

SCIENTIFIC RAPORT**RS_2_2023****Project Name****Top-down nanoporous oxide films and bioactive molecules obtained electrochemically to improve the properties of titan base implant biomaterials.****Acronim: BioNanoSurf****Cod project: PN-III-P4-PCE-2021-0702; Contract: PCE 102/2022****Report period: 01/01/2023 - 31/12/2023**Project web page: <https://bionanosurf.ugal.ro/>**Participation and scientific results presented at international conferences****Table 2. Summary of project implementation progress (achieved deliverables, result indicators, dissemination of results)**

Indicators Type	Name of indicators	UM/an	Value Presented papers / an
Result Indicators	Published articles in ISI indexed journals	No.	4
	Published articles in BDI journals	No.	1
	Conference participations – presented papers	No.	8 presented papers at 4 international scientific conferences

There are no non-achievements or differences in the implementation of the project for the reported period, respectively the 2nd stage: 01/01/2023 - 12/31/2023.

**SCIENTIFIC DESCRIPTION OF ACHIEVMENTS FROM STAGE TWO:
2023****Dissemination of results through participation and presentations at
international conferences 2023****Project PCE 102/2023: <https://bionanosurf.ugal.ro/>**

In 2023, it was possible to participate in 5 international scientific conferences, being a member of the Scientific Committee at 2 International Conferences with 8 oral presentations, exceeding the number proposed in the implementation plan, as follows:

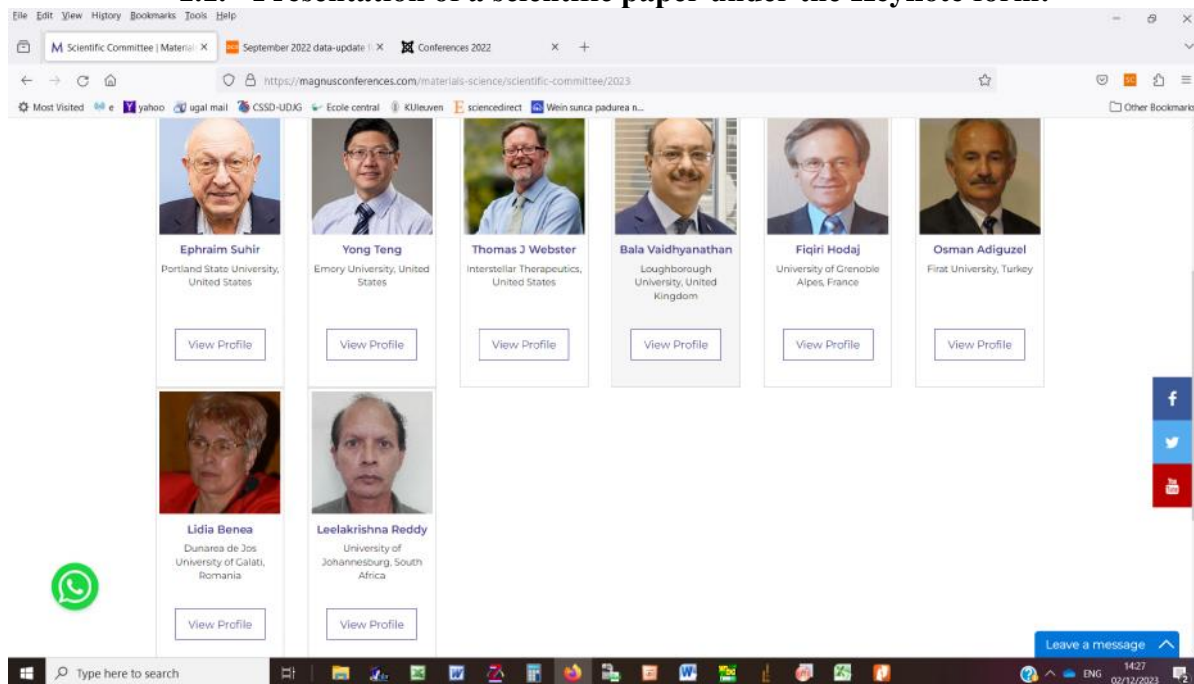
1.1. Member of the scientific committee and presentation of a paper at International Conference:

4th Edition of International Conference on Materials Science and Engineering, March 18-20, 2023 Singapore.

