



international journal of pharmaceutics

Book Review

Biodegradable Hydrogels for Drug Delivery K. Park, W.S. Shalaby and H. Park Technomic Publishing AG, Basel, Switzerland, 1993.

ISBN: 1-56676-004-6.

Price SwFr 1672 (hardcover); 252 pages.

This book is, by the standards of today, a relatively short text of 252 pages comprising 12 pages of index and 240 pages of main text. The fact that around one quarter of the latter is devoted to references implies that a thorough literature research of biodegradable hydrogels was prompted before the book was written. Indeed, over 1000 references are listed, some repeated, and since reference to work published in 1992 is made, the book is relatively up to date.

Its nine chapters are well set out. Chapter 1 provides a brief basic introduction to the topic and Chapter 2 deals with the methods of biodegradation. Chapter 3 details the types of hydrogels available whilst Chapters 4 and 5 deal with the production of gels from the polymers. Chapters 6 and 7 deal with the degradation of the polymers in the body. These chapters are especially interesting to those scientists who specialise in the production of delivery systems without considering, per se, the degradation of the polymers. Chapter 8 deals with the production of drug delivery systems based on hydrogels and

suffers from being too short and 'cross-linking' information of disparate polymers and intermixing in vivo and in vitro methods of testing. The sections on the kinetics of drug release would profit by being extended. The final chapter reflects the current and future trends for biodegradable hydrogels.

The book is relatively free from spelling mistakes although its style requires at least a little knowledge by the reader on the topic. Annoying omissions are, for instance, ignoring the isomeric form in monomers used to produce polyorthoesters such as polylactic acid. The book does not give a thorough, in-depth, review of the topic, its length mitigates against this. It does have a broad insight into the topic and thus is an ideal text for the specialist third year undergraduate project or as the starting point for a Ph.D. thesis. It provides a good introduction to the physicochemical properties of and degradation of hydrogels. It is informative, well referenced but not all encompassing. It should, however, have a place in the library of universities and companies specializing on biodegradable hydrogels.

> J.L. Ford School of Pharmacy Liverpool John Moores University Liverpool, U.K.