

International Union of Crystallography

Tenth General Assembly and International Congress of Crystallography

Exhibitions of Non-commercial Equipment and Visual Aspects of Crystallography

During the Tenth International Congress of Crystallography in Amsterdam, 7–15 August 1975, the Union's Commission on Crystallographic Apparatus is sponsoring two exhibitions, one of non-commercial equipment and the other on visual aspects of crystallography. Crystallographers are invited to participate actively by displaying devices, gadgets, charts, *etc.* and striking and unusual photographs.

Non-commercial equipment

Items of interest to those attending the Congress include new designs or unique modifications of: cameras and diffractometers, high- and low-temperature attachments, high- and low-pressure equipment, crystal-growing apparatus miscellaneous gadgets.

Exhibition space and standard electric outlets (220 V, 50 Hz, 15 A single phase) will be provided but water and high-power electric outlets will not be available. Items requiring these latter facilities can, of course, be exhibited but not operated.

The following information should be supplied:

1. Name and address of the exhibitor.
2. Description of apparatus.
3. Exhibition space required.
4. Storage space required (for shipping crates, spare parts, *etc.*).
5. Approximate weight and size of apparatus.
6. Whether or not electricity is required.
7. Whether the apparatus is to be shipped or brought by the exhibitor.

The Commission wishes to draw attention to the essential nature of the non-commercial apparatus exhibition. It is intended for display, by individual crystallographers, of items of apparatus with new or unusual features but not of apparatus intended for commercial exploitation. Should any item on display involve commercial overtones, the Commission will request that it be withdrawn.

Visual aspects of Crystallography

Crystallographers and others are in-

cluded to participate actively by submitting striking and unusual photographs or drawings on crystallography or crystallographers. Special attention is drawn to the possibility of submitting drawings which can be used in teaching crystallography.

The contributions should be mounted on standard mounting board (no glass or wooden framing) and may be accompanied by explanatory material if desired. Neither mounted print nor drawing nor explanatory material should separately exceed 2000 cm² in area (40 × 50 cm format preferred). Each contribution must have a caption and exhibitor's name and address. Exhibitors may contribute more than one item. The photographs and drawings will be judged primarily in terms of an aesthetic appearance rather than technical interest or importance. The best contributions will be awarded certificates of merit.

Potential exhibitors are asked to submit small prints of their proposed entries. They will be notified thereafter whether their contributions are suitable for the exhibition. Contributions will not be returned unless specifically requested; exhibitors attending the Congress will be required to remove their own contributions.

All potential exhibitors are invited to contact the chairman of the Non-Commercial Exhibition Committee, Dr H. van Koningsveld, Tenth International Congress of Crystallography, Organisatie Bureau Amsterdam B.V., P.O. Box 7205, Amsterdam, The Netherlands. The deadline for applications is 1 March 1975.

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).

Structure Reports

Five new volumes of *Structure Reports* have just been published. As a result of the increasing rate of publication of detailed crystal analyses, it has become necessary, for Volume 30 onwards, to publish *Structure Reports* in two parts: A. *Metals and Inorganic Compounds*, and B. *Organic Compounds* (including organometallic compounds). The reports generally give: name, formula, papers reported, unit cell and space group data, details of analysis, atomic positions, and detailed description and discussion of the structure (with bond

lengths and angles, and often an illustration). The structural data are reported so fully that reference to the original paper is often unnecessary, there are extensive indexes in each volume.

The five volumes just published are:

Volume 30B, covering the organic literature for 1965 (470 pages). Price: 80 Netherlands guilders.

Volume 31B, covering the organic literature for 1966 (482 pages). Price: 90 Netherlands guilders.

Volume 32B, covering the organic literature for 1967 (518 pages). Price: 100 Netherlands guilders.

Volume 33B, covering the organic literature for 1968 (580 pages). Price: 110 Netherlands guilders.

Volume 35B, covering the organic literature for 1970 (958 pages). Price: 165 Netherlands guilders.

Volume 28, covering all the literature for 1963, and the remaining volumes covering all the literature up to the end of 1970 are expected to be published during 1975.

Orders may be placed direct with the publishers (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.

Molecular Structures and Dimensions

Volume 5 of this series: *Bibliography 1972–73, Organic and Organometallic Crystal Structures*, was published recently by the International Union of Crystallography and the Cambridge Crystallographic Data Centre. This volume contains information on approximately 2000 structures published during 1972–73. Entries are arranged in 86 chemical classes and cover organic compounds, complexes, and organometallic compounds. There are three indexes: author, formula and transition metal. All are cumulative for the years 1935–1973 and give references to Volumes 1–5. Volume 6 for 1973–74 is in preparation and is due to appear early in 1975. A new numerical data volume for the years 1966–69, to follow Volume A1, *Interatomic Distances 1960–65*, which was published last year, is also in preparation.

