PROTEIN-BASED FILMS and COATINGS

Edited by
Aristippos Gennadios

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Aristippos Gennadios, Ph.D.

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Preface

INTEREST in the development of films and coatings from renewable biopolymers has been intense during the last decade. Opportunities for adding value to agricultural biopolymers and concerns over the environmental impact of synthetic film materials are perhaps the two most important factors behind this interest. Several applications of biopolymer films and coatings have already been realized, mainly in the area of packaging, while a great number of additional applications are envisioned. Proteins of plant and animal origin, which often are abundantly available as by-products of the food processing industry, are among the biopolymers being used or investigated as feedstocks for the production of films and coatings. In recent years, the scientific literature worldwide has seen an explosion of published articles, often the product of interdisciplinary research, related to protein-based films. Food scientists and technologists, packaging scientists and technologists, protein chemists, and polymer chemists and technologists are among the disciplines involved with research endeavors in this area.

It has become apparent that a book that comprehensively reviews the current body of knowledge on the formation, characterization, functional properties, and applications, both existing and potential, of protein-based films and coatings is needed. *Protein-Based Films and Coatings* aspires to meet this need by bringing together many researchers of varied backgrounds who are recognized leaders in this field. Each chapter was prepared as a comprehensive, stand-alone treatise on the covered topic. Readers will appreciate some inevitable overlap among chapters as an opportunity for exposure to the same issue from different perspectives. To enhance the thoroughness of coverage of the

subject matter, a host of prominent researchers and professionals in this field provided peer-review for the chapters.

It is hoped that newcomers to the challenging and promising field of protein-based films and coatings, as well as experienced researchers, will find valuable information in this book.

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