

berg photographs (W. Cochran, *J.Sci.Instrum.* 25, 253, 1948) (2 (2)(c) (i)).

PC 35. As PC 34 but for equi-inclination Weissenberg photographs (2 (2)(c) (ii)).

PC 33. Sets of five Bunn charts, each 2×4 ft. (C. W. Bunn, *Chemical Crystallography*, Chap. 6. Oxford: Clarendon Press, 1945) (3 (1)):

- (i) For tetragonal crystals $5.0 > c/a > 1$.
- (ii) For tetragonal crystals $0.224 < c/a < 1$.
- (iii) For hexagonal crystals $10 > c/a > 0.9$.
- (iv) For hexagonal crystals $0.1 < c/a < 0.9$.
- (v) For layer lines of single-crystal rotation photographs of crystals having rectangular cell bases.

Prices

PC 30 on thin card: 20 copies for 30 shillings.

PC 33 per set of five charts: 35 shillings.

All others on bleached transparent paper: 20 copies for 18 pence.

A small number of copies of PC 31 and PC 32 are also available on (opaque) white paper at the same price.

Orders, which should quote the chart reference number(s), e.g. PC 1, PC 33 etc., should be sent to:

The Institute of Physics,
47 Belgrave Square,
London S.W. 1, England.

Additional items may be made available later.

Acknowledgments

The X-ray Analysis Group wishes to thank the following persons, laboratories or firms for permission to reproduce charts: Cambridge University Press; Cavendish Laboratory, Cambridge; Crystal Structures Ltd.; G.K.N. Group Services Ltd.; Imperial Chemical Industries Ltd.; The Institute of Physics; Department of Mineralogy and Petrology, Cambridge; Unicam Ltd.

Acta Crystallographica

The reduced subscription rate for personal subscribers to *Acta Crystallographica* (see *Acta Cryst.* (1952), 5, 153) is now available also to members of the following British Spanish and Swiss societies:

The Faraday Society, the Mineralogical Society.

Asociación Española de Cristalografía.

Société suisse de Mathématique, Société suisse de Physique, Société suisse de chimie, Société suisse de Minéralogie et de Pétrographie.

Joint Commission on Electron Microscopy

The International Council of Scientific Unions has established a Joint Commission on Electron Microscopy. The International Union of Pure and Applied Physics is the 'mother Union' for this Commission, and other Unions have been invited to appoint representatives. The Executive Committee of the International Union of Crystallography has nominated as its representative R. W. G. Wyckoff (National Institute of Health, Bethesda 14, Maryland, U.S.A.) with whom crystallographers interested in the work of this Commission are invited to communicate.

Structures of Solidified Liquids and Gases

Prof. Fankuchen and Dr Post have compiled a list of some fifty structure investigations of solidified gases and liquids which have been completed in recent years or are being carried out at present. They also list a number of laboratories carrying out X-ray structure analysis at low temperatures. This first list, which is to be followed by further lists at suitable intervals, can be obtained by those interested by writing to Prof. Fankuchen, Polytechnic Institute of Brooklyn, Brooklyn 2, N.Y., U.S.A.

The crystal structure of 2-metanilamido-5-Br-pyrimidine: correction

In the above article by Singer & Fankuchen (*Acta Cryst.* (1952), 5, 99) the following phrase should be added after the word "agreement" in the penultimate line of the text on p. 100: "includes all reflections within range of radiation even though too weak to have been observed".

Commission on Crystallographic Apparatus

The Apparatus Commission of the International Union of Crystallography has decided to establish a central information bureau on apparatus and experimental methods of interest to crystallographers. The bureau proposes to undertake the following activities:

(1) The collection and classification of documents about apparatus and experimental methods (X-ray, optical, electronic etc.).

(2) The preparation of a list of the documents available. This will be distributed at four-monthly intervals to the National Committees of the adhering countries.

(3) The provision of micro-film copies of these documents. This service is made possible through the co-operation of the Centre National de Recherche Scientifique (18 Rue Pierre Curie, Paris 5^e, France) to whom orders should be addressed.

The efficient operation of the information bureau will be possible only if it can rely on the support of manufacturers and research workers. The bureau therefore appeals

to manufacturers to send notices and catalogues of all crystallographic apparatus available;

to crystallographers to send reprints of papers dealing with instrumentation or experimental methods, and also any manuscripts, internal reports or original notes not intended for publication but which the authors are willing to make available to the bureau. This request applies not only to new work but also to any documents of current interest.

All documents should be sent, in duplicate if possible, to

Monsieur le Professeur A. Guinier,
Conservatoire des Arts et Métiers,
292 Rue Saint Martin,
Paris 3^e, France.

A. GUINIER
Chairman of the Commission

International Union of Crystallography

As from 1 January 1951 the Japanese National Committee has raised the status of Japan's membership of the Union from Group I to Group IV.

