

International Union of Crystallography

Announcements of Forthcoming Meetings and Short Courses

Readers of *Acta Crystallographica* are reminded that information about forthcoming meetings of interest to crystallographers, including meetings of scientific societies, congresses, summer schools, *etc.*, is published regularly in the *Journal of Applied Crystallography*. In each issue, in addition to details of any new meetings, a calendar of events is published, giving abbreviated notices of all meetings announced in the current or earlier issues of the journal. Details of meetings for inclusion, subject to the approval of the Editorial Board, should be sent to Dr J. N. King, Executive Secretary, International Union of Crystallography, 13 White Friars, Chester CH1 1NZ, England. Announcements of meetings are not normally published in *Acta Crystallographica*.

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 Volume 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 Reviews

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.

Crystal physics – macroscopic physics of anisotropic solids. By H. J. JURETSCHKE, edited by F. M. H. VILLARS. Pp. xvi + 220 Fig. 28, Tables 25. London: Addison-Wesley, 1975. Price (cloth) £10.75, (paper) £6.90.

Hellmut Juretschke, a name well known to crystal physicists, should be congratulated for this neat little book on the macroscopic physics of anisotropic solids, which developed out of a series of lectures at the Polytechnic Institute of Brooklyn. The book adds itself to the fairly numerous textbooks on the field – the classic book by Nye, the more recent books by Bhagavantam and Mason and (in part) the book by Birss and the very recent book by Wooster – but it has clear, distinguishing features of its own and is rich in stimulating material.

The choice of topics is conventional and includes, in order, crystal symmetry, the mathematical description of crystal properties, tensor symmetry and linear vector spaces, electric polarization, magnetic symmetry, electrical conduction, thermoelectricity, crystal optics, second-order optical effects, elasticity, piezoelectricity and some higher-or-

der interactions (in particular third-order elasticity). The discussion of each physical property includes a review of the basic physics of the interaction in question, a discussion of the symmetry restrictions governing the effect and some applications that emphasize the role of anisotropy. The selection of specific points taken up for each topic is fairly unconventional, and was governed mainly by the questions that the author and his students wanted to have clarified. Each chapter (except Chapter 1) includes a set of (about ten to twenty) problems, of varying degree of difficulty, which fill in details of derivations skipped in the text, illustrate specific applications, or extend the arguments of the text to wider ranging situations. At the end of each chapter there is a brief list of references to other treatments of the subject matter in other textbooks or in treatises (except for Chapter 13 where only original papers are quoted), while a small sampling of the original literature pertinent to each chapter is given in a list of additional readings at the end of the book. There is finally a set of six appendices on the symmetry operations of the crystallographic point groups and their generating elements, the linear combinations of tensor components transforming in invariant sub-