Book review

The Chemistry of Platinum and Palladium; by F.R. Hartley, Applied Science Publishers, London, 1973, 544 + xiii, £14.00

This monograph provides an excellent survey of what is currently significant in the chemistry of platinum and palladium. It is packed with pertinent correlations, observations and data, backed by a useful list of references and completely up to date. A brief six-page introduction describing the occurrence, extraction and general properties of the elements is followed by a consideration of their physical and physico-chemical properties essential to an understanding of their chemistries and the differences between them. Oxidation states from 0 to VI are next considered briefly, and then the detailed chemistry of compounds classified according to the oxidation states and types of ligating atoms or ligands, with considerable emphasis on the organometallic chemistry. The main text occupies 451 pages followed by two useful appendices. The first lists instructions, or references to instructions, for the preparations of starting materials useful in platinum and palladium chemistry, and their pertinent physical properties, for example melting points and solubilities. The second details structural data of 212 palladium or platinum compounds.

The book has a good index and is remarkably free from errors. It is recommended to either the beginner or the advanced research worker alike. It is critical and explanatory, but nevertheless provides a useful compilation of facts and is quite unlike any previous book on platinum or palladium chemistry. All workers in the field must be very grateful to Dr. Hartley for the thought and hard work which he has obviously put into his monograph.

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