



Reference: REQUIMTE 2022-42

Main research field: Exact and Natural Sciences

Sub research field: MICROSCOPY/SPECTROSCOPY

1. In a meeting the Board of Directors of REQUIMTE – Rede de Química e Tecnologia – Associação, has decided to open an international call for a PhD holder Researcher, under a work contract for a non-fixed term. This announcement is intended to 1 (one) research position (Reference **REQUIMTE 2022-42**), to pursue scientific research activities in the area Exact and Natural Sciences, sub-area Chemistry, under a work contract for a non-fixed term, at Laboratório Associado para a Química Verde - Tecnologias e Processos Limpos - UIDP/50006/2020, with the financial support of the FCT/ MCTES through national funds, in order to pursue research activities in: (A) Atomic Force Microscopy, applied to the study of nanoparticles in biological and biomedical systems; and (B) in other biophysical methods for the study of peptide-membrane and peptide-living cells interactions.

2. Applicable Legislation

Decree-Law no. 57/2016 of August 29th, amended by Law 57/2017 and Regulatory Decree No. 11-A/2017 which approved the doctorate hiring regime destined to stimulate scientific and technological employment for all knowledge areas (RJEC); Portuguese Labour Code, approved by Law 7/2009 of February 12, in its actual form.

3. Pursuant to article 13 of RJEC, the tender selection panel is be formed by: Maria de La Salette de Freitas Fernandes Hipólito Reis Dias Rodrigues (Professora Catedrática, Faculdade de Farmácia, Universidade do Porto, chair of the jury by delegation of the Director of REQUIMTE), Nuno C. Santos (Professor Associado com Agregação, Faculdade de Medicina, Universidade de Lisboa) and José Ricardo Franco Tavares (Professor Associado com Agregação, Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa).

4. The workplace shall be at Universidade do Porto.

5. The gross monthly salary entitle is stipulated in clause 1 a) of article 15 of the Regulatory Decree No. 57/2016, of August 29th, amended by the law nº 57/2017 of July 29th, corresponding to level 33 of the Consolidated Table of Allowances, as approved by Government Order No. 1553-C/2008, of December 31st, being 2.153,94 Euros.

6. Application can be submitted by any national, foreign and stateless candidate(s) holding a doctorate degree in Biochemistry, Biophysics, Chemistry, Pharmaceutical Sciences and related area.

In case the doctorate degree was awarded by a foreign higher education institution, it must comply with the provisions of Decreto-Lei n.º 66/2018, de 16 de Agosto, and all formalities established therein must be complied with at the signature of work contract.

7. The tender admission general requirements are those defined in the previous point 6, and specific requirements are publications in the areas: (A) Atomic Force Microscopy in the evaluation of mechanical stability/cohesion of biofilms by nanoindentation and characterization of changes in the structure of biofilms and other biological and biomedical systems; and (B) in the application of other biophysical methods in the study of peptide-membrane and peptide- living cells interactions.

8. Pursuant to article 5 of RJEC, the selection is to be made based on the evaluation of the scientific and curricular career of the candidate.

9. Scientific and curricular career evaluation focuses on relevance, quality and up-to-datedness:

a) of scientific or technological production, considered most relevant by the candidate;

b) of research activities, fundamental or applied science, considered of higher impact by the candidate;

c) of knowledge extension and dissemination activities, namely under the scope of the promotion of culture and scientific practices, deemed most relevant by the candidate.

10. Evaluation criteria are the following:

In evaluating the candidates' CVs, in particular the scientific experience and scientific merit, the elements presented for the last five years of activity covered by the specific areas of the tender will be valued (see point 1), according to the following criteria:

10.1 Integrated assessment of the curriculum trajectory of the candidate, based on an overview of their scientific merits, namely:

I. overall scientific coherence of the CV – 10%;

II. diversity and quality of scientific indicators, including relevant published peer-reviewed articles, in the relevant areas (A) as Atomic Force Microscopy in biological and biomedical systems; and (B) other biophysical methods in the study of biological peptide-membrane and peptide- living cells interactions. – 30%;

III. contribution to research projects in the areas described in the previous point and supervision of students in these areas. - 15%.

