



Europass Curriculum Vitae

Personal information

First name(s) / Surname(s) Teodor / VELEA
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E-mail tvelea@imnr.ro
Nationality Romanian
Date of birth 23 July 1946
Gender male

Desired employment / Occupational field

Work experience

Dates 1969 - present
Occupation or position held I Scientific Researcher – General Manager
Main activities and responsibilities Responsible for 50 research programs - 2 National Programs
Responsible for 25 programs for ecology and metals recovery from wastes and waste waters
Responsibilities in international programs
Responsible or participant at the Governmental International Co-operations in the environment protection field with China, Greece, South Africa
Name and address of employer INCDMNR-IMNR, 102 Biruintei Blvd., Ilfov, Romania
Type of business or sector Research and development

Education and training

Dates October 1999 – November 1999
Title of qualification awarded Attendance certificate
Principal subjects/occupational skills covered Management and international economic relations
Name and type of organization providing education and training Academy of economic studies, Bucharest
Dates March 1999 – October 1999
Title of qualification awarded Certificate
Principal subjects/occupational skills covered Financial engineering
Name and type of organization providing education and training Ministry of national education – Romanian Institute of Management
Dates May 1997
Title of qualification awarded Certificate
Principal subjects/occupational skills covered New coordinates for research and development management
Name and type of organization providing education and training Ministry of national education – Romanian Institute of Management

Dates 1988 -1993
 Title of qualification awarded PhD
 Principal subjects/occupational skills covered Materials Science and Engineering
 Name and type of organization providing education and training University "POLITEHNICA" of Bucharest

Dates February 1973 – June 1974
 Title of qualification awarded Certificate
 Principal subjects/occupational skills covered Intensive English postgraduate course
 Name and type of organization providing education and training University of Bucharest

Dates 1964 -1969
 Title of qualification awarded Metallurgist
 Principal subjects/occupational skills covered Non-ferrous extractive metallurgy
 Name and type of organization providing education and training "Politehnica" University of Bucharest, Metallurgy Faculty

Personal skills and competences

Mother tongue(s) Specify mother tongue : Romanian

Other language(s)

Self-assessment
 European level (*)

English

French

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
B2	Upper Intermediate	B2	Upper Intermediate	B2	Upper Intermediate	B2	Upper Intermediate	B2	Upper Intermediate
B1	Intermediate	B1	Intermediate	B1	Intermediate	B1	Intermediate	B1	Intermediate

(*) Common European Framework of Reference for Languages

Social skills and competences I work both with young people and experienced persons supervise and guide their scientific activities. Good communication skills.

Organizational skills and competences My activity from IMNR was focused on research projects financed by;

- National R&D Programs – MENER, RELANSIN, ORIZONT, INVENT, PROGRAM NUCLEU
- International R&D Programs FP 5, FP 6, INCO-COPERNICUS, EUREKA
- Governmental Programs financed by Japan, China, Italy, Spain, Greece, South Africa, etc
- Director of „EUREKA“ Subprogram : „Copper recovery from low grade concentrates by hidrometallurgical methods
- Program for obtaining of zircalloy;
- Program for implementing of advanced technologies for low grade copper ores
- Over 25 de projects for metals recovery from wastes and waste waters

The results of my activity in research are as follows:

- Over 20 patens
- Over 150 papers and communications at national and international conferences and review.

Technical skills and competences Experienced in commissioning and exploitation of industrial equipments in non-ferrous extractive metallurgy

Computer skills and competences Competent with most Microsoft Programs. Competent with MS Office (Word, Excel, Power Point) Corel

Driving license Yes, B

Annexes

1. Experience gained in national/ international programs (selection)
2. Patents (selection)
3. List of papers published or presented at scientific sessions, symposia and congresses (selection)

EXPERIENCE GAINED IN NATIONAL/INTERNATIONAL PROGRAMS/PROJECTS (SELECTION):

