

CC-ITES

Competences Center for Interfaces – Tribocorrosion and Electrochemical Systems

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INDICATORII DE PERFORMANȚĂ OBȚINUȚI ÎN PERIOADA  
AFERENTĂ RAPORTĂRII ETAPEI: 01/01/2015 – 31/12/2015  
PROIECT PCE – PN II 10 / 30.08.2013

Titlul proiectului:

Noi funcționalizări hibride (anorganic – organic) a suprafețelor biomaterialelor (metale, aliaje) cu molecule bioactive prin tehnici electrochimice.

Acronim:

**HyBioElect**

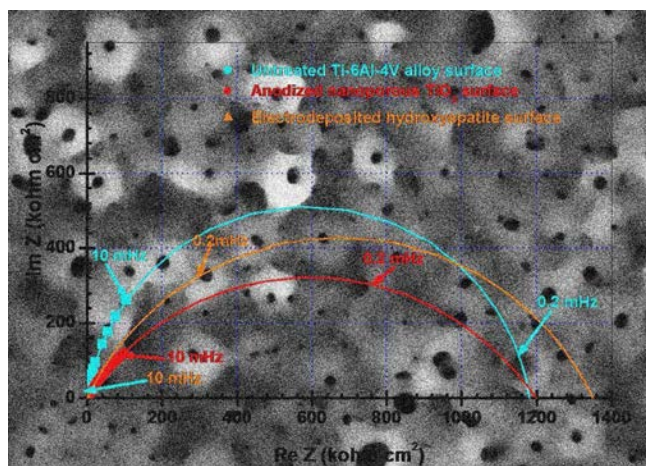
Contract 10 / 30-08-2013

Site web:

<http://www.hybioelect.ugal.ro>

Director proiect:

Prof. dr. chi. Lidia BENEĂ



2015

**A. Publicații în reviste indexate ISI (Web of Science)****1 articol****1. Lidia BENEĂ, Eliza DANAILA, Pierre PONTIAUX.****Effect of titania anodic formation and hydroxyapatite electrodeposition on electrochemical behavior of Ti-6Al-4V alloy under fretting conditions for biomedical applications.*****Corrosion Science*, 91 (2015) 262 - 271, ISSN: 0010-938X.**

Accession Number: WOS:000345520000069

[DOI:10.1016/j.corsci.2014.11.026](https://doi.org/10.1016/j.corsci.2014.11.026)<http://www.sciencedirect.com/science/article/pii/S0010938X14005472>[https://apps.webofknowledge.com/full\\_record.do?product=UA&search\\_mode=GeneralSearch&qid=1&SID=N2IBSTS4EJAwGMM6Bem&page=1&doc=1](https://apps.webofknowledge.com/full_record.do?product=UA&search_mode=GeneralSearch&qid=1&SID=N2IBSTS4EJAwGMM6Bem&page=1&doc=1)**Impact Factor (2014) = 4.422****B. Publicații sau în curs de publicare în reviste incluse în baze de date internaționale recunoscute (BDI)****5 articole****1. Valentin DUMITRAȘCU, Lidia BENEĂ.****Influence of the anodic oxidation treatment on the corrosion behaviour of aluminium and aluminium alloys.*****The Annals of "Dunarea de Jos" University of Galati, Fascicle IX - Metallurgy and Materials Science*, Vol. 3, 2015, ISSN 1453-083X, (lucrare acceptată, în curs de publicare).**[http://uefiscdi.gov.ro/userfiles/file/IC6%202011/Reviste%20romanesti%20recunoscute%20de%20CNCSIS-%20categoria%20B\\_plus.pdf](http://uefiscdi.gov.ro/userfiles/file/IC6%202011/Reviste%20romanesti%20recunoscute%20de%20CNCSIS-%20categoria%20B_plus.pdf)**2. Georgeta TODERAȘCU, Valentin DUMITRAȘCU, Lidia BENEĂ. Alexandru CHIRIAC.****Corrosion behaviour and biocompatibility of 316 stainless steel as biomaterial in physiological environment.*****The Annals of "Dunarea de Jos" University of Galati, Fascicle IX - Metallurgy and Materials Science*, Vol. 4, 2015, ISSN 1453-083X, (lucrare acceptată, în curs de publicare).**[http://uefiscdi.gov.ro/userfiles/file/IC6%202011/Reviste%20romanesti%20recunoscute%20de%20CNCSIS-%20categoria%20B\\_plus.pdf](http://uefiscdi.gov.ro/userfiles/file/IC6%202011/Reviste%20romanesti%20recunoscute%20de%20CNCSIS-%20categoria%20B_plus.pdf)**3. Alina CIUBOTARIU, Lidia BENEĂ, Wolfgang SAND.****Surface roughness and topography of Ni / micro-SiC layers: Influence of current density on electrodeposition process.**

**The Annals of "Dunarea de Jos" University of Galati, Fascicle IX - Metallurgy and Materials Science**, Vol. 4, 2015, ISSN 1453-083X, (lucrare acceptată, în curs de publicare).

