

Preface

The special edition presents a focused collection of research results on applied materials and technologies that address environmental, energy, biomedical, and construction challenges. They reflect the importance of innovative solutions that combine performance, affordability, and environmental responsibility.

The chapters cover adsorptive and photocatalytic materials for environmental remediation, green fuel technologies, materials for biomedical applications, and cost-effective alternative building materials.

This special edition is intended to provide researchers, engineers, and practitioners with concise insights into emerging trends and practical innovations supporting sustainable development across multiple manufacturing sectors.