

International Union of Crystallography

Voluntary Deposition of Material, including Structure Factor Tables

The International Union of Crystallography has set up a voluntary scheme, for an experimental period, for the deposition of structure factor tables and other voluminous material which would otherwise be published in the Union's journals. Such material may be deposited, free of charge, either at the request of the author and with the approval of the Co-editor or on the recommendation of the Co-editor and with the approval of the author.

Under this scheme, authors will submit articles, including two copies of any material to be deposited, to the editors for refereeing in the normal way. The author should indicate clearly the material that he wishes to be deposited. If the paper is accepted for publication then one copy of this material will be sent by the Union to the Supplementary Publications Scheme, National Lending Library for Science and Technology, Boston Spa, England, where it will be stored on microfiche, and the second copy will be stored elsewhere. Other depositories may be brought in later and suitable announcements will be made in due course. Authors are invited to state where copies may be obtained in their own country, in addition to the arrangements made by the Union. Microfiche and full-size copies will be obtainable by individuals on quoting a Supplementary Publication Number that will appear in the parent article. Copies of short items (10 pages or less) will only be available as photo-copies. They will not be available on microfiche as this offers no economic advantage. For this trial period the Union has decided to pay the charge for copies obtained from the N.L.L. Hence, individuals wishing to obtain a free copy of material from the N.L.L. must address their request to the Executive Secretary, International Union of Crystallography, 13 White Friars, Chester CH1 1NZ, England, indicating clearly whether they require a photo-copy or (for items of more than 10 pages) a microfiche. Copies of material sought direct from depositories must be paid for by the individuals concerned.

A footnote will be published with the paper, setting out the details necessary to enable any reader to obtain a copy of the deposited data associated with the paper.

A single microfiche will accommodate 58 pages in micro-form, plus an eye-visible title; additional pages are accommodated on numbered 'trailer' fiches, each holding 69 pages. The eye-visible title on the first microfiche will comprise the supplementary publication number, the authors' names, and the bibliographic reference to the parent article which the microfiche supplements.

Authors will be responsible for the preparation of camera-ready copy according to the following specifications.

- (a) Optimum page size for text or tables in typescript: up to 30 cm × 21 cm.
- (b) Limiting page size for text or tables in typescript: 33 cm high × 24 cm wide.
- (c) Limiting size for diagrams, graphs, spectra, *etc.*: 39 cm × 28.5 cm.
- (d) Tabular matter should be headed descriptively on the first page, with column headings recurring on each page.
- (e) Pages should be clearly numbered to ensure the correct sequence.

It is recommended that all material which is to be deposited should be accompanied by some prefatory text. Normally this will be that abstract from the parent paper and authors will greatly aid the deposition of the material if a duplicate copy of the abstract is provided. If authors have the facilities available the use of a type face designed to be read by computers is encouraged. Tables should be in normal typescript, and not reduced photographically.

Structure factor tables prepared from computer printout must be presented in the form indicated above, not in the form of continuous printout, and must be arranged with the greatest economy of space possible. The printout must be in clear black type and must be not printed on paper with coloured stripes, if the legibility of the tables is not to be impaired seriously. A suitable program for producing computer printout in the required page size (30 cm × 21 cm) and including table headings and page numbers is the *CRYLSQ* program, which is part of the 'X-RAY' system of programs by Stewart, Kundell & Baldwin (1970). All columns must be headed. A 'paste-up' on white card of computer printout will be acceptable provided that the quality of the printout is adequate.

Reference

- STEWART, J. M., KUNDELL, F. A. & BALDWIN, J. C. (1970). *The X-ray System, version of 1970*. Chemistry Department Univ. of Maryland, College Park, Maryland 20740, U.S.A.

IUCr-UNESCO Project on the Teaching of Crystallography

Under this Project, jointly sponsored by the International Union of Crystallography and UNESCO, funds were provided by the latter organization to assist in the development of some new learning materials in the field of crystallography [see *Acta Crystallographica* (1969), A25, 724].

Arrangements have been made with the authors and/or publishers for having a certain number of copies of each item made available to UNESCO for free distribution to teachers of crystallography in developing countries (except for item 5 where this was clearly impossible in view of the cost and for item 11). This distribution will be done by the IUCr Commission on the Teaching of Crystallography, and persons interested in receiving a free sample may write to Professor A. Authier (Laboratoire Minéralogie Cristallographie, Université Paris VI, 9 quai Saint Bernard, Tour 26, Paris Vème, France) who may also provide more detailed information on each of the eleven items. Preference will be given to crystallographers interested in new approaches to teaching and who are willing to report on the results of the new techniques that they may be using. Please, indicate clearly which items are requested.

Apart from the above free distribution (which obviously will have to be very limited), those interested in purchasing one or more copies of any of the items may do so by contacting the authors and/or publishers as indicated below.

