

Book Reviews

The Chemistry of Uranium. By E. H. P. Cordfunke. Elsevier, Amsterdam, 1969, pp. XIV+250. Price Dfl. 47,50.

This monograph is a concise review of uranium chemistry including the main technological aspects. After a short introduction there are two chapters dealing with the extractive metallurgy of uranium and with the preparation and properties of uranium metal. The next nine chapters are devoted to a discussion of uranium compounds grouped according to their importance or by analogy. A chapter on uranium ions and their reactions is also included. Particular attention is given to the uranium compounds of special interest in nuclear technology.

Perhaps the reader who is concerned with uranium chemistry would like to find in a book like this more information about some important aspects of the subject (as for instance the coordination chemistry of uranium both in solution and in the solid state), but evidently restrictions in length prevented these matters from receiving more detailed treatment. As pointed out by the author, this monograph, which contains over 650 literature references, is intended as an introduction to the considerable amount of research now being done.

The book, nicely printed and illustrated, is likely to find its major use among research workers and people handling uranium compounds in industry.

A. Cassol
University of Padova

Chemistry of Complex Equilibria. By M. T. Beck. Van Nostrand Reinhold Company, London. 1970, pp. 285. Price L. 4 - 10s.

It seems from reading the author's preface that his aim was to write a broad and realistic account of complex equilibria in which the chemistry was not obscured by an excess of algebraic equations. I believe he has succeeded and that this book will be useful to many chemists. It is true that algebraic equations are present in large numbers but this can hardly be avoided when treating the subject of complex equilibria. The bulk of the book is concerned with the following topics: determination of stability constants (experimental and calculation methods), mixed ligand and polynuclear complexes, protonation of complexes, and the factors affecting the values of stability constants. Kinetic and analytical aspects are treated in several chapters and the book is well documented throughout (about 900 references in all).

Unfortunately, the printing is in many places below the highest quality and the Appendix (mentioned in the publisher's description of the book) was missing from the review copy.

J. S. Coe
University of London