BOOK REVIEW

Cyclitols and Phosphoinositides: Proceedings of the 2nd Meeting of the Federation of European Biochemical Societies, Vienna. Vol. 2. Edited by H. KINDL. Pergamon Press, Oxford, 1966. 80 pp.

This book contains eight papers written by specialists: Biosynthesis of inositol in the mammal, by F. Eisenberg, Jr.: localization of synthesis in various rat tissues; mechanism of cyclization of p-glucose with an intermediate glucose-6-phosphate; enzymes involved. Biosynthesis of meso-inositol in microorganisms and higher plants, by H. Kindl: Investigation of the mechanism of transformation of selectively labelled D-glucose into meso-inositol in Sinapis alba and Candida utilis. Biosynthesis of the cyclitols other than meso-inositol, by O. Hoffmann-Ostenhof: incorporation of labelled meso-inositol into scyllitol; methylation of meso-inositol followed by epimerization to D-pinitol; epimerization to L-inositol followed by methylation to L-pinitol and L-quebrachitol. Antagonists of inositol, by Th. Posternak: active antagonists for Neurospora crassa and Schizosaccharomyces pombe; morphogenetics effects of antagonists and other inhibitors; biochemical differences between normal and abnormal cells. Phosphoinositides in mycobacteria, by C. E. Ballou and Y. C. Lee: general structure of glyceryl-phosphoryl-meso-inositol mannosides; complete structure of phosphatidyl-meso-inositol pentamannoside. Diphosphoinositide and triphosphoinositide in tissues other than brain or nerve, by J. N. Hawthorne and R. H. Michell: presence in various tissues; incorporation of [32P]-ATP into mitochondrial DPI of rat liver; comparison of subcellular fractions; distribution of ³²P in the DPI molecule. Metabolism and function of polyphosphoinositides in the nervous system, by R. M. C. Dawson: structure of mono-, di- and triphosphoinositides; enzymes and ions involved in their metabolism; localization in nervous tissue, turnover in myelin; form and possible functions. Biosynthesis of phosphoinositides in brain, by R. J. Rossiter and F. B. Palmer: production of phosphatidyl inositol by the transfer of a phosphatidyl group from the liponucleotide intermediate CDP-diglyceride; formation of polyphosphoinositides by the successive transfer of phosphoryl groups to phosphatidyl inositol.

All the papers contain numerous references and the book forms a conspicuous account of our present knowledge on this very much studied subject.

V. PLOUVIER