

## Preface

The articles collected in this special edition reflect a modern level of materials science and processing technologies development.

The topological optimisation of additively manufactured parts from titanium alloy, simulation of friction stir welding of aluminium and magnesium alloys, analysis properties of materials structure for sensors and functional thermoelectric materials and perovskite as a photocatalyst are the topics of the first three chapters.

The nitrate removal from wastewater, waste recycling and analysis of soil pollutants from Gold Panning in Komabangou in Niger are investigated in the fourth chapter.

The last two chapters are dedicated to analysing the properties and synthesis methods of some green building materials and wood applications in modern construction.

The presented special edition will be helpful to specialists in materials science and materials processing technologies from many branches of industrial production, construction, and environmental engineering.