



## **Belarusian State University of Informatics and Radioelectronics**

**R&D** Department

### **Announcement**

23th International Exhibition of Industrial Technologies and Innovations "TECHINNOPROM"

29.09-02.10.2020

Minsk, Belarus Roofed Soccer Arena, 20/2 Pobediteley av.

The 23th International Exhibition of Industrial Technologies and Innovations TECHINNOPROM is held under the auspices of Belarusian Government.

### **Purposes:**

- promotion of innovative industrial equipment, products and technologies of domestic and foreign companies to regional and international markets;
- strengthening business contacts and sharing experience.

The exhibition is included in the program of the Belarusian Industrial and Investment Forum 2020, which has been held annually since 1997 with the official support of the Council of Ministers of the Republic of Belarus, Republican State Administration Bodies, Executive Authorities of all regions of the Republic of Belarus and Minsk, and public associations.

### **BSUIR IS SHOWCASING HIGH-TECH PROJECTS AND TECHNOLOGIES:**

### **Energy-saving automatic charger**

Designation: charging of traction batteries of any type with a rated voltage from 40 to 110 V. The device can be used as a universal power source.

Advantages: possibility of using any type of storage batteries: lead-acid, lithium-ion, and nickel-iron ones; aluminum oxide technology for manufacturing power modules.

# Equipment and electrochemical technology for fabricating three-dimensional metal interconnections of integrated circuits.

The developed equipment and electrochemical technology allow fabricating three-dimensional metal interconnections of silicon crystals of integrated circuits.

Connecting silicon crystals on the principle of three-dimensional metal interconnections (the "stack" principle) can significantly reduce the final cost and increase the reliability of finished products.

This technology makes it possible to combine digital and analog circuits, memory, and microelectromechanical systems produced using various technologies in one case.

# Hardware and software appliance for investigating and verifying RFID-systems of HF and UHF ranges

#### **Fuel level sensors**

Designation: conversion of the measured fuel level in the proportional analog, frequency or digital signal, determination of the tanking level. They are used for working in liquid hydrocarbons such as diesel fuel, gasoline and engine oil.

**Advantages:** accuracy over 99 %; certificate of Means of Measurement; IP67 body; high noise immunity.

### Pipeline damage controllers COT C-1.0 with GSN, COT-P, COT-1.0

Designation: control of the state of pipelines insulated in PU-foam.

Advantages:

- indication of measured values directly on the controller;
- transmission of measured parameters via GPRS (virtual COM port, MODBUS Protocol) to the control room of urban heating networks;
  - application in automated pipeline condition monitoring systems;
- transmission of discrete signals to open/close the cabinet (room) doors via the GPRS channel;
  - built-in web server support for on-line monitoring and diagnostics of the device

### Universal service adapter USA V2.2

Designation:

- connection of devices with RS-232, RS-485, TTL UART interfaces to a personal computer for measuring frequency and voltage signals of devices connected to the adapter when using special software;
  - generation of a special "Calibration" signal to calibrate fuel level sensors

#### Calibrator v3.0

Designation: calibration of frequency, analog and interface fuel level sensors (RS 232/485) when mounted on a vehicle.

Advantages: no PC connection required; operates from 4 AA battaries.

More about the developments

Organizers' website