

CALL FOR APPLICATIONS

Reference: 2023.14741.TENURE.010

Main research field: Chemical Sciences

1. The Board of REQUIMTE – Rede de Química e Tecnologia – Associação have decided on January 20, 2025, to open an international doctoral selection competition, under the open-ended employment contract regime. This notice is intended to fill one (1) position equivalent to Assistant Researcher (**Reference 2023.14741.TENURE.010**), for the exercise of scientific research activities in the scientific area of Chemical Sciences, under the open-ended employment contract regime, at the Associated Chemistry Laboratory for Green Chemistry - Clean Technologies and Processes under the FCT-Tenure Program – 1st Edition, published through the Call for Applications (“Aviso de Abertura de Concurso”) with Reference PRR No. 02/C06-i06/2024, with financial support from FCT/MCTES through national funds, with a view to carrying out scientific research activities in Nanotechnology and Analytical Chemistry.

2. Applicable Legislation: Decree-Law no. 124/1999 of April 20; Portuguese Labour Code, approved by Law 7/2009 of February 12, in its actual form; and Scientific Employment Regulation published in Diário da República under the number 607-A/2017 of November 22, modified by Regulation 1083/2023 of October 12.

3. Pursuant to article 19 of Decree-Law no. 124/199, the tender selection panel is be formed by: President of the Jury: Baltazar Manuel Romão de Castro (Full Professor Emeritus, University of Porto, Director of REQUIMTE); Members of the evaluation panel: 1: Maria de La Salette de Freitas Fernandes Hipólito Reis Dias Rodrigues (Professora Catedrática, Faculdade de Farmácia da Universidade do Porto); 2: João Luís Machado dos Santos (Professor Associado, Faculdade de Farmácia da Universidade do Porto); 3: Maria das Graças Andrade Korn (Professora Titular, Universidade Federal da Bahia); 4: Cristina Maria Cavadas Morais Couto (Professora Associada do Instituto Universitário de Ciências da Saúde - CESPU).

4. The workplace shall be at University of Porto.

5. The gross monthly salary offered is that of index 195 of the Scientific Research Career (Annex I of Decreto-Lei Nº124/99, of April 20).

6. The assistant researcher is responsible for regularly carrying out research and development activities as well as other scientific and technical activities within the scope of the missions of the respective institutions and also:

- Participate in the design, development and execution of research and development projects, and related scientific and technical activities;
- Guide the work carried out within the scope of the projects under his responsibility;
- Collaborate in the development of training actions within the scope of the methodology of research and development;
- Monitor the research work developed by scholarship holders, research interns and research assistants;
- Collaborate in teaching and participate in training programs whenever agreed with a Higher Education Institution;
- Guidance for higher education students, particularly undergraduate, master's and doctoral students, whenever agreed with a Higher Education Institution;
- Perform the functions for which they have been elected or appointed in the collegiate bodies of the institution.

7. Application can be submitted by any national, foreign and stateless candidate(s) holding a doctorate degree in Chemistry and related areas, with five years or more of relevant post-doctoral experience.

When the doctorate degree was awarded by a foreign higher education institution, it must comply with the provisions of Decreto-Lei Nº 66/2018, of August 16, and all formalities established therein must be complied with at the signature of work contract.

8. General requirements for tender admission are those defined in previous point 7, and specific requirements are:

- a)** Publications in the fields of **Nanotechnology and Analytical Chemistry**, totalling more than 50 articles in international journals indexed in Web Of Science or Scopus;
- b)** Proven experience, through scientific publications, in the aqueous synthesis and application in photocatalytic processes and in the generation of multivariate data of semiconductor quantum dots, of carbon and metallic nanoparticles;
- c)** Proven experience, through scientific publications, in the combination of multiplexed and multi-detection analytical systems, and chemometric models, in the development of fluorimetric sensors;
- d)** Proven experience, through scientific publications, in the combination of advanced vibrational spectroscopic methods and chemometrics for the authentication and detection of adulterants in food.

9. 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.

