1. Record Nr. UNISALENTO991003231069707536 Autore Khor, Eugene Titolo Chitin [e-book]: fulfilling a biomaterials promise / Eugene Khor Amsterdam; New York: Elsevier Science Ltd., 2001 Pubbl/distr/stampa **ISBN** 9780080440187 0080440185 Descrizione fisica xi, 136 p.: ill.; 25 cm 660.6 Disciplina Soggetti Chitin - Biotechnology Biomedical materials Biocompatibility Electronic books. Lingua di pubblicazione Inglese **Formato** Risorsa elettronica Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index Nota di contenuto Chapter headings. The relevance Of chitin. Chitin biomedical applications. Chitin as a biomaterial. Biocompatibility issues. The sources and production of chitin. The structural properties of chitin as it is known today. The chemistry of chitin as it is known today. The regulatory road to approval for chitin. Too late the hero? Sommario/riassunto So far little has been discussed on the groundwork necessary for chitin to claim its rightful place as a biomaterial. This book aims to describe the factors necessary to standardize chitin processing and characterization. It attempts to capture the essential interplay between chitin's assets and its limitations as a biomaterial, placing the past promises of chitin in perspective, addressing its present realities and limitations as a biomaterial and offering an insight into what is required for chitin, and its derivative chitosan, to fulfil its potential as a biomaterial of the 21st Century. The ongoing search for alternative and

better ways to treat medical problems is filled with challenges and opportunities. When replacing body parts with artificial substitutes, state-of-the art technology developments such as Tissue Engineering are fuelling the quest for better biomaterials that can meet a myriad of challenges. Central to this goal is the potential for the utilization of materials from nature. Amongst the possible candidates, chitin has

been poised to be one such natural material which could be the answer to a variety of needs in the biomedical field. According to researchers, chitin possesses capabilities as a wound dressing, in bone substitutes and in drug delivery carriers, abilities which have evoked great enthusiasm. However this excitement is accompanied by confusion and lack of consensus, and this book also attempts to address these issues