

## Advanced & Innovative Materials (AIM) Group

Based in the Department of Civil, Environmental and Geomatic Engineering (CEGE) at UCL, the AIM Group is an internationally recognised research group aimed at promoting industry-driven, interdisciplinary research in material science and engineering. The main research areas covered by AIM include *novel and low carbon cementitious materials, immobilisation of nuclear wastes with cementitious materials and durability of cementitious materials.*

## University College London

Founded in 1826, UCL is London's leading multidisciplinary university, with around 50,000 students and 16,000 staff from over 150 different countries. It is a member of the Russell Group and G5 Group, and is consistently ranked as one of the world's leading universities (currently ranked No 9 in the world by QS). The Department of Civil, Environmental & Geomatic Engineering is a multidisciplinary department with a long tradition of excellence in teaching and research and currently holds the largest EPSRC research portfolio in civil engineering.

## Around UCL

Located at the heart of central London, UCL is within walking distance to several major transport hubs, including the Eurostar terminal at St Pancras International, and King's Cross and Euston stations.

**British Museum** – one of the world's most famous museums you should not miss when you visit London.



**Oxford Street** – one of the largest shopping streets in Europe, with more than 300 shops and designer outlets.



**Regent's Park** - one of the Royal Parks of London which also features more than 12,000 roses of 400 varieties.



## Call for abstracts

Authors are invited to submit one-page abstracts (up to 300 words without figures and tables) for selecting, grouping sessions and allocating oral/poster presentations. Please submit abstracts by **1<sup>st</sup> February 2024**. **Extended abstract (maximum 4 pages) should be submitted by 1<sup>st</sup> May 2024**, prepared according to the template which will be provided on the conference website. All submissions should be made through the portal on the conference website.

## Sponsorship-Exhibition

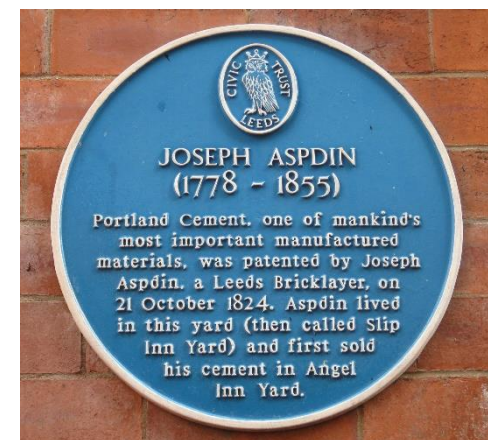
A range of exhibition and sponsorship packages will be available. Details are available on the conference website.

## The 2<sup>nd</sup> International Conference on Innovation in Low-Carbon Cement and Concrete Technology (ILCCC2024)

8<sup>th</sup> - 10<sup>th</sup> July, 2024

London, U. K.

With a special tribute to bicentenary of Joseph Aspdin's patent for Portland cement



Advanced & Innovative Materials (AIM) Group, University College London (UCL)



## Background

The construction industry has been under pressure to shift towards sustainability by manufacturing Portland cement in energy saving ways and developing alternative low-carbon cement and concrete technology. However, industrial application are still scarce due to the gap existing between the fundamental research and industrial use as well as the lack of standards and a skilled work force in this area.

To address the aforementioned challenges, the First International Conference on Innovation in Low-Carbon Cement and Concrete Technology (ILCCC2019) was held on 24-26<sup>th</sup> June 2019 in London. The second of this conference series (ILCCC2024) will again aim at exchanging the latest global scientific and technical achievements on low-carbon cement and concrete technology in order to promote their wide industrial applications.

## Joseph Aspdin & Portland cement

Born in December 1778 in Leeds, England, Joseph Aspdin patented a process for producing a type of cement which was named 'Portland cement'. This invention led to the widespread use of Portland cement in a variety of construction applications, making it one of the most important building materials in the world today.

This conference will also celebrate the bicentenary of Joseph Aspdin's patent for Portland cement and the conference banquet will take place on the River Thames.

## Conference Topics

The general topics to be covered will include:

- Manufacturing Portland cement in low carbon and energy saving ways
- Low-carbon cement and concrete technology based on non-Portland cement systems (alkaline activated cement and concrete, calcium sulfoaluminate, MgO-based system etc.)
- Decarbonation technology
- Chemical admixtures for low-carbon cement and concrete
- Durability of low-carbon concrete
- 3-D printing, sprayed concrete
- Calcined clay, carbonation curing, microwave curing
- Waste materials in low-carbon concrete
- Computational modelling
- Standards and specifications for low-carbon cement and concrete

## Key dates

- Abstracts 1<sup>st</sup> February 2024
- Confirmation of acceptance 15<sup>th</sup> March 2024
- Extended abstract 1<sup>st</sup> May 2024
- Early- Bird Registration 15<sup>th</sup> May 2024

## International Organising Committee

### Chair of Advisory Committee:

José L. Torero University College London  
Changwen Miao Southeast University, China

### Honorary Chair:

Fredrik Glasser University of Aberdeen

### Chair:

Yun Bai University College London

### Members:

Sam Ghazizadeh Mott Macdonald  
Raman Mangabhai Institute of Concrete Technology  
Colum McCague Mineral Products Association  
Jun Ren Yunnan University, China  
Shi Shi University College London  
Wen Sun University College London  
Yanfei Yue Chongqing University, China  
Judith Zhou University College London

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