Guest Editorial Preface

Special Issue on Emerging Trends in Civil Engineering for Sustainable Development

Sajjad Ahmad, Civil Engineering Department, Mirpur University of Science and Technology, Mirpur, Pakistan Anwar Khitab, Civil Engineering Department, Mirpur University of Science and Technology, Mirpur, Pakistan

The aim of the special issue is to present recent trends in civil engineering, which are capable of preciously solving certain challenges faced by the construction community. Nowadays, the construction industry must meet a comprehensive list of requirements while ensuring sustainability and economy. In light of these challenges, the special issue has been designed to develop workable solutions for the construction industry such as providing comprehensive details about the alkali silica reactions and their mitigation strategies or sustainable production of concrete blocks with partial replacement with saw-dust. Similarly, the structural capacity of buildings can be enhanced by employing the Dhajji Dewari concept: Dhajji dewari is a special type of timber frame with stone and earth infill, typically used in the mountain regions of South Asia: This type of structures leads to resource conservation, sustainability, and improved earthquake performance. One of the researches presented in the special issue is about the modification of asphaltic binders for the construction of road network.

The construction industry is the apex large-scale user of raw materials. The use of raw materials leads to the depletion of natural resources. This volume of natural resource utilization is not sustainable and could compromise the environment for the sake of growth. Researchers are making enormous efforts to provide alternates of the raw materials to minimize the use of natural resources. The use of saw dust as replacement of sand in construction materials is such an effort and is presented in one of the papers of this special issue.

To achieve sustainable buildings and constructions, new approaches, course of action and initiatives are needed, and this is the primary focus of this special issue. It is hoped that this special issue will provide a platform for sharing important technical data for international scientific and technical community.

Anwar Khitab Sajjad Ahmad Guest Editors IJoSE