

Universidade do Minho
Centro de Biologia Molecular e Ambiental (CBMA)

ANNOUNCEMENT FOR THE AWARD OF TWO RESEARCHS FELLOWSHIP

Title: Research Fellowship; 2 vacancies

Reference: BI-1/CHITMOD-CBMA/2026

A call for applications is now open for the attribution of 2 (two) grants within the scope of the I&D project “Chitinase Modulation for Diverse Biological Applications” (COMPETE2030-FEDER-00708500), financed by national funds through R&D Projects in All Scientific Domains, by Foundation for Science and Technology (FCT), under the following conditions:

Scientific Area: Biological Sciences

Recipient category: Masters in Applied Biochemistry or related fields, enrolled or able to enroll in non-academic degree courses.

Requirement for granting the fellowship:

- The applicants may apply without prior registration in the course for which the fellowship is open. The requirement to enroll in a degree course or non-academic degree course will be verified on the date of contracting the fellowship;
- Only fellowships whose selected applicants present a valid proof of enrollment in a degree course or non-academic degree course will be contracted, according to the type of the fellowship, issued by a Higher Education Institution, indicating, respectively, the academic year or its duration (start and term).

Applicants' eligibility: Candidates who meet the conditions set out in Article 9 of the Research Grant Regulations, No. 950/2019, of 16-12-2019, of FCT I.P. are eligible.

Nationals or citizens of other European Union member states, third-country nationals, stateless persons, and citizens with political refugee status are eligible to apply for this competition.

Candidate eligibility requirements:

- a) Mandatory requirements:
 - Master's degree in Applied Biochemistry or related fields.
 - Authorship of at least 5 papers published in scientific journals within the last 5 years (2021–2026)
- b) Preferred qualifications:
 - Proven experience in manipulating yeasts and filamentous fungi
 - Experience in protein production, purification, concentration, and quantification
 - Experience in antifungal activity assays.
 - Experience in biological activity assays (antimicrobial, antioxidant, and immunomodulatory).
 - Experience in bioinformatics analyses (genome assembly, annotation, phylogenetics, etc.).
 - Proven experience in mentoring undergraduate and/or Master's students

Workplan and objectives to be achieved:

The candidates will carry out R&D activities within the scope of the CHITMOD project, aiming to consolidate their scientific training.

Abstract: CHITMOD aims to use AI to engineer a fungal chitinase (Cht3), producing novel chimeric variants for biocontrol and waste valorization. The project builds on previous work and incorporates international experts with complementary skills to ensure the successful achievement of project objectives.

Specifically, candidates will carry out the following tasks, in accordance with the profiles identified below:

Profile 1 – Activity Plan

- Production of a fungal chitinase (Cht3) expressed in *Pichia pastoris*, as well as its subsequent concentration and quantification.
- Evaluation of the antifungal activity of Cht3 (and other variants) against human, animal, and plant pathogenic fungi, using growth assays, metabolic activity assays, and biomass quantification.

Profile 2 – Activity Plan

- Production of chitooligosaccharides (COS) from chitin waste, including chitin recovery from shrimp shells and its enzymatic hydrolysis using various recombinant chitinases.
- Physicochemical characterization of the COS obtained with the different chitinases, including the assessment of the degree of polymerization and other structural properties.
- Evaluation of the biological properties of COS *in vitro*—specifically their antimicrobial, antioxidant, and immunomodulatory activities—using microbiological, biochemical, and cellular assays.

EACH CANDIDATE MAY APPLY FOR ONLY ONE OF THE PROFILES PRESENTED ABOVE, and will be excluded from the selection process if they apply for both.

Applicable legislation and regulations: Research Fellow Statute (EBI), approved by Law n°. 40/2004 of August 18, in its current wording and FCT Research Fellowship Regulation, approved by Regulation n° 950/2019, published in the Diário da República, 2nd series, of December 16, 2019, in its current wording, and Scientific Research Fellowship Regulation (RBIC) of the University of Minho, approved by order n° 4998/2025, published in the Diário da República, 2nd series, n° 81, of April 28, 2025 Amended and republished through amendment statement no. 634/2025/2, published in the Official Gazette, 2nd series, no. 132, of July 11.

