



## Europass Curriculum Vitae

### Personal information

First name(s) / Surname(s) **Adrian Manescu**  
Address  
Telephone(s)  
E-mail(s)  
Nationality Romanian  
Date of birth 29/08/1975  
Gender Male

**Present occupational field** **Management, business administration**

**Past occupational field** **(bio)materials scientist, physicist**

### Work experience

Dates	15/06/2012 →
Occupation or position held	General manager
Main activities and responsibilities	Administration, Business development
Name and address of employers	SafeFleet Srl, Via Marsala 12, Ancona, Italy
Type of business sector	Telecom, IT
Dates	30/01/2013 →
Occupation or position held	Visiting Professor
Main activities and responsibilities	Theoretical and experimental aspects of non-destructive investigations in orthodontics and regenerative medicine
Name and address of employer	University of Medicine and Pharmacy "Victor Babes" Timisoara, Romania
Type of business or sector	Research, Education
Dates	01/01/2003 – 31/07/2016
Occupation or position held	Biophysicist
Main activities and responsibilities	Non-destructive materials and biomaterials testing, regenerative medicine and tissue engineering
Name and address of employer	Università Politecnica delle Marche, DISCO Department, Via Tronto 10, 60126 Ancona (Italy)
Type of business or sector	Research, Education

Dates 01/10/2007 →  
 Occupation or position held Teaching Professor  
 Main activities and responsibilities Teaching Physics  
 Name and address of employer Università Politecnica delle Marche, Faculty of Agriculture, Piazza Roma 22, 60100 Ancona (Italy)  
 Type of business or sector Education

Dates 01/02/1998 - 30/06/2001  
 Occupation or position held Physicist  
 Main activities and responsibilities Non-destructive materials testing  
 PhD position in Biophysics and biochemistry  
 Name and address of employer Università Politecnica delle Marche  
 Piazza Roma 22, 60100 Ancona (Italy)  
 Type of business or sector Research, Education

Dates 01/10/1997 - 31/01/1998  
 Occupation or position held Physicist  
 Main activities and responsibilities Non-destructive materials testing  
 Name and address of employer National R&D Institute for Welding and Material Testing  
 Bd. Mihai Viteazu 30, 300222 Timisoara (Romania)  
 Type of business or sector Research institute

## Education and training

Dates 15/09/1989 - 30/06/1993  
 Title of qualification awarded Junior programmer  
 Principal subjects / occupational skills covered Informatics, mathematics, physics  
 Name and type of organisation providing education and training "Grigore Moisil" High School  
 Str. Ghirlandei 4, 300231 Timisoara (Romania)  
 Level in national or international classification Bacalaureate

Dates 01/10/1993 - 30/06/1997  
 Title of qualification awarded Diploma in Physics  
 Principal subjects / occupational skills covered General physics  
 Name and type of organisation providing education and training West University (University)  
 Bd. Vasile Parvan 4, 300223 Timisoara (Romania)  
 Level in national or international classification University degree in Physics, B.Sc.

Dates 01/10/1998 - 30/09/2002  
 Title of qualification awarded PhD in Biochemistry and Biophysics  
 Principal subjects / occupational skills covered Biophysics, Materials Science  
 PhD Thesis: "Influence of plasma spray parameters on the characteristics of a compositional gradient Ti + HA coating on Ti6Al4V substrate for biomedical applications"

Name and type of organisation providing education and training  
 Level in national or international classification

Universita Politecnica delle Marche (University)  
 Piazza Roma 22, 60100 Ancona (Italy)  
 PhD

**Personal skills and competences**

Mother tongue(s)

**Romanian**

Other language(s)

Self-assessment  
 European level (\*)

**English**  
**Italian**  
**German**  
**French**  
**Hungarian**

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user
C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user
B1	Independent user	B2	Independent user	B2	Independent user	B1	Independent user	B2	Independent user
B1	Independent user	B1	Independent user	A2	Basic User	A2	Basic User	A2	Basic User
A2	Basic User	A2	Basic User	A1	Basic User	A1	Basic User	A1	Basic User

(\*) Common European Framework of Reference (CEF) level

Social skills and competences

- Extremely organised person
- Excellent abilities for synthetic and global views over concrete situations
- Good communication and presentation skills gained during various talks
- Result-oriented work capacity
- Problem-solving attitude and skills
- Responsibility, Self-respect and self-reliance
- Strong referential values of fairness, equity and dignity
- Team spirit gained during the participation in various EU research projects
- Good ability to adapt to and work in new multicultural environments acquired by living and studying in a foreign country in an international environment.

