

## Book Review

*Bond Index to the Determinations of Inorganic Crystal Structures Published During 1971 – BIDICS 1971*: compiled by I.D. Brown, C.P. Weiss and K.K. Wu. Institute for Materials Research, McMaster University, Hamilton, Ontario, Canada.

BIDICS is a bibliography of the determinations of all crystal structures, other than those of pure organic compounds, published during the year. It can be searched by means of an alphabetical index of bond types present in the crystal.

The bibliography itself lists the title, authors and full bibliographic reference of each paper. The index of bond types uses a coded form of the bibliographic reference as a means to finding the full entry, a scheme that will be familiar to anyone who has used *Chemical Titles*.

The principal usefulness of BIDICS lies in the ability to search rapidly for any particular crystal structure or class of crystal structures using the bond index. Each entry in the bibliography (Part II) has a number of entries in the index (Part I) each corresponding to a different bond type found in the crystal structure reported. A bond type is defined in this index by its terminal atoms. Thus C–O and C–N are different bond types but double and single bonds are not distinguished. The following entries found in Part I for  $\text{Li}_5\text{AlO}_4$  provide an example of how the index can be used.

Year	Journal	Vol.	Page		Bond type	Bond length	Rad.	Compound
71	ZAACA	381	149	**	AL–O	1.72	X **	LI5 AL.O4
71	ZAACA	381	149	**	LI–O	2.00	X **	LI5 AL.O4

(N.B. In the index these entries do not appear consecutively but are arranged alphabetically by bond type with all other entries.)

The first four columns give the reference, the center columns give information about the bond for each bond type and about the radiation used (X-ray, neutrons or electrons). The last column gives the compound formula and, where appropriate, its name. The use of the bond index is described in detail in the introduction to Part I.

It is important to realize the limitations which are imposed on BIDICS by the editorial decision to provide an up-to-date bibliography quickly and at low cost. The bibliography is produced by a systematic search of the journals in which crystal structure reports most commonly appear. No information has been included in the index that was not provided by the author, and that which has been provided by him has been included uncritically. This allows the search to be carried out by someone other than a qualified crystallographer. The bond length quoted in Part I is generally not a typical one but the shortest bond

length of that type reported in the paper. BIDICS is not therefore a list of interatomic distances but a guide to the papers where such distances can be found.

Another editorial limitation has been the decision to include all crystal structure determinations except those of pure organic compounds, i.e. compounds containing *only* C—C, C—H, C—S, C—N, C—O or C—halogen bonds. Any attempt to search the entries under C—O or C—N in the present index will illustrate the futility of using BIDICS as an index to organic structures. For a similar reason the C—C bond type has not been included in the index even for the structures included in the bibliography. *Molecular Structures and Dimensions*<sup>\*</sup> provides a bibliography of organic and organometallic crystal structure determinations classified according to the organic constituent.

In spite of these limitations BIDICS should provide a valuable tool to anyone trying to track down recent crystal structure determinations. The rapid increase in the rate at which crystal structures are being reported has made a bibliography of this kind imperative. With the experience gained in preparing and using BIDICS, it should be possible to evolve a bibliographic system which will be more useful and complete than that now offered, and to this end any comments on how BIDICS might be improved will be much appreciated.

Copies of BIDICS are available for 1969 and 1970 as well as 1971 at a price of \$3 for the first two and \$7.50 for the latter volume.

Copies may be ordered from:

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Institute for Materials Research,  
McMaster University,  
1280 King Street,  
Hamilton, Ontario (Canada).

The Editor's Desk

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<sup>\*</sup> O. Kennard and D.G. Watson, *Molecular Structures and Dimensions*, published by N.V.A. Oosthoek's Uitgevers Mij Utrecht.