

Special Issue

Biodegradable and Edible Films for Food Packaging Applications

Message from the Guest Editors

Biodegradable films are desirable as packaging materials because of their attractive properties such as nontoxicity, sustainability, biocompatibility, reproducibility, versatility, availability, and low carbon footprint. Furthermore, edible biodegradable films provide support to the natural layers on the food product surfaces. These films can prevent gas aromas, moisture losses, and solute movement out of the food. Simultaneously, they can selectively allow for the controlled exchange of gases, such as oxygen, carbon dioxide, and ethylene, which are involved in food respiration. Edible films are made of digestible ingredients, and recently, such materials have seen increased consumer demand due to their environmentally friendly nature, safety to consumers, and ease of use. Edible films can increase food quality, freshness, and shelf-life. The edible films form a semipermeable barrier around the packaged food product, increasing its barrier properties by reducing the exchange of moisture, lipids, gases, and volatiles. This Special Issue aims to present innovative ideas and recent advances in the development of biodegradable, edible film materials for food packaging applications.

Guest Editors

Dr. Brendan Duffy

Centre for Research in Engineering Surface Technology (CREST),
Technological University Dublin – City Campus, Grangegorman,
D07ADY7 Dublin, Ireland

Dr. Swarna Jaiswal

School of Food Science and Environmental Health, College of Sciences
and Health, Technological University Dublin, City Campus,
Grangegorman, D07ADY7 Dublin, Ireland

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Applied Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
applsci@mdpi.com

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Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,
20133 Milano, Italy

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