Special Issue

Mechanical Behavior of Concrete Materials and Structures: Experimental Evidence and Analytical Models

Message from the Guest Editors

The mechanical behavior of concrete and, even more, reinforced concrete has been a research theme tackled by many researchers through different approaches for years. Although the relevant literature is full of papers on this topic, ranging from experimental works to theoretical contributions, an accurate and comprehensive description of the actual mechanical behavior exhibited by concrete and reinforced concrete at service and ultimate conditions still remains a challenge in the field of structural engineering.
This Special Issue aims to collect contributions that deal with the mechanical behavior of ordinary, prestressed and special concretes, including high-strength, lightweight, recycled, fiber-reinforced, and self-healing concretes, for both structural and non-structural applications. In particular, the desired topics include, but are not limited to, experimental findings, numerical approaches, and analytical models investigating the mechanical behavior of concrete, reinforced concrete and prestressed concrete members at service and/or ultimate conditions under different loading states, such as axial loads, bending, shear, torsion, or combined loading states.

Guest Editors

Dr. Dario De Domenico
Department of Engineering, University of Messina, 98166 Messina, Italy

Dr. Luís Filipe Almeida Bernardo
GeoBioTec, Department of Civil Engineering and Architecture, University of Beira Interior, Calçada Fonte do Lameiro, 6201-001 Covilhã, Portugal

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Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

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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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