

PREFACE

The results of studies of interpolyelectrolyte complexes of chitosan and different polyanions are summarized and described systematically. Specific properties of chitosan as polyelectrolyte are described. The general concept of the formation of polyelectrolyte complexes is developed. Separate parts of the review are dedicated to investigation of polyelectrolyte complexes of chitosan with:

- biopolyelectrolytes, including polysaccharides (plant, animal, bacterial polysaccharides and lipopolysaccharides), proteins, nucleic acids and also modified natural polyanions (carboxymethylchitin, carboxymethylcellulose, etc.),
- synthetic polyanions.

The data on application of polyelectrolyte complexes of chitosan in medicine and biotechnology, particularly for creation of hemocompatible, thromboresistant materials, bioconstruction materials for replacement of coverlets, blood vessels, bone tissue, immobilization of biological active compounds, non-viral vectors of genetic information transfer and so on are generalized.

The bibliography includes 215 references.