

**Europass
Curriculum Vitae**
Personal information

First name(s) / Surname(s)

Address(es)

Telephone(s)

Fax(es)

E-mail

Nationality

Date of birth

Gender

Corneliu FRATILA

Schitu Magureanu Str. 3, Sc.B, ap. 12B, Bucharest 1, Romania

+40213522048

Mobile: +40741251059

+40213522048

cfratila@imnr.ro

Romanian

05.05.1951

Male

Work experience

Dates

Occupation or position held

 Main activities and
responsibilities

from dec 1989 to present

scientific researcher II

I improved my skills in electrochemistry, in nonferrous metals recovery from electrolyte solutions and in building thin metallic and non-metallic films on different supports. I worked in surface treatments of titanium and titanium alloys for their use in medical implants.

 Name and address of
employer

Bucharest – National R&D Institute for Non-ferrous and Rare Metals - INCDMNR-IMNR

Type of business or sector

Research Organisation

Dates

aug.1983 – dec.1989

Occupation or position held

engineer

 Main activities and
responsibilities

I worked in manufacturing of the pyrometer lamps - when they were first manufactured in Romania – necessary for temperature measurements in 500 – 1800 °C domain, measurements accomplished by the optical pyrometer; I also worked in the manufacturing of the lamps with cavitory cathode used in spectroscopic analysis. I also worked in study and production of optical, chemical and electrochemical sensors. Building metallic structures on different supports (metallic and non-metallic) using vacuum evaporation, electrochemical processes or chemical vapor deposition. I was head chief of Laboratory Apparatus Workshop.

 Name and address of
employer

Enterprise of apparatus and equipment for research

Type of business or sector

Industrial Enterprise

Dates

sept.1979 - aug.1983

Occupation or position held

scientific researcher

 Main activities and
responsibilities

I worked in nuclear zirconium obtaining. I participated as responsible or collaborator in a series of researches in the field of nonferrous and rare metals metallurgy.

 Name and address of
employer

Bucharest – National R&D Institute for Non-ferrous and Rare Metals - INCDMNR-IMNR

Type of business or sector

Research Organisation

Dates

November 1977 – September 1979

Occupation or position held

engineer

 Main activities and
responsibilities

I was a member of the team that took care of the investment part, starting the plant, running technological tests and exploitation of the Kowa-Seiko process plant for pyrite ash conditioning.

