Special Issue

Property, Evaluation and Development of Dentin Materials

Message from the Guest Editors

Human teeth have a more complicated structure, better mechanical properties, and better biocompatibility than all dental restorative materials invented to date. The history of dentin substitute materials started with calcium hydroxide and its ability to form reparative dentin. Later, glass ionomer cements (GICs) were introduced, which advanced the era of restorative dentistry. Along with the modification of GIC materials came improvements in their physical and mechanical properties to withstand occlusal forces. Currently, different, newer dentin substitutive materials are being introduced with improved mechanical and functional properties. Dentin substitutes are designed to be biocompatible, impermeable, anti-bacterial, regenerative, non-absorbable, and easy to manipulate.

To date, a material that can completely take the place of human teeth with regard to biological and mechanical properties has not yet been developed.

The aim of this Special Issue is to discuss new dentin materials and their clinical possibilities. Both research and review articles focusing on the properties, evaluation, and development of dentin materials are welcome.

Guest Editors

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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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