

catalysis and finishing with biological and medical aspects. It is impossible for a single reviewer to do justice to such a vast area of knowledge.

In such circumstances, complaints are few. Reviews on photographic applications and on dyes and pigments bring to attention areas which normally do not receive much notice. A relatively short section (nevertheless copiously referenced) on compounds with unusual electrical properties might have been more informatively called: "The electrical conduction of coordination compounds in the solid state". A section on the stoichiometric reactions of coordinated ligands actually deals with species such as "imine chelates" (sic), phthalocyanines, and β -diketones. It would be churlish to complain of the absence from consideration of dinitrogen. However, this small molecule finds no space even in the extensive section on catalytic activation of small molecules, which deals with processes such as hydrogenation, hydroformylation, and carbonylation. Dinitrogen is, however, mentioned in a magnificent review (214 pages, 1566 references) on coordination compounds in biology. This is really worth a book of itself, and appeals to the reviewer more than any other section in this volume.

Other reviews cover metal complexes in oxidation, Lewis acid catalysis and reactions of coordinated ligands (a pendant thought, what is an uncoordinated ligand?), the decomposition of water into its elements, chemotherapy, extractive metallurgy, geochemistry, and nuclear fuels and radiopharmacy, and there is a final survey of "other uses".

The editors are to be congratulated on this volume, which undoubtedly overlaps with the element-by-element treatment of earlier volumes. However, this allows access and organization in a different and often more useful way, and is of considerable value. The sheer quantity and generally excellent quality of the material presented here mean that the volume will be a standard literature resource for some time to come.

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Comprehensive Coordination Chemistry, Volume 7. Indexes, xxii + 642 pages, ISBN 0-08-035950-7

This volume contains, along with the expected cumulative Subject and Formula Indexes, an Index of Review Articles and Specialist Texts, prepared by R. Davis; this aims to provide a comprehensive listing of reviews dealing with aspects of coordination chemistry that appeared in English in the period 1945 to early 1986 in primary journals, review journals, or periodicals. (Textbooks are not included.) It is a very useful compilation, containing 1707 entries, and will be much consulted. It is, however, not as complete as it should be because a decision seems to have been made to exclude any reviews that appeared in publications having an organometallic label, so that, for example, the references to annual surveys do not include those in the Journal of Organometallic Chemistry or the Journal of Organometallic Chemistry Library Series, even though there must be much material in these publications that would fall within the defined scope of the set of volumes under review.

The Formula Index is straightforward. A feature is that when two or more metals are present the formula appears twice or more, with each element in turn appearing first. The Subject Index is of a standard usual these days, giving the impression that it has been compiled automatically, without consideration of each item. For example, there is an entry for metal halides, which refers only to (a) *metal alkoxide synthesis from*, and (b) *reactions with organooxysilanes*, whereas metal halides appear hundreds of times in the text. Likewise there is a single entry under *metal salts*, subtitled mysteriously '*catalysts, cleavage*'. Again there is only one entry for the very general topic *nucleophilic attack*, namely '*catalysis, transition metal complexes*'. Finally, I wonder who is likely to look specifically for material under entries such as: *Spleen, diagnostic imaging techniques; Masking, in gravimetry; Melts, metal complexes, geochemistry; or Metal buffering?* Fortunately, the Subject Index is not very important for the use of the volumes, since in general the systematic presentation means that it is fairly easy to locate the material one is seeking.

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