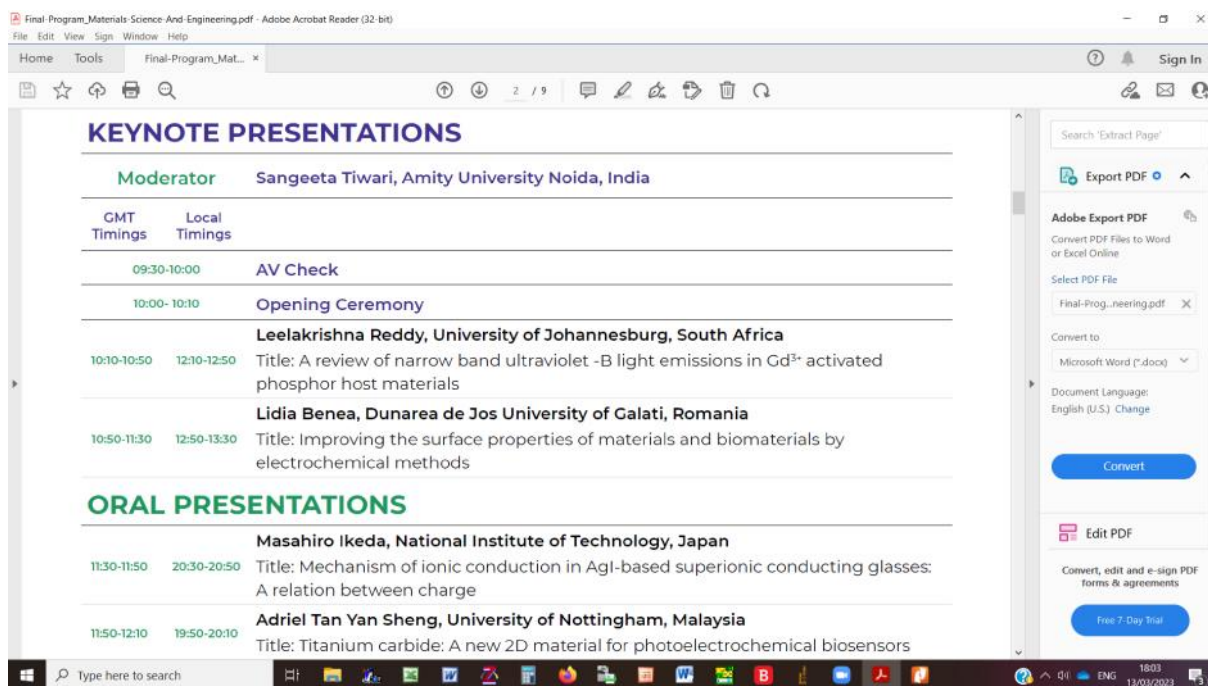
<https://magnusconferences.com/materials-science/scientific-committee/2023>

-Member of the scientific committee:

1.1. - Presentation of a scientific paper under the Keynote form:



-Name **PRESENTATION: Improving the surface properties of materials and biomaterials by electrochemical methods.**





2. Two (2) Scientific papers presented at Conferința internațională 4th International Conference on Biomaterials & Biodevices from period 16-17 november 2023, Roma, Italia.
<https://crgconferences.com/biomaterials/2023/>

2.1. Lidia BENEĂ, Iulian BOUNEGRU, Daniela Laura BURUIANA.
"Electrochemical Insights into the Corrosion Behavior of Pure Titanium Implants under Inflammatory Conditions".
Presentation Keynote, 17/11/2023.
<https://crgconferences.com/biomaterials/2023/>



2.2. Iulian BOUNEGRU, Lidia BENEĂ, Daniela BURUIAN . Impact of Lactic Acid Concentration on the Corrosion Behavior of 316L Stainless Steel in Salivary Environments.

– Oral presentation, Sesion 3, 16/11/2023.



3. A scientific paper presented as KeyNote la Conferința Internațională Bioremed 2023 - International Conference on Biomaterials and Regenerative Medicine, Sibiu, Romania, period 19-21 July 2023.

<https://bioremed.ro/>

3.1. Applied electrochemistry for nanostructuring and surface functionalization of Biomaterials.

Presentation Keynote, Scientific Sessions 3 Biomaterials 19 July 2023.



4 Scientific papers presented oral at International Conference on Innovative Research, ICIR EUROINVENT 2023, period 11-12 May 2023, Iași, Romania.

