



## Europass Curriculum Vitae

### Personal information

Surname(s) / First name(s) **Septelean Raluca Anamaria**  
Address(es) 11, Arany Janos  
E-mail sraluca@chem.ubbcluj.ro  
Nationality Romanian  
Date of birth 22.11.1981

### Work experience

Dates 2005-2009  
Occupation or position held PhD student  
Name and address of employer Faculty of Chemistry and Chemical Engineering, Babes-Bolyai University

### Education and training

Dates -October 2005 - November 2009  
Title of qualification awarded PhD in chemistry  
Principal subjects/occupational skills covered doctoral studies in Organometallic Chemistry, Computational Chemistry  
Name and type of organisation providing education and training - Faculty of Chemistry and Chemical Engineering, Babes-Bolyai University / Laboratoire Hétérochimie Fondamentale et Appliquée, Université Paul Sabatier, Toulouse, France

Dates -October 2004 – September 2005  
Title of qualification awarded - Master of Science  
Principal subjects/occupational skills covered - Applied Organometallic and Coordination Chemistry  
Name and type of organisation providing education and training - Faculty of Chemistry and Chemical Engineering, Babes-Bolyai University

Dates -October 2000- July 2004  
Title of qualification awarded - Bachelor's degree in Chemistry  
Name and type of organisation providing education and training - Faculty of Chemistry and Chemical Engineering, Babes-Bolyai University

**Personal skills and Competences**

Mother tongue(s)  
Self-assessment  
*European level (\*)*

**Romanian**

		Understanding				Speaking				Writing	
		Listening		Reading		Spoken interaction		Spoken production			
<b>English</b>	C 2	Advanced	C 2	Advanced	C 2	Advanced	C 1	Advanced	C 2	Advanced	
<b>French</b>	C 2	Advanced	C 2	Advanced	C 2	Advanced	C 2	Advanced	B 2	Intermediat e	
<b>Spanish</b>	C 1	Advanced	C 1	Advanced	C 1	Advanced	B 2	Intermediat e	B 1	Intermediat e	

(\*) *Common European Framework of Reference for Languages*

**Organizing skills and competences**

Director of a research project for young PhD students financed by the Romanian Government (CNCSIS PNII-TD 418)

**Technical skills and competences**

Use of argon based dry-box for sensitive air manipulations, use of inert atmosphere conditioned Schlenk techniques and utilization of NMR spectrometer Avance 300 MHz for different nuclei.

**Computer skills and competences**

Fully skilled in user level with the following operative systems: Windows (95 – Vista); fully skilled in the following text editing software: Microsoft Office and Open Office, Common Chemical drawing programs (ChemOffice, ChemWin etc.), skilled in specialized software for visualization or computational calculations (Molekel, Molden, GabEdit, Gaussview, Gaussian, Spartan, HyperChem)

## Stays abroad:

- February 2005 - July 2005 : Laboratoire Hétérochimie Fondamentale et Appliquée, Université Paul Sabatier, Toulouse, France (Socrate-Erasmus scholarship)
- November 2005 - May 2006 : Laboratoire Hétérochimie Fondamentale et Appliquée, Université Paul Sabatier, Toulouse, France
- October 2006 – July 2007 : Laboratoire Hétérochimie Fondamentale et Appliquée, Université Paul Sabatier, Toulouse, France. (Eiffel scholarship of the French Ministry)
- December 2007 – January 2008 – Laboratory Inorganica 2, Pontificia Universidad Católica de Chile, Santiago de Chile, Chile
- September 2008: Laboratoire Hétérochimie Fondamentale et Appliquée, Université Paul Sabatier, Toulouse, France.
- 26-29 march 2010: Training School „Models, Structures, Spectroscopies – Contemporary Methods”, Pecs, Hungary
- May 15<sup>th</sup> – June 15<sup>th</sup> 2010: Research stage at University of science Pecs, Hungary

## Scientific Papers

### Published Papers

- 1. Phosphavinylidene(oxo)phosphorane  $\text{Mes}^*\text{P}(\text{O})=\text{C}=\text{PMes}^*$ : A Diphosphaallene Featuring  $\lambda^5\sigma^3$ - and  $\lambda^3\sigma^2$ -Phosphorus Atoms,** R. Septelean, H. Ranaivonjatovo, G. Nemes, J. Escudié, I. Silaghi-Dumitrescu, H. Gornitzka, L. Silaghi-Dumitrescu, S. Massou, *Eur. J. Inorg. Chem.*, **2006**, 4237–4241.
- 2. Secondary Interactions in Heteroallenic Systems with P=C-E Units,** G. Nemes, I. Silaghi-Dumitrescu, P. M. Petrar, R. Septelean, L. Silaghi-Dumitrescu, *Studia Univ. Babeş-Bolyai, Chimia*, **2007**, LII(1), 3-10.
- 3. Towards new double bonded organophosphorus derivatives of C=P=C=P type,** G. Nemes, R. Septelean, P. M. Petrar, L. Silaghi-Dumitrescu, I. Silaghi-Dumitrescu, *Studia Univ. Babeş-Bolyai, Chimia*, **2007**, LII(4), 84-89.
- 4. vic-Dichlorodiphosphapropenes – Synthesis and Coordination Ability,** R. Septelean, G. Nemes, J. Escudie, I. Silaghi-Dumitrescu, H. Ranaivonjatovo, P. M. Petrar, H. Gornitzka, L. Silaghi-Dumitrescu, N. Saffon, *Eur. J. Inorg. Chem*, **2009**, 5, 628.
- 5. Lower Rim Silyl Substituted Calix[8]arenes,** N. Fleuret, S. Paic, G. Nemes, R. Septelean, P. Petrar, I. Silaghi-Dumitrescu, *Studia Univ. Babeş-Bolyai*, **2009**, LIV, 3, 81.