The materials that have been produced (or are being produced) as part of this Project, or with partial support from it, are:

1. *Atlas of optical transforms*

By C. A. Taylor (Cardiff, England). It will contain half-tone printed sheets with a few optical transforms on each; and facing these there will be sheets with line drawings representing the mask that corresponds to each optical transform. Altogether there will be about 400 optical transforms. At the bottom of each page there will be printed on explanatory text in several languages. This book will be published by G. Bell and Son, Ltd.

2. *Symmetry in two-dimensional periodic patterns*

By H. Schenk (Amsterdam, Netherlands). This is a programmed-instruction textbook, and the technique used by the author is to give three answers for each question: if the reader chooses the right answer, he is given the address of the next question; should he choose a wrong one, he is sent to an address where the nature of the error is explained to him. Versions in Dutch and in English were printed by the author. For as long as copies remain available, they can be obtained from him at: Laboratorium voor Kristallografie der Universiteit van Amsterdam, Nieuwe Prinsengracht 126, Amsterdam, The Netherlands (Price: £ 1.50).

3. *Fourier methods in X-ray crystallography*

By H. Schenk (Amsterdam, Netherlands). This is also a programmed-instruction textbook, and it is expected to be ready in 1972. Further details can be obtained from the author (see item 2).

4. *A two-circle ball driller for making crystal structure models*

This is a brochure, containing working drawings and general instructions for building a two-circle ball driller for making crystal structure models, which was produced under the direction of the late Professor Dame Kathleen Lonsdale (London, England). Copies can be obtained from Mr E. Nave, Department of Chemistry, University College, Gower St., London WC 1.

5. *Propriétés optiques des cristaux liquides (optical properties of liquid crystals)*

16 mm film in colour, 20 min duration, produced by the Service du Film de Recherche Scientifique (Paris, France) under the scientific direction of P. Chatelain (University of Montpellier). The SFRS has produced versions in French, English and Spanish. Copies can be obtained either to purchase or on loan, either from the SFRS (96, boulevard Raspail, Paris Vème, France) or through the French Embassy in any country of the world.

6. *Tables for the interpretation of electron diffraction spot patterns from single-parameter crystals of chemical elements*

A 40-page book, by J. Komrska and D. Penaz (Brno, Czechoslovakia). Copies can be obtained from: Academia, Publishing House of the Czechoslovak Academy of Sciences, Vodickova 40, Prague, Czechoslovakia.

7. *Application of the Mössbauer effect in crystallography*

A 47-page text illustrated with 50 diagrams, by T. Zemcik (Brno, Czechoslovakia). The author also prepared the 50 diagrams in the form of projection slides, so that the material can be used both for individual study and for working with large groups. Copies can be obtained from: Institute of

Physical Metallurgy of the Czechoslovak Academy of Sciences, Zizkova 22, Brno, Czechoslovakia (Price: \$ 3, for each full set of text, diagrams and slides).

8. *Laboratory manual on crystal growth*

By a group of Hungarian scientists under the direction of I. Tarjan (Budapest, Hungary). The purpose of this book is to help students (at a wide range of levels, from introductory to advanced) in performing experiments on crystal growth and understanding the mechanisms of crystal growth. It will also contain suggestions for demonstration experiments to be done by teachers. Most of the experiments selected do not require expensive equipment. This book will be published in English by the Publishing House of the Hungarian Academy of Sciences, and will become available in late 1972 from: Kultura, Hungarian Trading Company for Books, POB 149, Budapest 62, Hungary.

9. *Crystallographic computing*

Edited by F. R. Ahmed (Ottawa, Canada). This book is the Proceedings of the International Summer School on Crystallographic Computing which was held in Ottawa (August 1969) under the auspices of the IUCr. It was published by Munksgaard, International Publishers Ltd, Copenhagen, Denmark.

10. *Early papers on diffraction of X-rays by crystals*

Edited by J. M. Bijvoet (Utrecht), W. G. Burgers (Delft) and G. Hägg (Uppsala). The book was published for the IUCr by Oosthoek, Domstraat 11, Utrecht, Netherlands.

11. *Travaux pratiques de cristallographie*

By P. Perio, Université de Paris XI, France. A series of eight experiments, each requiring about eight hours and making use of standard equipment, has been set up for students in X-ray crystallography and thoroughly tried. All enquiries should be sent to Professor P. Perio, Cristallographie et Physique Matériaux, Bât. 493, Université Paris XI, 91 Orsay, France.

Supplement to *Acta Crystallographica*, Section A

The Abstracts of the Communications to the Ninth International Congress of Crystallography to be held in Japan in August/September 1972 will be published as part S4 of *Acta Crystallographica*, Section A in July 1972, and will be distributed free of charge not only to subscribers to Section A, but also to those subscribers to Section B and to the *Journal of Applied Crystallography* who do not subscribe to Section A.

Index of Crystallographic Supplies - Third Edition

The third edition of the *Index of Crystallographic Supplies*, prepared for the International Union of Crystallography by its Commission on Crystallographic Apparatus and edited by Professor R. Rudman, was published recently. (Unfortunately, the cover and the title page of the *Index* refer erroneously to the 'Commission on Crystallographic Supplies' but the name of the Commission is given correctly in the Preface by Dr A. McL. Mathieson, Chairman of the Commission.) Copies of this *Index* have been sent to all subscribers to *Acta Crystallographica* and the *Journal of Applied Crystallography*.

