



Europass Curriculum Vitae

Personal information

First name(s) / Surname(s) **Violeta-Florina Scurtu**
Address 41B, Valea Rusului, 420103 Bistrita (Romania)
Telephone(s) 0263212137 Mobile | 0740662479
E-mail(s) florinadeac@chem.ubbcluj.ro
Date of birth 14 June 1985
Gender Female

Desired employment / Occupational field

PhD

Work experience

Dates October 2013-present
July 2008-October 2012
Occupation or position held Research assistant (PN-II-ID-PCE-2012-4-0488, director Conf.dr. Radu Silaghi-Dumitrescu)
Research assistant (Ctr. IDEI 107/2007; PN II ID PCCE 2/140/2008)
Main activities and responsibilities Laboratory researcher
Name and address of employer Babes-Bolyai University
1, Mihail Kogalniceanu, 400084 Cluj-Napoca (Romania)
Type of business or sector Protein purification, modification and their characterisation. Enzymatic assays. Blood substitutes

Education and training

Dates October 2009-November 2012
Title of qualification awarded **PhD in chemistry**
Principal subjects / occupational skills covered Blood substitutes and their interaction with oxidative and nitrosative stress agents
Name and type of organization providing education and training Babes-Bolyai University (Chemistry and Chemical Engineering)
11, Arany Janos, 400028 Cluj-Napoca (Romania)
Level in national or international classification ISCED 6
Dates October 2008-June 2009
Title of qualification awarded **Master of Science**
Principal subjects / occupational skills covered Cellular biotransformation
Name and type of organisation providing education and training Babes-Bolyai University (Biology and Geology)
44, Gheorghe Bilascu, 400015 Cluj-Napoca (Romania)
Level in national or international classification ISCED 6

Dates	October 2004-June 2008
Title of qualification awarded	Bachelor's degree in Chemistry
Principal subjects / occupational skills covered	Organic Chemistry, Inorganic Chemistry, Analytical Chemistry, Biochemistry, Technological Chemistry, Physical Chemistry
Name and type of organisation providing education and training	Babes-Bolyai University (Chemistry and Chemical Engineering) 11, Arany Janos, 400028 Cluj-Napoca (Romania)
Level in national or international classification	ISCED 5

Personal skills and competences

Mother tongue(s) **Romanian**

Other language(s)

Self-assessment
European level (*)

English

French

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

(*) [Common European Framework of Reference \(CEF\) level](#)

Social skills and competences Very good relationship with co-workers;

Technical skills and competences -Protein handling (electrophoresis, gel filtration, anion exchange chromatography);
-Enzymatic assay, enzyme kinetics;
-Stop-flow techniques applied in fast reaction studies;
-Transition metals and free radicals studies using Electron Resonance Spectroscopy;

Computer skills and competences -Good command of Microsoft Office™ tools (Word™, Excel™ and PowerPoint™);
-Basic knowledge of several software applied in chemistry (ChemDraw, ClustalX2, ViewerLite, GraphPad Prism, Origin);

Artistic skills and competences music (chours);

Other skills and competences team spirit, originality, initiative, seriousness, modesty

Driving licence(s) B

Appendix List of publication

15. Pop, Veronica-Anita; Scurtu Violeta-Florina; Mahut, Sonia Diana; Silaghi-Dumitrescu, Radu. "The antioxidant –modulated effect of nitrite on the oxy forms of hemoglobin polymers", *Romanian Journal of Biochemistry*, submitted

14. Scurtu, Florina; Zolog, Oana; Iacob, Bianca; Silaghi-Dumitrecu, Radu. "Hemoglobin-albumin crosslinking with disuccinimidyl suberate (DSS) and/or glutaraldehyde for blood substitutes", *Artificial Cells, Blood Substitutes, and Immobilization Biotechnology*, **2014**, 42(1), 13-17

13. Scurtu, Violeta-Florina; Mot, Augustin; Silaghi-Dumitrescu, Radu. "Protein-based blood substitutes: recent attempts at controlling pro-oxidant reactivity with and beyond hemoglobin", *Pharmaceuticals*, **2013**, 6(7), 867-880

12. Ficher-Fodor, Eva; Mot, Augustin; Deac, Florina; Árkosi, Mariann; Silaghi-Dumitrescu, Radu. "Toward hemerythrin-based blood substitutes: comparative performance to hemoglobin on human

leukocytes and umbilical vein endothelial cells”, *Journal of Biosciences*, **2011**, 36(2), 215-221

11. Bischin, Cristina; Deac, Florina; Silaghi-Dumitrescu, Radu; Worrall, Jonathan; Rajagopal, Badri; Cooper, Chris. Ascorbate peroxidase activity of cytochrome c, *Free Radical Research*, **2011**, 45(4), 439-444

