observed, for example, in a continuous-flow stirred tank reactor system.

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The Impact of Stereochemistry on Drug Development and Use. Volume 142 in Chemical Analysis. Edited by H. Y. Aboul-Enein and I. W. Wainer. John Wiley & Sons, New York. 1997. xxvii + 695 pp. 16 × 23.5 cm. ISBN 0-471-59644-2. $99.00

This book is Volume 142 in the Wiley-Interscience Chemical Analysis series of monographs. The multiauthor work contains 23 chapters that have a focus on some aspect related to drug stereochemistry and also contains contributions from some outstanding scientists. The topic is timely and important as drug companies make decisions about whether to bring to market a racemic or enantiomeric drug entity and as the FDA increasingly focuses attention on the same question.

I'm not quite sure what I initially expected to find in a book with this title. What I did find was a *lot* of information, but the sequencing of the chapters seemed somewhat illogical. Late in the book, for example, one moves from a chapter on chiral derivatization reagents, to two chapters on circular dichroism, then to two chapters on regulatory guidelines for stereoisomers, followed by a chapter on first pass phenomena and then one on gastrointestinal transport, and finally to a chapter on chromatographic resolution on chiral stationary phases. Because I read the chapters in order, this sequence of presentation was perplexing, to say the least. In Chapter 9, after many examples of differences in the metabolism of stereoisomers have already been presented in preceding chapters, I found a section entitled "Chirality and Optical Isomerism: A Brief Overview", which begins a basic discussion and definitions of stereogenic centers, molecular dissymmetry, and resolution methods. Such fundamental information should have been presented early in the book.

The book also has a degree of redundancy that is perhaps not surprising in view of the fact that many of the chapter authors work in the same or closely related areas. Nevertheless, more editing effort could have eliminated much overlap. For example, many of the chapters have general introductory material about stereochemistry that could have been covered in one early chapter for later chapters to reference.

The chapters seem to fall into two general categories. The first broad area comprises analytical theory, techniques, and technologies (e.g., HPLC applications of various chiral stationary phases, chiral derivatizing agents, capillary electrophoresis, detection methods, ORD, etc.). The second category seems to include what might be called case studies of drug metabolism, wherein numerous examples of stereospecific or stereoselective metabolism of drug isomers or racemates are discussed, along with the pharmacological consequences and discussions of the analytical methods that were used. There's a lot of good material here.

Although I did not attempt to give the index a thorough workout, it does not appear quite extensive or detailed enough for the amount of information contained in the book. For example, the book contains one chapter with material on in vivo "chiral inversion" but another with a discussion of in vivo "stereochemical interconversion". The index contains both terms, as well as the term "stereochemical inversion" which occurs in yet a third chapter, but none of these apparently synonymous terms are cross-indexed.

Despite its perceived shortcomings with respect to overall organization, information flow, and redundancy, the book does contain a lot of information and will be a worthwhile addition for many libraries. I would envision the major audience to be pharmaceutical scientists who are particularly concerned with the in vivo metabolism and pharmacokinetics of racemates versus stereoisomers. A number of pharmaceutical companies no doubt have pharmaceutics groups that would be included there. The book provides a good and reasonably comprehensive starting point for someone trained in analytical methods who is about to embark on projects involving the biological activity and metabolism of chiral drugs. A complete read of the book would quickly bring one up to speed on current technology and thinking regarding the issue of racemic versus enantiomeric drugs.

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