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CHU HAI COLLEGE  
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Department of Materials Science and Engineering,  
City University of Hong Kong

MaSTEC 2017

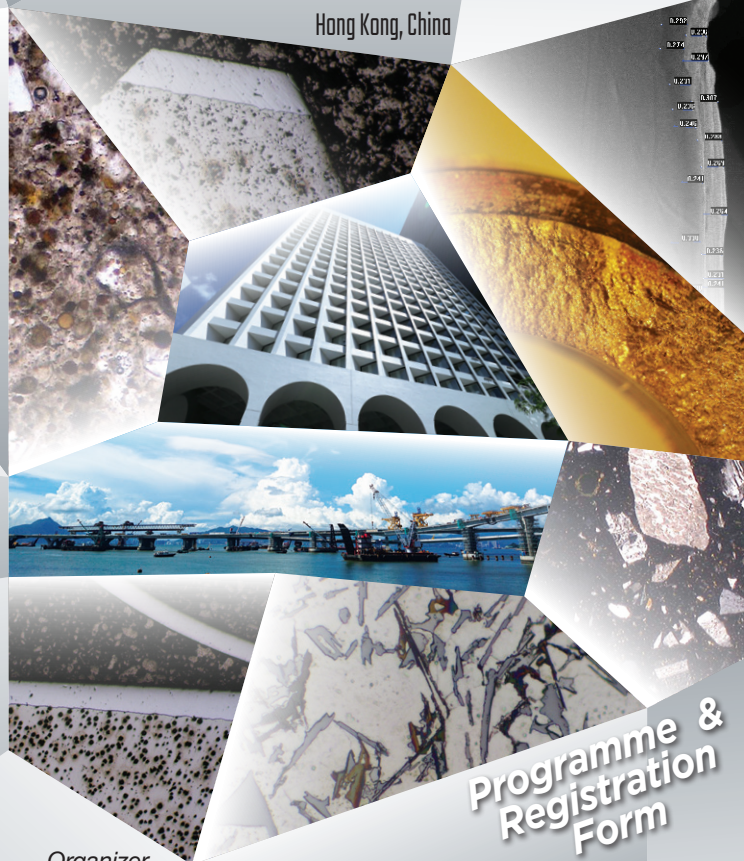
# Materials Science and Technology in Engineering Conference

## Revolutionary Materials

19-20 October 2017

InterContinental Grand Stanford Hong Kong

Hong Kong, China



Organizer



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

Materials Division  
材料分部



Materials Division  
材料分部

# Materials Science and Technology in Engineering Conference

## Revolutionary 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 appropriate box(es)

☐ HK\$2,200 (standard rate)

☐ HK\$1,950 (early bird registration before 1 Sept 2017)

☐ HK\$1,500 (graduate members under HKIE scheme A and full time students)

☐ HK\$700 (optional banquet)

- Enrolment fee includes Conference Materials, Tea Breaks and Lunches.
- Optional Banquet Dinner will be held on 20 October 2017
- 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"

MaSTEC 2017 Conference Secretariat

PO Box # 79010

Mongkok Post Office, Kowloon

Enquiries: Ms Irene So / Mr Eric Lee

(Tel) 2789 2389 / (Fax) 2789 2390 /

(Email) Mastec2017@hotmail.com

## Background

Our world is all about materials. Advances in materials science are the driving forces for innovation in industries. New materials and material technologies bring about innovative designs and new features into products which upgrade our living standards. Developing new products and technologies that add comfort, convenience, safety and sustainability to our daily lives are the main objectives of today's engineers and industrialists.

To achieve these goals, we must strive to enhance the performance of traditional materials, as well as to develop new and revolutionary materials that can meet the demands of the future and bring about innovation, efficiency and sustainability.

The purpose of this Conference is to assemble overseas and local experts to promulgate the latest advances in research and development of new and revolutionary materials, as well as their cutting edge in existing or potential applications.

## Theme

The two-day conference programme will include plenary keynote lectures and topics of interest including, but not limited to, the following:

- Concrete, cementitious materials and steels
- Glass and ceramic materials
- Fire protection materials and coatings
- Nanomaterials, photoelectrical materials and other materials and applications

## Who should attend?

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

Academics, scientists and students from tertiary and research institutions.

