by the right understanding of the microclimate.

The presentation will explore important drivers behind a series of landmark structures, including:

- [Tianjin CTF Finance Centre](#) – how did wind tunnel techniques help optimize the design of this mega-tall building to withstand the effect of winds 500 metres above the ground?
- [20 Fenchurch Street](#) – a building known for concentrating the effects of both the sun and wind: what, if anything, is unique about this signature London structure?
- [Gasholders Kings Cross](#) – originally erected in 1867, in recent years these structures were dismantled, re-furbished, and re-built as part of a bespoke high-end residential development in London. Wind engineers for this most unique development, Robin and Alex will describe the challenges and solutions behind this incredible development.

## ANNOUNCEMENT TO NOTE

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

#### Members

Registration Fee	:	No Charge
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).

- **To secure your seat, kindly register online at [www.myiem.org.my](http://www.myiem.org.my)**

## PERSONAL DATA PROTECTION ACT

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#### CPD Hours Validation:

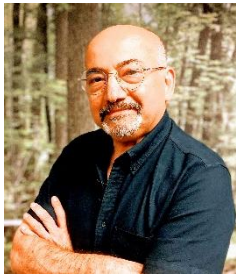
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**“IEM reserves the right to alter or cancel the programme due to unforeseen circumstances at its discretion”.  
For intending participants who choose to ‘walk in without prior registration’,  
IEM SHALL NOT be responsible for any direct or consequential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

## **SPEAKER BIODATA**



**Mr. MASOUD MOINFAR** – is the Managing Director of Fenestra Malaysia Sdn Bhd. He is a mechanical building services engineer and has more than 35 years of professional experience in design and construction management of a wide range of projects. Masoud has extensive experience in many aspects of building engineering with a strong focus on value engineering and project management. Masoud has a keen appreciation of costs, buildability and cost effectiveness of design solutions. He is passionate about reducing energy consumption of buildings and an ardent advocate of introduction of green technologies in commercial developments. Masoud has been a green engineering practitioner for many years and is a registered Malaysia Green Building Index Facilitator.

### **Qualifications and Memberships**

- Bachelor of Mechanical Engineering - University of Canterbury (1981)
- Post Graduate diploma in Arbitration – Massey University (2005)
- Member of the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)
- Member of the New Zealand Institute of Heating and Ventilating Engineers
- Fellow of the Asian Institute of Alternative Dispute Resolution (AADR)



**Dr. ROBIN STANFIELD** – a fixation with Formula 1 at an early age led to Robin's eventual degrees with a focus on aerodynamics, earning various degrees specialising in aerodynamics via both wind tunnel testing and CFD. Over the course of 12 years, as an Engineer and Project Manager, and ultimately as Head of Wind Engineering at BMT, Robin led the wind engineering work for many hundreds of projects in the UK and internationally. As a Director of ArcAero, Robin is responsible for the wind engineering work undertaken by the company.

### **Qualifications**

- BEng(Hons) Aeronautical Engineering - University of Glasgow (2001)
- MSc Aerospace Dynamics - specialising in Aerodynamics & CFD - Cranfield University (2003)
- Engineering Doctorate - Cranfield University (2009)



**Mr. ALEX TURPITT** – a graduate of Brunel University, Alex became a Wind Tunnel and Instrumentation Technician before moving quickly to specialise in two distinct areas – wind microclimate for large UK developments and wind engineering for stadia. As a Project Manager, Alex widened his technical capabilities and gained experience in tall building and bridge aerodynamics. In 2015, Alex became the BMT's Regional Manager for UK & Europe and more recently the EMEA region as a whole. As a Director of ArcAero, Alex is responsible for the wind engineering work undertaken by the company.

### **Qualifications and Memberships**

- MEng (Hons) Aerospace Engineering – Brunel University (2008)
- Member of the Institution of Mechanical Engineers (MIMechE)

**Dr. Robin Stanfield and Mr Alex Turpitt have a wide range of experience in wind engineering projects or civil structures internationally, including:**

#### UK and Europe

- 52-54 Lime Street 'The Scalpel', London
- Manhattan Loft Gardens, London
- Deansgate Square, Manchester
- 2012 Olympic Masterplan, London
- Wembley Masterplan, London
- Greenwich Peninsula Masterplan, London
- King Cross Masterplan, London
- Coal Drops Yard, London
- Gasholders, London
- Slipstream, T2 Heathrow, London
- 2012 Olympic Velodrome, London
- San Mamés Barria Stadium, Bilbao
- Stade Geoffroy-Guichard, St-Étienne
- Main Stand, Anfield, Liverpool
- Tottenham Hotspur Stadium, London
- Birmingham Airport, Birmingham
- Gatwick Airport, London

#### USA

- Miami World Center, Miami
- 1500 Mission Street, San Francisco
- Zurich North American HQ, Chicago
- Mercedes-Benz Stadium, Atlanta
- Kyle Field Stadium, Texas
- Daily's Place, Jacksonville
- Louis Armstrong Intl Airport, New Orleans

#### Far East

- D'Latour Bandar Sunway, Subang Jaya
- Spring City 66, Kunming
- Olympia 66, Dalian
- 2014 Asian Games Stadium, Incheon
- Hong Kong Velodrome, Hong Kong
- Hong Kong Intl Airport, Hong Kong
- Chow Tai Fook Finance Centre, Wuhan

#### Middle East

- Istanbul Financial Centre, Istanbul
- Al Habtoor City, Dubai
- Fountain Views, Dubai
- NKB Tower, Kuwait City
- National Museum of Qatar, Doha
- Qatar Foundation Stadium, Doha
- Al Rayyan Stadium, Doha
- Yas Arena, Abu Dhabi
- Lusail Iconic Stadium, Doha
- Hazza bin Zayed Stadium, Abu Dhabi
- Queen Alia Intl Airport, Amman

#### South America

- Atrio, Bogota,
- ESO's Extremely Large Telescope

## **Ir. CHONG CHEE MENG**

**Chairman**

**Civil and Structural Engineering Technical Division**