

# Preface

This special edition gives an acquaintance with the latest research results in wear resistance and the strength and corrosion behaviour of structural materials and also describes some solutions for the preparation of green building materials based on the use of industrial waste.

Wear resistance, tribological and mechanical properties and corrosion behaviour of main structural materials - composites, alloys, and steel are analysed and studied in the first chapter.

Welded joint quality by using laser and tungsten inert gas welding is explored in the second chapter.

The last chapter is devoted to green building materials that are based on the use of industrial waste such as steel slag, fly ash, glass bottle powder and some technologies of soil stabilisation.

The special edition will be helpful to specialists in machinery and construction.