Methods in Enzymology

Volume 117

Enzyme Structure

Part J

EDITED BY

C. H. W. Hirs

Serge N. Timasheff

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Preface

"Enzyme Structure," the eleventh volume of *Methods in Enzymology*, was published 18 years ago. Supplements appeared in 1972, 1973, 1978, and 1979. A large part of these volumes was devoted to the presentation of physical techniques used in protein studies. Part I, which appeared recently, is concerned primarily with chemical techniques. This volume and Parts K and L, which are now in preparation, deal in detail with physical methods. It is hoped that they will bring up-to-date coverage of techniques currently available for the study of enzyme conformation, interactions, and dynamics.

As in the past, these volumes present not only techniques that are currently widely available but some which are only beginning to make an impact and some for which no commercial standard equipment is as yet available. In the latter cases, an attempt has been made to guide the reader in assembling equipment from individual components and to help find the necessary information in the research literature.

In the coverage of physical techniques, we have departed somewhat in scope from the traditional format of the series. Since, at the termination of an experiment, physical techniques frequently require much more interpretation than do organic ones, we consider that brief sections on the theoretical principles involved are highly desirable as are sections on theoretical and mathematical approaches to data evaluation and on assumptions and, consequently, limitations involved in the applications of the various methods.

The organization of the material is similar to that of the previous volumes, with Part J being devoted primarily to techniques related to molecular weight measurements and interactions with ligands, the latter a topic that has gained prominence in recent years.

We wish to acknowledge with pleasure and gratitude the generous cooperation of the contributors to this volume. Their suggestions during its planning and preparation have been particularly valuable. The staff of Academic Press has provided inestimable help in the assembly of this volume. We thank them for their many courtesies.

C. H. W. HIRS
SERGE N. TIMASHEFF

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III. Preparation and Assay of Substrates
IV. Special Techniques for the Enzymologist
V. Preparation and Assay of Enzymes
VI. Preparation and Assay of Enzymes (*Continued*)
Preparation and Assay of Substrates
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VII. Cumulative Subject Index

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