

Book Review

Enzyme Inhibitors. Edited by U. Brodbeck. Verlag Chemie, Weinheim. 1981, xix + 282 pp., ISBN 3-527-25893-0. Price: £16.50 (US\$39.60).

Enzyme Inhibitors represents the proceedings of the spring symposium of the Swiss Chemical Society, held in Basel in March 1980, which was a joint meeting with the Medicinal Chemistry Division of the German Chemical Society, and consists of 21 full papers and 3 abstracts from industrial and academic institutions. The content of this book provides an example of the bridge between such establishments and how interaction of the two can provide important, mutually beneficial links.

The papers presented deal mainly with the theory, proposition of structures, synthesis, *in vitro* and *in vivo* effects of mechanism based enzyme inhibitors (which include discussions of enzyme inactivation by suicidal inactivation), paracatalytic self-inactivation and transition state analogue inhibitors. Examples are given for all six classes of enzyme but series of papers are devoted to single subject topics, one pertinent example being the four papers on Acarbose, an inhibitor of glycosyl glycosidases, which illustrate how an enzyme inhibitor is developed to the extent of clinical trials.

A series of papers stresses the potential clinical usefulness of enzyme inactivators. These include means to affect vasodilation, platelet aggregation and inflammation (by inhibition of prostaglandin biosynthesis); degenerative tissue degrading processes (by inhibition of elastase); and Gram-negative and -positive bacteria (by inhibition of dehydro-

polate reductase). Many examples of the structures and derivatives of enzyme inhibitors given have potential use in this area of chemotherapy.

The reviews presented in this volume provide a wealth of information, much of which is clearly presented in the many structures, figures and tables, which will be invaluable to researchers in this field. The nine pages of index, subdivided into subject, inhibitor and enzyme indexes, will prove invaluable to those who are actively involved in the subject, to whom this volume is directed. For the casual reader, this book, like so many conference reports, provides very little in the way of enjoyable reading, but some idea of the state-of-the-art can be obtained by a more detailed study of various papers with direct examples for use on polymeric carbohydrate substrates. We therefore recommend this inexpensive volume to all those who require an up-to-date review of the subject but those involved in the teaching/learning of the subject may be disappointed with the amount of material they can glean from this work.

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