

Morgan, D.M.L. (ed.): **Polyamine Protocols**. - Humana Press, Totowa 1997. 186 pp. ISBN 0-89603-448-8.

The polyamine field is a fast growing area and the primary objective of this book is to put together an overview of the methods used in polyamine studies, including some older methods that still enable us to get reliable data. The book is divided into five parts written by prominent authors in particular fields with high experience with the techniques they describe. The first part provides an introduction into the relevant questions of polyamines. The characteristics and structures of polyamines are presented here. The author mentions also some known facts about polyamine functions in cells. Adequate intracellular levels of polyamines are necessary for optimal growth and replication of animals, plants, bacteria, fungi and protozoa. These substances influence the transcriptional and translational stages of protein synthesis, interact with nucleic acids and stabilize membranes. The second section is devoted to assay methods of polyamine biosynthesis and involves determination of ornithine decarboxylase activity using

[³H]ornithine, assay of spermidine and spermine synthases and measurement of spermidine/spermine N¹-acetyltransferase activity. In part three, assay methods for enzymes of polyamine catabolism are presented. The methods for amine oxidase and polyamine oxidase activities are described here. The main topics of the fourth part are HPLC and TLC methods for determination of polyamines. The part five is focused on polyamine transport and the last part deals with the measurement of polyamine effects on cell growth. References at the end of each chapter provide valuable source of almost complete information from the field.

Polyamine Protocols brings together clear and complete descriptions of methods currently used in polyamine research. From the foregoing it is apparent that the book provides useful information for all researchers involved in the studies of polyamine metabolism, to name a few, for plant and animal biochemists, physiologists and cell biologists.

M. CVIKROVÁ (*Praha*)