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Sustainable Cementitious Materials for Civil and Transportation Engineering

Guest Editors:

Dr. Junjie Wang

School of Civil Engineering,
Central South University,
Changsha 410083, China

Prof. Dr. Jianhe Xie

1. School of Civil and
Transportation Engineering,
Guangdong University of
Technology, Guangzhou 510006,
China
2. Guangdong AIB Polytechnic,
Guangzhou 511365, China

Dr. Yongliang Liu

Department of Engineering
Mechanics, School of Mechanical
and Aerospace Engineering, Jilin
University, Changchun 130025,
China

Deadline for manuscript
submissions:

closed (20 November 2024)



mdpi.com/si/105233

Message from the Guest Editors

Concrete has become the most widely used construction material since its invention. Growing concerns over the greenhouse emissions profile of the Portland cement and concrete industry have led to a very high level of recent interest in the development of low-carbon construction materials. The construction industry has been under pressure to shift towards sustainability by developing alternative low-carbon cement and concrete materials.

Therefore, the special issue aims to focus on state-of-the-art progress, developments, and new trends on the physical and chemical mechanisms, fresh and hardened properties, long term performance and durability of sustainable cementitious materials with low carbon emissions for civil and transportation engineering. Both original research and review articles are welcome. In particular, the topics of interest include but are not limited to:

- Low carbon cementitious binders
- Carbonation enhanced concrete
- Low-carbon cement and concrete technology based on non-Portland cement systems, such as alkali-activated materials or geopolymers
- Recycled aggregate concrete
- Green admixtures for cement and concrete
- Durability of low-carbon concrete

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Editors-in-Chief

Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada

2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

Prof. Dr. Yuguang Ma

State Key Laboratory of Luminescent Materials and Devices, South China University of Technology, Guangzhou 510640, China

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Contact Us

Materials Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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