[http://uefiscdi.gov.ro/userfiles/file/IC6%202011/Reviste%20romanesti%20recunoscute%20de%20CNCSIS-%20categoria%20B\\_plus.pdf](http://uefiscdi.gov.ro/userfiles/file/IC6%202011/Reviste%20romanesti%20recunoscute%20de%20CNCSIS-%20categoria%20B_plus.pdf)

4. Adrian DIACONU, Cătălin SOLOMON, Lidia BENEĂ, Valentin DUMITRAȘCU, Laurențiu MARDARE.

**Corrosion resistance of zinc coated steel in sea water environment.**

**The Annals of "Dunarea de Jos" University of Galati, Fascicle IX - Metallurgy and Materials Science**, Vol. 3, 2015, ISSN 1453-083X, (lucrare acceptată, în curs de publicare).

[http://uefiscdi.gov.ro/userfiles/file/IC6%202011/Reviste%20romanesti%20recunoscute%20de%20CNCSIS-%20categoria%20B\\_plus.pdf](http://uefiscdi.gov.ro/userfiles/file/IC6%202011/Reviste%20romanesti%20recunoscute%20de%20CNCSIS-%20categoria%20B_plus.pdf)

5. Alina Crina CIUBOTARIU, Lidia BENEĂ, Wolfgang SAND.

**Effects of sulphate reducing bacteria on thermosetting polymers/Zn composite coatings.**

**Scientific Bulletin "Mircea cel Batran" Naval Academy**, Volume XVIII – 2015 – Issue 1, pag. 162 – 166, ISSN: 1454-864X, Proceedings of 1<sup>st</sup> International Conference SEA-CONF 2015, 15-16 May, Constanta, România.

[http://www.anmb.ro/buletinstiintific/buletine/2015\\_Issue1/MES/162-166.pdf](http://www.anmb.ro/buletinstiintific/buletine/2015_Issue1/MES/162-166.pdf)

The journal is indexed in: PROQUEST SciTech Journals, PROQUEST Engineering Journals, PROQUEST Illustrata: Technology, PROQUEST Technology Journals, PROQUEST Military Collection PROQUEST Advanced Technologies & Aerospace.

### C. Articole în curs de publicare în volumele conferințelor indexate 10 articole

**Patru (4) articole** aflate în evaluare, trimise spre a fi publicate în **Advanced Materials Research** - Proceedings of the International Conference on Sustainable Materials Science and Technology - SMST15, Université Paris 8, 15 – 17 Iulie 2015, Paris, Franța.

<http://www.smatcitech.com/>

<http://www.smatcitech.com/index.php/congress-information/congress-journals>

**Advanced Materials Research**, ISSN: 1662-8985.

**Indexing:** indexed by

Index Copernicus Journals Master List [www.indexcopernicus.com](http://www.indexcopernicus.com).

Google Scholar [scholar.google.com](http://scholar.google.com).

Chemical Abstracts (CAS) [www.cas.org](http://www.cas.org).

Cambridge Scientific Abstracts (CSA) [www.csa.com](http://www.csa.com).

Inspec (IET, Institution of Engineering Technology) [www.theiet.org](http://www.theiet.org).

SCImago Journal & Country Rank (SJR) [www.scimagojr.com](http://www.scimagojr.com).

ProQuest [www.proquest.com](http://www.proquest.com).

EBSCO [www.ebsco.com](http://www.ebsco.com).

**Thomson Reuters (WoS)**, all volumes are submitted and selected ones will be indexed.

1. Lidia BENEĂ, Eliza DĂNĂILĂ, Iulian BOUNEGRU.

**Characterization and corrosion-resistance performance of hybrid Co/UHMWPE composite biocoatings.**

Paper ID: MR092.

*Advanced Materials Research*, ISSN: 1662-8985.

2. Lidia BENEĂ, Eliza DĂNĂILĂ, Valentin Marian DUMITRAȘCU.

**Vegetable extracts as inhibitors of carbon steel corrosion in acidic environment.**

Paper ID: MR093.

*Advanced Materials Research*, ISSN: 1662-8985.

3. Eliza DĂNĂILĂ, Lidia BENEĂ.

**Comparative tribocorrosion resistance in physiological solution of untreated and modified Ti-6Al-4V alloy surface by electrodeposition of hydroxyapatite coatings into nanoporous titania layers.**

Paper ID: MR094.

*Advanced Materials Research*, ISSN: 1662-8985.

4. Lidia BENEĂ, Valentin DUMITRAȘCU, Eliza DĂNĂILĂ, Iulian BOUNEGRU.

**Electrochemical behavior of cobalt - chromium alloy as biomaterial in different pH environments.**

Paper ID: SM036.

*Advanced Materials Research*, ISSN: 1662-8985.

**Trei (3) articole** corectate și acceptate spre publicare în Proceedings of the the 3<sup>th</sup> International Conference on Polyemers Processing in Engineering (PPE 2015) - **Key Engineering Materials**, 24 – 26 Septembrie 2015, Universitatea "Dunărea de Jos,, din Galați, România.

