

# CONTENTS

## BIOPHYSICAL JOURNAL

August 1983 volume 43 number 2

- 141 ROBUST ESTIMATION IN PULSE FLUOROMETRY. A STUDY OF THE METHOD OF MOMENTS AND LEAST SQUARES. *Irvin Isenberg*
- 149 DEPENDENCE OF CELLULAR POTENTIAL ON IONIC CONCENTRATIONS. DATA SUPPORTING A MODIFICATION OF THE CONSTANT FIELD EQUATION. *Donald C. Chang*
- 157 FAST DIFFUSION ALONG DEFECTS AND CORRUGATIONS IN PHOSPHOLIPID  $P_{\beta}$  LIQUID CRYSTALS. *Marilyn B. Schneider, Winston K. Chan, and Watt W. Webb*
- 167 PAIR DISTRIBUTION FUNCTIONS OF BACTERIORHODOPSIN AND RHODOPSIN IN MODEL BILAYERS. *L. Timothy Pearson, Sunney I. Chan, Barbara A. Lewis, and Donald M. Engelman*
- 175 A LOCALIZED PATTERN PHOTBLEACHING METHOD FOR THE CONCURRENT ANALYSIS OF RAPID AND SLOW DIFFUSION PROCESSES. *Dennis E. Koppel and Michael P. Sheetz*
- 183 TRANSEPITHELIAL TRANSPORT IN CELL CULTURE. A THEORETICAL AND EXPERIMENTAL ANALYSIS OF THE BIOPHYSICAL PROPERTIES OF DOMES. *Cary Tanner, Donald A. Frambach, and Dayton S. Misfeldt*
- 191 INTERMEDIATE AND STABLE REDOX STATES OF CYTOCHROME *c* STUDIED BY LOW TEMPERATURE RESONANCE RAMAN SPECTROSCOPY. *Bo Cartling*
- 207 ESTIMATING KINETIC CONSTANTS FROM SINGLE CHANNEL DATA. *Richard Horn and Kenneth Lange*
- 225 DIFFUSION PROFILES OF  $Na^+$ -FLUORESCHEIN IN FROG VENTRICULAR MUSCLE. *Guy Salama and Martin Morad*
- Brief Communications*
- 231 PHOSPHOLIPID BILAYERS MADE FROM MONOLAYERS ON PATCH-CLAMP PIPETTES. *Roberto Coronado and Ramon Latorre*
- 237 SINGLE VOLTAGE-DEPENDENT CHLORIDE-SELECTIVE CHANNELS OF LARGE CONDUCTANCE IN CULTURED RAT MUSCLE. *Andrew L. Blatz and Karl L. Magleby*
- 243 SPECTROSCOPIC DISCRIMINATION OF THE THREE RHODOPSINLIKE PIGMENTS IN *HALOBACTERIUM HALOBIUM* MEMBRANES. *John L. Spudich and Roberto A. Bogomolni*
- 247 HOW PERCHLORATE IMPROVES EXCITATION-CONTRACTION COUPLING IN SKELETAL MUSCLE FIBERS. *H. C. Lüttgau, G. Gottschalk, L. Kovács, and M. Fuxreiter*
- 251 BLUE LIGHT EFFECT ON PROTON PUMPING BY BACTERIORHODOPSIN. *Koki Ohno, Rajni Govindjee, and Thomas G. Ebrey*
- Letter to the Editor*
- 255 TEMPERATURE DEPENDENCE OF SPIN-LABEL INTENSITY IN SOLUTIONS AND ITS IMPLICATION IN SPIN-LABELED ERYTHROCYTE MEMBRANE STUDIES. *Leslie W.-M. Fung and Michael E. Johnson*