# Integration and control of metabolic processes: pure and applied aspects

**EDITED BY** 

O. L. Kon

AND

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# Integration and Control of Metabolic Processes

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The Proceedings of the Fourth Federation of Asian and Oceanian Biochemists Congress and Satellite Symposium on Molecular and Protein Engineering, held in Singapore during November 30 - December 5, 1986

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with the assistance of
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#### Preface

This volume brings together the invited lectures of the Fourth Federation of Asian and Oceanian Biochemists (FAOB) Congress and of the Satellite Symposium on Molecular and Protein Engineering which took place in Singapore from November 30th to December 7th, 1986.

The Federation of Asian and Oceanian Biochemists was formed in 1972 as the grouping of Biochemical Societies—of Australia, Bangladesh, China (Beijing), China (Taipei), Hawaii, Hong Kong, India, Indonesia, Japan, the Republic of Korea, Malaysia, New Zealand, Pakistan, the Philippines, Singapore and Thailand. It is an Associated Organization of the International Union of Biochemistry (IUB) from which it receives substantial financial support. The Fourth FAOB Congress was organized and hosted by the Singapore Biochemical Society with additional support from the Science Council of Singapore, the National University of Singapore and the Singapore Turf Club. The Satellite Symposium on Molecular and Protein Engineering received generous support from the IUB Committee on Symposia (Symposium No. 157) and the IUB Interest Group on Gene Organization and Expression.

The Fourth FAOB Congress was an opportunity to take the pulse of some growing areas of research in biochemistry and molecular biology. These areas include signalling and regulatory molecules, gene structure and function, growth factors, oncogenes, energy transduction, molecular mechanisms of disease, design of macromolecules and recent advances in research methods.

The timely publication of this volume from camera ready copy provided by the authors is a measure of the efficiency of the publisher and owes much to the help and advice extended to the organizers by Dr. W.J. Whelan, Chairman of the ICSU Press.

O.L. Kon January 1987

#### The ICSU Press

The ICSU Press, the publishing house of the International Council of Scientific Unions, was founded in 1983 to serve the publishing needs of ICSU and the ICSU family. Many of these family members are already heavily engaged in publishing, but the need was felt for a central service within ICSU to carry out the following functions:

Undertaking publication projects for any ICSU family member, initiating interdisciplinary projects on behalf of a group of ICSU members; advising on publication activities both for technical and contractual matters and providing written recommendations and guidelines for these purposes; acting as an expert negotiator on behalf of ICSU members; producing service publications for them and studying new communications technologies.

Since it began publishing in 1984, the ICSU Press has published seven symposia and a variety of monographs. It has launched two journals, BioEssays and the Journal of Tropical Ecology. It has initiated a new rapid-communication format embodied already in seven volumes of "Short Reports". Educational texts and semi-popular expositions of the work of the ICSU family are in preparation.

ICSU Press activities are made known via the ICSU Newsletter, distributed to the ICSU family and cooperating bodies from the ICSU Secretariat, 51 Bd de Montmorency, 75016 Paris, France. Further information about the ICSU Press may be had from the office of the Chairman at P.O. Box 016129, Miami, Florida 33101, U.S.A.



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# Gene Structure and Expression

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