Russian scientists from SNIIP (part of Rosatom) have developed new portable dosimeters – devices that measure the accumulated dose of radiation. They can be used on atomic objects. They write news.

The main feature of the device is special tablets-detectors from magnesium and boron. They play the role of the “substitute” of human tissues, absorbing radiation in the same way as the body does.

When such tablets heat up, they begin to glow – and the more radiation they have accumulated, the brighter the light. This glow is captured by sensors, and then the device shows the exact level of the dose.

As explained by the chief designer SNIIP Andrei Gordeev, the main advantage of the new development is ease of use. The tablets can be prepared for re -use directly at room temperature.

In foreign analogues, this requires a special environment with nitrogen and expensive equipment. Russian technology does without all this, making the process easier and cheaper.