



Europass Curriculum Vitae

Personal information

First name(s) / Surname(s) **BURADA, Marian**
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Telephone(s) +(4021)3522046
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E-mail mburada@imnr.ro
Nationality Romanian
Date of birth 02.10.1969
Gender Male

Work experience

Dates October 1996 onwards
Occupation or position held October 1996 – May 2000: nonferrous metallurgy engineer , June 2000 – December 2008: scientific researcher, January 2009 – present: scientific researcher III
Main activities and responsibilities Research works
Name and address of employer National R&D Institute for Nonferrous and Rare Metals, Bucharest
Type of business or sector Research and development in nonferrous and rare metals

Education and training

Dates November 2002
Title of qualification awarded Specialist
Principal subjects/occupational skills covered Electrochemical studies in molten salts
Name and type of organisation providing education and training University of Patras, Greece
Dates January - February 2001
Title of qualification awarded Specialist
Principal subjects/occupational skills covered Molten salts investigation
Name and type of organisation providing education and training NTH Trondheim University, Norway
Dates October 1996 -July 1997
Title of qualification awarded Master of Science
Principal subjects/occupational skills covered Materials Science
Name and type of organisation providing education and training Faculty of Materials Science and Engineering, University „Politehnica” of Bucharest

Dates | October 1991 – July 1996
 Title of qualification awarded | Graduate engineer
 Principal subjects/occupational skills covered | Nonferrous Metallurgy
 Name and type of organisation providing education and training | Faculty of Materials Science and Engineering, University „Politehnica” of Bucharest

Personal skills and competences

Mother tongue(s) | **Specify mother tongue : Romanian**

Other language(s)

Self-assessment

European level ()*

English

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
B2	Independent User	B2	Independent User	B2	Independent user	B2	Independent user	B2	Independent user

(*) *Common European Framework of Reference for Languages*

Social skills and competences | Team work
 Self-motivated
 Intercultural skills

Organisational skills and competences | Experimental works coordinator
 PN programmes Project manager

Technical skills and competences | Rare metals and alloys obtaining by molten salts electrolysis
 Electrochemical thin films obtaining for anticorrosive applications, photovoltaic applications
 Metal matrix composite materials
 Unconventional elaboration methods for nonferrous alloys: metallothermic reductions, mechanical alloying

Computer skills and competences | Competent with most Microsoft Office programs, Electrochemistry PowerSuite
 Some experience with HSC

Additional information | Member of AGIR – National Association of Romanian Engineers

- Annexes**
1. List of publications (selection)
 2. List of national and international projects

LIST OF PUBLICATIONS (SELECTION)

Articles:

