

**THE $^{90}\text{Sr} + ^{90}\text{Y}$ KINETICS INVESTIGATION EXCHANGE
AND ABSORBED DOSES FORMATION AFTER ACUTE INTERNAL IRRADIATION
OF THE RATS IN MODEL EXPERIMENT**

I. P. Drozd, A. I. Lypska, Yu. P. Grynevich, G. Ya. Minchuk

The possibility of the camera model theory application for the description of metabolic processes in the living organisms has been analyzed. The type of transport matrix of the model has been determined according to physical and biological limits for the system. It has been shown that camera model is stable. It is able to describe uniquely the processes in the living organisms. Model of 10 camera has been proposed in order to describe $^{90}\text{Sr} + ^{90}\text{Y}$ exchange in the laboratory rats organism. The functions of isotope retention and kinetic constants needed for the practical application of the camera model theory have been determined for each camera. The doses of exposure of the experimental animals' organs and tissues have been calculated.