 Name and address of
employer

Turnu Măgurele – pyrite ash valorification plant

Type of business or sector

Industrial plant

Education and training

Dates	october 1972 - october 1977																																								
Title of qualification awarded	metallurgist engineer																																								
Principal subjects/ occupational skills covered	Non ferrous metals metalurgy																																								
Name and type of organisation providing education and training	University politehnica of bucharest facultaty of metallurgy -																																								
Personal skills and competences																																									
Mother tongue(s)	Romanian																																								
Other language(s)																																									
Self-assessment <i>European level (*)</i>	<table border="1"> <thead> <tr> <th colspan="4">Understanding</th> <th colspan="4">Speaking</th> <th colspan="2">Writing</th> </tr> <tr> <th colspan="2">Listening</th> <th colspan="2">Reading</th> <th colspan="2">Spoken interaction</th> <th colspan="2">Spoken production</th> <th colspan="2"></th> </tr> </thead> <tbody> <tr> <td>(B2)</td> <td>Independent user</td> <td>(B2)</td> <td>Independent user</td> <td>(B1)</td> <td>Independent user</td> <td>(B1)</td> <td>Independent user</td> <td>(B1)</td> <td>Independent user</td> </tr> <tr> <td>(B2)</td> <td>Independent user</td> <td>(B2)</td> <td>Independent user</td> <td>(B1)</td> <td>Independent user</td> <td>(B1)</td> <td>Independent user</td> <td>(B1)</td> <td>Independent user</td> </tr> </tbody> </table>	Understanding				Speaking				Writing		Listening		Reading		Spoken interaction		Spoken production				(B2)	Independent user	(B2)	Independent user	(B1)	Independent user	(B1)	Independent user	(B1)	Independent user	(B2)	Independent user	(B2)	Independent user	(B1)	Independent user	(B1)	Independent user	(B1)	Independent user
Understanding				Speaking				Writing																																	
Listening		Reading		Spoken interaction		Spoken production																																			
(B2)	Independent user	(B2)	Independent user	(B1)	Independent user	(B1)	Independent user	(B1)	Independent user																																
(B2)	Independent user	(B2)	Independent user	(B1)	Independent user	(B1)	Independent user	(B1)	Independent user																																
English																																									
French																																									
Social skills and competences	Communication skills, teem work ability																																								
Organisational skills and competences	Involved in the elaboration of national and FP7 research project proposals, research project management abilities, research project manager or responsible in national (20) and international projects: "Nanostructured titanium oxide sensor for biomedical measurement" MNT-ERA.NET 2010 Romania - Poland, 2011 ÷2012.																																								
Technical skills and competences	<ul style="list-style-type: none"> • Experience in electrochemical technology domain, surface coating on metallic and ceramic supports. • Experience in bio-materials (on titanium and titanium alloys base) domain. • Composite materials with metallic matrix obtaining • Experience in metallurgical and chemical technologies 																																								
Computer skills and competences	Good command of Microsoft Office tools (Word, Excel)																																								
Additional information Annexes	<p>Articles Published in ISI Journals related to the project topic:</p> <ol style="list-style-type: none"> 1. Controled changing of implantable bioinert materials biosurface-Elisabeta Vasilescu,Vlad Gabriel Vasilescu Ion Patracu,Cornel Fratila, Romanian Journal of Materials2016,46(1), 11-16 2. <i>Effects of titanium-based nanotube films on osteoblasts behaviour in vitro</i> – Miruna - Silvia Stan, Indira Memet, Cornel Fratila, Elzbieta Krasicka-Cydzik, Ioan Roman, Anca Dinischiotu, Journal of Biomedical Materials Research: Part A, 2015, Vol.103(1), p. 48÷56; 3. <i>Titanium dioxide nanotube films. Preparation, characterization and Electrochemical biosensitivity towards alkaline phosphatase</i> – I.Roman, R. D. Trusca, M.-L.Soare, C. Fratila, E. Krasicka-Cydzik, M.-S. Stan, A. Dinischiotu, Materials Science and Engineering C 37 (2014) 374–382; 4. <i>Electrochemical biosensitivity of titania nanotubes towards alkaline phosphatase, IL-6 and IL-8 interleukins biomarkers</i> - Ioan Roman, Maria-Laura Soare, Roxana Doina Trusca, Corneliu Fratila, Elzbieta Krasicka-Cydzik, Miruna-Silvia Stan and Anca Dinischiotu - Journal of The Electrochemical Society 2014 161(14): B275-B282; 																																								

