

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

Notice of adhesion in Group VIII, as from 1 January 1953, has been received from the German Federal Republic through the Deutsche Forschungsgemeinschaft. The Sektion für Kristallkunde der Deutschen Mineralogischen Gesellschaft forms the National Committee, of which the Secretary is Prof. Dr G. Menzer (Universitäts-

institut für Kristallographie und Mineralogie, Luisenstrasse 37/II, München 2).

The number of Adhering Bodies is now 20.

Acta Crystallographica

Parts 8 and 9 of the current volume will be published together as a single issue on 10 September 1953.

Book Reviews

Works intended for notice in this column should be sent direct to the Editor (P. P. Ewald, Polytechnic Institute of Brooklyn, 99 Livingston Street, Brooklyn 2, N.Y., U.S.A.). As far as practicable books will be reviewed in a country different from that of publication.

Tables for Microscopic Identification of Ore Minerals. By W. UYTENBOGAARDT. Pp. vii+242. Princeton: University Press; London: Geoffrey Cumberlege. 1951. Price \$5.00; 32s.6d.

This publication is an informative and valuable compilation in which all available data likely to assist in the identification of opaque and semi-opaque ore minerals have been presented in a systematic and concise manner.

In the first table the minerals are listed in order of increasing polishing hardness, with additional data on composition, reflectivity, and anisotropism; the second table gives the same information, but with the minerals arranged in order of increasing reflectivity. The main table of mineral species, which follows, is divided into seven groups depending on whether the minerals have less, equal or more resistance to polish than the three standards galena, chalcopyrite and pyrite. The choice of this criterion as the main basis of classification is unfortunate, since, with modern polishing techniques, relief is not normally observed. In addition, the groups tend to be much too large (one contains 90 separate species) so that more supplementary tests are called for than are really necessary.

Within the main table much valuable information is presented under the headings of chemistry, crystallography, Tselmage hardness, reflectivity, colour, etch tests, and miscellaneous. The last column is probably the most useful one in the compilation. It gives details of ease of polish, reflection pleochroism, anisotropism, cleavage, twinning, texture, and paragenesis, together with copious references. It is important to note, however, that the remarks on ease of polish do not always apply when metal laps with diamond abrasives are employed: for example, with such techniques pyrite and cassiterite take a perfect polish which is smooth and entirely free from scratches. Reflection pleochroism and anisotropism are usually

given for oil-immersion only, and this must be constantly borne in mind when using the dry objectives of low and medium power now widely used in ore microscopy.

The table listing the minerals in order of increasing reflectivity has proved most useful to the reviewer, even although the data at present available are far from satisfactory. It seems likely that accurate measurements of reflectivity, with standardized polishing techniques and in monochromatic light, will soon become the most reliable starting point of opaque-mineral identification, in the same way as indices of refraction are now used for non-opaque minerals.

The volume contains a long list of discredited mineral species and a bibliography of 441 publications, which to some extent supplement those given in the 1950 edition of Ramdohr's *Die Erzminerale und ihre Verwachsungen*.

*Atomic Energy Division
Geological Survey and Museum
London S.W. 7, England*

S. H. U. BOWIE

Structure Reports for 1949. Edited by A. J. C. WILSON, C. S. BARRETT, J. M. BIJVOET and J. M. ROBERTSON. Pp. 478 with many figs. Published for the International Union of Crystallography. Utrecht: N. V. A. Oosthoek's Uitgevers Mij. 1952. Price 45 Dutch florins.

The new *Structure Reports* are so well done and represent such a monumental piece of work on the part of the Editors and Abstractors that it is hard to find anything critical to say of the present volume, any more than of its predecessor.

Volume 12 covers the year 1949. The great amount of X-ray work now being done is very graphically shown by the 450 pages required merely to abstract one year of it.