

CONTENTS

Surveys

- AVDIYUK K. V., VARBANETS L. D.
Microbial α -amylases: physico-chemical properties, substrate specificity and domain structure 5

Experimental Works

- VEKLICH T. O., SHKRABAK A. A., MAZUR Yu. Yu., RODIK R. V.,
BOYKO V. I., KALCHENKO V. I., KOSTERIN S. O.
Kinetic regularities of calixarene C-90 action on the myometrial plasma
membrane Ca^{2+} , Mg^{2+} -ATPase activity and on Ca^{2+} concentration
in unexcited cells of the myometrium 20
- KOLOMIETS O. V., DANYLOVYCH Yu. V., DANYLOVYCH G. V., KOSTERIN S. O.
 Ca^{2+} accumulation study in isolated smooth muscle mitochondria using Fluo-4 AM 30
- SALYHA N. O.
Activity of the glutathione system of antioxidant defense in rats under the action of L-glutamic acid 40
- MANKO B. O., MANKO V. V.
Influence of Ca^{2+} on kinetic parameters of pancreatic acinar mitochondria *in situ* respiration 48
- GORDIENKO A. I.
Correlation between base concentration of C-reactive protein in the blood, levels
of serum antiendotoxin antibodies and endotoxin-binding capacity of monocytes
and granulocytes of healthy people 61
- PUZYRENKO A. M., CHEKMAN I. S., BRUZGINA T. S., GORCHAKOVA N. O.
Influence of antihypertensive and metabolic drugs on fatty acids content
of lipids in cardiomyocytes of rats with spontaneous hypertension 67
- MELNYCHUK S. D., KHYZHNYAK S. V., MOROZOVA V. S., VOITSITSKY V. M.
Activity of NAD⁺-H-generating enzymes and cytochrome content in mitochondria
from rat liver and myocardium under artificial hypobiosis 75
- STEPANOV S. S., ZOLOTAREVA E. K.
Influence of methanol on the content of NAD(P)H, free amino acids and protein
in the cells of *Chlamydomonas reinhardtii* 82

Brief Notes

- LEVCHUK N. I.
Influence of metanandamide on steroidogenesis in rat adrenocorticocytes *in vitro* 90
- STASHKEVYCH M. A., KHOMUTOV E. V., SHATOVA O. P.,
DUMANSKIY Yu. V., ZINKOVYCH I. I.
Distribution of 5-fluorouracil between lymphocytes and blood plasma 94

BROVARETS' O. O. Under what conditions does G·C Watson-Crick DNA base pair acquire all four configurations characteristic for A·T Watson-Crick DNA base pair?	98
BROVARETS' O. O. Structural and energetic properties of the four configurations of the A·T and G·C DNA base pairs	104
Methods	
ROKA-MOYA Y. M., ZHERNOSSEKOV D. D., KONDRATYUK A. S., GRINENKO T. V. Development and optimization of the methods for determining activity of plasminogen activator inhibitor-1 in plasma	111
The History of Biochemistry	
VYNOGRADOVA R. P., DANILOVA V. M. Laureates of the Palladin Prize of the National Academy of Sciences of Ukraine (1989–1990)	119
Theses of reports of the Conference of Young Scientists	
<i>Urgent Problem of Biochemistry and Biotechnology – 2013</i>	
Palladin Institute of Biochemistry of the National Academy of Sciences of Ukraine, 6–7 June, 2013, Kyiv	130
News Items	
BORIS FILIPPOVICH MINAEV On his 70th birthday	157