

# First Announcement and Call for Papers

## First International Conference on Performance-based and Life-cycle Structural Engineering (PLSE 2012)

5-7 December 2012, Hong Kong, China



Organised by

Faculty of Construction and Environment  
The Hong Kong Polytechnic University  
[www.polyu.edu.hk/fce/PLSE2012](http://www.polyu.edu.hk/fce/PLSE2012)

### Aim of the Conference

Both performance-based structural engineering and life-cycle structural engineering are important areas of structural engineering research; they have also been gaining gradual acceptance in structural engineering practice. This conference series is launched to provide an international forum for scientific exchanges in both areas and their interaction. In particular, performance-based life-cycle structural engineering, based on a full integration of the two areas, offers an exciting new direction for structural engineering within the context of sustainable urban development.

### Scope of the Conference

Papers relating to all aspects of the following three themes are invited:

- Performance-based structural engineering
- Life-cycle structural engineering
- Integration of performance-based and life-cycle structural engineering

The following topics are not exhaustive and papers which fall within the three themes of the conference will all be considered:

- Sustainable structural materials
- Deterioration science of structural materials
- Durability enhancement technologies
- Structural performance under extreme loadings
- Structural performance in extreme environments
- Computer simulation of structural performance
- Life-cycle performance assessment and management
- Design and optimization for life-cycle structural performance
- Service life evaluation and extension
- Structural health monitoring in life-cycle performance assessment and management
- Probabilistic approaches in life-cycle performance assessment and management
- Life-cycle cost analysis
- Life-cycle carbon footprint
- End-of-life strategies

### Conference Programme

The three-day conference programme will include keynote lectures, invited lectures, mini-symposia and parallel sessions. English will be the official language of the conference for both oral and written presentation.

### Keynote Speakers



**Prof. Nick Buenfeld**  
Imperial College London



**Prof. Oral Buyukozturk**  
Massachusetts Institute of Technology



**Prof. Gregory G. Deierlein**  
Stanford University



**Prof. Filip C. Filippou**  
University of California, Berkeley



**Prof. Dan M. Frangopol**  
Lehigh University



**Prof. Koichi Maekawa**  
University of Tokyo



**Prof. J.P. Ou**  
Dalian University of Technology



**Prof. Frieder Seible**  
University of California, San Diego



**Prof. Surendra P. Shah**  
Northwestern University

### Important Dates

- |                       |                                      |
|-----------------------|--------------------------------------|
| • 15 January 2012     | Submission of Abstracts              |
| • 1 April 2012        | Submission of Papers                 |
| • 1 June 2012 onwards | Notification of Paper Review Outcome |
| • 1 August 2012       | Submission of Finalized Papers       |

### Organizing Committee

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Ir Dr Eddie Siu Shu LAM      The Hong Kong Polytechnic University

Ir Dr Yuk Lung WONG      The Hong Kong Polytechnic University

### Submission of Abstracts and Enquiries

Abstracts and enquiries should be sent to the Conference Secretariat at [clplse@inet.polyu.edu.hk](mailto:clplse@inet.polyu.edu.hk).