



## **JUNIOR RESEARCHER (M/F) in the area of Optics and bioimaging - 1 VACANCY**

**Reference: CCMAR/IJ/11/2023**

**Project: HORIZON-INFRA-2022-TECH-01-101094250**

The Algarve Centre for Marine Sciences (CCMAR) opens a call for a Junior Researcher (M/F) of any nationality, including stateless candidates, under an uncertain term employment contract within the research project IMAGINE with ref. HORIZON-INFRA-2022-TECH-01-101094250 - *Next generation imaging technologies to probe structure and function of biological specimen across scales in their natural context.*, funded by European Union's HORIZON EUROPE – RIA programme in order to recruit and select the best candidate for the development of the project activities under the following conditions:

### **Job Summary and Duties:**

This post is for a junior researcher in the field of optical imaging & photonics to **develop 3D imaging spectroscopy hardware, image acquisition and analysis software tools.**

Specifically, the Junior Researcher will:

1. Develop fast multispectral optical imaging strategies to enable high-quality 3D images in real-time;
2. Develop an open-source computational framework to perform image acquisition, reconstruction, and analysis;
3. Perform experiments using model and non-model organisms;
4. Supervise PhD, MSc and BSc students;
5. Collaborate with other groups at CCMAR, UAlg and beyond (e.g. EMBL).

### **Relevant Legislation:**

- Decree-Law nr 57/2016, from 29th August, altered by Law nr 57/2017, from 19th July, (RJEC).
- Portuguese Labour Law, approved by Law nr 7/2009, from 12th February in its current form.
- Decree – Law nr 124/99, from 20th April in its current form.
- Regulatory Decree nr 11-A / 2017, of 29th December.
- Decree – Law nr 29/2001 of 3rd February.
- Portuguese Administrative Procedure Code

**Starting Date:** The contract is expected to start in September 2023, and will last only for the time necessary to complete the described work plan.

**Workplace:** The workplace will be at CCMAR (Universidade do Algarve, Faro, Portugal) and other places necessary to the completion of the job tasks.

**Working Schedule:** 35 hours per week.



**Monthly Remuneration:** Gross monthly Remuneration is 2228.11€, in accordance with subsection a), section 1, article 15 from Law nr. 57/2017, 19th July, and with the remuneration position at initial level predicted in article 2 of Regulatory Decree nr. 11-A/2017, of 29th December, correspondent to level 33 at Tabela Remuneratória Única, approved by Decree Law No 26-B/2023 of 18th April 2023.

**Application Period:** Between 27<sup>th</sup> of June and 11<sup>th</sup> July 2023 at 23:59 (Lisbon time, Portugal).

**Required Profile:**

1. PhD in optics, spectroscopy or related areas;
2. Be a holder of a background in optics and experience in the development of fast and efficient 3D optical imaging systems, particularly optical projection tomography and time-resolved spectroscopy systems;
3. Experience with Python programming and development of acquisition/control software;
4. Excellent English oral and written communications skills. Candidates are expected to publish manuscripts in scientific journals and present findings at international conferences;
5. Excellent interpersonal skills. Candidates will be encouraged to work in a collaborative work setting and participate in outreach activities.

**Selection panel:** in accordance with article 13<sup>o</sup> of RJECE the selection panel is composed of Doctor Teresa Correia, project Coordinator at CCMAR, and researcher at CCMAR (President); Professor Rui Guerra, Professor at the Universidade do Algarve and researcher at CEOT (member); Doctor Dário Passos, researcher the Universidade do Algarve and CEOT (member).

**Evaluation and Selection Procedure:**

The evaluation will consist of a Curricular assessment (final classification between 0 and 100 points).

The evaluation and selection of applications will consider the candidate's scientific and curricular career path focusing on the relevance, quality, and timeliness of the criteria referred to in Article 5 (2) (a) to (d) of the RJECE, as follows:

CA) Scientific and technological, cultural or artistic production in the last five years, deemed most relevant by the candidate to perform the project tasks, in accordance with the value defined. The content of the scientific production is more relevant than the publication metrics, or the publisher entity. (40%);

CB) Activities of applied research or based on practice, developed in the last five years, that the candidate considers with greater impact for the tasks to perform in the project, in accordance with the value defined (40%);

CC) Activities of extension and dissemination of knowledge, namely in the promotion of the culture and the scientific practices and developed in the last five years, that the candidate considers more relevant (15%);



CD) Management activities of scientific projects and programmes of research, technology and innovation, or experience in observation, monitoring and evaluation of the scientific and technological system, or higher education, in Portugal or abroad. (5%).