5. *Aspects Regarding Alloying Effect on Electrochemical Stability of the Sintered Titanium* – Mircea Corban; Ioan Roman; Roxana Trusca; Anca Dinischiotu; Irina Carceanu; Neculai Stan; Cornel Fratila - **Rev.Chim(Bucharest)**. 63.No1.2012
6. *Studies on Anodized Titanium and Ti6Al4V Alloy Bioactivity* (rezumat) - Ioan Roman, Laura Soare, Roxana Trusca, Cornel Fratila, Mihai-Bogdan Bucur, Gabriela Tanase, Mihai Burlibasa, Dana-Catrinel Ispas **Clinical Oral Implants Research**, ISSN:0905-7161, Ed.Wiley-Blackwell, 21, no.10, 2010, p.1189.
7. *Electrochemical evaluation of the stability of ceramic nanostructured titanium oxide layers in Ringer solution* - Ioan Roman, Corneliu Fratila, Eugeniu Vasile, Alexandru Petre, Maria-Laura Soare - **Journal of Optoelectronics and Advanced Materials** ISSN:1454-4164, Ed.INOE&INFM, Vol.12 ISS.7, 2010, p.1597÷1603; *factor impact 0,433*.
8. *Achievement and evaluation of some ceramic nanostructured titanium oxide-layers* - Ioan Roman, Cornel Fratila, Eugeniu Vasile, Alexandru Petre, Maria-Laura Soare - **Materials Science and Engineering B**, ISSN: 0921-5107, Ed.Elsevier, 165, no.3, 2009, p.207÷211; *factor impact 1,577*; **doi:10.1016/j.mseb.2009.07.012**.
9. *Interdisciplinary studies on titanium and titanium alloys experimental dental implants* (rezumat extins) - M.L.Soare, I.Roman, E.Alexandrescu, C.Fratila, A.Petre, A.Dinischiotu, Al.Serban - **Clinical Oral Implants Research**, ISSN:0905-7161, Ed.Wiley-Blackwell, 20, no.9, 2009, p.1020÷1021.
10. *New methods of increasing titanium and its alloys biotolerance* (rezumat) - M.Burlibasa, A.Iliescu, I.Roman, C.Fratila, C.Cristache, L.Soare - **Clinical Oral Implants Research**, ISSN:0905-7161, Ed.Wiley-Blackwell, 19, no.9, 2008, p.948.
11. *Microstructural and citotoxicity evaluation for different surface treatments of TA6V4 alloy* - A.Colceriu, C.Fratila, I.Roman, M.Moldovan, M.Trif, C.Prejmerean, C.Tamas - **European Cells and Materials**, ISSN 1473-2262, Ed. AO Research Institute Davos, Vol. 16(I), 2008, p.29.
12. *Obtaining a hydroxyapatite-tricalcium phosphate mixture for metal-ceramic composites for implantology* - C. Fratila, V. Badila, I. Roman, A. Ioncea, E.Neagu - **Journal of Chemistry**, 58, 8, 2007, p.720 ÷ 724.

International conferences:

1. *Effects of titanium-based nanotube films on osteoblasts behaviour; in vitro toxicity and biocompatibility analysis of TiO₂-based nanotube films on osteoblasts* Miruna-Silvia Stan, Cornel Fratila, Ioan Roman, Anca Dinischiotu **European Society of Toxicology in Vitro 2012 International Conference, ESTIV2012**, Lisabona, October 16 -19, 2012
2. *Processus de purification ga sous-produits obtenus a partir de l'industrie d'alumine* - Maria GHEORGHITA, Luminita MARA, Victoria PURCARU, Cornel FRATILA, Vasile PREDICA, Cornel SIMU; **la 7e édition du Colloque français-roumain de chimie appliquée** – COFrRoCA 2012, Bacău, Roumanie, 27–29 iunie 2012
3. *Studies on Anodized Titanium and Ti6Al4V Alloy Bioactivity* - Ioan Roman, Laura Soare, Roxana Trusca, Cornel Fratila, Mihai-Bogdan Bucur, Gabriela Tanase, Mihai Burlibasa, Dana-Catrinel Ispas - **19th Annual Meeting of the European Association for Osseointegration (EAO)**, Glasgow, England, October 6-9, 2010;
4. *Interdisciplinary studies on titanium and titanium alloys experimental dental implants* - M.L.Soare, I.Roman, E.Alexandrescu, C.Fratila, A.Petre, A.Dinischiotu, Al.Serban –

EAO 18th Annual Scientific Meeting, Monaco, September 30 – October 3, 2009;

