Preface

This special edition presents research results on the properties and processing technologies of structural materials such as steel, alloys, biocomposites, ceramics and polymers.

The first chapter contains articles related to the investigation of mechanical properties, corrosion behaviour, microstructure evaluation, etc. of steel and alloys and analysis of welding technology, including friction welding.

Biocomposites, their mechanical properties, microstructure, and preparation methods together with ceramics from spent bleaching earth used for the production of membranes are studied and analysed in the second chapter.

The last chapter is dedicated to additive technologies. Here various ways to improve them are considered and new technological materials, as well as the properties of the final finished products, are analysed.

The special edition will interest many specialists whose activity is related to metallurgy, machinery, and materials science.