

BOOK REVIEW

The Organic Chemistry of Palladium, Vol. I, Metal Complexes. By PETER M. MAITLIS, Academic Press, New York/London, 1971. xv + 319 pp. \$19.00.

This book, the first of two volumes on the organic chemistry of palladium, is part of a series of monographs on organometallic chemistry. The reviewers feel that this book satisfies a long felt need in the burgeoning field of organopalladium chemistry in presenting a concise, well organized picture of a series of complicated topics. There appears to be no obvious omission in the content of the book and there are few troublesome typographical errors.

The author has succeeded in preparing a critical evaluation of the literature rather than a mere tabulation of a large amount of information. Sufficient data have been presented to allow conclusions to be drawn without overwhelming the reader with unnecessary details. The reader is referred to detailed information for more comprehensive understanding with an excellent series of references [over 900, mostly after 1960].

The volume is clearly written with figures and reaction scheme diagrams close to the descriptive text. Unfamiliar structures are frequently illustrated.

However, production of two slim volumes [less than 300 pages each] has caused an unnecessary, and sometimes awkward, division of the subject [note the many references to Vol. II to be found in Vol. I]. In addition, the practicing chemist is put to an unnecessary expense in

bearing the burden of purchase of two volumes when a single 500-page volume could have been produced at much less than the cost of the two volumes. It is unlikely that either volume can stand separately on its own merits and it appears that an unnecessary proliferation of the literature has resulted.

Another problem, one that would appear to have contributed to the production of two volumes rather than one, is the extensive reference to elements other than palladium. While a certain amount of discussion of the chemistry of complexes of the other elements is necessary, the amount included in some cases is excessive. For example, in discussing the M(II) valence state [pp. 26-30], Pd(II) occupies only one of the three and a half pages used. Similarly in the discussion of the *trans*-effect [pp. 37 ff] only one of the four and a half pages is concerned with palladium. If all this excess material is really necessary, it could have been placed in footnotes at a considerable saving in space.

In summary, this is a well produced book, worthy of purchase by both novice and expert and probably the best single source of information on organopalladium chemistry available; however, it would have been even more valuable if a single volume rather than a two-volume set had been issued.

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