

MEASUREMENTS OF RADON EXHALATION RATE FROM SOIL SAMPLES OF THE TASHKENT AREA BY CR-39 DETECTORS

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In an article the results of measurements of radon exhalation rate (RER) from a surface of soil samples by solid state track detectors a type CR-39 are presented. As known at local measure of the Rn-222 on the magnitude of RER effected a very many external factors. There are pressure, temperature, humidity and porosity, emanation coefficient of the soils. Therefore were selected soil samples from 13 districts of Tashkent area and were measured of the RER with a calibrated CR-39 detectors in the plastic cups at laboratory conditions after its dried and sifted. The results of measurements have been showed that values of RER were 0.072-0.180 Bq/m² h for mostly of soil samples. The values of RER from the soil samples that a taken out vicinity of coal career and old orchard were reached up to 1.10 Bq/m² h. Therefore high contents of uranium and radium in these soils have been found. In one case the radioactive elements in soil migrated from a coal career and in case of orchard due to continuous entering phosphoric fertilizers into ground.