

Memorial Institute and continued at the Medical Foundation of Buffalo from 1967 to the time of her death. From 1969 to 1972 she also served as Research Director of the Medical Foundation where she established a research program in molecular endocrinology.

Dr Robert W. Hendricks, Metals and Ceramics Division, Oak Ridge National Laboratory, will spend the year October 1, 1972 to September 30, 1973, at the Institut für Festkörperforschung der Kernforschungsanlage, Jülich, West Germany, where he will be working with neutron small-angle scattering.

Dr Lawrence B Shaffer, chairman of the Physics Department, Anderson College, Anderson, Indiana, is spending a 15 month sabbatical leave at the Metals and Ceramics Division of Oak Ridge National Laboratory, Oak Ridge, Tennessee working with small-angle X-ray scattering.

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.

Landolt-Börnstein. Numerical data and functional relationships in science and technology. Group III. Vol. 6. Structure data of elements and intermetallic phases. Editor in chief K-H. HELLWEGE. Pp.xxviii +1019. Berlin, Heidelberg, New York: Springer-Verlag, 1971. Price (cloth) DM 620, U.S. \$179.10

Here is an elegantly produced book of 1019 pages, mostly tables of crystal data on metals and alloys. It is a companion to two other similar Landolt-Börnstein volumes, one giving data on Organic Crystals and the other on Inorganic Compounds. The data seem to cover the literature thoroughly up to the end of 1967, with some entries also being made for 1968.

The structures of the elements are dealt with in a table of 30 pages, those of borides, carbides and hydrides are covered in a table of 116 pages and intermetallic phases, generally, are covered by a table of 756 pages. The omission of nitrides might be considered inconvenient. The introductory part of the book is written both in English and in German. The tables of crystal data give the following information: space group, lattice parameters, number of formula units per cell, structure type, density, melting point (T_s), any transformation temperatures (T_t), the extent of the structure information, composition, range of stability of the phases, method of preparation and references. Data in the tables are arranged alphabetically by chemical symbols except that borides, carbides and hydrides are severally grouped together. The intermetallic phases table includes data for terminal solid solutions, with several lattice parame-

ters corresponding to several compositions. The solvent and solute symbols are enclosed in brackets with the solvent coming first. Nevertheless, indexing is by the symbol occurring first alphabetically. Thus solid solution of Al in Ni is indicated as (Ni, Al), but it is indexed under Al not Ni. The first formula of any alloy system is printed in bold type in the table. Lattice parameters given in column 5 of the table correspond to the alloy compositions given in column 3; the best values of lattice constants have been recorded, having regard not only to the X-ray measurements, but also the purity and characterization of the alloys. The last column of the tables gives coded references for the data, the first reference being that for the lattice parameters. The actual references are grouped together at the end of the tables where they can be located by the coded references given in the tables.

In addition to the crystal data tables, the introductory part of the book gives the usual tables of symmetry elements and classes, and space group symbols as well as nomenclature for structure types (compound names) and *Strukturbericht* types.

It is now necessary to evaluate the impact and usefulness of a book of data such as this: writing the introduction in English as well as German makes the book useful to a wide audience, but its price will restrict its use to those who are prepared to visit the reference sections of libraries. This price immediately removes the book from the place it should occupy as a ready desk-reference – that is for all but the very rich! Apart from the fact that it is more current than the most recent editions of *Crystal Data* and *A Handbook of Lattice Spacings and Structures of Metals and Alloys*, these two books have the advantage to the buyer of considerably lower prices, and

the tables in the latter give atomic parameters as well as lattice parameters, and are therefore of greater potential use.

It seems that what the consumer probably needs is not yet another elegant book of tables of crystal data for metals and alloys, but a better organization of all of the individual efforts to produce a single set of crystal data at much more frequent and regular intervals than is presently the case.

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Die vorliegende Zeitschrift ist eine vollständige Übersetzung der angesehenen sowjetischen wissenschaftlichen Zeitschrift *Fizika Metallov i Metallovedenie*, von der bereits etwa 30 Bände vorliegen. Sie wird im Auftrag der Akademie der Wissenschaften der Union der Sowjetrepubliken von einem Redaktionskollegium namhafter Wissenschaftler mit Akademiker S.V. Vonsovsky an der Spitze im Verlag Nauka Moskau herausgegeben.

Wie schon der Name der Zeitschrift anzeigt, ist das von ihr behandelte Spektrum ziemlich breit. Es erstreckt sich von theoretisch-physikalischen Untersuchungen metallphysikalischer