

I have noted in other volumes in the series, and which must trouble the perfectionists concerned with their production.

All the Gmelin organometallic volumes are very valuable, but this one is likely to be heavily used, and is very strongly recommended.

*School of Chemistry and Molecular Sciences,
University of Sussex, Brighton BN2 6LA (Great Britain)*

COLIN EABORN

Landolt-Börnstein. Numerical Data and Functional Relationships in Science and Technology. New Series, Group III, Volume 10. (Eds. K-H. Hellwege and A.M. Hellwege). *Supplement to Volume 111/5, Structure Data of Organic Compounds Sub-volume a: C₁ . . . C₁₅.* Springer-Verlag, Berlin, etc., 1985, xxi + 634 pages. DM 1150. ISBN 3-540-07834-7.

This addition to a highly regarded series is concerned with the structure data and some additional relevant information for all organic compounds containing 1 to 15 carbon atoms whose (complete or partial) structures, determined by X-ray diffraction, were reported in publications appearing in 1969–1972. It is a supplement to Vol 111/5 which appeared in 1970.

As usual the presentation is in the form of tables, which for each compound give empirical formula, the name, the space group, the cell dimensions, the measured density, the X-ray density, the number of formula units in the unit cell, the formula weight, the volume of the unit cell, and, where relevant, some additional information (e.g., colour, solvent used for recrystallization). Some 3017 compounds are listed.

Readers of this journal should not be misled by the title of the volume under review. Many, probably the majority, of the compounds are inorganic species containing organic ligands, including simple compounds such as carboxylates (e.g. Bi(OCH)₃, Si(O₂CMe)₄) and many chelate complexes. There are also numerous organometallic compounds (e.g. EtNa, (Me₃Th)₄, (C₅H₅)Fe(SiCl₃)₂(H)(CO)).

The volume has been compiled (by G. Schudt-Weitz and I. Strell) and produced with thoroughness we have come to expect from Landolt-Börnstein. Excellent though these compilations of X-ray structural data are, however, one must begin to ask whether their continued production can be justified in the light of the availability of on-line information from various data bases. These printed volumes necessarily suffer from being relatively out of date, from presenting only crystal data and not details of the molecular structure, and from enabling a reader to look up only individual compounds by their empirical formulae rather than permitting a search based on structural type. Since anyone requiring structural information has to look up the paper cited, I wonder whether the present type of compilation could not be reduced to a simple list giving for each compound the formula, name and reference — with the advantages that would entail in the ease of production, with a reduction in the gap between publication and inclusion and in the cost.

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

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