Organisational skills and competences

- Large experience in team and project management, as a result of participating to about 10 EU research projects; being involved in project coordination, responsible of different workpackages and tasks. List of the projects I was involved in:

1. Brite-Euram "Development of Models for the Prediction of the In-Service Performance Of MMC components" MISPOM - Coordinator: *Aerospaziale – F (01/04/97)*, Contract no: BRPR-CT97-0396.
2. Inco-Copernicus "Industrially relevant know-how exchange and transfer in the field of thermal coatings with high-tech materials" COATRANS - Coordinator: *University of Ancona (Italy) (18/12/98)*, Contract no: ERBIC15CT980815
3. Inco-Copernicus "Composite apatite-base ceramics implants for surgery: research, development and small-scale production" CABICIS - Coordinator: *University of Ancona (Italy)(18/12/98)*, Contract no: ERBIC15 CT98 0816
4. Thematic Network "Training Industry in Neutron Strain Scanning" TRAINSS - Coordinator: *Rutherford Appleton Laboratory – UK (01/01/98)*, Contract no: BRRT-CT96-0028
5. CRAFT project: "Development of improved casting technology for silver jewelery", AGCASTJEWEL, Coordinator: FEM, Germany, Contract no: G1ST-CT-2002-50174
6. EUMEDIS "The European Virtual Institute for Jewellery Technology " VI-JET- Coordinator: *EJTN GEIE.(01/01/2002)*, Contract no: G7RT-CT-2001-05065

	<p>7. Network of Excellence "Knowledge-based Multicomponent Materials for Durable and Safe Performance", KMM-NoE, Contract no: 502243.</p> <p>8. CRAFT "A Challenge for Materials Science: Bringing True Baroque and Medieval Sound Back to Life in Historic and New Pipe Organs", TRUESOUND, Coordinator: Max-Planck Institute Stuttgart (Germany), Contract no: COOP-CT-2004-005876</p> <p>9. Collaborative project FP7: "Micro and Nanocrystalline Functionally Graded Materials for Transport Applications" (MATRANS), Co-ordinator: KMM-VIN, Grant agreement no: 228869.</p> <p>10. FP7 – SCIENCE-IN-SOCIETY-2010-1, Immersion in the Science Worlds through the Arts (ISWA), Co-ordinator: Universita Politecnica delle Marche, Ancona (Italy), Grant agreement no: 266656.</p> <ul style="list-style-type: none"> <li>- Experience in organizing events, like Summer Schools, Workshops and Conferences.</li> <li>- Seven years of teaching experience at University level.</li> </ul>
Technical skills and competences	<p>Large experience in non-destructive materials and biomaterials testing, microstructural investigations, micro computed tomography investigations for regenerative medicine and tissue engineering, residual stress analysis, etc., using different techniques:</p> <ul style="list-style-type: none"> <li>- Synchrotron radiation micro computed tomography, Neutron and X-rays scattering: neutron / X-ray diffraction, Small angle neutron/ X-ray scattering.</li> <li>- Scanning electron microscopy, transmission electron microscopy, atomic force microscopy.</li> </ul>
Computer skills and competences	<p>Excellent Computer Proficiency, in:</p> <ul style="list-style-type: none"> <li>- Editing: Microsoft Word, Microsoft PowerPoint, AdobePageMaker, AdobeAcrobat(Writer/Reader)</li> <li>- Databases: MicrosoftAccess, MicrosoftExcel</li> <li>- PhotoEditing: AdobePhotoShop, CorelPhotoPaint</li> <li>- PC Operation Systems: Windows 2000 to Windows 7, Mac iOS</li> <li>- Networking: WWW, OutlookExpress, MicrosoftOutlook, HTMLScript</li> <li>- Data analysis softwares like: VGStudio Max, Kaleidagraph, Origin, etc</li> </ul> <p>Programming: Pascal, C++.</p> <p>Technical and Practical Abilities in Desk Equipment.</p>
Artistic skills and competences	Photography, decoration.
Other skills and competences	Cooking, reading, 7 years of professional table tennis, protection of nature and environment (former member of Connaitre e Proteger la Nature).
Driving licence(s)	B
<b>Additional information</b>	<p>Membership of Professional Bodies:</p> <p>CNISM – Consorzio Nazionale Interuniversitario per le Scienze Fisiche della Materia, Italy Romanian Society of Neutron Scattering, Romania</p> <p>Participated to more than 25 conferences and summer schools, with lectures or posters.</p> <p>Invited talks to different Universities and Research centres; some of them:</p> <ul style="list-style-type: none"> <li>- Invited talk at BNC Budapest (Hungary), February 2006</li> </ul> <p>"Microstructural characterization and residual stress analysis in historic organ reed tongues "</p>

