

PERSONAL INFORMATION

Maria Ștefana Lehene



📍 Cluj-Napoca (Romania)

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Date of birth | Nationality

EDUCATION AND TRAINING

- 2019-Present **Ph. D. in chemistry**
Babes-Bolyai University, Faculty of Chemistry and Chemical Engineering, Cluj-Napoca (Romania)
- 2017-2019 **Master of Science in Chemical Engineering**
Babes-Bolyai University, Faculty of Chemistry and Chemical Engineering, Cluj-Napoca (Romania)
Engineering of organic and biochemical processes
- 2013-2017 **Bachelor of Science Degree in Chemical Engineering**
Babes-Bolyai University, Faculty of Chemistry and Chemical Engineering, Cluj-Napoca (Romania)
Engineering and informatics of chemical and biochemical processes
- 2009-2013 **High School Diploma**
George Coșbuc Bilingual National College, Cluj-Napoca (Romania)
Natural Sciences

RESEARCH EXPERIENCE

- 2024-Present Research Associate Assistant in Chemistry at Babeș-Bolyai University (Cluj-Napoca, Romania)
"Targeted Tumor Therapy with multifunctional platinum(IV)-drug conjugates, T3Pt, (part-time)
PNRR-III-C9-2023-I8-CF"
- 2019-2022 Research Associate Assistant in Chemistry at Babeș-Bolyai University (Cluj-Napoca, Romania)
"Semi-artificial oxygen carriers", PN-III-P2-PED-2293

PERSONAL SKILLS

Mother tongue(s) Romanian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
German	C1	C1	C1	C1	C1
DEUTSCHES SPRACHDIPLOM – Zweite Stufe					
English	C1	C1	C1	C1	C1
CERTIFICATE IN ADVANCED ENGLISH (CAE)					

- Communication skills
- good communication skills gained through my experience as a volunteer in The Chemistry Students' Organization and as a group leader during the four years of university
 - good ability to adapt to different work environments

Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Proficient user	Proficient user	Proficient user

Levels: Basic user - Independent user - Proficient user
[Digital competences - Self-assessment grid](#)

- good command of Microsoft Office packages (Word, Excel, Power Point)
- good command of programs: MATLAB, CHEMCAD, LabVIEW, ASPEN, Origin
- laboratory experience: record and interpret UV-vis spectra, prepare samples and interpret data from Raman spectra, prepare and run SDS-PAGE and interpret/analyse results thereof (including semi-quantitative analysis), basic protocols in protein manipulation and purification

Driving licence B

ADDITIONAL INFORMATION

Scientific publications:

1. Rami Doukeh, Daniela Craciun, **Maria Lehene**, Adrian M.V Branzanic, Alexandru Lupan, Radu Silaghi-Dumitrescu,. An iron-free nitrogenase? Computational estimation of the ability to bind/activate N₂ in manganese and cobalt complexes. *Journal of Coordination Chemistry*. **2024**: 1-10.
2. Bianca Stoean, **Maria Lehene**, Cezara Zagrean-Tuza, Radu Silaghi-Dumitrescu, Castelia Cristea, Luiza Gaina, Transient Radical Species and Oxygen Colorimetric Indicators Grounded on Phenothiazinium Dyes. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2024**, 320: 124602.
3. Luana Radu, Alexandru Lupan, **Maria Lehene**, Radu Silaghi-Dumitrescu, Weak Interactions Between Hydroacids/Binary Acids: Some Considerations from a DFT Analysis. *Studia Universitatis Babes-Bolyai, Chemia*, **2024**, 69 (2): 121-134.
4. Eva Fischer-Fodor, Kinga Szabo, Florina Scurtu, **Maria Lehene**, Radu Silaghi-Dumitrescu, Toxicity of hemoglobin derivatized with oxidized adenosine triphosphate against tumoral human cells. *Studia Universitatis Babes-Bolyai, Chemia*, **2023**, 3(68).
5. Radu Silaghi-Dumitrescu, Iulia Patrascu, **Maria Lehene**, Iulia Bercea, Comorbidities of COVID-19 Patients. *Medicina*, **2023**, 8(59), 1393.
6. **Maria Lehene**, Adrian MV Brânzanic, Radu Silaghi-Dumitrescu, The adducts of cyano-and aquacobalamin with hypochlorite. *JBIC Journal of Biological Inorganic Chemistry*, **2023**, 6(28), 583-589.

