



26  
Jun  
2018

Tuesday

## GREEN MATERIAL RESOURCES FOR SUSTAINABLE CONSTRUCTION INDUSTRY

### Co-organised by



### Symposium Details

**Date:** 26 June 2018 (Tuesday)  
**Time:** 9:00 – 17:10 (Registration starts at 8:30 am)  
**Venue:** Room N002, Block N, The Hong Kong Polytechnic University  
**Language:** English

### Supporting Organizations

ice | hong kong

The Institution  
of Structural  
Engineers

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

Environmental Division  
環境分部



香港廢物管理學會  
Hong Kong Waste Management Association



香港  
鋼結構學會  
Hong Kong Institute of  
Steel Construction



RESEARCH INSTITUTE  
FOR SUSTAINABLE URBAN DEVELOPMENT  
可持續城市發展研究院

### Enquiry

Dr. Songye ZHU, t: 3400 3964  
Dr. Zhen LENG, t: 2766 6007  
Email: [ascehk@ust.hk](mailto:ascehk@ust.hk)

### Certificate

One-day CPD certificate will be issued.

## HIGHLIGHTS OF SYMPOSIUM

- Approach and challenges for managing huge volumes of inert construction waste
- Application of recycled PET fibers as a low-cost and green constituent of pseudo-ductile cementitious composites
- Upcycling of wastes into sustainable pavement material
- Application of fire resisting wall blocks, repair mortar, recycled aggregates in construction industry
- Eco-friendly paving blocks
- Green construction materials and their characterization

## INVITED SPEAKERS

- Ir. Prof. C.S. POON, The Hong Kong Polytechnic University
- Ir. Peter MOK, Fill Management Division, Civil Engineering and Development Department
- Ir. Prof. Christopher K.Y. LEUNG, Hong Kong University of Science and Technology
- Mr. David PEGG, Ove Arup & Partners Hong Kong Ltd
- Ir. Prof. Kaimin SHIH, The University of Hong Kong
- Dr. Ivan SHAM, Director, Nano & Advanced Materials Institute
- Dr. Zhen LENG, The Hong Kong Polytechnic University
- Mr. Dixon CHAN, Tiostone Environmental Ltd

## COURSE FEE

Fee	Eligibility
HK\$700	<ul style="list-style-type: none"><li>• Members of ASCE or other supporting organizations; <i>or</i></li><li>• Alumni of PolyU or HKU; <i>or</i></li><li>• Early-bird registration (payment made on or before 15 June 2018, postmarked); <i>or</i></li><li>• Group registration (≥4 person)</li></ul>
HK\$800	Other regular registration
HK\$300	ASCE Student member

Fee includes lecture notes, tea/coffee and an attendance certificate. Lunch is not included.

## CERTIFICATE

This Symposium is recommended for one CPD day.

## ENQUIRY

Dr. Songye ZHU      t: 3400 3964  
Dr. Zhen LENG      t: 2766 6007

Email:  
[ascehk@ust.hk](mailto:ascehk@ust.hk)

## PROGRAMME

8:30 – 9:00	<b>Registration</b>
9:00 – 9:15	<b>Welcoming Address</b>
9:15 – 9:55	<b>Recycling of Waste Glass in Construction Materials</b> <i>Prof. C S POON, The Hong Kong Polytechnic University</i>
9:55 – 10:35	<b>Public Fill Management in Hong Kong – Approach and Challenges</b> <i>Ir. Peter MOK, Fill Management Division, Civil Engineering and Development Department</i>
10:35 – 10:55	<b>Coffee Break</b>
10:55 – 11:35	<b>Development of Pseudo-ductile Cementitious Composites with Recycled PET Fibers</b> <i>Prof. Christopher K.Y. LEUNG, Hong Kong University of Science and Technology</i>
11:35 – 12:15	<b>The Urban Bio Loop</b> <i>Mr. David PEGG, Ove Arup &amp; Partners Hong Kong Ltd</i>
12:15 – 12:20	<b>Souvenir presentation</b>
12:20 – 14:00	<b>Lunch (not included in registration fee)</b>
14:00 – 14:40	<b>Mineral Phase Characterizations for Producing Safe and Reliable Green Construction Materials</b> <i>Prof. Kaimin SHIH, The University of Hong Kong</i>
14:40 – 15:20	<b>Recycling-in-Action: Waste Materials for Buildings and Construction</b> <i>Dr. Ivan ML SHAM, Nano &amp; Advanced Materials Institute (NAMI), Hong Kong</i>
15:20 – 15:40	<b>Coffee Break</b>
15:40 – 16:20	<b>Value-Added Application of Waste Plastic Based Additives in Paving Mixtures Containing High Percentage of Reclaimed Asphalt Pavement</b> <i>Dr. Zhen LENG, The Hong Kong Polytechnic University</i>
16:20 – 17:00	<b>The Application and Commercial Value of Environmentally Friendly Construction Materials in Hong Kong</b> <i>Mr. Dixon CHAN, Tiostone Environmental LTD</i>
17:00 – 17:10	<b>Closing Remarks and Souvenir Presentation</b>
17:10	<b>Distribution of CPD Certificates</b>

