Journal of Organometallic Chemistry, 142 (1977) C73

© Elsevier Sequoia S.A., Lausanne — Printed in The Netherlands

Book review

The Molecular Geometries of Coordination Compounds in the Vapour Phase; by M. Hargittai and I. Hargittai, Elsevier, Amsterdam, 1977, 275 pages, U.S. \$39.25, Dutch Fl.74.00

This slim book (ca.80000 words) is the English version of the Hungarian original, which appeared in Budapest in 1974. However, some additional references have been inserted, including papers published in 1975.

The first section (ca. 30 pages) deals briefly with the principles of electron diffraction, microwave spectroscopy, and limitations and uncertainties encountered with these techniques. This section is likely to be only of marginal interest to those readers looking for structural information, which is to be found later in the book. Further sections are headed "Addition Compounds" (e.g., B—N, B—P, Al—N), "Electron-deficient Molecules", "Halogen Bridging Complexes", (rather surprisingly) "Salts of Oxyacids" and "Polymeric Oxides", "Hydrogen-bonded Complexes" (e.g., dimers and carboxylic acids and transition metal complexes). The final section deals with metal carbonyls and derivatives incorporating PF₃, olefin or allyl ligands, as well as metallocenes.

There does not appear to be any similar book or review available, and for this reason alone the present monograph is welcome. There are about 600 references.

M.F. LAPPERT

School of Molecular Sciences, University of Sussex, Brighton BN1 9QJ (Great Britain)