Preface

The special publication is devoted to recent issues in applied materials science, materials synthesis and treatment technologies, as well as materials for providing fire and explosion safety.

The first chapter includes articles on various structural materials properties research from steel and alloys to polymers, composites and ceramics. Some technologies for processing these materials - abrasive waterjet cutting, electrical discharge deposition, grinding, clinch joints, etc. are analysed here also.

The last two chapters are dedicated to problems of fire and explosive safety. Fire resistance materials and materials for application in fire engineering, properties of explosive materials and safety conditions of their use are the main topics of these parts.

The presented edition will be useful to many engineers in materials science, machinery, and specialists in fire and explosion safety.