Sand replacement materials (SRM) in sustainable cement composites: A concise review

Abstract

This paper presents a short review of research works on the development of sustainable cementitious matrix composites with addition of potential mineral wastes as sand replacement materials. The study emphasizes on the possibility of recycling and sustain the mineral wastes from natural and industrial by-products in order to reduce the consumption of natural resources, energy and cost, and at the same time to reduce the environmental pollution. The aim of this review is to share the ideas and present the findings from previous works undertaken to evaluate the suitability of mineral wastes as a sand replacement materials to produce sustainable and durable construction materials in the future.

Keywords

Cement composites; Mineral wastes; Sand replacement materials; Sustainable