Host/Contracting institution and scientific supervision: The workplan will be carried out in the Centre of Molecular and Environmental Biology (CBMA) of the University of Minho, located at the School of Sciences, under the scientific supervision of Dr Ana Paula Sampaio, Associate Professor in the Department of Biology of the School

of Sciences of the University of Minho, and coordinated by Dr Maria Cláudia Gonçalves Cunha Pascoal, Full Professor in the Department of Biology of the School of Sciences of the University of Minho and Director of CBMA.

Fellowship duration: The grants will take place for a period of 12 months, with a provisional starting date on the October 2026. The fellowship grants may, eventually, be renewed up to the maximum limit allowed by the project and/or applicable.

Amount of the research grants: The amount of the grants corresponds to 1359,64€/month, according to the table of values of the Research scholarship of the University of Minho, updated annually, as decided by the Management Board.

Payment is made on the 23rd of each month, through bank transfer to the Bank Identification Number of the fellow identified in the contractualization process.

Other benefits: Reimbursement of Voluntary Social Insurance, if the candidate chooses to receive it, corresponding to the 1st level of discounts (for research grants with a total duration 6 months or higher) and personal accident insurance.

Exclusivity regime: The grantees will perform the activities under exclusivity, as foreseen in article 5º of the Research Fellow Statutes and applicable regulations.

Selection panel:

Chair:

Maria João Marques Ferreira Sousa Moreira, Associate Professor with Habilitation in the Department of Biology, School of Sciences, University of Minho.

Full Members:

Susana Alexandra Rodrigues Chaves, Assistant Professor in the Department of Biology, School of Sciences, University of Minho.

Isabel João Soares da Silva, Assistant Professor in the Department of Biology, School of Sciences, University of Minho.

Alternate Members:

Sandra Cristina Almeida Paiva, Associate Professor with Habilitation in the Department of Biology, School of Sciences, University of Minho.

Pedro Miguel Amadeu Costa Santos, Assistant Professor in the Department of Biology, School of Sciences, University of Minho.

The first effective member will substitute the President of the selection panel in case of impediment, being nominate the first substitute member in the place of the first effective member.

Criteria and procedures for applications assessment and selection: The applications assessment will focus on the candidate's Merit, following evaluation criteria, valued on a scale of 1 (insufficient) to 5 (excellent) values:

Applicant Merit - AM (100%):

A1. Academic path (considering the classifications of academic degrees), with a weighting of **30%**;

A2. Personal curriculum (considering professional and scientific background), with a weighting of **60%**;

Knowledge and prior experience in the following areas will be valued:

- Protein expression in yeast.
- Protein production, concentration, and quantification.
- Manipulation of filamentous fungi and yeast.
- Evaluation of antifungal activity (growth assays, metabolic activity, and/or biomass quantification).
- Production and characterization of chitooligosaccharides (COS) derived from chitin waste using various recombinant chitinases..
- Evaluation of the antimicrobial, antioxidant, and immunomodulatory activities of COS via *in vitro* assays.

A3. Publication Record, with a weighting of **10%**.

The final classification of the applicant's merit with the achieved through the following formula:

$$MC = (A1 \times 0.3) + (A2 \times 0.6) + (A3 \times 0.1)$$

The Selection Committee may decide not to award the Scholarships if none of the candidates obtains a final score higher than 3.8.

Application deadline and submission: The call for applications is open for a period of 10 working days from the date of publication on the Euraxess portal.

Applications must be submitted by email to bolsas@ecum.uminho.pt , indicating the reference number of the competition in the subject line: **BI-1/CHITMOD-CBMA/2026 - Profile 1 or BI-1/CHITMOD-CBMA/2026**

- Profile 2. Only applications submitted within the established deadline and accompanied by the following documents will be accepted:

- a) Candidate's updated curriculum vitae;
- b) Certificates of the academic degrees obtained or, if applicable, the candidate's declaration of honor that he/she has completed the degrees required in the notice by the application deadline (not applicable to research initiation grants).

For degrees obtained abroad, the record of recognition of the academic degrees and record of the conversion of the respective final classification to the Portuguese classification scale must be presented, or, alternatively, a declaration of honor from the candidate.

