data and references, which have been studied in the gas phase by electron diffraction or microwave spectroscopy.

On the other hand, not everything came up roses. Too many of the figures have been reduced to a point where it is impossible to discern the numbers in them without the aid of a magnifying glass. Some of the figures are defectively reproduced, with incomplete atoms and cracked bonds, as if they had been etched on pieces of bread. Some of the molecular drawings which occur opposite the empirical formulas at the start of each report are crudely hand-drawn. Hermann–Mauguin symbols are used exclusively for space groups, but Schönflies for molecular symmetries.

Gone, alas, are the days of critical abstracting of the earlier years of *Structure Reports* when the abstractors inserted their own pithy comments in [ ]; the most notable example of this which springs to mind is on p. 445 of Vol. 12, where the abstractor [MFP] discreetly pointed out that 'By an error, the sin β term appears to have been omitted in the denominator of the equation used to calculate the density. If this term is included the calculated density becomes 1·71, and not 1·56 as stated. The observed density is 1·51', thus effectively demolishing the structure of polyglycine proposed by Astbury. Present-day abstractors merely abstract, with their eyes more on the calendar than on whether what they are reading is reasonable. The balance between speed of publication and reliability of the publications is sensitive; this kind of decision cannot be left to a computer which, after all, does only what it is told to do. Nowadays, few people care how many mistakes appear in the literature; the only concern is how much of their work appears in the literature, regardless of quality or accuracy.

Vol. 41A (metals and inorganic compounds) is only about 40% as long as Vol. 40B; only about 1000 compounds are in the formula index. Is this because it is inherently more difficult to determine the structure of an inorganic compound? Probably not. More likely it is because it is easier to get funding to study organic substances (for 'organic', read 'health-related'). The general format is the same as that in earlier volumes. The metals (and alloys) section is alphabetical in arrangement. It comes as a surprise to find *salts*, such as Tl_2S_5 (as S_5Tl_2) or BaS_2 in this section. In the second section, inorganic compounds, salts are put together into related groups where possible, *e.g.* chlorides, oxides, phosphates, silicates, *etc.* The figures appear to be generally of higher quality than those in Vol. 40B. It is annoying to have some simple salts in the text and in the name index only by their uninformative mineralogical names, *e.g.* mercallite, anhydrite, celestite, and thenardite for, respectively, $KHSO_4$, $CaSO_4$, $SrSO_4$, and Na_2SO_4. At the end are two pages of molecules, the structures of which were determined by electron diffraction or microwave spectroscopy studies of the gas phase, followed by three pages of 1975 references to preliminary notes, fuller accounts of which will appear at a later date, and then 27 pages of structures which were omitted from previous volumes.

The *Sixty Year Index* of organic and organometallic compounds is well organized. There are three sections: (1) organic classified index (255 pp.), in which the compounds are grouped by chemical formula followed by the name according to the 91 classes of *Molecular Structures and Dimensions*; (2) organic formula index (86 pp.), in which the formulas, without names, are given in the usual ascending order of C_xH_y (other elements, alphabetically); a cross reference of the 91 classes above is given with each formula; and (3) transition-metal index (95 pp.), in which the transition metals are listed in alphabetical order, with, for each metal, their compounds listed in order by class and then by formula. Each entry in all three sections is followed by the volume and page numbers to *Strukturbericht* or *Structure Reports*. The method used for producing this volume did not allow for subscripts in the formulas nor for bold face for volume numbers, but this should cause no difficulties.

The *Sixty Year Index* of metals and inorganic compounds, with supplement, is also well organized, but in a somewhat different way. First comes a metals classified index (48 pp.), by formula, of elements, binary alloys, ternary alloys, hydrides, borides, carbides, ..., tellurides; (2) metals structure-type index (59 pp.), with the entries listed according to the structure-type code of Pearson (this is fully explained in the introduction); (3) inorganic index (103 pp.) in which the entries, by name, are listed under the classifications: elements, hydrides, carbides, nitrides, ..., silicate minerals. Within each classification the order is that of the groups of the Periodic Table; and (4) mineral index (28 pp.), in which minerals in the metals and inorganic sections are listed together in alphabetical order.

In both of the preceding volumes, if you know the name or formula of a compound in which you are interested it is easy to find out if that particular compound has been referenced in *Strukturbericht* or *Structure Reports* in 1913–1973.

The cumulative index for *Strukturbericht*, Vols 1–7, is based on English translation from the original German indexes. It consists of a subject index (24 pp.), a formula index (36 pp. of metals and inorganic compounds, 8 pp. of organic compounds), and an author index (27 pp.). This volume will be useful for locating references to the original early literature without having to leaf through the separate *Strukturbericht* indexes.

Although the combined cost of all of these volumes is a whopping Dfl 800 ($400 or £200 at today's exchange rates) librarians and crystallographers (who may purchase them at 50% of the list prices) will have to bite the bit and add them to their collections. They are essential, the few reservations expressed above notwithstanding.

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