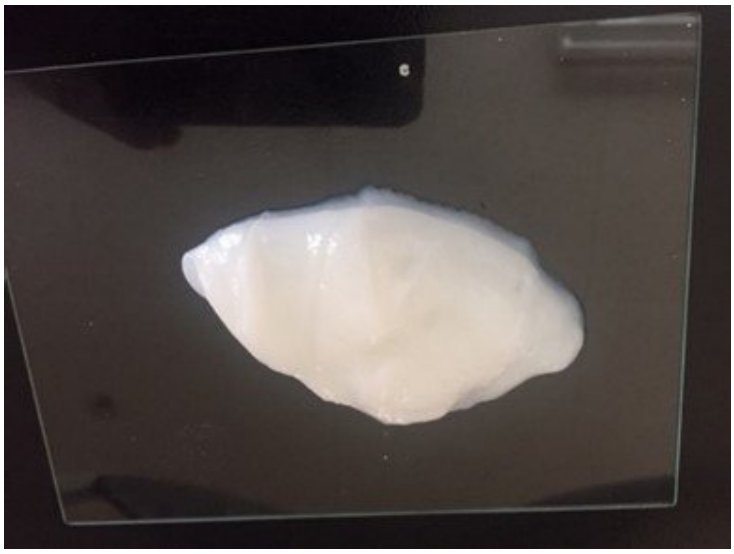
BioSpectrum
the business of Bio & Health Sciences
ASIA EDITION

Green Science Alliance starts production of Chitin, Chitosan Nanofiber

October 30, 2018 | News

Chitin and chitosan have been reported to have use in medicine for scars resulting from injury and fires, skin damage; and further medical applications based on these curative properties are being studied.



Chitin nanofiber is a new material made from crab shells. In brief, it can be prepared by making chitin on a nanoscale. Chitin nanofibers have high mechanical strength, high elasticity, and a low thermal expansion coefficient. Therefore, one application of chitin nanofiber is to be applied as the reinforcement fibrous materials for plastic etc. In addition, chitosan nanofiber, which can be obtained from chitin, may be applied as a functional coating and as an additive for glues, sealants, or cosmetics, which have used in bio-medicine, electronics, optics, and so forth.

If one has to define the difference between chitin nanofiber, chitosan nanofiber, and plant-derived cellulose nanofiber, it is in the biocompatibilities and biofunctions of both chitin and chitosan. Chitin and chitosan have been reported to have use in medicine for scars resulting from injury and fires, skin damage; and further medical applications based on these curative properties are being studied.

Green Science Alliance Co., Ltd. has manufactured chitin and chitosan nanofibers in their gel form in water. This form differs from chitin and chitosan powder because they are smaller in size such that they can be mixed with foods, beverages, and cosmetics, and be used in biomedical applications, among others.