

Notes and News

Announcements and other items of crystallographic interest will be published under this heading at the discretion of the Editorial Board. The notes (in duplicate) should be sent to the Executive Secretary of the International Union of Crystallography (J. N. King, International Union of Crystallography, 13 White Friars, Chester CH1 1NZ, England).

New Volume of *Structure Reports*

Volume 29 of *Structure Reports*, covering the literature for 1964, was published in December 1972, at a price of 180 Netherlands Guilders. Orders may be placed with A. Oosthoek's Uitgeversmij N.V., Domstraat 5-13, Utrecht, The Netherlands, with Polycrystal Book Service, P.O. Box 11567, Pittsburgh, Pennsylvania 15238, U.S.A. or with any bookseller.

Prices of earlier volumes were given in *Acta Cryst.* (1972). A28, 299-300 and B28, 1317 and in *J. Appl. Cryst.* (1972). 5, 145-146.

Workshop on the Use of Structure Invariants in Phase Determination Buffalo, U.S.A., 5-24 August 1973

The Medical Foundation of Buffalo, the Faculty of Health Sciences, and the Faculty of Natural Sciences and Mathematics of the State University of New York at Buffalo are jointly sponsoring a three week workshop on the use of

structure invariants in phase determination from 5 to 24 August 1973, to be held at the Medical Foundation of Buffalo. There will be two or three lectures daily concerned with the theoretical basis of the direct methods of phase determination and other background material. The lectures will be delivered by the members of the Laboratory staff and a number of invited speakers. The remainder of the time will be devoted to instruction in the implementation of the theoretical results and the application of these methods to the structure determination of crystals of interest to the students. Participants are strongly urged to supply the required experimental data. The total number of participants will be limited to thirty. Inquiries and requests for registration forms should be addressed to

Dr Herbert Hauptman
Medical Foundation of Buffalo
73 High Street
Buffalo
New York 14203, U.S.A.

Registration closing date is 1 May 1973.

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.

Lithium-drifted germanium detectors. Compiled by INA C. BROWNRIDGE. Pp.xiii + 210. New York: IFI/Plenum, 1972. Price \$23.00

Lithium-drifted detectors operating at 77°K are used as high energy particle and high quantum energy detectors. This annotated bibliography comprising 790 references, some with abstracts, and both author and subject indexes is of use to workers in the field and is reasonably up to date with the latest reference dated May 1971.

Its importance to the crystallographer can be gauged from the division of references, there being less than ten of direct interest to the X-ray user. Over 40% of the references refer directly to γ -ray spectroscopy and nuclear energy schemes whilst 40% are concerned with the detection of nuclear particles and the fabrication and physics of detectors.

The presentation is good, clear and concise but the book is only of marginal interest to crystallographers.

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Solid state chemistry. Edited by ROBERT S. ROTH and SAMUEL J. SCHNEIDER JR. Pp.xvi + 783. National Bureau of Standards Special Publication 364. Washington D. C. 20402: U. S. Government Printing Office. Price \$7.50 (order by S. D. Catalogue c. 13. 10.364)

This book consists of some fifty to sixty papers presented to the 5th NBS Research Symposium held at Gaithersburg last October. The compounds dealt with are exclusively inorganic with more than half the book devoted to oxides, about a third to borides, carbides, silicides and chalcogenides and the rest to short, informal discussion sessions under the general heading of non-stoichiometry. The editors provide a general abstract which reflects the content rather more accurately than the all-embracing title which may mislead the general reader.

Those closely involved with research in this field will find much to interest them here. The papers by Allpress, Anderson, Bursill, Hyde and O'Keefe provide a useful background to the study of Wadsley defects and will probably attract the most attention. Harald Schäfer's contribution on chemical transport for oxide preparation is an impressively systematic account which should prove of value to both experimentalists and theoreticians with interests in this field.

Non-specialists may find this volume useful as a survey

of current trends in inorganic solid state chemistry. It is interesting to note that, in spite of the increasing importance of electron diffraction and optics, X-ray diffraction continues to play by far the major role in experimental work. There is rather little solid state spectroscopy reported (unfortunately papers on photoelectron and laser-Raman spectra are represented only by their abstracts). The review of carbide and silicide chemistry by Nowotny, Boller and Zwilling makes the point that questions of chemical bonding in these materials are still far from being adequately answered. Doubts as to how far apparently 'steady-state' phenomena may be safely treated as thermodynamic

equilibria (pp. 317, 727ff.) should provide food for thought for most solid state experimentalists.

Photographic and line illustrations are generally clear and the typewritten, offset text is easily legible apart from the occasional page of photographically reduced computer listing so familiar to readers of this journal.

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