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Microelectronics: new opportunities for BSUIR

In times of globalization and instability of the foreign economic processes, it is important for Belarus to save the economic independence from import. The technological basis for the development of critical branches of economics, such as mechanical engineering, aircraft building, communications, and national defense, is represented by the microelectronic industry.

The President of the Republic of Belarus Alexander Lukashenko has ordered to develop a new state program for the development of microelectronic industry in the Republic of Belarus in the period before 2030. As a result of this program the technological independence of the Belarusian industry, as well as stable functioning and competitiveness of the national economics should be assured.

Vice-Rector for Research Viktor Stempitsky told what role BSUIR has played in the development of this program.



«It is well known that microelectronics and optimization of the elements of radio devices were the top priorities of the research and development activity of the Minsk Radioengineering Institute. Training of professionals, needed for the industry, was carried out since the very first days of the institute functioning. Nowadays, BSUIR provides more than 10 study programs at bachelor, master, and Ph.D. level covering majors in the field of micro- and nanoelectronics technology, materials, and devices. In addition, the RDI activities are

carried out under the tasks of various level state programs, agreements, and contracts with Belarusian and foreign companies. In 2016–2022, for example, about 60 contracts were fulfilled with the total value of more than 1.4 million BYN.

We are sure that while completing the state program a tight interaction between the Belarussian scientific, engineering, and industrial organizations would be established, a full-fledged industry infrastructure would be created, and a professional development system for scientific and engineering personnel in microelectronics and similar industries would be updated. BSUIR has already taken certain steps in this direction: we are preparing to sign an agreement on scientific and technical cooperation with the JSC "INTEGRAL" – managing

company of the "INTEGRAL" holding, which is a key player on the Belarusian market in terms of microelectronic devices development. The agreement foresees:

- development of accumulated world experience in the field of design and production of microelectronics, sensors, power and microwave electronics;*
- implementation of R&D activities in the field of computer modeling, optimization of technological processes for manufacturing and operational characteristics of instrument structures and integrated circuits, products of power and microwave electronics;*
- development of educational and methodological materials, organization and conduct of training courses, internships and retraining of specialists in this field».*