



## Green Polymer Coatings and Films for Food and Health Applications

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### Message from the Guest Editors

Dear Colleagues,

In recent years, there has been a strong research focus on new, 'green' polymers for coating and film applications. These polymers principally include biopolymers (mainly polysaccharides such as cellulose, chitin/chitosan, starch and alginate, as well as proteins) and biobased polymers (mainly bio-polyesters such as polylactide, polyhydroxyalkanoates and polyglycolide). The benefit of using these kinds of polymer is multifaceted:

- They may be used to fabricate edible coatings or films, which are useful for food and pharmaceutical applications;
- They may result in coatings or films that are degradable in the body or natural environment or under certain conditions, suitable for applications such as 'green' packaging, biomedical, drug delivery, etc.;
- Their unique functionality (e.g. antimicrobial activity of chitosan, chemical versatility of polysaccharides, and biocompatibility) may also enhance their applicability in the above-mentioned areas.





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## 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.

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