Special Issue

Silk Protein-Based Functional and Innovative Materials for Biomedical Applications

Message from the Guest Editors

Silk is a natural biopolymer. Raw silkworm silk is composed of 70-80% fibroin and 20-30% sericin. Silk sericin (SS) has recently transitioned from a mere byproduct of silk manufacturing to a material of significant interest, driven by the principles of circular economy and improved waste management. SS has also unlocked its potential for diverse applications, including tissue engineering, drug delivery, cosmetics, and sensing. Similarly to its well-known counterpart, sericin exhibits biocompatibility, biodegradability, and anti-inflammatory/antioxidative properties. Moreover, FDA's approval has recently been granted for SS, paving the way for expanded applications of sericin in material science and biotechnology. This Special Issue aims to fulfill recent and groundbreaking advances in silk protein-based biomaterials. We invite original manuscripts focusing on SF- and/or SS-based materials'/compounds' functionality, characterization, applications and design. Furthermore, we will welcome research articles and review papers related to silk proteins. To all the potential contributors of this Special Issue, *JFB* looks forward to receiving your submissions.

Guest Editors

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Deadline for manuscript submissions

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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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