



Trends in Functionalization of Natural Polymers by Ionizing and Non-ionizing Radiation Processing

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Message from the Guest Editors

Dear Colleagues,

Materials based on natural polymers are increasingly desired and promoted in both food and non-food applications. In this way, there is a continuous need to functionalize and upgrade the processing of bio-based materials by using emerging and non-polluting techniques. Recent trends of (bio)polymer modification explore various approaches of using radiation-based techniques for both single and dual modification in order to improve the technological and functional properties of natural polymer materials (i.e., starch, cellulose, pectins, alginates, chitosan, gums). The methods based on ionizing radiation or non-ionizing radiation, and even cold plasma for processing bio-based materials, are environmentally friendly and quick, involving no use of pollutants, no production of waste, and no penetration of toxic substances into the treated materials.

This Special Issue on **Trends in Functionalization of Natural Polymers by Ionizing and Non-Ionizing Radiation Processing** aims to highlight recent progress in the development of ionizing and non-ionizing radiation uses in modern and non-conventional methods for bio-based material processing.





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Message from the Editor-in-Chief

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