The CB sub-Criteria will be evaluated as follows:

Experience in spectroscopy (25%)

Experience in optical projection tomography (25%)

Experience in computer programming, particularly using Python (25%)

Experience in image reconstruction and analysis (25%)

The period of five years referred in the evaluation criteria may be increased by the selection panel, at the request of the candidate, when justified on grounds of suspension of scientific activity for socially protected reasons, namely for reasons of parental leave, prolonged serious illness, and other situations of unavailability for work legally protected.

The selection committee reserves the right to contact and interview candidates if additional information or clarification of any curricular aspect is necessary related with the research results. In case it takes place, the interview aims to evaluate in more detail the curricular items used to grade the candidate according to the list above.

### **Functioning of the Selection Panel**

Evaluation (from 0-100 points) is obtained through assessment of the motivation letter (including a personal assessment of the relevance of the activities of the last five years for the present application, highlighting the chosen scientific publications), and the CV that will include the activities of the specific field and of the scientific and professional path of the applicant and of up to 3 scientific papers of the candidate's choice.

The score of each candidate is obtained from the sums of the scores of each criterion multiplied by the weights according to the formulation:

$$C = CA*40\% + CB*40\% + CC*15\% + CD*5\%$$

After determining the final score C of all candidates, each member of the selection panel will rank the candidates according to the final scores assigned to them from the highest to the lowest. This is followed by the vote to the first place and for each successive place. A candidate is selected when they receive the majority of votes. If this does not happen in the first round of voting, the least ranked candidate is eliminated, and the procedure is repeated with the remaining candidates. In case of a draw the vote of the President of the selection panel is decisive.



The selection panel will write minutes of the meetings with a description of the evaluation and selection process including an ordered list of candidates, their classification, and the final decision. The CCMAR Board of Directors shall validate the final decision of the selection panel.

In the event that no applicant has the necessary profile, the selection committee reserves the right to close the call without any recruitment. In the event that the selected person does not take up the position because of failure to comply with documentary requirements or any other reason or later, during the contract, if they resign the jury reserves the right, upon convenience and opportunity, to assign the post to the next applicant in accordance with the ranking positions based on the selectable reservation list that can be used up to 12 months of the date of the present announcement.

#### **Application submission process and mandatory documents:**

Applications must be complete and submitted through the CCMAR website <https://www.ccmар.ualg.pt/list/job>. Applications are considered to be correctly submitted only after the candidate has received a confirmation e-mail from CCMAR. Applications (in English) must include:

1. A Motivation Letter (in English), including a personal assessment of the relevance of the activities of the last five years for the present application, highlighting the chosen publications.
2. Detailed CV (in English) including the activities of the specific field and of the scientific and professional path of the applicant, organized according to the evaluation criteria CA to CD.
3. A copy of the Doctoral Degree Certificate.
4. E-mail contacts of up to 3 referees.
5. Up to a maximum of 3 scientific papers chosen by the candidate.

**Non-compliance with this documents/information determines the immediate rejection of the application.**

**Results:** The lists of admitted and excluded candidates, and the final classification list, shall be posted on the CCMAR website at <https://www.ccmар.ualg.pt/list/job-closed> and all candidates will be notified by email.

#### **Preliminary Hearing and Final Decision Deadline:**

After the assessment of all applications the jury will write a provisional minute with the description of the admission process, assessment and selection, including the list of the ordered candidates and their classification and decision. All candidates will be notified by email of the provisional decision of the jury. In accordance with article 121 of the Portuguese Administrative Procedure Code, after being notified by electronic email all candidates have 10 working days, counted from the date of dispatch of the



notification by electronic email, to contest the preliminary decision sending an email to the jury of the present call. The final decision will be validated by the CCMAR board of Directors, and all candidates will be notified by electronic email within 90 working days counted of the application deadline.

**Candidates holding degrees awarded by a foreign university should have their degree recognized by a Portuguese higher education institution by the time of contract signing. Non-compliance justifies exclusion from the procedure. Information about the recognition procedures can be obtained at any Portuguese university or [here](#).**

The board of Directors reserves the right, due to a change in circumstances at the date of the present announcement, to cancel the present call without any recruitment.

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.

CCMAR's non-discrimination and equal access opportunities policy – No candidate can be privileged, benefited, jeopardised, or be deprived of any right or exempt of any claim in regard to descendent, age, gender, sexual orientation, marital status, economic situation, origin, social economy, genetic heritage, disability, chronic disease, nationality, ethnicity, territory of origin, language, religion, politics, ideology or union membership.

The members of the jury approved this announcement on 22th June 2023.

Project IMAGINE received funding from European Union's HORIZON EUROPE - RIA programme under the grant agreement No 101094250

