Book review

Gmelin Handbook of Inorganic Chemistry 8th edition, Mn—Manganese, Part D5: Coordination Compounds 5; Springer Verlag, Berlin, Heidelberg, New York, Tokyo, 1987, xix + 749 pages, DM 1541. ISBN 3-540-93550-9.

This volume continues the widely appreciated tradition of "Gmelin" and is in English, as are all volumes on manganese since 1981. It continues the listing and description of coordination compounds of manganese with eight distinct classes of acido-nitrogen type organic ligands, amine-*N*-polycarboxylic acids, hydrazine-carboxylic acids and derivatives, amides and related compounds, hydrazides, derivatives of hydroxylamine, oximes and nitroso compounds, azo compounds, and triazenes. The sections on all but one of the above classes are each introduced by a brief but useful general survey and the individual complexes follow within each class according to the actual ligand involved. They are easy to locate by use of an excellent ligand formula index of 27 pages running from $CH_3NO(HC(O)NH_2)$ to $C_{21}H_{12}N_4O_2$ (RN= $NC_{10}H_5(OH)_2$).

Under each ligand heading, one finds the established pattern of information: preparation or formation of its manganese complexes in order of oxidation state, their physical and chemical properties, and structures, including where appropriate diagrammatic representation of X-ray crystal structures with important bond lengths. There are tables of stability constants and a great amount of quantitative information on each, e.g. the manganese(II) and manganese(III) complexes of ethylenedia-minetetraacetic acid occupy a total of 29 pages.

All involved in the production of this volume are to be congratulated on a job well done. It is beautifully set out, printed and bound. It continues the excellent tradition of detailed documentation and thoroughness associated with "Gmelin". The style is clear and concise, but not too terse. The volume is essential to every good chemical library, but sadly, it may be pricing itself from the shelves of all but the most affluent.

School of Chemistry and Molecular Sciences, University of Sussex, Brighton BN1 9QJ (Great Britain) Joseph Chatt