<http://www.if.ugal.ro/PPE2015/>

**Key Engineering Materials**, ISSN: 1662-9795.

**Indexing:**

Indexed by Elsevier: SCOPUS [www.scopus.com](http://www.scopus.com). Index

Copernicus Journals Master List [www.indexcopernicus.com](http://www.indexcopernicus.com).

Google Scholar [scholar.google.com](http://scholar.google.com).

Ei Compendex (CPX) [www.ei.org/](http://www.ei.org/).

Chemical Abstracts (CAS) [www.cas.org](http://www.cas.org).

Cambridge Scientific Abstracts (CSA) [www.csa.com](http://www.csa.com).

Inspec (IET, Institution of Engineering Technology) [www.theiet.org](http://www.theiet.org).

SCImago Journal & Country Rank (SJR) [www.scimagojr.com](http://www.scimagojr.com).

ProQuest [www.proquest.com](http://www.proquest.com).

EBSCO [www.ebsco.com](http://www.ebsco.com).

CiteSeerX [citeseerx.ist.psu.edu](http://citeseerx.ist.psu.edu).

Thomson Reuters (WoS), all volumes are submitted and selected ones will be indexed.

1. Lidia BENEĂ, Eliza DĂNĂILĂ.

**Electrochemical codeposition of UHMWPE biopolymer into cobalt matrix for biomedical applications.**

Paper ID: 978-3-03835-557-1\_140.

Key Engineering Materials, ISSN: 1662-9795.

<http://www.if.ugal.ro/PPE2015/Authors.htm>

<http://www.scientific.net/Participant/Papers/4127>

2. Alina Crina CIUBOTARIU, Lidia BENEĂ, Pierre PONTIAUX.

**Phenol – Formaldehyde Resin to Improve Corrosion Resistance of Zinc Layers, Paper.**

ID: 978-3-03835-557-1\_150.

Key Engineering Materials, ISSN: 1662-9795.

<http://www.if.ugal.ro/PPE2015/Authors.htm>

<http://www.scientific.net/Participant/Papers/4127>

3. Laurentiu MARDARE, Lidia BENEĂ, Eliza DĂNĂILĂ, Valentin DUMITRAȘCU.

**Polymeric coatings used against marine corrosion of naval steel EN32.**

Paper ID: 978-3-03835-557-1\_160.

Key Engineering Materials, ISSN: 1662-9795.

<http://www.if.ugal.ro/PPE2015/Authors.htm>

<http://www.scientific.net/Participant/Papers/4127>

Trei (3) articole acceptate spre a fi publicate în Proceedings of the **5<sup>th</sup> IEEE International Conference on E-Health and Bioengineering - EHB 2015**, Universitatea de Medicină și Farmacie Grigore T. Popa, Iași, 19 – 21 Noiembrie 2015, Iași, Romania.

<http://www.ehbconference.ro/>

Titlu volum conferința:

**2015 E-Health and Bioengineering Conference (EHB)**

[https://www.ieee.org/conferences\\_events/conferences/conferencedetails/index.html?Conf\\_ID=36716](https://www.ieee.org/conferences_events/conferences/conferencedetails/index.html?Conf_ID=36716)

Denumire conferință:

**Challenging Issues for Health and Biomedical Technologies.**

**E-Health and Bioengineering Conference (EHB).**

Indexed in:

IEEE Xplore® data base,

submitted to Thomson-Reuters for Conference Proceedings citation Index (ISI-Proceedings), SCOPUS and INSPEC data bases.

1. Lidia BENEĂ, Eliza DĂNĂILĂ, Valentin Marian DUMITRAȘCU, Pierre PONTIAUX.

**The effect of anodic oxidation treatment of Ti-10Zr alloy on tribocorrosion behavior in a simulated physiological solution.**

Paper ID 60,

**E-Health and Bioengineering - EHB 2015.**

IEEE copyright notice: 978-1-4673-7545-0/15/\$31.00 ©2015 IEEE.

<http://www.ehbconference.ro/Submission.aspx>

<https://easychair.org/conferences/submission.cgi?a=9821051;submission=2475971>

2. Eliza DĂNĂILĂ, Lidia BENEĂ, Pierre PONTIAUX.

**Tribocorrosion performance of Co/UHMWPE composite biocoatings compared to pure Co coatings in a simulated physiological solution.**

Paper ID 61.

*E-Health and Bioengineering - EHB 2015.*

IEEE copyright notice: 978-1-4673-7545-0/15/\$31.00 ©2015 IEEE.

<http://www.ehbconference.ro/Submission.aspx>

<https://easychair.org/conferences/submission.cgi?submission=2475973;track=138896;a=9821051>

3. Eliza DĂNĂILĂ, Lidia BENEĂ.

**The Effect of Surface Roughness on Corrosion Behavior of Ti-6Al-4V Alloy in Saliva Solution.**

Paper ID 277.

