

Preface

This special topic edition is devoted to modern issues in materials science and materials processing technologies.

The first chapter includes research results on the properties, synthesis and processing technologies of polymer materials, composites, nanocomposites, and ceramics. The analysis of the application of various techniques and materials for reinforcement, including natural components, assessment of fracture behaviour and heat treatment of polymeric and composite materials are also research subjects in this chapter.

The second chapter is devoted to studying the properties and analysing the processing technologies of structural metals. These materials' mechanical properties and microstructure are also investigated, and the results of metallographic studies are presented.

Concrete and cement properties and composition, asphalt concrete, structural properties of modern green building materials and thermal insulation materials from waste are the main topics of the last chapter.

The publication will be helpful to materials science, machinery and construction specialists.