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Advances in Limestone Calcined Clay Cement (LC³) Concrete

Guest Editor:

Dr. Salim Barbhuiya

Department of Engineering and Construction, School of Architecture, Computing and Engineering, University of East London, London, UK

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Message from the Guest Editor

Cement-industry-related carbon dioxide emissions account for 5–8 percent of total greenhouse gas emissions globally. As a result, to reduce carbon emissions, many studies on reducing cement use have been conducted as a result of this. Supplemental cementitious materials (SCMs) are materials that are used in concrete to replace some of the cement. SCMs are currently found in nearly every type of cement. However, the quality and quantity of SCMs available for a global cement replacement strategy remain limited. Despite the fact that limestone is plentiful, adding more than 10% of it to cement increases porosity and degrades characteristics. Clay, on the other hand, is widely available, and calcined clay has been proved to be a good cement alternative. Making limestone calcined clay cement (LC³) is a practical choice because clays and limestone are abundantly available all over the world. This Special Issue will cover the rapidly growing body of knowledge about LC³, the background to the development of LC³, detailed reviews of the chemistry of LC³ hydration and synthesis, raw material qualities and manufacturing processes, and environmental aspects of LC³.



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Special Issue



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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

Message from the Editor-in-Chief

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Materials Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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