*E-Health and Bioengineering - EHB 2015.*

IEEE copyright notice: 978-1-4673-7545-0/15/\$31.00 ©2015 IEEE.

<http://www.ehbconference.ro/Submission.aspx>

<https://easychair.org/conferences/submission.cgi?track=138896;submission=2518923;a=9821051>

#### D. Participări la 9 conferințe internaționale

TOTAL 26 lucrări din care:

21 - prezentări orale

5 - postere

O (1) lucrare la: **5<sup>th</sup> Virtual Nanotechnology Poster Conference**, 13 – 19 Aprilie 2015

<http://www.nanopaprika.eu/video/nanoposter-2015>

1. Lidia BENEĂ, Eliza DANAILA, Iulian BOUNEGRU.

**Nanoporous TiO<sub>2</sub> thin layer formed by electrochemical methods to improve the surface properties of titanium alloy in bio-simulated solutions.**

Poster ID: P15-30.

Poster presentation:

**5<sup>th</sup> Virtual Nanotechnology Poster Conference**, 13 – 19 Aprilie 2015.

<http://www.nanopaprika.eu/group/nanoposter/page/p15-30>

Două (2) lucrări prezentate la: **7<sup>th</sup> EuroNanoForum Conference**, 10 – 12 Iunie 2015, Riga, Letonia.

<http://www.euronanoforum2015.eu>

1. Lidia BENEĂ, Eliza DĂNĂILĂ, Iulian Bounegru.

**Nanoporous TiO<sub>2</sub> thin layer formed by electrochemical methods on titanium alloy to improve the corrosion resistance of implants in physiological solutions.**

Session: *Nanotechnologies and health*.

Poster ID: 2D-207.

Poster presentation.

[http://euronanoforum2015.eu/wp-content/uploads/2015/03/Abstract\\_Benea.pdf](http://euronanoforum2015.eu/wp-content/uploads/2015/03/Abstract_Benea.pdf)

<http://euronanoforum2015.eu/poster-sessions/>

2. Eliza DĂNĂILĂ, Lidia BENEĂ, Valentin DUMITRAȘCU, Pierre PONTIAUX.

**Effects of nano-TiC content on morphology, hardness and tribological properties of Ni/TiC nanocomposite coatings.**

Session: *Modelling and characterisation at nanoscale*.

Poster ID: 1B-113

Poster presentation.

[http://euronanoforum2015.eu/wp-content/uploads/2015/03/Abstract\\_Danaila.pdf](http://euronanoforum2015.eu/wp-content/uploads/2015/03/Abstract_Danaila.pdf)

<http://euronanoforum2015.eu/poster-sessions/>

**Două (2) lucrări prezentate la 15<sup>th</sup> International Balkan Workshop on Applied Physics**, Ovidius University of Constanța, 2 – 4 Iulie 2015, Constanța, România.

<http://www.ibwap.ro/2015/>

1. Lidia BENEĂ, Eliza DĂNĂILĂ, Valentin DUMITRAȘCU.

**Influence of electro-codeposition parameters on TiO<sub>2</sub> nanoparticles inclusion into nickel matrix: structure, morphology and corrosion resistance.**

Oral presentation.

**Session I: Materials Physics**, S1 O3. pg. 29–30 – Book of Abstracts.

<http://www.ibwap.ro/2015/uploads/template/List%20of%20titles.pdf>

2. Lidia BENEĂ, Eliza DĂNĂILĂ, Nadege CARON, Olivier RAQUET.

**Fretting-corrosion behavior of Ni/WC hybrid coating system fabricated by electrodeposition.**

Oral presentation.

**Session I: Materials Physics**, S1 O5, pg. 31–32 – Book of Abstracts.

<http://www.ibwap.ro/2015/uploads/template/List%20of%20titles.pdf>

**Patru (4) lucrări prezentate la: International Conference on Sustainable Materials Science and Technology - SMST15**, Université Paris 8, 15 – 17 Iulie 2015, Paris, Franța.

<http://www.smatcitech.com/>

1. Lidia BENEĂ, Eliza DĂNĂILĂ, Iulian BOUNEGRU.

**Characterization and corrosion-resistance of hybrid Co/UHMWPE composite biocoatings.**

Oral presentation:

Session: **Materials in research**, pg. 68 – Book of Abstracts.

ISBN: 978-84-944311-0-4.

<http://www.smatscitech.com/index.php/scientific-program>

2. Eliza DĂNĂILĂ, Lidia BENEĂ.

**Comparative tribocorrosion resistance in physiological solution of untreated and modified Ti-6Al-4V alloy surface by electrodeposition of hydroxyapatite coatings into nanoporous titania layers.**

Oral presentation:

Session: **Materials in research**, pg. 70 – Book of Abstracts.

ISBN: 978-84-944311-0-4.

