Chitin, a β - (1-4) homopolymer of N-acetyl - D- glucosamine (GLc NAc), is the second most abundant polysaccharide existing in nature after cellulose. It is a major structural component of most biological systems such as mollusks, insects, crustaceans, and fungi. Chitin and its derivatives are of commercial and biotechnological interest due to their various biological activities and wide range of applications in areas ranging from waste water treatment to agrochemical and biomedical uses.

Chitinases (E.C.3.2.1.14), which hydrolyze β -1,4-glucosidic bonds of chitin are widely distributed in the biological word and have received an increased attention during the last two decades due to their wider range of biotechnological applications specially in the agricultural, medical and environmental fields.

In this book we discuss chitin, chitosan and chitinases, chemistry, properties, and production, as well as summarizes all their possible biotechnological applications.

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Chitin, Chitosan and Chitinases Biotechnology

Chemistry, properties, production and biotechnology

