Chapter 5
Conclusion

In this book, an attempt has been made to understand the importance and characteristics of polysaccharides like starch, chitin and chitosan with special thrust on thermal, morphological and tensile characteristics. They are attractive biomaterials for a multitude of potential applications in a diverse range of fields. Starch is considered to be one of the most promising natural polymer candidates available for the development of biodegradable materials. Chitin as a polymer, as well as a reinforcing agent, has an excellent potential for applications which still needs to be developed. Chitosan can be used as a natural polymer matrix as well as nanofillers for the fabrication of composites because of its interesting biological properties. The growing list of literature studying polysaccharides, mainly starch, chitin and chitosan, is a clear indication of their evolution. Practical applications of such biomaterials in industrial technology require a favorable balance between the expected performance of the composite materials and their cost. Research and development investments must be made in science and engineering fields that will fully determine the properties and characteristics of polysaccharides and new technologies should be developed so that industry can produce advanced and cost competitive polysaccharide composite products. This means that there are still significant scientific and technological challenges to take up.

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