Special Issue

The Development of Sustainable Concrete with Solid Waste and By-Products

Message from the Guest Editors

In recent years, due to rising concerns regarding the greenhouse emissions produced by the building material production industry, there has been significant interest in the development of waste-based building materials. The increasing scarcity of raw materials necessitates the maximum utilization of various wastes to fabricate building materials. The growing demand for sustainable construction practices has led to the exploration of eco-friendly materials in building material production. This Special Issue, entitled “The development of Sustainable Concrete with Solid Waste and By-Products”, focuses on incorporating solid waste and industrial by-products as supplementary cementitious materials (SCMs) in order to reduce the environmental footprint of concrete production. This approach not only tackles resource depletion and environmental degradation, but also seeks to enhance the durability and performance of concrete structures. This Special Issue highlights cutting-edge research and innovations in the optimization of waste pretreatment, incorporating innovative additives into concrete formulations, and designing eco-efficient concrete mixtures.

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Deadline for manuscript submissions

20 September 2025

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/201881

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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.

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