The press service of the University of ITMO reported that the university specialists have created a method that allows you to automatically determine the concentration of microal-seeded cells from microscope images. Unlike neural network solutions, the approach is based on the classic algorithms of computer vision and does not require preliminary training on large data arrays.

The development works on a regular computer and processes one sample in about 30 seconds, while the traditional manual method using the Goryaeva accounting camera takes about half an hour. In this case, the accuracy of the counting is comparable to the results obtained by hand.

The rapid calculation of cell concentration will accelerate the cultivation of microalozoles for industrial use, as well as increase the effectiveness of environmental research. Today, micro -crossbars are actively used in the food and cosmetic industry, pharmaceuticals, purification of water bodies and as a source of alternative fuel.

With mass cultivation, it is important to select optimal conditions for the growth and division of cells. The concentration indicator helps to compare different samples and identify factors affecting their development. However, the traditional technique requires a lot of time and effort, especially with a large number of tests, which increases the risk of errors.

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