B1-SOLVIT (Master), Research fellowship at Master's level for the exercise of functions within the scope of the Research Project "SOLVIT - Solutions to restore degraded Soils in Mediterranean vineyards via Organic muLch and biochar derived from VITiculture industry waste", in the framework of the Project "Vine&Wine Portugal, supported by the PRR - Recovery and Resilience Plan and by the European NextGeneration EU Funds), within the scope of the Mobilizing Agendas for Reindustrialization"

-Preferred requirements:

- o Fieldwork experience based on soil sciences and geomorphology, life cycle assessment and/or hydrological modelling;
- o Experience in installing and calibrating field measuring instruments for hydrological and erosive processes (rain simulations, hydraulic monitoring (flume, V-notch), erosion plots);
- Laboratory experience with treatment of soil and plant samples to determine physicochemical variables (pH, EC, BD, TOC, NPK, etc.)

- Skills:

- o Experience with teamwork;
- Oral and written proficiency in Portuguese and English;
- Aptitude for carrying out field work;
- o Driving license;

• Tasks:

- o Laboratory and field assessment on short- to mid- term impacts of SOLVIT mulch+biochar measures on soil erosion and water storage.
- Field assessment of the soil carbon stocks, carbon balance and carbon forms of soil and sediments (TOC, TG-DSC) of the different measures.
- Upscaling of the measures at broad temporal and spatial scales through hydrologic-erosion modelling
- Evaluate the environmental performance of the treatments through life cycle assessment (LCA) and assess their capacity to mitigate the water scarcity footprint and carbon footprint.
- Academic qualifications: Master
- Qualification Description: Master's in agriculture sciences and related areas.