Europass Curriculum Vitae

Personal information

First name/ Surname	Dr. Gergely Bánóczi
Address	Babeş-Bolyai University of Cluj-Napoca, Faculty of Chemistry and Chemical Engineering, Department of Chemistry and Chemical Engineering in Hungarian Language, Arany János 11, 400028 Cluj-Napoca (Romania)
Telephone	+40-769-886908
E-mail	banoczi.gergely@gmail.com gbanoczi@chem.ubbcluj.ro
Citizenship	Hungarian
Nationality	Hungarian
Date of birth	05 April 1987
Gender	Male

Occupational field	Research associate
Work experience	
Dates	01 July 2008 - 01 August 2008
Occupation or position held	BSc student trainee
Main activities and responsibilities	Administration at syringe production
Name and address of employer	Sanofi-Aventis Csanyikvölgy Factory, Csanyik völgy 3., 3535 Miskolc (Hungary)
Dates	01 March 2010 - 01 August 2010
Occupation or position held	MSc student trainee
Main activities and responsibilities	Research on computational design of selective acetylcholinesterase inhibitors
Name and address of employer	Gedeon Richter Pharmaceutical, Gyömrői út 19., 1103 Budapest (Hungary)
Dates	14 February 2011 - 31 August 2011
Main activities and responsibilities	Synthesizing on-demand, potentially bioactive molecules.
Name and address of employer	Bioblocks LTD, Berlini út 47-49., 1045 Budapest (Hungary)
Dates	01 November 2012 - 31 May 2013
Occupation or position held	Scientist
Main activities and responsibilities	Implementation of new LogP and pKa prediction methods in the Pallas software suite.
Name and address of employer	Compudrug LTD, 286 Balbay Dr. # 1A Bal Harbor, FL 33154 Florida (USA)
Dates	01 March 2015 - 31 June 2015
Occupation or position held	Designing engineer
Main activities and responsibilities	Designing engineer in the field of bioethanol production.
Name and address of employer	Károly Róbert University College - Research and Educational Laboratory, Tass puszta, 3213 Atkár (Hungary)
Dates	01 January 2015 - 31 October 2015

Occupation or position held	Scientist
Main activities and responsibilities	Scientist in the research field of coeliac disease.
Name and address of employer	Hungarian Academy of Sciences - Agricultural Institute, Centre of Agricultural Research, Brunszvik utca 2., 2462 Martonvásár (Hungary)

Education and training

Dates	September 2011 - September 2017
Title of qualification awarded	PhD in Chemistry, *summa cum laude*
Name and type of organisation providing education and training	George Olah Doctoral School of Chemistry and Chemical Technology at Budapest University of Technology and Economics (BME), Hungary
Topic	Computational and experimental enzyme engineering.
Dates	February 2009 - June 2011
Title of qualification awarded	Master's degree in chemical engineering
Name and type of organisation providing education and training	Department of Organic Chemistry and Technology, Budapest University of Technology and Economics (BME), Hungary
Topic	Computer-aided drug design and development.
Dates	September 2005 - January 2009
Title of qualification awarded	Bachelor's degree in chemical engineering
Name and type of organisation providing education and training	Department of Organic Chemistry and Technology, Budapest University of Technology and Economics (BME), Hungary
Topic	Synthesis of *Phenserine* analogues

Personal skills and competences

Mother tongue(s): Hungarian

Other language(s): English, German

Self-assessment	Understanding		Speaking		Writing
European level	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
German	B2	B2	B2	B2	B2

Research interests: *Synthetic Organic Chemistry*: design and implementation of synthesis of organic compounds from mg to several gramm scale, stereoselective biotransformations (lipases, phenylalanine ammonia-lyases and aminomutases)

Biochemistry and Biotechnology: enzyme mechanistic studies, development of novel biocatalysts (ω-transaminases, lipases/esterases, phenylalanine ammonia-lyases and aminomutases).

Modelling of molecular processes: computational modelling and statistical analysis of molecular level phenomena focusing on thermal or biocatalytic reactions of organic compounds.

Analytical chemistry: characterization of the structures and absolute configurations of organic compounds.

Laboratory skills: Synthesis of organic compounds and their analytics with MS, NMR, ECD, HPLC, TLC, UV-VIS, polarimetry.

Performing enzyme activity and kinetics tests.

Computer skills: Experience with Linux server administration and computer infrastructure.