- Keynote lecture at the 22nd International conference on surface modification technologies, Trollhattan (Sweden), 22-24.09.2008.  
"Residual stress analysis by neutron and X-ray diffraction, possibilities and limitations"
- Keynote lecture at International School on advanced material science and technology "G. Occhialini", 11th edition, Jesi (Italy), 03.09.2009  
"Structural investigations by Atomic Force Microscopy"
- Invited talk at the 4th International conference on Innovative technologies for joining advanced materials, Timisoara (Romania), 10-11.06.2010.
- Invited talk at BIOCERAMICS 25 International conference: "High resolution x-ray tomography and holotomography for non-invasive characterization of biomaterials and biological systems", Bucharest 2013.
- Invited talk at REDEOR International Conference: "From Orthopedics to Neurology – 3D Investigations by Synchrotron Radiation Micro Computed Tomography", Venice 2015.
- Keynote lecture at BIOREMEDIATION 2015 International conference: "High resolution x-ray micro computed tomography and holotomography as 3D non-invasive characterization methods for biomaterials and regenerative medicine applications in the fields of orthopedics and dentistry", Baile Felix 2015.

## Annexes

### List of publications:

- [1] G. Albertini, F. Fiori, A. Manescu, F. Rustichelli – "Determination of residual stresses in weld components by means of neutron diffraction", BID-Sudura (Romanian Welding Institute's Journal), Nr. 3 / 1999.
- [2] A. Giuliani, A. Manescu, F. Rustichelli, V. Stanic – "Neutron diffraction for stress analysis in metal matrix composites materials", Proceedings of the International School on advanced material science and technology "G. Occhialini", Jesi, August 1999.
- [3] S. Bertini, F. Fiori, E. Girardin, A. Giuliani, A. Manescu, F. Rustichelli - "Residual Stresses in Some New Generation Coating Samples: Measurements by X-Ray and Neutron Diffraction", Proceedings of the International Conference Thermal Spraying, Timisoara June 2000.
- [4] G. Bruno, F. Fiori, E. Girardin, A. Giuliani, L. Koszegi, R. Levy-Tubiana, A. Manescu, F. Rustichelli – "Residual Stress Determination in Several MMC Samples Submitted to Different Operating Conditions", Journal of Neutron Research, Vol.9., pp.107-117 (2001).
- [5] G. Albertini, E. Labbé, A. Lodini, A. Manescu, R.L. Peng, A. Ponzetti, - "Neutron measurement and finite element analysis of stress in a centrifugal bowl made of duplex steel", Journal of Neutron Research, Vol.9., pp.305-312 (2001).
- [6] D. Dehelean, P. Fogarassy, A. Manescu, N. Markocsan, F. Rustichelli, "Residual Stress Determination In Near-Net Shape Formed Specimens Obtained by Thermal Spraying", Proceedings of the International Thermal Spray Conference ITSC 2002, Essen (Germany), March 2002.
- [7] R. Schneider, T. Poeste, A. Manescu, A. Pyzalla, "Stress and Strain Analysis: The new Material Research Diffractometer E3 at BENSC", Proceedings of the ESS European Conference, Bonn (Germany), May 2002.
- [8] Markocsan, N., Fogarassy, P., Manescu, A., Dehelean, D., Rustichelli, F.: "Residual stress determination in built-up components made by thermal spraying", BID-Sudura (Romanian Welding Institute's Journal), Nr. 4, 2002.
- [9] G. Albertini, A. Giuliani, R. Lin Peng, A. Manescu, A. Ponzetti, "Determination of the residual stress in a centrifuge bowl by Neutron diffraction", Applied Physics A Materials Science & Processing Volume 74, Issue s01, pp s1406-s1408 (2002).
- [10] G. Bruno, E. Girardin, A. Giuliani, A. Manescu, F. Rustichelli, B. O'Donnell, P. E. McHugh, "Residual Stresses in Aerospace MMC Materials by Neutron Diffraction", Applied Physics A Materials Science & Processing Volume 74, Issue s01, pp s1701-s1703 (2002).
- [11] G. Annibali, G. Bruno, A. Giuliani, A. Manescu, M. Marcantoni, F. Rustichelli, F. Turquier, "Neutron diffraction measurements for residual stress analysis in automotive steel gears", Applied Physics A Materials Science & Processing Volume 74, Issue s01, pp s1698 s1700 (2002).
- [12] A. Manescu, G. Albertini, P. Fogarassy, A. Lodini, N. Markocsan, "Residual stress analyses in compositional gradient Ti + HA coatings on Ti6Al4V substrate for biomedical application", Journal of Neutron Research, Volume 12, Number 1-3, Pages 147-152 (2002).
- [13] Markocsan, N., Manescu, A., Fogarassy, P.: "Plasma thermal spraying of