### Posters

- 1.  $\text{Mes}^*\text{P}(\text{O})=\text{C}=\text{PMes}^*$  : le premier phosphavinylidène(oxo)phosphorane,** R. Septelean, H. Ranaivonjatovo, G. Nemes Cretiu, J. Escudie, I. Silaghi-Dumitrescu, H. Gornitzka, L. Silaghi-Dumitrescu, S. Massou, *XV<sup>eme</sup> Journee de Chimie Grand Sud-Ouest, Montpellier, France, 25 novembre 2005.*

2. **Theoretical investigation of –P=C=P(O)- phosphallenes**, R. Septelean, G. Nemes, I. Silaghi-Dumitrescu, **TOPMOL 2006**, Cluj-Napoca, Romania, **september 25-30<sup>th</sup> 2006**.
3. **Heteroalene continand elemente grele din grupele 14 si 15**, G. Nemes, I. Silaghi-Dumitrescu, P. M. Petrar, R. Septelean, L. Silaghi-Dumitrescu, J. Escudie, H. Ranaivonjatovo, H. Gornitzka, **A XXIX-a Conferinta Nationala de Chimie**, Calimanesti Caciulata, Romania, **4-6 octombrie 2006**.
4. **Precursori pentru fosfaalene : Sinteza si Caracterizarea Structurala a Mes\*P=CCI-PCI(S)t-Bu**, R. Septelean, H. Ranaivonjatovo, G. Nemes, J. Escudie, I. Silaghi-Dumitrescu, H. Gornitzka, **A XXIX-a Conferinta Nationala de Chimie**, Calimanesti Caciulata, Romania, **4-6 octombrie 2006**.
5. **Nouveaux diphosphaallènes à atomes de phosphore di- et tricoordonnés  $\lambda^3\sigma^2$  et  $\lambda^5\sigma^3$** , R. Septelean, H. Ranaivonjatovo, G. Nemes, J. Escudié, I. Silaghi-Dumitrescu, H. Gornitzka, **Toulouse, France, 23 avril 2007**.
6. **Mes\*P=CX<sub>2</sub>-W(CO)<sub>5</sub>: De Nouvelles Briques Moleculaires en Chimie Organometallique**, R. D. Pop, I. Silaghi-Dumitrescu, G. Nemes, R. Septelean, H. Ranaivonjatovo, H. Gornitzka, J. Escudié, **4<sup>th</sup> International Chemistry Conference Toulouse-Kiev**, Toulouse, France, **june 06-08<sup>th</sup>, 2007**.
7. **Towards new diphosphapropenic systems**, R. Septelean, G. Nemes, P. M. Petrar, L. Silaghi-Dumitrescu, I. Silaghi-Dumitrescu, J. Escudie, H. Ranaivonjatovo, H. Gornitzka, **23rd International Conference on Organometallic Chemistry**, Rennes, France, **july 13-16<sup>th</sup>, 2008**.
8. **Noi Chelati ai 2,3-dicloro-1,3-difosfapropenelor cu paladiu**, R. Septelean, G. Nemes, L. Silaghi-Dumitrescu, I. Silaghi-Dumitrescu, J. Escudie, H. Gornitzka, **Sesiunea de comunicari stiintifice ocazionata de Zilele Universitatii Alexandru Ioan Cuza**, Iasi, Romania, **24-26 octombrie 2008**.
9. **Relative Stabilities of C<sub>2</sub>H<sub>2</sub>P<sub>2</sub>O isomers**, R. Septelean, G. Nemes, I. Silaghi-Dumitrescu, J. Escudie, **Molecular Modeling in Chemistry and Biochemistry, MOLMOD 2009**, Cluj-Napoca, Romania, **april 2<sup>nd</sup>-4<sup>th</sup>**.
10. **P(III) / P(V) isomers of CX<sub>2</sub>P<sub>2</sub>O systems**, R. Septelean, G. Nemes, I. Silaghi-Dumitrescu, **Molecular Modeling in Chemistry and Biochemistry, MOLMOD 2009**, Cluj-Napoca, Romania, **april 2<sup>nd</sup>-4<sup>th</sup>**.
11. **Coordination Behaviour of Vic-Dichlorodiphosphapropenes towards Palladium Complexes**, R. Septelean, G. Nemes, P. M. Petrar, I. Silaghi-Dumitrescu, J. Escudie, H. Ranaivonjatovo, H. Gornitzka, **11<sup>th</sup> Central and Eastern European NMR Symposium, CEUM 2009**, Cluj-Napoca, **4-6 october 2009**.
12. **Theoretical evaluation of the effect induced by R groups on the stability of diphosphaallene systems**, R. Septelean, G. Nemes, P. Petrar, J. Escudié, I. Silaghi-Dumitrescu, **Molecular Modeling in Chemistry and Biochemistry, MOLMOD 2010**, Cluj-Napoca, Romania, **28 May**.

### **Oral Presentations**

**1. Towards the synthesis of new diphosphaallenes featuring  $\lambda^5\sigma^3$  and  $\lambda^3\sigma^2$  phosphorus atoms**, R. A. Septean, H. Ranaivonjatovo, G. Nemes, J. Escudié, I. Silaghi-Dumitrescu, H. Gornitzka, **4<sup>th</sup> International Chemistry Conference Toulouse-Kiev**, Toulouse, France, **june 06-08<sup>th</sup>, 2007**.