#### CONFERENCE VENUE

To most tourists, Hong Kong is famous for shopping, food and perhaps the Victoria Harbor. The conference will be held in a hotel in the Tsimshatsui area, just minutes away from the Harbour. After the technical activities of the day, a casual night stroll along the harbor is strongly recommended. Those with more energy can take the cross harbor ferry to the Hong Kong Island, and take a cable tram to the peak. The view of the Victoria harbor from the peak is one of the best night sceneries around the world. You can either have dinner at the peak or back at the area around the conference venues. Most restaurants in Hong Kong open till the late evening and there is no problem getting good food even after mid-night. For those who needs to get souvenirs or gifts for friends, family or themselves, there are also plenty of shops in the area that are open for long hours.

While most people see Hong Kong as a dynamic, exciting and busy financial center, life in Hong Kong is actually made up of many facets. For tourists, there are a wide range of activities such as visiting Chinese temples, going to theme parks, taking an excursion to one of the small outlying islands or simply strolling through town to look at the life of the locals. The Hong Kong Tourist Association will set up a booth at the conference venue to provide information and assistance to conference participants who would like to spend some time in Hong Kong.

### ACCOMMODATION

Many 3 to 5-star hotels are located in the area of the conference venue. We are currently negotiating with several of these to obtain a good rate for the conference participants. The hotel list will be placed on the website of the conference soon.

# **TRANSPORTATION**

Direct flights to the Hong Kong Chak Lap Kok International Airport are available at many major airports around the world. From the airport, it takes about 30 to 45 minutes (depending on traffic) to get to the conference venue by taxi and the fare is around U.S. \$30. Alternatively, one can take the airport express train to the Kowloon Station in town (fare is around U.S. \$12), and take free shuttle bus or taxi (around U.S. \$5) to hotels around the conference venue. This way, the total travel time should still be less than an hour.

#### IMPORTANT DATES

Submission of 300 word abstract Acceptance of Notification to authors Submission of Full Conference Paper Acceptance of Final Paper 15 September 2010

1 November 2010

1 February 2011

1 April 2011

Submission of Camera-Ready Manuscript 15 May 2011

# ABSTRACT SUBMISSION

Authors are invited to submit abstracts in English by 15 September 2010 to the website:

#### http://www.ce.ust.hk/rilem2011

There is no specific format for the abstract but it should contain the paper title, names and affiliations of all authors, and a brief description of the work to be presented (within 300 words). The submitted abstract will be reviewed by the Scientific Committee to assess its relevance to the conference, the originality of the work and the potential contributions it can make to engineering science or practice. Notification of acceptance will be sent by 1 November 2010.

# **CONTACT**

For additional information or queries, please email *rilem2011@ust.hk* 



# FIRST ANNOUNCEMENT AND CALL FOR PAPER

# INTERNATIONAL CONFERENCE ON ADVANCES IN CONSTRUCTION MATERIALS THROUGH SCIENCE AND ENGINEERING

5-7 September 2011, Hong Kong SAR, China



Sponsored by



Organized by



# INTRODUCTION

The International Conference on Advances in Construction Materials through Science and Engineering will be organized under the sponsorship of The International Union of Testing and Research Laboratories for Materials and Structures (RILEM), in conjunction with the 65th RILEM Week to be held in Hong Kong SAR, China. This conference can be considered as a sequel to two earlier conferences on Advances in Concrete through Science and Engineering, held in Evanston (2004) and Quebec City (2006) respectively, but with a broader scope to cover other construction materials besides concrete.

While construction activities improve the quality of our lives, they also have significant impact on our environment. The production of construction materials requires energy and generates greenhouse gases. The reduction of carbon footprint for construction materials can start at the production phase, where energy efficient processes can be developed and waste or recycled materials can be employed. However, it is just as important to increase the life of constructed facilities, so the frequency of construction activities can be reduced. Experience over the last few decades has shown that poor material durability is often the cause of pre-mature deterioration of structures, resulting in the need for large scale repair and even reconstruction. Better understanding of the loading and environmental effects on material deformation and failure is required for more durable materials to be designed. Sensing and non-destructive techniques are useful as they enable better quality control and early identification of damages. With the proper repair/strengthening materials and methods, structure life can then be extended with little cost and additional carbon emission. When structures are built to resist extreme loading (e.g., earthquake, hurricane), the innovative use of high performance materials can effectively control damage and prevent collapse. For buildings, carbon footprint will also be greatly reduced if indoor/outdoor heat exchange is decreased. Material with improved thermal insulation. which is an example of functional materials, can then be useful.

