

International Union of Crystallography

International Tables for X-ray Crystallography

Volume I of *International Tables for X-ray Crystallography* is out of print. The Executive Committee of the Union has decided not to reprint this volume because the new volumes on symmetry tables are well under way. The first volume in the new series, on direct space, will contain much more information than the old Volume I and is expected to be published in 1977. Further details of the availability and the price of the new volume on direct space will be announced nearer to the date of publication.

The remaining volumes in the present series continue to be available. Volume II (*Mathematical Tables*) and Volume III (*Physical and Chemical Tables*) cost £9.50 each whilst Volume IV (*Revised and Supplementary Tables for Volumes II and III*) costs £11.50. Copies may be obtained at the special reduced prices of £5.00 for Volumes II or III and £7.00 for Volume IV by *bona fide* crystallographers, who must give an undertaking when purchasing that the volume is for their personal use only. Orders may be placed direct with the publishers, The Kynoch Press, Witton, Birmingham B6 7BA, England, or with Polycrystal Book Service,

P.O. Box 11567, Pittsburgh, Pa. 15238, U.S.A., from whom prospectuses may also be obtained.

Symmetry Aspects of M. C. Escher's Periodic Drawings

This extremely popular book by Professor Caroline MacGillavry has been reprinted for the Union and is now available from Bohn, Scheltema & Holkema, Scientific Publishers (formerly Oosthoek, Scheltema & Holkema), Emmalaan 27, Utrecht, The Netherlands, at a price of 40 Netherlands Guilders. The book contains 42 plates (30 black-and-white and 12 in colour) of periodic drawings by the Netherlands artist M. C. Escher. Their symmetry aspects are discussed by Professor MacGillavry. Apart from its artistic value, the book is of great use for teaching purposes. An identical edition, entitled *Fantasy and Symmetry*, is being published simultaneously in North America by Harry Abrams, Inc., and copies may be ordered through Polycrystal Book Service, P.O. Box 11567, Pittsburgh, Pa. 15238, U.S.A., or any bookseller.

Book Review

Works intended for notice in this column should be sent direct to the Book-Review Editor (J. H. Robertson, School of Chemistry, University of Leeds, Leeds LS2 9JT, England). As far as practicable books will be reviewed in a country different from that of publication.

Crystals, X-rays and proteins. By D. SHERWOOD. Pp. xxii + 702, London: Longmans, 1976. Price £12.50.

I approached the review of Mr Sherwood's book with pleasurable anticipation since its title and size led me to hope for a valuable contribution to the subject. However, after studying the book in detail I was left with a feeling of disappointment, due in the main to the following principal criticisms.

The reader must reach Part IV, the section dealing with biopolymers, before encountering any large number of references to original work rather than to standard textbooks or monographs. Part IV starts at page 523, in a book containing a total of 683 pages.

Part III, *Structure Solution*, deals well with the topics selected but falls short of a comprehensive treatment of this important area of crystallography; for example the Patterson function is dealt with in fourteen pages, and direct methods in eight. Experimental technique, which is dealt with in 31 pages, contains much routine information.

Part IV begins with Chapter 15, *Protein Crystallography*, and devotes three pages to the solution of the phase problem, although the next chapter deals well with diffraction by helical structures.

Finally there is a description of the solution of a structure which is included as an appendix. However, this is a

one-dimensional example of a non-existent small molecule and although it can be used as a useful way of illustrating procedures, it is not ideal as a substitute for the real thing.

To summarize my criticisms I feel that there is a lack of balance in the material which has been used in the book, and many areas have been unnecessarily elaborated while other important areas have been dealt with rather cursorily.

Having said this, there are some good points to the book. Where detail is included it is usually of a high standard and it is obvious that a lot of painstaking work has gone into the production. In fairness to Mr Sherwood, he does say on the dust-cover that his book contains a complete account of the theory of the diffraction of X-rays by perfect crystals and a large part of the book is a compilation of such theory, and will serve as a useful reference for people interested in this aspect of X-ray crystallography.

There are few errors in the text although some diagrams are wrong or difficult to interpret, for example the mirror plane on page 83.

G. H. W. MILBURN

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