

18. EXTENSION OF ABILITIES OF THE 4π -GAMMA-SPECTROMETERS “PRIPYAT”

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The new measuring possibilities of 6-crystal gamma-rays spectrometers of “Pripyat” type are reported. Distinctive features of these spectrometers are the 4π registration geometry and large sensitive volume (up to 5 l). Principle of operation of the new registration system and the processing methods of spectra using the corresponding software are described. The minimal volume activities measured by using modernized spectrometers of “Pripyat” type are presented (^{137}Cs , ^{226}Ra , ^{232}Th < 1 Bq/l, ^{40}K < 10 Bq/l).