

ESJ Special Edition

Title: Engineering Applications of Biomaterials: Mechanical Performance, Biomedical Functions, and Physical Properties

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Overview of Special Edition

Biomaterials are increasingly applied in mechanical, biomedical, and materials engineering, including implants, bone substitutes, biodegradable composites, protective coatings, and bio-based components. Their successful application requires a clear understanding of their mechanical, physical, biological, and degradation properties.

This Special Edition provides an interdisciplinary platform for presenting recent developments in biomaterial design, characterisation, testing, modelling, and practical engineering applications. It welcomes original research, review papers, experimental investigations, and computational studies, particularly those addressing biomaterial performance, biocompatibility, sustainability, durability, and future applications.

Papers in the following academic disciplines are welcome:

- Mechanical and physical properties of biomaterials
- Biomedical materials, implants, and tissue engineering

- Biodegradable and bio-based materials
- Biomechanics and load transfer
- Surface coatings, corrosion, wear, and durability
- Biomaterial testing, modelling, and simulation
- Smart, additive-manufactured, and sustainable biomaterials

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Submissions:

Submit your paper as a Microsoft Word file to contact@eujournal.org

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Types of Manuscripts Accepted for Review:

- Original research
- Literature reviews
- Hypotheses
- Reviews of conceptual frameworks
- Simulations and algorithms
- Summaries of prior work
- Work in Progress and Preliminary Results