

Two of the authors are active in this field and, altgothor, the work is written with great authority.

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*Gmelin Handbook of Inorganic Chemistry. 8th Edition, Mn Manganese, Part D3. Coordination Compounds 3*, K. Koeber and D. Schneider, volume authors, E. Schleitzer-Rust, chief editor, System number 56, Gmelin Institut für Anorganische Chemie der Max-Planck-Gesellschaft zur Förderung der Wissenschaften and Springer-Verlag, Berlin/Heidelberg/New York, 1983, xiii + 341 pages, DM 1160.

The D series for manganese is concerned with coordination compounds. The preceding volumes, D1 and D2, dealt largely with oxygen-centred ligands (D1) or, additionally, pseudohalides (D2). The present work deals with complexes having ammonia, amines, hydrazines, hydroxylamines, or certain heterocyclic compounds as ligands (D4 will deal with more complex heterocycles).

The oxidation states involved are those of  $Mn^{2+}$  (predominant),  $Mn^{3+}$ , and  $Mn^{4+}$ . There is also a small number of mixed  $Mn^{III}/Mn^{IV}$  compounds. The oxidation state +2 represents high spin  $d^5$  systems.

Organometallic compounds are specifically excluded from this volume.

The literature is covered to the end of 1980 and the work is in English.

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*Gmelin Handbook of Inorganic Chemistry. 8th Edition, U - Uranium, Supplement Volume D4. Cation Exchange and Chromatography of Uranium*, H.O. Haug, Y. Marcus, J. Schön, and S. Specht, volume authors, R. Keim, Y. Marcus, and C. Keller, editors, System number 55, Gmelin Institut für Anorganische Chemie der Max-Planck-Gesellschaft zur Förderung der Wissenschaften and Springer-Verlag, Berlin/Heidelberg/New York, 1983, vxiii + 319 pages, DM 993.

This volume is unlikely to have any direct relevance to practitioners of organometallic chemistry. It describes uranium cation exchange behaviour. In contrast to anion exchange chromatography (see the preceding volume, Uranium D3), the procedures described here are not used on a technical scale and the cation technique has considerably less application than anion exchange. However several alternative procedures allow for simple, rapid, and quantitative separation of uranium from accompanying elements, especially in chloride and nitrate media.

The literature coverage is up to the end of 1980 and the volume is written in English.

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