

Landolt-Börnstein Group II Volume 13e. Radical Reaction Rates in Liquids. Proton and Electron Transfer. Biradicals; by J.K. Dohrmann, J.C. Scaiano and S. Steenken. Springer-Verlag, Berlin, 1985. xiii + 385 pages, DM 860, ISBN 3-540-13676-2.

Subvolume 13e completes this compilation of radical kinetics, with a literature coverage up to 1981 and in parts up to 1983. The virtual absence of any references to organometallic compounds in this subvolume on proton, electron-transfer, and biradical reactions may indicate a potential research field! This work concludes with a compound index for the five subvolumes — organometallic radicals feature mainly in subvolume c.

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Gmelin Handbook of Inorganic Chemistry. 8th Edition, Fe—Organoiron Compounds, Part B8. Mononuclear Compounds 8. By Adolf Slawisch, volume author, R. Froböse, editor, and Adolf Slawisch, chief editor. Gmelin Institut für Anorganische Chemie der Max-Planck-Gesellschaft zur Förderung der Wissenschaften and Springer-Verlag, Berlin/Heidelberg/New York, 1985 ix + 486 pages, DM1652. ISBN 3-540-93510-X, ISBN 0-387-93510-X.

The present volume is a continuation of Series B on mononuclear organoiron compounds. It covers complexes in metal oxidation state 0 having three carbonyl ligands and a 4-electron neutral donor (⁴L) which is either a cyclohexadiene (this a major part of the book) or is a heterocyclic ring system, such as a furan or a silicon-, germanium-, boron-, or nitrogen-containing five- or six-membered ring containing two double bonds. Additionally, there is a short discussion of complexes where the 4-electron ligand is a cyclohexa-1,4-diene.

This rather restricted class is, nevertheless, represented by 1130 compounds. The literature is complete to the end of 1983, and there are numerous references to the middle of 1984.

As is usual in books in this series, there are extensive tables of compounds with notes on spectroscopic and other data.

A good deal of the work described is related to a study of the reactions of the coordinated cyclohexadiene.

There is, obviously, an enormous wealth of detail in this book, and it will clearly be the principal authoritative source for information on individual compounds belonging to the general class of compound [Fe(CO)₃(⁴L)].

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