



P.N. 89138_21/09/2022

**One (1) Post – doctoral Researcher Position
[EYZ00022_01]**

The Institute of Geoenergy (FORTH/IG) invites applications for a Post-doctoral Researcher position within the EU funded research project entitled “Twinning to sustainable energy transition”- Acronym: TWINN2SET (GA No 101079246) (<https://ig.forth.gr/event/146>).

Position:

One (1) Post-doctoral Researcher position in the field of Chemistry and/or Chemical Engineering.

Position Description:

The Postdoctoral Researcher is expected to contribute to the development of innovative efficient technologies for hydrogen and CO₂ storage into geological formations. Relevant tasks will involve the determination of the spatial distribution of porosities and permeabilities, the investigation of alterations in the petrophysics properties of reservoir rocks and evaluation of effective migration of gases through porous media. A second area of research will focus on a number of coupled processes, including two-phase flow and transport, thermodynamic equilibria, dissolution and precipitation of minerals at the reservoir scale.

Required qualifications:

- Degree in Chemistry or Chemical Engineering.
- Ph.D. relevant scientific field, especially in the fields of Physical Chemistry and Materials Science.
- Extensive experience in research projects (management, support, and implementation).

Desired qualifications:

1. Experience in the development, characterisation and evaluation of the performance of porous adsorbents for separation and capture of hydrogen and other gases (evidenced by relevant works, certificates, participation in relevant projects or research groups).
2. Experience in the investigation of transport mechanisms of gases and vapors through porous materials (evidenced by relevant works, certificates, participation in relevant projects or research groups).
3. Experience in performance evaluation of porous materials for hydrogen separation and purification (evidenced by relevant works, certificates, participation in relevant projects or research groups).
4. Experience in equipment and techniques for characterization of the porous structure of solid materials and evaluation of adsorption, absorption and diffusivity of gases in porous sorbents and liquids, i.e. nitrogen porosimetry, mercury porosimetry, gravimetric or volumetric sorption analysis (evidenced by relevant works, certificates, participation in relevant projects or research groups).
5. Participation of the applicant in scientific publications in high-quality peer-reviewed journals (the number of publications relevant to the topics 1-3 mentioned above will be taken into account, at least 5 publications).
6. Experience in research projects, including planning, compilation, and submission of proposals, management, overseeing of the implementation of the workplan, communication with the project partners, and actions to promote and disseminate research results (the number of participations in research projects will be taken into account).
7. Excellent oral and written skills in English language (evidenced by relevant certificates).





About the new position:

The successful applicant will be expected to join a multidisciplinary team of scientists with expertise in engineering, geology, chemistry and biology, and participate in technology transfer events and workshops, contribute to the broad dissemination of science and the project objectives, grant-applications and preparation of research articles.

Contact information:

The project coordinator is Assistant Researcher Dr. Emmanuel Stamatakis
(E-mail: estamatakis@ipr.forth.gr; Phone: +30 2811392203).

Contract Duration: 34 months

Envisaged starting date: 1/12/2022

Application submission: Interested candidates should submit their application electronically (ipr@ipr.forth.gr and estamatakis@ipr.forth.gr) by **October 31st 2022 @ 13:00 (Greek time)**.

The application should consist of:

1. CV
2. Brief statement of interest
3. The names of two referees

