

Phosphorescence analysis of lipid peroxidation products at 77 K

Vladimir M.Mazhul, Dmitry G.Shcharbin

The results of measurements of the spectral and kinetic characteristics of low temperature phosphorescence of lipid peroxidation products in composition of oxidized preparations of phosphatidylcholine from bovine heart, phosphatidylethanolamine from bovine heart, cardiolipine from bovine heart, a total lipid fraction of human erythrocytes membranes, linoleic acid have been presented first. Phosphorescence of polymerized malonic dialdehyde and Schiff bases has been also investigated at 77 K. The nature of phosphorescent chromophores of lipid peroxidation products in composition of oxidized lipid preparations has been discussed.