

## **Institute of Earth Sciences**

## Research Grant for a Master Student, 1 position

August 13, 2021

A call for tenders is open for one Research Grant for a Master Student within the scope of the project "FIREPOCTEP: Fortalecimiento de los sistemas transfronterizos de prevención y extinción de incendios forestales y mejora de los recursos para la generación de empleo rural posCovid-19", 0756\_FIREPOCTEP\_6\_E, financed by the program: "EP - INTERREG V A España Portugal (POCTEP)", under the following conditions:

**Scientific area**: Earth Sciences, Environmental Sciences, Environmental Engineering, Geography, Forest Engineering

## **Admission requirements:**

The applicant needs to be registered in a Master course in one of the above mentioned scientific areas. Applicants should have the following qualifications: good knowledge in Geographic Information Systems and Remote Sensing techniques (Optical, SAR, and LiDAR); Drive License; availability to conduct field work in the southern part of Portugal. Preference will be given to applicants with job experience in Geographic Information Systems and Remote Sensing methods; basic knowledge in R programming for spatial data.

As set forth FCT Research Scholarship Regulation No. 950/2019 of December 16, 2019, article 3 and 6, candidates for "BI" must comply as a rule condition for the award of the scholarship, the effective inclusion in study cycles leading to the attribution of academic degrees or in courses not leading to an academic degree. Courses that do not confer an academic degree correspond to the courses provided for in subparagraph e) of paragraph 3 of article 4 of Decree-Law No. 74/2006 of 24 March and must be developed in a higher education institution in association with at least one R&D unit, including a course plan in one or several research areas of the unit.

**Work plan**: The main goal is to test the capabilities of the GEDI sensor (LiDAR technology) aboard of the International Space Station for aboveground biomass estimation in shrublands. The applicant will collaborate in the following tasks:

- i) LiDAR data collection using Terrestrial Laser Scanner (TLS);
- ii) Field measurements for shrublands aboveground biomass estimation;
- iii) TLS cloud point processing;
- iv) Download and pre-processing GEDI data;
- v) Calibration and validation of biomass equations using TLS data;
- vi) GEDI waveform simulation using TLS data and biomass estimation;
- vii) Comparison of biomass estimations derived from simulated and measured GEDI data.

Applicable legislation and regulations: The granting of the Research Scholarship will be carried out upon the signing of a contract between the University of Évora and the scholarship holder, established **FCT** for in the rules research scholarships https://www.fct.pt/apoios/bolsas/docs/Normas de Atribuicao de Bolsas 2021.pdf pursuant to the Research Scholarship Statute (Law No. 40/2004 of August 18 and Decree-Law No. 123/2019 of August 28) and in accordance with the legislation and Regulation of Research Grants of the Foundation for Science and Technology, IP in force, regulation nº950/2019 of December 16, 2019 https://www.fct.pt/apoios/bolsas/regulamento.phtml.pt and other applicable rules.

**Place of work**: The work will be developed at Institute of Earth Sciences of the University of Évora, under the scientific guidance of the Doctor Sérgio Godinho.

**Duration of the scholarship:** The scholarship will have a duration of 6 months, starting on September of 2021. The scholarship contract may be renewed up to 6 months.

Amount of monthly maintenance allowance: The amount of the scholarship corresponds to €835.98, according to the table of scholarships awarded directly by FCT, I.P. in Portugal (http://fct.pt/apoios/bolsas/valores), payments being made monthly, by check or bank transfer.

**Selection methods**: The selection methods to be used will be the following: curriculum evaluation and interview, with the respective valuation of 60% and 40%.

## **Composition of the Selection Jury:**

President: Doutor Sérgio Rui Borreicho Coelho Godinho 1st *Member* – Mestre Nuno Ricardo Gracinhas Nunes Guiomar 2nd *Member* – Doutor Rui Jorge Braga de Oliveira 1st Substitute – Prof. Doutora Maria João Costa 2nd Substitute - Prof. Doutor Rui Salgado

**Advertising/notification of results:** The final results of the evaluation will be publicized, through an ordered list *by final grade obtained* posted in a visible and public place (*Institute of Earth Sciences*), being the candidate (a) approved notified through *email*.

To ensure the right of prior hearing of interested parties, the Final Classification project will be announced by any written means to all interested parties.

After communicating the provisional list of the results of the evaluation, candidates have a period of 10 working days to express their opinion in a preliminary hearing of interested parties.

**Application deadline and submission of applications**: The tender is open from 13/08/2021 to 27/08/2021 and the results of the selection will be published by 31/08/2021.

Applications must be formalized, obligatorily, by sending an application letter with the following documents: Motivation letter, Curriculum Vitae, certificate of qualifications.

For the purposes of application, the evidence may be replaced by a declaration of honor signed by the candidate, but the failure to demonstrate that evidence, in the contracting phase, possession of the required degree on the deadline for application or the non-presentation of proof of enrollment in the study cycle or non-degree course, for scholarships with this component, imply the cancellation of the candidate's application.

Academic degrees obtained in foreign countries require registration by a Portuguese Institution in accordance with Decree-Law no. 66/2018, of August 16 and Ordinance No. 33/2019, of January 25th.

The presentation of the certificate is mandatory for the signing of the contract. More information can be obtained at: <a href="https://www.dges.gov.pt/pt/pagina/recognition?plid=374">https://www.dges.gov.pt/pt/pagina/recognition?plid=374</a>

Applications must be sent by email to:

Doutor Sérgio Godinho

email: sgodinho@uevora.pt



