

ADVANCES IN ENZYMOLOGY
AND RELATED AREAS OF
MOLECULAR BIOLOGY

Volume 35

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Founded by F. F. NORD

Edited by ALTON MEISTER

CORNELL UNIVERSITY MEDICAL COLLEGE, NEW YORK

VOLUME 35

1971
INTERSCIENCE PUBLISHERS
a division of John Wiley & Sons, Inc.
New York · London · Sydney · Toronto

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Library of Congress Catalog Card Number: 41-9213

ISBN 0 471 59170 X

Printed in the United States of America

10 9 8 7 6 5 4 3 2 1

PUBLISHER'S TRIBUTE

With Volume 35 F. F. Nord is retiring as Editor of this series into a well-deserved *otium cum dignitate*. Because he was the initiator of the series, which grew under his editorship to its present significance and reputation, it seems fitting for the publisher who has collaborated with F. F. Nord since 1940 (in Europe since 1930) to express gratitude for the great enthusiasm, untiring effort, and tenacity that F. F. Nord brought to this task.

At the same time it is fitting to review briefly the history of the series and to reflect on the reasons for its undiminished success for almost 40 years.

F. F. Nord conceived the idea of a periodical review series in enzymology in 1930, while Professor at Berlin. In 1932 the first volume of *Ergebnisse der Enzymforschung* was published by Akademische Verlagsgesellschaft m.b.H., in Leipzig. In 1938 Nord became Professor of Chemistry at Fordham University and transplanted the series to the United States.

The first volume of *Advances in Enzymology* was published under his editorship in 1941, one of the first publications of a budding publishing house, Interscience Publishers, Inc., which was founded in 1940 and merged with John Wiley & Sons, Inc., in 1961.

From 1941 on one volume appeared each year, with the exception of three years during which two volumes were published.

The series was warmly received by its readers. It has become an undisputed success as a source of new information for the experts in the field and as an educational and reference tool for the workers in related fields of biochemistry, as well as for the many novices who want to enter enzymology. This has been achieved by treating the right subject in the right form guided by the right man.

Enzymology played a very unusual role in the development of the life sciences. Gowland Hopkins once called cell life "an ordered sequence of events governed by specific catalysts." Since the enzymes are, of course, the catalysts in question, enzymology was instrumental in transforming large areas of biology into biochemistry, leading to a chemical understanding of the life process and laying the foundation of

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molecular biology. Because of its close connections with biological systems, its growth was not systematic, but haphazard and taxonomic. It therefore became necessary for the biochemist to acquire and remember a tremendous amount of proliferating unrelated facts about substances and systems. The field maintained, at the same time, its connections with biology and exerted its influence on many related areas of physiology and medicine.

An information method that sifted new concepts and results and presented them in well-ordered intelligible fashion, and followed the development of the field, was therefore very desirable. The selection for it of the form of essay reviews was an especially fortunate one. It enabled investigators who themselves had contributed to progress in the field to evaluate, synthesize, and integrate in a consistent way new developments in a personalized fashion that transposed the flavor of their own scientific excitement and their own laboratory work into print.

The major task, however, was to find the right topics and the right authors. Both had to reflect the great strides that the field made and to represent the best authorities. F. F. Nord was the editor supreme who steered the *Advances* from their inception almost single-handedly. In fact, the *Advances* never had an advisory board. Nord had an almost uncanny vision for picking subjects that showed significance and promise for the future. He had an unshakable sense for the intrinsic soundness of a research effort, which led him to bypass authors and topics that appeared doubtful to him—an attitude that often seemed to outsiders to be ungenerous. But reviewers and users have often and consistently testified to the value and significance of the published material. This is certainly an affirmation of his editorial sagacity and integrity.

The series will be continued by Alton Meister, Professor of Biochemistry, Cornell University Medical College.

We hope that F. F. Nord will have for many years to come, an opportunity to examine the subsequent volumes of his brainchild and that he will not feel a generation gap in doing so.

New York, New York
March 1971

ERIC S. PROSKAUER

EDITOR'S PROLOGUE

Publication of *Advances in Enzymology*, successor to *Ergebnisse der Enzymforschung*, began in 1941—as stated in the preface to Volume 1, “at a time when research is subject to the gravest of interruptions and original thinking liable to the greatest distraction.” This and the succeeding 33 volumes of the *Advances*, edited by Dr. F. F. Nord and published over a period of 30 years, contain chapters that reflect the tremendous growth of enzymology and emphasize its important connections with biochemistry, molecular biology, biophysics, physiology, microbiology, pharmacology, and medicine. Although generally not considered to be a “discipline,” enzymology has nevertheless served crucially in the development of biochemistry and related areas. Enzymology is certainly no less important today in terms of its biological significance than it has been in the past. Indeed, not only do we seem to be approaching more closely the solution of such problems as the structures and mechanisms of action of a number of enzymes, but current and future research seems certain to elucidate more fully and at the molecular level the role of enzymes in a wide variety of biological phenomena. As the new editor of this series, I shall endeavor to maintain the tradition of excellence so skillfully and masterfully established by my predecessor. It is my hope to continue to present the reader with chapters that reflect the thinking and accomplishments of those who are moving the broad field of enzymology.

New York, New York
August 1971

ALTON MEISTER