## **BOOK REVIEWS**

Les Cyclitols. Chimie, biochimie, biologie. (The Cyclitols. Chemistry, biochemistry, biology,) Actualités scientifiques et industrielles nº 1294, by Th. Posternak, Hermann, Paris, 1962, 491 pp., 463 formules, tables.

The present monograph is a comprehensive and up-to-date account of everything that is known about cyclitols and related compounds authoritatively written by a scientist whose personal contribution to the field has been foremost.

The first part, Chemistry of Cyclitols, deals mainly with the organic chemistry of the substances studied, whether they are naturally occurring compounds or synthesized ones, obtained in the laboratory by chemical or biochemical means. After a general introduction, chapters are devoted respectively to: meso-inositol, other inositols, cyclohexane-pentols, cyclo-pentane- and cyclohexane-tetrols and -triols, O-methyl inositols, cyclohexenetetrols, cycloses, epoxydic-1,2- and osidic-derivatives of cyclitols and C-methyl-inositols, halogenated cyclitols, amino-cyclitols, phosphoric esters of cyclitols, inositol-containing phospholipids, cyclitol-derived carboxylic acids.

The second part, Biochemistry and Biology of Cyclitols, studies in succession: distribution of meso-inositol in nature, physiological actions of inositol, antagonists of meso-inositol, metabolism of meso-inositol, inosury, biosynthesis of cyclitols, biosynthesis of aromatic compounds, metabolism of inositol-phosphoric acids, inositol and lipids, miscellaneous biochemical and biological topics.

References, numbering 1279, are first fully given as footnotes to the text and again cited in the index of authors which, together with a well-compiled index of subjects, makes the finding of information easy.

Although limited in its subject-matter, the book offers useful information in very many different fields and therefore should appeal to a wide audience not only of organic chemists, but also of biochemists, phyto-chemists, microbiologists and physiologists.

M. Welsch

L. REY (editor): Progrès récents en Lyophilisation (Recent progress in freeze-drying). Hermann, Paris, 1962. Actualités scientifiques et industrielles, no. 1299, 204 pp., 33 N.F.

THE introduction by A. S. Parkes, F.R.S., on: "Biological aspects of freezing and drying", and the thirteen papers gathered in this book are original contributions introduced at the second series of International Course on Freeze-drying. They are presented as an up-to-date complement to the *Traité de Lyophilisation*, also edited by L. Rey, published in 1960 by Hermann.

The first six contributions, respectively written by J. M. Mosnier, L. Rieutord, H. Meryman, R. I. N. Greaves, L. Rey and U. Hackenberg, deal with theoretical aspects and technical problems from which fundamental rules for the engineering of freeze-drying machines can be deduced.

Industrial freeze-drying of foodstuffs is discussed by K. H. Neumann, freeze-drying of microorganisms and viruses by P. Hauduroy, J. D. Piguet and I. Marcovici, while several questions pertaining to the freeze-drying of cells and tissues are respectively propounded by G. Hyatt and M. C. Wilber, by A. C. Taylor, by H. Meryman and by R. I. N. Greaves.

Finally, D. Greiff, M. Myers and C. A. Privitera give an account of their work on the effects of glycerol on the cryotolerance of suspensions of mitochondria.

The articles are authoritatively written either in French or English. They are well illustrated and the book should appeal to a wide audience

M. Welsch