10.2 Relevant experience, proved in CV, in:

I. Practical experience in the use and maintenance of Atomic Force Microscopy to obtain images of erythrocytes, bacteria, parasites, dental appliances, screws for dental implants and in the characterization of changes in the structure of biofilms, as well as in the evaluation of mechanical stability/cohesion of biofilms by nanoindentation in liquid medium – 25%;

II. Solid knowledge and practical experience in the evaluation of mechanism of action of peptides in bacteria and parasites – 15%;

III. Experience in knowledge extension and dissemination activities – 5%.

Only candidates who obtain a classification equal to or greater than 50% in the parameters indicated above will be eligible.

11. In the case of admitted candidates whose evaluation does not differ more than 10% from that obtained by the best positioned candidate, the jury will interview the best positioned candidate and the candidates in this situation. This will be aimed at obtaining clarifications and explanations about

the curricular elements and additional information as well as to evaluate the attitude profile and motivation of the candidate.

The final score of each jury member is obtained by the following assessment: 90% scientific and curricular career evaluation and 10% interview.

12. Candidate final classification system shall be given based on a scale 0 to 100.

13. The panel shall deliberate by means of roll-call vote justified under adopted and disclosed selection criteria, with no abstentions allowed.

14. Minutes of panel meetings shall be executed and include a summary of all occurrences of said meeting, as well as of all votes casted by the members and respective reasoning, and shall be provided to candidates whenever required.

15. After selection criteria application, the panel shall prepare a sorted list of approved candidates and respective classification.

16. Panel's final decision shall be validated by the leader of the institution, who is also in charge of deciding about the hiring.

17. Application formalization:

The applications are formalized at the electronic address <https://www.requimte.com/> with following documents in a digital form, in PDF format:

- i) Curriculum vitae;
- ii) Motivation letter, in which the candidate must explain future research objectives based on previous experience
- iii) Qualifications Certificate;
- iv) other relevant documentation.

17.2. The application period is from **08/08/2022 to 22/08/2022**.

18. All candidates who formalize their applications in an improper way or fail to prove the requirements imposed by this tender are excluded from admission. In case of doubt, the panel is entitled to request any candidate to present further documentation supporting their statements.

19. False statements provided by the candidates shall be punished by law.

20. Both admitted and excluded candidate list and final classification list shall be published at the address of REQUIMTE (Praça Coronel Pacheco nº 15-6º andar, Porto), in the website of the Institute and the selected candidate shall be notified by email.

21. Preliminary Hearing and Final Decision Deadline: After publication, all candidates have 10 working days to respond. Panel's final decisions are pronounced within a period of 90 working days, from response period deadline.

22. This tender is exclusively destined to fill this specify position and can be terminated at any time until approval of final candidate list, expiring with the respective occupation of said position.

23. Non-discrimination and equal access policy: REQUIMTE actively promotes a non-discrimination and equal access policy, wherefore no candidate can be privileged, benefited, impaired or deprived of any rights whatsoever, or be exempt of any duties based on their ancestry, age, sex, sexual preference, marital status, family and economic conditions, instruction, origin or social conditions, genetic heritage, reduced work capacity, disability, chronic illness, nationality, ethnic origin or race, origin territory, language, religion, political or ideological convictions and union membership.

24. The panel has approved this announcement in a meeting held on 26/07/2022.

25. According to Decree-Law no. 29/2001 of 3 February, disabled candidates shall be preferred in a situation of equal classification, and said preference supersedes any legal preferences. Candidates must declare, on their honour, their respective disability degree, type of disability and communication/expression means to be used during selection period on their application form, under the regulations above.

26. The selection of candidate to be hired is determined by orientations and regulations issued by Fundação para a Ciência e Tecnologia upon verification of all legal requirements. REQUIMTE is entitled to annihilate the present process in case the legal requirements are not fulfilled.