The press service of the St. Petersburg State Electrotechnical University “LETI” reported that the university experts have developed a method that significantly improves the quality of metal implants created using 3D printing for animals. The technology is aimed at solving the problem of surface roughness, which is critical of successful enlistment of implant.

The essence of the method is the combined processing of printed parts. First, the surface is treated with a hydro -carbrane mixture, and then with a laser with specially selected parameters. Such a two -stage approach allows you to reduce roughness by more than 90%.

Studies were conducted on stainless steel and aluminum stainless steel, which were made on a 3D printer. Scientists selected optimal laser processing modes for different areas, achieving maximum smoothness.

During the experiments, copies of articular implants for animals were created. The initial roughness of several micrometers after hydro -carbraise processing was reduced to about 1 micrometer. The final laser processing made it possible to achieve an indicator of 0.27 micrometer.