



Laura-Edit Barabás

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☎ **Phone**: (+40) 742137826

Gender: Female **Date of birth**: 03/05/1994 **Nationality**: Romanian

WORK EXPERIENCE

Babeş-Bolyai University

City: Cluj-Napoca | **Country**: Romania

[2017 – 2020] **Student senator**

Student senator of Natural Sciences

Babeş-Bolyai University

City: Cluj-Napoca | **Country**: Romania

[08/2020 – 09/2021] **Research Assistant**

PROMYS - Promotion of Young Scientists in Eastern Europe
MIO-enzyme toolkit for the synthesis of non-natural amino acids
Enzymology and Applied Biocatalysis Research Center

Babeş-Bolyai University

Country: Romania

[2020 – 2022] **Fellowship Program**

POCU 123886 – Entrepreneurship for innovation through doctoral and postdoctoral research

Babeş-Bolyai University

[22/12/2022 – Current] **Chemist**

Babeş-Bolyai University

City: Cluj-Napoca | **Country**: Romania

[04/08/2023 – Current] **Research Assistant**

Advanced (multi)-enzymatic synthesis and purification processes for biobased furan derivatives – ASPIRE

EDUCATION AND TRAINING

[2009 – 2013] **High school**

Márton Áron National College

City: Miercurea Ciuc | **Country**: Romania | **Field(s) of study**: Ştiinţele ale naturii

[2013 – 2017] **Engineer**

Babeş-Bolyai University, Faculty of Chemistry and Chemical Engineering

City: Cluj-Napoca | **Country:** Romania | **Field(s) of study:** Chimia și Ingineria Substanțelor Organice, Petrochimie și Carbochimie

[2017 – 2019] **Master's degree**

Babeş-Bolyai University, Faculty of Chemistry and Chemical Engineering

City: Cluj-Napoca | **Country:** Romania | **Field(s) of study:** Chimia și Ingineria Nano- și Biomaterialelor

LANGUAGE SKILLS

Mother tongue(s): Hungarian

Other language(s):

English

LISTENING C1 READING C1 WRITING C1

SPOKEN PRODUCTION C1 SPOKEN INTERACTION C1

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

SKILLS

programe de modelare a moleculelor în 3D (Pymol, Hyperchem, Chemdraw) | ChemStation | European Computer Driving Licence

DRIVING LICENCE

Cars: B

PUBLICATIONS

[2021] [Lipase on carbon nanotubes - an active, selective, stable and easy-to-optimize nanobiocatalyst for kinetic resolutions](#)

React. Chem. Eng., 2021, **6**, 2391-2399

Gal, Cristian Andrei; Barabas, Laura Edit; Bartha Vari, Judith-Hajnal; Moisa, Madalina Elena; Balogh-Weiser, Diana; Bencze, Laszlo Csaba; Poppe, Laszlo; Paizs, Csaba; Tosa, Monica Ioana

[2021] [Immobilization of Phenylalanine ammonia-lyase on hydroxyapatite and hydroxyapatite composites](#)

Stud. Univ. Babeş-Bolyai, Chem., 2021, Vol. **66** Issue 1, p165-178. 14p.

BARTHA-VARI, JUDITH-HAJNAL; ELEKES-DARABONT, RENÁTA; BARABÁS, LAURA-EDIT; BARABÁS, RÉKA

[2022] [How to identify and characterize novel transaminases? Two novel transaminases with opposite enantioselectivity for the synthesis of optically active amines](#)

Mol. Catal., 2022, Vol. **531**, 112660

Cristian Andrei Gal, Laura-Edit Barabás, Andrea Varga, Pál Csuka, László Csaba Bencze, Monica Ioana Toşa, László Poppe, Csaba Paizs

[2023] [Transaminase – carbonic anhydrase bi-enzymatic cascade for preparation of \(R\)-1-arylethan-1-amines and \(S\)-1-arylethan-1-ols](#)