Refereed Journals

1. V. Soare, V. Soare, **M. Burada**, T. Ostvold, C. Kontoyannis, E. Stefanidaki, „*Study of the Mg-Nd alloy obtaining by electrolysis in molten oxifluoride media*”, Journal of Mining and Metallurgy, section B, Metallurgy, Bor-Serbia and Montenegro, 39 (1-2) B, 2003
2. V. Soare, C. Gurgu, **M. Burada**, T. Østvold and C. Kontoyannis, „*The production of a Mg –Nd alloy by direct electrolysis from a oxifluoride melt*”, Canadian Metallurgical Quarterly, Vol.45, nr.2, 2006
3. D. Taloi, M. Tarcolea, V. Soare, **M. Burada**, I. Carcea, „*Study on the chemism of the chlorinated electrolyte-sintered cathode-anode system at titanium dioxide electrochemical reduction in calcium chloride*”, Revista de chimie, vol. 59, 2008, pp. 486-490, ISSN 0034-7752
4. **M. Burada**, V. Soare, D. Mitrica, C.P. Lungu, V. Ghenescu, L. Ion, „*Growth of CIS Thin Films using one step electrodeposition process*”, Metalurgia International, ISSN 1582-2214, vol. 3, 2009, p.191-196
5. V. Soare, C. Gurgu, I. Surcel, **M. Burada**, V.I. Soare, „*Electrochemical process for the manufacturing of titanium alloy matrix composites*”, METALLURGY, Zagreb, Croatia, ISSN 0543-5846 , vol. 48 (3), 2009, p.151-155.
6. Soare, V; **Burada, M**; Mitrica, D; Badilita, V; Stoiciu, F; Lungu, CP; Ghenescu, V; Rusu, MI; Antohe, S ,” *Electrodeposition and characterization of CuInSe₂/CdS multilayered thin films deposited on flexible substrate* „ OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS , 2010 vol.4, nr.12, p 2018-2021, ISSN 1454 – 4164
7. V. Soare, **M. Burada**, D. Mitrica, I. Constantin, F. Stoiciu, C. Cotrut, A.M. Popescu „ *Electroless deposition process of NiZnP thin films for anticorrosive applications*”, Metallurgy and new materials researches, vol. XIX, no.2/2011, ISSN 1221-5503
8. Vasile Soare, Ioan Surcel, Gabriel Popeneacu, Viorel Badilita, Florin Stoiciu, Victoria Soare, Dumitru Mitrica, **Marian Burada**, „*Physical – structural characteristics of Ti_{0.8}Zr_{0.2}Cr_{1.2}Mn_{0.8} hydrogen storage alloy*”, Metallurgy and new materials researches, vol. XIX, no.1/2011, ISSN 1221-5503
9. **Burada Marian**, Mitrică Dumitru, Constantin Ionuț, Bădiliță Viorel, Minculescu Florin, Cotrut Cosmin, Constantin Virgil, „*Electrochemical process for Zn-Ni-P thin films deposition on steel substrate*”, Metallurgy and new materials researches, vol. XIX, no.2/2011, ISSN 1221-5503
10. D. Mitrica V. Soare, **M. Burada**, V. Badilita, Victoria Soare, I. Constantin, P. Moldovan, G. Popescu, „*Melt spinning process for nanostructured AlSr master alloy obtaining*”, Metallurgy and new materials researches, vol. XIX, no.2/2011, ISSN 1221-5503
11. A. M. Popescu, V. Constantin, M. Olteanu, V. Soare, **M. Burada**, E. I. Neacșu, „*Morphology and corrosion behavior of Zn-Ni-P thin films electrolessly deposited from chloride baths*”, Revista de Chimie, vol. 64, nr. 4 (2013), 417-424.
12. V. Soare, **M. Burada**, I. Constantin, D. Dumitrescu, F. Stoiciu, V. Bădiliță, D. Mitrică, „*The influence of the process control agent and dispersoid on the mechanical alloying of the A5083 alloy*”, Metallurgy and new materials researches, vol. 21, no. 4 (2013), 31-41.
13. V. Soare, **M. Burada**, I. Constantin, M. Ghita, V. Constantin, F. Miculescu, A. M. Popescu, „*Synthesis and performance of Zn–Ni–P thin films*”, Chinese Physics B, vol. 24, no. 3 (2015), 036101-1 - 036101-10.
14. V. Soare, **M. Burada**, I. Constantin, D. Mitrică, V. Bădiliță, A. Caragea, M. Târcolea, „*Electrochemical deposition and microstructural characterization of AlCrFeMnNi and AlCrCuFeMnNi high entropy alloy thin films*, Applied Surface Science, vol. 358 (2015), 533–539.
15. V. Soare, D. Dumitrescu, **M. Burada**, I. Constantin, V.I. Soare, P. Capota, A. M. J. Popescu, V. Constantin, „*Recovery of metals from waste electrical and electronic equipment (WEEE) by anodic dissolution*”, Revista de Chimie, 67, 5 (2016), 920.

