

Notes and News

Announcements and other items of crystallographic interest will be published under this heading at the discretion of the Editorial Board. The notes (in duplicate) should be sent to the General Secretary of the International Union of Crystallography (D. W. Smits, Mathematisch Instituut, University of Groningen, Reiddiepskade 4, Groningen, The Netherlands).

Fifth International Congress for Electron Microscopy

The fifth International Congress for Electron Microscopy will be held at Philadelphia, United States of America, from 29 August to 5 September 1962. It is intended that the Congress will include the most significant developments since the previous Congress held in Berlin in 1958. Contributed papers of ten minutes length will be welcomed, and there will also be longer invited papers. Requests for further information should be sent to: Fifth International Congress for Electron Microscopy, 7701 Burholme Avenue, Philadelphia 11, Pennsylvania, U.S.A.

International Union of Crystallography

Structure Reports

1. Volume 18 of *Structure Reports*, covering the year 1954, has appeared. It is the largest volume published so far, its size being 844 pages. It is also the last volume finished under the general editorship of A. J. C. Wilson. His work on Volume 17 (for 1953), which is expected to appear soon, was taken over by the present General

Editor of *Structure Reports*, W. B. Pearson. The section editors for Volume 18 were W. B. Pearson (Metals), J. M. Robertson (Organic Compounds) and J. M. Bijvoet (Inorganic Compounds). The regular price has been set at 120 Netherlands Guilders (\$33.50 or £12 at the present rates of exchange), the reduced personal price for *bona fide* crystallographers in countries adhering to the Union at 70 Netherlands Guilders (\$19.50 or £7). Orders may be placed direct with the publishers, N. V. A. Oosthoek's Uitgevers Mij., Domstraat 11-13, Utrecht, The Netherlands; with the Polycrystal Book Service, G.P.O. Box 620, Brooklyn 1, N.Y., U.S.A.; or with any bookseller. Orders of copies at the reduced personal price have to be sent directly to the publishers; crystallographers in the U.S.A. may place these orders also with the Polycrystal Book Service.

2. As already reported earlier, it is the intention to speed up the production of volumes of *Structure Reports* by having more teams of Co-Editors working simultaneously on different volumes. In accordance with this aim the following Co-Editors have been appointed since the Fifth General Assembly in Cambridge: S. Geller (Inorganic Compounds), J. S. Kasper (Inorganic Compounds), A. McL. Mathieson (Organic Compounds) and A. Taylor (Metals).

Book Reviews

Works intended for notice in this column should be sent direct to the Editor (A. J. C. Wilson, Department of Physics, University College, Cathays Park, Cardiff, Great Britain). As far as practicable books will be reviewed in a country different from that of publication.

Angewandte Gitterphysik. By W. KLEBER. Pp. XII+291. Berlin: Walter de Gruyter & Co. 3rd edition. 1960. Price DM 38.00.

The author, who is professor of mineralogy and crystallography at The Humboldt University of Berlin, explains in his preface the main aims of this book on 'applied lattice physics' as follows: (1) to present a general survey of the physical (and chemical) properties of crystals from the point of view of the lattice theory, (2) to give a fairly elementary introduction into the mathematical theory of the crystalline state, especially intended for mineralogists and chemists, (3) to provide a basis for the planning of new experimental investigations in this field.

The three main parts of the book are entitled: the lattice structure of crystalline matter, the physics of ideal crystal lattices, and the real structure of crystals and its physical significance. Considerable sections of the book, especially in the last part, which deals with subjects that have vastly developed since the appearance of the first edition in 1941, have been thoroughly revised and brought up to date in the present edition.

On the whole the author can be congratulated on having achieved his aim so well in a book of this size. His selection of topics is good, covering the most relevant parts of the subject and presented in logical order. Some

serious gaps, however, ought to be filled in the next edition. For example there is nothing to be found on computational methods for evaluating complex crystal structures, on the use of neutron-diffraction methods for crystal analysis, on the electronic structure of metallic crystals and its bearing on the thermal and electrical properties of these crystals, and on photochemical and wide-angle X-ray (Borrmann) techniques for making individual dislocation lines visible.

The text is clearly written in good style and is accompanied by numerous tables and well drawn diagrams. There are some odd omissions: for example the names of Einstein and Grüneisen in connection with the thermodynamics of solids and those of Born and Karman as the founders of lattice dynamics are not mentioned. Also some of the theoretical explanations given are obsolete, for instance the Braunbeck theory of melting and the theory of scattering of lattice waves by 'thermal fluctuations'.

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