## **Preface**

This special edition features results of recent advancements in sustainable materials science and innovative technologies.

Chapter 1, "Functional Materials", explores materials with specific properties and behaviours that are critical for modern applications in electronics, sensors, energy, etc.

Chapter 2, "Green Synthesis and Applied Biotechnologies", highlights environmentally friendly methods for producing materials and leveraging biological processes to develop sustainable solutions.

Chapter 3, "Waste Recycling", addresses the material reuse strategies for reducing environmental impact.

Chapter 4, "Building Materials", focuses on sustainable construction materials that enhance durability, energy efficiency, and ecological responsibility.

The presented articles demonstrate the development of modern advanced materials science through green practices, innovative biotechnologies, and circular economy principles, and provide valuable practical information for researchers and engineers.