

Special Issue

Edible Films and Coatings: Fundamentals and Applications II

Message from the Guest Editors

There is worldwide concern about the environment; particularly, there is growing concern related to plastic consumption, due to being non-biodegradable. Edible films and coatings are an alternative to petroleum-derived plastics. These new materials are designed by using natural polymers such as carbohydrates, proteins, oils, etc., and can be developed as films or coatings. Usually, films are prepared using the casting technique and their mechanical and barrier properties will be defined by the composition of the material; a plasticizer can be added to improve their plasticity. Coatings are obtained when a film forming solution is applied to a surface, creating a thin layer that can act as a barrier to protect the food. Improving the mechanical and barrier properties of films and coatings is recommended in order to be able to combine different biopolymers such as proteins and polysaccharides, but also to be able to make a chemical modification of natural proteins or polysaccharides and an enzymatic reticulation between the polymer chains. Edible films and coatings can be considered as active or intelligent packaging due to their ability to protect and enhance food shelf-life.

Guest Editors

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Deadline for manuscript submissions

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About the Journal

Message from the Editorial Board

Now more than ever, research is asked to deliver knowledge and technologies to solve the major challenges faced by our society. The development of new materials and devices for (without the ambition to be exhaustive) energy, health and food technology, together with the need for establishing processes that reduce the impact on critical resources and the environment, is indeed in the spotlight of most contemporary research. Surface science and engineering play a key role in this regard, with an incredible potential in delivering new and deep scientific understanding and technical solutions essential to solve most of the major societal challenges.

Coatings is a well-established, peerreviewed, online journal dedicated to the vibrant field of surface science and engineering. Coatings publishes original research articles that report cutting-edge results and review papers that make the point on the hottest research topics.

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