



Institute of Earth Sciences

Research Initiation Scholarship – 2 positions

12 of August of 2021

A call for tenders is open for two Scholarships (Research Initiation Scholarship) within the scope of the project “Verão com Ciência 2021”, financed by national funds through FCT/MCTES in the Institute of Earth Sciences, Unit ref.^a UIDB/04683/2020, financed by national funds through FCT/MCTES and co-financed by European Regional Development Fund (ERDF) through COMPETE – Competitiveness Factors Operational Program (POFC) under the following conditions:

Scientific area: Earth Sciences; Geology; Mineral Resources

Admission requirements:

Candidates for the BII must be enrolled in a bachelor's, master's, or integrated master's degree (according to Article 5 of the RBI) in the field of Earth Sciences and preferably in Geology. Candidates who have in their academic curriculum evidence of successful attendance of Curricular Units in the area of Geological Resources and who have previous experience in the area are favored.

According to FCT Research Grants Regulation No. 950/2019 of December 16, 2019, article 5, - BII (Initiation to Research Grants) cannot be awarded to those who have already benefited from research grants directly or indirectly funded by FCT, awarded under the Research Fellowship Statute.

Work plan:

The tasks that will be developed by the researchers selected for the BII will focus on essential techniques for the exploration of mineral resources, as well as in promoting the contact with techniques in identifying areas with potential for future exploration activities. By this, the proposal herein presented aims to initiate and innovative study in the area correspondent to the Santiago-do-Escoural (Montemor-o-Novo) gold mineralizations, located in the Serra do Monfurado. This study seeks the identification of potential areas for the accumulation of sediments in alluvial deposits which provenance is related to the erosion of gold-bearing country rocks. This region is recognized for its exploration potential regarding gold mineralizations associated to the Montemor-o-Novo Shear Zone and hosted in metasedimentary and metavolcanic host rocks and has been the target of mineral exploration projects by several companies throughout the last decade. By this it is prospected that the water erosion effects

over these gold-bearing host rocks might have favoured gold particle remobilization leading to its deposition in alluvial environments. This type of mineral accumulation is widely recognized as a gold placer deposit and the analysis of the sediments from those deposits (stream sediment) allows the separation and morphological and chemical characterization of the heavy mineral and gold concentrates. Such studies are important in identifying the origin of such gold particles and in identifying the prone areas of gold accumulation.

The tasks are organized as follows:

- 1) Compilation of the main targets of gold exploration at the Escoural gold district area and combining of these data with the digital elevation model of the area in order to identify the prone streams for gold particle accumulation.
- 2) Sampling of stream sediments in two locations identified in task 1.
- 3) Hydrogravitic separation of the collected stream sediments in order to collect as much gold particles as possible. For this task the researcher will use traditional exploration methods, such as panning and sluice box separation.
- 4) Gold particle and heavy mineral separation using a binocular loupe, including the collection of photos and characterization of the morphology of gold particles.
- 5) Preparation of gold particle polished sections aiming for the future Scanning Electron Microscopy.

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 the Institute of Earth Sciences of the University of Évora, under the scientific guidance of the Professor Doctor Pedro Miguel Madureira Pimenta Nogueira.

Duration of the scholarship(s): The scholarship will have a duration of 1 month, starting on August 2021.

Amount of monthly maintenance allowance: The amount of the scholarship corresponds to €446.12, 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 Vitae – 40%, Motivation Letter – 40%, Academic achievement in the Mineral Resources area – 20%.

Composition of the Selection Jury:

President of the Jury: Pedro Miguel Madureira Pimenta Nogueira (ICT -UEVORA)

Vogals: Rui Salgado (ICT – UEVORA); Miguel Cardoso Maia (ICT – UEVORA)

1st Substitute - Noel Moreira; 2nd Substitute – Flavio Tiago Couto

Advertising/notification of results: The final results of the evaluation will be publicized, through an ordered list by final grade posted in a visible and public place of the School of Science and Technology of the University of Évora being the candidates 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.

Application deadline and submission of applications: The tender is open from 13 August of 2021 to 19 August 2021 and the results of the selection will be published by 20 August of 2021.

Applications must be formalized, obligatorily, by sending an application letter with the following documents: Curriculum Vitae where the candidate must expressively state the most relevant academic activities, namely the grades of the courses related to mineral resources as well as a proof of enrolment.

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 enrolment 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:

Prof. Doutor(a) Pedro Miguel Madureira Pimenta Nogueira.

(Departamento de Geociências da Universidade de Évora

e-mail: pmn@uevora.pt

