

Belarusian State University of Informatics and Radioelectronics R&D Department BSUIR, 6, P. Brovki Str., Minsk 220013, Republic of Belarus

# Announcement

XXV International Specialized Exhibition "Energy. Ecology. Energy saving. Electro" (EnergyExpo)

October 12 — 15, 2021 Minsk, Belarus

# <u>About</u>

The exhibition seeks to present modern equipment and technologies for the production and distribution of electrical and thermal energy, automated systems, energy and resource saving technologies.

## Sections:

- Power plants and appropriate equipment
- Turbine generators, compressors, gas turbine plants, auxiliary equipment
- Automated systems and smart grids
- Design and engineering of power facilities and power supply systems
- Energy efficient equipment and technologies in energy, petrochemistry, industry and utilities
- Renewable and alternative energy systems, energy recycling
- Environmental protection equipment, waste disposal and recycling
- Energy saving heating: boilers, burners, heat exchangers, radiators, heat pumps
- Heat, water and gas metering devices, automated control systems and regulation equipment
- Measuring systems and automation
- Complete devices for control and distribution of electrical energy (stations, cabinets, panels, switchboards, boxes, consoles)
- High and low voltage devices
- Power and measuring converters
- Uninterruptible power supplies
- Electrical installation tools and materials
- Cable production

- Electromechanical components, sensors and microsystems
- Security systems and technologies, industrual locking systems
- Industrial information technology, industrial automation, software

## BSUIR will showcase high-tech developments

## Manufacturing technology of energy-saving flat aluminum heating elements

The technology allows the production of elements with any surface shape, which is especially important in the automotive industry, in the manufacture of printing plates, as well as in the military industry.

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

#### Advantages:

- adjustable electrical resistance in the range from 10-3 to 107 Ohm cm;
- maximum operating temperature up to 400 ° C;
- aluminum base;
- heating element made of carbon filament;
- ultra-thin form;
- low heat losses.

#### Technology of obtaining optical composite coatings for solar collectors

The technology makes it possible to obtain highly efficient two-component composite highly selective coatings in the composition of anodic aluminum oxide / carbon. The coatings are uniformly colored and wear resistant.

#### Advantages:

- resistance to ionizing radiation;
- high corrosive, heat and light resistance;
- high electrical insulating properties;
- eco-friendly electrochemical coating formation process.