Special Issue

Microstructural, Mechanical, and Durability Characteristics of Cementitious Materials

Message from the Guest Editors

Concrete is the most widely used construction material in the world. Advances in the manufacturing of cementitious materials and the production of concrete have led to improved performance of traditional concrete. Since the mechanical properties and durability of the materials are directly linked to the change in the microstructure of the mixture, it is important to understand the relationship between the microstructural, mechanical, and durability performance of cementitious materials.

The aim of this special issue is to collect original contributions on the mechanical properties and durability evaluation of different types of cementitious materials and the microstructure characterization of cementitious composites. Topics of interest include but are not limited to the following: characterization of cementitious materials, mechanical and durability performance, fiber-reinforced concrete, alkali-activated materials, geopolymer, multi-scale study of the cementitious materials, and other related experimental investigations, simulations, and analyses of cementbased construction materials.

Guest Editors

Dr. Ruizhe Si School of Civil Engineering, Southwest University of Science and Technology, Mianyang 621010, China

Dr. Shuaicheng Guo College of Civil Engineering, Hunan University, Changsha 410012, China

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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. Materials provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

Editor-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

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