Refereed proceedings

1. V. Soare, V.I. Soare, **M. Burada**, „*Electrochemical production of Al – RE alloys on molten cathode from oxifluoride media*”, Proceeding: EuChem Conference on Molten Salts – Lyngby, Denmark, aug. 2000
2. V. Soare, C. Gurgu, **M. Burada**, „*Solubility and dissolution kinetic of the Nd₂(CO₃)₃ in molten fluorides*”, Proceeding: EuChem Conference on Molten Salts, Oxford, England, sept. 2002
3. V. Soare, C. Gurgu, **M. Burada**, „*Solubility and dissolution kinetic of the Nd₂(CO₃)₃ in molten fluorides*”, Proceeding: EuChem Conference on Molten Salts, Oxford, England, sept. 2002
4. V. Soare, C. Gurgu, I. Surcel, **M. Burada**, V.I. Soare, „*Electrochemical process for titanium alloy matrix composites obtaining*”, 8th International Symposium of Croatian Metallurgical Society - Materials and Metallurgy”, Sibenik CROATIA
5. V. Soare, I. Surcel, **M. Burada**, C. Gurgu, M. Târcolea, „*Titanium alloy matrix composites obtained through an electrochemical process in molten calcium chloride*”, 1st International Round Table on Titanium Production in Molten Salts, Koln, 2008, Germany, Proceedings 2008, ISBN 978-4-7598-0747-0
6. Dumitru MITRICA, Dr. Vasile SOARE, Ioan SURCEL, Mircea RADU, **Marian BURADA**, Ionut CONSTANTIN, „*Modeling of metal matrix composite synthesis from Al alloys/nitrides system*”, Workshop Materiale Funcționale, 01-02 Iulie 2009, București, Romania.
7. M. Radu, O. Ghenescu, M. Ghenescu, C. Lungu, V. Soare, **M. Burada**, T. Mitran, L. Ion, S. Antohe „*CIS films deposited on flexible substrates for photovoltaic applications*”, 2nd International Symposium on Flexible Organic Electronics (IS-FOE09), 8-10 July 2009, Halkidiki, Greece
8. **Burada Marian**, Soare Vasile, Radu Mircea, Dumitru Mitrică, Barloaga Ionela, Lungu Petrica Cristian, Ghenescu Veta, Antohe Stefan, „*CuInSe₂ thin films electrodeposition for photovoltaic applications*”, National symposium with international participation „Chemistry priorities for sustainable development” (PRIOCHEM) – Vth Edition, ICECHIM-Bucharest, 29-30 October 2009 , Sinaia, ISBN 978-973-0-06996-9

9. M.I. Rusu, O. Ghenescu, M.Ghenescu, C. Lungu, V. Soare, **M. Burada**, T. Mitran, M. Radu, L.Ion, S. Antohe, „*CIS films deposited on flexible substrates for photovoltaic applications*”, 6th Int. Conference on “Nanosciences & Nanotechnologies” – 13 - 15 July 2009, Thessaloniki, Greece
10. V. Constantin , A.M. Popescu, V. Soare, **M. Burada**, M. Tarcolea, „*Corrosion properties of Zn-Ni-P thin films in aqua and ionic liquid media*”, Euromat 2011, 12-15 September, Montpellier, France
11. V. Soare, **M. Burada**, D. Mitrică, I. Constantin, D. V. Dumitrescu, “*Investigation of Al-5083 alloy obtained by mechanical alloying*”, 12th Young researchers' Conference - Materials Science and Engineering, 11-13 December 2013, Belgrade, Serbia.
12. D. Mitrica, **M. Burada**, V. Soare, M. Ghita, R. M. Florea, F. Miculescu, P. Moldovan, “*Microstructure and properties of aluminum metal matrix composite prepared by in-situ method*”, TMS 143rd Annual meeting & exhibition, 16-20 February 2014, San Diego, USA.
13. I. Constantin, V. Soare, **M. Burada**, D. Mitrica, D. Dumitrescu, P. Moldovan, A. M. Popescu, „*Double layer multifunctional Zn-Ni-P coatings for anticorrosive applications*”, TMS 143rd Annual meeting & exhibition, 16-20 February 2014, San Diego, USA.
14. D. V. Dumitrescu, V. Soare, I. Constantin, **M. Burada**, D. Mitrică, “*Microwave field melting of non-ferrous metallic wastes*”, 10th ELSEDIMA International Conference, , 18-19 September 2014, Cluj-Napoca, Romania.
15. V. Soare, **M. Burada**, I. Constantin, D. Mitrică, V. Bădiliță, A. Caragea, M. Târcolea, “*Electrochemical deposition and microstructural characterization of AlCrFeMnNi and AlCrCuFeMnNi high entropy alloy thin films*”, 9th International Conference on Materials Science and Engineering – BRAMAT 2015, 5 – 7 March 2015, Brasov, Romania.
16. V. Soare, D. V. Dumitrescu, **M. Burada**, I. Constantin, V. I. Soare, P. Capotă, “*Study of Metals Recovery from WEEE by Anodic Dissolution*”, 9th International Conference on Materials Science and Engineering – BRAMAT 2015, 5 – 7 March 2015, Brasov, Romania.
17. **M. Burada**, V. Soare, D. V. Dumitrescu, I. Constantin, M. T. Olaru, V. Badilita, V. Soare, P. Capota, „*Separation of Precious Metals from WEEE by Acid Solubilization and Thiourea Extraction*”, The 19th Romanian International Conference on Chemistry and Chemical Engineering – RICCCE 19, 02-05 Septembrie 2015, Sibiu, Romania.
18. V. Soare, **M. Burada**, D. V. Dumitrescu, I. Constantin, V. Soare, A. M. J. Popescu, I. Carcea, “*Innovative approach for the valorization of useful metals from waste electric and electronic equipment (WEEE)*”, ModTech 2016 International Conference – Modern Technologies in Industrial Engineering”, 15-18 June 2016, Iasi, Romania.

