Special Issue

Volatile Compounds: Trends, Advances, and Applications in Biodegradable Polymers for Food Packaging

Message from the Guest Editors

Plastic packaging derived from synthetic polymers can create several health risks because it can interact with food and release cytotoxic microparticles at the cellular level. Another alternative that can be considered ecologically correct is the film used in food packaging derived from renewable and biodegradable polymers generated from food processing waste. Proteins present great potential because they are low-cost biopolymers and easily available from sources such as pork, bovine, fish gelatins, or produced by microorganisms. In addition, biopolymers can be important carriers of natural bioactive compounds for the preservation of food quality, such as volatile compounds, e.g., thymol, -terpinene, carvacrol, linalool, borneol, camphor, eugenol, methyl eugenol, limonene, terpinen-4-ol, and 1,8-cineole among others. These compounds have demonstrated antioxidant and antimicrobial activities that can preserve the characteristics of food and prolong its shelf life. For these reasons, the present Special Issue has as its central theme advances in the application of volatile compounds in biofilms used as functional food packaging.

Guest Editors

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