

Sponsoring Organizations:

THE CONCRETE PRODUCERS ASSOCIATION OF HONG KONG LTD.



Gammon



MITSUBISHI ELECTRIC
Changes for the Better

AECOM

BOSA

BOSA TECHNOLOGY (HONG KONG) LTD

KFDN
ADVANCED CONSTRUCTION MATERIALS

STEEL



Supporting Organizations:

CONSTRUCTION INDUSTRY COUNCIL
建造業議會

Hong Kong Concrete Institute
香港混凝土學會

HKICA
Hong Kong Institution of Certified Auditors
香港專業審核師學會

納米及先進材料研究院有限公司
Nano and Advanced Materials Institute Limited

HKGBC
香港綠色建築議會

BEAM
建築環境評估協會

MOSTEC 2015

Materials Science and Technology
in Engineering Conference

Frontiers of Sustainable Materials



24-25 June 2015

Eaton Hotel Hong Kong
380 Nathan Road, Howloon, Hong Kong

Programme &
Registration Form

Organizer

THE HONG KONG INSTITUTE OF ENGINEERS
香港工程師學會

Materials Division
材料分部

MOSTEC 2015

THE HONG KONG INSTITUTE OF ENGINEERS
香港工程師學會

Materials Division
材料分部

Materials Science and Technology
in Engineering Conference

Frontiers of Sustainable Materials

Registration Form

English Name: (Mr/Prof/Dr/Mr/Mrs/Ms) _____
(will be the same to be printed in CPD Certificate)

Chinese Name: _____

Company: _____

Position: _____

Mailing Address: _____

Phone: _____

Fax: _____

Mobile: _____

Email: _____
(please provide email address for receiving confirmation)

HKIE Member Membership No.: _____

Non Member

Enrolment Fee for Conference

Please tick one box

HK\$1,800 (2 days)

HK\$1,500 (Early bird registration before 15 May 2015)

HK\$1,100 (for Materials Engineering Graduates under Scheme A)

- Enrolment fee includes Conference Materials, Tea Breaks, Lunches, and Conference Dinner on 25 June 2015

- CPD certificate will be provided after the conference

Registration & Enquiries

For registration, please send completed registration form to the following address with cheque payable to "HKIE-MATERIALS DIVISION"

Materials Division
MATERIALS DIVISION

PO Box # 79010

Mongkok Post Office, Kowloon

Enquiries: Ms Lai, Conference Secretary

(Tel) 2789 2389 / (Fax) 2789 2390 / (Email) mastec2015@gmail.com



Background

Materials are a large part of our everyday lives and as they develop, so do we. The exciting progress in our living standards over recent decades has been empowered by both the evolution of new materials and renovation of traditional materials bringing innovation, change, efficiency and sustainability into almost every aspect of our society.

At the frontier of sustainable development, leading examples of materials evolution or renovation show how diverse materials can be optimized and utilized for specific applications including energy harvesting and saving, construction of infrastructure, and management of greenhouse gas emission in manufacturing.

The purpose of this conference is to assemble world and local experts across materials engineering and science to actively discuss the latest advances in research and development of sustainable materials, as well as their cutting edge in existing or potential applications.

Theme

The theme of **MOSTEC 2015** is **Frontiers of Sustainable Materials** and topics for discussions include :

- Emerging Materials and Technologies for Sustainable Construction and Repairs
- Energy-efficient Materials and Technologies
- Environmental Sustainability Assessment of Materials

Who should attend?

Engineers and professionals from Government, public authorities, consultants, contractors and materials suppliers.

Academics, scientists and graduates from universities, and public and private research institutions.



Conference Programme

Day 1 (24 June 2015 | 09:00-17:00)

Emerging Materials and Technologies for Sustainable Construction and Repairs

Welcome Speech

Ir Dr. WK FUNG

Chairman, Organizing Committee of MOSTEC 2015

Opening Speech

Ms Ada FUNG, JP

Deputy Director, Hong Kong Housing Department, HKSAR

Keynote Speech

BCA's Roadmap on Sustainable Concrete Construction

Mr. Keat Chuan CHEW

Group Director, Building Engineering Group, Building and Construction Authority, Singapore

An Innovative Method of Recycling Fresh Concrete Waste

Ir Prof CS POON

Hong Kong Polytechnic University

Green Materials based on Alkali Activation Technology for the Sustainable Development for the Construction Industry

Ir Raymond WAN^a, Dr Garrison CHAU^b and Ir Dr. PL NG^b

^a*Optimix (Hong Kong) Limited*
^b*Nano and Advanced Materials Institute Ltd.*

The Future Towards Intelligent Concrete Admixture

Dr Nguyen Van CHANH

HCM City University of Technology, Vietnam

Accelerated and In-situ Tests on Concrete Protection Coating Systems for Hong Kong Sewage Installations

Mr Ka Shing CHAU^a, Mr Siu Yuen CHAN^b, Dr Ricky YC TSUI^b and Ir Prof Lawrence CM WU^a

^a*City University of Hong Kong*
^b*One Group and Partners Hong Kong Ltd.*

From Planar to Volumetric Precast in Housing Authority Projects

Ir Prof Joseph MAK

Chief Structural Engineer (retired), Hong Kong Housing Department, HKSAR

Bridges, Tunnels and a Lot of Concrete – Designed to Last 120 Years or More

Prof Yilmaz AKKAYA

Istanbul Technical University, Turkey

Sustainable Development of Ready-mixed Concrete in Hong Kong

Mr KM CHAN, Mr Kenneth MAK, Mr Casey CHAN and Ir Billy CHEEMA

Concrete Producers Association of Hong Kong Ltd.

Thermal and Acoustic Insulation Performance Studies of Foamed Concrete

Dr HG ZHU

Nano and Advanced Materials Institute Ltd.



Conference Programme

Day 2 (25 June 2015 | 09:00-17:00)

Energy-efficient Materials and Technologies

Keynote Speech

Green Material Application in BEAM Plus Green Building Rating Scheme

Prof John NG^a and Ir Dr Raymond YAU^b

^a*Chairperson and 1st Vice Chairperson, BEAM Society Ltd*

The Development of CLP's Pulverized Fuel Ash (PFA) in Hong Kong

Mr Edward CHOW

China Light and Power Company Ltd.

Mystery of Sustainable Heat Exchanger Material

Mr Masanobu SUZUKI

Overseas Engineering Section Manager, Mitsubishi Electric Makatsugawa Works, Japan

Feasibility Study of Carbon Dioxide Capture on Functionalized Graphene Sheets

Dr Yanjun XIAO, Dr Zhigang DENG and Ir Prof Lawrence CM WU

City University of Hong Kong

A New Perspective on the Use of Phase-change Material in Buildings

Dr Ben YB CHAN

Hong Kong University of Science and Technology

Environmental Sustainability Assessment of Materials

Keynote Speech

Topic to be announced

Mr Kesson LEE

Secretary General, Hong Kong Council for Testing and Certification, HKSAR

Embodied Carbon of Concrete / Steel – Building Structures Using Nonlinear Optimisation

Ir Julian LEE^a, Ir Prof Siu-Lai CHAN^b and Mr Han YU^b

^a*Construction Industry Council Hong Kong*
^b*Hong Kong Polytechnic University*

Sustainable and Energy Saving Coating Materials

Mr Shinji NISHIDA

SK Kaken Co Ltd., Japan

The Development of Photovoltaics/Phase Change Composite Walls System

Dr Hongzhi CUI

College of Civil Engineering, Shenzhen University, China

Closing Speech

Ir Stan CHEESMAN

Chairman, Materials Division, HKIE