- *"Technologies for the reclamation of metallurgical process waters - TREWAT"*, Project nr.: ERB ICI5 CT 98 0146 financed by INCO-COPERNICUS Program, (1999 – 2001) – Scientific director of the project
- *"Developing a new concept "CLEAN-LEAD" factory for Europe - CLEANLEAD"*, Project nr. GRD3 -2001-60019, financed by FP 5 Program, (2002 – 2004) – Director for IMNR partner
- *"Promotion of heavy metal recycling using existing smelting facilities"*, Contract nr. 995/22.10.2002 financed by Japan International Cooperation Agency – JICA; (2002 – 2003) – Director of the project
- *"Biotechnology for Metal Bearing Materials – BIOMINE"*, Project Nr. 500329 – 1/2004, financed by FP 6 Program; (2004 – 2008) – Director for IMNR partner
- *"The estimation of the pollution degree of water and soil in the vicinity of the industrial area NEFERAL – Bucharest and the impact upon the health of people living in this area – NEPOLL"*, Project nr. IB6120-107014 / 2005" financed by Swiss National Science Foundation by ESTROM Program ;(2005 – 2007) – Director of the project
- „Copper recovery from low grade concentrates by hydrometallurgical methods" Director for IMNR EUREKA 1996

PUBLISHED PATENTS/INVENTIONS more than 25 of which published after 2000:

1. Teodorescu Romanita, **Velea Teodor**, "Process for fractional separation of toxic heavy metals from complex sulphide" RO 116489 B1, 28.02.2001
2. Rădulescu Elena Carmen, **Velea Teodor**, Predica Vasile, Părpăriță Adrian, Părpăriță Adrian "Lead recovery process from lead slag and lead sulfato-oxidic byproducts" Patent no.116911 B, 30.07.2001
3. Dumitrescu Daniela, **Velea Teodor**, Parparita Adrian, Predica Vasile "Hydrometallurgical process for separating and recovering Bismuth" RO118138 B, 28.02.2003
4. Gheorghita Maria, Mara Eleonora Luminita, **Velea Teodor**, Gornic Corneliu, Covrig atanasie, Ilie Dan Dumitru, Terpezean Tabara Gheorghe "Catalyst for depolluting gas emissions from motor vehicles and process for preparing the same" RO 119227 B1, 30.06.2004
5. Anger Ildiko, Stanciu Doina, Rosca Silviu, **Velea Teodor** "Process for removing pollutants from effluents resulting from titanium and zirconium waste pickling" RO 120257 B1, 30.11.2005
6. Ulmanu Mihaela, **Velea Teodor**, "Process for advanced purification of toxic heavy metal-loaded waters" RO120839 B1, 30.08.2006
7. Teodorescu Romanita, **Velea Teodor**, Gheorghita Maria, "Process for complete exploitation of copper, zinc and nickel from galvanic muds", Ro 12108 B1, 29.12.2006
8. Teodorescu Romanita, Tanase Dumitru, Guta Aura Iulia, **Velea Teodor**, "Process for the recovery of chrome from high chrome content slurry" RO 121109 B1, 29.12.2006
9. **Velea Teodor**, Predica Vasile, Gherghe Săndica Liliana, Gheorghită Maria „Lead recovery process from secondary sulfato-oxidic wastes" Patent no. 121606 B1, 28.12.2007
10. Gorinoiu Mircea, **Velea Teodor**, Stoica Dumitru, Koudoumogiannakis Leonidas, Balazs Bela Atila, "Process for the recovery of zinc and lead from waste" RO122366 B1, 30.04.2009
11. **Velea Teodor**, Predica Vasile „Copper sulfurous concentrates processing method" Patent no. 122496 B1, 30.07.2009
12. **Velea Teodor**, Predica Vasile, Gherghe Săndica Liliana „Hydrometallurgical process for the separation and recovery of lead from sulfurous concentrates" Patent no. 123342 B1, 30.09.2011

INVENTIONS, PATENTS registered for reviewing:

