B3-SOLVO (Master), Research fellowship at Master's level for the exercise of functions within the scope of the Research Project "SOLVO (2022.06004.PTDC) - SOLUTIONS based on soil cover with mulch and biochar from mill residues to reverse desertification processes in the olive groves of the Mediterranean.", financed by national funds from the Foundation for Science and Technology (FCT-MCTES).

-Preferred requirements:

- o Field work experience on soil degradation and conservation, erosion, life cycle assessment and/or hydrological modelling;
- Experience in installing and calibrating field measuring instruments for hydrological and/or erosive processes (rain simulations, hydraulic monitoring (flume, V-notch), erosion plots);
- Laboratory experience with treatment of soil and/or plant samples to determine physicochemical variables;

-Skills:

- Experience with teamwork;
- Oral and written proficiency in Portuguese and English;
- Aptitude for carrying out laboratory and fieldwork;
- Driving license;

-Tasks:

- o Laboratory and field assessment on short- to mid- term impacts of SOLVO mulch+biochar measures on ES 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
- Strengthen existing links between the various stakeholders through the facilitation of events, bilateral and multilateral meetings;

- Academic qualifications: Master's

Qualification Description: Master's in the following areas: Agriculture sciences,
Environmental Engineering, Environmental Sciences, Biology, Biochemistry, Agricultural
Chemistry, Sustainable Management of Natural Resources, Geography or Sociology,
Sustainability.