

## Measuring of the neutron generator radiation field characteristics by activation detectors

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The possibility of determining with activation detectors the spectral characteristics of the neutron generator radiation field was considered in this work. For measuring the neutron yield from a generator target there has been developed a technique that uses threshold detectors which are made of copper and aluminum and a screen made of cadmium.

The experimental neutron yield values that have been obtained with activation detectors coincide with the readings of the certified dosimeter-radiometer, within the limits of error.

There was also performed a simulation of these experiments with the Monte Carlo method. A significant effect on the simulation results of the design of the neutron generator and the measurement geometry is shown. The results of the experiment coincide with the simulation results within the error.

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