

# Preface

The special issue contains articles that are dedicated to the analysis of the latest research results and engineering solutions in the area of materials science and materials processing and synthesis technologies.

The first chapter is dedicated to the investigation of mechanical properties and machinability characteristics of composite, metal matrix composite materials and nickel alloy.

Properties of materials for applications in energy storage devices, and biogas and biodiesel production technologies are analysed and investigated in the next two chapters. Here also are analysed the latest technologies of biomass treatment.

The last chapter deals with some issues related to heat and mass transfer phenomena in various engineering systems.

This special edition will be useful to specialists in machinery, chemical production and energy storage.