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).

Bragg Symposium 1970

A report of this meeting, which was held in London 1-3 April 1970, has been published in *Acta Cryst.* (1970) A**26**, 575.

International Tables for X-ray Crystallography

The Editors of Volume I of *International Tables for X-ray Crystallography* regret that there is an omission in Table 3.4.1 (page 30) of the 1969 edition. In the cubic system the Laue Class of highest symmetry has been omitted. This should be inserted below the Laue Class ***m*3** as follows:

432
$\bar{4}3m$
m*3*m

Book Review

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.

Ionic crystals, lattice defects and nonstoichiometry. By N. N. GREENWOOD. Pp. 194. London: Butterworths, 1968. Price 32*s*.

The chemical bonding theory of the defect solid state is generally neglected in student textbooks and thus an important branch of chemistry does not receive adequate attention in undergraduate and graduate courses. To remedy this situation Professor Greenwood has written this little monograph which is based on lectures he has given during the last 15 years. The book aims at providing a systematic and integrated account of modern ideas on the role of structure defects in modifying the properties of ionic solids. It further aims to give a didactic treatment of the problems posed by the occurrence of compounds of variable composition and the apparent existence of grossly nonstoichiometric phases. He begins with a chapter on structure energy of ionic crystals which without involving quantum mechanics goes much beyond the oversimplified treatment found in other books on crystal chemistry. There follows a short discussion of the geometrical structure of simple ionic crystals. Naturally the material presented here is quite selective and serves essentially to introduce concepts required in later chapters. Chapter 4 which is entitled *Lattice Defects* covers thermodynamic aspects and also experimental methods to determine defects. The reviewer being a crystallographer regrets the use of the terms 'Lattice Defects and Lattice Energy' instead of 'Structure Defects and Structure Energy' but he realizes that the wrong terms are used frequently by physicists. There follows a discussion of specific defect structures in stoichiometric crystals which is then extended logically to encompass the structural and thermodynamic aspects of nonstoichiometry. The last chapter of the book is devoted to the experimental investigation of nonstoichiometric compounds.

It is the reviewer's opinion that the author has succeeded in writing a very useful book which will find its place in the interested student's desk library. The treatment concentrates on principles rather than applications without getting lost in mathematical details. The style is clear and the material well presented except for the structure–lattice mix-up discussed above. It was a pleasure to read and review this book.

ERWIN PARTHÉ
School of Metallurgy and Materials Science
University of Pennsylvania
Philadelphia 19104
U.S.A.