

PERSONAL INFORMATION

Mădălina Elena Moisă



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WORK EXPERIENCE

Sep 2020 - Present

Lecturer

Babeş-Bolyai University, Cluj-Napoca (Romania)

Teaching position: Technology of Enzymatic and Fermentative Processes, Biocatalysis, Biochemistry, Food Biotechnology

Aug 2023 - Present

Postdoctoral researcher

Babeş-Bolyai University, Faculty of Chemistry and Chemical Engineering Cluj-Napoca (Romania)

Research in the field of Biocatalysis within the project entitled: Advanced (multi)-enzymatic synthesis and purification processes for biobased furan derivatives – ASPIRE, contract no. 760042/23.05.2023, code PNRR-III-C9-2022-I8-ASPIRE/PNRR2022

Sep 2020-Aug 2022

Project leader

Babeş-Bolyai University, Cluj-Napoca (Romania)

Project title: Site-specific Immobilization of Recombinant Phenylalanine Ammonia Lyases (SIR-PAL), PN-III-P1-1.1-PD-2019-1188

Research in the field of Biocatalysis – MIO-enzymes, immobilization of enzymes

Oct 2017–Sep 2020

Research assistant

Babeş-Bolyai University, Cluj-Napoca (Romania)

Project title: MIO-enzyme toolkit for the synthesis of non-natural amino acids, IZ11ZO-166543/1 Research in the field of Biocatalysis – MIO-enzymes

Feb 2016–Sep 2017

Research assistant

Babeş-Bolyai University, Cluj-Napoca (Romania)

Project title: Biocatalyst - Click Chemistry Downstreaming Tandem Based Innovative Kit for Optically Pure Fine Chemicals Synthesis, PN-II-PT-PCCA-2013-4-0734

Research in the field of Biocatalysis

Nov 2014–Jan 2016

Research assistant

Babeş-Bolyai University, Cluj-Napoca (Romania)

Project title: Integrated Green Technology System for Producing Advanced Biofuels, PN-II-PT-PCCA- 2013-4-1006

Research in the field of Biocatalysis

Oct 2012–Jun 2015

Chemical engineer

Babeş-Bolyai University, Cluj-Napoca (Romania)

Project title: Development of Novel Stereoselective Biocatalysts for Economic Synthesis of Chiral Building Blocks, PN-II-PT-PCCA-2011-3.1-1268

Research in the field of Biocatalysis

EDUCATION AND TRAINING

Oct 2014–Feb 2019	Ph.D. in Chemistry Babeş-Bolyai University, Faculty of Chemistry and Chemical Engineering, Cluj-Napoca (Romania) <ul style="list-style-type: none"> ▪ Title of thesis: Tailored lipases for bioprocess development ▪ Teaching activity – Seminars /laboratories on Bioprocesses Engineering, Technology of Enzymatic and Fermentative Processes, Biochemistry, Biocatalysis, Drug Biotechnology, coordination of Bachelor and Master theses 	EQF level 8
Oct 2012–Jul 2014	MSc degree in Engineering of Organic and Biochemical Processes Babeş-Bolyai University, Faculty of Chemistry and Chemical Engineering, Cluj-Napoca (Romania)	EQF level 7
Oct 2008–Jul 2012	BSc degree in Chemical Engineering, Biochemical Engineering Babeş-Bolyai University, Faculty of Chemistry and Chemical Engineering, Cluj-Napoca (Romania)	EQF level 6
2008–2011	Certificate in Didactic Level 1 Babeş-Bolyai University, DPPD, Cluj-Napoca (Romania)	

PERSONAL SKILLS

Mother tongue(s) Romanian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
Certificate in Advanced English, Level C1					
French	A2	A2	A2	A2	A2
German	B1	B1	A2	A2	B1
Goethe-Zertifikat A1, Start Deutsch 1					

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user Common European Framework of Reference for Languages

Organisational / managerial skills

- Good team working skills developed while working on different projects
- I have supervised and conducted research work carried out by undergraduate and graduate students
- Good time management skills, can set priorities and efficiently manage to write reports and prepare presentations, skills developed during the Career Management Winter School, held at Trieste, Italy, 1st-6th November, 2015, organized under the project "Quality, excellence, transnational mobility in doctoral research", POSDRU/187/1.5/S/155383
- Project management skills developed within a doctoral scholarship – Project management course offered by the project "Quality, excellence, transnational mobility in doctoral research", POSDRU/187/1.5/S/155383, in 2015
- Entrepreneurship skills developed within a postdoctoral scholarship - POCU/380/6/13/123886 – Entrepreneurship for innovation through doctoral and postdoctoral research, 2019-2020

- Job-related skills**
- Good competences in designing and controlling chemical reactions at laboratory level for organic synthesis and biocatalysis, in isolation and purification of organic compounds and compounds' analysis
 - Good technical skills in chiral liquid and gas chromatography (HPLC and GC), NMR spectroscopy, mass spectrometry, UV-vis spectrophotometry and polarimetry
 - Good competences in molecular cloning, site-directed mutagenesis, directed evolution, expression, purification and immobilization of enzymes

Digital competence

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

Digital competences - Self-assessment grid

- Good command of Microsoft Office™ (Word, Excel, Power Point)
- ChemDraw, ChemCAD, ViewerLite, PyMOL, Snappene
- MestReNova
- Matlab
- SolidEdge

ADDITIONAL INFORMATION

Awards and scholarships

- Postdoctoral scholarship under the project POCU/380/6/13/123886 - Entrepreneurship for innovation through doctoral and postdoctoral research, 2019-2020
- Doctoral scholarship under the project POSDRU/187/1.5/S/155383 – Quality, excellence, transnational mobility in doctoral research, POSDRU/187/1.5/S/155383, in 2015
- Prize for excellence in research offered under the project "Quality, excellence, transnational mobility in doctoral research", POSDRU/187/1.5/S/155383 in 2015
- Scholarship for scientific performance offered by the Scientific Council of Babeş-Bolyai University in 2013-2014