

Dissemination of results through publications

Project PCE 102/2022: <https://bionanosurf.ugal.ro/>

As a result of the special experimental results achieved by the group coordinated by professor phd. Lidia Benea within the research laboratory (research center) CC-ITES, within the PCE 102/2022 project, they were finalized and published with the full participation of the project, in the year 2023 **4 ISI articles** in journals from the ISI category Q1 and Q2 as follows:

Publications in ISI indexed journals (Clarivate Analytics)

Fully supported by research project BioNanoSurf, contract PCE 102/2023
<https://bionanosurf.ugal.ro/>

1. Benea, L.; Ravoiu, A.; Neaga, V.; Axente, E.R. Using Applied Electrochemistry to Obtain Nanoporous TiO₂ Films on Ti6Al4V Implant Alloys and Their Preclinical In Vitro Characterization in Biological Solutions. *Coatings* 2023, 13, 614.

<https://doi.org/10.3390/coatings13030614>

Cuartilă: Q2.

Factor de Impact (IF): 3.50.

WOS: 000958379500001

Participare proiect: 100%.

2. Benea, L.; Ravoiu Lupu, A.; Bounegru, I.; Vizureanu, P. Effect of Functional Nanoporous TiO₂ Film Obtained on Ti6Al4V Implant Alloy to Improve Resistance in Biological Solution for Inflammatory Conditions. *Int. J. Mol. Sci.* 2023, 24, 8529.

<https://doi.org/10.3390/ijms24108529>

Cuartilă (Quartile): Q1

Factor de Impact (IF): 6.208

WOS: 000998239300001

Participare proiect: 100%.

3. Benea, L.; Bounegru, I.; Forray, A.; Axente, E.R.; Buruiana, D.L. Preclinical EIS Study of the Inflammatory Response Evolution of Pure Titanium Implant in Hank's Biological Solution. *Molecules* 2023, 28, 4837.

<https://doi.org/10.3390/molecules28124837>

Cuartilă (Quartile): **Q2**

Factor de Impact (IF): 4.927

WOS: 001017380900001

Participare proiect: 100%.

4. Benea, L.; Bounegru, I.; Axente, E.R.; Buruiană, D. Susceptibility of 316L Stainless Steel Structures to Corrosion Degradation in Salivary Solutions in the Presence of Lactic Acid. *J. Funct. Biomater.* 2023, 14, 535.

<https://doi.org/10.3390/jfb14110535>

<https://doi.org/10.3390/jfb14110535>

Cuartilă (Quartile): Q2

Factor de Impact (IF): 4.901

Participare proiect: 100%.

Publications in database indexed journals BDI
Fully supported by research project BioNanoSurf, contract PCE 102/2023

1. Bogatu, Nicoleta, Benea Lidia. "Relevanța Tribocoroziunii: O Scurtă Prezentare Generală a Degradării Complexe a Materialelor și Biomaterialelor în Medii Corozive sub Acțiunea unei Perturbări Mecanice. Buletinul AGIR, ISSN 2247-3548; Vol. 27 Issue 4, p. 33-44. 12 pagini.

Disponibil online.

<https://www.agir.ro/buletine/3270.pdf>

<https://www.buletinulagir.agir.ro/>

DOCTORAL THESIS

completed in the project area in 2023:

Phd. Pharmacist Anca RĂVOIU.

Doctorat supervisor : Prof. phd. chem. Lidia BENEĂ

Thesis title: **Efectul modificării suprafeței aliajului Ti6Al4V asupra comportării în mediul biologic de implant în condiții inflamatorii.**

Project Manager

Prof. phd. Lidia Benea

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