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Analysis and Design for Sustainable and Durable Structural Concrete in Infrastructures

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Deadline for manuscript submissions: **20 July 2024**

Message from the Guest Editors

Dear Colleagues,

Structural reinforced concrete is commonly used in infrastructure such as concrete pavements, bridges, abutments, etc. The addition of polyvinyl alcohol (PVA) fibres, polypropylene (PP) fibres, or hybrid fibres to concrete would improve the structural behaviour and sustainability of the infrastructure. PVA fibres may contribute to the self-healing of concrete, and both PVA and PP would improve the structural behaviour and ductility of reinforced concrete beams and slabs.

Experimental work may be carried out on fibrous reinforced concrete slabs and beams to assess the different types and quantity of fibres on their structural behaviour and durability.

Empirical design and rational equations based on international design codes may be developed to predict the deflection of slabs and the shear behaviour of beams, taking into consideration the effect of hybrid fibres for predicting deflection/shear strength in a simple and accurate way.

Specialsue



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Editor-in-Chief

Message from the Editor-in-Chief

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

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