<http://www.smatscitech.com/index.php/scientific-program>

3. Valentin Marian DUMITRAȘCU, Lidia BENEĂ, Eliza DĂNĂILĂ.

**Vegetable extracts as inhibitors of carbon steel corrosion in acidic environment.**

Poster presentation:

Session: **Materials in research**. pg. 69 – Book of Abstracts.

ISBN: 978-84-944311-0-4.

<http://www.smatscitech.com/index.php/scientific-program>

4. Lidia BENEĂ, Eliza DĂNĂILĂ, Iulian BOUNEGRU.

**Electrochemical behavior of cobalt–chromium alloy as biomaterial in different pH environments.**

Poster presentation:

Session: **Materials in research**. pg. 208 – Book of Abstracts.

ISBN: 978-84-944311-0-4.

<http://www.smatscitech.com/index.php/scientific-program>

**Două (2) lucrări prezentate la: International Seminar - Scientific Approach in Research Methodology & Universe of Biomaterials.**

Organized in the frame of Research Project PNII-PCE - *New hybrid (inorganic-organic) functionalization of biomaterials (metals alloys) surfaces with functional molecules by electrochemical techniques*. Acronym: *HyBioElect*. Contract 10 / 30-08-2013 (2013-2016) – UEFISCDI.

<http://www.cc-ites.ugal.ro/Anunturi/International%20Seminar%202015.pdf>

1. Prof. dr. ir. Jean-Pierre CELIS, Katholieke Universiteit Leuven (KULeuven), Belgium.  
**Bio- and nanomaterials in mechanical joints operated in dry and wet environments from friction, wear and corrosion to lubrication.**

Oral presentation.

<http://www.cc-ites.ugal.ro/Anunturi/International%20Seminar%202015.pdf>

2. Prof. dr. Pierre PONTIAUX, Ecole Centrale Paris (ECP), France.



**Scientific Approach in Research Methodology.**

<http://www.cc-ites.ugal.ro/Anunturi/International%20Seminar%202015.pdf>

**Două (2) lucrări** prezentate la: European Corrosion Congress **EUROCORR 2015 - Earth, Water, Fire, Air, Corrosion happens everywhere**, Stadthalle Graz, 6 – 10 Septembrie 2015, Graz, Austria.

<http://eurocorr2015.org/>

1. Lidia BENEĂ, Eliza DĂNĂILĂ, Pierre PONTIAUX.

**Tribocorrosion performances of Co/nano-CeO<sub>2</sub> bio-coatings in physiological solutions.**

Oral presentation:

**Session: Tribocorrosion**, pg. 35 – Scientific Programme.

[http://eurocorr2015.org/downloads/Eurocorr2015\\_Programme.pdf](http://eurocorr2015.org/downloads/Eurocorr2015_Programme.pdf)

Aportul acestei lucrări în actualul proiect de cercetare este de 30% iar restul de 70% fiind atribuit proiectului POSDRU/159/1.5/S/138963 – Perform.

Taxa de participare la conferință și diurna pentru această deplasare au fost suportate din prezentul proiect de cercetare, iar cheltuielile de transport și cazare au fost suportate din proiectul POSDRU/159/1.5/S/138963 – Perform.

2. Lidia BENEĂ, Pierre PONTIAUX, Eliza DĂNĂILĂ, Nadege CARON, Olivier RAQUET.

**Wear-corrosion performance of Ni/WC nano-structured composite coatings obtained by electrochemical deposition.**

Oral presentation:

**Session: Nuclear Corrosion**, pg. 49 – Scientific Programme.

[http://eurocorr2015.org/downloads/Eurocorr2015\\_Programme.pdf](http://eurocorr2015.org/downloads/Eurocorr2015_Programme.pdf)

Aportul acestei lucrări în actualul proiect de cercetare este de 50% iar restul de 50% fiind atribuit Universității "Dunărea de Jos", din Galați.

Taxa de participare la conferință a fost suportată din prezentul proiect de cercetare, iar cheltuielile privind deplasarea (transport, cazare și diurnă) au fost suportate din venituri proprii ale Universității "Dunărea de Jos", din Galați.

**Trei (3) lucrări** prezentate la: The **3<sup>th</sup> International Conference on Polymers Processing in Engineering - PPE 2015**, 24 – 26 Septembrie 2015, Universitatea "Dunărea de Jos", din Galați, România.

<http://www.if.ugal.ro/PPE2015/>

1. Lidia BENEĂ, Eliza DĂNĂILĂ.

**Electrochemical codeposition of UHMWPE biopolymer into cobalt matrix for biomedical applications.**

Oral presentation:

**Session 1: Polymers, Functional Surface and Interfaces I**, PPE2015-32.

<http://www.if.ugal.ro/PPE2015/Program.htm>

2. Alina Crina CIUBOTARIU, Lidia BENEĂ, Pierre PONTIAUX.

**Phenol-Formaldehyde resin to improve corrosion resistance of zinc layers.**

Oral presentation:

**Symposium 3, Session 2: Polymers, Functional Surface and Interfaces II, PPE2015-34.**

<http://www.if.ugal.ro/PPE2015/Program.htm>

3. Laurențiu MARDARE, Lidia BENEĂ, Valentin DUMITRAȘCU, Eliza DĂNĂILĂ.  
**Polymeric coatings used against marine corrosion of naval steel EN32,**

Oral presentation:

**Symposium 3, Session 2: Polymers, Functional Surface and Interfaces II, PPE2015-35.**

<http://www.if.ugal.ro/PPE2015/Program.htm>

**Șapte (7) lucrări prezentate la: The 3<sup>rd</sup> International Conferance of Young Researchers - New Trends in Environmental and Material Engineering - TEME 2015,** 21 - 23 Octombrie 2015, Universitatea "Dunărea de Jos,, din Galați, România.

