The company Termovat LLC is an enterprise, one of the activities that are aimed at the implementation of devices, systems and systems that help protect a person and his environment.
The main areas of application of the equipment are customs and border control, special equipment, nuclear industry, radioecology, emergency situations, civil defense, nuclear medicine, radiology, geophysics, metrology, scientific research, etc.

The domestic manufacturer manufactures and produces ionizing radiation detectors based on modern optical and semiconductor devices for measurement and radiation monitoring.
The combined inspection systems mastered in production, combining the possibility of simultaneous observation of metal objects and radiation substances.

These utilitarian devices are based on the use of detectors, with the capabilities of a gamma spectrometer with unique characteristics, which allows them to be used for applied and applied tasks.
The basis - the detector (gamma spectrometer) is designed as an autonomous, inexpensive radioisotope signaling identifier. It contains the detection and processing parts in the case, as well as an interface that allows to communicate with any processing means via the serial interface.

The advantages of the detector and devices implemented on its basis.

- The ability to create new types of instruments for detecting ionizing radiation through the registration of light flashes of low intensity (at the level of single photons) and duration of the order of nanoseconds in combination with:

- considerable compactness and strength;
- Ability to work in a wide range of ambient temperatures, in particular when working in the field;
- low operating voltage;
- the possibility of full-fledged operation in any magnetic fields without special modifications.

- Allows to apply any algorithm of processing of spectra with high accuracy.

- Extended range of recorded gamma-ray energies, possibility of recording low-energy gamma quanta.

Examples of the use of detectors series "RT-3.x", "RT-40.x", NaI (tl) 40x40.

1. Manufacture of arched and manual (inspection) combined detectors of metal and radioactive elements.

(Combined detectors of this class are not manufactured in the world)

Nuclear terrorism today is perhaps the greatest threat to peace.
The phrase "dirty bomb" was heard by everyone, but very few seriously thought about the possible consequences of its use.
We must understand that the "dirty bomb" is not a nuclear explosion, which leads to huge destruction. It is, above all, weapons aimed at destroying the economy, the ecological habitat and human health. Such a bomb pollutes the territory with radioactive materials for a long time. And, consequently, if applied in an important financial or industrial region, it can destroy the entire infrastructure system, make the territory impossible for living.

For 20 years in the database ITDB (Incident and Trafficking Database - special base, which was created by the IAEA in 1995) collected 2734 confirmed incidents related to illegal trafficking in radioactive materials.

In this regard, Termovat LLC offers innovative security systems and inspection of visitors to government agencies, mass-entertainment facilities, railway and bus stations, airports, sea and river

ports, water supply facilities, energy, industry; educational institutions, museums, theaters, shopping facilities, etc.

Argo and handheld (portable) domestic inspection detectors, implemented by Termovat, allow simultaneous inspection for the presence of metal objects and radioactive elements, meet all the requirements of GOST, IEC, ANSI.

2. The possibility of using the developed sensors in industrial γ-locators, medical equipment:

- Creating a medical γ-factor. The device, implemented on the basis of the detector "RT-3.x", has higher technical characteristics.
- As a highly sensitive system used for radioisotope study of kidney function.

Advantages: compactness, the ability to work in the field, the price (much lower than the world peers).

- Creation of the Human Radiation Spectrometer (SIC), as an analogue of the unique imported equipment for the investigation of the internal organs of a person. It is especially important for people living in the territory exposed to radiation pollution.

Advantages: reliability, durability, the ability to work in the field, the price.

3. Use in the manufacture of radionuclide content control devices for rapid analysis of food purity - in markets, procurement centers, industrial processing plants. The device meets all the requirements for professional spectrometers - radiometers, for these tasks.

Advantages: compactness, the possibility of combining with the weights - to get the result immediately on the mass.

4. Application in devices designed to measure the concentration of natural Radon in order to control the ecology of regions and determine the boundaries of geological anomalous zones of the Earth.

5. Ability to mount on Unmanned Aerial Vehicles - on both large and light vehicles.

The relevant fields of application are in the military field and in the sphere of environmental control tasks.

6. Logistics and cargo (sea, river ports, railway junctions, customs, warehouses).

In connection with the growing cargo transportation markets, a new approach to the complex solution of security problems with the use of modern technical means is needed.

7. Automotive.

Automotive scintillation gamma detector for embedded systems can be used in the mass production of cars - with the output of information on the on-board computer car.