L178 Book Reviews

Literature closing date: up to end of 1975, in some instances more recent data have been included.

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The Chemistry of Cyano Complexes of the Transition Metals, By A. G. Sharpe, published by Academic Press, London, 1976; Pages XI + 302. Price £ 26.25.

This book is a complete, up-to-date survey of the chemistry of transition-metal cyano complexes. All transition metals in all oxidation states are extensively covered. The book starts with some general features of the chemistry of cyano complexes, such as preparative methods, structural chemistry, thermodynamics, and kinetic aspects.

After a few chapters (II, III, and IV) dealing with metals having only a limited number of cyano complexes: Scandium Yttrium, Lanthanides and Actinides (Chapter II, 14 references), Titanium, Zirconium and Hafnium (Chapter III, 7 references), and a more extended Chapter IV (35 references) discussing Vanadium, Niobium and Tantalium, the book continues discussing the metals with a larger number of cyano complexes. There are Chromium Molyb-

denum and Tungsten (Chapter V, 249 references), Manganese, Technetium and Rhenium (Chapter VI, 116 references).

The three following chapters deal with Iron, Ruthenium and Osmium (Chapter VII, 426 references), Cobalt, Rhodium and Iridium (Chapter VIII, 356 references), Nickel, Palladium and Platinum (Chapter IX, 284 references), and they are probably the most complete review one can find on the subject. As an example, cobalt cyano complexes in various oxidation states are extensively discussed and all the aspects — synthesis, equilibria, thermodyna/mics, spectroscopy, solide state, reactivity and kinetics — are focused. In the case of Platinum an interesting discussion on >II, < IV oxidation state is reported.

The book ends with chapters dealing with the chemistry of Copper, Silver, and Gold (Chapter X, 157 references) and Zinc, Cadmium and Mercury (Chapter XI, 99 references) written and organized with the same great care and professionalism as the rest of the book.

In conclusion, this seems a very useful book, I found it attractive not only as a reference book, but also as a source of possible new ideas in the field.

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