1. **Velea Teodor**, Predica Vasile „Sulfurous concentrates with lead content processing method”, Patent request A/00711- 15.09.2008
2. **Velea Teodor**, Stanciu Doina, Predica Vasile, Lungu Petrică Cristian, Zaroschi Valer Nicolae, Mirică Marius Constantin, Iorga Mirela Ioana „Advanced treatment process of leigates and waste waters with heavy metal content”, Patent request A/00639- 23.07.2010
3. **Velea Teodor**, Predica Vasile, Gherghe Săndica Liliana „Oxidation process for metallic sulfates from precious nonferrous metals concentrates”, Patent request A/00590- 22.06.2011

ANNEX 3

LIST OF PAPERS PRESENTED AT SCIENTIFIC SESSIONS, SYMPOSIA AND CONGRESS

1. **Teodor Velea**, Vasile Predica, Adrian Parparita, Liliana Gherghe “Base metals recovery from by products and waste waters resulting from a cooper plant” . Conference Recycling and waste treatment in mineral and metal processing: Tehnica land economic aspect 16-20 June 2002 Lulea Suedia
2. **Teodor Velea**, L. Gherghe, V. Predică, Alain Adjemian, Carlos Frias, “Recycling of lead batteries – new concept”, ASEM Workshop on EU/Asia S&T Co-operation on Clean Technologies, Hanoi, Vietnam, 3 – 6 November, 2004
3. “Technology for copper recovery from slag resulted at thermal refining of blister copper”, Symposium “REWAS”, Madrid , 26 – 29 September 2004
4. **T. Velea**, D-tru. Stoica, Liliana Gherghe, V. Predica, “ Techniques regarding SO2 removal from gaseous emissions resulted from extractive metallurgy of non ferrous metals” Proceedings Nacional Conference of Metallurgy and Materials Science, ROMAT 2006 ,Bucharest, Romania, 28-29 sept. 2006, pag. 351-356
5. **T. Velea**, V. Predica, L. Gherghe, D. Stanciu, M. Gheorghită, „Lead recovery from lead-acid spent batteries using a hydrometallurgical technology” Conference Excellence Research -a Way to E.R.A. Braşov 2007
6. **Teodor VELEA**, Vasile PREDICA, Liliana GHERGHE, Doina STANCIU, Maria GHEORHIȚĂ, ZsuZsana KOVACS, Aurel VARNA “Bio-oxidizing of lead concentrate” Conference Excellence Research -a Way to E.R.A. Braşov 2007
7. **Teodor Velea**, Vasile Predica, Liliana Gherghe “ New hydrometallurgical technology for processing of lead sulfide concentrates” Proceedings European Metallurgical Conference EMC 2007 June 11-14,2007, Vol.4, pg 2066 Dusseldorf Germany
8. **T. Velea**, V. Predica, L. Gherghe “A new hydrometallurgical technology for processing copper concentrates” Proceedings The Sixth International Copper-Cobre Conference Toronto 2007, The John E. Dutrizac Symposium on Copper Hydrometallurgy, Vol. IV, pg 221-230
9. **T. Velea**, V. Predica, L. Gherghe, D. Stanciu, M. Gherghiță, “Electrolytic recovery of lead from alkaline solutions” Proceedings Conference Excellence Research -a Way to Innovation Braşov 2008, Vol. II, pag 188/1-6
10. **T. Velea**, V. Predica, L. Gherghe, D. Stanciu, M. Gherghiță, Z. Kovacs, A. Varna “ New Eco-Biotechnology to Recovery Lead from sulfide concentrates” Proceedings Conference Excellence Research- a way to Innovation Braşov 2008, Vol II, pag 190/1-6
11. **Teodor Velea**, Vasile Predica, Doina Stanciu, Cristian Predescu, Ecaterina Matei “Evaluation of pollution potential of slags resulted from primary lead fabrication at ROMPLUMB – Baia Mare” Proceedings National Conference of Metallurgy and Materials Science, ROMAT 2008 ,Bucharest, Romania, 25-28 sept. 2008, pag. 359-364
12. Liliana Gherghe, **Teodor Velea**, Vasile Predica, Silvana Onisei, “Purification of spent sulfuric acid from the batteries recycling in view of recovery” Proceedings National Conference of Metallurgy and Materials Science, ROMAT 2008 ,Bucharest, Romania, 25-28 sept. 2008, pag. 283- 288
13. **T. Velea**, D. Stanciu, L. Gherghe, V. Predica, “Research highlights of INCDMNR-IMNR in the field of non-ferrous heavy metals contaminated soils “round table on “CONTAMINATED SITES” – a new challenge for Romania of Sanitation, Ministry of Environment and Sustainable Development – General Branch of Soils, Underground, Wastes Management”, Mamaia, 01 – 02 sept. 2008

