

Creation of biocompatible protective coatings by high-energy treatment methods.

Area of activity	Medicine (implants, surgical and orthopedic instrument, prostheses)
1. Main purpose of technology	Creation of biocompatible protective coatings with increased adhesion strength for implants, prostheses and medical instrument
2. Scientific achievements, directed towards the development of technology and organization-developer	Investigation of structure and properties of biocompatible protective coatings, obtained by ion-plasma, electro-spark and laser high-energy surface treatment methods; National Technical University of Ukraine «Kyiv Polytechnic Institute», Metal Physics Department

Short description of technology: Formation of biocompatible protective coatings by vacuum ion-plasma methods with further surface modification by electro-spark alloying and laser treatment

Novelty: The application of high-energy treatment methods provides required complex of physical, mechanical and biological properties of surface layers and their high adhesion.