Book Review

The Organic Chemistry of Palladium, Volume II, Catalytic Reactions; by Peter M. Maitlis, Academic Press, New York and London, xiii + 216 pages, \$16.00 (Academic Press series of monographs on Organometallic Chemistry; Ed. by P.M. Maitlis, F.G.A. Stone and R. West).

This second volume of a two volume set devoted to the organic chemistry of palladium should perhaps be entitled "Synthetically Useful Transformations". The author claims that each monograph can be read separately. However, I feel that the two volumes together will prove to be invaluable not only for specialists in the area but also, more importantly, for organic chemists and graduate students. If read together they will provide not only a lucid outline of the chemistry of organometallic complexes of palladium, and their applications to synthesis (both stoichiometric and catalytic) but also of some of the appropriate comparative chemistry of the neighboring elements. The organization in this second volume differs markedly from that in Volume I and it is assigned naturally according to transformation types. The text is well referenced. There are a number of pertinent cross references to Volume I which is a particularly valuable feature to the newcomer to the area. This volume contains no extensive tabulations of physical properties of complexes, etc. Particular emphasis is given the structural and mechanistic aspects of the chemistry in the broader sense. Much work has been performed in the areas discussed, but many fine details remain to be answered. One of the useful features of this book is that it conveniently highlights these aspects of the chemistry. It will quite naturally stimulate further work in organopalladium, and more generally, organometallic, chemistry along mechanistic lines to give us all a better picture of an area which promises to be extremely important and versatile in organic synthesis.

The author is to be congratulated for producing what will undoubtedly be a major work in organometallic chemistry for the nineteen seventies rather than the taxonomic collections found in the monographs of the nineteen sixties.

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