10. Scientific and curricular career evaluation focuses on relevance, quality and up-to-dateness:

- a)** of scientific or technological production, considered most relevant by the candidate in the past 5 years;
- b)** of research activities, fundamental or applied science, considered of higher impact by the candidate in the past 5 years;
- 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;
- d)** of activities of entrepreneurship and technology transfer;
- e)** of activities of elaboration of applications for R&TD projects funding.

11. Evaluation criteria are the following:

11.1 Integrated assessment of the curriculum trajectory of the candidate, based on an overview of their scientific merits (80 points):

I. Curriculum Vitae (CV).

When evaluating candidates' CVs, in particular their scientific experience and merit, the elements presented for the last five years of activity covered by the specific areas of the competition (see point 8) will be valued, in accordance with the following criteria

- a.** The global coherence of the CV, particularly in terms of the diversity and quality of scientific indicators, including relevant published articles in the specific areas indicated in point 8 of this call –10;
- b.** Publications on the aqueous synthesis of semiconductor quantum dots (binary and ternary) of carbon and metallic nanoparticles, and their application in photocatalysis processes and/or in the implementation of multiplexed and multi-detection analytical systems – 25;
- c.** Publications on increasing the selectivity of sensor elements based on nanocrystals through the functionalization of their respective surface – 5;
- d.** Publications on the application of chemometric models in the analysis and processing of multivariate data obtained using fluorescence excitation/emission matrices and kinetic data – 10.
- e.** Publications on the combination of vibrational spectroscopic methods and chemometrics, for characterization, authentication, detection of adulterants and discrimination of origin - 10;

II. Participation on funded research projects in the area of Nanotechnology applied to Analytical Chemistry – 5.

III Supervision of master's and doctoral students with completed dissertations – 5.

IV. International collaborations, particularly participation in research projects/cooperation actions and joint publication of articles – 5.

V. Collaboration in teaching and participation in training programs – 5.

11.2. Performance report– 10.

11.3. Development plan – 10.

12. Only candidates who obtain a score equal to or higher than 50 points in the parameters indicated in item 11 will be eligible to fill the position through competition.

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

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

15. Minutes of the jury meetings will be drawn up, which contain a summary of what occurred during them, as well as the votes cast by each jury member and their respective reasons, being provided to candidates whenever requested.

16. After completing the application of the selection criteria, the panel will draw up an ordered list of approved candidates with their respective classification.

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

18. Application formalization:

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

- a) Curriculum Vitae written in English containing all information relevant to the evaluation of the application and organized in accordance with the selection criteria set out in item 10 of this notice;
- b) Copy of certificate of doctoral qualifications;
- c) Development plan, in which the candidate must outline the future research intended to carry out, contextualizing the state of the art and the research strategies proposed to adopt. This document must have a maximum of 10 A4 pages (Arial font, size 11, 1.5 spacing and 2.5 cm margins, including cover, index, figures, references, and any other elements), and can be written in English;
- d) Performance report, which must correspond to an analysis made by the candidate on the work and elements of his/her curriculum vitae that he/she considers most relevant, especially with regard to the development of knowledge in the area of the tender; this document must have a maximum of 5 A4 pages (including cover, index, figures, references, and any other elements), with a minimum text size of 11pt and can be written in English;
- e) Scientific publications, up to a maximum of 5, that the candidate considers to be the most significant for the recruitment area;
- f) Any documents that the candidate deems relevant to assessing his/her merits.

18.2 The documents referred to in points a) to e) are mandatory.

18.3 The documents included in the application must be in PDF format (mandatory), unlocked(unlock), allowing selecting and copying text, and making annotations, with an active "table of contents"(TOC or "bookmarks", depending on the PDF reader) and a chapter structure to allow digital navigation of the document with the side column open in " Portable Document Format" (.pdf).

18.4. Files must be identified with the candidate's first and last name. They can be compressed in the format .zip.

19. 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.

20. The application submission period runs for 30 working days after publication of the opening notice in Diário da República.

21. 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.

22. 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.

23. 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.

24. 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.

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 a Tecnologia upon verification of all legal requirements. REQUIMTE is entitled to cancel the present process in case the legal requirements are not fulfilled.

27. The panel has approved this tender in a meeting held on 31/01/2025.