

# Preface

The special edition that is brought to your attention includes articles comprising research results in the area of applied materials and manufacturing technologies.

The first two chapters are dedicated to research on synthesis methods and properties of bio-based polymer and composite materials and materials for biomedical applications.

Functional nanomaterials for applications in sensing and thermal energy storage engineering and special mesoporous silica additives to elastomeric polymer materials are analysed in the third chapter.

The next chapter is devoted to the study of materials properties and technologies for use in the nuclear industry.

The last chapter contains research results on the mechanics of various structures in construction and machinery.

This special publication will be useful and interesting to specialists in materials science, mechanical engineering, construction, and biomedicine.