

tion was almost uniform in the solid angle defined by α . In Fig. 2(a), where α is small, all the bands are excess. When α increases [Fig. 2(b) and (c)], defect bands appear inside the dotted circle, while excess bands remain outside. It is of note that the contrast reversal is also observed for the second-order Kikuchi bands, *i.e.* the {440} bands, on the original films.

The above results show that the angular region over which defect bands occur increases with increasing aperture angle of the incident electrons. This effect may help towards a better understanding of the excess-defect reversal of Kikuchi bands.

The author thanks Dr Y. Kamiya for kind guidance and Professor R. Uyeda for encouragement and helpful discussion.

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International Union of Crystallography

Inter-Congress Meetings – I. U. Cr. Sponsorship

The Executive Committee of I.U.Cr. is anxious to promote and increase in the number of Inter-Congress meetings in order to avoid future Triennial Congresses becoming excessively large and cumbersome to handle. A Sub-Committee on the Union Calendar has therefore been set up (see *Acta Cryst.* (1969) **A25**, 719) to implement this policy. Its function is to gather information on proposed or prospective meetings, coordinate the long-term planning of meetings which the Union organizes or co-sponsors, and actively to encourage the initiation of small or intermediate-sized meetings in fields where development is significant.

Since it is the aim of Sub-Committee to plan at least three, and preferably more, years ahead, it is advisable to have early advice of meetings being planned or in prospect which might appropriately come within the category of Union sponsorship or co-sponsorship in terms of their content, location, size and date. It would therefore be appreciated if bodies such as Commissions of the Union, National Committees for crystallography, regional associations and other bodies which are contemplating or have

begun the planning of a future international meeting on crystallography or with a major content of crystallography would contact the Sub-Committee Chairman:

Dr. A. Líněk
 Institute of Solid State Physics
 Czechoslovak Academy of Sciences
 Cukrovarnická 10
 PRAHA 6,
 Czechoslovakia

The Sub-Committee would be pleased to receive advice of provisional details of proposed Inter-Congress meetings as soon as possible and it will also consider requests for Union co-sponsorship of these meetings. Nominal financial support could be available in some cases.

Contact with the Sub-Committee should assist prospective organizers of meetings to disseminate preliminary information in a convenient manner since lists of meetings of interest to crystallographers will be published in the Journals of the Union from time to time. The Sub-Committee will also be glad to be informed of local or national crystallographic meetings.

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, 13 White Friars, Chester CH1 1NZ, England).

Professor A. V. Shubnikov 1887–1970

Professor Alexey Vasilyevich Shubnikov died on 27 April, 1970. Professor Shubnikov was Head of the Laboratory at the Institute of Crystallography, Academy of Sciences of the U.S.S.R. He was best known internationally as the first editor of *Kristallografiia*, by his participation in the founding of the International Union of Crystallography and by his discussion of the role of antisymmetry elements in structure theory ('Shubnikov Groups').

A full obituary will be published in the Journal of Applied Crystallography in due course.

International Union of Crystallography Ninth General Assembly and International Congress of Crystallography

Preliminary Announcement

The Ninth General Assembly and International Congress of Crystallography of the International Union of Crystallography will be held in Japan in 1972. The date and place are provisionally planned as follows: The General Assembly and Congress, lasting about 10 days, will be held within the period from 27 August to 8 September, 1972, at the Kyoto International Conference Hall, Kyoto, Japan.

The first formal announcement will appear in *Acta Crystallographica* at the end of 1970 or early in 1971 and will give the address from which the First Circular can be obtained. This First Circular will be available about September 1971 and copies will be sent to all National Committees for Crystallography.

ICSU Abstracting Board: Publications

The 1969 issues of two annual publications detailing the activities of those Scientific Unions (including the International Union of Crystallography) which are members of the International Council of Scientific Unions (ICSU) and the activities of the Committees and Commissions of ICSU have been published recently by the ICSU Abstracting Board and may be purchased from the ICSUAB Secretariat, 17 rue Mirabeau, Paris 16e, France. The title of one publication, *Tentative List of Publications of ICSU Scientific Unions, Special and Scientific Committees and Commissions of ICSU, Year 1969, and Corrections and Additions to the 1968 List*, is self-explanatory. The other publication, entitled *Survey of the Activities of the ICSU Scientific Unions, Special and Scientific Committees and Commissions of ICSU in the Field of Scientific Information during the Year 1969*, presents information under the following headings: Name of union, commission, committee, or working group; President/Chairman (name and address); Secretary (name and address); Members (names and countries); Date of creation; Periodicity of meetings; and Publication of minutes of meetings. A general description is given of the activities and a listing of 1969 publications. Particular attention is given to those bodies dealing with the following topics: notations, symbols, units, nomenclature, terminology, standards, bibliographies, abstracts, review articles, classification, and publication of data.

The purpose of the ICSUAB surveys is to make the activities of the Scientific Unions and ICSU bodies in the field of scientific information more widely in the scientific

community, and to strengthen co-operation between those bodies working in similar fields.

A Symposium on Crystal Structure and Chemical Bonding Twente, The Netherlands, 3-6 August 1971

The Netherlands National Committee for Crystallography (F.O.M.R.E.) is arranging a symposium on Crystal Structure and Chemical Bonding from 3 to 6 August 1971 at the Technological University, Twente, Enschede, The Netherlands. The topics to be covered will include structure analysis and molecular spectroscopy, intermolecular forces, electron densities, the accuracy of results, the general theory of bonding and interactions, and the comparison of results of different methods. Registration will be accepted until 1 February 1971, but the total number of participants will have to be limited to 150.

Inquiries should be addressed to the organizing secretary, Dr A. Schuyff, Laboratory for Crystal Chemistry, University of Utrecht, Utrecht, The Netherlands.

Third International Conference on Thermal Analysis Davos, Switzerland, 23-28 August 1971

This meeting is being arranged by the International Confederation for Thermal Analysis and the programme will include sessions on advances in instrumentation; inorganic chemistry; organic chemistry, including polymers; ceramics and earth sciences. For further information apply to:

Dr Max Müller-Vonmoos
Institute for Crystallography and Petrography
Swiss Federal Institute of Technology
CH-8006 Zürich
Sonneggstrasse 5
Switzerland

Book Review

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.

An introduction to X-ray crystallography. BY M. M. WOOLFSON. Pp. 380. Cambridge University Press, 1969. Price £4. 25.

This book is intended for the senior undergraduate or graduate student beginning a serious study of X-ray crystallography. However, owing to lack of time most undergraduates taking courses such as physics or chemistry will probably fail to master the subject matter of this book to the desirable standard at which the author aims. On the other hand undergraduates following courses in crystallography and graduate students in other disciplines should find it an invaluable first text in which the fundamentals of

X-ray diffraction from crystals are presented clearly, rigorously and succinctly.

An introductory chapter summarizes the geometry of the crystalline state and the way in which Miller indices, symmetry elements and space groups are used to describe it. The next two chapters cover, in some fifty pages, the scattering of X-rays by matter, their diffraction by the regular arrangement of atoms in a crystal structure and the factors governing X-ray intensities. The concepts of the reciprocal lattice and the structure factor are introduced in these chapters.

The fourth chapter is a mathematical one and lays down the necessary theory of Fourier series, the Fourier trans-