

## 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).*

### The Walter C. Hamilton Memorial Fund

The Walter C. Hamilton Memorial Fund has been established to provide assistance to one or more students, chosen each year, to work in the Chemistry Department at Brookhaven National Laboratory or for such other purposes related to chemical research as may be deemed appropriate by a committee appointed by Associated Universities, Inc. (operators of BNL), which will collect and administer the fund. The committee consists of Dr Gerhard Friedlander, Chairman (Department of Chemistry, Brookhaven National Laboratory, Upton, L. I., New York 11973, U.S.A.), Sidney C. Abrahams, David P. Shoemaker and Robert Thomas. Those wishing to participate in this memorial fund may send contributions to any committee member.

### International Crystallography Conference on Diffraction Studies of Real Atoms and Real Crystals

This conference, sponsored by the Australian Academy of Science in association with the International Union of Crystallography, will be held in Melbourne, Australia, 19–23 August 1974. The subject matter of this meeting is arranged under 3 topics: 1. Real Atoms in Crystals; 2. Nature of Extended Defects in Solids; 3. Use of Dynamical Effects in the Study of Crystals.

The basic theme of the meeting is the study of the atomic structure of the solid state, considered in respect of different levels of organization – on the primary level, of the fine details of electron density associated with individual atoms and molecules (topic 1), and, on the secondary level, of the way in which atomic and molecular arrays differ from the ideal and hence form defects of various types in real crystals (topic 2). The third section of the meeting will deal with advances in diffraction procedures – particularly with reference to X-ray and electron diffraction. This section then

readily allows for association with the Eighth International Congress on Electron Microscopy, which will be held in Canberra, Australia, 25–31 August 1974.

Further information and copies of the *First Circular* may be obtained from The Secretary, International Crystallography Conference, Australian Academy of Science, P. O. Box 216, Civic Square, A.C.T. 2608, Australia.

### International Union of Crystallography Inter-Congress Conference, 1974

The Commission on Crystallographic Apparatus of the International Union of Crystallography is organizing a specialist inter-Congress 'Conference on Anomalous Scattering' to take place at the Consejo Superior de Investigaciones Cientificas, Madrid, Spain, April 22–26, 1974.

The purpose of this conference is to assess the experimental and theoretical errors that arise in the measurement and interpretation of anomalous scattering of X-rays, neutrons and electrons. Topics under consideration include the accuracy of anomalous scattering measurement using characteristic X-radiation, continuous X-radiation, X-radiation at an absorption edge, neutrons and electrons; the effects of dispersion corrections on atomic parameters and the accuracy of the dispersion corrections; the application of anomalous scattering to structure determination; the probability of error in absolute configuration determination; the relation of absolute atomic arrangement to macroscopic tensorial properties; novel uses of anomalous scattering, such as Mössbauer effect and electron scattering; other applications of anomalous scattering.

Participation in the Conference, which will be limited to a total attendance of about 125 specialists for optimum discussion and interaction, is by invitation only. For further information, write to S. C. Abrahams, Bell Laboratories, Murray Hill, New Jersey 07974, U.S.A.

It is proposed to publish the proceedings of the Conference.

## 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.*

**Optical properties of solids.** Edited by F. ABELÈS. Pp. 1026, Figs. 421, Tables 43. Amsterdam: North Holland, 1972. Price £200.00 (ca. US \$62.50).

Our understanding of the basic physical properties of condensed matter has been considerably advanced in the past ten years by the study of the optical properties of solids. The present volume contains a number of detailed and tutorial discussions of various aspects of this subject by experts in the field. The level of treatment is suitable both for graduate students and for research workers. Eight more or less self-contained chapters are devoted to interactions of photons with various fundamental excitations in semicon-

ductors, metals and insulators, one to non-crystalline solids, and two to the further information obtainable from application of the modulated reflectance and photoelectric emission techniques to the study of solids.

On the whole it is an extremely useful book with a collection of thorough and well documented contributions, both as a source of information and of references, to all research workers in the field of solid state physics. The only criticism perhaps is that the large and, at the present time, extremely interesting field of light scattering in solids is not treated; and further that the time lapse between the time of writing and the date of publication inevitably makes the book a little out of date. With the exceptions of the chapters on magneto-optics and photoelectric emission, which have notes added