



MED – Mediterranean Institute for Agriculture, Environment and Development & CHANGE –
Global Change and Sustainability Institute

Research grant (BI) – 2 vacancies

Ref. SOLVIT

26 of October of 2022

A call for tenders is open for (2) Scholarship(s) (*Research fellowship/MSc level*) within the scope of the project “*Vine&Wine Portugal - Driving Sustainable Growth Through Smart Innovation, subproject – SOLVIT*”, ref.^a cand67-ACC02/CO5-i01/2022, supported by the PRR - Recovery and Resilience Plan and by the European NextGeneration EU Funds), within the scope of the “Mobilizing Agendas for Reindustrialization” under the following conditions:

Scientific area: Agriculture sciences and related areas

Admission requirements:

- Master (MSc) in Agricultural Sciences and related.
- Laboratory research experience.
- Field work experience and/or research and data collection.
- Driving license

As set forth FCT Research Scholarship Regulation No. 950/2019 of December 16, 2019, article 3 and 6, candidates for “BI” (Research Grants) 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:

Research grant 1 (SOLVIT1)

The Work Plan for this research grant consists of:

1. Laboratory and field monitoring of the short- and medium-term impacts of SOLVIT (mulch-biochar) techniques on soil erosion and water storage;
2. Field assessment of carbon balance, soil and sediment carbon stocks and forms (TOC, TG-DSC analysis) of SOLVIT techniques;
3. Evaluation of techniques at wider temporal and spatial scales using hydrological-erosive modeling;
4. Assessment of the environmental performance of techniques through life cycle assessment (LCA) and assessment of water scarcity and carbon footprint;
5. Statistical analysis of results and other analyzes required within the scope of the project;
6. Writing articles with dissemination of the results obtained.

The final objective of this work is the detailed characterization of the effects of mulch and biochar-based restoration treatments of degraded soils on soil ecosystem services, namely erosion control, water storage and carbon footprint.

Work plan:

Research grant 2 (SOLVIT2)

The Work Plan for this research grant consists of:

1. Field monitoring of the short- and medium-term impacts of SOLVIT (mulch-biochar) techniques on soil fertility and soil habitat status.
2. Laboratory assessment of soil fertility (through CEC, N, P, K and C-NMR molecular analysis);
3. Laboratory assessment of soil habitat status (enzymatic activity, microbial DNA, ecotoxicological assays);
4. Assessment of the quality of grapes and wines, through chromatographic methods (analysis of phenolic compounds and volatile elements);
5. Statistical analysis of results and other analyzes required within the scope of the project;
6. Writing articles with dissemination of the results obtained.

The final objective of this work is the detailed characterization of the effects of restoration treatments of degraded soils based on mulch and biochar on soil ecosystem services, namely on its fertility and habitat, as well as on the quality of grapes and wine.

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 *MED – Mediterranean Institute for Agriculture, Environment and Development & CHANGE – Global Change and Sustainability Institute* of the University of Évora, under the scientific guidance of the Doctor Sergio Prats Alegre.

Duration of the scholarship(s): The scholarship will have a duration of 6 months, starting on January of 2023. The scholarship contract may be renewed *until the end of the funding project's budget allocation*.

Amount of monthly maintenance allowance: The amount of these scholarships corresponds to €1144,64, 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 method will consist of an evaluation by points, with a maximum of 100 points with the following criteria:

- curriculum evaluation, 30 points
- professional experience in the field of hydrology and soil science, 20 points
- interview, 40 points
- availability to start functions, 10 points

Candidates with more than 40 points in the curriculum evaluation and professional experience will be selected for evaluation in the interview. In the curricular evaluation, the publication of scientific articles will be highly valued. The jury reserves the right to exclude candidates who do not reach the minimum final classification of 50 points on a scale of 0-100 points, and the jury may not select any candidate if it agrees that none of the candidates has the required profile

Composition of the Selection Jury:

Presidente: Prof. Maria João Cabrita, PhD

1º Effective member –Sergio Prats Alegre, PhD

2º Effective member –Oscar Gonzalez Pelayo, PhD

1º Alternate member – Prof. Doctor José Muñoz-Rojas, PhD

2º Alternate member –Maria Rivera, PhD

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 in the MED headquarters, 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.

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 26 of October 2022 to 2 of December of 2022 and the results of the selection will be published by 7 of December of 2022.

Applications must be formalized, obligatorily, by sending an application letter with the following documents: *Curriculum Vitae, certificate of qualifications, 2 recommendation letters and one motivation letter.*

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>

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.

Applications must be sent by e-mail, with the reference "Vine&Wine sub-project SOLVIT" in the Subject field to:

Prof. Maria João Cabrita
MED, Universidade de Évora
e-mail: mjbc@uevora.pt



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