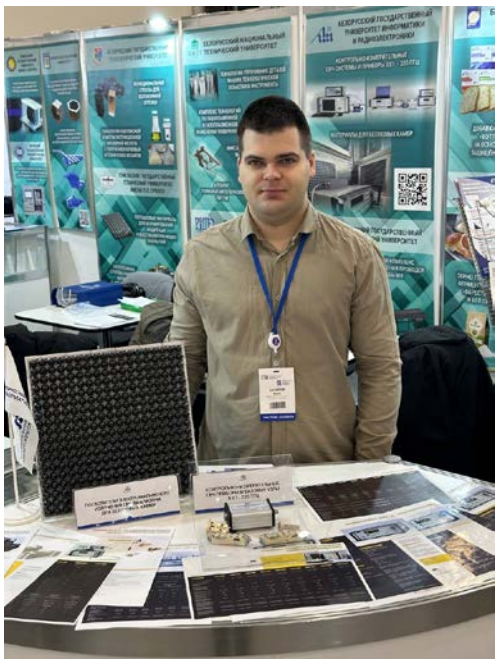
Summary of BSUIR Participation in the International Exhibition of Innovations "HI-TECH 2025"

Exhibition "HI-TECH 2025" took place on April 9 – 11, 2025 in Saint Petersburg, Russia.

The HI-TECH exhibition is the largest Russian event in the field of high technologies, innovations and investment projects in science and technology (held since 1996).

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

- national standard of the unit of power of electromagnetic oscillations in the frequency range from 37.5 to 178.4 GHz;
- microwave control-and-measuring and testing devices, software and hardware complexes;
- basic units and components of microwave and EHF ranges;
- carbon-containing absorbers of microwave electromagnetic radiation for anechoic chamber shielding.



In the frames of the exhibition, the "Best Innovative Project and Best Scientific and Technical Development of the Year" competition took place.

This year BSUIR presented 4 developments at the competition, each of which took the first place in its category and received a gold medal.

The nomination "The best innovation in import substitution, localisation, import advancement, successful market promotion" was won by:

Vector network analyzer P4-MWM-37.

✔ Novelty of development: the software allows direct programming of the analyzer for a large number of single-type measurements.

✔ Field of application: electronic industry, instrumentation, microelectronics, radar and communication, special purpose systems.

Generator G4-MWM-20.

✔ Novelty of development: development and usage of fundamentally new methods of signal synthesis for construction of highly stable oscillating frequency oscillators of microwave range.

✔ Field of application: radio electronic industry, instrumentation, microelectronics, radar and communication.

The nomination "The best innovative project (development) in the field of new materials" was won by:

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

✔ Novelty of development: radio-transparent forms are included in the structure of absorbers, due to which these absorbers are characterised by higher strength in comparison with their analogues.

✔ Field of application: construction (manufacturing of anechoic chambers, shielded cabins and chambers, functional zoning of rooms).

The nomination "The best innovative project (development) in the field of instrumentation, national element base, measuring and control equipment" was won by:

Scalar Network Analyzer P2-MWM-53.

✔ Novelty of development: a new calibration algorithm was introduced, which allowed to increase the measurement accuracy.

✔ Field of application: electronic industry, instrumentation, microelectronics, radar and communications, special purpose systems.

The **above-mentioned developments** aroused great interest not only among the representatives of the competition committee, but also among the specialists of a number of Russian and other foreign enterprises (e.g. Phoenix (Феникс), FORWAY, "REO" (Russian Electrotechnical Company) LLC (ООО "РЭО"), INSIZE RUSSIA). BSUIR reached agreements on further mutually beneficial co-operation and exchange of experience with interested companies of the Russian Federation, CIS and other foreign countries.