

Post-doctoral researcher in gas adsorption

Job description

The postdoctoral fellow will join the Biosourced Materials team at Institut Jean Lamour (IJL) to work for the project TALISMAN, funded by FEDER. He or she will work under the supervision of Dr. Vanessa FIERRO and Prof Alain CELZARD as part of a project to test new lines of research for the design of innovative carbon materials derived from tannins with tuneable gas adsorption properties. The purpose of the studies will be to maximise H₂ or CO₂ adsorption, and CO₂ adsorption selectivity when CO₂ is mixed with CH₄ or with real combustion flue gases.

The postdoctoral fellow will be in charge of the synthesis and the characterisation of the materials and of high-pressure experiments, up to 14 MPa, and with PSA reactors. He or she will

- work in a multidisciplinary project, providing an exceptional opportunity for enriching his/her expertise
- write scientific reports, A-rank publications and patents
- coach at least one PhD student
- attend international conferences and congresses where he/she will present the outcomes of his/her research

Desired skills and experience

Required Research Experiences

- RESEARCH FIELD chemistry, materials science or physics
- YEARS OF RESEARCH EXPERIENCE 1 - 4

Offer Requirements

- REQUIRED EDUCATION LEVEL chemistry, materials science or physics: PhD or equivalent
- REQUIRED LANGUAGES ENGLISH: Excellent

Skills/Qualifications

The candidate must have defended a thesis in the field of gas adsorption and must have a strong experience in the synthesis and characterisation of porous materials, especially carbons. He or she must know how to write perfectly in English, the aim of the study being to publish in the best journals in the field. A practical profile is therefore sought after, but strong theoretical bases of gas adsorption thermodynamics are required.

Salary

This is a 22-month position, with a net salary around 2050 € per month.

Eligibility criteria

PhD in chemistry, materials science or physics with excellent track record, and motivation for transferring his/her knowledge to colleagues and students.

