# Advanced & Innovative Materials (AIM) Group

Based in the Department of Civil, Environmental and Geometic 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 35,600 students and 12,000 staff. 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 7 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 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 1st September 2018. Extended abstract (4 pages), should be submitted by 1st January 2019 prepared according to the template which will be provided on the conference website. Keynotes and selected presentations will be published in a special edition of Advances in Cement Research.

### **Sponsorship-Exhibition**

A range of exhibition and sponsorship packages will be available.

# The 1st International Conference on Innovation in Low-Carbon Cement and Concrete Technology (ILCCC2019)

With a special tribute to Prof. Fredrik Glasser on his 90<sup>th</sup> birthday

**24**<sup>th</sup> - **26**<sup>th</sup>, June, **2019** London, U. K.



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 applications 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 challenge, the ILCCC2019 will be held on 24-26<sup>th</sup> June 2019 in London. The conference aims at exchanging the latest global scientific and technical achievements on low-carbon cement and concrete technology in order to promote their wide industrial applications. The themes of the conference will include:

- Manufacturing Portland cement in low carbon and energy saving way
- Low-carbon cement and concrete technology based on non-Portland cement systems (alkaline activated cement and concrete, calcium sulfoaluminate and MgObased system etc.)
- Chemical admixtures for low-carbon cement and concrete
- Durability of low-carbon concrete
- Standards and specifications for low-carbon cement and concrete

The conference will also celebrate Fred's 90th birthday and acknowledge his outstanding contribution to cement science, especially in the development of cements with a low carbon footprint.

#### **Professor Fredrik Paul Glasser**

Fredrik Paul Glasser received his PhD from the Pennsylvania State University in 1957 where he worked on high temperature phase equilibria and refractories for the steel industry.

In 1959 he moved to the University of Aberdeen, since then he has worked mainly on materials science, materials chemistry and solid state science and its applications. This has resulted in publication of more than 500 peer-reviewed papers. In recent decades cements have featured prominently in his research portfolio.

He is the recipient of numerous distinctions including a DSc and DSc (honorary, University of Aberdeen), Fellow of the Royal Society of Edinburgh, of the IoM³, the Mineralogical Society of America, Honorary Fellow of ICT, and a Distinguished Life Member of the American Ceramic Society. He is a founder Fellow of the Academy of Ceramics and Chairman of the Editorial Board of Advances in Cement Research. He has contributed to International Science and was co-chair of the International Congress of the Chemistry of Cement (Gothenburg and was awarded the Torroja Gold Medal for services to science in Spain). He has been made a Burgess of the city of Aberdeen for civic services.

After retirement, he continues to be active in research on the development of cements with low or negative embodied CO<sub>2</sub> and in the development of calcium sulfoaluminate cements.

## **Organising Committee**

#### **Honorary Chair:**

Fredrik Glasser, University of Aberdeen

#### Chair:

Yun Bai, University College London

#### Members:

Sam Ghazizadeh University College London Mohammed Imbabi University of Aberdeen Donald MacPhee University of Aberdeen

Raman Mangabhai The Institute of Concrete Technology

Colum McCague Mineral Products Association

Jun Ren China Academy of Building Research
Shi Shi University College London
Julia Stegemann University College London
Mingzhong Zhang University College London

Judith Zhou University College London

# Correspondence

All correspondence should be addressed to:

AIM.ILCCC2019@ucl.ac.uk

Department of Civil, Environmental and Geomatic Engineering, University College London, Gower Street

London, WC1E 6BT

Web: http://www.ucl.ac.uk/aim