In Krasnoyarsk, at the Siberian Federal University, an industrial biotechnology laboratory is created. Its task is to develop new methods for extracting gold from the so -called persistent ores, which contains metal in an inaccessible form.

Such ores make up to 30% of the world's gold reserves. In Russia, their share is even higher – about 80% in the portfolios of mining companies. Gold in them is often associated with harmful impurities like arsenic and carbon compounds, so traditional processing methods are ineffective – it is possible to extract no more than 10% of the metal.

Scientists intend to use a bio -excess method – this is a method in which microorganisms help to extract gold from ores. Studies will take into account the conditions of low temperatures, including for the possible use in the Arctic. In the future, technology is planned to be used not only for gold production, but also for the reclamation of polluted territories.

Now experts are conducting a microbiological analysis of the samples and select suitable cultures of microorganisms that can effectively decompose difficult compounds. It is expected that new methods will increase the level of gold extraction to 90%.

In addition, technologies will help to use old dumps and tails, which in the Krasnoyarsk Territory occupy more than 17 thousand hectares.