

## Preface

The special edition presents readers with the latest research results in the field of modern composite materials.

In articles of Chapter 1: Sustainable Bio-Based Composites explore techniques of the development and application of composites derived by reinforcing the base materials with natural fibres from renewable bioresources. The importance of reducing the impact on the environment while simultaneously preserving the strength characteristics of the resulting material, as well as ensuring the structural integrity and operational characteristics of structures made from it, is highlighted.

Chapter 2: Advanced Composite Materials focuses on the analysis of the properties of advanced high-performance composite materials. Complex composite systems based on the use of ceramics, high-strength polymers and alloys as a matrix and additives in laminated composite structures for applications in various industries as a structural material are considered.

The presented research results offer a comprehensive perspective on the present and future of composite materials, from eco-friendly alternatives to state-of-the-art solutions. This special edition aims to provide researchers, engineers, and anyone interested in materials science with valuable insights into the versatility and potential of these advanced materials.

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