The price of Volume 5 has been maintained at the same level as that of Volume

4 and is 55 Netherlands guilders (U.S. \$21.00 or £9.00). Personal copies may be obtained at a reduced price of 39 Netherlands guilders (U.S. \$15.00 or £6.50). The new volume can be obtained direct from Oosthoek, Scheltema & Holkema, Emmalaan 27, Postbus 13079, Utrecht, The Netherlands. Alternatively orders may be placed with Polycrystal Book Service, P.O. Box 11567, Pittsburgh, Pennsylvania 15238, U.S.A., or with the Crystallographic Data Centre, Lensfield Road, Cambridge, CB2 1EW, England or with any bookseller. Standing orders can be placed for the series with Messrs Oosthoek, Scheltema & Holkema to ensure the earliest possible despatch of new volumes as soon as they are published.

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.

Diffusion and defect data. Vol. 8. Nos. 1-4. Edited by F. H. WOHLEBIER, Pp. iv + 353, Figs. 42, Tables 126. Eight issues a year. Aedermannsdorf, Switzerland: Trans Tech Publications, 1974. Price (yearly subscription) Swiss F 344.00 (U.S. \$ 108.00).

This publication is an expanded version of the former *Diffusion Data*, which has been published since 1967 as a specialized source of recent work in that field. Issued in two volumes each year, it is a survey of new published work on diffusion and defect properties for all materials which are solid at normal temperature and pressure. The volume reviewed covers more than 1700 publications, each classified by both the material concerned and the property studied. The first section of the work is a compilation of results from just over 300 papers, adjudged to contain 'important new reference data'. Each is summarized in less than 200 words, with important tables and figures reproduced; 42 figures and 126 tables are included. The references are grouped according to the type of material described. Typical headings include *Solid Metals and Alloys, Semiconductors, Nitrides*, and so on.

The second section is a listing of other recent references — more than 1400 in all — classified according to the property studied. Thus there are 158 references under the general heading of

Diffusion Processes, 333 under *Dislocations*, 107 concerned with ion bombardment and implantation. In addition to diffusion and the traditional range of defects, irradiation effects ranging from ion implantation to laser irradiation are included.

The third section collects all the references according to the material studied. Each entry is either a referral to the summary in the first section or a brief synopsis of the paper concerned (less than 100 words). There is also a condensed subject index.

A publication of this type fulfils an obvious need. The task of sifting the veritable mountain of published papers for useful nuggets of information grows more difficult and time-consuming each year. The availability of a publication which sorts the literature and classifies papers according to the materials and the properties studied is a real boon to workers in this field. The reviewer found five recent papers of interest in as many minutes, and a colleague working in an entirely different field reported a similar experience. The typography is clear and pleasing to the eye, making the volume very easy to use. Not everyone would agree with the selection of 'important' references, as it is quite heavily biased toward diffusion work. Nevertheless, the expanded terms of reference have produced a publication which is a useful reference source for anyone interested in defect phenomena, at a price not significantly higher than some of the individual journals it surveys.

Faculty of Technology
The Open University
Milton Keynes MK7 6AA
England

I. LOWE

An introduction to X-ray spectrometry. By RON JENKINS. Pp. xi + 163, Figs. 95, Tables 21. London: Heyden & Son, 1974. Price £5.00, \$14.00, DM 41.00.

The past few years have witnessed a rapid growth in the application of X-ray spectrometry to the chemical analysis of media ranging from biological materials to objects of archaeological interest. In part, this has been brought about by the development of energy-dispersive systems together with the increasing application of computers to facilitate data handling.

Clearly, with such a widespread growth of interest in X-ray spectrometry a need has arisen for an introductory

text, readily understandable by workers of varying backgrounds, covering the essential aspects of the subject: instrumentation, methods of calibration and the various techniques of qualitative and quantitative analysis. Ron Jenkins has recognised this need and written a book which explains these topics in a manner that will stimulate the newcomer to the field whilst providing much of interest to the experienced spectroscopist. The treatment of X-ray spectra and the underlying theoretical physics, which together occupy about one third of the book, is adequate bearing in mind the title of the work, and certainly equips the reader with sufficient background knowledge to tackle more advanced treatises. It is pleasing to note that the recently introduced energy-dispersive instruments are described and their performance compared and contrasted with the more conventional wavelength-dispersive spectrometers.

The text is competently written, the format pleasing, and priced at £5.00 the book surely represents good value for money. Although not primarily written with undergraduates in mind it could be used in conjunction with a short special course on the subject; most probably, however, this book will find greater appeal in research and industrial laboratories.

G. A. COX

Department of Physics
University of York
Heslington
York YO1 5DD
England

Applied mineralogy. Vol. 5. Apatite. By DUNCAN McCONNELL. (General editors: V. D. FRECHETTE, H. KIRSCH, L. B. SAND and F. TROGER). Pp. xvi + 111, Figs. 17, Tables 31. New York: Springer-Verlag, 1973. Price S 324, DM 47, US \$ 14.90.

The only acceptable approach to publishing science is to be involved with the subject and uninvolved with the personalities who prosecute it. In this way, the inanimate is savagely scoured and polished to purity, while the animate are gently left to all their warts and imperfections. To depart from this standard is to diminish impartiality and to substitute the easy cash of emotion for the hard currency of reason. It is unfortunate that Duncan McConnell, whose contributions are well known to mineralogists and medicals alike, should persist in