Special Issue

Application of Chitosan and/or Chitin Nanofibrils in Medical Treatment

Message from the Guest Editor

Due to recent advances in biology and medicine, the problems of creating materials that can replace human or animal organs were brought to the fore. A matrix for tissue engineering constructions should provide adhesion, proliferation, and differentiation of cells, be biocompatible and non-toxic, and possess a certain mechanical strength and elasticity parameters that are necessary for manipulations with these materials in liquid media. Chitosan is the most promising polymer for tissue engineering applications since it possesses the above properties. The use of biocompatible organic nanoparticles as chitin nanofibrils is particularly important for regulating properties of chitosan matrices. Different methods like wet spinning method for producing composite fibers; electrospinning for producing nanofibers cloth; lyophilization of chitosan solutions and their mixtures with nanoparticles to form porous three-dimensional matrices; and, finally, 3D bioprinting. The materials thus developed to form fibers, films, tubular samples, and sponges can be used as surgical suture threads, effective wound dressing, and others.

Guest Editor

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Message from the Editor-in-Chief

During the past few decades there has been an ever increasing number of novel compounds discovered in the marine environment. This is exemplified by the robust preclinical and clinical pipeline that currently exists for marine natural products. *Marine Drugs* is inviting contributions on new advances in marine biotechnology, pharmacology, chemical ecology, synthetic biology, and genomics approaches related to the discovery of therapeutically relevant marine natural products. Our goal is to share your contribution in a timely fashion and in a manner that will be valued by the scientific community.

Editor-in-Chief

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