tetracoordinate carbon: experimental determination of the charge density of $Cp_2Zr(\mu\text{-}\eta^1,\eta^2\text{-}Me_3SiCCPh)(\mu\text{-}Cl)AlMe_2$ and $Cp_2Zr(\mu\text{-}\eta^1,\eta^2\text{-}MeCCPh)(\mu\text{-}CCPh)AlMe_2$" (C. Krüger and S. Werner).

The book will clearly be of interest to workers in the field, although on the whole they will be familiar with much of the data presented. Nevertheless, reviews of this type dealing with a single topic have a useful place in the chemical literature.

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Gmelin Handbook of Inorganic and Organometallic Chemistry, 8th Edition, Organorhenium Compounds, Part 3, Mononuclear Compounds 3
Springer Verlag, Berlin, 1992, pp. 259 + xii, DM 1480
ISBN 3-540-93659-9

This is the third part of the series dealing with organorhenium compounds, the first two parts of which were published in 1989. It discusses the chemical, physical and catalytic properties of mononuclear cyclopentadienylrhenium compounds from literature published before the end of 1987, and it is the first of two volumes devoted to this topic. It concentrates on derivatives of NO and of monotertiary phosphines, on monocarbonyls, and on dicarbonyls not containing additional organic ligands.

As is usual in these volumes, the presentation is of the highest class, with full descriptions of structures, spectroscopic properties, and preparative details. For such information one does not need to consult the original literature. The general remarks give some additional data, but cannot convey the flavour of the original discussions.

There is a comprehensive empirical formula index and also a ligand formula index. These enable one to track down any complex easily. What they do not do is give direct access to, say, a general discussion of catalytic properties. This probably won't exist, because of the rigid compound-based structure. Nevertheless, this invaluable book should be within reach of every organorhenium chemist.

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