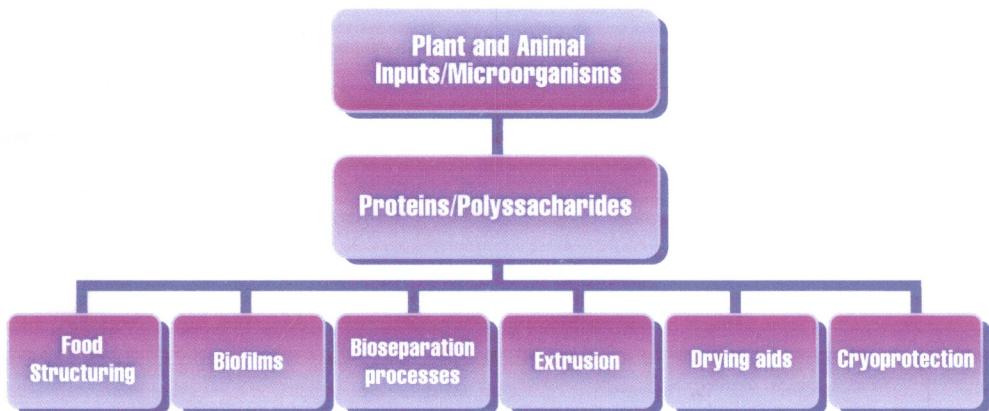


Contemporary Food
Engineering Series
Da-Wen Sun, Series Editor



BIOPOLYMER ENGINEERING in FOOD PROCESSING

Edited by **Vânia Regina Nicoletti Telis**



CRC Press
Taylor & Francis Group

Contents

Series Preface.....	ix
Series Editor.....	xi
Preface.....	xiii
Editor	xv
Contributors	xvii
Chapter 1 An Introduction to Biopolymer Applications in Food Engineering	1
<i>Vânia Regina Nicoletti Telis</i>	
Chapter 2 Biopolymers	17
<i>Cristina Tristão Andrade and Edwin Gonzalo Azero Rojas</i>	
Chapter 3 Rheological Behavior of Biopolymer Suspensions	69
<i>Paulo Henrique Mariano Marfil, Javier Telis-Romero, and Vânia Regina Nicoletti Telis</i>	
Chapter 4 Food Gels	111
<i>Kátia Regina Kuhn, Carolina Siqueira Franco Picone, and Rosiane Lopes da Cunha</i>	
Chapter 5 Films and Coatings Produced from Biopolymers and Composites	145
<i>Carmen Maria Olivera Müller, Fabio Yamashita, Maria Victoria Eiras Grossmann, and Suzana Mali</i>	
Chapter 6 Bioseparation Process Based on the Use of Biopolymers: Aqueous Two-Phase Systems and Adsorption Applied for Food Components Recovery	217
<i>Jane Selia dos Reis Coimbra, Edwin Elard Garcia Rojas, Evaldo Cardozo de Souza Jr., and Paula de Aguiar Cipriano</i>	
Chapter 7 Thermoplastic Behavior of Biopolymers during Extrusion	245
<i>Fernando Martínez-Bustos, Ernesto Aguilar-Palazuelos, and Tomás Galicia-García</i>	

Chapter 8	Biopolymers Used as Drying Aids in Spray-Drying and Freeze-Drying of Fruit Juices and Pulps.....	279
	<i>Vânia Regina Nicoletti Telis and Nuria Martínez-Navarrete</i>	
Chapter 9	Biopolymers Used as Cryoprotectants in Food Freezing.....	327
	<i>Noemi Zaritzky</i>	
Index.....		385