



walls of dwellings constructed from different construction materials are within limits of 0.083-1.12 Bq m⁻² h⁻¹. At average levels of radon 44-384 Bq/m³ for inhabitants of multistory and one story buildings an annual effective dose and fatal factor of risk are estimated occurred to be (0,7-6,1) mSv/year and (0,5-4,57) x 10⁻⁴, respectively.



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INFRARED PRECISION MEASURING COMPLEX FOR INVESTIGATION OF HIGH-SPEED PROCESSES IN SUBCRITICAL ELECTRONUCLEAR INSTALLATION

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The description of multi-channel system for investigation of the energy generation dynamics by infrared radiation is given [1]. The system consists of an optical channel, infrared radiation detector, a unit of amplifiers, monitoring electronics and coupling with a computer. The appropriate software reads out operations in the real time disc operation system.

Reference:

1. M.V.Maslova et al. -- Atomic Energy, 2002. Vol. 93. No. 4. P. 832.



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FUEL ASSEMBLIES OF LOW ENRICHED ²³⁵U IN REACTOR OF INSTITUTE OF NUCLEAR PHYSICS OF UZBEKISTAN ACADEMY OF SCIENCES

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On the WWR-SM reactor of INP Uzbekistan AS since March 1987 till March 1989 the resource tests of 3 fuel assemblages (FA) such as IRT-3M with 36 % enrichment on ²³⁵U were carried out. Uranium density in FA cores were 2,5 g/cm³. The FA tests have passed successfully with more than 50 % of the fuel burnt out. Thus increase of the radioactive emissions level through reactor ventilating center above control was not observed.

The WWR-SM reactor conversion the FA such as IRT-3M with fuel (UO₂-Al) 36 % enrichment on ²³⁵U was started in August 1998 and was completed in February 1999. Uranium density in FA cores was 2,7 g/cm³. From the end of 2000 till March 2002 the resource tests of FA such as IRT-4M with lower enrichment (19,7 %) on ²³⁵U were carried out on the WWR-SM reactor and were successfully finished with average burning out of 62 %.

In the given work the accumulated experience on the WWR-SM INP AS RU reactor exploitation with of lowered ²³⁵U enrichment on fuel is discussed.