



**Belarusian State University of Informatics and
Radioelectronics**
R&D Department

Announcement

Exhibition of the most significant results of scientific, technical and innovative activities dedicated to the Day of Belarusian Science 2021

January 29

Minsk, the NASB Presidium Building, 66 Nezavisimosti avenue

BSUIR presents

1. Hardware and software complex for detecting and suppressing communication with an unmanned aerial vehicle

The complex is designed for operation at long distances and in any meteorological conditions to detect unauthorized emergence of unmanned aerial vehicles in the area of responsibility and control points.

Features and advantages:

- high speed of UAV detection due to the simultaneous use of eight probing beams, which reduces the time for scanning in elevation;
- versatility of use: detection of various types of UAVs at long distances and in any meteorological conditions;
- suppression of communication channels with an unmanned aerial vehicle; possibility of application for protecting the perimeter of the air and ground space;
- availability of a mobile version.

2. High-temperature cavitometer

The device is designed to measure and control the activity of cavitation in liquids and molten metals at temperatures up to 1000°C...

Applications: metallurgical research and industry.

Features and advantages:

- full cavitation activity;
- digital output of measurements to a computer;

- recording of output signals as time dependences;
- built-in memory card and USB connector.

3. Manufacturing technology of energy-saving flat aluminum heating elements

The technology allows the production of elements with any surface shape, which is especially relevant in the automotive industry for use in conjunction with lithium-ion rechargeable batteries (maintaining preset operating temperature), in 3D printers, for work in moulds and in the military industry.

The use of carbon filament ensures high stability of the electrical characteristics of the heater and its reliability under constant heating-cooling thermal cycles during operation.

Features and advantages:

- capability to regulate electrical resistance in the range from 10^{-3} to 10^7 Ohm • cm;
- maximum operating temperature up to 400 ° C;
- aluminum base; heating element made of carbon filament;
- ultra-thin form;
- low heat losses.

4. Manufacturing technology of screens to secure information through optical channels

Flat screens are designed for preserving information on monitors, displays and indication panels. They ensure protection of information against unauthorized collection by outsiders who are beyond the viewing angle of 10 degrees or more.

Features and advantages:

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

High-temperature cavitometer



Protective film screen

