



## **Study of the Surface on Bacterial Adhesion of the Ti30Ta Alloy**

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In this study, bacterial biofilm formation of the surface was evaluated for Ti30Ta alloy. Ingots were obtained in arc furnace under an argon atmosphere and they were homogenized under vacuum at 1100°C for 86.4Ks to eliminated chemical segregation. Biofilms were grown in Ti-30Ta discs immersed in sterile brain heart infusion broth(BHI) containing 5% sucrose, inoculated with microbial suspension (10<sup>6</sup> cells/ml) and incubated for 5 days. Next, the discs were placed in tubes with sterile physiological solution 0,9% sodium chloride(NaCl) and sonicated for to disperse the biofilms. Ten-fold serial dilutions were carried and aliquots seeded in selective agar, which were then incubated for 48hs. Then, the numbers CFU/ml (log 10) were counted and analyzed statistically. Scanning electron microscopy (SEM) on discs with biofilms groups was performed.

### **Palavras-chave**

Biofilm, Implant, Titanium, Alloy