



NOTICE

BASIC INFORMATION

Position available within the research project entitled: "Computational design of cationic polymers as gene delivery vectors", code PN-III-P4-ID-PCE-2016-0474, Contract No. 36/2017

Title*: ASSISTANT RESEARCHER

Offer Description*:

The candidate is expected to be already enrolled as a doctoral student in physics, to be familiar with gene delivery mechanisms and cationic polymers, and to possess solid knowledge of numerical methods, molecular mechanics, and operation with well-established molecular dynamics (MD) codes (NAMD or Gromacs). They will be actively involved in:

- Development of a coarse-grained (CG) force field for protonated polyethyleneimine (PEI, as gene carrier), by mapping atomistic residues to CG beads and adjusting the interaction parameters by Boltzmann inversion relative to reference atomistic MD simulations.
- Atomistic- and CG MD investigations of DNA-PEI condensation under diverse conditions, aiming at enhanced efficiency of practical condensation/transfection processes.

Researcher Profiles*:

- First Stage Researcher (R1) Recognised Researcher (R2)
- Established Researcher (R3) Leading Researcher (R4)

Research field*:

Type of Contract*:

Job Status*:

Hours Per Week*: 20

Application Deadline*: 23 October 2018

Envisaged Job Starting Date: 1 November 2018

Is the job funded through a EU Research Framework Programme? *

Not funded by an EU programme ▼

Is the Job related to staff position within a [Research Infrastructure](#)? (se bifează opțiunea)

How to Apply *: email ▼

Contact person*: Titus Beu (nume, prenume persoană de contact)

E-mail adress*: titus.beu@phys.ubbcluj.ro (adresa de e-mail a persoanei de contact)

Internal Application form needed (.pdf files) (se bifează opțiunea, dacă este cazul)

HIRING INFO & WORK LOCATION

Number of positions available*: 1

Company/Institute*: Babeş-Bolyai University

Department*: Faculty of Physics / Department of Biomolecular Physics

REQUIREMENTS

Required Education Level

Main Research Field*: Physics ▼

Level*: Master Degree or equivalent ▼

or

Main Research Field*: Please Select ▼

Level*: Please Select ▼

Skills/Qualifications:

PhD student in Physics.

Experience with numerical methods, scientific programming, and molecular dynamics simulations.

Specific Requirements:

Required Languages

Language *

Level*

Language *

Level*

Required Research Experience

Research Field *

Years of Research Experience *

or

Research Field *

Years of Research Experience *

ADDITIONAL INFO

Website for additional job details: *(câmp opțional)*

Benefits: *(câmp opțional)*

Eligibility criteria: *(câmp opțional)*

Selection process: *(câmp opțional)*

Additional comments: *(câmp opțional)*