## **Preface**

This special topic edition presents the latest research results in materials science and materials synthesis and processing technologies.

The first two chapters are devoted to the analysis and study of structural materials' processing technologies and special superhydrophobic and ceramic coatings.

The third chapter contains papers on the study of the properties of some functional materials which can be used in electronics, machinery and optics.

The fourth and fifth chapters include articles on various chemical production technologies, environment protection and waste recycling. Catalytic reforming, synthesis of cellulose nanocrystals, analysis of hydrate formation in multiphase oil systems, photocatalytic degradation and adsorption of pollutants in wastewater and more are topics of these parts.

The last chapter is devoted to analysing the properties of some concretes.

This edition will be helpful to many researchers and engineers from mechanical engineering, electronics, environmental engineering and construction.