

Day 1: 14 December 2023 (Thursday)			
Poster Sessions (10:15 – 10:45 & 16:05 – 16:30)			Podium, Block Z
1	Use of volcanic ash from Tajogaite (La Palma, Canary Islands) as alkali-activated binder precursor	Josep Ma. Chimenos	Universitat de Barcelona
2	Investigation of mechanical properties and microstructural evolution of cementitious materials containing waste clay brick powder at low water-cement ratio	Shujun Li	Southeast University
3	Recycling of municipal solid wastes for the preparation, microstructural evolution and mechanical properties of belite-rich low-carbon eco-cements	Lu Zhu	The Hong Kong Polytechnic University
4	The influence of biochar on the immobilization of heavy metals in asphalt rubber	Fuliao Zou	The Hong Kong Polytechnic University
5	CO <sub>2</sub> sequestration and upcycling of carbonated $\gamma$ -C <sub>2</sub> S binders via thermal activation	Zhe Yu	Hunan University
6	Enhancing the treatment efficiency of recycled concrete fines with aqueous carbonation	Yi Jiang	The Hong Kong Polytechnic University
7	Assessing the rheology and buildability of 3D printed mortar with CO <sub>2</sub> modification	Kaiyin Zhao	The Hong Kong Polytechnic University
8	Bonding properties between 3D printed recycled coarse aggregate concrete and rebar	Huawei Liu	The Hong Kong Polytechnic University
9	Preparing carbon-negative vaterite cement from recycled concrete fines: A promising approach	Jiankai Xie	The Hong Kong Polytechnic University
10	Carbonized recycled coarse and fine aggregate preparation for concrete blocks to achieve ultra-low or negative carbon	Qinglong Qin	The Hong Kong Polytechnic University
11	Valorization and enhancement mechanism of ferrochrome slag as aggregate for manufacturing ultra-high performance concrete (UHPC)	Yuanyuan Zhu	Southeast University
12	Development and characteristics of carbonation-enhanced high-strength foam concrete (HSFC): Towards high structural efficiency and carbon sequestration	Dingqiang Fan	The Hong Kong Polytechnic University
13	Graphite modified recycled aggregates towards a highly heat-conductive concrete	Chen Chen	Southeast University
14	Development of an ecological ambient-cured one-part geopolymers utilizing municipal solid waste incineration bottom ash	Syed Farasat Ali Shah	The Hong Kong Polytechnic University

Day 1: 14 December 2023 (Thursday)			
Poster Sessions (10:15 – 10:45 & 16:05 – 16:30)			Podium, Block Z
15	The effect of SCMs on the resistance of steam-cured concrete to chloride attack in the tidal zone of real marine environment	Tengfei Guo	Southeast University
16	The intrinsic change of biochar in biochar-cement based construction materials: insights from structural, chemical and mechanical properties	Weijian Xu	The Hong Kong Polytechnic University
17	Evaluation and comparison of the environmental footprint of two repair mortars through a life cycle assessment	Joan Formosa Mitjans	Universitat de Barcelona
18	Influence of fly ash on the early-stage hydration kinetics of Portland cement	Jionghuang He	The Hong Kong Polytechnic University
19	Effects of seawater on the hydration, properties, and structure of aluminates phases in cement	Yamei Cai	The Hong Kong Polytechnic University
20	From waste to valuable products: investigation of carbonation processes within the “BBCIRCLE” project	Alessandra Masi	University of Rome Tor Vergata
21	First 60 min behavior of fresh properties and reaction mechanisms of cement pastes intermixed with CO <sub>2</sub>	Shuang Luo	Hunan University
22	Green recycling of CFRP composites in atmospheric environment	Xiangfei Wang	Shenzhen University
23	Accelerated carbonation of recycled concrete aggregate in semi-wet environments: A promising technique for CO <sub>2</sub> utilization	Yining Gao	The Hong Kong Polytechnic University
24	Utilization of low-grade glass as a partial replacement of cementitious materials and river sand in ultra-high performance concrete	Xudong Zhao	The Hong Kong Polytechnic University
25	Enchantment of architectural luminescent-glass mortar (ALM) properties with encapsulation of white-color powder	Jinxin Wei	Hunan University
26	Production of lightweight aggregates from waste glass and incinerated sewage sludge ash	Yujie Huang	The Hong Kong Polytechnic University
27	Blending efficiency of reclaimed asphalt rubber pavement and its cracking resistance	Danning Li	The Hong Kong Polytechnic University
28	Environmental implications of waste-derived polyhydroxyalkanoate composites as construction materials	Jaewook Myung	Korea Advanced Institute of Science & Technology

