
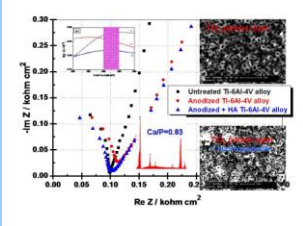



**Competences (Research) Center:
Interfaces - Tribocorrosion and Electrochemical Systems (CC-ITES).**

Offer name:	In-vitro assessment of corrosion and bio-corrosion resistance of biomaterials used in implants and dental treatments		
Description	<p>Expertise and technical assistance as well as the in-vitro assessment of corrosion resistance of biomaterials used in implants and dental treatments by various electrochemical methods such as Open Circuit Potential (OCP), Electrochemical Impedance Spectroscopy (EIS) , Potentio Dynamic Polarization (PD), Linear Polarization, Cyclic Voltammetry (CV), and Polarization Resistance. For biodegradation in solutions simulating body fluids in the human body, various specific compounds from saliva will be added.</p> <p>In Fig. 1 it is shown implant or support systems of metallic materials used in dental treatments that are subject to corrosion degradation in biological fluids (blood, saliva, etc.). In Fig. 2, an improvement of the surface of the implant alloys is observed to increase their resistance to corrosion degradation process. It can be grown forms nanoporous oxide thin films over which hydroxyapatite can be deposited to improve bone implant integration. All these treatments can be done in our center. In Fig. 3 it is shown an electrochemical cell for corrosion resistance evaluation.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Fig. 1</p> </div> <div style="text-align: center;">  <p>Fig. 2</p> </div> <div style="text-align: center;">  <p>Fig. 3</p> </div> </div>		
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