

Preface to the First Edition

Today enzymes are much more widely used as analytical tools than in the past. New methods have been worked out for the use of those enzymes which are now available in a high state of purity, and existing techniques have been improved.

This laboratory manual contains the working directions for carefully tested procedures. The analytical methods have been contributed by authors who have had many years of experience in their particular field of study. Consequently, the reader is certain to have reliable experimental directions which represent the latest advances in this branch of science.

Any type of laboratory can make good use of this book, since it is designed on strictly practical lines. The individual chapters are arranged according to the substances to be determined (not according to the enzymes used). Grouping by substrates is employed since today the reagents are commercially available (with the exception of a few special enzymes). For these exceptions a short résumé of isolation techniques is included. The possibility of attempting the preparation of these enzymes is then easily judged by the reader, bearing in mind the facilities available to him.

The book is divided into four sections. The first section outlines the basis of enzymatic analysis and gives general experimental instructions for the techniques of measurement and for the disintegration of cells and tissues. The two main sections which follow give detailed directions for the determination of substrates and assay of enzyme activities. The commercially available enzymes, coenzymes, substrates and some less common reagents are described in the fourth section "Biochemical Reagents". Once again the practical aspects are emphasized, and information necessary for the application of these reagents to enzymatic analysis, such as sources, stability and purity required, is given.

The publisher and the editor agreed not to use the International Nomenclature for enzymes and coenzymes proposed by the International Union of Biochemistry at present, apart from referring to it in the Section on "Biochemical Reagents".

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