

## PIAST nanosatellites for the Polish Army



**At the Military University of Technology, the official inauguration of the project "Nanosatellite constellation of optoelectronic image recognition PIAST (Polish ImAging SaTellites)" took place. Its goal is to build and distribute a constellation of three nanosatellites in space, which will be used to observe the Earth and acquire image data. The implementation of the project is an element of the development of a key component of the national satellite Earth observation system for the needs of t**

The PIAST project is one of the 11 projects awarded to our university in the competition of the National Center for Research and Development for State Security and Defense – "SZAFIR". As a project leader, WAT carries out work in cooperation with consortium members:

- Space Research Center of the Polish Academy of Sciences
- Łukasiewicz Research Network - Institute of Aviation
- Creotech Instruments S.A.
- Scanway Sp. z o.o.
- PCO S.A.

On the part of the Military University of Technology, the Institute of Optoelectronics and the Faculty of Civil Engineering and Geodesy are participating in the project. The Military University of Technology is responsible for the mission requirements, construction and operational use of the ground segment and data collection

center, as well as for algorithms improving image resolution, laser rangefinders with connectivity and sun position sensors.

"I am very pleased that in such an excellent consortium we can implement a project of such great importance for our Armed Forces and the entire national economy. I wish all consortium members that the project will be a great success and will enable further research and development within new projects on this interesting subject. A very important aspect of the PIAST project is that the satellites will be developed in Poland, and their critical subsystems will be made on the basis of Polish technologies, which will allow for full control over the process of collecting images for defense purposes " – said the Rector-Commandant of the Military University of Technology, Col. Prof. dr hab. inż. Przemysław Wachulak. On the basis of Polish technologies, the following will be developed: platform, propulsion, AOCS satellite control system, telescopes and laser devices.

The implementation of the project is part of the development of a key component of the national satellite system for the needs of the battlefield reconnaissance and the provision of up-to-date strategic and operational information. The results of the project will be related to increasing the troops' ability to recognize, destroy and survive on the battlefield.

The project also meets the market demand of the domestic economy. It is expected that, apart from the defense sector, private companies, which will participate in the construction of satellite constellations based on microsatellites, will benefit from the PIAST project solutions.

