

# Preface

This special edition presents the latest research results in materials engineering and chemical production.

Structural metals such as ductile iron, aluminium alloy and stainless steel, as well as functional materials represented by carbon nanotubes, nanohydroxyapatite powder and natural rubber latex foam are analysed in the first two chapters. The mechanical properties, microstructure and methods of their preparation are investigated here.

Elements of modern fuel cells including materials for their production and technologies of biofuel synthesis are examined in the third and fourth parts of this special issue. These research results are very actual in the framework of the development of ecological energy sources.

The last chapter presents some research related to geochemistry and environmental engineering.

The special edition will be helpful to many specialists whose activity is related to materials science, machinery, biotechnologies, alternative sources of energy and ecological safety.