

Claudia-Maria Mihut

 **Home** : Aleea Petuniei nr 14 ap 42 sc C, 550114, Sibiu, Romania

 **Email**: claumihut01@gmail.com  **Phone**: (+40) 773722360

Date of birth: 01/07/1996 **Nationality**: Romanian

WORK EXPERIENCE

„Lucian Blaga” University of Sibiu

City: Sibiu | **Country**: Romania

[07/2023 – Current] **Research Assistant**

The project "*Interdisciplinary Excellence Platform for Research and Training: Arhin Lab (Laboratories for Archaeology, Heritage, IT, Biology)*", LBUS-HPI-ERG-2023-07.

„Lucian Blaga” University of Sibiu

City: Sibiu | **Country**: Romania

[17/08/2021 – Current] **Scientific laboratory technician**

Responsibilities:

- **Preparation of matrices for extraction**
- **Extraction of persistent organic pollutants** (liquid-liquid extraction, LLE)
- **Analysis of persistent organic pollutants** using a gas chromatograph coupled with a triple quadrupole mass spectrometer (Agilent technology)
- **Quantitative and qualitative analysis of compounds** using the MassHunter Quantitative and Qualitative software (Agilent technology)
- **Writing scientific articles** based on data analyses using statistical analysis programs
- **Extraction of pharmaceuticals** from sediment (solid-phase extraction, SPE)
- **Analysis of pharmaceuticals** using a liquid chromatograph coupled with a triple quadrupole mass spectrometer (Agilent technology)
- **Development of microplastic extraction methods** for water, sediment, and tissue
- **Use of FT-IR** for microplastic identification
- **Writing scientific articles** based on data analyses using statistical analysis programs (GraphPad Prism)
- **SARS-CoV-2 Viral RNA extraction** using an extraction kit (QIAamp Viral RNA Mini)
- **Sample amplification** using qRT-PCR
- **Analysis and interpretation of results**
- **Release of results**

„Lucian Blaga” University of Sibiu

City: Sibiu | **Country**: Romania

[01/07/2020 – 10/08/2021] **Biologist**

Project: "*Excellence in Research for the Evaluation and Monitoring of Emerging Pollutants in Continental Aquatic Ecosystems*", CNFIS-FDI-2020-0531

Responsibilities:

- **Preparation of matrices for extraction**
- **Extraction of persistent organic pollutants** (liquid-liquid extraction, LLE)
- **Analysis of persistent organic pollutants** using a gas chromatograph coupled with a triple quadrupole mass spectrometer (Agilent technology)
- **Quantitative and qualitative analysis of compounds** using MassHunter Quantitative and Qualitative software (Agilent technology)
- **Writing scientific articles** based on data analyses using statistical analysis software
- **Extraction of pharmaceuticals** from sediment (solid-phase extraction, SPE)

- **Analysis of pharmaceuticals** using a liquid chromatograph coupled with a triple quadrupole mass spectrometer (Agilent technology)
- **Development of microplastic extraction methods** for water, sediment, and tissue
- **Use of FT-IR** for microplastic identification
- **Writing scientific articles** based on data analyses using statistical analysis software (GraphPad Prism)
- **Extraction of SARS-CoV-2 Viral RNA** using an extraction kit (QIAamp Viral RNA Mini)
- **Sample amplification** using qRT-PCR
- **Analysis and interpretation of results**
- **Release of results**

„Lucian Blaga” University of Sibiu

City: Sibiu

[16/03/2020 – 31/05/2020] **Biologist**

Project: *"LIFE Nat.Sal.Mo - Grant Agreement LIFE17NAI/IT/00547 - Recovery of S. macrostigma: Application of Innovative Techniques and Participatory Governance Tools in the Rivers of Molise"*

Responsibilities:

- **Administrative document management**

„Lucian Blaga” University of Sibiu

City: Sibiu

[01/06/2019 – 31/12/2019] **Biologist**

Project: *"Excellence in Research on the Ecotoxicology of Pharmaceutical Pollutants"*, CNFIS-FDI-2019-0381

Responsibilities:

- **Extraction of pharmaceuticals** from sediment and water (solid-phase extraction, SPE)
- **Analysis of pharmaceuticals** using a liquid chromatograph coupled with a triple quadrupole mass spectrometer (Agilent technology)
- **Conducting toxicity experiments** to assess the effects of pharmaceuticals on *Daphnia magna*
- **DNA extraction** from sediment and snails (Zymo kit)
- **Development of microplastic extraction methods** for water and sediment
- **Use of FT-IR** for microplastic identification
- **Writing scientific articles** based on data analyses using statistical analysis software (GraphPad Prism)

„Lucian Blaga” University of Sibiu

City: Sibiu | **Country:** Romania

[01/08/2018 – 31/12/2018] **Biologist**

Project: *"Excellence in Research on the Ecotoxicology of Emerging Pollutants"*, CNFIS-FDI-2018-0317

