

Organometallic Chemistry of Rhodium and Iridium. Ronald S. Dickson, Academic Press, London, 1983, £50.50 or US\$85.00, pp. 421. ISBN: 0.12.215480.0.

This book is part of a series of monographs in the organometallic chemistry area. The noble metals rhodium and iridium have a very rich chemistry which is especially important in the field of catalysis with particular respect to the water-gas shift reaction, hydrogenation, breaking and making of metal carbon bonds, etc. The book surveys the chemistry of these elements in some considerable detail. Chapter 1 is a brief survey of the chemistry of these elements and is followed in chapter 2 by the carbonyls and their substitution products. Chapter 3 deals with carbonyl-halide and -hydride complexes and chapter 4 with pseudo carbonyls involving groups such as CS, M-PF₃, M-CNR, M-NO and M-N₂R. Chapter 5 deals with π -organo rhodium and iridium complexes. This chapter emphasizes the binding of olefin and diolefin derivatives, quinones, cyclopentadienones, etc. while chapter 6 deals with π -complexes formed from alkynes. The book finishes in chapter 7 with a discussion of σ -alkyl and -aryl and related systems.

The author seems to have done a very thorough job in bringing together a wealth of detailed information. There are over 2,000 references listed in author alphabetical order and a section added in proof updating references from the recent literature. These extend to early 1982. There is also a fairly useful subject index.

The book is certainly a valuable addition to the collection of anyone expressing interest in organometallic chemistry in general and rhodium and iridium chemistry in particular.

The Editor's Desk