International Tables for Crystallography, Volume A. 2nd edition; edited by Th. Hahn, Dordrecht, Reidel, 1987. xvi + 878 pages. Dfl340.00, US\$140.00, £90. ISBN 90-277-2280-3.

This is a revised edition of the indispensible reference volume for crystallographers first published in 1983, which replaced the old Volume 1 of Tables for X-Ray Crystallography. The bulk of the volume is the same as in the first edition. Part 1 contains extensive descriptions of the one, two, and three dimensional space groups and point groups in direct space, and Part 2 treats symmetry in crystallography in a more theoretical manner stated in the preface to correspond in part to "an advanced textbook of crystallography". The changes consist of correction of any errors discovered in the first edition and the updating of some references and of the subject index. There is also the addition of two new sections in Part 2 dealing with normalisers of space groups.

This volume is not intended exclusively for the specialist crystallographer. Every attempt has been made to make the use of the tables in Part 1 as easy as possible, and any chemists considering the determination of their own structures will find it of great help. For instance, when confronted by a structure which is not in the ubiquitous  $P2_1/c$ , the easy-to-follow guide to space group determination in Chapter 3 should lead to the correct conclusions, even for those with a minimal knowledge of the subject

School of Chemistry and Molecular Sciences, University of Sussex, Brighton BN1 9QJ (Great Britain) Peter B. Hitchcock

Gmelin Handbook of Inorganic Chemistry, 8th edit., B — Boron Compounds, 3rd Suppl., Vol. 1; by T. Onak (Department of Chemistry, California State University, Los Angeles, California USA) and L. Barton (Department of Chemistry, University of Missouri-St. Louis, Missouri USA). Springer, Berlin, 1987, xv + 242 pages, ISBN 3-540-93549-5. DM 1076

Twenty volumes of Gmelin on boron chemistry covered the literature from 1950 to the end of 1976. The survey was extended to 1980 in two supplements, and the present volume is the first in a third supplement covering literature up to 1984. There is one page (4 references) by Professor Onak on boron-noble gas compounds and the remainder of the book by Professor Barton deals with boron hydrides.

Ever since their discovery there have been problems in finding names for boron hydrides which adequately and unambiguously describe their structures and the connectivities of the boron atoms. Various systems have been proposed: these have remained mysterious to non-specialists and confusing to those working in the area. It is not surprising therefore that this book begins with an account of a new nomenclature which is claimed to remove many of the ambiguities in the names currently in use. There is then a systematic account of work published in the four