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Book review

CH-Acids; by O.A. Reutov, I.P. Beletskaya and K.P. Butin, Pergamon Press, Oxford/New York/Toronto/Sydney/Paris/Frankfurt, 1978, viii + 228 pages, \$30.00.

The strengths of carbon acids are of direct interest to a good number of organometallic chemists; not only are they related to the ease of metallation, but furthermore the behaviour of C—H bonds is frequently a guide to that of corresponding C—metal σ -bonds. The volume is of special interest in this respect, since it is written by authors who have made distinguished contributions to the understanding of the mechanisms of organometallic reactions.

The book is stated on its sub-title to be "A guide to all existing problems of CH-acidity with new experimental methods and data, including indirect electrochemical, kinetic and thermodynamic studies". (The seeming immodesty of this claim may perhaps reflect a slight distortion of emphasis in the translation, which, in general, is very good. Inevitably, however, there are some examples of the errors which can arise from transliteration into Cyrillic from Roman script and then back again; thus McEwen, of the well-known acidity scale, appears throughout as McEven.) The topics covered, as indicated by the chapter headings are as follows: Equilibrium acidity of CH-acids; Structure effects on equilibrium CH-acidity; Kinetic CH-acidity; Stereochemistry of proton-transfer; Relationship between equilibrium and kinetic acidity.

The main drawback of this book is that it seems to have been written some years ago; thus there are no references in the text to papers appearing after 1974 (and rather few to those after 1971), although a list of 53 references to papers (of unspecified content) appearing in 1975-1978 has been added. Consequently it is no more up-to-date than the book by J.R. Jones ("The Ionization of Carbon Acids") which appeared in 1973, and less up-to-date than that by E. Bunce ("Carbanions: Mechanistic and Isotopic Aspects"). It does have the great advantage, however, of presenting clear summaries of the work (especially the electrochemical studies) by Soviet authors, which is so often inadequately treated in Western texts, and of bringing a different point of view to bear on more familiar topics. For these features alone it is essential reading for all those concerned with acidities of carbon acids.

The text is directly reproduced from typescript, with the familiar unattractive appearance which this implies, and, as so often in such cases, the type is annoyingly small.

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