<http://www.teme.ugal.ro/>

1. Eliza DĂNĂILĂ, Lidia BENEĂ, Jean-Pierre CELIS.

**Advanced materials and biomedical applications – improving the corrosion and wear resistance of titanium alloy surfaces by controlled growth of porous oxide film.**

Oral presentation.

<http://www.teme.ugal.ro/Program%20TEME%202015.pdf>

2. Eliza DĂNĂILĂ, Lidia BENEĂ, Nadege CARON, Olivier RAQUET, Pierre PONTIAUX.

**Advanced materials and energy applications – improving the tribocorrosion behavior of coatings by electro-codeposition of WC nano-dispersed particles with nickel matrix.**

Oral presentation.

<http://www.teme.ugal.ro/Program%20TEME%202015.pdf>

3. Laurențiu MARDARE, Valentin DUMITRAȘCU, Lidia BENEĂ.

**Advanced materials and coatings for marine corrosive environment – improving the corrosion resistance of naval steel by polymeric coatings.**

Oral presentation.

<http://www.teme.ugal.ro/Program%20TEME%202015.pdf>

4. Valentin DUMITRAȘCU, Lidia BENEĂ, Eliza DĂNĂILĂ.

**Advanced materials for aerospace applications – influence of anodic oxidation treatment on the corrosion behavior of aluminium and aluminium alloys.**

Oral presentation.

<http://www.teme.ugal.ro/Program%20TEME%202015.pdf>

5. Georgeta TODERAȘCU, Lidia BENEĂ, Eliza DĂNĂILĂ.

**Corrosion behavior and biocompatibility of 316 stainless steel SS as biomaterial in physiological solutions.**

Oral presentation.

<http://www.teme.ugal.ro/Program%20TEME%202015.pdf>

6. Cătălin SOLOMON, Adrian DIACONU, Lidia BENEĂ, Eliza DĂNĂILĂ.

**Corrosion resistance of zinc coated steel in sea water environment.**

Oral presentation.

<http://www.teme.ugal.ro/Program%20TEME%202015.pdf>

7. Alina Crina CIUBOTARIU, Lidia BENEĂ, Wolfgang SAND.

**Roughness and topography surfaces of SiC/Ni layers: Influence of current density on electrodeposition process.**

Poster presentation.

Poster ID–P35.

<http://www.teme.ugal.ro/Program%20TEME%202015.pdf>

Trei (3) lucrări prezentate la: The *5<sup>th</sup> IEEE International Conference on E-Health and Bioengineering - EHB 2015*, Universitatea de Medicină și Farmacie Grigore T. Popa, Iași, 19 – 21 Noiembrie 2015, Iași, Romania.

<http://www.ehbconference.ro/>

1. Lidia BENEĂ, Eliza DĂNĂILĂ, Valentin Marian DUMITRAȘCU, Pierre PONTIAUX.  
**The effect of anodic oxidation treatment of Ti-10Zr alloy on tribocorrosion behavior in a simulated physiological solution.**

Oral presentation.

<http://www.ehbconference.ro/Program.aspx>

2. Eliza DĂNĂILĂ, Lidia BENEĂ, Pierre PONTIAUX.

**Tribocorrosion performance of Co/UHMWPE composite biocoatings compared to pure Co coatings in a simulated physiological solution.**

Oral presentation.

<http://www.ehbconference.ro/Program.aspx>

3. Eliza DĂNĂILĂ, Lidia BENEĂ.

**The Effect of Surface Roughness on Corrosion Behavior of Ti-6Al-4V Alloy in Saliva Solution.**

Oral presentation.

<http://www.ehbconference.ro/Program.aspx>

**E. Participări la 3 conferințe naționale****TOTAL 6 Lucrări din care:****4 - prezentări orale****2 - postere**

O (1) lucrare prezentată la: Sesiunea Națională de Comunicări Științifice Ștudentești Anghel Saligny, Ediția a VII-a, 20 - 21 Mai 2015, Facultatea de Inginerie, Universitatea "Dunărea de Jos", din Galați, România.

