



**Reference: REQUIMTE 2021-34**

**Main research field:** Exact and Natural Sciences

**Sub research field:** BIOINORGANIC 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 2021-34**), to pursue scientific research activities in the area Exact and Natural Sciences, sub-area Bioinorganic Chemistry, under a work contract for a non-fixed term, at Laboratório Associado para a Química Verde - Tecnologias e Processos Limpos - UIDP/QUI/50006/2020, with the financial support of the FCT/ MCTES through national funds, in order to pursue research activities in Bioinorganic Chemistry concerning the design of chelators and transition metal ion chelates with application in the fields of medicine, agriculture and environmental sciences. The work will also involve: (i) the preparation and characterization of nanoformulations for delivery of the active compounds, (ii) in vitro and in vivo evaluation of the biological activity of the prepared compounds and formulations, (iii) study of molecular interactions with biological membranes. Previous experience in chemical synthesis of chelators and transition metal ion chelates, preparation and characterization of nanoformulations for delivery of active compounds, in vitro and in vivo evaluation of biological activity and spectroscopic and microscopy techniques namely, Nuclear Magnetic Resonance, Electron Paramagnetic Resonance, Electronic Absorption and Fluorescence spectroscopy and Confocal Microscopy in the perspective of elucidation of molecular interactions with biological membranes, 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 (Diretor of REQUIMTE, President), Maria de La Salette de Freitas Fernandes Hipólito Reis Dias Rodrigues (Full Professor, Faculdade de Farmácia, Universidade do Porto) and Maria da Conceição Santos Silva Rangel Gonçalves (Associate Professor with Habilitation, Instituto de Ciências Biomédicas de Abel Salazar, Universidade do Porto).

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 2.134,73 Euros.

**6.** Application can be submitted by any national, foreign and stateless candidate(s) holding a doctorate degree in Chemistry, Biochemistry, Biophysics, Pharmaceutical Sciences and holders of a scientific and professional curriculum that reveals an adequate profile for the activity to be developed (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 publications in the areas of chemical synthesis of chelators and transition metal ion chelates, preparation and characterization of nanoformulations for delivery of active compounds, in vitro and in vivo evaluation of biological activity and spectroscopic and microscopy techniques namely, Nuclear Magnetic Resonance, Electron Paramagnetic Resonance, Electronic Absorption and Fluorescence spectroscopy and Confocal Microscopy in the perspective of elucidation of molecular interactions with biological membranes.

**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 relevant if the areas of Bioinorganic Chemistry, Pharmaceutical Sciences, Biophysics, Nanotechnology or demonstrating relevant technical expertise – 25%;

**III.** contribution to research projects in the area of chemical synthesis of chelators and transition metal ion chelates with application in the fields of medicine agriculture and environmental sciences, in the area of drug delivery and study of molecular interactions related with applications in life and health sciences -15%.

**10.2** Relevant experience, proved in CV, in:

**I.** Experience in the chemical synthesis of chelators and transition metal ion chelates and preparation and characterization of nanoformulations– 25%;

**II.** Experience in spectroscopic techniques namely, Nuclear Magnetic Resonance, Electronic Paramagnetic Resonance Spectroscopy and Electronic Absorption and Fluorescence Spectroscopy and microscopy namely Confocal Microscopy– 10%;

**III.** Experience in in vitro e in vivo evaluation of biological activity – 10%

**IV. Experience in knowledge extension and dissemination activities – 5%.**

**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:**

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 **01/09/2021 to 15/09/2021**.

**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 the 27<sup>th</sup> of July of 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.

**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.