

Preface

This special edition presents the latest research results in the dynamic field of materials science and materials processing techniques. The edition is structured to offer readers results of a well-rounded exploration of both foundational concepts and emerging advancements across the next areas.

Chapter 1, Properties and Processing of Alloys, examines the intrinsic characteristics and fabrication techniques of some structural alloys, highlighting innovative solutions for enhanced performance.

Chapter 2, Corrosion, Protective Coatings, and Surface Treatment, addresses the challenges of materials corrosion degradation and explores advanced protective strategies for extending structural materials' lifespan and functionality.

Chapter 3, Polymers and Composites, studies versatile polymer and composite materials that bridge strength and adaptability, emphasizing their applications across industries as full-fledged substitutes for metallic materials.

Chapter 4, Functional and Special Materials, focuses on materials with unique properties that are engineered for special applications, stimulating technological breakthroughs.

This special edition aims to inspire further exploration and innovation in materials science, offering valuable perspectives for researchers, practitioners, and students alike.