

Preface

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

The publication's first part includes research results on the properties, structure, synthesis and processing technologies of polymer materials, composites, metal matrix composites, and some types of ceramics. The analysis of the application of various techniques and materials for reinforcement, assessment of hardness, wear behaviour and machinability of polymeric and composite materials are also research subjects in this chapter.

The second chapter is devoted to evaluating the properties and analysing some processing technologies of structural metals. Mechanical properties, microstructure and practice optimising technological parameters are also investigated here.

Concrete and cement properties and consistency, structural properties of modern wooden materials, and thermal insulation materials are the main topics of the last chapter.

The edition will be useful to specialists in materials science, machinery and construction.