Gmelin Handbook of Inorganic Chemistry, 8th edition, Fe. Organoiron Compounds, Part A: Ferrocene 5, J. Füssel, volume author, A. Slawisch, volume editor, Gmelin Institut für Anorganische Chemie der Max-Planck-Gesellschaft zur Forderung der Wissenschaften and Springer-Verlag, Berlin/Heidelberg/New York, 1981, iv + 338 pages, DM 998.00 (in German).

Seven volumes of Gmelin dealing with ferrocene derivatives have now appeared. This latest, vol. A5, completes the set dealing with monosubstituted ferrocenes and therefore includes a valuable formula index to all such compounds in yols, A1-A5. This index takes up one third of the total space reflecting the large number of derivatives prepared in 30 years from the discovery of ferrocene; the remainder is devoted to all those derivatives whose substituent includes elements other than C. H. O. N or halogen. The largest subsection, that devoted to sulphur-containing compounds, occupies 87 pages while perhaps more surprisingly the twelve subsections devoted to all the metallic substituents also total some 80 pages; the remainder are devoted to silicon (43p), phosphorus (10p), boron (5p) and selenium (two compounds) derivatives, Remarkably, the literature has been covered through the middle of 1981 with all the thoroughness characteristic of the Gmelin series. More than the English translations of section and subsection headings (in the margins), the very extensive use of tables for series of related compounds will help the non-German speaking reader to use this volume with ease. Whether in such tables or in the running text, each compound is described with most of its known physical and chemical properties including extensively tabulated spectral and structural data and of course comprehensive literature references. The coverage moreover includes substances which have been clearly identified as reaction intermediates even if they have not been isolated. Each subsection has an introductory account of general preparative methods and gives, where appropriate, common reactions or even reaction mechanisms and properties of the class, followed by specific details for individual compounds.

Workers in the field with access to this and other volumes of the set will be spared many wearisome hours of literature searching by availability of such comprehensive and reliable compilations; they will look forward to the further volumes which will complete coverage of the di- and poly-substituted derivatives.

Gmelin Handbook of Inorganic Chemistry, 8th edition, Fe. Organoiron Compounds, Part C5: Binuclear Compounds 5, U. Behrens and B. Lubke, volume authors, U. Kruerke, volume editor, Gmelin Institut für Anorganische Chemie der Max-Planck-Gesellschaft zur Forderung der Wissenschaften and Springer-Verlag, Berlin/Heidelberg/New York, 1981, ii + 172 pages, DM 501.00.

Unlike the volume reviewed above this one follows the latest pattern of the Gmelin series in being written entirely in English. It covers those di-iron compounds which have ligands bonded to them by six, seven, eight, ten or twelve carbon atoms and completes the present series with respect to binuclear iron compounds. The 12-carbon section consists of bis(cyclopentadienyliron) derivatives of bis(cyclohexadienyl), biphenyl and polycyclic aromatics and