The conference will focus on recent advancements in the processing, design and application of construction materials brought along by improved scientific understanding and/or engineering innovations. In particular, we would like to solicit papers under the following themes:

- (1) Environmental Friendly Construction Materials
- (2) Rheology and Material Processing
- (3) Thermal and Hygral Effects
- (4) Novel Testing and Characterization Methods
- (5) Material Damage and Durability

- (6) Sensing and Non-destructive Evaluation
- (7) Strengthening and Repair
- (8) High Performance Construction Materials
- (9) Functional Materials
- (10) Sustainability and Life-Cycle Analysis

# ORGANIZING COMMITTEE

#### **Conference Chair**

Prof. Christopher K.Y. Leung
(Hong Kong University of Science and Technology
(HKUST), Hong Kong)

#### Conference Secretariat

Dr. K.T. Wan (Chu Hai College of Higher Education, Hong Kong)

Mr. Angus K.F. Cheung (HKUST, Hong Kong)

Ms. Emily Ma (HKUST, Hong Kong)

Ms. Bingky Lam (HKUST, Hong Kong)

#### **International Scientific Committee**

Prof. Mark G. Alexander (University of Cape Town, South Africa)

Takayoshi Aoki (Nagoya City University, Japan)

Prof. Carmen Andrade (National Research Council, Spain)
Dr. Hans Beushausen (University of Cape Town, South Africa)

Dr. Peter Billberg (CBI, Sweden)

Prof. Wolfgang Brameshuber (RWTH Aachen, Germany)

Prof. Denys Breysse (Universite Bordeaux 1, France)

Prof. Ravindra Gettu (Indian Institute of Technolgy, Madras)

Prof. J.M. Chandra Kishen (Indian Institute of Science)

Prof. Ole M. Jensen (Technical University of Denmark)

Prof. Weiliang Jin (Zhejiang University, China)

Prof. Xianyu Jin (Zhejiang University, China)

Prof. Bohumil Kasal (Pennsylvania State University, U.S.A.)

Prof. Konstantin Kovler (Technion, Israel)

Prof. Victor C. Li (University of Michigan, U.S.A.)

Prof. Zongjin Li (HKUST, Hong Kong)

Prof. Viktor Mechtcherine (TU Dresden, Germany)

Prof. Hirozo Mihashi (Tohoku Institute of Technology, Japan)

Prof. Hwan-Byung Oh (National Seoul University, Korea)

Prof. Masayasu Ohtsu (Kumamoto University, Japan)

Dr. Manfred Partl (EMPA, Switzerland)

Dr. Carlo Pellegrino (University of Padova, Italy)

Prof. Giovanni Plizzari (University of Brescia, Italy)

Prof. Hans Reinhardt (University of Stuttgart, Germany)

Dr. Nicolas Roussel (LCPC, France)

Dr. Erik Schlangen (Delft University of Technology,

the Netherlands)

Prof. Caijun Shi (Hunan University, China)

Prof. Tongbo Sui (China Building Materials Academy)

Dr. Luping Tang (Chalmers University, Sweden)

Dr. Maria Rosa Valluzzi (University of Padova, Italy)

Prof. Jannie van Deventer (University of Melbourne, Australia)

Prof. Enric Vazquez (UPC, Spain)

Prof. Jun Wei (Central South University, China)

Prof. Jason Weiss (Purdue University)

Prof. Feng Xing (Shenzhen University, China)

Prof. Shilang Xu (Zhejiang University, China)

Prof. Peiyu Yan (Tsinghua University, China)

Prof. Guang Ye (Delft University of Technology, the Netherlands)

Prof. Jun Zhang (Tsinghua University, China)

Prof. Yamei Zhang (Southeast University, China)

# <u>Local Organizing Committee</u>

#### Chair

Prof. Zongjin Li

#### **Secretary**

Dr. K.T. Wan

#### Members

Ir. C.K. Cheung

Dr. W.K. Fung

Ir. Eddie Ho

Prof. K.H. Kwan

Ir. C.S. Lam

Prof. Tommy Lo

Prof. C.S. Poon

Dr. Ricky Tsui

Ir. Raymond Wan

Dr. Jaime Yeung