Preface

This special edition is dedicated to recent achievements in the analysis of properties, investigation of technologies synthesis, preparation and processing of modern structural alloys, steel and some sustainable building materials.

Mechanical properties and mechanical behaviour, microstructure analysis, surface behaviour, etc. of structural steel, superalloys, high entropy alloys and alloys for biomedical applications are investigated in the first chapter. Here are also presented some research results on the optimisation of metalworking processes, for example, milling, cutting and rolling.

The second chapter contains articles that are dedicated to current issues in the preparation and application of some green building materials based on geopolymers and industrial waste.

The presented special edition will interest specialists in machinery, metallurgy, and construction.