Research Grant (BI) (1 vacancy)

Reference: 2022-002-BI-M_CTA-AMB

A competition is open for the attribution of 1 research grant in the framework of the Project Sustainable antifouling agents: from grape wastes to the sea with the green chemistry leading the way, reference PTDC/CTA-AMB/0853/2021, within the R&D Institution CIIMAR (Interdisciplinary Centre of Marine and Environmental Research), supported by FCT, according to the following conditions:

1. **Scientific area:** Chemistry

2. **Admission requirements:**

   The candidates must accomplished one of the following requisites:

   1) hold a bachelor in chemistry or other related fields, with a final classification of at least 16 and be able to be enrolled in a PhD programme of a higher education institution; or

   2) hold an integrated master in Pharmaceutical Sciences or a master in chemistry or other related fields, with a final classification of at least 15 and be able to be enrolled in a PhD programme of a higher education institution.

   Enrolment will be mandatory and proof necessary only at the moment of scholarship contracting.

   Academic degrees awarded by a foreign higher education institution must comply with the provisions of Decree-Law no. 66/2018 of 16th August, which approves the legal regime of recognition of academic degrees and diplomas of Higher Education, attributed by foreign higher education institutions, being any formalities established therein fulfilled only by the date of the contracting act.

   In detail the candidates must have and demonstrate training and/or experience in some of the following subjects, in the field of Chemistry:

   - Isolation of natural compounds and structure elucidation;
   - Chemical synthesis;
   - Green Chemistry principles/methods;
Candidates should speak and write fluently English. Preferred condition will be the candidate hold a master in chemistry or other related fields, and be able to be enrolled in a Pharmaceutical Sciences PhD programme under the scope of this project.

3. Work plan:

The selected candidate will be involved in the extraction of high-value compounds from grape wastes (Task 1) and in optimization of the chemical syntheses of nature-inspired antifoulants accordingly to the Green Chemistry principles (Task 2).

The candidate will:

- extract high-value compounds from grape wastes with green methodologies (Task 1);
- synthesize nature-inspired antifoulants with greener methods and with a purity >95% (Task 2);
- perform molecular modification for optimization of some of the nature-inspired antifoulants who may exhibit some toxicity or persistence potential across the project (Task 2).

The structures of all products will be established by spectroscopic methods (IR, NMR) and HRMS. The purity of each compound will be determined by DAD-HPLC and HRMS.

4. Legislation and official rules:

Law nº. 40/2004, 18th August (Research Fellowship and Studentship Regulation) amended and republished by Decreto-Lei n.º 202/2012, 27th August; Regulations for Studentships and Fellowships of the Fundação para a Ciência e a Tecnologia, I.P. — and CIIMAR Grants Regulation approved by FCT.

5. Work place:

The work will be carried out at the Laboratory of Organic and Pharmaceutical Chemistry, Faculty of Pharmacy of University of Porto, Porto (Natural Products and Medicinal Chemistry group of CIIMAR - Interdisciplinary Centre of Marine and
Environmental Research) under the scientific supervision of the Principal Investigator of the Project, Prof Marta Ramos Pinto Correia da Silva Carvalho Guerra and at Chemistry Department of University of Aveiro (CICECO - Centre for Research in Ceramics and Composite Materials), under the supervision of the consultant of the Project, Dr. Mara Guadalupe Freire Martins.

6. Duration of the contract:
Duration of 30 months, starting in March 2022, under the regime of exclusive dedication.

7. Monthly salary:
The monthly maintenance allowance is € 1104,64, in agreement with the monthly maintenance stipend table of the grants directly attributed by FCT, I.P. within the country (https://www.fct.pt/apoios/bolsas/valores.phtml.en). Payment will be made monthly by bank transfer. In addition to this allowance, the grantee will be covered by a personal accident insurance.

8. Selection methods:
The ranking of candidates will be performed by an initial evaluation based on global Curriculum Vitae evaluation.

The candidates’ CV score (CVS) will be the sum of the evaluation for the Academic Qualification (AQ) and the Professional Experience (PE), in accordance with the formula:

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CVS = AQ + PE
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The Academic Qualification (AQ) and the Professional Experience (PE) will evaluate the merit of the candidate, and are evaluated with the following subcriteria:

AQ. Overall assessment of the curriculum - will have a weighting of 50% and will evaluate the following sub-factors:

- Academic degree;
- Published or submitted articles;
• Oral and/or poster communications in scientific meetings.

PE. Expertise / skills in the field of research indicated - will have a weighting of 50% and will evaluate the following subfactors:

- Laboratory experience in chemical synthesis;
- Laboratory experience in isolation/extraction of natural compounds;
- Laboratory experience in structure elucidation;
- Knowledge in green chemistry principles/methods;
- English writing experience (reports, dissertation).

The jury reserves the right to not assign the research grant if none of the candidates meets all requirements and matches the desired profile.

Short-listed candidates with similar final scores may be invited to an interview, which adds a maximum of 2 values to the evaluation of the Curriculum Vitae.

9. Composition of the jury selection:

President of the jury: Marta Ramos Pinto Correia da Silva Carvalho Guerra

Vogal: Professora Doutora Maria Emília Pereira de Sousa

Vogal: Doutora Diana I.S.P Resende

10. Form of Advertising/notification of results:

The final results of the evaluation will be published through a list sorting the candidates according to their attributed mark, on the CIIMAR website and by e-mail.

After the announcement of the results, candidates are considered automatically notified to, if they wish to do so, comment on the results on a preliminary hearing period within 10 working days after that date, as provided for in the Código do Procedimento Administrativo.

The jury reserves the right to not assign the grant depending on the quality of the applications.

In case of resignation or withdrawal of the selected candidate, the next candidate with the highest evaluation score will be notified immediately.
Based on the final sorted list of the candidates it will be made a reserve list that will be used for the future recruitment of grantees for this project.

11. **Deadline for application and presentation of applications:**

The competition is open from **24/1/2022 until 4/2/2022**. The applications must be formalized, compulsorily, by sending the following documents:
- indication of the reference of the competition (as indicated in this announcement);
- detailed Curriculum vitae with contact e-mail address and phone number;
- copy of the eligibility certificates;
- motivation letter specifying if the candidate is able to be enrolled in a PhD programme, namely in Pharmaceutical Sciences;
- one or more reference contact information;
- any other documents that the candidates may recognize as relevant to demonstrate the adequacy to the function.

The applications should be sent by e-mail to: rh@ciimar.up.pt, with the reference 2022-002-BI-M_CTA-AMB. The applications that do not include all the elements previously indicated will not be considered.