

# Preface

This edition will help the readers to enrich their knowledge and understanding of materials' properties and their behavior in the various external conditions which is the basis for many practical solutions in engineering and technology development. Modern production technologies are hard to imagine without the use of various materials including steels and alloys, special ceramics, polymers, and composites. And these are far not a complete list of modern solid-phase structural materials that determine the contemporary development of production and are of major significance to different production and engineering industries. Acquaintance with specifics of their properties is crucial for successful technological and industrial development.

This collection will be interesting and useful for many engineers and a wide range of researchers in their professional activities and scientific endeavours.