Volume 13	f 100 (\$31.00 or £12.00)
Volume 14	f 35 (\$11.00 or £ 4.20)
Volume 15	f 110 (\$34.00 or £13.20)
Volume 16	f 120 (\$37.50 or £14.40)
Volume 17	f 125 (\$39.00 or £15.00)
Volume 18	f 120 (\$37.50 or £14.40)
Volume 19	f 100 (\$31.00 or £13.20)
Volume 20	f 100 (\$31.00 or £13.20)
Volume 21	f 100 (\$31.00 or £13.20)
Volume 21	f 100 (\$31.00 or £13·20)
Volume 22	f 140 (\$43.50 or £16.80)
Volume 23	f 120 (\$37.50 or £14.40)
Volume 24	f 140 (\$43.50 or £16.80)
Volume 25	f 90 (\$28.00 or £10.80)
Volume 26	f 140 (\$43.50 or £16.80)
Volume 27	f 200 (\$62.00 or £24.00)

Orders for Structure Reports, or for any of the other publications listed below, may be placed with the publishers, N.V. A. Oosthoek's Uitgevers Mij., Domstraat 5-13, Utrecht, The Netherlands, with Polycrystal Book Service, P.O. Box 11567, Pittsburgh, Pa. 15238, U.S.A. or with any bookseller. Special price reductions are available on Structure Reports for standing orders and for ten-year sets, and for private subscribers purchasing copies for their own use. Details may be obtained from the publishers, Oosthoek's, or from Polycrystal Book Service.

## (ii) Other Publications

Molecular Structures and Dimensions

Volume 1 f 45 (\$14.00 or £5.40)

Volume 2 f 35 (\$11.00 or £4.30) Volume 3 f 55 (\$17.00 or £6.50)

## Private subscribers' prices:

Volume 1 f 32 (\$10.00 or £3.90) Volume 2 f 27 (\$ 8.50 or £3·30) Volume 3 f 39 (\$12.50 or £4.70)

Fifty Years of X-ray Diffraction (P. P. Ewald) f 40 (\$12.50 or £4.80)

Symmetry Aspects of M. C. Escher's Periodic Drawings (C. H. MacGillavry) f 24 (\$ 7.50 or £2.90)

Early Papers on Diffraction of X-rays by Crystals (first volume - J. M. Bijvoet, W. G. Burgers & G. Hägg) f 48 (\$15.00 or £5.80)

World Directory of Crystallographers, fourth edition f 17 (\$ 5.00 or £2.00)

Index of Crystallographic Supplies, third edition f 10 (\$ 3.50 or £1.35)

Bibliographies on X-ray diffraction at high and low temperatures, on methods of obtaining monochromatic X-rays and neutrons and on small-angle scattering, a Crystallographic Book List and a World List of Crystallographic Computer Programs (second edition) are all priced f 10 (\$3.50 or £1.35).

## **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.

Electrical conductivity of vitreous substances. By RUDOL'F L. MYULLER. Pp. v+197. New York: Plenum, 1971. Price \$33.60.

This collection of papers by the late Professor Myuller consists of those of his publications involving the electrical properties of glasses. The material, which was originally published between 1940 and 1964, is divided into three parts dealing respectively with ionic conductivity, semiconducting glasses and vitreous structure.

The first and longest of these sections consists of eleven early papers in which Myuller's primary interest in the 'electrochemical principles' of physical properties quickly becomes apparent. The electrical properties are treated predominantly as a tool for the investigation of chemical bond formation in the materials. Whilst the papers contain a substantial amount of experimental data, the age of the collection makes it inevitable that the subject has advanced considerably since the time of original publication, so that interest is likely to be mainly historical in nature.

The second section contains five articles on the semiconducting chalcogenide glasses. Again, Myuller is mainly concerned with chemical bonding behaviour. His 'electrochemical' approach is employed to the almost complete exclusion of the more familiar band-theory formalism. Indeed, Myuller appears to consider the application of

wave-mechanical methods to the problem as 'somewhat arbitrary'. In view of the fact that the properties of semiconducting glasses are currently discussed predominantly in terms of band concepts, Myuller's approach renders the analysis of his experimental data of less general value than it might otherwise have proved.

The remainder of the collection consists of four papers dealing rather more generally with the nature of chemical bonding in the vitreous state. Once more, the experimental data are considered solely in terms of their value in elucidating structural characteristics.

Taken as a whole, this publication is likely to be of significant value only to a reader specifically interested in the nature of chemical bonding in glasses, or in the historical aspects of the collected works. The book could not be recommended to someone desiring a more general knowledge of the electronic behaviour of vitreous materials.

J. M. MARSHALL

School of Engineering Science University of Edinburgh King's Buildings Mayfield Road Edinburgh EH9 3UL Scotland