International scientific organizations. A guide to their library, documentation, and information services. Pp. xii+794. Prepared under the direction of K. O. MURRA. Washington: Library of Congress, 1962. Obtainable from U.S. Government Printing Office, Washington 25, U.S.A. Price \$3.25.

The main part of this book, over 700 pages, consists of descriptions of 449 international organizations. The organizations are arranged alphabetically by their names in English, and the information given is a description of the library of the organization; its documentation and information services; and other relevant activities. A list of publications of the organization (up to about 1959) and a short resumé of the origin, purposes, administrative structure, and similar data concerning the organization are also given.

The entry for the International Union of Crystallography occupies just over a page and a half, and seems generally accurate, though three years out of date. The length of the entries varies considerably: the Bee Research Association has over three pages, the Organization of American States fifteen pages, the United Nations and Unesco 30 each, and the Society of Chemical Industry four lines. There is a useful list of acronyms (abbreviations such as IUCr, BRA, UN) and an index occupying thirty-four pages.

The book will clearly be a most useful reference work. Certain information concerning U.S. library holdings is only of local interest.

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Crystal data. Determinative tables. 2nd ed. By J. D. H. Donnay (General Ed.), Gabrielle Donnay (Assistant Ed.), E. G. Cox (Inorganic compounds), Olga Kennard (Organic compounds) and Murray Vernon King (Proteins). 1302 pages. A.C.A. monograph No. 5, 1963. Price \$20.

The value of a handbook giving numerical data increases strongly with the number of entries and — inversely — with the number of omissions, misprints and errors. Already a mere glance at the impressive dimensions of Donnay's new *Crystal Data* tells us that this volume, containing also Nowacki's classification tables by space groups,\* must mean a considerable improvement in comparison with the first edition.

This second edition has more than doubled its entries, giving X-ray data and other auxiliary properties of about 13000 crystalline substances, now collected and supervised by a great number of collaborators who also covered Russian and Japanese literature. As Donnay ends his preface with the rather mocking remark: 'Having found by sad experience how little I could trust other compilations (the first edition of *Crystal Data*,

for example), I have no illusion about the faultlessness of this one,' we certainly can be sure that all short-comings indicated by users of the first edition have been corrected.

The principle of choosing axial ratios as determinative numbers has been maintained, so that the data can even be used when only preliminary measurements with the optical goniometer have been done, but the choice of the unit cell to define the lattice has been modified. It is based now on the true reduced cell showing the shortest possible lattice translations instead of the Delaunay cell having the shortest possible translations that enable all three inter-edge angles to be non-acute. Though this is certainly an improvement from a practical point of view, it is a pity that Donnay's lucid treatment of the Delaunay reduction procedure has disappeared from his book.

The handling of the determinative tables is improved by a thumb index, distinguishing the different crystal systems, while the policy of avoiding misprints by off-set printing from typewritten sheets has been maintained in this edition. Though the size of the type o, e, a, n, u etc. is only I mm (compare the type in this review which is  $1\frac{1}{4}$  mm!) the text is surprisingly clear and easily readable. Workers in the field of crystalline proteins will greatly welcome the Protein Crystal Data by Murray Vernon King giving 5 anorthic, 81 monoclinic, 98 orthorhombic, 15 tetragonal, 23 hexagonal and 24 cubic entries. Record holder in cell dimensions is a virus described by Klug et al. giving visible-light diffraction with a cubic unit cell of 3580 Å.

As the first edition — in spite of its imperfections — has already been a very useful source of information on crystalline substances and a great help in identifying unknown compounds, this new handbook certainly will gain a reputation as an authoritative reference work on crystal data. The editors and their collaborators are to be congratulated on the impressive result of a long period of painstaking labour: the close family of scientists covered by the International Union of Crystallography is greatly indebted to them all. This well-bound monograph, at such a reasonable price considering its valuable contents, is a 'must' on the shelves of every science library.

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Proteins and nucleic acids. Structure and function. By Max F. Perutz. Pp. x+211. Amsterdam: Elsevier, 1962. Price £2·10·0.

'Molecular genetics is approaching a stage similar to that reached by atomic physics thirty years earlier, when the imaginative hypotheses which formed the background of research will have become established scientific truths.' This book, which is a slightly expanded version of the Weizmann Memorial Lectures given in 1961, surveys the position already reached in some rapidly advancing fields of molecular biology.

Great progress has recently been made in our understanding at a molecular, or atomic, level, of each step

<sup>\*</sup> A second edition of Nowacki's tables, based on these new data, is in preparation.