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A Massive Work of Reference

Dictionary of Organometallic Compounds, Vols. 1, 2 and 3

EDITED BY DR. JOHN BUCKINGHAM, Chapman and Hall/Methuen, London, 1984, 3000 pages, £495

That organometallic chemistry has now come of age as a scientific discipline is obvious from the enormous number of publications that have appeared on the subject in the last twenty or more years. This quite astonishing growth is also brought out by the reminiscences of Professor Chatt in the preceding pages, where, after describing the growth of activity from his early years to the present time, he refers to the nine-volume "Comprehensive Organometallic Chemistry" edited by Sir Geoffrey Wilkinson and published by Pergamon in 1982.

The objective of the present work is to review the whole field of organometallic chemistry, to select those compounds which, in the opinion of the numerous specialist contributors, are most typical and either useful or potentially useful and then to present their properties and bibliography in a systematically indexed manner.

The elements are treated in alphabetical order, each entry giving details of stoichiometry, molecular weight and basic properties together with structural diagrams. Each entry is numbered to assist location from

the indexes in Volume 3 which themselves detail compound name, molecular formula and CAS registry number, respectively. In terms of numbers of platinum metal compounds listed ruthenium leads the field with 870, followed by platinum, osmium and rhodium with over 400 each, palladium some 346 and iridium 242. The literature has been covered to mid-1983, but annual supplements are to be published, beginning in late 1985.

Since the publication of the dictionary a number of separate parts have been issued dealing only with small groups of metals. These include a volume on the organometallic compounds of nickel, palladium, platinum, copper, silver and gold edited by Dr. R. J. Cross, one on cobalt, rhodium and iridium by Dr. C. White and another on ruthenium and osmium by Dr. G. R. Knox, each available at £22.50.

These volumes will undoubtedly make an important contribution to the yet further development of organometallic chemistry and possibly encourage the greater use of organometallic compounds in industry.

L.B.H.