

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

<p>Offer name:</p>	<p>In-vitro assessment of corrosion and bio-corrosion degradation resistance of biomaterials used in human implants and metal surfaces in medical devices</p>
<p>Description</p>	<p>Consultancy, expertise, technical assistance and in-vitro assessment of corrosion resistance of biomaterials used in implants through various electrochemical methods such as Open Circuit Potential (OCP), Electrochemical Impedance Spectroscopy (EIS), Polarization Potential Dynamics (PD), Linear Polarization, Cyclic Voltammetry (CV), and Polarization Resistance. For the degradation by biocorrosion in solutions simulating fluids in the human body, various physiological specific compounds will be added.</p> <p>In Fig. 1 we can see the corrosion resistance evaluation of composite layer systems applied on implant materials. Fig. 2 shows the locations where metal implants are used. in Fig. 3 shows the effect of chlorine ions from biological fluids on metal implant materials.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div data-bbox="347 947 743 1196"> </div> <div data-bbox="743 947 1098 1196"> </div> <div data-bbox="1098 947 1441 1196"> </div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div data-bbox="347 1196 743 1283"> <p style="text-align: center;">Fig. 1</p> </div> <div data-bbox="743 1196 1098 1283"> <p style="text-align: center;">Fig. 2</p> </div> <div data-bbox="1098 1196 1441 1283"> <p style="text-align: center;">Fig. 3</p> </div> </div>
<p>Responsible</p>	<p>Prof. Univ. Dr. (Ph.D.) Chem. Lidia BENEĂ. Competences (Research) Center: Interfaces - Tribocorrosion and Electrochemical Systems (CC-ITES). Dunărea de Jos University of Galati.</p>
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