

Preface

This special edition highlights recent advancements in investigations into materials science and technology development, focusing on pivotal features that are shaping the progress of modern industry.

Chapter 1, "Functional Materials and Specialised Technologies", delves into the design and application of materials engineered for specific functions and some unique technologies. Characteristics of melanin extracted from black soldier fly, biodiesel production from roselle seeds by ultrasonic cavitation, study on physical properties of doped silicene nanoribbons, etc., are the topics of this part.

The second chapter represents the research results in the sphere of modern polymer and composite materials. Polymers and composites are indispensable in fields like automotive, aerospace, construction, etc., where their unique properties meet the demands of modern engineering challenges. This chapter highlights the latest developments in their synthesis, processing, and applications, emphasizing their contribution to many fields of engineering.

This special edition provides a comprehensive resource for researchers, engineers, and students whose activity is related to materials engineering and technologies development.