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Book reviews

Organometallic Chemistry of Rhodium and Iridium; by R.S. Dickson. Academic Press, London-New York, 1983, x + 421 pages, £28.00, \$49.00. ISBN 0122154800.

It is inevitable that a book concerned with the organometallic chemistry of specific elements will be compared with "Comprehensive Organometallic Chemistry", eds. G. Wilkinson, F.G.A. Stone, and E.W. Abel [Pergamon Press, Oxford, 1982, see *J. Organomet. Chem.*, 251 (1983) C29 (for volume 3, Co, Rh, and Ir)]. Regrettably for Dr. Dickson, the larger work appears to be the more complete. The volume under review deals with the literature to the end of 1978 and, additionally, has an addendum to the key references for the period 1979—81, with 13 to 1982. The addendum takes the form of listing the titles of the papers, as well as the authors and references, broken down according to the chapter heading of the main text in which there are 2014 references (which are listed in alphabetical order). There is a 10 page subject index.

The book is divided into the following chapters.

Chapter I. The General Chemistry of Rhodium and Iridium — A Brief Survey; Chapter II. Carbonyls and their Substitution Products; Chapter III. Carbonyl-halide and -hydride Complexes; Chapter IV. Pseudo Carbonyls — Complexes with M—CS, M—PF₃, M—CNR, M—NO and M—N₂R Bonds; Chapter V. π -Organorhodium and Iridium Complexes; Chapter VI. π -Complexes Formed from Alkynes; and Chapter VII. σ -Alkyl-Aryl and Related Complexes.

Features of the rival text included the large number of Schemes (61 for Rh and 14 for Ir) and Tables (47 for Rh and 15 for Ir); the text comprised 263 pages and 1311 references for Rh and 87 pages and 512 references for Ir, and the coverage was completed to the end of 1980 (Rh) or 1978 (Ir). Dr. Dickson's book is much more discursive in nature, but has only two Tables and virtually no Schemes and, of course, the page area is less than half that in the larger book. The principal advantage, however, is that the two elements are treated side by side in the work under review.

The title of the book is really a misnomer. It actually deals with the organometallic compounds, rather than chemistry, of Rh and Ir. For example, catalytic applications, which of course are particularly important, are dealt with in only three pages; by contrast in the larger work catalytic aspects are dealt with separately and are not included in the outline given above.

This book has clearly been a monumental task and the author has dealt with his material efficiently; however, he is singularly unfortunate in the timing of his publication and the inevitable comparison which has had to be drawn.