Patents:

“Process and installation for Mg-Nd master alloys obtaining by electrochemical co-deposition”, Patent Number(s) RO121282 B1

“Process for obtaining of Nd-Fe-B magnetic alloy and resulting magnet”, OSIM, nr. 121793.2008, Romania

“Electrolytic process and cell for preparing metal titanium and titanium alloys by electrochemical process” , Patent Number(s) RO123257-B1

ANNEX 2

LIST OF NATIONAL AND INTERNATIONAL PROJECTS (SELECTION)

INTERNATIONAL PROJECTS:

Project Grant	Position	Period
Romania-Greece international cooperation: “Study on the influence of the electrolyte physical-chemical properties at lanthanide electro deposition in fluoride media”	Researcher	1996-1998
Project NATO” Science for Peace” SfP 97 1858: “Improvement of the technological parameters in the electrochemical production of Mg-Nd alloys from oxyfluoride media”	Researcher	1998-2003

NATIONAL PROJECTS:

Project Grant	Position	Period
Project RELANSIN „Obtaining Al-TR alloys by molten salts electrolysis”	Researcher	1999-2003
Project RELANSIN „Low energy consumption technologies for obtaining new lead alloys necessary in the performant accumulator industry”	Researcher	2001- 2004
Project MATNANTECH „High energy permanent magnets based on neodymium intermetallic compounds”	Researcher	2003-2005
Project CERES «New, unconventional concept for obtaining titanium alloys by electrochemical processes”	Researcher	2004-2006
PN Programme “New ecological technology for obtaining Nd-Fe magnetic alloys by electrochemical reduction”	Principal investigator	2006
GRANT CONSORTIUM „Physical-chemical processes modeling in elaboration of a new,	Researcher	2006-2008

ecologic method for obtaining titanium”,		
Grant „New concept for titanium alloys matrix composites synthesis by molten salts electrochemical processes ”	Researcher	2007-2008
Programme PN 09240102 “Research on obtaining ultra light aluminum alloys by mechanical alloying”	Project manager	2009-2009
Programme PNCDI2 Partnerships « New methods for metal matrix composite materials synthesis by in-situ processes »	Researcher	2007-2010
Programme PNCDI2 Partnerships « Energetic technologies implementation by developing a thermal engine based on hydrogen absorbing metallic alloys using solar energy or residual energies »	Researcher	2007-2010
Programme PNCDI2 Partnerships «New types of flexible solar cells based on CIS compounds obtained through electro-deposition»	Researcher	2007-2010
Programme PNCDI2 Partnerships “New protection method against corrosion of steel materials by thin film electro-deposition of Zn-Ni-P ternary alloys”	Researcher	2008-2011
Programme PNCDI2 Partnerships “ Nanostructured aluminum alloys with high physical-mechanical characteristics “	Researcher	2008-2011
PN 09240102 „ Research regarding the obtaining of ultra light Al based alloys by mechanical alloying”	Principal investigator	2010-2014
PN-II-IN-CI-2012-1, CI 168/2012 “New method for obtaining nanostructured ZnO in microwave field”	Researcher	2012-2013
PN-II-IN-CI-2013-1, CI 191/2013 „Innovative melting of nonferrous metals in microwave field”	Researcher	2013-2014
PN-II-IN-CI-2013-1, CI 190/2013 ”Innovative method for the recovery of silver from etching solutions”	Researcher	2013-2014
Programme PNCDI2, Contract 270/2014 “New high entropy alloys/composites with superior mechanical and corrosion resistance characteristics, for high temperature uses”.	Researcher	2014-2016
PN 09240110 “High-entropy alloys with superior mechanical characteristics and corrosion resistance for high-temperature applications”	Researcher	2014-2015
Programme PNCDI2, Contract 82/2014 “Innovative and ecological technology for the recovery of nonferrous metals from electrical and electronic equipment wastes (WEEE) using microwaves energy”	Researcher	2014-2016
PN 09240113 „Studies and researches for the obtaining of new semiconductor materials for applications in renewable energy”	Principal investigator	2015
PN 16200304 “High entropy alloys for applications in energy industry”	Researcher	2016-2017
PN 16200202 “Advanced metallic materials with elevated thermoelectric properties”	Principal investigator	2016-2017