Responsibilities:

- **Preparation of tissue for extraction**
- **Extraction of persistent organic pollutants** from tissue (liquid-liquid extraction, LLE)
- **Analysis of persistent organic pollutants** using a gas chromatograph coupled with a triple quadrupole mass spectrometer (Agilent technology)

- **Quantitative and qualitative analysis of compounds** using MassHunter Quantitative and Qualitative software (Agilent technology)
- **Writing scientific articles** based on data analyses using statistical analysis software (GraphPad Prism)

EDUCATION AND TRAINING

[2021 – Current]

PhD

„Lucian Blaga” University of Sibiu

City: Sibiu | **Country:** Romania |

[2018 – 2020]

Master's degree

„Lucian Blaga” University of Sibiu

City: Sibiu | **Country:** Romania |

Facultatea de Științe

Master: Biologie aplicată

[2015 – 2018]

Bachelor's degree

„Lucian Blaga” University of Sibiu

City: Sibiu | **Country:** Romania |

Facultatea de Științe

Licență: Biologie

LANGUAGE SKILLS

Mother tongue(s): Romanian

Other language(s):

English

LISTENING B2 READING B2 WRITING B1

SPOKEN PRODUCTION B1 SPOKEN INTERACTION B1

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user

PUBLICATIONS

ISI-indexed articles

- Curtean-Bănăduc, A., **Mihuț, C.**, Burcea, A., McCall, G. S., Matei, C., & Bănăduc, D. (2023). Screening for Microplastic Uptake in an Urbanized Freshwater Ecosystem: *Chondrostoma nasus* (Linnaeus, 1758) Case Study. *Water*, 15(8), 1578.
- Curtean-Bănăduc, A., Burcea, A., **Mihuț, C.M.** and Bănăduc, D., 2021. The Benthic Trophic Corner Stone Compartment in POPs Transfer from Abiotic Environment to Higher Trophic Levels—Trichoptera and Ephemeroptera Pre-Alert Indicator Role. *Water*, 13(13), p.1778.
- Burcea, A., Boeraș, I., **Mihuț, C.M.**, Bănăduc, D., Matei, C. and Curtean-Bănăduc, A., 2020. Adding the Mureș River Basin (Transylvania, Romania) to the list of hotspots with high contamination with pharmaceuticals. *Sustainability*, 12(23), p.10197.
- Curtean-Bănăduc, A., Burcea, A., **Mihuț, C.-M.**, Berg, V., Lyche, J. L., & Bănăduc, D. (2020). Bioaccumulation of persistent organic pollutants in the gonads of *Barbus barbus* (Linnaeus, 1758). *Ecotoxicology and Environmental Safety*, 201, 110852.

Conferences

- **September 20 - 24, 2024 - 9th Aquatic Biodiversity International Conference, Sibiu**
 - **September 24 - 27, 2019 - 7th Aquatic Biodiversity International Conference, Sibiu**
 - **May 24, 2019 - Studium Oecologicum, Student Conference, Oral Presentation:** "Assessment of Mureş River Pollution with Pharmaceutical Compounds for Human Use" (in collaboration with A. Bănăduc and A. Burcea)
 - **May 18, 2019 - Studium Oecologicum, Student Conference, Oral Presentation:** "Analysis of Persistent Organic Pollutants in the Gonads of *Barbus barbus* Individuals. Case Study: Mureş River." (in collaboration with A. Bănăduc and A. Burcea)
-

SKILLS ACQUIRED IN THE WORKPLACE

Skills

- **Isolation of persistent organic pollutants** from sediment and tissues (liquid-liquid extraction, LLE)
 - **Analysis of persistent organic pollutants** using a gas chromatograph coupled with a triple quadrupole mass spectrometer (Agilent technology)
 - **Isolation of pharmaceuticals** from water and sediment (solid-phase extraction, SPE)
 - **Analysis of pharmaceuticals** using a liquid chromatograph coupled with a triple quadrupole mass spectrometer (Agilent technology)
 - **Quantitative and qualitative analysis of compounds** using MassHunter Quantitative and Qualitative software (Agilent technology)
 - **Conducting toxicity experiments** to assess pharmaceuticals on *Daphnia magna*
 - **DNA extraction** from sediment and snails (Zymo kit)
 - **Development of microplastic extraction methods** for water, sediment, and tissues
 - **Use of FTIR-ATR** for microplastic identification
 - **Extraction of SARS-CoV-2 viral RNA** (QIAamp Viral RNA Mini kit)
 - **qRT-PCR application**
 - **Writing scientific articles** based on data analyses using statistical analysis software (GraphPad Prism)
-

ADDITIONAL TRAINING

Training

- **Participation in the GiMaRIS company training in the Netherlands, funded by Hasso Plattner**, aimed at developing a microplastic extraction method for water and sediment.
- **Participation in the course "Experimental Design and Data Analysis in Scientific Research – Module 1, 2019."**