14. **Teodor Velea**, Vasile Predica, Liliana Gherghe, Andrzej Chmielarz " Oxidation of copper sulfides from low grade concentrates with high carbon content" Proceedings European Metallurgical Conference EMC 2009, June 28-July 1, 2009, Innsbruck, Austria, Vol. 2, pag 771-778
15. "Geopolymers from lead slag and fly ash" Workshop Geopolymers for waste valorization" S. Onisei, Y. Pontikes, T. van Gerven, G. N. Angelopoulos, **T. Velea**, V. Predica, P. Moldovan at K.U.Leuven, Department of Metallurgy and Materials Engineering, 2010 Belgium
16. S. Onisei, Y. Pontikes, T. van Gerven, G. N. Angelopoulos, **T. Velea**, V. Predica, P. Moldovan, „Alkali activation of lead slag for building materials' production" " Workshop Geopolymers for waste valorisation at K.U.Leuven, Department of Metallurgy and Materials Engineering, 2011Belgia
17. **T. Velea**, D. Stanciu, V. Predica, S. L. Gherghe, R. Krebs "Characterization and chemical stabilization of slag containing heavy metals before disposal" ICCE 2011 Zurich, Switzerland
18. **Velea Teodor**, Vasile Predica, Liliana Gherghe " Eco innovation in hydro-copper concentrates processing " International Conference Copper Metallurgy Krakow 2011, Poland

LIST OF PUBLISHED PAPERS

1. **Teodor Velea**, Liliana Gherghe, Vasile Predica, Rolf Krebs " Heavy metal contamination in the vicinity of an industrial area near Bucharest", Environ Sci Pollut Res (2009) 16 (Suppl 1):S27–S32
2. **T. Velea** V. Predica, L. Gherghe, M. Gheorghiuță „Investigations on waste lead-acid accumulators" Romanian Journal of Automatic ISSN 1454-9077, Vol. XIX – nr.1
3. **Dragoș Taloi**, Ion Constantin, Liana Maria Vlăduțiu, Liliana Taloi, **Teodor Velea**, Vasile Predica, " Mathematical modeling for optimization of lead electrodeposition from alkaline solutions " Revista de Chimie, July 2009, Vol. 60, 724 -727
4. P. Lungu, Ana Lungu, N. Georgescu, M. Magureanu, I. Mustata, - INFLPR **T. Velea**, D. Stanciu, V. Predica – IMNR (CO) "Plasma treatment of levigated materials and saturated waters" Romanian Journal of Physics , Vol.54 , No. 3-4 369-375 Bucharest, 2009,(published by Publishing House of the Romanian Academy, included in Science Citation Index Expanded™ and Journal Citation Reports™
5. CP Lungu, N. Mustata, N. Georgescu, A.M. Lungu, V. Zaroschi – INFPLR ,**T. Velea**, D. Stanciu, V. Predica - IMNR "Aqueous Solution Purification by Bubbling Underwater Discharges" Advances in plasma science/Osaka University , Vol. 7, 2009 pp 1-7
6. **Teodor Velea**, Vasile Predica, Liliana Gherghe, **Dragoș Taloi**, Luminița Mara, Cornelia Lupu " Leaching of nonferrous metals from oxidized low grade complex concentrate" Environmental Engineering and Management Journal , 2011
7. **T. Velea**, S. Ivanescu, M. Gorinoiu, C. Lupu, P. Motoiu, P. Moldovan, D. Taloi, „Research studies regarding the obtaining of new microcrystalline materials and of new materials in micro substrates used for electrical contacts", accepted for publication in "Journal of optoelectronics and advanced materials"