Journal of Organometallic Chemistry, 193 (1980) C30

Book review

Solution Equilibria. F.R. Hartley, C. Burgess and R. Alcock, Ellis Horwood Ltd., Chichester, 1980, 361 pages, £26.00; paperback £6.90. Distributed by John Wiley and Sons Ltd.

This is essentially a manual for the determination of stability constants in solution. About one third of the book is devoted to the fundamental concepts and the mathematical methods for deriving and testing equilibrium constants and the treatment is very detailed with appropriate computer programs TRIANG and DALSFEK outlined and listed in appendices. Three chapters are then devoted to experimental methods for studying equilibria, and a reader with a system in mind would obtain clear guidance on the suitability of the various methods from this section. Full details of the experimental methods and the methods of calculation are then given in four case studies: Ni(II)-ethylenediamine, Ag(I)-allyl alcohol, Cu(II)-ethylenediamine-oxalate, and $[PdCl_4]^{2-}$ - Cl^-, - all in aqueous solution. The book concludes with very brief surveys of the interpretation and the applications of stability constants at about the level to be found in standard inorganic texts. There is thus not a great deal here for the general reader, but the reader wishing to study this type of equilibrium for the first time will be very grateful for this guide to modern practice.

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

Alan Pidcock