

## Book Reviews

*Works intended for notice in this column should be sent direct to the Editor (P. P. Ewald, Polytechnic Institute of Brooklyn, 99 Livingston Street, Brooklyn 2, N.Y., U.S.A.). As far as practicable books will be reviewed in a country different from that of publication.*

**Structure Reports for 1950.** Edited by A. J. C. WILSON, N. C. BAENZIGER, J. M. BIJVOET and J. M. ROBERTSON. Pp. 643 with many figs. Published for the International Union of Crystallography. Utrecht: N. V. A. Oosthoek's Uitgevers Mij. 1954. Price 80 Dutch florins; 21.50 U.S. dollars.

The collection of structure data was initiated more than 25 years ago by P. P. Ewald and C. Hermann. In their *Strukturbericht* the different 'types of structure' were so fully described, the drawings so instructive, and the reporting of the individual papers so detailed, that *Strukturbericht* was an excellent substitute for the original paper. This type of reporting is important for one who needs accurate information and to whom only a limited number of periodicals are available.

In the course of time the *Strukturbericht* underwent a natural development by dropping the classification of structures into structure types and the consequential separation of the geometrical description from the bibliographical report on the papers. This feature was taken over into *Structure Reports*. As with *Strukturbericht*, the main value of *Structure Reports* lies in the complete coverage of the literature of a definite period and in the provision of accurate and detailed information on structural and methodical data. Critical remarks by the abstractor, recognizable as such by inclusion in square brackets, are added where necessary.

The reviewer checked the completeness on Volume 72 (1950) of the *Journal of the American Chemical Society* and found that the abstract of a paper by Jerry Donohue 'The Crystal Structure of 2,2' Diiododiethyltrisulfide' (p. 2701) is missing both in its proper place and in the list of papers belonging to 1950 but reported elsewhere. This paper was, however, found reported in Volume 11, together with a paper by I. M. Dawson & J. M. Robertson on the same substance. As for accuracy and completeness of the reports, the reviewer found them excellent. Obviously, in many cases the abstractor had spent an appreciable amount of work on the presentation and also, in some cases, on criticizing the work. Russian papers are reported quite extensively, because of their inaccessibility.

Thus it may be said that the present volume fully meets all the requirements and wishes of even an exact-

ing user. The authors have to be congratulated and thanked for their excellent work.

Some suggestions might be added: While the essential task of the *Structure Reports* is to abstract papers which are concerned with the determination of structures, the present volume, and also some of the preceding ones, cover more ground. The index, for example, contains the word 'Techniques' and p. 437 has reports on corresponding papers. Papers on particle-size determination, low-angle scattering of small particles, lattice distortions, etc. are included. Wyckoff, in his review of the *Structure Reports for 1949* warned already: "If the uses of X-rays expand still further, the coverage of these fragments may ultimately eclipse in bulk what many will consider the primary field of the *Reports*". It certainly is difficult to limit the bibliography to be covered by the *Reports*. The reviewer thinks that an abstract like that on 'Vulcollan' on p. 521 should have its place in the *Structure Reports* even if there is not much more to be said about it than that an X-ray fiber diagram is obtained by stretching the substance. But it is questionable whether papers should be included which are concerned with techniques exclusively. The reports do not seem to be complete in this respect anyway. Would it not, then, be better to report on these papers in a supplement? Instrumentation is an important item and such supplements might be welcome.

Furthermore, at the end of one report it is stated: "Many interesting points of details are described in the paper, including a method for calculating best atomic coordinates from electron-density data". It might be an improvement if papers containing a special methodical progress of structure determination could be indicated in the index.

Finally, the usefulness of the whole set of *Strukturberichte* and *Structure Reports* could be vastly improved by even a primitive general register, which is highly desirable as soon as possible, in spite of the present gap between Volumes 7 and 10\*.

R. F. BRILL

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\* *Editorial note.*—The Commissionar *Structure Reports* intends to issue a cumulative index for the years 1940–1950 as soon as possible after the appearance of Volume 8.

## Books Received

*The undermentioned works have been received by the Editors. Mention here does not preclude review at a later date.*

**Handbuch der Mineralogie. Ergänzungsband II, Neue Mineralien und Neue Mineralnamen, Lieferung 5.** By C. HINTZE, compiled and edited by K. F. CHUDOBA. Pp. 80 with 7 figs. and many tables. Berlin: de Gruyter. 1955. Price DM. 22.

**Dynamical Theory of Crystal Lattices.** By M. BORN and K. HUANG. Pp. viii+420 with 28 figs. Oxford: Clarendon Press (Geoffrey Cumberlege). 1954. Price 50s.

**Behavior of Metals under Impulsive Loads.** By J. S. RINEHART and J. PEARSON. Pp. 256. Cleveland: American Society for Metals. 1954. Price \$5.50.

**Landolt-Börnstein Physikalisch-chemischen Tabellen. Band 1, Teil 4, Kristalle.** Pp. xi + 1007 with 930 figs. Berlin, Göttingen, Heidelberg: Springer. 1954. Price DM. 318.