

# Preface

The special edition is dedicated to the recent issues in materials science and technologies of materials synthesis and processing.

The first chapter deals with the investigation of properties and deposition methods of protective coatings using ceramics and metal matrix composite materials. Electropolishing, plasma nitrocarburizing and direct laser deposition technologies are also considered here.

The next chapter contains articles on the investigation of some metal machining technologies such as multistage single-point incremental sheet forming, friction and laser welding.

The last chapter is dedicated to some issues related to the synthesis and characterization of gold nanoparticles, carbon-based and silicon-based nanomaterials, reduced graphene oxide, etc.

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