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Book review

Enantioselective Reactions in Organic Chemistry

O. Cervinka, Ellis Horwood, London, New York, Toronto, 1995, VIII+ 194 pp; Price US\$ 119.95, ISBN 0-13-276239-0

One's first thought on handling this book is to wonder how the author could address the immense subject of enantioselective reactions so concisely (174 pages excluding table of contents and references), especially as the first four chapters are devoted to a discussion of some of the fundamental issues of stereoisomers (racemates and conglomerates, resolutions, determinations of stereochemical purity). The latter discussion is perfunctory and badly out of date.

Chapter 5 addresses some of the basic aspects of asymmetric induction and some of the models (Cram, Felkin, Karabatsos, Cornforth, Prelog) proposed to rationalize some asymmetric inductions. Chapter 6 is essentially a one-page discussion of strategy. Only chapters 7, 10 and 12 can be considered "meaty" and they too do not do full justice to the topics essayed. Chapter 7 "Non-catalysed Asymmetric Reactions" contains a number of examples of asymmetric inductions which are of historical interest and useful for illustrating principles but which, for the most part, the chemistry cited is

unlikely to be used by a modern-day synthetic organic chemist. In Contrast, chapter 10, "Asymmetric Reactions Catalysed with Transition Metal Complexes" cites examples of reactions still much in use. However, this chapter is several years out of date and contains no mention of the asymmetric catalysis work of Eric Jacobsen, David Evans, or the asymmetric dihydroxylations of Barry Sharpless.

The longest chapter in the book, Chapter 12, "Asymmetric Reactions which use a Chiral Auxiliary Reagent" is 57 pages in length with 246 references. Of these, only 16 are to work published after the beginning of 1990. This trend is noted throughout the book and presumably reflects an interval between completion of the manuscript and the printing of the book.

In so far as much exciting work in asymmetric synthesis has been done in the last five years, the book cannot be considered to cover the cutting edge of modern-day asymmetric synthesis. However, it can be considered a concise and well-written source of references (621 total) to earlier work and would be of value to someone seeking to gain an overview of the field of enantioselective reactions in organic chemistry.

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