

Special Issue

Functionalized Biomimetic Calcium Phosphates 2.0

Message from the Guest Editors

The inorganic phase of the hard tissues of vertebrates is deposited in an environment rich with organic molecules and macromolecules, as well as of foreign ions. This is the main reason behind the peculiar properties of these biomineralized tissues, which are extremely challenging to replicate in a synthetic environment (laboratory).

Nonetheless, the use of synthetic calcium phosphates (CaPs) as bone substitutes in medicine is continuously increasing due to the remarkable biocompatibility and osteoconductivity of these compounds. The success of CaPs as biomaterials is undoubtedly related to their chemical composition, similar to that of the inorganic phase of bone, but it can be further improved through functionalization with bioactive substances. **Keywords**

- Calcium phosphate
- Ionic substitution
- Biomaterials
- Controlled release
- Drug delivery

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Message from the Editor-in-Chief

The biomaterials field is one of the largest and fastest growing research areas both in the scientific community and in the industrial one. Biomaterials are the result of collaborations between different disciplines: chemistry, medicine, pharmacology, engineering and biology. The objective of this collaboration is to lead to the implementation of new devices to restore form and human body functions. The mission of the *Journal of Functional Biomaterials (JFB)* is to focus attention on physico-chemical characteristics and their importance in the interactions between biomaterials and living tissues. *JFB* seeks to publish studies on the preparation, performance and use of biomaterials in biomedical devices, as well as regarding their behavior in physiological environments. We are pleased to welcome you as our authors.

Editor-in-Chief

Prof. Dr. Pankaj Vadgama
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