

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 General Secretary of the International Union of Crystallography (D. W. Smits, Rekencentrum der Rijksuniversiteit, Grote Appelstraat 11, Groningen, The Netherlands). Publication of an item in a particular issue cannot be guaranteed unless the draft is received 8 weeks before the date of publication.

International Union of Crystallography Seventh General Assembly and International Congress and Symposium on Crystal Growth

An announcement for the above meetings has already been given in the previous issue of this journal [*Acta Cryst.* (1965), **19**, 291]. In this announcement no mention was made, however, that Saturday 16 July has been reserved for meetings of Commissions and Committees of the Union. These bodies may use this day at their own discretion for business meetings or for open sessions. Some Commissions have already made preliminary plans for such open sessions.

Attention should further be drawn to the decision made by the Programme Committee, and approved by the Executive Committee of the Union, that each author will be allowed only one contributed paper in the programme of the Congress. By this rule joint authors whose names are attached to a contributed paper may not offer another paper to the contributed programme nor may they be joint author for another contributed paper. Invited papers and papers offered for the Symposium are not considered for the application of the rule.

International Conference on Crystal Growth Boston, Massachusetts, U.S.A., 20 – 24 June 1966

An International Conference on Crystal Growth will be held in Boston, Mass., from 20 to 24 June 1966. The purpose of the conference is to further basic understanding of the science of crystal growth. The scope of the meeting will include (1) molecular mechanisms of crystallization, (2) growth of metals and semiconductors, (3) growth of non-metals, (4) techniques, and (5) properties associated with growth parameters.

Only refereed contributions will be admitted for presentation. The proceedings will be published as a special issue of *The International Journal of the Physics and Chemistry of Solids*.

Those interested in submitting a paper to the Conference are requested to write as soon as possible to the Conference Secretary, International Conference on Crystal Growth, 40 Acorn Park, Cambridge, Mass., U.S.A., to whom also any other enquiries about the meeting should be addressed.

Book Reviews

Works intended for notice in this column should be sent direct to the Editor (A. J. C. Wilson, Department of Physics, University College, Cardiff, Great Britain). As far as practicable books will be reviewed in a country different from that of publication.

Handbook of X-ray analysis of polycrystalline materials. By LEV IOSIFOVICH MIRKIN, translated from Russian by J. E. S. BRADLEY. Pp. xx+731 with 200 figs. and many tables. New York: Consultants Bureau, 1964. Price \$ 35.00.

This volume is a translation into English of a quite remarkable Russian book. The Russian edition was published originally in 1961. It attempted to provide, mainly in the form of tables, diagrams and charts, a comprehensive collection of those data used in X-ray analysis of polycrystalline materials. The translation can be regarded as eminently successful, with the result that a reference book of considerable practical value, deserving wide circulation in the Western world and elsewhere, has been made available.

In the foreword by the Russian editor Professor Uman'skii, it is stressed that it was not the intention to present the type of material to be found in the ordinary textbook. Thus, only relatively brief statements about the use of the tabulated data, graphs, and other devices, are included, and descriptions of techniques, derivations of formulae, and so on, are kept to a minimum. Perusal of the table of contents on pages xiii to xx leaves one with the conviction that the subject has been very adequately covered, and it is indeed difficult to find any very serious gaps in this admirable compilation.

The material is divided broadly into two parts. In the first part, comprising four chapters, basic data and physical constants, required at the start of an X-ray analysis, are

tabulated. The second part containing six chapters provides the kind of information needed in the various applications of X-ray powder methods, for example, qualitative and quantitative analysis, determination of orientation textures, and crystallite size evaluation.

The basic data include tables of wavelengths, scattering coefficients, absorption coefficients, aids to measurements of diffraction patterns, indexing, and line intensity calculations. As an example of the length to which the tabulated data go to enable the user to avoid the simplest arithmetic, the factor for conversion between kX and Å is briefly discussed, but, in addition, a table is provided listing in parallel columns spacing values in the two units and the numerical difference between them. The range covered is from 2.2525 to 9.9258 kX. It appears rather doubtful whether reference to the table is any quicker than a mental computation. The chapter on indexing includes reference to almost every possible type of chart, though the Hull-Davey charts receive perhaps the chief attention. It is interesting to note that the Hull-Davey charts for indexing orthorhombic structures have been reproduced, since so far as the reviewer is aware, these disappeared from the available literature after publication in 1928 in a rather obscure book on ore mineralogy. Another notable item in this chapter is the set of diagrams illustrating the use of the theory of homology in indexing: the diagrams depict the different line splittings consequent upon progressive lowering of crystal symmetry as a result of displacive deformation from cubic through tetragonal and hexagonal to orthorhombic, monoclinic and triclinic.