

# Preface

This special edition contains articles that reflect the latest research results in applied materials science and nanotechnologies.

Synthesis of semiconductor nanoparticles and structures for the various electronic devices, analysis of thin film's growth for the optical bandpass filter and investigation of luminescent material for the road marking are presented in the first two chapters.

The next chapter is devoted to the analysis of the properties of some functional materials: spinel ferrite nanoparticles, dielectric elastomers for artificial muscles application and nanocrystalline ceramics.

The last chapter presents the results of the study of the mechanical properties of carbon fibre-reinforced polymer composite and the machineability of superalloy using tools with special coatings.

This special issue will be helpful to a wide range of specialists in applied materials science from various branches of modern production.