

# Preface

This special edition presents the results of recent advancements in the development, properties analysis, and applications of modern materials, highlighting their role in science and industry.

Chapter 1, "Functional Ceramics and Oxides", explores the synthesis, characterization, and applications of advanced ceramics and oxide materials, emphasizing their importance in electronics, catalysis, etc.

Chapter 2, "Composites", examines the structure and performance of composite materials, focusing on their mechanical, thermal, and multifunctional properties for use in aerospace, automotive, and other engineering sectors.

Chapter 3, "Building Materials", discusses innovative results in the development of construction materials, accenting durability, and efficiency for the demands of modern infrastructure and sustainable development.

This special edition provides a comprehensive overview of material science advancements, supporting further research and technological progress and will be useful to a wide range of engineers.