

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).

International Union of Crystallography

Acta Crystallographica

Since the publication of Part 3 of this *Journal* a further generous contribution towards the cost of production has been received from Arthur Guinness, Son & Co., Ltd., London, England.

General Assembly and International Congress

The First General Assembly and International Congress was held, by kind invitation, at Harvard University, Cambridge, Mass., U.S.A., from 28 July to 3 August 1948. A detailed report of the proceedings will be given in this *Journal* at a later date.

Book Reviews

Works intended for notice in this column should be sent direct to the Editor (P. P. Ewald, The Queen's University, Belfast, Northern Ireland). As far as practicable books will be reviewed in a country different from that of publication.

Chemical Crystallography. By C. W. BUNN. Pp. vii + 422, with 234 figs. Oxford: Clarendon Press. 1945, reprinted with corrections 1946. Price 25s.

This very stimulating book is easy to read but difficult to classify. At the end of the war period, during which most of the world scientists were under such tremendous production pressure that concentration upon writing was difficult, the crystallographers were in need of much. Among these many needs one might anticipate: (a) a textbook systematically leading the student from the fundamentals of optical and X-ray crystallography to the final determination of structure, (b) a continuation of the recorded results of structure work such as Wyckoff's 1934 supplement to *The Structure of Crystals*, or (c), a book describing the recent advances in the field of X-ray crystallography. The author of *Chemical Crystallography*, however, was inspired to achieve none of the purposes which are commonly anticipated. In reading this book, one is convinced that if there are an abundance of scientists who are well versed in some of the separate subjects, such as optical crystallography, X-ray diffraction, molecular structure, or the physical measurements of crystals, but who are unaware of or uncertain about the beautiful way in which these subjects are related qualitatively, the author has fulfilled a need. The author has not developed systematically or in an elementary way all of the separate subjects which he has discussed, but he has used elementary methods of showing the relationships between the separate subjects, especially between optics and X-ray crystallography, and between crystal symmetry and molecular symmetry.

The table of contents of this book is complete and systematic in the sequence of topic headings. In the discussion under each topic, however, there is no attempt to be systematic, and it is in this respect that the book is very unusual but not without merit. It would be very difficult for any author to adhere to a system and yet

retain the originality and charm that is characteristic of this book. Its chief merit lies in the author's exceptional descriptive power, both in his literary style and in his choice of numerous figures. Drawing from academic and industrial experience, he has selected an actual example for every chemical aspect of crystallography that he chooses to discuss.

The book is divided into two sections: I, Identification, and II, Structure Determinations. The first section describes both the optical and X-ray powder methods. The second section contains six chapters, two of which, although not strictly necessary for the development of the difficult concepts of crystallography, are of great importance and are very interesting: Chapter 8, Evidence of Crystal Structure from Physical Properties, discusses shape and cleavage, optical properties, magnetic properties, pyro-electric and piezo-electric properties, and other physical properties, all of which contribute to the reader's philosophy of the scope of crystallography; Chapter 4, Some Examples of Crystal Structure Determination by Trial, adds much force to the book by showing how the principles discussed in previous chapters have been applied to particular compounds. This chapter contains nine specific examples, including the simplest of the inorganic compounds, as well as difficult organic structures such as ascorbic acid.

Although this book omits many subjects that could be included in a book having this title (such as tables of ionic radii, the detailed mechanics of a Weissenberg camera, the derivation of the Fourier equations, divergent beam X-ray photography, and historical references to early workers in the field) it is consistent in its objective to furnish a descriptive correlation of the many parts of crystallography.

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