

# Special Issue

## Biopolymers in Food Science

### Message from the Guest Editor

The growing demand for sustainable, biodegradable, and food-safe materials has intensified interest in natural biopolymers. Polysaccharides—such as starch, cellulose derivatives, chitosan, and alginate—are widely used due to their abundance, non-toxicity, and film-forming capabilities, making them ideal for food science applications. This Special Issue invites original research and reviews on recent advances in the design, fabrication, and application of polysaccharide-based films and related structures. Topics include food packaging, edible coatings, delivery systems for bioactives, optical sensors, and smart packaging (e.g., freshness sensors, pH-responsive films). Emphasis is placed on processing techniques, structure–property relationships, functional performance, and overcoming challenges like moisture sensitivity and mechanical fragility. We welcome studies on physicochemical or biotechnological processes converting biopolymers into films, gels, and hydrogels for use as adhesives, adsorbents, carriers, sensors, and coatings in packaging, medicine, and beyond.

### Guest Editor

Dr. Mustafa Bener

Department of Chemistry, Faculty of Science, Istanbul University, 34126 Istanbul, Turkey

### Deadline for manuscript submissions

31 December 2025



## Polymers

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### Message from the Editor-in-Chief

Since its foundation in 2009, *Polymers* has developed into an internationally renowned, extremely successful open access journal. The editorial team and the editorial board dedicatedly combine open-access publishing and high-quality rigorous peer reviewing. The performance of the journal has proven this strategy to be well-suited and highly successful. This is reflected in the increasing impact factor of *Polymers*, the most recent one being 4.7.

I would like to invite you to contribute to the success of the journal by sending us your high quality research papers. We would be pleased to welcome you as one of our authors.

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### Editor-in-Chief

Prof. Dr. Alexander Böker

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