

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 1NZ, England).

New Volume of

International Tables for X-ray Crystallography

Volume IV, entitled *Revised and Supplementary Tables* and edited by James A. Ibers and the late Walter C. Hamilton, has just been published for the Union by the Kynoch Press, Witton, Birmingham B6 7BA, England, at a price of £10.00. Orders may be placed direct with the Kynoch Press, with Polycrystal Book Service, P.O. Box 11567, Pittsburgh, Pa. 15238, U.S.A., or with any bookseller.

Since the publication of Volume III in 1962, experimental and theoretical activity in all areas of crystallography has greatly increased. The principle motivation for a new volume was to provide revised values for atomic scattering factors, X-ray wavelengths and atomic absorption coefficients.

Volume IV has a cumulative index for all four volumes. When specific information included in Volume IV supersedes material in an earlier volume, the reference to the earlier volume is included in parentheses. In such cases, the numerical values given in Volume IV should be used, but the earlier volume should also be consulted for the sometimes extensive textual material accompanying the tables.

A number of special topics, mainly mathematical in content, which were not included in Volume II, have developed considerably and have been incorporated in Volume IV. Such new material, selected by the Editors, includes diffractometer calculations, analysis of thermal motion in crystals, and some aspects of direct methods for phase determination. Although some of this material is more textual than tabular, it has been included because of its great importance to most structural crystallographers. Omission of other topics should not be taken as indicative of their relative unimportance. Selection had to be made by the Editors. The Union is greatly indebted to the Editors and to all the contributing authors for making the publication of this volume possible.

Volumes I, II and III in this series are

still available but it has been necessary to increase the price slightly to £8.00 per volume. Prospectuses for all volumes and details of preferential prices for personal subscribers may be obtained from the Kynoch Press or from Polycrystal Book Service.

Crystallographers

This section is intended to be a series of short paragraphs dealing with the activities of crystallographers, such as their changes of position, promotions, assumption of significant new duties, honours, etc. Items for inclusion, subject to the approval of the Editorial Board, 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 1NZ, England).

Dr **William L. Fink** has retired as Chairman of the Joint Committee on Powder Diffraction Standards and has been succeeded by Mr **LeRoy L. Wyman Sr**, former Treasurer of the JCPDS. Mr **J. W. Caum** has been elected Vice-Chairman and Dr **J. D. Hanawalt** has been elected to the Board of Directors. Mr **Andrew W. Danko** has been appointed Secretary and General Manager on the retirement of Dr **Roger G. Simard**.

Dr **R. D. Heidenreich**, Bell Telephone Laboratories, Murray Hill, U.S.A., has resigned as a Co-editor of the *Journal of Applied Crystallography*. He has been a Co-editor since the journal was first published in 1968.

Dr **George A. Jeffrey** has left the Department of Crystallography, University of Pittsburgh, to take up the appointment of Senior Scientist at the Chemistry Department of the Brookhaven National Laboratory. Dr Jeffrey continues to be a Co-editor of *Acta Crystallographica*.

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, Heslington, York YO1 5DD, England). As far as practicable books will be reviewed in a country different from that of publication.

Electron optics. By P. GRIVET, translated by P. W. HAWKES, and revised by A. SEPTIER. Pp. lvii + 870, Figs. 323. Oxford: Pergamon Press, 1972. Price £12.00.

It is now nine years since the first edition of Grivet appeared in English and it

remains one of the best books on the subject today, treating as it does not only the principles of electron optics but also their application in the electron microscope and other instruments. In this new edition the chapters dealing with the calculation of the field and potential in both electrostatic and magnetic lenses have been considerably expanded. However, despite the 1972 publication date the powerful methods developed by Read are not mentioned. The emphasis of the book is on high-energy optics, but this is rarely explicit or obtrusive though the instrumental examples are all of high-energy devices. A complete chapter has been added on prism optics and this includes a discussion of the fringing field problem in both the magnetic and electrostatic cases. The treatment is fairly general, but does not mention some of the fairly recent advances in the use of parallel-plane or coaxial-cylinder geometries nor the very important work of Purcell on spherical electrostatic systems.

An edition in two parts, *Optics and Instruments*, is available. For readers who are less interested in instruments there are possibly better, though more expensive, choices, but for those who need the full coverage this book is excellent.

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Kristallzüchtung. By K.-Th. WILKE with the assistance of J. BOHM. Pp. 923, Figs. 440, Tables 145. Leipzig: VEB Deutscher Verlag, 1973. Price: 160.00 M.

This book is not simply a second edition of the book *Methoden der Kristallzüchtung*, also written by K.-Th. Wilke and published in 1963. On the contrary, it is a completely new edition giving in its nearly a thousand pages a wealth of information. It is interesting to see how in the last ten years crystal growth methods have developed. Growth from the gas phase, from fluxes and from the melt have become increasingly important, no doubt as a result of the demands of solid-state technology.

The book starts with a theoretical chapter on the fundamentals of crystal