



Diana Maria Scrob

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WORK EXPERIENCE

ASSISTANT RESEARCHER – FACULTY OF CHEMISTRY AND CHEMICAL ENGINEERING, BABEȘ-BOLYAI UNIVERSITY –
04/2024 – Current – CLUJ-NAPOCA, ROMANIA

PNRR I8 - "Renewable Enzyme Immobilization - RENZI", contract nr. 760241/28.12.2023.

ASSISTANT RESEARCHER – FACULTY OF CHEMISTRY AND CHEMICAL ENGINEERING, BABEȘ-BOLYAI UNIVERSITY –
08/2023 – Current – CLUJ-NAPOCA, ROMANIA

PNRR - "Advanced (multi)-enzymatic synthesis and purification processes for bio-based furan derivatives – ASPIRE",
contract nr. 760042/23.05.2023.

CHEMICAL ENGINEER – FACULTY OF CHEMISTRY AND CHEMICAL ENGINEERING, BABEȘ-BOLYAI UNIVERSITY –
01/10/2020 – 01/09/2022 – CLUJ-NAPOCA, ROMANIA

WORKING STUDENT TECHNICAL DEPARTMENT – ROBERT BOSCH S.R.L. – 13/07/2020 – 30/12/2020 – JUCU, CLUJ,
ROMANIA

- Manage tasks like, data input and data-bases up-dates
- Provide support for creating and editing documentation used in the departament
- Translations of various documents
- Power Point presentations
- The opportunity to learn how to work in a multicultural environment
- Apply my theoretical knowledge from university in practice, being involved in production projects
- Take part to assigned trainings to enrich my career development skills

EDUCATION AND TRAINING

01/10/2022 – CURRENT Cluj-Napoca, Romania

PHD STUDENT Doctoral School of Chemistry, Babeș-Bolyai University

2020 – 2022 Cluj-Napoca, Romania

MSC DEGREE IN ORGANIC AND BIOCHEMICAL PROCESSES ENGINEERING Faculty of Chemistry and
Chemical Engineering, Babeș-Bolyai University

2016 – 2020 Cluj-Napoca, Romania

BSC DEGREE IN BIOCHEMICAL ENGINEERING Faculty of Chemistry and Chemical Engineering, Babeș-Bolyai
University

2016 – 2019 Cluj-Napoca, Romania

TEACHER-TRAINING MODULE Teacher Formation Department, Babeș-Bolyai University

2012 – 2016 Câmpeni, Romania

HIGH SCHOOL DIPLOMA "Avram Iancu" National College, section: Natural Sciences

LANGUAGE SKILLS

Mother tongue(s): **ROMANIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
SPANISH	C2	C2	C1	C1	C1
ENGLISH	C1	C1	C1	C1	C1
FRENCH	A2	A2	A2	A2	A2
GERMAN	A1	A1	A1	A1	A1

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

SKILLS

Microsoft Office | ChemDRAW | PyMOL | SnapGene

PUBLICATIONS

2025
Buffer-Mediated Catalyst-Free Strecker Reaction Toward Enzymatic Implementation

P. Magyar, S. Újvári, Z. Molnár, Z. Orgován, D. Balogh-Weiser, B. E. Nagy, D. M. Scrob, L. Poppe, P. Ábrányi Balogh: Buffer-Mediated Catalyst-Free Strecker Reaction Toward Enzymatic Implementation. *ChemistryOpen*, 14, **2025**, e202500389

2025
Enantiocomplementary Bioreduction of Flexible Ring N-(3-Oxobutyl)Heterocycles Providing Enantiopure Chiral Fragments for Drug Discovery

M. G. Honvári, L. A. Móczsa, B. A. Kucsinka, P. Csuka, V. Bódai, D. M. Scrob, L. Poppe, G. Hornyánszky: Enantiocomplementary Bioreduction of Flexible Ring N-(3-Oxobutyl)Heterocycles Providing Enantiopure Chiral Fragments for Drug Discovery. *ChemBioChem*, 26, **2025**, e202500601.

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

L.E. Barabas, D.M. Scrob, A. Varga, L. Kiss, M. I. Toşa, C. Paizs: Transaminase - carbonic anhydrase bi-enzymatic cascade for preparation of (R)-1-arylethan-1-amines and (S)-1- arylethan-1-ols. *React. Chem. Eng.*, **2023**.

2021
Eco-friendly Enzymatic Synthesis of Anisyl Propionate Mediated by Lipase B from *Candida antarctica*

D.M. Scrob, M.A. Lăcătuş, A.I. Dudu: Eco-friendly Enzymatic Synthesis of Anisyl Propionate Mediated by Lipase B from *Candida antarctica*. *Studia Universitatis Babeş-Bolyai, Chemia*, 66, **2021**, 277-286.

CONFERENCES AND SEMINARS

09/07/2025 – 11/07/2026 Cluj-Napoca, Romania
14th International Symposium of the Romanian Catalysis Society

25/03/2025 – 28/03/2025 Budapest, Hungary
Novel Enzymes 2025

Biocatalytic Transformation of alpha-halo-ketones by Human Carbonic Anhydrase II: Synthesis of Enantiopure Alcohols and Epoxides

04/10/2023 – 06/10/2023 Ljubljana, Slovenia
European Biotechnology Congress 2023

Human carbonic anhydrase a powerful enzyme in chemical biotechnologies

22/06/2022 – 24/06/2022

RomCat2022 Conference, The 13th International Symposium of The Romanian Catalysis Society

Development of a novel enzyme-metal bifunctional catalyst for the dynamic kinetic resolution of chiral primary amines.

20/06/2022 – 22/06/2022

Summer School "CATALYSIS for PROMISING FUTURE"

21/04/2021 – 25/04/2021

The XVII edition of International Conference "Students for Students"

Green approaches for fragrances synthesis. Biotechnological production of anisyl-propionate.

● **VOLUNTEERING**

2016 – 2019 Faculty of Chemistry and Chemical Engineering, Babeş-Bolyai University

Chemistry Student's Organization (CSO)

● **JOB-RELATED SKILLS**

Job-related skills

- Fermentation, expression and purification of proteins
- Gel electrophoresis SDS-PAGE
- Site-directed mutagenesis
- UV-vis spectrophotometry, High Performance Liquid Chromatography (HPLC)
- Development of chromatographic methods
- Preparative enzymatic synthesis of perfumes and flavors
- Preparative scale purification and isolation of proteins by fast protein liquid chromatography (FPLC)
- Analytical and preparative scale biotransformation
- Flow-biocatalysis
- The ability to work independently and take responsibility

● **SCHOLARSHIPS**

2022 – 2023

WFS National Scholarship

World Federation of Scientists

2021 – 2022

Special scholarship for scientific activity

STAR-UBB Institute, Babeş-Bolyai University

● **COMMUNICATION AND INTERPERSONAL SKILLS**

Communication and interpersonal skills

- Good contact skills with children gained through teacher-training module
- Good team work skills developed while working on different projects and as a volunteer
- Ability to manage conflicts

● **ORGANISATIONAL SKILLS**

Organisational skills

- Tendency to achieve all objectives
- Efficient time management of different activities and not allowing the results to be overdue