



Reference: REQUIMTE 2021-23

Main research field: Exact and Natural Sciences

Sub research field: Chemistry

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 2021-23**), 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 - UIDB/QUI/50006/2020, with the financial support of the FCT/ MCTES through national funds, in order to pursue research activities in Inorganic Chemistry, Materials Chemistry, Nanochemistry/Nanotechnology and Functional and Smart Textiles. Experience regarding the preparation of hybrid (nano)materials, chemical processes of textiles functionalization and coating, advanced characterization techniques and development of functional and smart textiles for Energy, Protection, Sensing, Health & Well-Being will be considered.

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 to be formed by: Baltazar Manuel Romão de Castro (REQUIMTE Director), Ana Cristina Moreira Freire (Full Professor, Faculdade de Ciências, Universidade do Porto) and Manuel Fernando Ribeiro Pereira (Full Professor, Faculdade de Engenharia, Universidade do Porto).

4. The workplace shall be at Faculdade de Ciências da Universidade do Porto.

5. The gross monthly salary entitle is € **3.201,40**, corresponding to 195 index of the Scientific Research Career ((Anexo I do Decreto-Lei nº 124/99, de 20 de Abril).

6. Application can be submitted by any national, foreign and stateless candidate(s) holding a doctorate degree in Chemistry, with five years or more relevant post-doctoral experience, and a scientific and professional curriculum whose profile is suited for the activity described below (item 7).

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 relevant publication record in the fields of inorganic chemistry, materials chemistry, nanochemistry/nanotechnology, functional and smart textiles, energy and/or individual protection. Experience in ecosustainable processes of chemical synthesis and morphological, structural, textural, chemical, magnetic and electrochemical characterization techniques will be also considered, namely SEM, TEM, EDX, XRD, DLS, zeta potential, XPS, infrared spectroscopy, Raman

spectroscopy, UV-Vis spectroscopy, thermogravimetry, N₂ adsorption/desorption isotherms, magnetometry, voltammetric techniques, electrochemical impedance spectroscopy and charge/discharge galvanostatic method.

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;
- d)** of activities of entrepreneurship and technology transfer;
- e)** of activities of elaboration of applications for R&TD projects funding.

10. Evaluation criteria are the following:

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 – 15%;
- II.** diversity and quality of scientific indicators, including relevant published peer-reviewed articles, in the specific areas indicated in points 1 and 7 or demonstrating relevant technical expertise – 20%;
- III.** contribution to research projects in the areas of inorganic chemistry, materials chemistry, nanochemistry and nanotechnology, ecosustainable processes of chemical synthesis, functional and smart textiles, energy, protection, sensing, health and well-being – 15%.

10.2 Relevant experience, proved in CV, in:

- I.** Processes of chemical functionalization and doping of (nano)materials and preparation of advanced hybrid/composite (nano)materials with electrical, redox, magnetic, optical and/or responsive properties – 10%;
- II.** Experience in morphological, structural, textural, chemical, magnetic and electrochemical characterization techniques – 10%;
- III.** Experience in the fabrication of functional and smart textiles and devices through chemical functionalization, coating, printing and/or spinning processes – 10%;
- IV.** Strong knowledge and experience on the evaluation of devices performance in energy, protection and/or chromic sensors applications – 10%;
- V.** Entrepreneurship and technology transfer – 10%.

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 these candidates. 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:

17.1 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) Motivational Letter;
- iii) Qualifications Certificate;
- iv) other relevant documentation.

17.2. The application period is from **21/06/2021 to 05/07/2021**.

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 09/06/2021.

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.