

title and reference, but in some cases the editors have added a few explanatory words. There are very full indexes of names, subjects and materials tested.

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R. C. EVANS

*Crystallographic Laboratory
Cavendish Laboratory
Cambridge
England*

Irradiation Colours and Luminescence. By K.

PRZIBRAM. Translated and revised by J. E. FAFFYN. Pp. xiv + 332 with 72 figs. London: Pergamon Press. 1956. Price 63s; \$10.

This book is a translation of the author's *Verfärbung und Lumineszenz* already reviewed in these columns (*Acta Cryst.* (1954), 7, 383). The translator, in collaboration with the author, has taken the opportunity of making some minor modifications in the text and of adding some 500 references to recent work.

The book is very elegantly printed and bound but the use of small capitals for the names of authors is distracting to the eye, especially in a work in which the number of references is so large (about 1200).

R. C. EVANS

*Crystallographic Laboratory
Cavendish Laboratory
Cambridge
England*

Structure Reports for 1942-1944. Edited by

A. J. C. WILSON, N. C. BAENZIGER, J. M. BIJVOET and J. M. ROBERTSON. Pp. viii + 448 with many figs. Published for the International Union of Crystallography. Utrecht: N.V. A. Oosthoek's Uitgevers Mij. 1955. Price 65 Dutch florins; \$17.50; £6.6.0.

There must be a growing number of crystallographers, metallurgists and chemists who are interested in the results of structure analysis. Many substances show unexpected polymorphism or other complexities, and our knowledge of structure is bound to be used more and more in the explanation of the properties of the solid state. For these reasons it is important to collect results of structure determination, and this volume of *Structure Reports* makes an excellent attempt to cover papers giving these results published in the years 1942-4. During these war years the output of work was comparatively

small, but nevertheless the book represents a great deal of effort on behalf of editors and abstractors.

The book is divided into three parts, covering metals, inorganic compounds, and organic compounds respectively, and there are excellent indexes of authors, substances, formulae and an index of carbon compounds. The contents bear out the editorial claim in being not ordinary abstracts, but even at times considerably enlarged versions of the original. Opportunity is taken to improve the presentation of the results, occasionally as a result of correspondence between abstractor and author, and a specially valuable feature is the frequent comment in square brackets by the abstractor. This critical comment is particularly valuable in the case of the older papers reported in this volume, often giving more than a hint as to the value of the work and at times giving references to later work on the same subject. This latter type of coverage does not, however, seem to be complete, the volume being meant to be used along with the later volumes of *Structure Reports*. A book covering a small portion of the history of structure investigation is necessarily somewhat patchy and interim in its nature, but one of the most satisfying portions is that dealing with chain polymer structures by C. W. Bunn.

As in the case of its companion volumes, the book is beautifully produced and printed. Many different type faces are used and the setting-out is as attractive as it could possibly be. One comment may, however, be made. Many of the structures in the inorganic and organic sections are well illustrated by clear diagrams, but in some ways these diagrams are not much above the general standard of draughtsmanship in the literature. The representation of crystal structures on paper is a difficult art, and an expensive one also, but nevertheless some improvement might be made. In many cases several drawings may be necessary, the first showing a sub-structure and the others showing how these units are connected together. Most of the pictures in *Structure Reports*, however, consist of the usual somewhat meaningless projection of the cell contents down an axis, with no bonds shown and no symmetry elements. Now these latter two features are most important, since they show how the atoms hold together and how they repeat. It is true, of course, that the bonding is not as definite always as one would wish, and a diagram which contains all these things becomes very complex. However, I think some progress could be made with advantage in crystallographic illustration, and *Structure Reports* might be a suitable opportunity. This is a large undertaking and one in which all authors must play a part. Meantime we can only offer our thanks to the producers of this volume, and give them the best reward of all by making intensive use of their work.

C. A. BEEVERS

*Chemistry Department
King's Buildings
Edinburgh 9, Scotland*