

Book review

Strained Organic Molecules, by A. Greenberg and J.F. Liebman, Vol. 38 of a series of monographs on Organic Chemistry, series ed. H.A. Wasserman, Academic Press, New York/San Francisco/London, 1978, xi + 406 pages, \$41.50.

This volume of the well known series on Organic Chemistry is basically an expansion of a published review [*Chem. Reviews*, 76, 311 (1976)]. It is written in much the same style with much the same emphasis. The division of the book is into six chapters: 1) Energy and Entropy, 2) Cyclopropane and Cyclobutane, 3) Unique Strained Groupings or Building Blocks, 4) Polycycles: Aesthetics, Rearrangements, Topology, 5) Kinetic and Thermodynamic Stability and 6) A Potpourri of Pathologies. The book is interesting reading. It is a unique and worthwhile sampling of chemistry of strained organic molecules. In some regards the title of this book is somewhat misleading in that it is more general than need be. The book deals primarily with the physical aspects of strained organic molecules ranging from an in-depth thermodynamic discussion of certain properties of some strained systems in the first two chapters to a rather miscellaneous sampling of "cute" or unusual molecules in the last chapter. In many regards the book is inconsistent in its treatment of the subject matter. Whereas detailed historical perspective is provided in a few instances, it is totally omitted in others. In terms of being a comprehensive survey, this book lacks an even touch. Some subjects have been treated in detail, such as transition metal promoted rearrangements (allotted 31 pages). Other topics are often brushed aside in a few paragraphs or even a few sentences. Relatively little space is devoted to the origin and synthesis of molecules which constitute the title of this monograph.

In summary, the authors have put together an interesting sampling of the more physical aspects of strained organic molecules. The authors have not been comprehensive and they do not claim to be. The book has relatively few typographical errors. Overall, it is the type of book which those involved in the chemistry of strained organic molecules should have on their shelves. It is unfortunate that the price has been placed at a level which many will find prohibitive.

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