5. *Obtinerea unei biocompatibilitati avansate in implantologia orala, prin utilizarea straturilor nanostructurate, ceramice, crescute electrochimic pe titant-* Ruxandra Stanescu, I.Roman, M.Augustin, C.Fratila, Gabriela Tanase, Laura Iosif - **AI XII-lea Congres International UNAS**, Bucuresti, 8÷11 Octombrie, 2008;
6. *New methods of increasing titanium and its alloys biotolerance* - M.Burlibasa, A.Iliescu, I.Roman, C.Fratila, C.Cristache, L.Soare - **17th Annual Scientific Congress of the European Association for Osseointegration (EAO)**, Warsaw, Poland, September, 2008;
7. *Interdisciplinary evaluation of ceramic nanostructured titanium oxide layers stability in Ringer solution* - Ruxandra Sfeatcu, I.Roman, E.Vasile, Maria Laura Soare, C.Fratila, Marioara Moldovan, M.Burlibasa - **FDI Annual World Dental Congress**, Stockholm, Suedia, 24÷27 Septembrie, 2008;
8. *Ceramic Nanostructured Layers Electrochemically Grown On Titanium*, Maria-Laura Soare, I. Roman, C.Frățilă, E.Vasile, A.Petre - „**N&N08**” **5th International Conference On Nanosciences & Nanotechnologies** - Thessaloniki, Greece, 14-16 July 2008;
9. *The increase of titanium implants biocompatibility by anodic oxidation* - Ruxandra Sfeatcu, I. Roman, C. Fratila, M. Burlibasa, Laura Soare, C. Cristache - The 6th International Congress of Oro-dental Health and Management in the Black Sea Countries, Albena, Bulgaria, 25-28 mai 2008;
10. *Microstructural and cytotoxicity evaluation for different surface treatments of TA6V4 alloy* - Aurora Colceriu, C.Fratila, I.Roman, Marioara Moldovan, Marcela A. Trif, Cristina Prejmorean, Codruta L.Tamas - **14th Swiss Conference on Biomaterials**, Basel, Elvetia, 8 Mai 2008;
11. *The achievement of advanced biocompatibility in oral implantology using nanostructured ceramic layers, electrochemically developed in titanium* - I.Popovici, M. Burlibasa, I. Roman, A. Mihai, C. Fratila, Laura Soare - **The 6th Congress of Baltic Association for Maxillofacial and Plastic Surgery**, Tallinn, Estonia, 15÷17 Mai, 2008;
12. *Nickel alloying influence on cobalt base dental superalloys. electrochemical characteristics* - I. Roman, Elvira Alexandrescu, Dana Daisa, Laura Soare, T. Traistaru, A. Petre, C. Fratila - **13th Congress of the BaSS** (Balkan Stomatological Society), Limassol, Cyprus, 1÷4 Mai, 2008;
13. *Electrochemical Evaluation of the Ceramic Nanostructural Layers Stability in Ringer Solution* - I. Roman, C. Fratila, E. Vasile, P. Nita – “**EUROMAT 2007**”, Nurnberg, Germania, 10÷13 Septembrie 2007;

National projects

- 1 "Composite titanium - hydroxyapatite achieved by electrophoresis for medical applications," MATNANTECH Program, Subprogram 1, Contract Financing 192 (401) / 2004, **project director** CSII Corneliu Fratila, National Research Institute for Nonferrous and Rare Metals Development - IMNR, 2004 ÷ 2006;
2. "Nanostructures Ceramic, multifunctional grown on titanium and its alloys," MATNANTECH Program, Contract Financing 124 (301) / 2003, **project director** Corneliu Fratila CSII, National Research Institute for Nonferrous and Rare Metals Development - IMNR, 2003 ÷ 2005 ;
3. "Developing advanced biocompatible implants using nanostructured coatings, ceramics, electrochemically grown on titanium", PN2, Direction of Research 7, Contract Financing 71-057/18.09.2008, CSII Corneliu Fratila **scientific responsible contract**, National Research Institute for Nonferrous and Rare Metals Development - IMNR, 2007-2010;

4. "Advanced Composites for Dental Implantology", PN2, Contract Financing 72-158/2008 CSII Corneliu Fratila **scientific responsible contract**, National Research Institute for Nonferrous and Rare Metals Development - IMNR, 2008-2011

5. "New materials and systems for prosthetics and dental implantology" Excellence Research Program, Contract Financing 2 / 03.10.2005, CSII Corneliu Fratila, **scientific responsible contract** National Research Institute for Nonferrous and Rare Metals Development - IMNR, 2005-2008

International projects

„Nanostructured titanium oxide sensors for Biomedical measurement" MNT-ERA.NET financing contract 7-033/2011 CSII Corneliu Fratila, IMNR, **scientific responsible contract**, National Research Institute for Nonferrous and Rare Metals Development - IMNR, 2011-2012