



CO₂ Geological Pilots in Strategic Territories – PilotSTRATEGY

PhD Scholarship in geochemical modelling University of Évora, Portugal

Requisites: The University of Évora, Portugal, accepts application for a PhD scholarship in geochemical modelling. Candidates should hold a MSc degree in in Earth Sciences, Geology, Geochemistry or related areas and have a profile suitable to develop research towards a PhD in Geochemical modelling of CO₂+water+rock interaction in the context of CO₂ storage projects.

Research Activities: The activities will be carried out in the scope of the PilotStrategy project (pilotstrategy.eu), involving acquisition and interpretation of geological data to build a geochemical model able to describe the geochemical behaviour of CO₂ in a reservoir. The selected candidate will be required to utilize optical microscopy, X-Ray Diffraction and Scanning Electron Microscopy and other tools to identify potentially reactive mineral phases and mineral surface microtextures after exposure to CO₂. The selected candidate will be required to model the results of laboratory experiments on the CO₂+water+rock interaction, based on the interpretation of chemical analysis before and after exposure to CO₂, and to upscale the results of that model from the sample size to the pilot size, using TOUGHREACT, CRUNCHFLOW or similar geochemical modelling software.

Study Program: Earth and Space Sciences PhD Program.

<https://www.uevora.pt/en/study/courses/doctoral-degrees?curso=2525>

Working place: University of Évora (Portugal). <https://www.uevora.pt/en>

Duration: 3 years

Grant: The grant amount is established according to the FCT (Foundation for Science and Technology) regulation for holders of a MSc degree or equivalent.

Deadline for application: 31 August 2022

Contacts for further information and application: Prof. Jorge Pedro, jpedro@uevora.pt or Mário Abel Gonçalves, mgoncalves@fc.ul.pt