Analysis, Design and Construction of Tensioned Fabric Structures

Wednesday
27 July
2022

Time:
6.30pm – 8.30pm

Venue:
IEM Secretariat @ E-Gate

REGISTER ONLINE @
event.iempenang.org

IEM Senior (>65yrs old) :	**RM20**
IEM Student & Graduate:	**RM20**
IEM Member:	**RM30**
Non-IEM Member:	**RM60**

LIMITED SEATS – 40 PAX ONLY
(first-come-first-serve basis)

Organized by
Women Engineers Section, IEM Penang Branch

Synopsis

In this talk, mechanics of tensioned fabric structure will be first explained. The importance of tension and curvature will be elaborated. Properties of material used, form-finding analysis, stress analysis and patterning analysis will also be touched upon. Design process will next be explained. The fabrication of membrane panel for use in the erection of tensioned fabric structure will be covered. Fabrication of membrane panels in plant, transportation to site and erection process will be explained using actual examples.

Speaker 1:
Professor Ir. Dr. Choong Kok Keong

Speaker 2:
Ms. Migico Sing Si Wei

Moderator:
Ir. Yeap Geok Ngoh

About the Speakers

1) Professor Ir. Dr. Choong Kok Keong

Professor, School of Civil Engineering, Engineering Campus
Universiti Sains Malaysia.

Graduated from Universiti Teknologi Malaysia with degree in Bachelor of Civil Engineering in 1987, continue for Master of Engineering in Structure Engineering at Gifu University, Japan in 1991 and subsequently obtained Doctor of Engineering in Architectural Engineering at The University of Tokyo, Japan in 1994. Professor Ir. Dr. Choong with 26 years of research and teaching experience. His field of specialization is computational mechanics, nonliner analysis of shell and spatial structures, structure stability and structural dynamics.

Besides teaching, supervise post graduate students and be the external examiner of PhD thesis, he is actively involved for research work, research paper publication and collaboration with industry. He had been awarded for:

a. Ranked World Top 30 Innovative Bridge System Award-"A New Overfilled Precast Concrete Closed Spandrel Arch Bridge System with Folded Plate Profile" 2017 BERD FEUP World Innovation in Bridge Engineering Prize (WIBE 2017)

b. The Malaysian Construction Industry Excellence Awards 2017 (Best Project Award: Building Project-Medium Category) Leader of Team from School of Civil Engineering, Universiti Sains Malaysia as Project Structural Dynamic Specialist Consultant for Revitalization of KOMTAR Building, Pulau Pinang.

2) Migico Sing Si Wei

Head of Project for Tensioned Fabric Structure (M) Sdn Bhd

Graduate from University of Cambridge with degree in Business Administration (major in Marketing) in 2004. She joins the Tensioned Fabric Structure (M) Sdn Bhd in 2007 as marketing manager, subsequently been appointed as project sales manager in 2009, before promoted as head of project in 2013. Ms Migico joined Tensioned Fabric Structure (M) Sdn Bhd for more than 15 years and handle hundreds of local as well as international tensile architectural project. She participating in local and overseas exhibition and conference throughout the years. She involved in design and engineering department and project site management. Besides, also attended multiple conference and international seminar and training on Architectural Fabric industries, such as Structural Membrane, IASS Symposium, Textile Roof, Tensinet and etc.