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## ABOUT THE SPEAKERS

### ***Ir. Prof. Chi Sun POON, The Hong Kong Polytechnic University***

Ir Prof. Chi Sun Poon is currently Chair Professor of Sustainable Construction Materials and Associate Head of the Department of Civil and Environmental Engineering of The Hong Kong Polytechnic University. He obtained his PhD from Imperial College, London and spent two years as a Research Fellow at Oxford University specializing in cement and concrete research. He now specializes in the teaching and research of construction materials and waste management. His research covers the recycling of construction waste, waste glass, incineration ashes, waste wood and rubber tyres. He pioneered the development of the Eco-block technology for turning wastes into construction materials. His developed recycling technologies have been successfully commercialized and he has been awarded various local, national and international prizes. He has published over 500 papers in international journals and conferences (with >350 journal publications). He served on the Advisory Council on the Environment and the Council for Sustainable Development. He is now a member of the Recycling Fund Advisory Committee. He has been appointed as a Justice of Peace by the Government since 2013. He is also an Editor of Construction and Building Materials.

### ***Ir. Peter MOK, Manager, Chief Engineer, Fill Management Division, Civil Engineering and Development Department, The Government of the Hong Kong Special Administrative Region***

Ir Peter MOK is the Chief Engineer/Fill Management of Civil Engineering and Development Department (CEDD), HKSAR Government. He joined the Government upon graduation from the University of Hong Kong in the 1980s. He has worked in the planning and implementation of the developments of Tin Shui Wai, Central Reclamation and Kai Tak. He has also been involved in a series of site formation, infrastructure and dredging projects. Ir MOK is now responsible for the management of public fill and dredged sediment in Hong Kong providing vital services for the construction industry.

### ***Ir. Prof. Christopher K.Y. LEUNG, Hong Kong University of Science and Technology***

Dr. Christopher K. Y. Leung is Professor of Civil and Environmental Engineering at the Hong Kong University of Science and Technology. His research interests are in the general area of construction materials, covering fracture mechanics, composite mechanics, fiber optic sensing and the application of composites in civil engineering. Prof. Leung has delivered keynote and plenary lectures at many international conferences around the world. He has received a number of research-related awards including the Best Applied Research Paper Award from ASCE Journal of Composites in Construction, the First Class Award in Natural Sciences from the China Ministry of Education and the Second Class State Natural Science Award from the China State Department. He served as the Honorary President of RILEM (International Union of Laboratories and Experts in Construction Materials, Systems and Structures) in 2011 and is elected Fellow of 6 international institutions/associations. He has also served as Chairman of the HKIE Materials Division and Chair of the HKAS Working Party on Construction Materials.

### ***Dr. Ivan ML SHAM, Director of Research & Development (Construction), Director of Smart Construction Materials Lab (Centre of Excellence), Nano & Advanced Materials Institute (NAMI), Hong Kong***

Dr. Ivan Sham is responsible for the strategic technology developments of the sector at NAMI and collaborations with the construction industries and academia. He received his Ph.D. in Mechanical Engineering from the HK University of Science & Technology and MBA from the University of Strathclyde (UK), with major in innovation management. His research interests include advanced fibre reinforced and nanostructured composites materials, concrete materials, surface modifications and finite element analysis. Dr. Sham has 50+ publications in international peer reviewed journals/conferences, 12+ granted patents in US/CN, and 10 local/international awards.

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***Ir. Prof. Kaimin SHIH, The University of Hong Kong***

Ir Professor Kaimin Shih received his Ph.D. and the postdoctoral training at Stanford University. He has been leading an “Environmental Materials” research group in the Department of Civil Engineering at the University of Hong Kong since 2008, and their work is primarily to engineer and employ material properties for innovative environmental and construction applications. Professor Shih is particularly interested in studying the pollutant behavior in solid matrices and at water-mineral interfaces. He has carried out research projects related to waste-to-resources, environmentally-friendly ceramics, metal leaching behavior of construction materials, urban environmental pollutants, and water facility materials. Professor Shih currently also serves as executive committee members in 5 environmental associations, and as an editor and associate editor in 4 peer-reviewed scientific journals. In 2014, he received university’s Outstanding Teaching Award for his extraordinary contribution to the environmental engineering education at HKU. Further details about Professor Shih’s research activities can be found at <http://web.hku.hk/~kshih/>.

