**Îöåíî÷íûé ðàñ÷åò êîýôôèöèåíòà ïðåîáðàçîâàíèÿ ñèãíàëîâ äåòåêòîðà â âåëè÷èíó îáúåìíîé àêòèâíîñòè**

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Аннотация. Öåëüþ ðàáîòû ÿâëÿåòñÿ ïîëó÷åíèå îöåíî÷íîé âåëè÷èíû êîýôôèöèåíòà ïðåîáðàçîâàíèÿ ñèãíàëà äåòåêòîðà â çíà÷åíèå îáúåìíîé àêòèâíîñòè (äàëåå - ÎÀ) ïðè èçìåðåíèÿõ â æèäêîé ñðåäå. Â ñòàòüå ïðèâåäåí àíàëèòè÷åñêèé ðàñ÷åò îïðåäåëåíèÿ çíà÷åíèÿ êîýôôèöèåíòà ïðåîáðàçîâàíèÿ knA ÷àñòîòû n èìïóëüñîâ, ãåíåðèðóåìûõ óçëîì äåòåêòèðîâàíèÿ (äàëåå - ÓçÄ), â îáúåìíóþ àêòèâíîñòü AV ðàäèîàêòèâíîé æèäêîñòè, çàïîëíÿþùåé èçìåðèòåëüíóþ êàìåðó (äàëåå - ÈÊ), â êîòîðóþ ïîãðóæåí ÓçÄ. Òàêæå ïðîèçâåäåí ðàñ÷åò èçìåíåíèÿ êîýôôèöèåíòà ÷óâñòâèòåëüíîñòè äåòåêòîðà îò ýíåðãèè ðåãèñòðèðóåìîãî èçëó÷åíèÿ, äàþùèé êà÷åñòâåííóþ îöåíêó ýíåðãåòè÷åñêîé ÷óâñòâèòåëüíîñòè ïðè ðàçðàáîòêå ïðèáîðîâ. Â êà÷åñòâå ïîäòâåðæäåíèÿ ïðîèçâåäåííûõ âûêëàäîê ïðåäñòàâëåí ìåòîä, óòî÷íÿþùèé ðàñ÷åòíûé êîýôôèöèåíò ïðåîáðàçîâàíèÿ ñèãíàëîâ äåòåêòîðà â âåëè÷èíó ÎÀ.

Êëþ÷åâûå ñëîâà: îáúåìíàÿ àêòèâíîñòü æèäêîñòè, êîýôôèöèåíò ÷óâñòâèòåëüíîñòè, ñöèíòèëëÿöèîííûé äåòåêòîð.

**Àn Estimate of the Conversion Factor of Detector Signals to the Magnitude of Volume Àctivity**

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Abstract. An obtaining the estimated value of the conversion factor of the detector signal in a value of volume activity measurements in liquid environments is the aim of this investigation. The article gives an analytical calculation of the value of the conversion factor of rate of pulses generated by the detection unit in volume activity of radioactive liquid that fills up the measuring chamber, in which is immersed detector unit. Also were calculated the changes in the detector sensitivity coefficient from the energy of detected radiation, which gives a qualitative assessment of the energetic sensitivity in development of devices. In evidence of produced calculations, we present a method which specifies the current conversion factor of detector signals to magnitude of volume activity.

Key words: liquid volume activity, the coefficient of sensitivity, scintillation detector.