7. **Maria Lehene**, Cezara Zăgrean-Tuza, Niculina Hădade, Andreea Aghion, Raluca Șeptelean, Stefania D Iancu, Adrian MV Brânzanic, Radu Silaghi-Dumitrescu, A complex of cobalamin with an organic peroxide. *New Journal of Chemistry*, **2023**, 47(39), 18178-18185.
8. Diana Pleșa, **Maria Lehene**, Radu Silaghi-Dumitrescu, On the reaction of Co (II) cobalamin with hydrogen peroxide. *Reaction Kinetics, Mechanisms and Catalysis*, **2023**, 1-9.
9. Oleg Rudenco, **Maria Lehene**, Alexandru Lupan, Cezara Zagrean-Tuza, Bianca Stoean, Artiom Gaina-Gardiuta, Adelina Maria Ulici, Radu Silaghi-Dumitrescu. Versatility of thiourea dioxide as redox agent in globins: Case study with myoglobin. *Inorganica Chimica Acta*, **2023**, 551, 121474.
10. Szilárd Pesek, **Maria Lehene**, Adrian MV Brânzanic, Radu Silaghi-Dumitrescu. On the Origin of the Blue Color in The Iodine/Iodide/Starch Supramolecular Complex. *Molecules*, **2022**, 27(24), 8974.
11. **Maria Lehene**, Diana Plesa, Stefania Ionescu-Zinca, Stefania D Iancu, Nicolae Leopold, Sergei V Makarov, Adrian MV Brânzanic, Radu Silaghi-Dumitrescu. Adduct of Aquacobalamin with Hydrogen Peroxide. *Inorganic Chemistry*, **2021**, 60(17), 12681-12684.
12. **Maria Lehene**, Eva Fischer-Fodor, Florina Scurtu, Niculina D Hădade, Emese Gal, Augustin C Mot, Alina Matei, Radu Silaghi-Dumitrescu. Excess ascorbate is a chemical stress agent against proteins and cells. *Pharmaceuticals*, **2020**, 13(6), 107.
13. Alina Matei, Cristina Puscas, Iulia Patrascu, **Maria Lehene**, Julia Ziebro, Florina Scurtu, Monica Baia, Dan Porumb, Robert Totos, Radu Silaghi-Dumitrescu. Stability of Glutaraldehyde in Biocide Compositions. *International journal of molecular sciences*, **2020**, 21(9), 3372.

Other contributions:

1. Radu Silaghi-Dumitrescu, Flavia-Malina Oana, **Maria Lehene**. Antioxidants in Clinical Treatments: A Case Study With Vitamin C. *Fundamental and Biomedical Aspects of Redox Processes*, IGI Global, **2023**, 315-326.

Conferences

1. **Maria Lehene**, Diana Plesa, Stefania Ionescu-Zinca, Stefania D. Iancu, Nicolae Leopold, Sergei V. Makarov, Adrian M. V. Brânzanic and Radu Silaghi-Dumitrescu. Adduct of Aquacobalamin with Hydrogen Peroxide. **The 16th European Biological Inorganic Chemistry Conference (EuroBIC-16)**, Grenoble, France, July 2022.
2. **Maria Lehene**, Diana Plesa, Stefania Ionescu-Zinca, Stefania D. Iancu, Nicolae Leopold, Sergei V. Makarov, Adrian M. V. Brânzanic and Radu Silaghi-Dumitrescu. Adduct of Aquacobalamin with Hydrogen Peroxide. **The 36th National Chemistry Conference**, Calimanesti-Caciulata, Romania, October 2022.
3. **Maria Lehene**, Radu Silaghi-Dumitrescu. A complex of cobalamin with an organic peroxide. **The Annual International Conference of RSBMB**, Cluj-Napoca, Romania, September 2023.
4. **Maria Lehene**, Cezara Zagrean-Tuza, Stefania D. Iancu, Sergiu R. Cosma, Adrian M. V. Brânzanic and Radu Silaghi-Dumitrescu. The chlorite adduct of aquacobalamin: contrast with chlorite dismutase. **The 17th European Biological Inorganic Chemistry Conference (EuroBIC-17)**, Munster, Germany, August 2024.

Awards

1. Research Scholarship from "WORLD FEDERATION OF SCIENCE", Switzerland.
2. Research Scholarship from "Project POCU/380/6/13/123886: Entrepreneurship for innovation through doctoral and postdoctoral research".
3. Excellentia Award, X. Edition for academic, didactic and volunteer activity from Babes-Bolyai University.
4. Doctoral Advanced Fellowship (CNFIS-FDI-2023-F-0214) from Babes-Bolyai University.
5. Doctoral Advanced Fellowship (nr.21PFE/ 30.12.2021, ID: PFE-550-UBB) from Babes-Bolyai University.