

ReACT2024

The 1st International Conference on **Research and Application of Carbonation Technology for Wastes and Concrete**

11 – 13 December 2024

The Hong Kong Polytechnic University, Hong Kong

<https://events.polyu.edu.hk/ReAct2024/>



Important Dates

- End of abstract submission: ~~31 May 2024~~ **31 July 2024**
- Notification of acceptance of abstracts: ~~17 June 2024~~ **16 August 2024**
- Early-bird and presenter registration deadline: 1 September 2024
- Registration deadline for non-presenters: 1 October 2024
- Welcome reception: 11 December 2024
- Conference: 12 - 13 December 2024

List of Topics

- (a) Carbonation of solid wastes including recycled concrete wastes, steel slag, red mud, incineration ashes and other alkali wastes, etc.
- (b) CO₂ activation of fresh and hardening concrete
- (c) CO₂ activation of waste powders (e.g. steel slag, recycled cement powder, ashes)
- (d) Integration of waste and CO₂ for construction products (e.g. aggregate and blocks)
- (e) Biomineralisation of waste and concrete
- (f) Direct air carbonation
- (g) Carbonatable binders
- (h) Theory of carbonation
- (i) Life cycle analyses and quantification of CO₂ uptake
- (j) Upscaling and application case studies
- (k) Other advanced mineral carbonation materials and technologies

Conference Chairs

Prof. Chi-sun POON

Director of Research Centre for Resources Engineering towards Carbon Neutrality

Chair Professor of Sustainable Construction Materials

Head of Department of Civil and Environmental Engineering

The Hong Kong Polytechnic University, Hong Kong

Prof. Tung-chai LING

Professor

College of Civil Engineering

Hunan University, China

Keynote Speakers *(in alphabetical order of surname)*



Dr Warda ASHRAF

The University of Texas at Arlington, USA



Prof. Liwu MO

Nanjing Tech University, China



Prof. Takafumi NOGUCHI

The University of Tokyo, Japan



Prof. Chi-sun POON

The Hong Kong Polytechnic University, Hong Kong



Prof. Cise UNLUER

The University of Manchester, UK



Prof. Fazhou WANG

Wuhan University of Technology, China



Dr Maciej ZAJAC

Heidelberg Materials AG, Germany

For inquiry, please contact react.2024hk@polyu.edu.hk