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Book reviews

Gmelin Handbook of Inorganic Chemistry, 8th Edition, Index. Formula Index, 2nd Supplement, Springer-Verlag, Berlin, 1989, Volume 7, C_{23}–$C_{32.5}$, x + 248 pages, DM1129.00. ISBN 3-540-93597-5.

The Main Formula Index, published in twelve volumes between 1975 and 1980, covered all the volumes of the Main Series of the Eighth Edition of the Gmelin Handbook up to the end of 1974, as well as the New Supplement Series up to the end of 1973. The First Supplement to the Formula Index continued this Index up to the end of 1979, and the Second Supplement (the subject of this review) covers the period from 1980 up to the end of 1987. When finished, this will complete the coverage of compounds published in the Gmelin Handbook between 1922 and 1987. This Second Supplement consists, to date, of seven volumes, of which this is the seventh, and the basic structure of the Main Formula Index has been retained. Thus, the Index lists all the elements, compounds, ions, and systems having definite composition that have been described in the text of the Handbook. The index is in three-column format: the first column gives the empirical formula, the second gives the conventional formula as it appears in the Handbook text (as well as any additional information or subdivisions), and the third gives the volume and page reference.

The empirical formula index is arranged in alphabetic and alphanumeric order—C and H are *not* placed first. Ions are always placed after neutral species and anions precede cations. Polymers of the type $\{AB\}_n$ are listed under AB, and multi-component systems (e.g. mixed crystals and melts) are listed under the empirical formulae of their components.

Entries with the same empirical formulae are distinguished in the second column, and arranged in the order compounds, isotopic species, polymers, hydrates, and multicomponent systems. Entries for elements and compounds with multiple occurrences are subdivided by topics.

A work of the size of the Gmelin Handbook relies upon the ease of access to its information for its success. It is no good having a totally comprehensive source of data if the information that you are seeking cannot be found, and this Formula Index makes that access easier. The use of empirical formulae as a means of indexing a chemical treatise is well established, and is particularly appropriate to the arrangement of information within the Handbook. The arrangement, clarity and presentation of these volumes is first class, and I do not believe that any library which possesses the Gmelin Handbook volumes published between 1980 and 1987 will wish to be without the volumes of the Index. It is a welcome addition to the series, adding to its value and utility.

This Index will be the last one to appear in printed form. The contents of the current, and previous, indexes are already contained in the Gmelin Formula Index

(GFI) database, which can be accessed via STN. This is, in future, to be updated annually, and will obviously ensure a comprehensive coverage.

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Kenneth R. Seddon

Tin-Based Antitumour Drugs; edited by M. Gielen, Springer-Verlag, Berlin, 1990, viii + 226 pages, DM128.00. ISBN 3-540-50417-6 and 0-387-50417-6.

This monograph presents the proceedings of the NATO Advanced Research Workshop on the Effect of Tin upon Malignant Cell Growth, held in Brussels in July 1989. (It is made up of eight directly reproduced typescripts, and as usual in such circumstances the type is variable in quality, but it is clearly legible even where it is unattractive in appearance.)

It is a timely publication, since there is a rapidly growing interest in the potential of tin compounds as anticancer agents, and the editor in his Foreword points to the remarkable fact that half of all tin compounds tested have been found to display antitumour activity, although none has so far reached the stage of clinical studies.

The first paper (by B.K. Keppler) offers an instructive account of the use of platinum complexes in cancer therapy and then considers the role of derivatives of other elements. Subsequent papers are concerned specifically with tin compounds; one (by N.F. Cardarelli) will be of particular interest to older readers in that it states "Evidence suggests that (1) tin hormones or chalones of thymic origin exist, (2) that they act on the genome in such a way as to (3) destroy malignant cells, and (4) retard the onset of senescence".

The monograph will certainly act as a stimulus to research on the pharmaceutical potential of tin compounds, and I suspect that it will also be much quoted in applications to grant-giving agencies for fundamental projects in organotin chemistry that are not really concerned with biological activity at all!

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Colin Eaborn

Dictionary of Organometallic Compounds. Cumulative Structure Index to Volumes 1–5; edited by J.E. Macintyre, Chapman and Hall, London, 1990, ix + 256 pages, £150.00. ISBN 0-412-235680-5.

Publication of the Fifth Supplement marks the end of the first edition of this highly regarded dictionary. (In the future new editions will be produced complete at fairly short intervals rather than at longer intervals with supplements.) Appropriately the edition ends with a structure index covering the original volume and all five supplements, and since for all but the simplest compounds the compounds are shown as clearly drawn structural diagrams it is very easy to form an overall impression of the range of organometallic compounds known for each element or to locate a particular compound or type of compound. Even to glance through the structures for an element is instructive and can be a stimulus to ideas for future research. In looking through the pages I was surprised to see that a significant number of the compounds are not organometallic in terms of the most commonly