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Numerical and Experimental Analysis of Advanced Concrete Materials

Guest Editors:

Dr. Nikolina Živaljić
Faculty of Civil Engineering, Architecture and Geodesy, University of Split, Split, Croatia

Dr. Hrvoje Smoljanović
Faculty of Civil Engineering, Architecture and Geodesy, University of Split, Split, Croatia

Dr. Ivan Balić
Faculty of Civil Engineering, Architecture and Geodesy, University of Split, Split, Croatia

Deadline for manuscript submissions:
closed (10 June 2023)

Message from the Guest Editors

Dear Colleagues,

In modern engineering, more different types of concrete structures are used. Current applications in the construction of modern structures, require the analysis of structures of different material properties and shapes exposed to different types of loads.

In practice, several experimental tests exist that provide new insights into concrete as a material. However, such tests are expensive, and new numerical models within which these results can be implemented and then used for further analysis, have a great advantage. The development of new numerical models based on experimental results can simulate the behavior of concrete as a building material with improved properties. Also numerical models can simulate the behavior of concrete structures whose load capacity can be increased form of fastening.

The aim of this special edition is to collect and present new numerical simulations of the behavior of concrete as materials and concrete structures as well and thus provide a better understanding of the basic principles of cracking and propagation of cracks in concrete structures exposed to different types of loads.

Dr. Nikolina Zivaljic
Guest Editor

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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

Message from the Editor-in-Chief

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Journal Rank: JCR - Q1 (Metallurgy and Metallurgical Engineering) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us

Materials Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
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mdpi.com/journal/materials
materials@mdpi.com
𝕏@Materials_Mdpi