

## Books Received

*The following books have been received by the Editor. Brief and generally uncritical notices are given of works of marginal crystallographic interest; occasionally a book of fundamental interest is included under this heading because of difficulty in finding a suitable reviewer without great delay.*

**Nitrogen NMR.** Edited by M. WITANOWSKI and G. A. WEBB. Pp. ix + 403. 31 Figs. 85 Tables. New York: Plenum Press, 1973. Price \$32.00

The book surveys the whole field of nitrogen NMR. Each chapter has an extensive bibliography covering the development of nitrogen NMR from the early experiments in 1950 to the present time. Both theoretical and experimental aspects of the subject are covered. The quadrupolar effects produced by the  $^{14}\text{N}$  nucleus in both NMR and NQR are comprehensively dealt with. Applications of nitrogen chemical shift and coupling constant data, dealing with all the main branches of chemistry, are discussed including paramagnetic systems.

**Advances in molten salt chemistry. Vol. 2.** Edited by J. BRAUNSTEIN, GLEB MAMANTOV AND G. P. SMITH. Pp. xi + 259. 63 Figs., 66 Tables. New York: Plenum Press, 1973. Price \$23.00.

The second volume in this broad-ranging series explores the physical, electroanalytical and high-temperature coordination chemistry of molten salts. The authors examine

novel organic molten salts and discuss their use in testing theories of liquids. In addition, there is an explanation of the interaction of reactive gases with molten salts and a general survey of the coordination chemistry of Group VIII.

**Inorganic rings and cages.** By D. A. ARMITAGE. Pp. 386, 211 Figs. and 17 Tables. London: Arnold 1972. Price £12.50.

This book, as the title suggests, covers a structural aspect of main-group inorganic chemistry. The omission of compounds with carbon as an integral part of the ring necessarily excludes heterocyclic and chelate chemistry.

The cyclic compounds are discussed according to the group classification. The structure and bonding is considered in detail along with the synthesis and reactions of these 'rings and cages'. Where appropriate, matters of historical, geological and industrial interest are included.

Subjects considered in detail include the Grignard reagent, boron hydrides and carboranes, borate and silicate minerals, and inorganic polymers such as silicones and phosphazenes. Allotropy and cyclic catenation provide more general topics while the trends in multiple bonding and coordination number are emphasized throughout the text.