

- V. SCHOMAKER & J. DONOHUE. Some recent developments in the use of punched cards and IBM machines for crystal-structure determinations.
- E. G. COX & MARYON W. DOUGILL. A detailed analysis of anhydrous oxalic acid.
- E. W. HUGHES. Phase determination for certain structure types.
- D. SAYRE. Some new phase-determining relationships and their application to the structure of hydroxyproline.
- W. COCHRAN. Remarks on Sayre's method of crystal structure analysis.
- J. A. GOEDKOOP, C. H. MACGILLAVRY & R. PEPINSKY. Phase-determining relations based on knowledge of the electron density in parts of the unit cell.
- D. HARKER. Direct methods of structure determination applicable to crystals with very large unit cells.
- W. COCHRAN. Steepest descents and similar methods.
- J. S. ROLLETT. An application of ( $F_o - F_c$ ) syntheses to the structure of dimethyl-triacetylene.
- V. VAND. Examples of application of the steepest-descents method to crystal-structure determination.
- V. LUZZATI. Convergence and error of the Fourier method.
- D. W. CRUICKSHANK. The accuracy of structure determination.
- D. W. CRUICKSHANK. Some relations between Fourier and least-squares methods.
- V. SCHOMAKER & D. P. SHOEMAKER. Remarks on the theory and practice of three-dimensional Fourier, least-squares, and Patterson analysis.
- J. A. GOEDKOOP. On the theory of crystal-structure determination by the variation of parameters.
- L. S. BARTELL & O. L. BROCKWAY. Electron distribution in atoms determined from electron diffraction by gases.
- L. BRU & P. RODRIGUEZ. Analogies between diffraction of light and electron diffraction by gas molecules.
- Y. MORINO. The effect of thermal vibration on the intensity of electron-diffraction halos.
- C. J. FINBAK. The experience of electron diffraction applied to structure investigation of liquids by monochromatic X-rays.
- R. L. LIVINGSTON. A comparison of molecular parameters determined by electron diffraction and by spectroscopy.
- L. O. BROCKWAY & A. C. BOND. The molecular structures of three methyl silanes.
- S. H. BAUER & F. A. KEIDEL. The structures of toluene, phenyl-silane, and dichloro-diphenyl-silane as determined by electron diffraction. Atom form factors for carbon and silicon.
- P. W. ALLEN. The molecular structures of acetone and the acetyl halides.
- H. MACKLE. The molecular structure of some carbonyl compounds.
- S. H. BAUER & K. P. COFFIN. The determination by electron diffraction of the structures of several compounds of boron.
- K. HEDBERG, V. SCHOMAKER & M. E. JONES. The molecular structures of some boron hydrides and related compounds.
- J. KAKINOKI, K. KATADA & T. INO. An electron-diffraction study of films of certain organic polymers in the amorphous state.

#### *Electron Diffraction in Liquids and Gases*

- L. S. BARTELL & L. O. BROCKWAY. Performance of the new Michigan electron-diffraction unit.
- L. E. SUTTON. A survey of electron-diffraction research in Oxford since 1947.
- S. H. BAUER & MIRIAM MICHNIK. The diffraction of electrons by thin gold films. Use of a rotating sector for the determination of background intensities.
- I. KARLE. The probability distribution of interatomic distances.
- O. BASTIANSEN & H. VIERVOLL. Remarks on the method of electron diffraction in use in Oslo.
- A. GILCHRIST. Preliminary account of a method of presenting electron-diffraction patterns on a cathode-ray tube, using a photomultiplier.

#### Geological Excursion

During the period 6–12 July twenty-nine members from nine countries took part in an excursion to localities of geological interest in central and northern Sweden.

The places visited included Sundsvall, Alnö Island, the Varuträsk pegmatite, the museum and works of the Boliden Mining Company, the iron-ore deposits at Gellivare (Malmberget) and at Kiruna (Kiirunavaara and Luossavaara), and Narvik. The warm thanks of the Union are due to H. von Eckermann, E. Grip, O. Ödman, P. Quensel, F. E. Wickman and the staffs of the Boliden Mining Company, the Kooperativa Förbundet, and the Kiirunavaara–Luossavaara Company for much preparatory work in organizing the expedition, for acting as leaders at the various localities and for most generous hospitality, all of which contributed to the success of a memorable excursion.

#### Notes and News

*Announcements and other items of crystallographic interest will be published under this heading at the discretion of the Editorial Board. Copy should be sent direct to the British Co-editor (R. C. Evans, Crystallographic Laboratory, Cavendish Laboratory, Cambridge, England).*

#### Structure transition and antiferromagnetism in magnetite: correction

The Editors regret that errors occur in Fig. 1 of the above article by Tombs & Rooksby (*Acta Cryst.* (1951),

4, 474). In the process of reproduction the shape of some of the lines has been accidentally distorted and their relative intensities do not very faithfully correspond with the original. In the legend the photographs should have been described as those of  $Fe_3O_4$ .