functionally graded Titanium-Hydroxyapatite coatings", Paper to be IIW document: IIW Doc IC - 1014-2003 (presented at The 56th Annual Assembly of the International Institute of Welding, Sub-Commission I-C, July 2003, Bucharest).

- [14] P. Fogarassy, A. Manescu, N. Markocsan, F. Rustichelli, "Residual stress analysis in near net-shape formed specimens obtained by thermal spraying", *Physica B: Condensed Matter*, Volume 350, Issues 1-3, Supplement 1, Pages E537-E539 (2004).
- [15] G. Albertini, A. Giuliani, A. Manescu, "Residual stress analysis on tensile MMC specimens after loading/unloading tests in several conditions", *Physica B: Condensed Matter*, Volume 350, Issues 1-3, Supplement 1, Pages E499-E501 (2004).
- [16] F. Fiori, G. Albertini, E. Girardin, A. Giuliani, A. Manescu, F. Rustichelli, "Neutron and synchrotron radiation non-destructive methods for the characterisation of materials for different applications", *Journal of Alloys and Compounds*, Volume 382, Issues 1-2, 17 November 2004, Pages 39-45 (2004).
- [17] F. Fiori, E. Girardin, A. Giuliani, A. Manescu, F. Rustichelli, "Neutron and synchrotron radiation non-destructive methods for residual stress determination in materials for industrial applications", O.N. Senkov et al. (eds.), *Metallic Materials with High Structural Efficiency*, 425-432(2004).
- [18] G. Bruno, M. Ceretti, E. Girardin, A. Giuliani and A. Manescu, "Relaxation of residual stress in MMC after combined plastic deformation and heat treatment", *Scripta Materialia*, Volume 51, Issue 10, Pages 999-1004 (2004).
- [19] N. Markocsan, P. Nylén, P. Fogarassy, A. Manescu, "Residual stress analysis in plasma sprayed free-standing zirconia components", *Proceedings of the International Thermal Spray Conference*, pp. 101-106 (2004).
- [20] A. Manescu, A. Giuliani, F. Fiori, B. Baretzky, "Residual stress analysis in reed pipe brass tongues of historic organs", *Materials Science Forum* Vols. 524-525, pp. 969-974 (2006).
- [21] T. Moskalewicz, B. Schaffer, A. Manescu, F. Rustichelli, A. Czyrska-Filemonowicz, "Microstructure characterisation and stress analysis of the Ti<sub>48</sub>Al<sub>2</sub>Ag coating on the near- $\alpha$  titanium alloy", *Surface & Coatings Technology* 201 (2007) 7635-7640 (2007).
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- [25] F. Fiori, V. Calbucci, V. Casalegno, M. Ferraris, M. Salvo, A. Giuliani, A. Manescu, F. Rustichelli, "Neutron diffraction measurement of residual stresses in CFC/Cu/CuCrZr joints for nuclear fusion technology", *J. Phys.: Condens. Matter* 20 (2008) 104260.
- [26] A. Giuliani, F. Fiori, J. Gysens, A. Manescu, F. Rustichelli, "Analysis of neutron diffraction profiles in bronze archaeological statuettes produced by solid lost wax casting", *J. Phys.: Condens. Matter* 20 (2008) 104251.
- [27] C. Lyphout, P. Nylén, A. Manescu, T. Pirling, "Residual Stresses Distribution Through Thick HVOF Sprayed Inconel 718 Coatings", Published in the Proceedings of the International Thermal Spray Conference ITSC-08, Maastricht, Netherlands, pp. 588-593, 2008
- [28] C. Renghini, E. Girardin, A.S. Fomin, A. Manescu, P. Robotti, S.M. Barinov, V.S. Komlev, G. Albertini, F. Rustichelli, "Plasma sprayed hydroxyapatite coatings from nanostructured granules", *Materials Science and Engineering B* 152 (2008) 86-90.
- [29] T. Moskalewicz, B. Wendler, F. Smeacetto, M. Salvo, A. Manescu, A. Czyrska-Filemonowicz, "Microstructure, mechanical properties and oxidation behavior of the TiAl(Si,Ag) coating on near- $\alpha$  titanium alloy", *Surface & Coatings Technology* 202 (2008) 5876-5881.
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- [31] C. Lyphout, P. Nylén, A. Manescu, T. Pirling, "Residual Stresses Distribution through Thick HVOF Sprayed Inconel 718 Coatings", *Journal of Thermal Spray Technology*, Springer Boston, Volume 17, Numbers 5-6, 1059-9630 (Print) 1544-1016 (Online) (2008).