The *Index* is intended to present the practising crystal-

lographer with a useful list of apparatus and suppliers. There is a detailed list of apparatus and relevant accessories, with suppliers listed by the use of Keywords, which may also be used as a check list of items for novices in crystallographic work. There is a list of the full names and addresses of manufacturers and suppliers. Very few specifications have been included in the descriptions of apparatus because manufacturers are constantly revising specifications of their

products. For efficient use of the *Index* it is suggested that the manufacturers be contacted for the latest detailed information. The text of the *Index* extends over 56 pages. Copies may be ordered from A. Oosthoek's Uitgevers N.V., Domstraat 5-13, Utrecht, The Netherlands, from Polycrystal Book Service, P.O. Box 11567, Pittsburgh, Pa. 15238, U.S.A. or from any bookseller at a price of 10 Netherlands Guilders (U.S. \$ 3.50 or £ 1.35 at current rates of exchange).

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).

M. C. Escher

Mr M. C. Escher, the well-known Dutch artist, died on 27 March 1972. He made his first periodic woodcut in 1922 and subsequently designed about 150 tessellations. Many of his periodic drawings have been reproduced in the monograph *Symmetry of M. C. Escher's Periodic Drawings*, with accompanying text by Professor C. H. MacGillavry, published for the I.U.Cr. by A. Oosthoek's Uitgevers Mij.

Journal of Crystal and Molecular Structure

This new journal was first published in 1971 by Plenum Press (London) under the editorship of Dr M. F. C. Ladd, Department of Chemical Physics, University of Surrey, Guilford, Surrey, U.K. It states that it is concerned with the publication of crystallographic and spectroscopic studies of the structures of crystals, molecules and other atomic assemblies, publishing, in English only, reports of original research as full-length articles or as short communications. It does not publish letters or book reviews.

Molecular Structures and Dimensions

Volume 3 of the new reference series published by the International Union of Crystallography and the Crystallographic Data Centre was published in February 1972. The new volume contains classified bibliographic information on organic and organometallic structures published during 1969-71. The arrangement is identical with the first two volumes in the series with entries arranged in chemical classes and extensive cross-references. There are three indices: author, formula and transition metal. All are cumulative for the years 1935-1971 and give references to entries in Volumes 1, 2 and 3.

Molecular Structures and Dimensions is obtainable directly from the publishers, A. Oosthoek's Uitgevers Mij. N.V., Domstraat 5-13, Utrecht, The Netherlands, from Polycrystal Book Service, P.O. Box 11567, Pittsburgh, Pa. 15238, U.S.A. or from any bookseller, at a price of Netherlands Guilders 55.00 (U.S. \$ 17.00 or £ 6.50 at present rates of exchange). Personal subscribers may purchase a copy for their own use only at the special reduced price of Netherlands Guilders 39.00 (U.S. \$ 12.50 or £ 4.70).

Crystal Structure Communications

Crystal Structure Communications is an international quarterly report for rapid communications concerning

results of crystal structure analyses and is published by the X-ray Crystallography Group of the University of Parma, Italy. The Editors are Professor L. Cavalca and Professor M. Nardelli. Contributions must concern structures solved and completely refined, not yet published or in the press and not yet printed. All the papers must be written in English and the authors are free to publish elsewhere the complete reports of these researches. They must, however, be prepared to supply further data and information (*e.g.* structure factor tables, thermal parameters, *etc.*) on direct request from readers. Papers are classified in three sections: (1) minerals and inorganic, (2) coordination and metal organic, (3) organic and polymers. Publication commenced early in 1972.

Second National Conference on Crystal Growth, 30 July-3 August 1972, Princeton, U.S.A.

This conference is sponsored by the American Association for Crystal Growth and will be held at Princeton University. There will be special sessions on theory, epitaxy, growth control, melt growth and characterization. Further information is obtainable from Dr D. Richman, RCA Laboratories, Princeton, New Jersey 08540, U.S.A.

Second General Conference of the European Physical Society, Wiesbaden, Germany (BRD), 3-6 October 1972

This conference entitled 'Trends in Physics' is organized by the Deutsche Physikalische Gesellschaft and will have three predominating aspects; review of the present state and the expected future development of physics, the application of fundamental physics to modern technology and the close interrelation of physics and society. Divisional sessions will include ones on condensed matter and computational physics. Further information may be obtained from Herr U. Dihle, D-6000 Frankfurt/Main 1, Robert Mayer Strasse 2-4, Germany.

Third International Meeting on Ferroelectricity, Edinburgh, Scotland, 10-14 September 1973

This meeting is sponsored by the International Union of Crystallography and will cover all aspects of ferroelectricity. Further information may be obtained from Professor W. Cochran, Department of Physics, The University, Mayfield Road, Edinburgh EH9 3JZ, Scotland.