React. Chem. Eng., 2023

Laura Edit Barabás, Diana Maria Scrob, Andrea Varga, Loránd Kiss, Monica Ioana Toşa, Csaba Paizs

[Site-specifically immobilized D-amino acid dehydrogenase for the synthesis of D-phenylalanine](#)

[2025]

Authors: Krisztina Boros, András-Ernő Iszlai, Laura-Edit Barabás, László Csaba Bencze, Monica Ioana Toşa | **Journal Name:** New Biotechnol. | **Volume, Issue and Pages:** 90, 2025, 145-154

CONFERENCES AND SEMINARS

[17/05/2017 – 20/05/2017]

20th Transylvanian Students' Scientific Conference, Cluj-Napoca II.

Synthesis of phenothiazine and indole based Schiff bases

Laura-Edit Barabás, Balázs Brém, Emese Gál

[23/10/2018 – 26/10/2018]

24th International Conference on Chemistry, Sovata

Synthesis of phenothiazine and indole based Schiff bases, and their photophysical properties

Laura-Edit Barabás, Emese Gál

[02/04/2019 – 06/04/2019]

16th International Conference Students for Students, Cluj-Napoca

Asymmetric hydrogenation of chalcones

Laura-Edit Barabás, Laura Marincaş, Emese Gál

[29/10/2020]

26th International Conference on Chemistry II.

The development of bienzymatic cascade system for the conversion of benzaldehydes into valuable products

Laura-Edit BARABÁS, Cristian-Andrei GAL, Csaba PAIZS

[28/10/2021]

27th International Conference on Chemistry II.

Transaminases in casting for chemical industry - Two jackpots by one push of a single enzyme

Laura-Edit BARABÁS, Csaba PAIZS

[27/10/2022 – 29/10/2022]

28th International Conference on Chemistry

Kinetic resolution of racemic amines - in a new light

Laura-Edit BARABÁS, Csaba PAIZS

[22/06/2022 – 24/06/2022]

The 13th International Symposium of the Romanian Catalysis Society

Transaminases in casting for chemical industry - Two jackpots by one push of a single enzyme

Laura-Edit BARABÁS, Csaba PAIZS

[04/10/2023 – 06/10/2023]

European Biotechnology Congress

Enzymes in Biocatalysis: Unlocking their Potential for Sustainable Chemical Synthesis

Laura Edit BARABÁS, Monica Ioana TOŞA, Csaba PAIZS

[01/10/2024 – 04/10/2024]

International Conference on Materials Science and Condensed Matter Physics

Chişinău

Human carbonic anhydrase II – a new tool for the synthesis of valuable organic materials

Laura Edit BARABÁS, Monica Ioana TOŞA, Csaba PAIZS

[25/03/2025 – 28/03/2025] **Novel Enzymes** Budapest

Diol-icious catalysis: the case of the selectivity of human carbonic anhydrase

Laura-Edit Barabás, Csaba Paizs

JOB-RELATED SKILLS

Job-related skills

- Planning and research skills
- Interpersonal and teamwork skills
- Conflict management
- Motivation
- People management
- Presentation
- Collaboration

SCHOLARSHIP

[2017 – 2019] **WFS (World Federation of Scientists) National Scholarship**

[2020 – 2021] **Collegium Talentum**

Sapientia Hungariae Foundation

[2021 – 2022] **Collegium Talentum**

Sapientia Hungariae Foundation

**Entrepreneurship for Innovation through Doctoral and Postdoctoral Research,
POCU/380/6/13/123886**

ALTE INFORMAȚII

ORCID ID

0000-0002-3599-9753

RESEARCHER ID

AAC-9499-2021

GOOGLE SCHOLAR ID

<https://scholar.google.com/citations?hl=hu&user=DJOcLQMAAAAJ>

ORGANISATIONAL SKILLS

Volunteering

- Organizing round tables with scientific discussions
- Organization of the Open Doors Day at the Faculty of Chemistry and Chemical Engineering
- Organization of Open Days for high school teachers