## SCINTILLATION $\beta$ -SPECTROMETER FOR THE DETERMINATION OF $^{90}$ Sr CONTENT IN ENVIRONMENTAL OBJECTS

I. N. Kadenko, V. K. Maidanyuk, V. M. Petryshyn, G. I. Primenko, Yu. A. Sedov

The design of high-sensitive scintillation  $\beta$ -spectrometer intended for measuring the content of  $^{90}Sr$  in environmental samples against the background  $^{40}K$  and  $^{137}Cs$  is described. The spectrometer includes the plastic detector with developed surface, to be simultaneously used as sample container. The content of  $^{90}Sr$  is determined by measuring  $\beta$ -spectrum in the region 1311 - 2282 keV. The minimum detectable specific activity of spectrometer is 5,0 Bq/kg for solid granular samples with mass 1000 g and - 3,6 Bq/l for water under 1 hour measurement with sample and background.