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# of Effective Radionuclide Methods for Identification of Nuclear Testing Venues

The authors of research propose development of a new effective method for locating a nuclear test by using tritium. The objects of the study were in the test area (wells, tunnels), as well as epicenter of surface and excavation explosions of the Semepalatinsk Test Site.
At each object was carried out tritium distribution through ecosystem elements - surface and groundwater, air, snow, vegetation and soil. During research work was design the individual scheme for study of each object - boreholes, tunnels, epicenter of explosions. Methodology of research of level and distribution of tritium in the different object of ecosystems has also been developed.
According of results the tritium content in water is about 1•105 Bq/l, in the air is up to 1 400 Bq/m3, in vegetation – up to 1•106 Bq/l, in the snow cover is about 500 Bq/kg, in soil – up to 50 000 Bq/kg.
Based on all of the data will be held on the selection of the most effective elements of the ecosystem, which could be used as an indicator of nuclear test.

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