***Mr. David PEGG, Director of Infrastructure, Ove Arup & Partners Hong Kong Ltd***

Mr. David Pegg is a Director with Arup who leads the resources team responsible for design and construction of waste treatment facilities. He is an Executive member of the Hong Kong Waste Management Association.

***Dr. Zhen LENG, The Hong Kong Polytechnic University***

Dr. Zhen Leng is an Associate Professor at The Hong Kong Polytechnic University. His research interests mainly include sustainable pavement materials and technologies, eco-efficiency analysis and life cycle assessment, and nondestructive evaluation of transportation infrastructure. His research projects have been funded by various sources such as the Research Grant Council, Construction Industry Council, Environmental Conservation Fund, Highways Department, and Environmental Protection Department in Hong Kong, and Federal Aviation Administration, Association of American Railroad, and Illinois Department of Transportation in the US. He is currently the Director of the ASCE Hong Kong Section, and the Executive Board Member and Honorary Deputy Treasurer of the Hong Kong Society for Transportation Studies (HKSTS). He also serves as the Associate Editor of the Journal of Cleaner Production and ASCE Journal of Transportation Engineering, Part B: Pavements, and the Editorial Board Member of the International Journal of Road Materials and Pavement Design, and the International Journal of Pavement Research and Technology.

***Mr. Dixon CHAN, General Manager, Tiostone Environmental LTD***

Mr. Dixon Chan graduated from McMaster University in Ontario, Canada and holds a B. Eng degree and a M. A. Sc. degree. He served as a research associate in Hong Kong Polytechnic University between 2003 and 2006. Dixon Chan is one of the founders and directors of Tiostone Holdings Ltd (THL). THL owns different trading firms and factories across Hong Kong and South East Asia for trading and producing environmentally friendly construction materials to serve the demands of the local construction industry of different regions.

**ASCE ONE-DAY SYMPOSIUM**  
**Green Material Resources for Sustainable Construction Industry**

26 June 2018, N002, The Hong Kong Polytechnic University

**Registration Form**

Name: \_\_\_\_\_  
(Last Name) (First Name)

Office Tel.: \_\_\_\_\_ Mobile: \_\_\_\_\_

Email: \_\_\_\_\_ Company: \_\_\_\_\_

Membership (if applicable): \_\_\_\_\_  
(ASCE/PolyU/HKU/ICE/HKIE/IStructE/HKEMA/RISUD/HKISC)

Membership No. (if applicable): \_\_\_\_\_

**Group Registration** (please use separate sheets as necessary)

No.	Last Name	First Name	Email	Phone
1	(Contact person as shown above)			
2				
3				
4				
5				
6				
7				
8				

**Payment**

I enclose a crossed cheque no. \_\_\_\_\_ (Bank: \_\_\_\_\_)

for the amount of HK\$ \_\_\_\_\_ x \_\_\_\_\_ person = HK\$ \_\_\_\_\_

**Remarks**

- All payments are non-refundable once booking is confirmed
- Please make a cheque payable to "**American Society of Civil Engineers – Hong Kong Section**" and post to:

Dr Songye ZHU, Department of Civil & Environmental Engineering,  
The Hong Kong Polytechnic University, Hung Hom, Kowloon

- Seat will be confirmed when payment is received.
- ASCE Hong Kong reserves the right to cancel or reschedule the conference at its discretion

**Enquiry**

Dr Songye ZHU

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t: 3400 3964



# Campus Map

## 校園地圖

### KEY TO CAMPUS MAP 校園索引



### Location Map of Off-Campus Venues 校外場所位置圖



1. PolyU Main Campus  
香港理工大學主校園
2. Student Halls of Residence (Hung Hom)  
學生宿舍 (紅磡)
3. Student Halls of Residence (Hornet)  
學生宿舍 (角角)
4. Hong Kong Community College (Hung Hom Bay)  
香港社區學院 (紅磡灣校園)
5. Hong Kong Community College (Wai Kwoon)  
香港社區學院 (西九龍校園)
6. PolyU Kowloon Tong Campus  
香港理工大學 (九龍塘校園)
7. Off Campus Housing (OOH - Shan Tung Street)  
校外宿舍 (山塘街)
8. Off Campus Housing (OOH - Hillwood Road)  
校外宿舍 (山景路)
9. Off Campus Housing (OOH - Yu Chau Street)  
校外宿舍 (油洲街)



Online campus map: <http://www.polyu.edu.hk/fmo/eMap/CampusMap.pdf>