

Molecular structures and dimensions: guide to the literature, 1935–76: organic and organometallic crystal structures. Edited by O. KENNARD, F. H. ALLEN and D. G. WATSON. Pp. xxiii + 660. Utrecht: Bohn, Scheltema & Holkema, 1977. Price \$66.00, £35.00 (personal rate \$49.00, £25.50).

Some folk like their data on magnetic tape or disc, others prefer microfiche, but the majority of scientists are stubbornly conservative with respect to devices outside their own special field and still prefer a good solid book. This should please them. It weighs 2.4 kg and its 660 pages are contained in a volume of 32 × 23 × 5 cm. Apart from the purpose which is stated in its title, this book can be used to support apparatus, prop open office doors, press family photographs or wild flowers, and if erected vertically can conceal a post-prandial snooze. There is certainly a sense of money's worth, which might not be so from the equivalent ten microfiches weighing 14 g.

The book contains a consolidation and redistribution of the bibliographic data contained in Vols. 1 to 8 of *Bibliography of Organic and Organometallic Crystal Structures*. The most valuable section is the compound name index which lists the 15 933 crystal structures of these two general types that have been published between 1935 and 1976. This list is based on an alphabetical arrangement of key-words, which are permuted so that each compound or synonym name usually appears several times. Thus the rubidium salt of 6-sulfo-6-deoxy- α -D-glucopyranosyl-(1 \rightarrow 1')-D-glycerol appears under the key-words *rubidium salt*, *sulfo*, *glucopyranosyl* and *glycerol*. The choice of key-words is not always successful. For example, an attempt to identify all the anhydro sugars which had been studied failed because of the absence of *anhydro* as a key-word. The organic compounds and the organometallics/metal complexes are listed separately. There follow two molecular formula indexes: one is based on the number of carbon atoms, the other on the metallic element, if present. There is then an author index and a literature index. The common use of the book is to identify a compound of interest in the compound name index, then use the literature index number, e.g. 1,45,54, to identify the journal reference in the literature index. The full reference including the authors' names is then obtained by going to Vol. 1 of *Molecular Structures and Dimensions, Bibliography*, where the reference is given under compound class 45 (carbohydrates), compound 54; or by going to the primary journal itself.

This book, or its equivalent device, is essential for all scientists concerned with organic or organometallic molecular structures in the crystalline state. It removes every excuse for ignorance concerning the literature in this field.

Finally, I must say 'thank heavens' for Olga and her colleagues who had the good sense to start getting these structural data organized before they swamped us.

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Structure reports. For 1974, Vol. 40B. General editor J. TROTTER. Section editor, G. FERGUSON. Pp. viii + 1227 (in two parts, viii + 1–582 and 583–1227). Price Dfl 320. **For 1975, Vol. 41A.** General editor J. TROTTER. Section editors, L. D. CALVERT and J. TROTTER. Pp. viii + 477. Price Dfl 150. **Sixty year index 1913–1973, A. metals and inorganic compounds.** Editor J. TROTTER, assisted by C. A. BEAR, J. M. BREE and S. J. RETTIG. Pp. ix + 229. Price Dfl 80. **Sixty year index, supplement for 1974–1975. A. Metals and inorganic compounds.** Pp. 47. Editor J. TROTTER. Price Dfl 10. **Sixty year index 1913–1973, B. Organic and organometallic compounds.** Editor J. TROTTER, assisted by J. M. BREE and S. J. RETTIG. Pp. x + 437. Price Dfl 190. **Strukturbericht, cumulative index for volumes 1–7 (1913–1939).** Editor J. TROTTER, assisted by J. M. BREE. Pp. vi + 91. Price Dfl 50. All published for the International Union of Crystallography by Bohn, Scheltema & Holkema, Utrecht, The Netherlands.

It was no small decision to agree to write a review of seven volumes made up of xli + 2508 pp. in all. So, one must take a deep breath and plunge in head-first. I do not pretend to have looked at all of the xli + 2508 pp. No typographical errors were noted.

The Structure Reports Commission of the IUCr is to be commended taking the bit in their teeth, pulling up their bootstraps, and valiantly trying to bring *Structure Reports* up to date. Thus Vol. 40B, for 1974, is stated as being published in 1977 (1976, by error, in part 1). This is a distinct improvement over the six-year lapse for Vol. 23 and the nine-year lapse for Vol. 30B, to choose from but two earlier volumes at random. It should not be expected that the yearly volumes of *Structure Reports* appear within a year, and a three-year lacuna is not unacceptable.

These volumes continue to be a most important and indispensable part of any crystallographic library. No practising crystallographer can afford not to have them at her (or his) fingertips. Although many, if not most, crystallographers have a tendency to reference their own previous publications, the availability of *Structure Reports* can and should broaden horizons for them.

Vol. 40B (organic and organometallic compounds) is a monumental undertaking. Approximately 1900 compounds are treated, the vast majority being crystal structure determinations by X-ray or neutron diffraction. For each of these are given: unit-cell data, space group, measured density (calculated densities are no longer given, an unfortunate omission), number of reflections used, refinement method, atomic positions, and final value of *R*. For large molecules the individual positional parameters are not presented; readers interested in these, and in thermal vibration parameters must consult the original literature. Bond distances, bond angles, and hydrogen-bonding modes are usually presented in figures, which are liberally used. Many of the figures are stereo pairs, a very useful feature.

At the end of part 2 there are 160 pp. of compounds which had, for some reason, been omitted from previous volumes. This is followed by a 13 p. list of molecules, with structural