This declaration must attest to facts that occurred prior to the application. In the event of a discrepancy between the information contained in the declaration and the documentation submitted for the purposes of contracting the scholarship, only the information contained in the latter will be considered. If it is found that the documents proving the academic degree and diploma, or their recognition under the terms of Decree-Law n. ° 66/2018, of August 16, do not correspond to the classifications awarded in the assessment of the academic career and may consequently alter the candidate's ranking, the scholarship will not be contracted;

c)Publication Record.

Form of publication/notification of results: The results of the evaluation are published in a single list (by final score obtained), posted in a visible and public place in the host unit, as well as by email to all candidates, attaching, for this purpose, the minutes of the jury's deliberations, within a maximum period of 90 working days from the deadline for submission of applications.

Candidates are informed, at a preliminary hearing, in accordance with Articles 121 and 122 of the Administrative Procedure Code, of the likely outcome of the final decision, and may comment within 10 working days of this notification.

An appeal may be lodged against the final decision within 15 working days, or an appeal may be lodged with the highest executive body of the funding entity within 30 days, both after the respective notification (Article 12(n°6) of the FCT Research Grant Regulations).

Within 10 working days of notification of the grant award, the applicant must declare their acceptance in writing. In case of non-acceptance, the next highest ranked applicant will be notified immediately.

Fellowship contractualization: The scholarship is awarded through the signing of a contract between the University of Minho and the scholarship recipient, in accordance with point 2.4 of the Rules for the Award and Management of Scholarships

https://www.fct.pt/wpcontent/uploads/2022/03/Normas_de_Atribuicao_de_Bolsas_2021.pdf and the draft contract in Annex II of the University of Minho's Scientific Research Scholarship Regulations.

The contract can only be signed after receipt of all the documentation required for the type of scholarship, which must occur within a maximum period of 6 months, including proof of academic degrees or diplomas, as well as enrollment in non-degree study cycles or courses, as applicable.

Once all the documentation has been received, the contracting entity has 60 working days to sign the scholarship contract. Once received by the scholarship holder, the contract must be returned, duly signed, within 15 working days.

Term and cancellation of fellowship contracts: Without prejudice to the other grounds laid down in the University of Minho's Scientific Research Scholarship Regulation and in the Research Fellow Statute, the scholarship

will cease on completion of the contracted work plan, as well as on expiry of the period for which it was granted or renewed.

The **final report** must be submitted to the scientific advisor, in accordance with the defined objectives and evaluation criteria, no later than 60 working days after the end of the scholarship and must be drawn up in accordance with Annex I of the Regulations of the University of Minho.

Non-discrimination and equal access policy: Universidade do Minho actively promotes a policy of non-discrimination and equal access, so that no candidate may be privileged, benefited, harmed or deprived of any right or exempt from any duty due, namely, to ancestry, age, sex, sexual orientation, marital status, family status, economic situation, education, social origin or condition, genetic heritage, reduced working capacity, disability, chronic illness, nationality, ethnic origin or race, territory of origin, language, religion, political or ideological convictions and trade union membership.

Declaration of Honor
Academic qualifications

I, (full name), candidate for the vacancy for the award of a (type of scholarship), within the scope of the project (name or reference of the project), published on the Euraxess portal, with the reference (ref. notice), declare on my honor that I have completed the academic degree of (academic degree), qualifying for the type of scholarship in the competition, namely the course (designation), by the (University conferring the degree), on the date XX/XX/XXXX, with a final average of XXXXX values on the YY scale.

As it is not possible for me to present proof of qualifications until the end of the competition, I declare that I undertake to present the aforementioned certificate at the conclusion of the scholarship contract, in the event that I am selected for the vacancy in the competition.

As this is true, I hereby date and sign this declaration.

(Place), (date).

(full name)

NOTE: The declaration may only attest to facts that occurred prior to the application.

In the event of a discrepancy between the information contained in the declaration and the documentation submitted for the purpose of contracting the scholarship, only the information contained in the latter will be taken into account.

Declaration of Honor

I, (full name), bearer of identification document number (XXXX), candidate for a research grant (type of grant), within the scope of the project (name or reference of the project), published on the Euraxess portal, with the reference (ref. call for proposals), declare on my honor that (I have not received any research grants to date / I have received the following research grants) under the Research Grant Holder Statute.

University	Financing Entity	Project	Type of Grant	Duration	Start	Term

As this is true, I hereby date and sign this declaration.

(Place), (date).

(full name)