

Book Review

Gmelin Handbook of Inorganic and Organometallic Chemistry, 8th Edition, Fe, Organoiron Compounds, Part C 6b

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This volume is the last on polynuclear iron compounds, and it covers the literature completely until the end of 1989, with many references as late as mid-1991. It is a continuation of the exposition of trinuclear compounds containing $\text{Fe}_3(\text{CO})_{10}$ and $\text{Fe}_3(\text{CO})_{11}$ (*i.e.* Gmelin style ^1L ligands are principally involved). Compounds $\text{Fe}_3(\text{CO})_n$ ($n \leq 9$) and $[\text{Fe}_3(\text{CO})_{12}]$ and compounds with carbon ligands of higher order have been treated elsewhere. Compounds with further different metal atoms are considered here as long as they contain three iron atoms.

This volume is invaluable to anyone working in this area. The compounds are catalogued exhaustively, with methods of preparation in considerable detail, spectra and structural information (whenever available), general properties, and reactions. With this volume one

has no need of Chemical Abstracts and modern data bases, because the indices are extensive and easy to use. The problem is that a relatively small area is covered, and hence it is very frequent that one begins to stray out of the narrow confines of this excellent book. Then the other volumes of Gmelin (if available) and the other literature sources are very necessary.

I find these volumes very congenial. I like the style, the immaculate presentation and the comprehensiveness. My only real criticism is that they are based almost entirely on structure, so that reactivity and mechanism are sometimes difficult to disinter, although the appropriate publications will certainly be cited. Despite the cost, these volumes should be in every serious chemistry library.

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