



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 H_2 or CO_2 adsorption, and CO_2 adsorption selectivity when CO_2 is mixed with CH_4 or with real combustion flue gases.

The postdoctoral fellow will be in charge of the synthesis and the characterisation of the materials and of highpressure 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.

INSTITUT JEAN LAMOUR ENSTIB 27 rue Philippe Séguin - BP 21042 F-88051 Epinal Cedex 9 www.iil.univ-lorraine.fr





About the employer

The Institut Jean Lamour (IJL) is a mixed research unit from the CNRS and the Université de Lorraine. Its activities are spread on 3 distinct sites: Nancy (Campus ARTEM, where most teams are hosted), Epinal (Campus Bois, where the work will take place), and Metz (Campus Bridoux). It gathers around 550 people. See https://ijl.univ-lorraine.fr/, and especially https://ijl.univ-lorraine.fr/, and especially https://ijl.univ-lorraine.fr/, and especially https://ijl.univ-lorraine.fr/ (Campus Bridoux). It gathers around 550 people. See https://ijl.univ-lorraine.fr/ (Campus Bridoux). It gathers around 550 people. See https://ijl.univ-lorraine.fr/ (Campus Bridoux). It gathers around 550 people. See https://ijl.univ-lorraine.fr/ (Campus Bridoux). It gathers around 550 people. See https://ijl.univ-lorraine.fr/ (Campus Bridoux). It gathers around 550 people. See https://ijl.univ-lorraine.fr/ (Campus Bridoux). It gathers around 550 people. See https://ijl.univ-lorraine.fr/ (Campus Bridoux). It gathers around 550 people. See https://ijl.univ-lorraine.fr/ (Campus Bridoux). It gathers around 550 people. See https://ijl.univ-lorraine.fr/ (Campus Bridoux). It gathers around 550 people. See https://ijl.univ-lorraine.fr/ (Campus Bridoux). It gathers around 550 people. See https://ijl.univ-lorraine.fr/ (Data Bridoux). It gathers around See https://ijl.univ-lorraine.fr/ (Data Bridoux).

Contacts

Vanessa FIERRO – CNRS Research Director, Head of the Bio-sourced Materials Research Team at IJL Vanessa. Fierro@univ-lorraine.fr

Alain CELZARD – Lorraine University Professor, Head of Department at IJL <u>Alain.Celzard@univ-lorraine.fr</u>

Important dates

- Announcement posted on February 15th 2019
- Deadline to send your candidature: March 10th 2019
- > The contract should start on 1st June 2019 at latest.

Selection process

Receipt of complete and detailed CV with updated publication list, motivation letter, and supporting letter(s). Then, Skype interview