

## Preface

This special edition is devoted to the latest research in materials science and technologies of materials synthesis and processing.

Metallurgical and metalworking technologies, microstructure and mechanical properties of structural metals, and powder metallurgical processes are analysed in the first two chapters.

The separate part contains papers in which are analysed materials' properties and technologies' peculiarities for the oil and gas industry.

The research results on the electrochemical properties of materials for electrodes for lithium-ion and lithium-metal batteries are included in the fourth chapter.

The last chapter describes investigations in the field of sustainable building materials. Lime mortars for hot climates, the application of chicken eggs powder as a fine aggregate and industrial waste in concrete are analysed here.

The presented issue will be helpful to many engineers and researchers in materials for a wide range of modern manufacturing areas.