[http://ing.ugal.ro/Resurse/MENUS/Studenti/Sesiuni/Sesiune\\_ASaligny/2015/index.html](http://ing.ugal.ro/Resurse/MENUS/Studenti/Sesiuni/Sesiune_ASaligny/2015/index.html)

1. Oral presentation: **Coroziunea oțelului zincat în apa de mare**. Studenți: **Cătălin SOLOMON, Adrian DIACONU**, Coordonatori Științifici: **prof. univ. dr. Lidia BENEĂ, dr. ing. Eliza DĂNĂILĂ**, Sesiunea Națională de Comunicări Științifice Ștudentești Anghel Saligny, Ediția a VII-a, Secțiunea 5: Ingineria și Protecția Mediului în Industrie, 20 - 21 Mai 2015, Facultatea de Inginerie, Universitatea "Dunărea de Jos", din Galați, România.

[http://ing.ugal.ro/Resurse/MENUS/Studenti/Sesiuni/Sesiune\\_ASaligny/2015/pages/Program\\_2015.pdf](http://ing.ugal.ro/Resurse/MENUS/Studenti/Sesiuni/Sesiune_ASaligny/2015/pages/Program_2015.pdf)

Trei (3) lucrări prezentate la: **Scientific Conference organized by the Doctoral Schools of "Dunărea de Jos" University of Galați (CSSD-UDJG 2015)**, Third Edition of Scientific Conference of Doctoral Schools from UDJ Galați, 4 - 5 Iunie 2015, Galați, România.

<http://www.cssd-udjg.ugal.ro/>

1. **Eliza DĂNĂILĂ**, Lidia BENEĂ, Iulian BOUNEGRU, Pierre PONTIAUX, Jean Pierre CELIS.

**Importance of tribocorrosion in biomedical applicatios: Overview and some results.**

Oral presentation.

**Session 3 & UGALnano5: Functional Materials & Nanotechnologies**, O.P. 3.3, pg. 76 – Book of Abstract.

<http://www.cssd-udjg.ugal.ro/index.php/abstracts>

2. **Iulian BOUNEGRU**, Lidia BENEĂ, Eliza DĂNĂILĂ, Alexandru CHIRIAC.

**Electrodeposition of chitosan thin films on nanoporous titanium surface for biomedical applications.**

Oral presentation.

**Session 3 & UGALnano5: Functional Materials & Nanotechnologies**, O.P. 3.3, pg. 77 – Book of Abstract.

<http://www.cssd-udjg.ugal.ro/index.php/abstracts>

**Această lucrare a primit premiul II la Secțiunea 3 – Materiale Funcționale și Nanotehnologii.**

3. **Valentin Marian DUMITRAȘCU**, Lidia BENEĂ, Eliza DĂNĂILĂ.

**Electrodeposition of nanocomposite coatings – advantages and challenges.**

Oral presentation.

**Session 3 & UGALnano5: Functional Materials & Nanotechnologies**, O.P. 3.3, pg. 81 – Book of Abstract , 4 - 5 Iunie 2015, Galați, România.

<http://www.cssd-udjg.ugal.ro/index.php/abstracts>

**Această lucrare a primit premiul III la Secțiunea 3 – Materiale Funcționale și Nanotehnologii.**

**Două (2) lucrări prezentate la: UGAL INVENT, The first event supporting innovation promoted by "Dunărea de Jos,, University of Galati, 7 - 9 Octombrie 2015, Galati, Romania.**

[www.invent.ugal.ro](http://www.invent.ugal.ro)

**1. Eliza DĂNĂILĂ, Lidia BENEĂ, Pierre PONTTHIAUX, Nadège CARON, Olivier RAQUET. Advanced coatings for energy applications – Improving tribocorrosion behaviour by electro-codeposition of TiC nano – dispersed particles with nickel matrix.**

Poster presentation.

[www.invent.ugal.ro](http://www.invent.ugal.ro)

**Această lucrare a primit premiul *The Best Woman Inventor Award* - UGAL INVENT 2015.**

[http://www.invent.ugal.ro/docs/listaPremii\\_EN\\_20102015.pdf](http://www.invent.ugal.ro/docs/listaPremii_EN_20102015.pdf)

**2. Lidia BENEĂ, Eliza DĂNĂILĂ.**

**Nanoporous TiO<sub>2</sub> thin film formed by electrochemical technique to improve the biocompatibility of titanium alloy in physiological environment.**

Poster presentation.

[www.invent.ugal.ro](http://www.invent.ugal.ro)

**Această lucrare a primit o mențiune de onoare.**

[http://www.invent.ugal.ro/docs/listaPremii\\_EN\\_20102015.pdf](http://www.invent.ugal.ro/docs/listaPremii_EN_20102015.pdf)

#### F. Alte realizări:

**1 Seminar International**

**1 Teză de Doctorat finalizată**

**1 Teză de Disertație Master finalizată**

**2 Teze de Licență finalizate**

**Un (1) Seminar International:**

**International Seminar: Scientific Approach in Research Methodology & Universe of Biomaterials.**

**Organized in the frame of Research Project PNII-PCE - New hybrid (inorganic-organic) functionalization of biomaterials (metals alloys) surfaces with functional**

**molecules by electrochemical techniques.** Acronym: **HyBioElect** Contract 10 / 30-08-2013 (2013-2016) - UEFISCDI.

Period: July 23, 2015.

