

RADU Alexandra

F, 21.10.1986, married

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PROFESSIONAL EXPERIENCE

Research Assistant – January 2012 – onwards

Company: Babeș-Bolyai University

City: Cluj-Napoca

Responsibilities:

- molecular cloning
- expression and purification of proteins
- assessed the purity of protein samples by SDS-PAGE electrophoresis
- enzyme kinetics
- fine organic synthesis
- HPLC analysis
- research reports

EDUCATION AND TRAINING

▪ 2011 – onwards

PhD: Chemistry – Faculty of Chemistry and Chemical Engineering, Babeș-Bolyai University, Cluj-Napoca

- Enzymatic biotransformation in organic chemistry, NMR in Organic Chemistry, Stereochemistry and Supramolecular Chemistry
- Internship and specialization at MTA Institute of Enzymology, Budapest, Hungary
- Didactic activities (laboratory, seminar, license thesis and dissertations guidance)
- Summer School attendance
- Conference and workshops attendance

- 2009 – 2011

Master: Cellular Biotransformation – Faculty of Biology and Geology, Babeş-Bolyai University, Cluj-Napoca

- **Master Thesis Title:** "*Production and purification of polyclonal antibodies to separate (S)-ibuprofen from racemic mixture*"
- Advanced Enzymology, Recombinant DNA Technology I & II, Advanced Biochemistry, Cellular Signaling, Applied Biotransformations in Food, Pharmaceutical and Organic Industries, Molecular Microbiology, Cell Culture, Advanced Engineering of Enzymatic and Fermentative Bioprocesses.
- Determination of parameters using the spectrophotometer
- Immunization and parameters monitoring of a rabbit group

- 2005 – 2009

Faculty: Chemical Engineering – Faculty of Chemistry and Chemical Engineering, Babeş-Bolyai University, Cluj-Napoca

- **Bachelor Thesis Title:** "*The biosynthesis of the (S)-enantiomer of ibuprofen*"
- Organic Chemistry, Analytical Chemistry, Bioinorganic Chemistry, Microbiology, Biochemistry, Engineering of Bioprocesses, Enzymatic Technologies, Cell Biology and Molecular Genetics, Mycology, Drugs Biotechnology, Food Industry Biotechnologies, Biocatalysis
- Laboratory practice: drug synthesis and biochemical analysis
- Qualitative analysis using HPLC

PERSONAL
SKILLS

Foreign languages

		Understanding				Speaking				Writing	
		Listening		Reading		Spoken interaction		Spoken production			
English	B2	Upper intermediate	B1	Intermediate	B1	Intermediate	B1	Intermediate	B1	Intermediate	
French	C1	Advanced	C1	Advanced	B2	Upper intermediate	B2	Upper intermediate	B1	Intermediate	

Computer skills and competences:

- Microsoft Office: Word, Excel, PowerPoint
- Matlab, Solid Edge, ChemDraw, ChemCad, MestReNova

Additional information:

- Participation at the 3rd International Congress of Romanian Society of Cellular Biology, Arad – Szeged, 2011; theme: "*Production and purification of polyclonal antibodies to separate (S)-ibuprofen from racemic mixture*"
- Participation at the 2nd Symposium on Biotransformation for Pharmaceutical and Cosmetic Industry (BPCI), Warsaw, 2014; theme "*The Influence of Several Additives on the Phenylalanine Ammonia Lyase Activity*"
- Publications:
 - "*Candida antarctica* lipases acting as versatile catalysts for the synthesis of enantiopure (R)- and (S)-1-(2-phenylthiazol-4-yl)ethanamines", **A. Radu**, M.E. Moisă, M.I. Toşa, N. Dima, V. Zaharia, F.D. Irimie, J. Mol. Catal. B: Enzym., 107 (2014), pp. 114–119
 - "The Interaction of Nitrophenylalanines with Wild Type and Mutant 4-Methylideneimidazole-5-one-less Phenylalanine Ammonia Lyase", M.I. Toşa, J. Brem, **A. Mantu**, F. D. Irimie, C. Paizs, J. Rétey, ChemCatChem 5 (2013), pp. 779–783