

BIOPHYSICAL JOURNAL

CONTENTS

March 1969 volume 9 number 3

- 269 TEMPERATURE DEPENDENCE OF OSCILLATION IN SQUID AXONS: COMPARISON OF EXPERIMENTS WITH COMPUTATIONS. *Rita Guttman*
- 278 A SIMPLIFIED MATHEMATICAL MODEL AND SIMULATIONS OF THE HYPOPHYSIS-OVARIAN ENDOCRINE CONTROL SYSTEM. *Henry E. Thompson, James D. Horgan, and Eleanor Delfs*
- 292 MECHANISM OF INHIBITION PYRIMIDINE DIMER FORMATION IN DEOXYRIBONUCLEIC ACID BY ACRIDINE DYES. *B. M. Sutherland and J. C. Sutherland*
- 303 NUCLEAR MAGNETIC RESONANCE EVIDENCE USING D<sub>2</sub>O FOR STRUCTURED WATER IN MUSCLE AND BRAIN. *Freeman W. Cope*
- 320 STUDIES OF RAMAN SPECTRA OF WATER SOLUTIONS OF ADENOSINE TRI-, DI-, AND MONOPHOSPHATE AND SOME RELATED COMPOUNDS. *L. Rimai, T. Cole, J. L. Parsons, J. T. Hickmott, Jr., and E. B. Carew*
- 330 RADIATION-INDUCED BREAKS OF DNA IN CULTURED MAMMALIAN CELLS. *W. Veatch and S. Okada*
- 347 A MODEL FOR ULTRAVIOLET AND PHOTOREACTIVATING LIGHT EFFECTS IN *Euglena*. *Helene Z. Hill and David W. Alling*
- 360 DISTRIBUTED REPRESENTATION FOR ACTIN-MYOSIN INTERACTION IN THE OSCILLATORY CONTRACTION OF MUSCLE. *John Thorson and D. C. S. White*
- 391 CONJUGATION IN *Escherichia coli* K-12 AND ITS MODIFICATION BY IRRADIATION. *Thomas H. Wood and Roger H. Walmsley*
- 421 THE GENERAL THEORY OF MAPPING FUNCTIONS FOR RANDOM GENETIC RECOMBINATION. *R. H. Walmsley*
- 432 FLUX RATIO AND DRIVING FORCES IN A MODEL OF ACTIVE TRANSPORT. *R. Blumenthal and O. Kedem*
- 447 EFFECT OF DIVALENT CATIONS ON POTASSIUM CONDUCTANCE OF SQUID AXONS: DETERMINATION OF SURFACE CHARGE. *Daniel L. Gilbert and Gerald Ehrenstein*
- 465 *Letters to the Editor*  
ZETA POTENTIAL AND DISCRETE VS. UNIFORM SURFACE CHARGES. *Kenneth S. Cole*