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Book Review

Metal π Complexes: Vol. II, Complexes with Mono-Olefinic Ligands: Part I, General Survey: by Max Herberhold. Elsevier Scientific Publishing Company, P.O. Box 3489, Amsterdam, The Netherlands. 643 pp., price $78.25.

The volume under review results from an unpublished German version which has been much revised and extended. It is the first of a pair designed to complement *Vol. I: Complexes with Di- and Oligo-Olefinic Ligands* by E.O. Fischer and H. Werner. The English version, prepared by Dr. J.A. Connor, is not only very concise, but quite readable.

The text begins with an historical section describing initial preparations of metal–olefin complexes and early ideas of the bonding involved. The main body of the text is devoted to methods of preparation and to a general survey of mono-olefin complexes. These are dealt with in two sections – mono-olefin hydrocarbons and mono-olefins with functional substituents in the vicinity of the C=C double bond. Both sections contain not only preparative details but much proton magnetic resonance, infrared and other physical data both within the text and set out in associated tables. These data are present despite the preface which indicates that spectroscopic results, as well as catalytic studies, will be discussed in Part II of this volume, to be entitled "Specific Aspects".

A total of 1879 references provides very thorough coverage of the literature to the end of 1968. Important papers published in 1969 and 1970 are presented as 210 short notes which are rather arbitrarily arranged, in surprising contrast to the rest of the text. Fortunately, these notes are classified with the other material in an extensive index.

The collection of such a wealth of information on metal–mono-olefin complexes fills a current need for a general reference text on this subject. It should merit a place on the bookshelf of anyone working on metal–olefin complexes or related catalytic studies, but unfortunately the very high price is difficult to justify to most private purchasers. As a reference source, however, this book would be a worthwhile addition to any chemical library.

A.J. Oliver
York University (Toronto)