10. Zolog Oana, Mot Augustin-Catalin, Deac Florina, Fischer-Fodor Eva, Silaghi-Dumitrecu Radu, “A New Polyethyleneglycol-Derivatized Hemoglobin Derivative with Decreased Oxygen Affinity and Limited Toxicity”, *The Protein Journal*, **2011**, 30(1), 27-31

9. Iacob, Bianca; Deac, Florina; Damian, Grigore; Silaghi-Dumitrescu, Radu. “Hemoglobin-albumin crosslinked copolymers: reduced prooxidant reactivity”, *Artificial Cells, Blood Substitutes, and Biotechnology*, **2011**, 39(5), 293-297

8. Deac, Florina; Cotelan, Nicoleta; Kis, Zoltan; Silaghi-Dumitrescu, Radu. “A dithionite-induced six-coordinated species at the heme in deoxy haemoglobin”, *Metal Elements in Environment, Medicine and Biology Tome X*, , Gabriela Garban, Radu Silaghi-Dumitrescu, Ludovic Sayti, Eds., **2010**, “Eurobit” Publishing House, Timisoara, Romania, pp 121-126.

7. Deac, Violeta-Florina; Bolfa, Ana-Maria; Magdas, Cristian; Sevestre, Bogdan; Turc, Silvia; Silaghi-Dumitrescu, Radu. “Hemoglobin-based blood substitutes: wich haemoglobin to use?”, *Romanian Journal of Biochemistry*, **2010**, 47(2), 135-141

6. Deac, Violeta-Florina; Iacob, Bianca; Eva, Fischer-Fodor; Damian, Grigore; Silaghi-Dumitrescu, Radu. “Derivatization of hemoglobin with periodate-generated reticulation agents: evaluation of oxidative reactivity for potential blood substitutes”, *Journal of Biochemistry*, **2011**, 149(1), 75-82

5. Deac, Violeta-Florina; Todea, Anamaria; Silaghi-Dumitrescu, Radu. “Glutaraldehyde derivatization of hemoglobin: a potential blood substitute”, *Metal Elements in Environment, Medicine and Biology Tome IX*, Radu Silaghi-Dumitrescu, Gabriela Garban, Eds., **2009**, Cluj University Press, Cluj-Napoca, Romania, pp 165-173.

4. Arkosi, Mariann-Kinga; Deac, Florina; Silaghi-Dumitrescu, Radu. “Hemoglobin peroxidase activity: interaction with hydroquinone and anthracene”, *Metal Elements in Environment, Medicine and Biology Tome IX*, Radu Silaghi-Dumitrescu, Gabriela Garban, Eds., **2009**, Cluj University Press, Cluj-Napoca, Romania, pp 99-110.

3. Silaghi-Dumitrescu, Radu; Bischin, Cristina; Deac, Florina; Kis, Zoltan; Mot, Augustin; Makarov, Sergei V. “Unusual metal oxidation states in metalloproteins and related complexes: from degenerate orbitals to apoptosis”, *Metal Elements in Environment, Medicine and Biology Tome IX*, Radu Silaghi-Dumitrescu, Gabriela Garban, Eds., **2009**, Cluj University Press, Cluj-Napoca, Romania, pp 174-182.

2. Deac, Violeta-Florina; Todea, Anamaria; Bolfa, Ana Maria; Podea, Paula; Petrar, Petronela; Silaghi-Dumitrescu, Radu.” Ascorbate binding to globins”, *Romanian Journal of Biochemistry*, **2009**, 46(2), 115–121.

1. Silaghi-Dumitrescu, Radu; Deac, Florina. “The redox reactivity of globins: the chicken and egg paradox”, *Metal Elements in Environment, Medicine and Biology*, Corneliu Davidescu, Gabriela Garban, Iosif Gergen, Simona Dragan, Nicolae Vaszilcsin, Adina Avacovici, Eds., **2008**, “Eurobit” Publishing House, Timisoara, Romania, pp 271-276.

