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 Executive Secretary of the International Union of Crystallography (J. N. King, International Union of Crystallography, 13 White Friars Chester CH1 1WZ, England).

Structure Reports

In addition to the five volumes of Structure Reports published in November 1974 (Volumes 30A, 31B, 32B, 33B and 35B, covering the organic literature for 1965-68 and 1970), five more volumes have just been published. These latest volumes cover all the literature for 1963 and the literature for metals and inorganic compounds for 1965, 1966, 1968 and 1970. All the annual volumes, up to and including Volumes 39A and 39B (for 1973), should be published by the end of 1975. This will bring Structure Reports up to date and make it even more useful to all crystallographers.

The five volumes just published are:

Volume 31A, covering the literature for metals and inorganic compounds for 1966 (viii+278 pages). Price: 75 Netherlands guilders.

Orders may be placed direct with the publisher (Oosthoek, Scheltema & Holkema, Emmalaan 27, Utrecht, The Netherlands), with Polycrystal Book Service, P.O. Box 11567, Pittsburgh, Pa. 15238, U.S.A., or with any bookseller. Details of price reductions for personal subscriptions and for standing orders may be obtained direct from Oosthoek, Scheltema & Holkema or from Polycrystal Book Service.

Book Reviews

Works intended for notice in this column should be sent direct to the Book-Review Editor (M. M. Woolfson, Physics Department, University of York, Halsington, York Y01 5DD, England). As far as practicable books will be reviewed in a country different from that of publication.


The opening chapter — on the present state and aims of research on crystalline textures — indicates the particular contribution which this book makes to the literature. The next two chapters give a very exhaustive mathematical presentation of the analysis, much of which is used in later chapters. The four remaining chapters treat of thermal expansion, thermal conductivity, electrical conductivity and dielectric susceptibility respectively. In each chapter the tensor treatment is first given for single crystals and then this is followed by the modifications necessary for polycrystalline specimens, such as rocks or rolled metal sheets. The effect of preferred orientation is carefully analysed. There are many examples of the working out of the principal coefficients from the quantities measured on particular kinds of crystals going from triclinic through all the systems down to cubic. There are also many tables of the physical constants relating to these four properties — thermal expansion, conduction (thermal and electrical) and dielectricity.

There are a few errors. On p. 87 a $\frac{1}{3}$ has been omitted in equations 738/740 and a 3 in equation 741. On p. 88 the calculated values of the principal coefficients of expansion are incorrect both in magnitude and direction. On p. 92 the formula 762 introduces confusion because $\tan^2 \theta = \tan^2 (\frac{\theta - 2 \omega}{2})$. As a result the value of the expansion coefficient calculated from the formula is incorrect.

The book is beautifully printed and the illustrations are numerous and very clear. The bibliography is extensive. The book can be warmly recommended, both for the detailed working out from practical measurements of second-order tensor properties and also for the mathematical treatment of polycrystalline aggregates.

W. A. Wooster


This is a book primarily for research workers already in, or about to enter, the field of solid-state physics, chemistry or materials science; it is a book for the working specialist, rather than the amateur. It concedes little to a user unfamiliar with crystal structures or who does not already know the context and priorities of the subject.

The first edition was published in