

Contents

I. Membrane Proteins: Function, Purification, and Characterization

Purification of Cytochrome c Reductase and Oxidase by Affinity Chromatography R. Bolli, C. Broger and A. Azzi (With 1 Figure)	3
Molecular Weight Estimation of Membrane Proteins: Gel Permeation Chromatography and Sucrose Gradient Centrifugation K.A. Nałecz, R. Bolli and A. Azzi (With 3 Figures)	11
The Problem of Light Scattering in the Absorbance and Fluorescence Studies of Proteins in Membranes P. Cavatorta, E. Casali and G. Sartor (With 4 Figures)	24
Reproducible Preparation of Phosphatidylserine Vesicles for Fluorescence Studies of Protein Incorporation into Lipids J. Johns and A.G. Szabo (With 3 Figures)	32
Purification and Reconstitution of the Proton Translocating Membrane Bound Inorganic Pyrophosphatase from <i>Rhodospirillum rubrum</i> M. Baltscheffsky and P. Nyrén (With 1 Figure)	42
The Function of Transmembrane Channels: Ion Transport Studies by ^{23}Na NMR A. Spisni, V. Comaschi and L. Franzoni (With 2 Figures)	49
Membrane Signal Transduction via Protein Kinase C C.W. Mahoney, R. Lüthy and A. Azzi (With 4 Figures)	56
Extraction, Partial Purification, and Reconstitution of a Mixture of Carriers from the Inner Mitochondrial Membrane M.J. Nałecz, K.A. Nałecz and A. Azzi	67

II. Lipid-Protein Interaction

The Effect of Polypeptides on the Fluidity of Lipid Bilayers G. Sartor, M.B. Ferrari and P. Cavatorta (With 3 Figures)	79
Polypeptide-Lipid Interactions as Studied by ^{13}C NMR A. Spisni, G. Farruggia and L. Franzoni (With 4 Figures)	86
Conformational Changes in Polypeptides and Proteins Brought About by Interactions with Lipids L. Masotti, J. Von Berger and N. Gesmundo (With 7 Figures)	95

III. Protein Modification

Two Examples of Selective Fluorescent Labeling of SH-Groups with Eosin-5-Maleimide: The ADP/ATP Translocator and the Cytochrome c Oxidase Subunit III of Bovine Heart Mitochondria M. Müller and A. Azzi (With 5 Figures)	109
Hydrophobic Photolabeling with ^{125}I -TID of Red Blood Cell Membranes C. Montecucco	119
Use of Fluorescent Probes of the Adenine Nucleotide Carrier for Binding Studies and Analysis of Conformational Changes G. Brandolin, M.R. Block, F. Boulay and P.V. Vignais (With 5 Figures)	124
Spin Labeling of Membranes and Membrane Proteins C. Broger, R. Bolli and A. Azzi (With 10 Figures)	136

IV. Protein Reconstitution

Functional Reconstitution of the Mitochondrial Cytochrome b-c ₁ Complex: Effect of Cholesterol M.J. Nałęcz and A. Azzi	151
Changes of the Membrane Surface Potential Measured by Amphiphilic Fluorescent and ESR Probes M.J. Nałęcz, A. Szewczyk and L. Wojtczak (With 4 Figures)	160

Reconstitution of Cytochrome c Oxidase	
N. Capitanio and S. Papa (With 2 Figures)	168
Measurement of Pyruvate Transport in Mitochondria	
K.A. Nałecz and A. Azzi	173