Posters:

17.”Characterization of Hemoglobin Albumin Copolymers with potential Application as Blood Substitutes”

Florina Deac, O. Zolog, C. Bischin, V. Pop, E. Fischer-Fodor, S. Astilean, G. Damian, R. Silaghi-Dumitrescu

Advanced Spectroscopies on Biomedical and Nanostructured Systems, Cluj-Napoca, Romania, 05-07 Septembrie **2011**

16. “Strategies for combatting autooxidation in blood, relevant for blood substitute preparation and chemotherapy”, Vicentiu Taciuc, Bianca Iacob, Florina Deac, Augustin Mot, , Denisa Hathazi, Radu

Silaghi-Dumitrescu,

Metal Elements in Environment, Medicine and Biology Tome X, Timisoara, November **2010**

15. "Derivatization of hemoglobin with periodate-generated reticulation agent: evaluation of oxidative reactivity for potential blood substitutes", Bianca Iacob, Florina Deac, Eva Fischer-Fodor, Grigore Damian, Vasile Miclaus, Radu Silaghi-Dumitrescu

31th National Conference, October **2010**, Ramnicu-Valcea, Romania

14. "Cisplatin modulated free radical-generating reactivity in hemoglobin and in cytochrome c", Cristina Bischin, Vicentiu Taciuc, Violeta-Florina Deac, Grigore Damian, Silvia Turc, Cristian Magdas, Eva Fischer-Fodor, Radu Silaghi-Dumitrescu,

31th National Conference, October **2010**, Ramnicu-Valcea, Romania

13. "A new protocol for derivatization of hemoglobin with polyethylene glycol: evaluation for potential blood substitutes", Florina Deac, Oana Zolog, Augustin Mot, Alina Roman, Eva Fischer-Fodor, Radu Silaghi-Dumitrescu,

31th National Conference, October **2010**, Ramnicu-Valcea, Romania

12. "Strategies for combatting autooxidation in blood, relevant for blood substitute preparation and chemotherapy", Bianca Iacob, Florina Deac, Augustin Mot, Vicentiu Taciuc, Denisa Hathazi, Radu Silaghi-Dumitrescu,

ICOSECS7, September **2010**, Bucharest, Romania

11. "Ascorbate peroxidase activity with cytochrome c", Cristina Bischin, Violeta-Florina Deac, Radu Silaghi-Dumitrescu,

ICOSECS7, September **2010**, Bucharest, Romania

10. "Derivatization of hemoglobin with periodate-generated reticulation agent: evaluation of oxidative reactivity for potential blood substitutes", Florina Deac, Bianca Iacob, Eva Fischer-Fodor, Grigore Damian, Vasile Miclaus, Radu Silaghi-Dumitrescu,

ICOSECS7, September **2010**, Bucharest, Romania

9. "Derivatization of hemoglobin with periodate-generated reticulation agent: evaluation of oxidative reactivity for potential blood substitutes", Florina Deac, Bianca Iacob, Eva Fischer-Fodor, Grigore Damian, Vasile Miclaus, Radu Silaghi-Dumitrescu,

3rdEuCheMS Chemistry Congresss, August-September **2010**, Nurnberg, Germany

8. "Hemoglobin peroxidase activity: interaction with hydroquinone and anthracene", Mariann-Kinga Arkosi, Florina Deac, Radu Silaghi-Dumitrescu

7th International Conference "Students for students", April **2010**, Cluj-Napoca, Romania,

7."Glutaraldehyde derivatization of Hemoglobin: a potential blood substitute", Florina Deac, Anamaria Todea, Radu Silaghi-Dumitrescu

Metal Elements in Environment, Medicine and Biology Tome IX, Cluj-Napoca, October **2009**

6. "Hemoglobin peroxidase activity: interaction with hydroquinone and anthracene", Mariann-Kinga Arkosi, Florina Deac, Radu Silaghi-Dumitrescu,

Metal Elements in Environment, Medicine and Biology Tome IX, Cluj-Napoca, October **2009**

5. "Hemoglobin is an ascorbate-binding protein with remarkably high affinity for ascorbate"

Anamaria Todea, Florina Deac, Paula Podea, Radu Silaghi-Dumitrescu,

SOE Workshop "From Molecules to Functionalised Materials" – Cluj-Napoca,

October **2009**

4. "Hemoglobin is an ascorbate peroxidase with a remarkably high affinity for ascorbate", Anamaria Todea, Deac Florina, Paula Podea, Radu Silaghi-Dumitrescu

11th Central and Eastern European NMR Symposium, Cluj-Napoca, Romania, October **2009**

3. "Hemoglobin is an ascorbate peroxidase with remarkably high affinity for ascorbate",

Florina Deac, Radu Silaghi-Dumitrescu

6th International Conference "Students for students", April **2009**, Cluj-Napoca, Romania

2. "Hemoglobin is an ascorbate-binding protein with remarkably high affinity for ascorbate",

Anamaria Todea, Florina Deac, Paula Podea, Radu Silaghi-Dumitrescu

6th International Conference "Students for students", April **2009**, Cluj-Napoca, Romania

1. "Hemoglobin is an ascorbate peroxidase with remarkably high affinity for ascorbate"

Florina Deac, Radu Silaghi-Dumitrescu

