

Special Issue on
Progress in Protein-Based Films and Coatings

CALL FOR PAPERS

Nowadays protein-based films and coatings are considered as a more environmentally friendly and renewable replacement for petrochemical polymers. However, the functionality of suchlike films and coatings is strongly depending on the type of protein. Attributes like structure and molecular weight affect processability of the protein as well as the quality and properties of the resulting films. In recent years progress has been made in this field. This comprises the clarification of structure-function relationships, the investigation of film properties, and the development of new applications for protein-based films. However, in many cases the properties of proteinogenic materials still do not match those of traditional polymers. Therefore, further research is required to improve the properties and applicability of suchlike films and coatings. This includes physical, chemical, and biochemical modifications in order to tailor the film and coating properties. Nevertheless, many modifications and their impact on protein structure and functionality are still not fully understood. Gaining knowledge about the structure-property relationships as well as the molecular interaction-property relationships is an important step towards the industrial implementation of protein-based films and coatings.

This special issue is to build a platform to discuss the state-of-the-art research applications and progress in protein-based films and coatings. We sincerely invite high quality original research and review papers on both experimental and theoretical works addressing this topic.

Potential topics include but are not limited to the following:

- ▶ Properties of protein-based films and coatings
- ▶ Chemical, biochemical, and physical modification of protein-based films and coatings
- ▶ Characterization methods (e.g., rheology, particle size, and film morphology)
- ▶ Structure-property relationships
- ▶ Protein-based edible films and coatings
- ▶ Wet-chemical processing of protein-based films and coatings
- ▶ Thermoplastic processing of protein-based films and coatings
- ▶ Controlled release applications
- ▶ Packaging applications (active, barrier, and intelligent packaging applications)

Authors can submit their manuscripts through the Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/ijps/ppbfc/>.

Lead Guest Editor

Markus Schmid, Technische Universität München, Freising, Germany
markus.schmid@ivv.fraunhofer.de

Guest Editors

Patrizia Cinelli, National Research Council, Pisa, Italy
patrizia.cinelli@iccism.unipi.it

Maria B. Coltelli, University of Pisa, Pisa, Italy
maria.beatrice.coltelli@unipi.it

Andreas Stäbler, Fraunhofer Institute for Process Engineering and Packaging IVV, Freising, Germany
andreas.staebler@ivv.fraunhofer.de

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First Round of Reviews

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