



**Belarusian State University  
of Informatics and Radioelectronics**

R&D Department

## Announcement

### BSUIR will take part in the II International Security Industry Exhibition "National Security. Belarus-2024"

June 19 – 21, 2024  
111, Pobediteley Ave (Minsk-Arena)  
Minsk, Belarus

#### About the exhibition:

Exhibition "National Security. Belarus – 2024" provides an opportunity for a large-scale demonstration of high-tech innovative developments and ready-made solutions in the field of security.

The scientific and business program includes conferences, seminars, round tables for the purpose of exchanging expert opinions, as well as discussing issues of improving mechanisms for the creation of favorable conditions for industrial, scientific, and technological development.

#### Main thematic areas of the exhibition:

- equipment for law enforcement agencies and special services with special technical equipment, police equipment;
- technologies of information and digital security of the state;
- anti-terrorist protection system for objects vulnerable to terrorism, "safe city";
- technical equipment for border protection;
- technical equipment and systems for preventing accidents, disasters and their liquidation;
- special fire safety equipment;
- equipment and components used in disaster medicine;
- means of ensuring industrial and environmental safety.

At the exhibition, BSUIR will introduce high-tech developments in the field of electromagnetic and information security, as well as advanced control and measuring microwave equipment.

Microwave control, measuring and testing equipment in the frequency range from 0.01 to 220 GHz (vector and scalar network analyzers, signal generators, absorbed power wattmeters, calorimeters).

Equipment for maintenance and repair of communication stations and replacement of outdated material and technical base of telecommunications industry enterprises of the Republic of Belarus.

#### **Advantages:**

- a line of devices has been developed in the range from 0.01 to 220 GHz;
- can be integrated into the measuring system using a standard Ethernet computer interface.

Included in the Registers of Measuring Instruments of the Republic of Belarus and the Russian Federation.

#### **About the developer**

#### **Display film for information protection**



The film is designed to maintain the confidentiality of information displayed on monitors, displays and indicator panels.

It ensures protection of information from unauthorized recording by unauthorized people located outside the viewing angle of 10 degrees or more. It is a double-sided optically transparent film developed using innovative micro-blind technology.

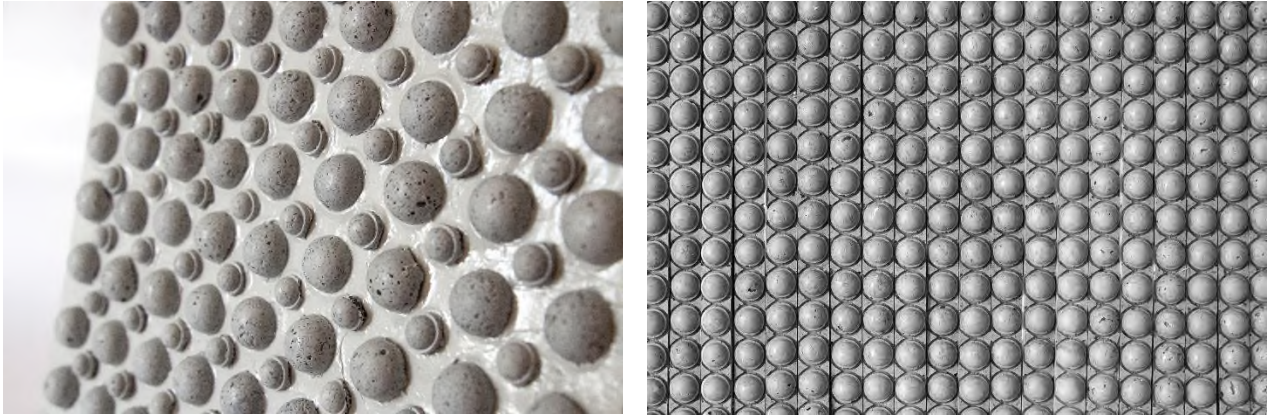
Has an anti-glare effect and reduces light reflection.

#### **Advantages:**

- reduces eye strain by creating contrast in small text and images;
- does not distort the display of information on the display;
- easy to install and remove;
- Protects the display from external damage and dust.

#### **About the developer**

## Absorbers of electromagnetic radiation in the microwave range



They are final panels intended for installation on walls or partition frames of shielded rooms. The presence of geometric inhomogeneities on the surface ensures the scattering of electromagnetic waves interacting with it.

The panel has a two-layer structure. The bottom layer is made on the basis of a conductive film material, the top layer is made on the basis of powdered activated carbon and a polymer binder.

The rounded shape of the geometric surface inhomogeneities determines the strength of the absorbers and low material consumption compared to analogues.

### Advantages:

- High mechanical strength.
- Flexibility.
- The presence of geometric surface inhomogeneities ensures greater dispersion of electromagnetic radiation.
- High degree of fire resistance.
- Reduced mass per unit area.
- Does not contain substances toxic to humans.
- The cost of the finished product is reduced due to the availability of materials.
- Reflection coefficient of electromagnetic radiation in the microwave range: up to – 20 dB;
- Transmission coefficient of electromagnetic radiation in the microwave range: up to –40 dB.

### About the developer