Day 2: 15 December 2023 (Friday)			
Poster Sessions (10:15 – 10:45 & 16:00 – 16:30)			Podium, Block Z
1	Recycling of incinerated sewage sludge ash and waste glass powder in cementless binders for sewer rehabilitation	Hafiz Asad Ali	The Hong Kong Polytechnic University
2	Use of fly ash in promoting carbonation of steel slag block	Jie Li	Hunan University
3	Employment of silica fume in the interfacial transition zone in high-volume fly ash concrete	Soufian El Mghari	Yanshan University
4	Production of pure vaterite via leaching-carbonation of BOFS	Qifeng Song	Hunan University
5	Mechanochemical carbonation of recycled concrete fines: Towards a high-efficiency recycling and CO <sub>2</sub> sequestration	Yingliang Zhao	The Hong Kong Polytechnic University
6	Utilizing waste cement for carbon dioxide sequestration and capture: The role of water content on the growth of calcium carbonate during the carbonation process of hydrated cement	Zihan Ma	The Hong Kong Polytechnic University
7	Investigation of recycled carbon fiber felt as a promising material for capacitive deionization (CDI) electrodes in industrial applications	Jiuyi Liu	Shenzhen University
8	Geotechnical applicability of cement-stabilized fiber-reinforced incinerator bottom ash composites	Sanjeev Kumar	Dr BR Ambedkar National Institute of Technology Jalandhar
9	Designing magnesium phosphate cement for stabilization/ solidification of Zn-rich electroplating sludge	Yuying Zhang	The Hong Kong Polytechnic University
10	A zero-waste strategy to transform Bayer red mud into clean glass fiber and cast iron	Ziwei Chen	The Hong Kong Polytechnic University
11	Effect of waste glass powder on improving the resistance ability of elevated temperature for ultra-high performance concrete	Weichen Tian	The Hong Kong Polytechnic University
12	Preparation and characterization of porous glass lightweight aggregate	Weiyi Ji	The Hong Kong Polytechnic University
13	Influence of alkali metal cations on the atomic structure and mechanical properties of geopolymers gel phase: Insights from molecular simulations	Sergey Tsvetkov	Novosibirsk State University
14	Ultra-stabilized foam improved by amphiphilic nano silica for foam concrete	Chunpeng Zhang	The Hong Kong Polytechnic University

Day 2: 15 December 2023 (Friday)			
Poster Sessions (10:15 – 10:45 & 16:00 – 16:30)			Podium, Block Z
15	Utilization of contaminated air pollution control residues for the preparation of alkali/sulfate-activated slag/glass powder	Keke Sun	The Hong Kong Polytechnic University
16	The potential use of carbonated recycled concrete fines with sodium meta-aluminate for synthesizing alkali-activated materials	Weiwei Chen	The Hong Kong Polytechnic University
17	Sustainable reuse of modified incineration sewage sludge ash (M-ISSA) for stabilization of highly As-contaminated soil	Shengya Gao	The Hong Kong Polytechnic University
18	Building a sustainable future: Evaluating environmental impact and eco-efficiency of prefabricated vs. cast-in-situ construction in rapidly urbanizing India	Harshal Tikam	Indian Institute of Technology Kanpur
19	Eco-cement synthesized from municipal solid waste incineration bottom ash and recycled concrete fine	Hanxiong Lyu	The Hong Kong Polytechnic University
20	Integrated deep learning and life-cycle cost analysis model to estimate the sustainability of tall buildings in Hong Kong with the climate change impacts	Siqi Cao	The Hong Kong University of Science and Technology
21	A roadmap for environmental assessment in building construction: Integrating LCA with India-specific footprint	Abhiram Shukla	Indian Institute of Technology Kanpur
22	Life-cycle assessment of low and high water mixed cement pastes: Comparative study of fast-curing methods	Xin Shao	Hunan University
23	A novel foaming-sintering technique for developing eco-friendly lightweight aggregates for high performance concrete	Zuwang Bian	The Hong Kong Polytechnic University
24	A new superhydrophobic interface construction technology for low carbon concrete: In-situ self-generation of micro-/nano-structures	Long Jiang	The Hong Kong Polytechnic University
25	Study on chemical method to simulate the cementitious property of steel slag	Wenzheng Li	Dalian University of Technology
26	Fractal hydration evolution of a sustainable low water/binder cementitious composite: Experiments and simulation	Kangning Liu	The Hong Kong Polytechnic University
27	Rapid CO <sub>2</sub> catalytic activation of binary cementing system of CSA and Portland cement	Yang Liu	The Hong Kong Polytechnic University
28	Preparation of reactive seedings by in situ precarbonation under power ultrasound-assisted mixing: Enhancing the hydration and mechanical properties of OPC	Guangqi Xiong	The Hong Kong Polytechnic University

