



Instituto de Ciências da Terra, ICT

Postdoctoral scholarship, 1 vacancy

15 of October of 2021

A call for tenders is open for one Scholarship Postdoctoral Scholarship within the scope of the project (Innovative Reusable Vehicle for Orbital Technology Research and Leverage (VIRIATO), POCI-01-0247-FEDER-046100 e LISBOA-01-0247-FEDER-046100 and co-financed by “FEDER” and Portugal 2020 through the Competitiveness and Internationalization Operational Program and the Lisbon Regional Operational Program), under the following conditions:

Scientific area: Physics

Admission requirements:

1) PhD in Physics; 2) Knowledge of instrumentation; 3) Experience in Mathematical Modeling and Numerical Simulations; 4) Experiences in Mechanical and Optical Design, in Finite Element Simulation; 5) Knowledge of Electronics and Optics; 6) Programming experience (example: Python, Julia, C, C++, Java, Javascript); 7) Laboratory experience; 8) Ability to write reports in English and French.

Regarding the “BIPD” (postdoctoral scholarship), in terms of the requirements to be verified for their attribution (article 7 of the FCT Research Grant Regulation no. 950/2019) the need for a doctoral degree to have been obtained in the 3 years prior to the date of submission of the application to the scholarship and, in terms of its execution, the fact that it can only be renewed for a maximum period of 3 years.

Work plan:

- 1) Review of the state of the art in the scope of instrumentation system solutions for launchers (orbital vehicles);
- 2) Survey of system requirements for the launcher: under the environmental operating conditions (operating temperatures, vibrations); within the scope of technical needs (interfaces, parameters to be monitored, acquisition tags, storage needs); within the scope of data transmission protocols (processing requirements, final data format);
- 3) Definition of system requirements for the launcher;
- 4) Design of the launcher status acquisition and monitoring system;
- 5) System simulation and implementation;

- 6) Definition of test plans;
- 7) Carrying out functional tests;
- 8) Qualification of the system;
- 9) Conducting tests in the launcher's operating environment.

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, as set in the template https://www.fct.pt/apoios/Minuta_Contrato_Bolsa.docx, 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 ICT, Instituto de Ciências da Terra of the University of Évora, under the scientific guidance of the Dr. Rui Melício and Dr. Paulo Gordo. The candidate will have to travel frequently to the Faculty of Science Laboratories, University of Lisbon.

Duration of the scholarship: The scholarship will have a duration of 6 months, starting on November of 2021. The scholarship contract may be renewed until the end of the budget allocation of the financing project.

Amount of monthly maintenance allowance: The amount of the scholarship corresponds to €1646, 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 as follows: The selection methods to be used will be based on the following parameters:

Curriculum evaluation (85%) and the selection interview (15%).

The selection interview will be held in the event of a tie between the first 2 candidates.

Composition of the Selection Jury:

President: Dr. Rui Melício

1st Member – Doctor Paulo Gordo

2nd Member – Doctor António Amorim

1st Alternate – Doctor Paulo Garcia

2nd Alternate – Doctor José Figueiredo

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 ICT, Colégio Luis António Verney, Rua Romão Ramalho, nº59, Évora 7000-671, 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 18 October of 2021 to 03 November 2021 and the results of the selection will be published by 08 November 2021.

Applications must be formalized, obligatorily, by sending an application letter accompanied by the following documents: Curriculum Vitae, certificate of qualifications and other supporting documents considered relevant.

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: <https://www.dges.gov.pt/pt/pagina/recognition?plid=374>

Applications must be sent by email to:

ruimelicio@uevora.pt

And with the subject: **“Viriato Project Postdoctoral Scholarship Application”**