

*УДК 577.37***CARDIOLIPIN EFFECT ON THE LIPID BILAYER STRUCTURE: PYRENE
EXCIMERIZATION STUDY****V.M. Ioffe, G.P. Gorbenko, Ye.A. Domanov***V.N.Karazin Kharkov National University, 4 Svobody Sq., Kharkov, 61077*

The influence of cardiolipin (CL) on the structural state of model membranes has been examined using pyrene excimerization technique. Excimer-to-monomer ratio decreased by 11 % as CL content increased from 0 to 10 mol % suggesting that CL can induce bilayer condensation. At higher CL concentrations (20 and 40 mol %) excimer-to-monomer ratio tended to increase being indicative of the reduced lipid packing density. Biological role of CL is discussed.

KEY WORDS: liposomes, pyrene excimer formation, cardiolipin, lipid bilayer structure, free volume.