<http://www.hybioelect.ugal.ro>

Participare internațională:

**Prof. dr. ir. Jean-Pierre CELIS** - Katholieke Universiteit Leuven (KULeuven), Belgium.

**Prof. dr. Pierre PONTIAUX** - Ecole Centrale Paris (ECP), France.

**Scientific Committee & Organizing Committee:**

Prof. Dr. Lidia BENEĂ - Dunărea de Jos University of Galați: [Lidia.Benea@ugal.ro](mailto:Lidia.Benea@ugal.ro)

Prof. Dr. Alexandru CHIRIAC - Dunărea de Jos University of Galați: [Alexandru.Chiriac@ugal.ro](mailto:Alexandru.Chiriac@ugal.ro)

Prof. Dr. Minodora RIPA - Dunărea de Jos University of Galați: [Ripa.Minodora@ugal.ro](mailto:Ripa.Minodora@ugal.ro)

Dr. Eliza DĂNĂILĂ: [Eliza.Mardare@ugal.ro](mailto:Eliza.Mardare@ugal.ro)

Drd. Ec. Valentin DUMITRAȘCU: [Valentin.Dumitrascu@ugal.ro](mailto:Valentin.Dumitrascu@ugal.ro)

<http://www.cc-ites.ugal.ro/Anunturi/International%20Seminar%202015.pdf>

### O (1) Teză de doctorat finalizată (PhD Thesis):

#### 1. Drd. Farm. Iulian BOUNEGRU,

Titlul tezei de doctorat:

**Obținerea și caracterizarea suprafețelor funcționale prin metode electrochimice pentru aplicații biomedicale.**

**Preparation and characterization of functional surfaces for biomedical applications using electrochemical methods.**

Data susținerii publice: 23 Iulie 2015,

Conducător doctorat: **Prof. univ. dr. Lidia BENEĂ.**

Domeniul de doctorat: **Ingineria Materialelor.**

**Comisie doctorat:**

Președinte: Prof. univ. dr. ing. Cătălin FETECĂU - Decan Facultatea de Inginerie.

Conducător de doctorat: Prof. univ. dr. Lidia BENEĂ

Referent oficial: Prof. univ. dr. ing. Jean Pierre CELIS - Katholieke Universiteit Leuven (KULeuven), Belgium.

Referent oficial: Prof. univ. dr. ing. Pierre PONTIAUX - Ecole Centrale Paris (ECP), France.

Referent oficial: Prof. univ. dr. ing. Alexandru CHIRIAC - Prodecan - Facultatea de Medicină și Farmacie.

### O (1) Teză disertație Master finalizată:

#### 1. Student masterand: **Ing. Bogdan – Sorin BAȘA.**

Titlul lucrării de disertație:

**Electrodeposition and fretting corrosion resistance of nickel composite coatings containing nanosized WC particles.**

Conducător științific: **Prof. univ. dr. Lidia BENEĂ.**

Sesiunea: iulie 2015.

Domeniul: Ingineria Mediului.

Specializarea: **Sustainable development and safety in industry** (Dezvoltare Durabilă și Securitate în Industrie).

Limba: Engleză.

**Două (2) Lucrări de licență finalizate:****1. Student Marius SOCOLA.**

Titlul lucrării de licență:

**Evaluarea coroziunii a tablelor zincate pe platforma Arcelor Mittal Galati.**

Conducător științific: Prof. univ. dr. Lidia BENEĂ.

Sesiunea: iulie 2015.

Domeniul **Ingineria Materialelor.**Specializarea: **Știința Materialelor.****2. Student Gigi BORDEIANU.**

Titlul lucrării de licență:

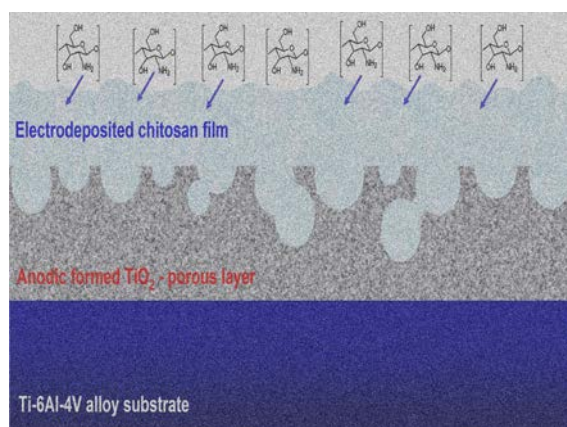
**Purificarea apelor uzate prin metode electrochimice.**

Conducător științific: Prof. univ. dr. Lidia BENEĂ.

Sesiunea iulie 2015,.

Domeniul: Ingineria Mediului.

Specializarea: Ingineria și Protecția Mediului în Industrie.



**Director proiect,  
Prof. univ. dr. Lidia BENEĂ**

30 noiembrie 2015

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