<https://www.euroinvent.org/conference/program/>

4.1. Iulian BOUNEGRU, Lidia BENEĂ, Alexandra FORRAY, Daniela BURUIANĂ .
Electrochemical Impedance Spectroscopy Study Of The Reactivity Response Of Pure Titanium In Biological Solution With Reactive Oxygen Species – oral presentation, Sesion 2, date 11/05/2023. <https://www.euroinvent.org/conference/program/>



4.2. Diana MOCANU, Lidia BENEĂ, Elena-Roxana AXENTE, Daniela BURUIANĂ .
Corrosion of 316L Stainless Steel Orthodontic Structures In Salivary Solutions in the Presence of Lactic Acid. – Oral presentation, Sesion 3, 12/05/2023.
<https://www.euroinvent.org/conference/program/>



4.3. Veaceslav NEAGA, Lidia BENEĂ, Elena-Roxana AXENTE, Iulian BOUNEGRU "The Effects of the Electrochemical Oxidation Parameters Of The Zr2.5Nb Alloy On Some

Implants Properties" – Oral presentation, Sesion 3, 12/05/2023.

<https://www.euroinvent.org/conference/program/>



4.4. Adrian MAZILU, Lidia BENEĂ "Monitoring and Evaluation of the Corrosion Behavior in Seawater of the Low-Alloy Steels BDVH36 and LRAH36" – Oral Presentation, Session 3, 12/05/2023.

<https://www.euroinvent.org/conference/program/>



And in 2023, as in 2022, the project director, **Prof. Dr. Chim. Lidia BENEĂ** is named among the **best scientists in the world, taking into account the related publications from the year 2022.** Top World Ranking 2%" is a publicly available database, created by Stanford University (California, USA) together with Elsevier Publishing, which provides information on the impact of the most read researchers around the world, throughout their entire career or for one year (2022).

At the "Dunărea de Jos" University in Galați, this year the same researchers who were present in the previous year can be found in the Top. They are among the 169 Romanians included in the list, the selection criterion being the achievements in the field of research in the past year.
<https://www.ugal.ro/anunturi/stiri-si-evenimente/12685-patru-profesori-de-la-udjg-printre-cei-mai-importanti-oameni-de-stiinta-din-lume>
<https://www.ugal.ro/>

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<https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/6>.

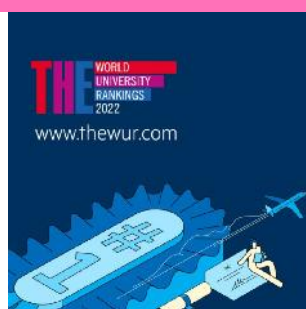
Project manager no. 102/2022: Prof univ. dr. Lidia BENEĂ

2023: Cited in Top 2 World Ranking of the World's Top Scientists by Stanford University in conjunction with Elsevier Publishing and SciTech Strategies.

https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/4?fbclid=IwAR2s2ItYq_rPtVZKqp-XVsYgVHivkXQuM7RA7EPpicERq-ldMIN_LiV948w

Four professors from UDJG among the world's most important scientists, in year 2022

<https://www.ugal.ro/anunturi/stiri-si-evenimente/12685-patru-profesori-de-la-udjg-printre-cei-mai-importanti-oameni-de-stiinta-din-lume>



<https://www.ugal.ro/anunturi/stiri-si-evenimente/12685-patru-profesori-de-la-udjg-printre-cei-mai-importanti-oameni-de-stiinta-din-lume>

Table_1_Authors_career_2022_pubs_since_1788_wopp_extracted_202310.xlsx

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
181849	van Agtsestra	Military institute of Engin pol		196	2010	2023	273,855	1,749	20	9,8758	4	37	74	1,212	107	1,857	5,0998	1,241	13
181850	Benea, Lidia	Universitatea Dunarea de Jos		102	1999	2023	273,857	1,799	18	9,9119	10	73	49	1,105	66	1,148	3,0398	1,591	11
181851	Guo, Hui	Kronos Bio, Inc.	usa	46	1996	2022	273,843	2,138	24	8,4681	1	54	11	618	19	1,235	1,0368	2,189	11

Researchers from the Faculty of Engineering in The World's Top 2% of Scientists.

Four professors from UDJG among the world's most important scientists

<https://ing.ugal.ro/index.php/ro/noutati/cercetatori-ai-facultatii-de-inginerie-in-the-world-s-top-2-of-scientists>.

Project Manager
 Prof. phd. Lidia Benea -- //

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