Transport and Bioenergetics in Biomembranes

Edited by R. Sato and Y. Kagawa

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xii + 250 pages. $54 (outside USA), £34 approx.

This small book consists of articles on topics in the general field of 'membranes and bioenergetics'. These include the mitochondrial electron-transport chain, cytochrome P450, bacterial amino acid transport and the ATPase enzymes involved in oxidative phosphorylation, photophosphorylation, Ca^{2+}-transport in sarcoplasmic reticulum and the exchange of Na^+ and K^+ across plasma membranes. Each article reviews recent research work on the topic with particular reference to that carried out in Japanese laboratories. Some authors gave detailed experimental methods and results in their articles (e.g., that of Ozawa on purification of complexes I, III and IV from beef heart mitochondria) whereas other incorporated their own work into the general trend of the review.

I found the articles to be well presented and interesting to read, although they were at a level suitable only for postgraduate students and research workers. The book made me more aware than I was previously of the substantial Japanese contributions to bioenergetics. One criticism, perhaps a predictable one, is that the most up to date references to non-Japanese work are to papers published in 1981 and so some of the articles are already out of date. A second criticism is that much of the new Japanese work reported has already been published in scientific journals or is 'in press'.

This book should be useful to advanced research workers in the field. If they see it in the library, they should read it. I could not recommend them to go out of their way to get a copy, however, since the book will have such a transient value.

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