

Book review

Inorganic Chemistry of the Transition Elements, Volume 2 (a Chemical Society Specialist Periodical Report); B.F.G. Johnson, senior reporter. The Chemical Society, London, 1973, xvi + 501 pages, £9.50.

This volume reviews the literature of the transition elements and the lanthanides and actinides for the period between October 1971, and September 1972. As stated in the Preface, this report "is concerned with essentially preparative procedures". It does not necessarily include organometallic complexes, kinetic studies, or spectroscopic results, all of which are summarized in separate series of the Specialist Periodical Reports. It does, however, include a great number of X-ray structural results and references to metal complexation stability constants.

The chapters are divided as follows: The Early Transition Metals (Ti, Zr, Hf, V, Nb, Ta, Cr, Mo, W, Tc, and Re) by C.D. Garner, Elements of the First Transitional Period (Mn, Fe, Co, Ni, and Cu) by R. Davis, The Noble Metals (Ru, Os, Rh, Ir, Pd, Pt, Ag, and Au) by L.A.P. Kane-Maguire, and the Lanthanides, including Scandium and Yttrium, and the Actinides by J.A. McCleverty.

The excellent table of contents divides each chapter by element. These sections are further divided into segments covering the different oxidation states of the element and sections on metal carbonyls and binary compounds. These are usually divided still further into sections which indicate the types of ligands (e.g., halides, O-donors, N-donors, S-donors, etc.) that are bound to the metal. This logical and consistent treatment makes this series one of the most useful quick-reference reviews that I have seen.

As required by the tremendous amount of information that is surveyed (the first chapter alone contains over 1100 references), the writing style is terse and uncritical. Structural formulas are used appropriately for less familiar ligands and complexes.

I congratulate the editor and authors for making such a vast amount of information so readily accessible.

*Department of Chemistry
Iowa State University
Ames, Iowa 50010 (U.S.A.)*

ROBERT J. ANGELICI