

First Announcement
International Workshop on
Frontier Technologies for Infrastructures Engineering

IWFTIE 2008

Venue :  International Building, NTUST

Taipei, Taiwan, 23-25 October 2008

www.iwftie2008.com

• Organized by

National Taiwan University of Science and Technology
Taiwan Building Technology Center

• In Collaboration with

Ministry of Education, Taiwan
Ministry of Transportation and Communications, Taiwan
National Science Council, Taiwan
American Society of Civil Engineers
Chinese Institute of Civil and Hydraulic Engineering, Taiwan
International Association for Bridge Management & Safety
International Association of Life-Cycle Civil Engineering
International Association for Structural Safety and Reliability

• Supporting Organizations

Architecture and Building Research Institute
Bureau of High Speed Rail
CECI Engineering Consultants, Inc.
Construction and Planning Agency
CTCI Corporation
Dept. of Rapid Transit System, Taipei
Directorate General of Highways
Moh and Associates, Inc.
Ruentex Group
Sinotech Engineering Consultants, Ltd.
Taiwan Area National Expressway Engineering Bureau
Taiwan Area National Freeway Bureau
Taiwan High Speed Rail Corporation

• Objective

The National Taiwan University of Science & Technology (NTUST) is organizing the three-day Workshop to introduce some of the current and frontier technologies of special significance to the planning, design, construction, and maintenance of civil infrastructures. The Workshop is intended primarily for the professional and practicing engineers in Taiwan and elsewhere, including those in government and industry, who are involved with or are responsible for the infrastructure systems including roadways, bridges, buildings, power generating and distribution systems, water resources, environmental facilities, and other civil infrastructure systems.

The technical program will emphasize the applications in earthquake and other natural hazards, geotechnical engineering, and construction management with special reference to providing information on emerging technologies for infrastructure engineers.

• Technical Program

The program of the three-day Workshop will consist of about 18 invited lectures to be delivered by internationally renowned and eminent experts in their respective fields. The technical program will cover the following specific topics:

- Life-cycle cost and performance
- Reliability engineering
- Risk assessment and management
- Optimization methods and optimal design
- Role of maintenance, inspection, and repair
- Structural and system health monitoring
- Durability, fatigue and fracture
- Corrosion technology for metal and R/C structures
- Concrete materials and concrete structures

The lectures will present the current or emerging fields of engineering with emphasis on the practical aspects of the respective topics. The papers for all the lectures will be published in the proceedings of the Workshop.

• List of Lecturers/authors (listed alphabetically)

- Prof. Bilal Ayubb, University of Maryland, USA
"A Risk-Based Framework for Managing Infrastructures"
- Prof. Franklin Cheng, University of Missouri-Rolla, USA
"Introduction of Optimum Structural Design and Its Recent Developments"
- Prof. Hyo-Nam Cho, Hanyang University, Korea
"Performance Degradation-Based Life-Cycle Cost Analysis for Civil Infrastructures"
- Prof. Armen Der Kiureghian, Univ. of Calif., Berkeley, USA
"An Enhanced Bayesian Network Approach for Infrastructure Risk Management"
- Prof. Bruce Ellingwood, Georgia Inst. of Tech., USA
"The Role of Risk Assessment in Performance-Based Engineering"
- Prof. John Fisher, Lehigh University, USA
"Fatigue and the Durability of Steel Bridges"
- Prof. Dan Frangopol, Lehigh University, USA
"Life-Cycle Cost and Performance Prediction: Role of Structural Health Monitoring"
- Prof. Hitoshi Furuta, Kansai University, Japan
"Life-Cycle Cost and Bridge Management"
- Prof. Achintya Haldar, University of Arizona, USA
"Structural Health Assessment using Minimum Dynamic Response Information"
- Prof. Hongwei Huang, Tongji University, China
"Risk Assessment in the Construction of Shanghai Yangtze River Shield Tunnel"
- Prof. Anne Kiremidjian, Stanford University, USA
"Design and Implementation of A Wireless Structural Health Monitoring System"
- Prof. Seng-Lip Lee, National University of Singapore, Singapore
"Innovative Conceptual Design of Vibration Sensitive Buildings"
- Prof. Liang Liu, Univ. of Illinois, Urbana-Champaign, USA
"Construction Remote Sensing, Building Blackbox and 3D Laser Scanning Applications"
- Prof. Julio Martinez, Purdue University, USA
"Modeling and Simulation for Design and Improvement of Complex Construction Operations"
- Prof. Wilson Tang, Hong Kong Univ. of Sc. & Tech., Hong Kong
"Application of Risk Management and Reliability Procedures in Geotechnical Engineering"
- Prof. Erik Vanmarcke, Princeton University, USA
"Managing Physical and Financial Risks from Extreme Natural Hazards"
- Prof. Y.K Wen, Univ. of Illinois, Urbana-Champaign, USA
"Application of Reliability in Earthquake Engineering"

• Registration Fees

Early Bird Registration (before August 31, 2008)	USD 300
Regular Registration	USD 350
Accompanying Person	USD 100

• Contact Information

Professor Jianye Ching, IWFTIE 2008 Secretariat
Taiwan Building Technology Center
National Taiwan University of Science and Technology
43, Keelung Road Section 4, Taipei 106, Taiwan
Tel: +886-2-27301055 Fax: +886-2-27376606
Email: jyching@mail.ntust.edu.tw