


PERSONAL INFORMATION	FILIP ALINA
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	<a href="http://www.chem.ubbcluj.ro/BIO/CENTRU/index.php">http://www.chem.ubbcluj.ro/BIO/CENTRU/index.php</a> <a href="http://chem.ubbcluj.ro/~cslbencze/grants/promys/sites/people.html">http://chem.ubbcluj.ro/~cslbencze/grants/promys/sites/people.html</a>
	Sex: <b>Female</b>   Date of birth: -   Nationality: <b>Romanian</b>

## WORK EXPERIENCE

01.02.2017 → 26.02.2020	<b>Teaching assistant</b> Babes-Bolyai University, Faculty of Chemistry and Chemical Engineering, no. 11, str. Arany Janos, 400028 Cluj Napoca (Romania) <ul style="list-style-type: none"> <li>Laboratory courses of Elements of biochemistry, Biochemistry, Microbiology, Genetic engineering Biocatalysis, and Food Technology.</li> </ul>
01.09.2020 → 30.08.2022	<b>Project leader - PN-III-P1-1.1-PD-2019-1222</b> <b>Protein engineering of ferulic acid decarboxylase from <i>Saccharomyces cerevisiae</i> (PEN-FDC)</b>
01.01.2015 → 30.09.2020	<b>Researcher in different projects</b> Babes-Bolyai University, Faculty of Chemistry and Chemical Engineering, no. 11, str. Arany Janos, 400028 Cluj Napoca (Romania) <ul style="list-style-type: none"> <li><b>MIO-enzyme toolbox for the synthesis of non-natural amino acids, PROMYS, IZ11Z0_166543/1</b></li> <li><b>Mio-enzyme kit with defined and extended substrate domain, PN-II-RU-TE-2014-4-1668, 264/01.10.2015</b></li> <li><b>Integrated green technology system for producing advanced biofuels, PN-II-PT-PCCA-2013-4-1006; 65/2014</b></li> </ul>
03.09.2012 → 04.02.2013	<b>Voluntary in Clinical Laboratory of the CFR Hospital from Cluj-Napoca</b> Hospital Clinical CFR , Cluj –Napoca (România), Republicii Street, No. 18 <ul style="list-style-type: none"> <li><b>Determination analysis from category:</b> - microbiology, hematology, coagulation, biochemistry, serology determination.</li> </ul>

## EDUCATION AND TRAINING

01.02.2020 → 01.02.2021	<b>Postdoctoral scholarship through project “Entrepreneurship for Innovation through Doctoral and Postdoctoral Research”, POCU/360/6/13/123886</b> <ul style="list-style-type: none"> <li>Project co-financed from the European Social Fund through the Human Capital Operational Program 2014-2020</li> </ul>
15.07.2016 → 30.09.2016	<b>PhD student (Scholarship ERASMUS - Outgoing students placements)</b> <ul style="list-style-type: none"> <li>Faculty of Chemical Technology and Biotechnology of Budapest University of Technology and Economics</li> </ul>
01.06.2015 → 30.09.2015	<b>PhD student (Scholarship POSDRU)</b> <ul style="list-style-type: none"> <li>Institute of Enzymology of the Hungarian Academic of Science, 1117 Budapest, Magyar tudósok körútja 2. “Young successful researchers professional development in an international and interdisciplinary environment” - POSDRU/159/1.5/S/132400</li> </ul>

<p><i>July 2019</i></p> <p><i>October 2013 → June 2019</i></p>	<p><b>Doctor of Science (chemistry)</b>  <b>Calificative: <i>Summa cum Laude</i></b>            &gt; <b>Wild-type and tailored phenylalanine ammonia-lyases for the synthesis of unnatural L- and D arylalanines</b>  <b>PhD student (Chemistry)</b>            Faculty of Chemistry and Chemical Engineering, Babes-Bolyai University, Cluj-Napoca (Romania)            Arany Janos Street, No. 11.            ▪ Chemistry domain</p>
<p><i>2011 → 2013</i></p>	<p><b>Master's Degree</b>            Faculty of Biology and Geology, Babes-Bolyai University, Cluj-Napoca (Romania), Clinicilor Street, No. 3-5            ▪ <b>Cellular Biotransformations</b></p>
<p><i>2011 → 2013</i></p>	<p><b>Graduate Teacher Certificate – Level II</b></p>
<p><i>2008 → 2011</i></p>	<p><b>Graduate Teacher Certificate – Level I</b>            Department For Teacher Training , Babes-Bolyai University, Cluj-Napoca (Romania), Sindicatelor Street, No. 7</p>
<p><i>2008 → 2011</i></p>	<p><b>Bachelor's Degree in Biology</b>            Faculty of Biology and Geology, Babes-Bolyai University, Cluj-Napoca (Romania) Clinicilor Street, No. 3-5</p>

## PERSONAL SKILLS

<p><b>Mother tongue(s)</b></p>	<p>▪ <b>Romanian</b></p>
<p><b>Other language(s)</b></p>	<p>▪ English (Independent user, level B2), Italian (level B1) and French (level A2)</p>
<p><b>Research skills</b></p>	<ul style="list-style-type: none"> <li>▪ Site-directed mutagenesis, directed evolution and cloning, Polymerase Chain Reaction (PCR), Gel electrophoresis (SDS-PAGE, native and agarose) and Western-Blot (WB),</li> <li>▪ Expression and purification of proteins.</li> <li>▪ Fast Protein Liquid Chromatography (FPLC) and Immobilized metal affinity chromatography (IMAC),</li> <li>▪ Nano differential scanning fluorimetry (NanoDSF) - protein stability.</li> <li>▪ UV-vis spectrophotometry, Kinetic measurements, Biocatalysis, High Performance Liquid Chromatography (HPLC), Polarimetry.</li> <li>▪ Organic synthesis (basic level).</li> <li>▪ Testing the active compounds from plants on Wistar rats, Hematological, morphological and biochemical determinations.</li> <li>▪ Testing the active compounds from plants on Wistar rats, Hematological, morphological and biochemical determinations.</li> </ul>
<p><b>Communication skills</b></p>	<ul style="list-style-type: none"> <li>▪ Team spirit: I have a teamwork experience since undergraduate years, when I participated in numerous activities based on practical and research projects conducted in the faculty.</li> <li>▪ Confident, optimistic and communicative.</li> <li>▪ Participation at conferences, workshops and student practices</li> </ul>
<p><b>Organisational / managerial skills</b></p>	<ul style="list-style-type: none"> <li>▪ Good experience of project and team management.</li> <li>▪ Head of the Master Cell biotransformation in during 2011-2013</li> <li>▪ Scientific Co-coordinator for license and dissertation during 2013-Present</li> <li>▪ Didactic activities: laboratory + seminar, during 2013-Present: Elements of biochemistry, Biochemistry, Microbiology, Genetic engineering, Food Biotechnologies, Foodstuffs technology and Pharmaceutical biotechnology.</li> <li>▪ Bioinformatics.</li> </ul>
<p><b>Digital competence</b></p>	<ul style="list-style-type: none"> <li>▪ Microsoft Office, C++, CLC workbench, BioEdit, Mega 4, RasTop, Dotlet and ChemBioDraw, MestReNova, SnapGene, Matlab, ViewerLite</li> </ul>
<p><b>Other skills</b></p>	<ul style="list-style-type: none"> <li>▪ Hobbies: painting, photography and cycling</li> </ul>
<p><b>Driving licence</b></p>	<ul style="list-style-type: none"> <li>▪ Category B</li> </ul>

## ADDITIONAL INFORMATION

Publication list, books, conference publications, awards and seminars are listed in the CV annex at <https://www.brainmap.ro>

Scientific articles:12, Hindex 5

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## I. Books and book chapters

1. **Alina Filip** și László Csaba Bencze, Biochimie avansată – Lucrări practice, *Napoca Star* – Cluj Napoca, **2017**, ISBN:978-606-690-518-3.
2. Nagy, E.Z.A., Tork, S.D., **Filip, A.**, Poppe, L., Toşa, M.I., Paizs, C., Bencze, L.C., Production of L- and D- phenylalanine analogues using tailored phenylalanine ammonia-lyases, *Practical methods for Biocatalysis and Biotransformation, Applied-Biocat*, 2020, ISBN: 978-1-119-48701-2.

## II. List of publications

1. Tomoiagă R.B., Tork S.D., Horváth I., **Alina Filip**, Nagy L.C., Bencze L.C., Saturation mutagenesis for phenylalanine ammonia lyases of enhanced catalytic properties, *Biomolecules* **2020**, *10*, 6, 838; DOI: 10.3390/biom10060838; ISSN: 2218-273X  
**Impact factor: 4.082; Accession Number: WOS:000553622200001 (Q2)**
2. Emma Aletta Zsófia Emma Nagy, Diana-Souad Tork, Pauline A. Lang, **Alina Filip**, Florin-Dan Irimie, László Poppe, Monica Ioana Toşa, Christopher J. Schofield, Jürgen Brem, Csaba Paizs, László-Csaba Bencze, Mapping the Hydrophobic Substrate Binding Site of Phenylalanine Ammonia Lyase from *Petroselinum crispum*, *ACS Catal.*, **2019**, *9*, 8825-8834.  
**doi: 10.1021/acscatal.9b02108 IF 12.221, Relative score of influence = 4.300**  
**Accession Number: WOS:000485090400120 (Q1)**
3. Emma Aletta Zsófia Emma Nagy, Levente Csaba Nagy, **Alina Filip**, Katalin Nagy, Emese Gál, Róbert Tötös, László Poppe, Csaba Paizs, László-Csaba Bencze, Exploring the substrate scope of ferulic acid decarboxylase (FDC1) from *Saccharomyces cerevisiae*, *Scientific Reports*, **2019**, *9*, 647.  
**doi: 10.1038/s41598-018-36977-x, IF 4.525, Relative score of influence = 3.435 (Q1)**  
**Accession Number: WOS:000456554600086**
4. **Alina Filip**, Emma Aletta Zsófia Emma Nagy, Diana-Souad Tork, Gergely Bánóczy, Toşa M.I., Florin-Dan Irimie, László Poppe, Csaba Paizs., László-Csaba Bencze, Tailored mutants of phenylalanine ammonia-lyase from *Petroselinum crispum* for the synthesis of bulky L- and D- arylalanines, *ChemCatChem*, **2018**, *10*, 2627-2633.  
**doi: 10.1002/cctc.201800258, IF 4.495, Relative score of influence = 1.899 (Q2)**  
**Accession Number: WOS:000436933700014**
5. Pal Csuka, Vivien Juhász, Sz Kohári, **Alina Filip**, Andrea Varga, Peter Sátorhelyi, László-Csaba Bencze, Hazel Barton, Csaba Paizs, László Poppe, *Pseudomonas fluorescens* strain R124 encodes three different MIO-enzymes, *ChemBioChem*, **2018**, *19*, 411-418.  
**doi: 10.1002/cbic.201700530 IF 2.593, Relative score of influence = 1.840 (Q2)**  
**Accession Number: WOS:000425511500015**
6. László Csaba Bencze, **Alina Filip**, Gergely Bánóczy, Monica Ioana Toşa, Florin Dan Irimie, Ákos Gellért, László Poppe and Csaba Paizs (prim autor). Expansion of the substrate scope of phenylalanine ammonia-lyase from *Petroselinum crispum* towards styrylalanines, *Organic & Biomolecular Chemistry*, **2017**, *15*, 3717-3727.  
**doi: 10.1039/c7ob00562h. IF 3.49, Relative score of influence =1.798 (Q1)**  
**Accession Number: WOS:000400868000021**
7. Botond Nagy, Mădălina Elena Moisă , **Alina Filip**, László Csaba Bencze, Monica Ioana Toşa, Lipase catalyzed parallel kinetic resolution of ibuprofen, *Studia UBB Chemia*, **2016**, LXI, 4, 2016 (p. 255 - 266).  
**IF 0.244, Relative score of influence = 0.049, (Q4)**  
**Accession Number: WOS:000393578800021**
8. Norbert Artur Dima, **Alina Filip**, László Csaba Bencze, Márk Oláh, Péter Sátorhelyi, Beáta G Vértessy, László Poppe, Csaba Paizs, Expression and purification of recombinant Phenylalanine ammonia-lyase from *Petroselinum crispum*, *Studia UBB Chemia*, **2016**, LXI, 2, 21-34.  
**IF 0.244, Relative score of influence =0.049, (Q4)**  
**Accession Number: WOS:000393576700002**
9. Andrea Varga, **Alina Filip**, László-Csaba Bencze, Péter Sátorhelyi, Evelin Bell , Beáta G Vértessy, László Poppe, Csaba Paizs, Expression and purification of recombinant Phenylalanine 2,3-aminomutase from *Pantoea agglomerans*. *Studia UBB Chemia*, **2016**, LXI, 2, 7-19,  
**IF 0.244, Relative score of influence = 0.049, (Q4)**  
**Accession Number: WOS:000393576700001**
10. Gergely Bánóczy, Csongor Szabó, Zsófia Bata, **Alina Filip**, Gábor Hornyánszky, László Poppe, Structural modelling of phenylalanine ammonia-lyases and related MIO-containing enzymes – An insight into thermostability and ionic interactions, *Studia UBB Chemia*, **2015**, *4*, 213-228.  
**IF 0.148, Relative score of influence = 0.068, (Q4)**  
**Accession Number: WOS:000369162600020**
11. **Alina Filip**, László Csaba Bencze, Csaba Paizs, László Poppe, Florin Dan Irimie, MIO-enzyme toolbox: cloning, expression and purification of recombinant R<sub>t</sub>PAL, *Stud. Univ. Babeş-Bol. Sp. Iss.* **2015**, 39-43.  
**jurnal BDI - Short communication**

12. Vlad Alexandru Toma, **Alina Filip**, Claudiu Mirescu, Anca Farcaș, Corina Roșioru: Effect of hyoscine N-butylbromide on the skeletal muscle contraction in Wistar rat, *Annals of the Romanian Society for Cell Biology*, **2013**, 18(2):123-128.

**IF 0.11 (Q4)**

**III. Conference publications:**

**2019**

- Tork S.D, Nagy E. Z.A, **Filip A.**, Lang P.A, Schofield C.J, Brem J., Paizs C., Bencze L.C., Active site mapping of phenylalanine ammonia-lyase from *Petroselinum crispum*, 14<sup>th</sup> International Symposium on Biocatalysis and Biotransformations (BioTrans 7-11 julie 2019, Groningen) - Poster Section
- Tork Souad-Diana, Nagy Emma Zsofia Aletta, Alina Filip, Csaba Paizs, László Csaba Bencze, Conferința Națională a Școlilor Doctorale din Consorțiul Universitar, Ediția a II-a, 11-14 noiembrie 2019, Timișoara; Secțiune: Școala Doctorală de Chimie - Oral presentation

**2018**

- Bordea D., **Filip A.**, Bencze, L.C., Protein engineering for enhanced catalytic properties of phenylalanine ammonia-lyase from *Petroselinum crispum*, XV<sup>th</sup> Edition of the International Conference "Students for Students" Cluj-Napoca, **2018**

**2017**

- Tork S.D., **Filip A.**, Nagy Z.: *Novel PcPAL mutants exhibiting broadened substrate scope*, XIV<sup>th</sup> Edition of the International Conference "Students for Students" Cluj-Napoca, **2017** - **THE GO GREEN! APPROACH award granted by SPI** (Special Pro Installations) - Oral presentation
- **Filip A.**, Biotransformări ale aminoacizilor non-naturali mediate de enzime PcPAL mutante, Conferința interdisciplinară a doctoranzilor din Universitatea Babeș-Bolyai, Bar (Hunedoara), 23-25 iunie 2017 - Oral presentation
- Bencze, L.C., **Filip, A.**, Nagy, E.Zs.A., Nagy, B., Banoczi, G, Poppe, L., Paizs, C.: Rational design of phenylalanine ammonia lyase from *Petroselinum crispum* (PcPAL) towards sterically demanding phenylalanine analogues, VII EFMC International Symposium on Advances in Synthetic and Medicinal Chemistry, Viena (Austria), **2017** - Poster Section

**2016**

- **Filip, A.**, Banoczi, G, Poppe, L., Paizs, C., Irimie, F.D., Bencze, L.C., Expanding the substrate range of phenylalanine ammonia lyase from *Petroselinum crispum* towards styryl-alanines. *Biotransformations for Pharmaceutical and cosmetic industry*, Varsovia, **2016**. **Gold medal award- Poster Section.**
- Tork S.D, **Filip A.**, Bartha-Vári JH, Bencze L.C, Irimie FD, Immobilization and substrate domain expansion of RtPAL, XIII<sup>th</sup> Edition of the International Conference "Students for Students" Cluj-Napoca, **2016**- Oral presentation
- Nagy, E.Zs.A., **Filip, A.**, Bencze, L.C., Paizs, C., Irimie, F.D., Expanding the substrate range of PcPAL towards biphenyl-alanines. *16th CEEPUS Symposium and Summer School on Bioanalysis*, Varsovia, **2016**.
- **Filip, A.**, Tork, D.S., Bencze, L.C., Banoczi, G, Irimie, F.D., Poppe, L., Paizs, C., MIO-enzyme toolbox: F137V mutant of phenylalanine ammonia-lyase from *Petroselinum crispum* with improved substrate tolerance and stereoselectivity, *Action COST CM1303 SysBiocat Training School*, Siena, **2016**.

**2015**

- **Filip, A.**, Bencze, L.C., Paizs, C., Poppe, L., Irimie, F.D. MIO-enzyme toolbox: cloning, expression and purification of recombinant RtPAL. *International Conference Molecular Biology – Current Aspects and Prospects* (ICMB-CAP), Cluj-Napoca, 6-8 November, **2015**.
- Bencze, L.C., **Filip, A.**, Banoczi, G, Tosa, M.I., Irimie, F.D., Poppe, L., Paizs, C., Styryl-alanines as novel substrates for phenylalanine ammonia lyases, *International Symposium on Synthesis and Catalysis (ISYSYCAT)*, Evora (Portugal), **2015**. **Poster awarded with runner-up prize in the Catalysis section.**
- **Filip, A.**, Bartha-Vári JH, Banoczi, G, Poppe, L., Bencze L.C, Paizs C., Irimie FD., Non-natural aminoacids via the MIO-enzyme toolkit, The Organizing Committee of the 29<sup>th</sup> Annual Symposium of The Protein Society, Barcelona, Spania, **22-25 iulie, 2015**.

**2014**

- **Filip A.**, Bencze L. C., Paizs C., Toșa M. I., Irimie F. D., Synthesis of new substrates for phenylalanine ammonia-lyase, Innovative Materials and Processes, 2<sup>nd</sup> edițiune of International conference on Chemical Engineering held in Iasi, Romania, 05<sup>th</sup>-08<sup>th</sup> November, **2014**, poster.

**2013**

- **Filip A.**, Roșioru C.: Contribuții privind acțiunea semnițelor de schinduf în situații normale și patologice induse, Simpozionul Național "Tinerii Cercetători În Științe Biologice" ediția I, Cluj-Napoca, 24-26 Mai, **2013**, p.55-56.
- **Filip A.**, Farcas A., Sindilaru M., Vlad Toma., Danaia A. M., Teodoru C., Rosioru C.: Hematological change induced by fenugreek seed flour in alcoholic rats, Bul. SRBC, No. 41, 5<sup>th</sup> International Congress and 31<sup>th</sup> Annual Scientific Session of Romanian Society For Cell Biology June 5-9, **2013**, Timișoara p.57, summary.

**2012**

- Filip A., Utiu I., Munteanu C., Guțu M., Szoke-Nagy T., Crăciun C., Guțu D., Lang C., Roșioru C., *Trigonella foenum-grecum* seed – A natural hepatoprotector, Bul. SRBC, No. 40, 4<sup>th</sup> International Congress and 30<sup>th</sup> Annual Scientific Session of Romanian Society For Cell Biology June, 13-17, **2012**, Satu-Mare - Debrecen, p.59, summary.
  - Trif M., **Filip A.**, Crăciun C., Muntean C., Uțiu I., Szoke-Nagy T., Lukaci C., Tripon S., Roșioru C.: Biological activities of furil-benzothiazole (R) – and (S) enantiomers and racemic in the liver of ethanol-intoxicated rats, Bul. SRBC, No. 40, 4<sup>th</sup> International Congress and 30<sup>th</sup> Annual Scientific Session of Romanian Society For Cell Biology June, 13-17, **2012**, Satu-Mare - Debrecen, p.62, summary.
- 2011**
- Munteanu C., Uțiu I., **Filip A.**, Crișan M., Szoke-Nagy T., Crăciun C., Lang C.: The effect induced by consumption the red bull energy drink on the central nervous system, Bul. SRBC, No. 39, 3<sup>rd</sup> International Congress and 29<sup>th</sup> Annual Scientific Session of Romanian Society For Cell Biology June, 8-12, **2011**, Arad-Szeged, p.42, summary.
  - Pribac G., Simeoni I., Szoke-Nagy T., Lang C., Munteanu C., Uțiu I., Mantu A., **Filip A.**, Crișan M., Crăciun C., Ardelean A., Roșioru C.: *Trigonella foenum-grecum* seed protect against ethanol chronic toxicity in rats, Bul. SRBC, No. 39, 3<sup>rd</sup> International Congress and 29<sup>th</sup> Annual Scientific Session of Romanian Society For Cell Biology June, 8-12, **2011**, Arad-Szeged, p. 45, summary.
  - Szoke-Nagy T., Pribac G., Crăciun C., Simeoni I., Roșioru C., Lang C., Mantu A., Crișan M., **Filip A.**, Uțiu I., Munteanu C.: Hypoglycemic effect of Fenugreek seeds (*Trigonella foenum-grecum*) in streptozotocin-induced diabetic rats, Bul. SRBC, No. 39, 3<sup>rd</sup> International Congress and 29<sup>th</sup> Annual Scientific Session of Romanian Society For Cell Biology, June, 8-12, **2011** Arad-Szeged, p.46, summary.
  - Uțiu I., Munteanu C., Crișan M., **Filip A.**, Simeoni I., Crăciun C., Roșioru C., Lang C.: Metabolic effects of red bull consumption on liver, Bul. SRBC, No. 39, 3<sup>rd</sup> International Congress and 29<sup>th</sup> Annual Scientific Session of Romanian Society For Cell Biology, June, 8-12, **2011**, Arad-Szeged, p.43, summary.

#### IV. AWARDS (excluding certificates of attendance)

- **Excellentia Award** - 5 june **2019**, **PhD student category**, granted by CSUBB and Babeș-Bolyai University
- **Excellentia Award** - 16 june **2017**, **teachers category**, granted by CSUBB and Babeș-Bolyai University
- Gold medal award – Poster section - Expanding the substrate range of phenylalanine ammonia lyase from *Petroselinum crispum* towards styryl-alanines at Conference Biotransformations 2016, The institution which has awarded: Biotransformations for Pharmaceutical and cosmetic industry, Varșovia, 30.06 - 02.07. **2016**.
- Diploma for scientific performance in the academic year **2012-2013**. The institution: Scientific Council of the Babeș-Bolyai University, Cluj-Napoca, President of the Scientific Council - Conf. Univ. dr. Radu Silaghi-Dumitrescu.
- Diplomă de participare pentru implicarea activă în calitatea de membru la activitățile din cadru OsPN - **27.03.2013**, Cluj-Napoca.
- Diploma for the "Best internships", **2009**, Program funded by the European Social Fund POSDRU/7/2.1/S1/2007-2013. The institution: Faculty of Biology and Geology, Cluj-Napoca.
- Scientific Performance Scholarship, awarded by Babeș-Bolyai University, **2011-2013**
- Scholarship awarded for the academic results during the Bachelor's programme by the Faculty of Chemistry and Chemical Engineering, Cluj-Napoca, **2009-2011**

#### V. Seminars

- Workshop International " How to write a success paper in impact factor journal" desfășurată în Cluj-Napoca între **7-9 noiembrie 2012**. Workshopolul a fost acreditat de Colegiul Medicilor din România în cadrul programului Educație Medicală Continuă cu 16 credite conform deciziei CMR nr.5685/02/11/2012.
- Merck-Millipore: Expresii și clonare de proteine, Analiza apei, **2013**.
- Merck-Millipore: Life Science Research with Merk Millipore, **2014**.
- Webinar: Using PR.Stability Analysis software to quickly and confidently identify the conditions that impact the stability of your protein, **06.11.2018**. <https://nanotempertech.com/webinar-pr-stability-analysis-software-11-2018/>
- Certificat de absolvire a cursului de pregătire în acordarea primului ajutor de bază și defibrilare externă automată. Curs de prim ajutor în conformitate cu normele centrului european de Referință pentru educație în prim ajutor. Societatea Națională de Cruce Roșie, Filiala Cluj, 1569/22.01.**2014** și **2017**
- HPLC troubleshooting - Phenomenex Inc. (USA)&MUSO SRL, Trainer: Heiko Behr, at USAMV, Cluj Napoca **2018**.
- Sesiunea de formare "Gamificarea în educația universitară: fundamente și strategii", susținută de prof. Dr. Adrian Opre și lect. Dr. Ramona Buzgar, Facultatea de Psihologie și Științe ale Educației, UBB, Cluj Napoca **27.11.2019**.
- **Coordonator secundar la o bursă de performanță științifică:** "PcPAL mutanți adaptați prin inginerie proteică pentru substraturi cu substituenți voluminoși în pozițiile orto, meta și para" – student masterand Diana Bordea.
- Webinar: **FLOW BIOCATALYSIS**, European Society of Applied Biocatalysis Chairs: Roland Wohlgemuth, ESAB Chairman, Lodz University of Technology, Poland, Jennifer Littlechild, ESAB Vice-Chairman, University of Exeter, UK, **1st October 2020** at 14:00 CET

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

Date: 1. Februarie 2021