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- [33] G. Albertini, M. Cegielski, H. Egner, F. Fiori, A. Ganczarski, E. Girardin, A. Giuliani, S. Hernik, V. Komlev, M. Kula, A. Manescu, A. Muc, M. Oleksy, F. Rustichelli, J. Skrzypek, F. Spinozzi, "Innovative Technological Materials" (book), published by Springer (May 2010).
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- [35] A. Giuliani, C. Frati, A. Rossini, V. Komlev, C. Lagrasta, M. Savi, S. Cavalli, M. Capogrossi, F. Quaini, A. Manescu, F. Rustichelli, "High-resolution X-ray Microtomography for Three-dimensional Visualization of Cardiac Progenitor Cells Homing in Infarcted Rat Hearts", *Journal of Tissue Engineering and Regenerative Medicine*, vol.5, p.e168-e178 (2011).
- [36] Alessandra Giuliani, Fabrizio Fiori, Adrian Manescu, Vladimir S. Komlev, Chiara Renghini and Franco Rustichelli, "Synchrotron Radiation and Nanotechnology for Stem Cell Research", *Stem Cells in Clinic and Research*, Ali Gholamrezanezhad (Ed.), ISBN: 978-953-307-797-0, InTech, Available from: <http://www.intechopen.com/articles/show/title/synchrotron-radiation-and-nanotechnology-for-stem-cell-research> (2011).
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- [38] F. Fiori, A. Giuliani, A. Manescu, C. Renghini and F. Rustichelli. "Synchrotron Radiation and Nanotechnology for Stem Cell Researchers", in "Adult and Embryonic Stem Cells" – "Stem Cell Biology and Regenerative Medicine", Edited by Kursad Turksen, DOI:10.1007/978-1-61779-630-2\_8 (2012).
- [39] Sara Tavella, Alessandra Ruggiu, Alessandra Giuliani, Francesco Brun, Barbara Canciani, Adrian Manescu, Katia Marozzi, Michele Cilli, Delfina Costa, Yi Liu, Federica Piccardi, Roberta Tasso, Giuliana Tromba, Franco Rustichelli, Ranieri Cancedda, "Bone Turnover in Wild Type and Pleiotrophin-Transgenic Mice Housed for Three Months in the International Space Station (ISS)", *PLoS ONE* 7(3): e33179. doi:10.1371/journal.pone.0033179 (2012)
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- [41] Alessandra Giuliani, Adrian Manescu, Emanuel Larsson, Giuliana Tromba, Giuseppe Luongo, Adriano Piattelli, Francesco Mangano, Giovanna Iezzi, Carlo Mangano, "In vivo regenerative properties of Coralline-derived (Biocoral) scaffold grafts in human maxillary defects: Demonstrative and Comparative Study with Beta-Tricalcium Phosphate and Biphasic Calcium Phosphate by Synchrotron Radiation X-ray Microtomography", *Clinical Implant Dentistry and Related Research*, published online: 25 JAN 2013, DOI: 10.1111/cid.12039 (2013).
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transgenic mice over-expressing lipocalin-2 in bone", *Journal of Cellular Physiology*, DOI 10.1002/jcp.24391 (2013).

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