
Preface

The two lead chapters of *Microbial Enzymes and Biotransformations* represent overviews of microorganisms as a source of metabolic and enzymatic diversity, and of the fast-developing field of enzyme biosensors. The remaining chapters show comprehensive experimental methods for improving enzyme function by directed evolution, and for manufacturing enzymes used worldwide for human health, nutrition, and environmental protection, including L-glutaminase, D-hydantoinase/D-carbamoylase, fructosyltransferase, food-grade hydrolytic enzymes, phenylalanine dehydrogenase, alkaline enzymes for detergents, conventional and high salinity stable proteases, pectinases, phytases, glucose dehydrogenase, and acetate kinase. Finally, methods for covalently immobilized enzymes, penicillin G acylase, and procedures to microencapsulate enzyme and cells are described.

Microbial Enzymes and Biotransformations has been written by outstanding experts in the field and provides a highly useful reference source for laboratory and industrial professionals, as well as for graduate students in a number of biological disciplines (biotechnology, microbiology, genetics, molecular biology) because of the uncommonly wide applicability of the procedures across the range of areas covered.

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José Luis Barredo



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