

The Institut Laue-Langevin (ILL), situated in Grenoble, France, is Europe's leading research facility for fundamental research using neutrons. The Institute welcomes 2000 visiting scientists per year to carry out world-class research in solid-state physics, crystallography, soft matter, biology, chemistry and fundamental physics. Funded primarily by its three founder members: France, Germany and the United Kingdom, the ILL has also signed scientific collaboration agreements with 10 other European countries. The Science Division currently has a vacancy for a:

Post-Doctoral Research Assistant (m/f) BIOMATERIALS

Duties:

Working within the Soft Matter Science and Support (SMSS) group and in strong interaction with the Large Scale Structures (LSS) group, you will combine neutron scattering with other laboratory techniques with the aim of drawing a comprehensive picture of the interaction between cells and artificial matrices. You will also help supporting users from the biomedical material community to design and perform neutron experiments and complementary measurements within the Partnership for Soft Condensed Matter.

The research project will be centred on the characterization of Fibroin-based materials. Fibroin gel makes a great and versatile media for cell culture and nanoparticle coating. To complement structural analysis on SANS (gel reticulation and porosity) and small angle diffraction (crystallinity), mechanical tests will be carried out. The characterised gels and nanoparticles will be provided to collaborating researchers for testing on cell cultures, with the ultimate goal of developing implants seeded with pluripotent cells for in situ tissue regeneration and apoptosis-inducing nanoparticles for cancer treatment.

The initial phase of material characterization will involve collaboration with both ILL scientists and researchers from other institutions.

The post-doctoral fellow will be expected to contribute publicising neutron scattering techniques with biomedical communities and build collaborations to test silk-based biomaterials.

The SMSS group includes activities within the Partnership for Soft Condensed Matter, a scientific and technical platform supporting ambitious large-scale soft matter research projects related to nanomaterials, environmental and energy sciences, biotechnology and related fields, and of the ILL support chemistry laboratories. The LSS group comprises a range of instruments designed to carry out studies on the structure of matter on a scale of one to hundreds of nanometers. These include instruments for small-angle scattering, reflectometry, diffraction from single crystals or one or two-dimensionally ordered materials.



The range of science covered is very broad, from polymer and colloid science through structural molecular biology to materials science and magnetic phenomena.

The post-doctoral contract is funded by the European grant FILL2030, aiming at attracting the biomedical community to Neutron scattering techniques.

Qualifications and Experience :

You hold a Ph.D. in physical chemistry, biophysics and/or related to biomaterials science or regenerative medicine.

We are particularly interested in highly motivated candidates with experience in neutron scattering data analysis and biomaterials.

Applications from candidates bringing their own research project in the field of biomaterials and biomedical applications will be considered.

The post represents an excellent opportunity for a young scientist to develop expertise, broaden experience and interact with leading scientists from around the world.

Language skills :

As an international research centre, we are particularly keen to ensure that we also attract applicants from outside France. You must have a sound knowledge of English and be willing to learn French (a language course will be paid for by the ILL). Knowledge of German would be an advantage.

Notes :

Post-Doctoral contract of 18 months, renewable for a further 6 to 18-month period.

Only candidates holding a PhD obtained less than 2 years ago are eligible for Post-doctoral positions.

Medical fitness for work under ionising radiation is required.

Further information can be obtained by contacting the head of the SMSS Group: Dr. G. Fragneto, tel.:+33(0)4.76.20.70.62, e-mail: fragneto@ill.fr or via <http://www.ill.fr/lss> (please do not send your application to this address).

The interviews will take place in the last 2 weeks of August 2017. The selected candidate is expected to start in Autumn 2017.



Benefits :

Generous company benefits (expatriation allowance), relocation assistance and language courses may be offered (for more information, please consult our [employment conditions](#)).

HOW TO APPLY:

Please submit your application on-line,
with a list of publications and the names of 3 references, including one
from your present work place,

no later than 03/07/2017, via our website:

<http://www.ill.eu/careers>
(vacancy reference : 17/PostDoc05).

Remitir Copia de la candidatura a: eures.franciasuizabeneLux@sepe.es

indicando la referencia: **ILL 17/ PostDoc05**

Ayudas a la movilidad

