

# **Mysterious Under-Ice Antarctic Lake to Unveil Prehistoric Ocean World**

## **Russian scientists will soon reach the waters of the ancient lake**

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Russian scientists promise to make a sensational discovery in the evolution of the natural world. Having drilled a superdeep well in Antarctica, they will uncover a lake, which was formed not less than 500 million years ago. When the goal is accomplished, humans will be able to see ancient inhabitants of Antarctic waters.

The drilling of the well on the Antarctic station Vostok was started in 1970. The well, which is still reputed to be the deepest well in the world, has brought a great deal of valuable information to scientists. Ice layers showed periods of climate change on planet Earth, for instance. It became possible to prove that global rises and falls of temperature have occurred several times in the history of the planet before. Scientists have not yet reached their most desirable goal - the lake underneath the ice, which has not been into contact with the Earth's atmosphere for over 500 thousand years. The drilling was stopped in 1998 at the depth of 3,623 meters, when only 130 meters were left to reach the water surface. The technology that was used for the drilling during those years could pollute the lake and cause irreparable damage to the ecosystem of the ancient waters. The work was ceased at the request of the international community.

The current situation has changed for the better. Geographer and glaciologist Vladimir Kotlyakov, who was one of the founders of the project in the 1960s, currently the president of the Russian Geographic Society, said that specialists of the St.Petersburg-based Mining Academy developed the equipment, which would be capable of reaching the prehistoric lake without polluting it. The groundbreaking project is planned to be resumed: scientists are eagerly waiting for unbelievable discoveries to arrive.

The lake is full of life despite three kilometers of ice that cover it. The scientist said that there was every reason for living creatures to exist there: the water was not stagnant; oxygen penetrates into the lake through the ice too. Supreme organisms cannot exist under such conditions. However, they did not exist 500 million years ago at all. There was no land life back then, whereas the ocean was filled with such primitive creatures as worms, mollusks and seaweed.

Even if scientists discover only bacteria in the Antarctic lake, it will still be a breathtaking breakthrough in natural studies. Humans will have a chance to look at the distant past of the Earth and study ancient organisms. That is why academician Kotlyakov does not hesitate to say that the grand project will bring a lot of sensations. The academician did not specify the date when the works were scheduled to be resumed, though.

[http://english.pravda.ru/science/19/94/377/14989\\_lake.html](http://english.pravda.ru/science/19/94/377/14989_lake.html)