Current Topics in Biophysics (Zagadnienia Biofizyki Współczesnej) vol. 17 (Supplement), 1993, 17-32

Termokinetyka w organizmach stałocieplnych

Feliks Jaroszyk

This article is devoted to a study of temperature fields, temperature gradient and influence of the field on the rate of biological processes. Next a study was made of standard heat transport mechanisms such as heat conduction, convection, radiation and vaporization. Moreover, we concentrated on temperature fields of living homoeothermal organisms and problems concerning the thermoregulation of these organisms. Heat transport mechanisms inside homoeothermal organisms and between the organism and surrounding environment were of interest in the following section of the work. Furthermore, towards the end of this article we discussed such problems as generalized energy balance in organism-environment system, environmental parameters determining heat losses and the basic metabolic rate of these organisms. The criterion of similarity used in this work is given in the appendix.