

Specialists from the Novosibirsk Design and Technology Institute developed X-ray microscopes for the installation of the Siberian Ring Source of photons (SKIF). This is a domestic replacement of French equipment, the acquisition of which became impossible due to sanctions. In terms of technical parameters, new microscopes are not inferior to foreign counterparts, and their cost is four times lower.

These devices are designed to study the internal three-dimensional structure of materials, observe dynamic processes and chemical reactions in real time. Their key advantage is a high penetrating ability that allows you to explore unique objects, including archaeological finds and art objects, without their destruction.

Microscopes are capable of working with large samples in size up to 200 millimeters and with micro-objects. They will be installed at one of the stations of the first stage of the Scythian and used for experiments in the field of material science, geology, chemistry, biology and medicine.

One of the microscopes is equipped with a highly sensitive camera for static research and constructing a three-dimensional model of a model by tomography. The second is a high-speed camera that shoots thousands of frames per second, which allows you to fix dynamic processes, such as deformation of materials or 3D printing.