



Belarusian State University of Informatics and Radioelectronics

R&D Department

Summary of BSUIR Participation in the XXVII International Medical Forum "BELARUSMEDICA 2024"

The "BELARUSMEDICA 2024" forum and exhibition were held on April 23 - 26, 2024 in Minsk, Belarus. At the exhibition, BSUIR introduced its developments in the field of plasmonics, ultrasound and plasma technologies and equipment:

- nanomaterials for visualization and analysis of biological objects using photoluminescence and SERS spectroscopy;
- kit for forming an athermal coating for sterilizing the surface of medical devices;
- porous nylon filters modified with plasmonic and photocatalytically active nanoparticles for self-cleaning face masks;
- experimental plasma generation system for processing biological objects;
- portable cavitometer;
- ultrasonic high-frequency disperser.



On a separate platform, BSUIR students and teachers presented their developments that were created jointly with Belarusian scientific centers and were previously showcased in medical-related republican competitions:

- Methodology of adaptive therapy of respiratory failure and its hardware and software implementation in the form of a medical equipment to optimize oxygen consumption by Oleg Zelmansky, Associate Professor of the Department of Information Security;
- Diagnostic and rehabilitation complex of musculoskeletal disorders in children and adults by Nikita Glushachenko, a 3rd year student of the Faculty of Computer Systems and Networks.



The university's exhibition was visited by the Prime Minister of the Republic of Belarus R. Golovchenko and Minister of Health A. Khodzhayev. Such companies as IBC Nanotex, Galteyafarm LLC, Research and Production Center "KHIMMEDSINTEZ", Vitebsk Regional Hospital and others showed interest in the university's developments. Negotiations on the possibility of introducing the presented university developments into the production processes of companies were held. Based on the results of participation in the exhibition, BSUIR was awarded a diploma.