Extensive experience with computational modeling to rationalize and predict molecular level

	phenomena with i.e. QM/MM, induced-fit docking, molecular dynamics, Monte Carlo methods, quantum chemistry, molecular mechanics, mathematical statistics, statistical mechanics. Extensive experience with the use of numerous (computational) software (i.e. Gaussian, Schrodinger Suite, Rosetta, FoldX, MRCC, Orca, Mathematica, MATLAB, Statistica, MS Office, Linux, Windows) Programming in Python and R languages
Awards	Gedeon Richter Centenary Foundation, financial support of PhD studies, September 2015 – February 2016
Driving license	Category B
Major sports results	Hungarian National Weightlifting Championship of Colleges and Universities: 6. place, in 77-85 kg category, 2008, 7. place, in 85-94 kg category, 2009; Kyokushin karate 5. kyu
Other skills and Competence	Studies in musical theory, performance with recorder, flute, piano, and guitar

Publication List:

1. Lipase-catalysed kinetic resolutions of racemic 1-(10-ethyl-10-*H*-phenothiazin-1,2 and 4-yl)ethanols and their acetates, Jürgen Brem, Sarolta Pilbák, Csaba Paizs, Gergely Bánóczi, Florin-Dan Irimie, Monica-Ioana Toşa, László Poppe, *Tetrahedron Asymmetry*, 2011, *22 (8)*, 916-923. IF: 2.165

2. Molecular modeling in biotechnology, Gergely Bánóczi, Klaudia Kovács, Gábor Hornyánszky, Beáta G. Vértessy, László Poppe, *Proceeding of the PhD Conferences organised by the Doctoral Schools of the BME, in the framework of TÁMOP-4.2.2/B-10/1-2010-0009 2012,* IF:-

3. A convenient method for the preparation of cyclohepta[b]indole derivatives, Katalin Kupai, Gergely Bánóczi, Gábor Hornyánszky, Pál Kolonits, Lajos Novák; *Central European Journal of Chemistry,* 2012, *10(1)*, 91-95. IF: 1.167

4. Facile Synthesis of Cycloalkanoindole Derivatives by aza-Claisen Rearrangement. Katalin Kupai, Gergely Bánóczi, Gábor Hornyánszky, Pál Kolonits, Lajos Novák; *Monatshefte für Chemie/Chemical monthly,* 2012, *42 (12)*, 1663-1669. IF: 1.629

5. Expression and properties of the highly alkalophilic phenylalanine ammonia-lyase of thermophilic *Rubrobacter xylanophilus*, Klaudia Kovács, Gergely Bánóczi, Andrea Varga, Izabella Szabó, András Holczinger, Gábor Hornyánszky, Imre Zagyva, Csaba Paizs, Beáta G. Vértessy, László Poppe, *PLOS-ONE,* 2014, *9(1)*, e85943. IF:3.730

6. Structural modeling of phenylalanine ammonia-lyases and related MIO-containing enzymes – an insight into thermostability and ionic interactions, Gergely Bánóczi, Csongor Szabó, Zsófia Bata, Gábor Hornyánszky, László Poppe, *STUDIA UBB CHEMIA*, 2015, *60(4)*, 213-228. IF: 0.136

7. Phenylalanine Ammonia-Lyase-Catalyzed Deamination of an Acyclic Amino Acid: Enzyme Mechanistic Studies Aided by a Novel Microreactor Filled with Magnetic Nanoparticles, Diána Weiser, László Csaba Bence, Gergely Bánóczi, Ferenc Ender, Róbert Kiss, Eszter Kókai, András Szilágyi, Beáta G. Vértessy, Ödön Farkas, Csaba Paizs, László Poppe, *ChemBioChem,* 2015, *16(16)*, 2283-2288. IF: 3.088

8. Influence of the aromatic moiety in α- and β-arylalanines on their biotransformation with phenylalanine 2,3-aminomutase from *Pantoea agglomerans,* Andrea Varga, Gergely Bánóczi, Botond Nagy, László Csaba Bencze, Monica Ioana-Toşa, Ákos Gellért, Florin Dan Irimie, János Rétey, László Poppe, Csaba Paizs, *RSC Advances*, 2016, *6*, 56412-56420. IF: 3.289

9. Bioimprinted lipases in PVA nanofibers as efficient immobilized biocatalysts, Diána Weiser, Péter L. Sóti, Gergely Bánóczi, Viktória Bódai, Bálint Kiss, Ákos Gellért, Zsombor K. Nagy, Béla Koczka, András Szilágyi, György Marosi, László Poppe, *Tetrahedron*, 2016, *72(46)*. 7335-7342. IF: 2.645

10. Expanding the substrate scope of phenylalanine ammonia-lyase from *Petroselinum crispum* towards styrylalanines, László Csaba Bencze, Alina Filip, Gergely Bánóczi, Monica-Ioana Toşa, Florin-Dan Irimie, Ákos Gellért, László Poppe, Csaba Paizs, *Organic and Biomolecular Chemistry,* 2017, *15,* 3717–3727. IF: 3.559

11. Immobilization engineering – How to design advanced sol-gel systems for biocatalysis?, Diána Weiser, Flóra Nagy, Gergely Bánóczi, Márk Oláh, Attila Farkas, András Szilágyi, Ákos Gellért, György Marosi, Sándor Kemény, László Poppe, *Green chemistry*, 2017, *16*, 3927-3937. IF: 9.125