Europass Curriculum Vitae

Personal information

First name(s) / Surname(s)	**NICOLETA – VIORICA DUMITRASCU**		
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Nationality	Romanian		
Gender	Female		

Present employment / position

Professor *Emeritus*

Work experience

Dates	1974 - 1977, professor, Industrial school no. 7, Iasi 1977 - 1990, assistant, Department of Physics, *Gheorghe Asachi* Technical University, Iasi 1990 - 2001, lecturer, *Alexandru Ioan Cuza* University of Iasi 2001 - 2007, assoc. professor, *Alexandru Ioan Cuza* University of Iasi 2007 – professor, *Alexandru Ioan Cuza* University of Iasi 2009 – PhD supervisor.
Occupation or position held	Professor
Name and address of employer	Faculty of Physics, *Alexandru Ioan Cuza* University of Iasi, Romania
Type of business or sector	

Education and training

Dates	• D.Sc. in Plasma Physics (1990) • M. Sc. in Optics, Spectroscopy and Plasma Physics (1974), with average grade 10 (on a scale of 10 maximum) • B.Sc. in Physics (1973), with average grade 9.83 (10 maximum)
Title of qualification awarded	Physicist
Principal subjects/occupational skills covered	• Biomaterials characterization. Biocompatibility testing of materials for medical applications • Plasma techniques for immobilization of biological molecules (heparin, albumin, IgG, antibiotics etc.) onto the polymeric surfaces • Reactions of polymerization under the plasma conditions • Optical and electrical diagnosis of plasma. Dielectric barrier discharges • Waves and instabilities in low temperature plasmas.

Name and type of organisation providing education and training	Faculty of Physics, *Alexandru Ioan Cuza* University of Iasi, Romania.
Personal skills and competences	• Biomaterials and biocompatibility testing of materials used in medical applications • Optical and electrical diagnosis of plasmas at atmospheric pressure • Mechanisms of polymerization • Techniques of biomolecules characterization
Mother tongue(s)	Romanian
English	

Self-assessment	**Understanding**		**Speaking**		**Writing**
European level (*)	Listening	Reading	Spoken interaction	Spoken production	
	C1 Proficient user	C1 Proficient user	A2 Basic user	A2 Basic user	B1 Independent user

Organisational skills and competences	• Participation at International programmes of scientific cooperation: Brancusi (2000-2002), COST (2003-2007), CEEPUS (2003-2007; 2007-2012, 2012-2015) Socrates / Erasmus (2000-2015). • Convenor at ESF Exploratory Workshop about *Manipulation of Biomaterials surface by Plasma Processing* (May 2010) • Peer review activities at *Applied Surface Science, Elsevier*, *IEEE Transactions on Plasma Physics, J. of Coll. Inter Sci.*, *ACS Appl. Mat & Interface*, *Acta Biomaterialia.*
Teaching activities	Courses (2009-2016): • *Biomaterials and Biocompatibility.* Master II, Plasma Physics, Biophysics and Medical Physics – in Romanian and English • *Ecosystem and Interactions with human.* Master II, Plasma Physics • *Elements of Plasma Physics. Medical applications.* Bachelor III, Biophysics and Medical Physics.
Scientific research activity	**a)** Scientific papers • 53 articles ISI: 45 articles in the topic of *Plasma treatments of biomaterials surface* and *Biocompatibility testing of materials.* 5 Books: - *Biomaterials and Plasma Processing*, Eds. N. Dumitrascu**,** I.Topala, ISBN: 978-973-703-543-1, 2011. - *Polimeri degradabili si biocompatibili* (Cap. VI: Tratamente cu plasma ale polimerilor naturali si sintetici. Importanta si aplicatii in domeniul medical (G. Borcia, N.Dumitrascu), eds: C.Vasile et al., Tehnopress, Iasi, (in Romanian), 2009. - *Biomaterials and Biocompatibility* , pgs. 312, Ed. Univ. Al.I.Cuza Iasi, 2007. - *Dielectric barrier discharge and treatments of polymer surfaces* - in Plasmas non thermiques et applications, vol. II, N. Dumitrascu, Ed. Univ. Al. I. Cuza Iasi, 2003. - *Introducere în Fizica Plasmei,* partea I-a, N. Dumitrascu, Ed. Junimea, Iasi, 1999. **b)** Scientific grants • 6 grants : 3 grants CNCSIS as director, and 3 grants CEEX as coordinator • 1 international grant as convenor, Workshop ESF: *Manipulation of Biomaterials by Plasma Processing*, Iaşi, 26- 30 May, 2010 • 2 international grants: Brancusi and COST (*Plasma Polymers and Related Materials*) as member • 11 grants CNCSIS as member. **c)** ISI citations: • Over 688 citations in ISI journals, 2 books and 1 USA patent. 17 Hirsch factor.

Other activities	**a)** Visiting professor • *Plasma processing of materials and biointerfaces,* Leopold Franzens University, Innsbruck, Austria, June 2012. • *Le traitement plasma a pression atmospherique de polymeres pour applications bio-medicales,* Institut Européen des Membranes, Montpellier, France, 10 Avril-10 May 2007. • *Biomaterials. Tests of biocompatibility* - Master cours, Leopold Franzens University, Innsbruck, Austria, May 2005. **b)** Invited talks (title of lecture) • *Medical applications of atmospheric pressure plasma. Tissue – polymeric implants interface,* Université de Lille 1, France, September, 2014. • *Plasma Physics Laboratory of Iasi*, at Conference „*40 Jahre Institut fur Ionenphysik in Innsbruck"*, Leopold Franzens University, Innsbruck, Austria, December 2007. • *Optimization of the blood-polymer materials interface by plasma treatments,* 4th Joint workgroup meeting COST 527, University of Barcelona, Catalunya, Sant Feliu de Guixols, Spania, 2-5 October 2005. • *Hemocompatibility of PA-6 surfaces treated by a dielectric barrier discharge,* University of Barcelona, Spain, June 2004. • *DBD and its medical applications*, Leopold Franzens University, Innsbruck, Austria, May 2004. • *Traitements des surfaces polymeres par une decharge a barriere dielectrique*, Université Paris-Sud Orsay, France, December 2003. • *Tests of biocompatibiliy*, Comenius University, Bratislava, Slovacia, May 2002. **c).** Co - editor at the Analele "Alexandru Ioan Cuza University of Iasi". Plasma Physics section (2000-2005). **d).** Coordinator Socrates /Erasmus at the Faculty of Physics (2000-2010).

N. Dumitrascu

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