



## Europass Curriculum Vitae



### Personal information

First name(s) / Surname(s) **Matei-Maria UȚĂ**  
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Nationality Romanian  
Date of birth October 14, 1975  
Gender male

### Work experience

Dates 2006-present  
Occupation or position held system administrator  
Main activities and responsibilities network communications  
Name and address of employer Babeş-Bolyai University of Cluj-Napoca, Faculty of Chemistry and Chemical Engineering

Dates 2002-2006  
Occupation or position held PhD student in quantum chemistry  
Main activities and responsibilities chemical research  
Name and address of employer Babeş-Bolyai University of Cluj-Napoca, Faculty of Chemistry and Chemical Engineering

Dates 2000-2002  
Occupation or position held chemistry teacher  
Main activities and responsibilities teaching  
Name and address of employer Emil Racoviță High School, Baia Mare

### Education and training

Dates 2002-2006  
Title of qualification awarded PhD in Chemistry  
Name and type of organisation providing education and training Babeş-Bolyai University, Cluj-Napoca

Dates 2001-2003  
Title of qualification awarded Master of Science in Applied Informatics and Programming  
Name and type of organisation providing education and training Technical University, Cluj-Napoca

Dates 1994-1998  
Title of qualification awarded Bachelor's degree in Chemistry  
Name and type of organisation providing education and training Babeş-Bolyai University, Cluj-Napoca

European level (\*)

**English  
Language**

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
C2	Advanced	C2	Advanced	C2	Advanced	C2	Advanced	C2	Advanced

(\*) [Common European Framework of Reference for Languages](#)

Computer skills and competences

- administration of computers and networks under windows and linux
- use of most common applications, such as Microsoft Word, Excel, Powerpoint
- use of specialized chemistry software, such as Gaussian, Spartan, ChemOffice

**Additional information**

**Annexes**

## Publications

### 9. Carbon Dioxide Activation:

#### Hydration by Carbonic Anhydrase and Related Systems – What Makes a Good Catalyst?

R.Silaghi-Dumitrescu, M.M.Uță, A.Kállay, J.Bódis *J.Mol.Struct.Theochem*, **2010**, 942 (1), 15-18.

### 8. The Unique Palladium-Centered Pentagonal Antiprismatic Cationic Bismuth Cluster:

#### A Comparison of Related Metal-Centered 10-Vertex Pnictogen Cluster Structures by Density Functional Theory

R.B.King, I.Silaghi-Dumitrescu, M.M.Uță, *Inorg.Chem.*, **2009**, 48 (17), 8508-8514.

### 7. Endohedral Nickel, Palladium, and Platinum Atoms in 10-Vertex Germanium Clusters:

#### Competition between Bicapped Square Antiprismatic and Pentagonal Prismatic Structures

R.B.King, I.Silaghi-Dumitrescu, M.M.Uță, *J.Phys.Chem.A*, **2009**, 113 (3), 527-533.

### 6. Beyond the Icosahedron:

#### A Density Functional Theory Study of 14-Atom Germanium Clusters

R.B.King, I.Silaghi-Dumitrescu, M.M.Uță, *Eur.J.Inorg.Chem.*, **2008**, 25, 3996-4003.

### 5. Polyhedral Structures with Three-, Four-, and Five Fold Symmetry in Metal-Centered Ten-Vertex Germanium Clusters

R.B.King, I.Silaghi-Dumitrescu, M.M.Uță, *Chem.Eur.J.*, **2008**, 14, 4542-4550.

### 4. Nitrite Linkage Isomerism in Bioinorganic Chemistry:

#### A Case for Mechanistic Promiscuity

R.Silaghi-Dumitrescu, M.M.Uță, *Studia.Univ.Babes-Bolyai Chemia*, **2008**, 53 (2), 61-65.

### 3. Beyond the Wade-Mingos Rules in Bare 10- and 12-Vertex Germanium Clusters: Transition States for Symmetry Breaking Processes

R.B.King, I.Silaghi-Dumitrescu, M.M.Uță, *J.Chem.TheoryComput.*, **2008**, 4, 209-215.

### 2. Density Functional Theory Study of Twelve-Atom Germanium Clusters:

#### Conflict Between the Wade-Mingos Rules and Optimum Vertex Degrees

R.B.King, I.Silaghi-Dumitrescu, M.M.Uță, *J.Chem.Soc. Dalton Trans.*, **2007**, 364-372.

### 1. Density Functional Theory Study of 10-Atom Germanium Clusters:

#### Effect of Electron Count on Cluster Geometry

R.B.King, I.Silaghi-Dumitrescu, M.M.Uță, *Inorg.Chem.*, **2006**, 45, 4974-4981.