Shoji Nishikawa

Dr S. Nishikawa, Emeritus-Professor of Physics of the University of Tokyo, Chairman of the Japanese National Committee of Crystallography, and President of the Japanese Crystallographic Society, died suddenly in Tokyo on 5 January 1952. The Executive Committee of the International Union of Crystallography wishes to express the deep sympathy of all crystallographers to the Japanese Committee for the loss it has thus sustained.

It had been expected that Dr Nishikawa would attend the Second General Assembly of the Union in Stockholm last summer as Chairman of the Japanese delegation, but a heart attack earlier in the year made this impossible. He was apparently recovering strength from the earlier illness at the time of his death.

Dr Nishikawa was one of the earliest workers in the field of crystal structure. His use of space-group reasoning in connection with his determination of the structure of spinel (published in 1915) was one of the first applications of this theory which is now a mainstay of our science. He was the teacher and ever encouraging friend of many of the succeeding generation of X-ray crystallographers and students of electron diffraction in Japan; thus, in addition to his own researches, he fathered much of modern crystallography there.

Self-binders for *Acta Crystallographica*

Readers are reminded that arrangements have been made with Messrs Easibind Ltd., Pilot House, Mallow Street, London E.C. 1, England, for the provision of self-binders for *Acta Crystallographica*. The binders for Vols. 1-4 are

designed to carry the twelve parts of two successive volumes, which are held without damage by steel wires; they are lettered with title, volume numbers and years (e.g. Vols. 1 and 2, 1948-9; Vols. 3 and 4, 1950-1).

The binders for Vol. 5 and subsequent volumes will be designed for one volume only, and will be supplied in two styles:

- (1) Lettered with title only.
- (2) Lettered with title, volume number and year (e.g. Vol. 5, 1952).

The price of the binder is 12s. 6d. post free throughout the world. Orders should be placed direct with Messrs Easibind Ltd., stating clearly which style is required.

Third General Assembly and International Congress

The Executive Committee of the Union has accepted a kind invitation from the French Government to hold the third General Assembly and International Congress in Paris in the summer of 1954. The exact date will be announced later.

Reprints from *Acta Crystallographica*

It is now possible for authors to obtain reprints of their articles in *Acta Crystallographica* without limit of number, and these can be supplied with or without covers. Twenty-five reprints of each article are provided free of charge.

Book Reviews

Works intended for notice in this column should be sent direct to the Editor (P. P. Ewald, Polytechnic Institute of Brooklyn, 99 Livingston Street, Brooklyn 2, N.Y., U.S.A.). As far as practicable books will be reviewed in a country different from that of publication.

Optical Crystallography. Von E. E. WAHLSTROM. S. 247, mit 206 Abb. New York: Wiley; London: Chapman and Hall. 2. Auf. 1951. Preis \$4.50; 36s.

Das Polarisationsmikroskop ist heute nicht mehr ausschliesslich das Werkzeug des Mineralogen und Petrographen, sondern es hat auch weitgehend Eingang in Chemie, Biologie und Technik gefunden. Neben den streng physikalisch fundierten Darstellungen der Kristalloptik besteht daher auch ein Bedürfnis nach mehr anschaulich gehaltenen, elementaren Einführungen für den Mikroskopischen Praktiker. Zu diesen ist das hier angezeigte Werk zu rechnen, dessen erste Auflage 1943 erschien.

Nach einer Einleitung in die geometrische Kristallographie (wobei eigentümlicher Weise die Kristallsysteme vor Erwähnung der Symmetrieeigenschaften eingeführt werden) und kurzen Ausführungen über die Natur des Lichtes folgt, in vierzehn Kapitel unterteilt, die Behandlung der für die Anwendung des Polarisationsmikroskopes wichtigen Phänomene. Leider ist die Dar-

stellung verschiedenlich nicht frei von Unklarheiten und Irrtümern, wenn auch in dieser Hinsicht gegenüber der ersten Auflage grosse Fortschritte zu konstatieren sind. Der fatale Satz 'The quartz wedge resolves white light into its spectrum' (S. 100) und die Bezeichnung der Ordnungen der Interferenzfarben als Spektren sind jedoch leider nicht verschwunden. Die Heranziehung der Fresnel'schen Konstruktion zur Bestimmung des Charakters der spitzen Bisektrix aus Interferenzbildern stellt zum mindesten eine unnötige Komplikation dar. Der Strahlengang im Mikroskop ist entschieden zu kurz behandelt und der Unterschied zwischen orthoskopischer und konoskopischer Betrachtungsweise wird nicht klar hervorgehoben. Andererseits sind Dinge erwähnt, welche in einem elementaren Leitfadens füglich hätten weggelassen werden können, wie z. B. die gnomonische Projektion, die ausführliche Darstellung der konischen Refraktion und die explizite Darstellung sämtlicher sechs Referenzflächen der Kristalloptik. Besonders letztere sind nicht nur unnötig, weil alle beim Mikroskopieren auftretenden diesbezüglichen Probleme mit der Indi-