## Conference Programme

<b>Day 1 – Revolutionary Materials</b> (09:00-17:00, 19 October 2017)
<b>Welcome Speech</b> <b>Ir Dr WK FUNG</b> <i>Chairman, Organising Committee of MaSTEC 2017</i>
<b>Opening Speech</b> <b>Ir Dr Ming Fong HUI</b> <i>Assistant Director of Buildings, Buildings Department, HKSAR Government, Hong Kong, China</i>
<b>Keynote speech</b> <b>Material Genome Enable Research and Development Revolution</b> <b>Prof Hong WANG</b> <i>State Key Laboratory of Green Building Materials, China Building Materials Academy, Beijing, China</i>
<b>The Future Battery for Electric Vehicles</b> <b>Ir Dr Jonathan CY CHUNG</b> <i>City University of Hong Kong, Hong Kong, China</i>
<b>Advance in Applications of Glass in Modern Constructions</b> <b>Ir Dr Eric CH LIM</b> <i>Safety Accident &amp; Failure Experts Ltd, Hong Kong, China</i>
<b>Transformation of Waste into Sustainable Concrete Material in MTR Shatin Central Link Project</b> <b>Ir Clement YK NGAI and Ir Charles CS PANG</b> <i>MTR Corporation Ltd, Hong Kong, China</i>
<b>Sulphoaluminate Cement Based Application</b> <b>Dr Stefano ALLEVI</b> <i>Italcementi Italy, Heidelberg Cement Group, Italy</i>
<b>Keynote speech</b> <b>Research and Applications of Ultra-high Performance Concrete</b> <b>Prof Jiaping LIU</b> <i>Southeast University, Nanjing, China</i>
<b>Effects of Micro-silica and Nano-silica on Fresh and Hardened Properties of Mortar</b> <b>Ir Prof Albert KH KWAN</b> <i>University of Hong Kong, Hong Kong, China</i>
<b>Nano Engineered Ultra-high Performance Concrete: The Basis for a Family of Advanced Concrete Products</b> <b>Ir Peter W WEBER</b> <i>ceEntek Pte Ltd, Singapore</i>
<b>Nano-foam, Lighter and Stronger Material for Tomorrow's Green Buildings</b> <b>Dr Tomi NISSINEN</b> <i>Nano and Advanced Materials Institute Ltd, Hong Kong, China</i>
<b>Application of the Anti-microbial Properties of Nano-photocatalyst to Combat Hygienic and Environmental Nuisance</b> <b>Mr Kenji TAKEI<sup>1</sup> and Ir Dr Jamie SK YEUNG<sup>2</sup></b> <i><sup>1</sup>Souki Incorporation, Japan and <sup>2</sup>Score Holdings Ltd, Hong Kong, China</i>

## Conference Programme

<b>Day 2 – Leading Technologies</b> (9:00-17:00, 20 October 2017)
<b>Keynote Speech</b> <b>Advanced Precast Technology in Japan</b> <b>Prof Yuji ISHIKAWA</b> <i>University of Tokyo, Tokyo, Japan</i>
<b>Research and Development on Taiwan New Reinforced Concrete Project and Bond Behaviours of High Strength Threaded Bar</b> <b>Dr Ker Chun LIN</b> <i>National Centre for Research on Earthquake Engineering (NCREE), National Applied Research Laboratories (NARLabs), Taiwan, China</i>
<b>Behaviour of Jute FRP Tube Encased Recycled Aggregate Concrete</b> <b>Prof Liang HUANG</b> <i>Hunan University, Changsha, China</i>
<b>High-fiber Slabs: Extended Joint Spacing</b> <b>Ir Su Hung CHIN</b> <i>Forta Corp, USA</i>
<b>Applications of Epoxy Adhesives in Civil Engineering</b> <b>Dr Ren SHAN and Dr Bo PENG</b> <i>Hunan Goodbond Construction Technic Development Co Ltd, Changsha, China</i>
<b>Extending the Service Life of Concrete Structures from a Scientific and Holistic Point of View</b> <b>Prof Weizu QIN</b> <i>Tsinghua University, Beijing, China</i>
<b>State of the Art Admixture for Improving Concrete Rheology</b> <b>Ir Kiat Huat SEOW</b> <i>BASF Construction Chemicals (China) Co, Ltd, Shanghai, China</i>
<b>Alkali-aggregate Reactivity Research of River Sand for Concrete in Macau</b> <b>Mr David Ker Chiun TSENG</b> <i>The Macau Laboratory of Civil Engineering (LECM), Macau, China</i>
<b>Assessment of Harmful Clay in Aggregate and the Newly Innovative Clay Mitigation Technology</b> <b>Dr Jiabiao JIANG</b> <i>GCP (Singapore) Pte Ltd, Singapore</i>
<b>Review of Passive Fire Protection Materials Adopted in Hong Kong</b> <b>Ir Prof Yuk Lung WONG</b> <i>Chu Hai College of Higher Education, Hong Kong, China</i>
<b>A Pseudo-ductile Hybrid PVA/PET Fiber Reinforced Cementitious Composite for Waterproofing Applications</b> <b>Ir Prof Christopher KY LEUNG and Dr Jing YU</b> <i>Hong Kong University of Science and Technology, Hong Kong, China</i>
<b>Closing Speech</b> <b>Ir Prof Joseph Yiu Wing MAK</b> <i>Materials Division, Hong Kong Institution of Engineers, Hong Kong, China</i>