



Belarusian State University of Informatics and Radioelectronics

R&D Department

Announcement of BSUIR participation in the in TechInnoProm — the 28th International Specialized Exhibition of Technologies and Innovations in Industry.

September 23 – 25, 2025. Republic of Belarus, Minsk, Pobediteley Ave. 20/2, Football Arena, BSUIR booth No. D2.2.

"TechInnoProm" is the 28th international specialised exhibition of technologies and innovations in industry. It is held as part of the Belarusian Industrial and Innovation Forum with the aim of promoting innovative industrial equipment, products and technologies from domestic and foreign companies to regional and international markets, strengthening business contacts and exchanging experience.

Sections of the exhibition:

- Equipment, technologies and scientific and technical developments for industrial production.
- Innovations. Scientific and technical developments.
- Industrial products and services..
- Organisation and improvement of industrial production.

At the exhibition BSUIR will present the following developments:

National standards of units of power and attenuation of electromagnetic oscillations in the frequency range from 37.5 to 178.4 GHz



These are complexes of microwave test and measurement equipment and special software designed to calibrate microwave measurement devices (power meters and attenuators) widely used in radio astronomy, radio spectroscopy, radar, communications, applied metrology, etc.

Advantages:

- unique equipment in the Republic of Belarus for calibration, verification and highprecision measurements;
- included in the State Registry of National Standards of Units Values of the Republic of Belarus:
- manufactured at the university's own production facilities.

About the developer

Flexible X-ray transparent heating elements



The main advantage of flexible heaters is their adaptability. The elements can be manufactured in any shape and follow the contours of curved surfaces, which is particularly relevant in the automotive industry for heating batteries, in the manufacture of printing plates, and in medicine for heating mats in operating rooms.

Advantages:

- the ability to adjust electrical resistance in the range from 10-3 to 107 ohm-centimeters;
- maximum operating temperature up to 250εC;
- high flexibility;
- ultra-thin shape;
- low heat loss

About the developer

Semi-automatic installation for thick-layer anodizing of aluminum and aluminum alloy products

Used to create high-quality dielectric coatings of anodic aluminium oxide on the surface of various aluminium alloys, manufacture porous aluminium oxide membranes, aluminium anodised bases for LED modules, substrates for powerful integrated circuits and microwave devices, and MEMS components.

Advantages of the coatings created:

- increase the service life of aluminium parts;
- can be easily coloured with organic dyes in various colours and used as a primer for paint coatings;
- coatings formed in oxalic acid-based electrolytes have high plasticity.

About the developer

Technology and equipment for producing wear-resistant anti-reflective composite coatings on aluminum



Advantages:

- resistance to ionising radiation;
- high corrosion, heat and light resistance;
- high electrical insulation properties;
- environmentally friendly electrochemical coating formation process.

Areas of application: for masking objects in the IR range, as protective and decorative coatings in mechanical engineering, for enhancing image contrast in the

manufacture of display devices for cars and aircraft, for the manufacture of optically selective coatings on solar collectors.

About the developer

Two-channel software-controlled pulse current source IST 10-5



Designed to power a galvanic bath and used for cathodic electrochemical processes with direct, unipolar pulsed or alternating pulsed current.

Features:

1. Each channel of the source is controlled by a personal computer via a USB port or in stand-alone mode in accordance with one of ten

programmes stored in non-volatile memory.

2. A programme is set using a computer to provide the required sequence and shape of current pulses.

The development has been implemented in the production process of OJSC Planar-SO for the manufacture of diamond discs for cutting silicon wafers.

About the developer

Power supplies for ion-plasma systems



Designed for use in vacuum technological equipment to ensure the process of coating and cleaning product surfaces.

Two types of sources have been developed and supplied to the Russian Federation:

- 1. VAC 3000-05 ion source power supply unit.
- 2. VAC 1200-3 glow discharge power supply unit.

About the developer

We invite you to visit BSUIR's booth!

Exhibition working hours:

September 23 and 24, 2025 from 10:00 to 18:00; September 25, 2025 from 10:00 to 15:00.