ASCE American Society of Civil Engineers

Hong Kong Section

P.O.Box No. 65269 TSEUNG KWAN O Post Office, Hong Kong
E-mail: asce@ust.hk Website: http://sections.asce.org/hongkong/

Continuing Professional Development Short Course 2006

Designing Buildings and Infrastructure for Wind, Fire and Other Extreme Events

Organized by

American Society of Civil Engineers – Hong Kong Section

Sponsored by

Department of Civil Engineering, The Hong Kong University of Science & Technology

Buildings and infrastructure failure disasters in recent years, caused by extreme events such as Hurricane Katrina in 2005 and World Trade Center collapse in 2002, have shown to us that even well-engineered structures are still vulnerable to natural or man-made hazards. This one-day CPD course covers the latest technologies to achieve engineering resilience to ensure life safety. Presented by internationally known specialists, this course is devised for civil and structural engineers, practitioners, contractors as well as researchers.

Date:	16 September 2006, Saturday (9:00 am-5:00 pm)
Venue:	Rm 4334, 4/F, The Hong Kong University of Science and Technology, Clearwater Bay, Hong Kong
Language:	English
Course fee:	HK$500 each for ASCE members; HK$600 each for non-ASCE members; HK$300 each for ASCE student members. (Fee includes lecture notes, an attendance certificate, two coffee breaks and a lunch.)
Certificate:	This course is recommended for one CPD day.
Enquiry:	Please contact the Course Coordinators : Dr. Jun Yang (Tel: 2241 5273, Fax: 2559 5337) Dr. Patrick Cheung (Tel: 2867 3426, Fax: 2290 2192)

Registration

Please complete the reply slip below and send it with cheque payable to
American Society of Civil Engineers – Hong Kong Section
to the Course Secretariat as soon as possible.

Course Secretariat

ASCEISG, HKUSTCE, Room 3564, Department of Civil Engineering,
The Hong Kong University of Science and Technology, Clearwater Bay,
Kowloon, Hong Kong. (Attn: Dr. Limin Zhang) **Email:** asce@ust.hk

Reply Slip

Full Name:

Company:

Tel. No.: Mobile: E-mail:

Correspondence Address:

ASCE Member: Yes ☐ No ☐ ASCE Membership No.:

Bank & Cheque No.: (HK $)

ASCE American Society of Civil Engineers
Hong Kong Section
P.O.Box No. 65269 TSEUNG KWAN O Post Office, Hong Kong
E-mail: asce@ust.hk Website: http://sections.asce.org/hongkong/

Continuing Professional Development Short Course 2006

Designing Buildings and Infrastructure for Wind, Fire and Other Extreme Events

16 September 2006 (Saturday)

8:30-9:00 a.m. Registration

9:00-9:45 a.m. **Effects of fire on reinforced concrete**

Dr Y.L. Wong (Department of Civil & Structural Engineering, The Hong Kong Polytechnic University)

Damage mechanisms, concrete cover spalling, strength degradation, structural failure.

9:45-10:45 a.m. **Extreme events of storm surges and tsunami**

Prof K.T. Chau (Department of Civil & Structural Engineering, The Hong Kong Polytechnic University)

Storm surges, tsunami, historical events and hazard, earthquake, numerical simulation, hydraulic models, submarine landslides, structural forms.

10:45-11:15 a.m. **Morning tea/coffee**

11:15-12:15 p.m **Wind engineering: Its role in infrastructure development in an urban environment**

Prof Kenny Kwok (Department of Civil Engineering, The Hong Kong University of Science and Technology)

Wind engineering, wind tunnel, wind effects, tall buildings, field measurements.

12:15-1:45 p.m. **Lunch**

1:45-2:45 p.m. **Wind hazard mitigation: advanced technologies**

Prof Y.L. Xu (Research Centre for Urban Hazards Mitigation, The Hong Kong Polytechnic University)

Design wind speed, wind characteristics, wind and structural health monitoring, application of GPS, system identification, computational simulation, buffeting analysis of long span bridge, wind-induced cable vibration and control, effects on road vehicles, wind-train-bridge interaction.

2:45-3:00 p.m. **Afternoon tea/coffee**

3:00-4:00 p.m. **Fire engineering design and practice**

Dr Ming-chun Luo (Ove Arup & Partners Hong Kong Ltd)

Fire safety design of high-rise building and evacuation strategy for super high-rise buildings, performance-based design approach.

4:00-5:00 p.m. **Ship impact on bridges**

Dr Limin Zhang (Department of Civil Engineering, The Hong Kong University of Science and Technology)

Ship impact design case study

Dr Daman Lee (Ove Arup & Partners Hong Kong Ltd)