



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

Announcement of BSUIR participation in the HI-TECH 2025 International Exhibition of Innovations

April 9 – 11, 2025

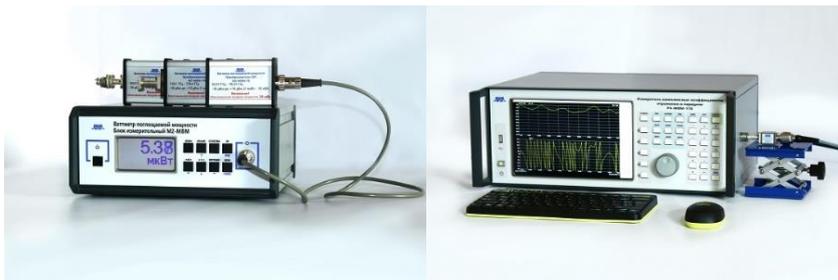
**Russia, St. Petersburg,
Expoforum Convention and Exhibition Center, Pavilion F, Stand K1.4
Peterburgskoye Highway, 64**

The HI-TECH exhibition is the first Russian event in the field of high technologies, innovations and investment projects in science and technology (held since 1996). The exhibition is held in cooperation with the St. Petersburg Technical Fair and promotes effective interaction between scientific organisations and potential investors.

At the exhibition BSUIR will present the latest developments in the field of microwave technologies:

Microwave control-and-measuring and testing devices, software and hardware complexes, basic units and components of microwave and EHF ranges

BSUIR provides a full cycle of development and small-scale production of such equipment. At present, a line of signal generators of G4-MWM type, microwave power meters of M2-MWM and M3-MWM types, calorimeters of MK-MWM type, scalar network analyzers of P2-MWM type and vector network analyzers of P4-MWM type in the frequency range from 0.01 to 220 GHz has been developed. These products are known under the brand name "MWM Lab". A number of devices are included in the State Registers of Measuring Instruments of Belarus and Russia.



National standard of the unit of power of electromagnetic oscillations in the frequency range from 37.5 to 178.4 GHz

The most significant achievement of 2024 for the University is the creation of a standard of the unit of power of electromagnetic oscillations in the frequency range from 37.5 to 178.4 GHz. This is a unique (and one-of-a-kind!) equipment for the Union State for calibration and verification of microwave measuring devices used in the development and manufacture of new samples of advanced military and civilian equipment, space systems for controlling near-Earth space, and high-speed information transmission systems.



In January 2025, this development was officially included in the national standard base – by the decision of the State Committee for Standardisation of the Republic of Belarus it became the 68th national standard. It is worth noting that BSUIR is not only the developer, but also the custodian of this standard.

Besides, it is important to note that calibration and verification laboratories of ultra-high frequency measuring instruments, which are a part of MWM Lab, are accredited in the System of Certified Verification, Testing and Calibration Laboratories of Belarus, which enables MWM Lab to carry out metrological certification of manufactured microwave devices, as well as to provide services on calibration and testing of microwave equipment at the request of other organisations.

About the developer

Carbon-containing absorbers of microwave electromagnetic radiation for anechoic chamber shielding.

Such absorbers are designed for the shielding of rooms where testing of microwave systems and devices is carried out. Two types of absorbers – flexible and solid-state modules for lining walls, floors and ceilings – are developed and manufactured at the University's own production base. They were used for the creation of an anechoic chamber in BSUIR.

Differences from analogues:

- - radio-transparent forms are included in the structure of absorbers, due to which these absorbers are characterised by higher durability;
- reduced cost;
- reduced weight per unit area.



About the developer

BSUIR plans to present four developments at the contest “Best Innovative Project and Best Scientific and Technical Development of the Year” in the following nominations:

- “The best innovation in import substitution, localisation, import advancement, successful market promotion”,
- “The best innovative project (development) in the field of instrumentation, national element base, measuring and control equipment”,
- “The best innovative project (development) in the field of new materials”.

We invite you to visit the BSUIR stand K1.4 at the HI-TECH 2025 exhibition.

Contacts of the university representative to organise a meeting at the stand:

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