Curriculum vitae

Dr. László Csaba Bencze; Ph. D

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1. Education:

Institution	Period	Degrees or diplomas
Babeș-Bolyai University, Faculty of Chemistry and Chemical Engineering	2002-2006	Bachelor's Degree in Chemistry
Babeș-Bolyai University, Faculty of Chemistry and Chemical Engineering	2006-2007	Master's Degree in Advanced Techniques in Chemical Synthesis
Babeș-Bolyai University, Faculty of Chemistry and Chemical Engineering	2007-2011	Ph.D in Chemistry/Biocatalysis

2. Professional experience

2016-… : - *Lecturer*, Department of Chemistry, Babeș-Bolyai University: teaching (Advanced Enzymology, Applied Biochemistry, Metabolism of xenobiotics) and research activities (biocatalysis, enzymology, protein engineering)

2014-2016: - *Assistant Professor* of Biochemistry, Department of Chemistry, Babeș-Bolyai University: teaching (Biochemistry practical courses and seminars) and research activities (biocatalysis, enzymology)

2014-2015: - *Post-doctoral fellowship* (Biocatalysis and Biotransformation Group, Department of Chemistry, Babeș-Bolyai University): biocatalytic synthesis of unnatural amino acids through lipase mediated dynamic kinetic resolutions and ammonia lyase catalyzed processes (16 months)

2011-2014: - *Post-doctoral researcher* (University of Zürich, Department of Chemistry, Prof. Dr. John A. Robinson): Identifiying the mechanism of action of novel peptide antibiotics – binding site determination: purification of LptD_*PAO1* outer membrane protein, protein folding studies, site-directed mutagenesis, *in-vitro* and *in-vivo* LptD-peptide antibiotic POL7001 binding assays, binding site determination techniques, protein-peptide interaction studies (33 months).

- **Stages:**

2015: Institute of Enzymology, Hungarian Academy of Science, Prof. Dr. Beáta Vértessy: Genetic engineering and structural studies of ammonia lyases (4 months)

2010: Budapest University of Technology and Economics, Department of Organic Chemistry and Technology, Prof. Dr. Poppe László: Immobilization of Phenylalanine- and Hystidine Ammonia Lyases (2 months)

2009: Eötvös Lóránt University, Faculty of Science, Department of Organic Chemistry, Dr. Vass Elemer: Determination of the absolute configuration by VCD spectroscopical methodologies -1 month, Domus Fellowhip

2007: Budapest University of Technology and Economics, Department of Organic Chemistry and Technology, Prof. Dr. Lajos Novak, Pheromone synthesis - 7 months, Agora and Erasmus Fellowship

2006: Chinoin-Sanofi-Adventis, Budapest-Hungary, Dr. Hermecz István, Drug synthesis - 2 months, Erasmus mobility

3. Experience (including managerial experience) in national/international programmes/ projects:

Programme/Project	Position	Fund and Financing Institute	Period
MIO-enyzme toolbox for the synthesis of non-natural amino acids, PROMYS, IZ11Z0_166543/1	Manager	625.000 CHF, SNF	2016-2021
MIO-enyzme toolkit with expanded and defined targetability, PN-II-RU-TE-2014-4-1668	Manager	125.000 EUR, UEFISCDI	2015-2017
Developing novel peptidomimetics based on unnatural amino acids, post-doctoral project POSDRU/159/1.5/S/137750	Manager	10.000 EUR, POSDRU	2014-2015
Stereoselective biotransformations of homo- and heteroaromatic diols, BD 384/2008	Manager	10.000 EUR, CNCSIS	2008-2010
Integrated green technology system for producing advanced biofuels; PN-II-PT-PCCA-2013-4-1006; 65/2014	Member	UEFISCDI	2014-2016
Continous flow enzymatic dynamic kinetic resolutions for stereoselective bioorganic processes, PCE-2011-3-0775	Member	FP7-HEALTH	2011-2016
Biocatalyst - click chemistry down streaming tandem based innovative kit for optically pure fine chemicals synthesis; PN-II-PT-PCCA-2013-4-0734	Member	UEFISCDI	2014-2016
Technology based on enzymatic transesterification process in order to obtain 2nd generation biofuels, CARENZI; Nr 22094/01.10.2008	Member	UEFISCDI	2008-2011

4. Languages: romanian english, hungarian

5. Technical skills and competences:

Advanced knowledge in: biocatalysis, protein engineering, organic synthesis, chromatographic separation of chiral compounds, enzymatic kinetic studies, enzyme

immobilization, protein purification techniques, membrane protein isolation, *in vitro* and *in vivo* protein-ligand binding assays, microbiology (cloning techniques, site-directed mutagenesis), proteomics

Experiences in: NMR (Nuclear Magnetic Resonance) spectroscopy, High Perfomance Liquid Chromatography (HPLC), Gas Chromatography (GC), Fast Protein Chromatography (FPLC), UV-VIS spectroscopy, Gelelectrophoresis (SDS-PAGE, agarose gels), Fluorescence Polarization (FP), Western-Blot (WB), Polymerase Chain Reaction (PCR), CD spectroscopy

Computer skills: Microsoft Office; Computational Chemistry: Chemoffice, Spartan, Gaussian, Hyperchem, Pymol; Instrumentational Analysis: Topspin, Mestrec, Chemstation

6. Other relevant informations

Researcher ID: E-6793-2013

Project evaluator at national level for Romania.

Scientific referee for: *ChemBioChem, Biochimica et Biophysica Acta, Archiv der Pharmazie Biocatalysis & Biotransformation, Periodica Polytehnica Acta, Studia Universitatis "Babeş-Bolyai"-Chemia*

Scientific articles: 44, H_{index} 10

Premiul Excellentia 2016 – *award from the Student Council of BBU, for the „best professor"at each faculty.*

I hereby state on my own responsibility that the data presented is accurate.

Date: 12.09.2019