

## Preface

It has been fully realized, as mentioned in the Preface to Volume I of "Metabolic Inhibitors," that knowledge of the mechanisms of action of metabolic inhibitors must have practical importance in the direct control of disease and that such knowledge would not only lead to a better understanding of the processes involved in normal and abnormal cell growth but of genetic relationships to disease conditions and of membrane transport processes as well. In the nine years that have elapsed since publication of Volumes I and II of "Metabolic Inhibitors" these areas have expanded at such a phenomenal rate that it was felt the time was ripe to evaluate the new developments in additional volumes to this treatise. Volume III deals with some aspects of metabolic and enzyme inhibition not previously considered in detail in the earlier volumes.

The processes or metabolic systems covered include such basic topics as membrane transport, immunization, gene activity, DNA and RNA synthesis, protein synthesis, virus replication, photosynthesis, lipid metabolism, and blood clotting. Articles dealing with inhibitors per se include novel antibiotics, polypeptide and protein hormones, modified tRNA's, and oligonucleotides, as well as more conventional inhibitors. The chapters are written by investigators experienced in their respective fields and provide a broad coverage of recent developments. The authors were free to express their opinions and were asked to provide a critical evaluation of the literature. Many of them have taken advantage of the unavoidable delays in production to update their reviews. It is hoped that this volume will be of interest not only to biochemists and medical research workers but also to virologists, microbiologists, plant physiologists, and agronomists.

We wish to express our sincere thanks to the contributors for their time and energy in preparing their articles and for their patience and understanding in the face of the delays encountered in the production of this volume. We also wish to thank the many publishers and authors who gave their kind permission to reproduce some of their previously published illustrative material, Academic Press for their fine spirit of cooperation throughout the production of this volume, and Mr. Paul Deroo for preparation of the Subject Index.

M. Kates  
J. H. Quastel