

## Concurrent session 6-1: Materials Physics and Engineering

Friday, July 27, 2018

14:00 – 17:50	<b>Concurrent session 6-1: Materials Physics and Engineering</b>
<b>Venue:</b>	<b>Anthony Lau Building (E4), E4-3062</b>
<b>Chairpersons:</b>	<b>1. Changwen Miao 2. Zongjin Li</b>
14:00 – 14:35	<b>Keynote presentation</b>
	<b>Micromechanical Modeling of Strain Hardening Cementitious Composites</b> Christopher K Leung, The Hong Kong University of Science and Technology. MC: Changwen Miao
14:35 – 15:35	<b>Invited presentations</b>
14:35 – 14:55	<b>The relation of sorptivity and capillary coefficient for water transport in mortar</b> Yunsheng Zhang, Southeast University. MC: Changwen Miao
14:55 – 15:15	<b>Application of embedded piezoelectric transducers in concrete</b> Dongyu Xu, University of Jinan. MC: Changwen Miao
15:15 – 15:35	<b>How to effectively use graphene oxide to reinforce cementitious composites</b> Zeyu Lu, The Hong Kong University of Science and Technology. MC: Changwen Miao
16:00 – 16:30	Tea/coffee break, poster, discussion
16:30 – 17:50	<b>Invited presentations</b>
16:30 – 16:50	<b>Development of low drying shrinkage foamed concrete</b> Kaitai Wan, Brunel University London. MC: Zongjin Li
16:50 – 17:10	<b>Flaw characterization and correlation with cracking strength in SHCC</b> Cong Lu, Southeast University. MC: Zongjin Li
17:10 – 17:30	<b>Development of structural-functional integrated energy storage concrete with innovative macro-encapsulated PCM</b> Haibin Yang, Shenzhen University. MC: Zongjin Li
17:30 – 17:50	<b>Engineering properties of Pb contaminated clay with nZVI treatment</b> Wanhuan Zhou, University of Macau. MC: Zongjin Li
<b>After 18:00</b>	<b>Banquet Dinner (Hotel: Galaxy Macau, Bus pick-up point &amp; time: E4 G/F Lobby @ 18:00 pm)</b>

**Saturday, July 28, 2018**

<b>09:00 – 12:00</b>	<b>Concurrent session 6-1: Materials Physics and Engineering</b>
<b>Venue:</b>	<b>Anthony Lau Building (E4), E4-3062</b>
<b>Chairpersons:</b>	<b>1. Guoxing Sun 2. Wanhuan Zhou</b>
<b>09:00 – 09:35</b>	<b>Keynote presentation</b>
	<b>Numerical modeling of hydration and microstructure development of cement-based materials</b> Caijun Shi, Hunan University. MC: Guoxing Sun
<b>09:35 – 10:35</b>	<b>Invited presentations</b>
09:35 – 09:55	<b>Biomimetic superhydrophobic surface of concrete: Topographic and chemical modification by a direct spray method</b> Wei She, Southeast University. MC: Guoxing Sun
09:55 – 10:15	<b>Influence of concrete micro-dispersant on cement hydration</b> Yanfeng Zuo, Institute of Building Materials Technology Information. MC: Guoxing Sun
10:15 – 10:35	<b>Transportation model of calcium silicate hydrate in mesoscale: a molecular dynamic study</b> Ming Sun, The Hong Kong University of Science and Technology. MC: Guoxing Sun
10:35 – 11:00	Tea/coffee break, poster, discussion
<b>11:00 – 12:00</b>	<b>Invited presentations</b>
11:00 – 11:20	<b>Effect of fly ash microsphere on the rheology and microstructure of alkali-activated fly ash/slag pastes</b> Tao Yang, Yancheng Institute of Technology. MC: Wanhuan Zhou
11:20 – 11:40	<b>Fire resistant eco concrete blocks containing waste glass</b> Binmeng Chen, Nano and Advanced Materials Institute Ltd. . MC: Wanhuan Zhou
11:40 – 12:00	<b>Application of nanocomposites in construction materials</b> Guoxing Sun, University of Macau. MC: Wanhuan Zhou
<b>12:00 - 14:00</b>	<b>Buffet Lunch (venue: UM Chao Kuang Piu College, W21-G019)</b>