tural representations, with one structure per page covering most of the page.

The introduction includes very helpful, brief explanations regarding the structural data bearing on groups, classes, and subclasses of the compounds. Although these comments are not intended to provide complete explanations, they strengthen the perception of intra- and interclass relationships and differences which are reflected by the pictorial representations.

The authors' intent was for this book "to serve as a bridge between crystallographers and structural chemists and those engaged in drug research." This reviewer concludes that the book does in fact provide such an effective bridge. This book therefore is recommended not only to medicinal chemists but also to graduate and undergraduate students in medicinal chemistry and pharmacology.

Reviewed by Jaime N. Delgado
College of Pharmacy
University of Texas at Austin
Austin, TX 78712

Computer-Assisted Drug Design. Edited by E. C. OLSON and R. E. CHRISTOFFERSEN. (ACS Symposium Series 112.) American Chemical Society, 1155 16th St., N.W., Washington, DC 20036. 1979. 619 pp. 15 × 23 cm. Price $40.00.

This book is a collection of 26 presentations made at a recent American Chemical Society symposium entitled "Computer-Assisted Drug Design." The articles cover a few of the theoretical structure–activity relationship methods in use for drug design. The book is divided into four sections covering the assessment of several techniques, drug receptor modeling, examples of some techniques, and applications. A 15-page index completes the book.

A number of articles stand out and deserve comment. In the first section, a review of a few of the general structure–activity relationship methods is attempted. Unfortunately, it is incomplete in its coverage. An article by Topliss *et al.* is a useful description of chance factors in dealing with structure–activity relationship statistics.

In the second section on drug receptor modeling, Andrews briefly discusses transition state analogs. Articles by *Cole et al.*, Marshall *et al.*, and Humber *et al.* on mapping and modeling are of interest. An article by Loew *et al.* on interaction studies on the opiate receptor is well written and of quality. Rohrer *et al.* describe the use of PROPHET in the same section.

In the third section on examples of techniques, articles by Magee, Bersohn, Weintraub, and Stuper *et al.* present useful descriptions of computer-assisted methods of analysis.

The fourth section on applications in drug design contains a refreshingly thorough and accurate review of theoretical structure–activity relationship contributions over the past 15 years by Grunewald *et al.* Articles by Gund *et al.*, Petit *et al.*, and Hodes reveal computer-based applications of theoretical structure—activity relationships.

A number of problems apparent with this book are common to similar efforts to publish quickly everything presented at a symposium. Because of the requirement for speed, there is little opportunity for screening or review, leading to a wide range of scholarship and quality. Since every presentation is published, the amount of background material that can accompany each article is restricted. As a result, a reader outside of the area is not sufficiently informed. In contrast, an investigator in the field probably would turn to the original journal articles of the authors.

The book should be examined by anyone involved or interested in theoretical structure–activity relationship studies in medicinal chemistry.

Reviewed by Lemont B. Kier
School of Pharmacy
Medical College of Virginia
Virginia Commonwealth University
Richmond, VA 23298