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Editorial

This issue of *European Journal of Pharmaceutics and Biopharmaceutics* focuses on the role of chitosan and chitosan derivatives in drug delivery. Chitosan, a polysaccharide formed by the deacetylation of chitin, is industrially produced from crab shell waste – although in recent years it has also been obtained from fungi. It meets the important requirements for excipients in drug delivery, namely excellent biocompatibility and biodegradability. As a result, chitosan and related compounds have been the focus of increased research activity in recent years. The use of chitosan has been postulated in numerous areas of biopharmaceutical research such as mucoadhesion, permeation enhancement, vaccine technology, gene therapy and wound healing. Chitosan has also found several applications in topical ocular drug delivery, and a relatively new field is the development of thermosensitive chitosan hydrogels.

The low solubility of chitosan at physiological pH, limits its use as an absorption enhancer, for example, in nasal or peroral delivery systems. Several measures to overcome this problem, including the development of cationic or anionic derivatives are under investigation and also discussed here.

The current special issue, written by internationally renowned scientists offers a large selection of topics concerning modern drug delivery based on chitosan.

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