



The Institution of Engineers, Malaysia

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The Institution of Structural Engineers

TALK ON DESIGNING WITH COMPUTERS

(Jointly organised by IStructE Malaysia Regional Group and IEM, C&S Technical Division)

BEM Approved CPD/PDP : 2 Hours Ref : IEM15/HQ/217/T

Date : 6 August 2015 (Thursday)

Time : 5.30 pm – 7.30 pm (Refreshment served at 5.00pm)

Venue : Auditorium Tan Sri Prof. Chin Fung Kee, 3rd Floor Wisma IEM

Speaker : Mr. Tristram Carfrae

SYNOPSIS

It is relatively common to hear the senior members of our profession exhort our more junior members to “stop using computer models”, particularly early in the design process. However, a computer analysis programme is really just a superior calculator (slide rule or log table). Why shouldn't they be used by engineers to get a fast appreciation of the structural behaviour of their idea? What is it about making a quick sketch and a hand calculation that makes it so more informative than a computer model, which is replete with stresses, deflected shapes, loads, reactions and many other informative results?

Surely what we really want is the wise use of computer models, even early in the design process. A virtual exploration of the design space; many models of different complexity, cross checking for fundamental structural behaviour; sensitivity studies against various input parameters; to name a few of the different strategies available.

I think that our senior members should try and learn the capabilities of modern computing so that they can teach their colleagues how to get the most out.

BIODATA OF SPEAKER



Tristram is an Arup Fellow and Arup's Deputy Chairman. He is responsible for the design of an impressive array of award winning buildings, including the Water Cube for Beijing 2008, and is regarded internationally as a leading designer of lightweight long-span structures, particularly where the architecture is defined by the structure.

In collaborating with some of the world's best architects, he has a reputation for challenging the established way of doing things; for exploring better solutions; and moulding both materials and people to his vision. Tristram believes that good buildings should consume less materials, energy, time and money; while at the same time being beautiful and providing greater amenity for society.

Ir. Hooi Wing Chuen
Chairman
Civil & Structural Engineering Technical Division

ANNOUNCEMENTS TO NOTE

- Preferential admission to talk shall be accorded to IEM & IStructE members (pre-registration and online registration are NOT required). Telephone and/or fax reservation will NOT be entertained.
- **Non members** may also attend the talk but will need to pay a registration fee of **RM50** and an administrative fee of **RM15**. GST is inclusive.
- For members of affiliated organisations, there will be no registration fee payable. However, they are requested to produce their membership card as proof of membership. For the list of affiliated organisations, please refer to IEM website at www.myiem.org.my under International/MoU.
- Limited seats are available on a "first come first served" basis (maximum 100 participants).
- IEM members are required to produce membership cards for confirmation of attendance (CPD purpose).
- Latecomers will not be allowed to enter if the lecture hall is full nor be entitled to CPD.
- **IEM members who fail to produce their membership cards will be charged a fee of RM25.00. GST is inclusive.**

ADMINISTRATIVE FEE

- Kindly be informed that an administrative fee of **RM15** is payable for talks organized by IEM. GST is inclusive.
- The fee would be used to cover overhead costs, building maintenance expenses as well as contribute to Wisma IEM Building Fund.
- All contributions will be deeply appreciated by IEM.
- Student Members are however exempted.

CPD HOURS CONFIRMATION

Name:

Membership No:

Signature: