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NOTICE

BASIC INFORMATION

Position available within the research project entitled: "MIO-enzyme toolbox for the synthesis of non-natural amino acids", project number IZ11Z0_166543

Title*: Scientific research assistant

Offer Description* : Scientific work in the field of biocatalysis, protein engineering		
Researcher Profiles *: (se bifează opțiunea dori	tă)	
First Stage Researcher (R1)	Recognised Researcher (R2)	
Established Researcher (R3)	Leading Researcher (R4)	
Research field *: Chemistry	▼	
Type of Contract*: Temporary ▼		
Job Status *: Full-time ▼		
Hours Per Week*: 40 h/week		
Application Deadline *: 20.09.2019		
Envisaged Job Starting Date: 01.10.2019		
Is the job funded through a EU Research Framework Programme? *		
Please Select	▼	
Is the Job related to staff position within a Research Infrastructure? (se bifează opțiunea)		
How to Apply *:		
Contact person*: Dr. Laszlo-Csaba Bencze		
E-mail adress*: cslbencze@chem.ubbcluj.ro		
Internal Application form needed (.pdf files) (se bifează opțiunea, dacă este cazul)		

* - Câmpuri obligatorii

HIRING INFO & WORK LOCATION

Number of positions available*:

Company/Institute*: Faculty of Chemistry and Chemical Engineering/Biocatalysis and Biotransformation Research Center

Department*: Biocatalysis and Biotransformation Research Center

REQUIREMENTS

Required Education Level (se completează unul sau mai multe câmpuri, după caz)

Main Research Field*:		
Level*:	Master Degree or equivalent	
Main Re	esearch Field*:	_
Level*:	Please Select	

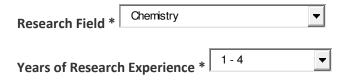
Skills/Qualifications: experiences and skills in cloning techniques, PCR, site-directed mutagenesis, expression, isolation and structural analysis of recombinant proteins/enzymes, enzyme kinetic measurements and rational design of the proteins are suitable for the position.

Specific Requirements: at least two scientific publications sustaining the expertise in biocatalysis/enzymology

Required Languages english and romanian or hungarian



Required Research Experience (se completează unul sau mai multe câmpuri, după caz)





ADDITIONAL INFO

Website for additional job details: (câmp opțional)

Benefits: (câmp opțional)

Eligibility criteria: Ph.D students performing their doctoral studies in the field of Chemistry or Biology

Selection process: step 1. eligibility test (eliminatory); step 2. interview; step 3. selection process based on practical test from the following topics: 1. synthesis of optically pure amino acids using phenylalanine ammonia lyases; 2. monitoring the phenylalanine ammonia lyase catalyzed enzymatic reactions.

Minimal note of each selection step: 8 (at scale 1-10). The candidates are hierarchized based on the final note, which is calculated as the average of notes obtained at selection steps 1,2,3.

Additional comments:

References for the topics of the practical test:

- 1. Gloge A, Zoń J, Kővári Á, Poppe L, Rétey J. Phenylalanine ammonia-lyase: the use of its broad substrate specificity for mechanistic investigations and biocatalysis. Synthesis of larylalanines. *Chem. Eur. J.* **2000**, *6*, 3386.
- 2. Paizs C, Katona A, Rétey J:The interaction of heteroaryl-acrylates and alanines with phenylalanine ammonia-lyase from Parsley. *Chem Eur. J.* **2006**, *12*, 2739-2744.
- 3. Paizs C, Katona A, Rétey J: Chemoenzymatic one-pot synthesis of enantiopure l-arylalanines from arylaldehydes. *Eur J Org Chem* **2006**, 1113-1116.
- 4. Paizs C,Toşa MI, Bencze LC, Brem J, Irimie FD: 2-Amino-3-(5-phenylfuran-2-yl) proprionic acids—phenylfuran-2-yl acrylic acids are novel substrates of phenylalanine ammonia lyase. *Heterocycles* **2011**, *82*, 1217-1228