

Preface

This special edition contains papers reflecting the latest research results in polymers, composite and ceramic materials, additive manufacturing, bearings tribology and chemical and petrochemical production.

Polymers, composites, polymer composites and biocomposites with ceramic materials are groups of modern structural and functional materials with a wide range of applications in many branches of production. The first chapter is devoted to researching these materials' properties, which defines possible ways of their practical use.

Without a close symbiosis of technological ideas, special manufacturing equipment and materials for their implementation, progress in additive manufacturing is impossible. Some decisions in this direction are presented in the second chapter.

The next chapter includes the research results on tribological issues of bearings, which is very important for modern machinery where the reliability of bearings plays a decisive role.

The last two chapters are devoted to problems of heavy metals absorption from water and wastewater, the development and research of chemical production technologies and the petrochemical industry.

The presented special collection will be helpful to engineers in machinery, applied materials science and chemical engineering.