

## Foreword

An analytical method is of value when its specificity, reproducibility and sensitivity are high and when the expenditure of labour, time and material are low. Even at the time when enzymes were understood and defined solely by their action many enzymatic methods were suggested to fulfil these conditions. However, on the whole these methods were not adopted, mainly because of the unreliability of the enzyme preparations and the elaborate nature of the assays.

During the last decade *Otto Warburg's* methods of enzymatic analysis (crystalline enzymes used in single and combined "optical tests") provided a new basis for work in this field. The majority of the methods used at present are based on measurements of the 340 m $\mu$  band of DPNH and TPNH and were developed during this period. The renewed interest in enzymatic analysis began mainly with the determination of alcohol (ADH method) in forensic medicine. At the same time other enzymatic methods of analysis were thoroughly revised and new types worked out.

In addition to the general progress in enzymology and intense activity in the special field of enzymatic analysis, a new factor has appeared: the commercial production of biochemical reagents for analysis. We are indebted to the pioneer spirit of a few firms, but more especially to the research workers who have continued their work in this field in spite of all difficulties.

By and large, the transition from the possible use of enzymatic analysis to its varied applications in pure and applied biochemistry has been made. This then is the situation at the time of publication of this collection of methods and is therefore an argument in favour of the considerable effort required. Many of the workers who have been engaged in recent developments report on their experience here. It is hoped that this book will increase the exchange of ideas between various groups and thus will attract new recruits to the field of enzymatic analysis.

This book and the methods described are intended to be of practical service. I hope that it will succeed.

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*Theodor Bücher*