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Gel Technology for Development of Bioactive Foodstuffs

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Message from the Guest Editors

Contemporary lifestyles are responsible for the increased prevalence of several diseases such as obesity, diabetes, and cardiovascular diseases. In this way, the incorporation of bioactive compounds into food systems is one of the most important strategies used by the food industry to meet consumer needs. However, most of these compounds are chemically sensitive to environmental stresses, have poor water or oil solubility and display low bioavailability. To overcome these disadvantages, different delivery solutions have been developed, particularly involving gels. These soft materials are built up with a liquid phase entrapped within a 3D network, which can be a carrier for bioactive food ingredients. Gels can be designed in the water phase (hydrogels, emulsion gels, bigels) or oil phase (organogels, bigels) for the purpose of modulating their delivery performances. In addition, these structures can also be used as fat replacers to improve foods nutritional quality and meet the recommendations of lowering the intake of unhealthy fats. Thus, this Issue seeks to spotlight the application of gels in the food industry for food fortification or to act as fat replacers.













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Message from the Editor-in-Chief

Gels (ISSN 2310-2861) is recently established international, open access journal on physical and chemical gel-based materials. The journal aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. General topics include but not limited to synthesis, characterization and applications of new organogels, hydrogels and ionic gels made either from low molecular weight compounds or polymers, composite and hybrid materials where a metal is by some means incorporated into the gel network, and computational studies of these materials in order to provide a better understanding of gelation mechanism. We cordially invite you to consider publishing with us and contribute with your own grain of sand to the advance in this fascinating field.

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