



an Open Access Journal by MDPI

Properties and Applications of Sustainable and High-Performance Concrete Materials

Guest Editors:

Dr. Leong Sing Wong

Institute of Energy Infrastructure
(IEI), Universiti Tenaga Nasional,
Kajang, Malaysia

Dr. Sih Ying Kong

Discipline of Civil Engineering,
Monash University Malaysia,
Subang Jaya, Selangor 47500,
Malaysia

Deadline for manuscript
submissions:

closed (31 December 2023)

Message from the Guest Editors

Throughout this Special Issue, our contributors work to uncover the sustainability of optimizing the constituents of concrete such as cement, waste aggregates, recycled plastic, and industrial wastes like fly ash, slag, silica fume, and waste glass. In doing so, they work to produce high-performance concrete that has superior qualities in terms of robustness, durability, and workability compared to normal concrete.

This Special Issue presents a high-quality review and original research papers, which includes, but is not limited to:

- Cleaner production of high-performance concrete;
- The durability of high-performance concrete;
- The waste-to-wealth concept in high-performance concrete production;
- Sustainable recycling of waste aggregates for high-performance concrete;
- Utilization of chemical admixtures in high-performance concrete;
- Optimization of waste pozzolanic materials in high-performance concrete;
- The structural integrity of high-performance concrete;
- High-performance concrete for building, pavement, and foundation; applications;
- Computational modeling of high-performance concrete.



mdpi.com/si/157576

Special Issue



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica,
Politecnico di Milano, Piazza L.
da Vinci 32, 20133 Milano, Italy

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

Contact Us

Applied Sciences Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/applsci
applsci@mdpi.com
[X@Applsci](#)