PhD Position
Synthesis of redox active complexes for medical imaging

SECTOR: Higher Education Institution

LOCATION: France, Grenoble

RESEARCHER PROFILE:
☐ First stage researcher,

INSTITUTION: Univ. Grenoble Alpes, University of Innovation

One of the major research-intensive French universities, Univ. Grenoble Alpes* enjoys an international reputation in many scientific fields, as confirmed by international rankings. It benefits from the implementation of major European instruments (ESRF, ILL, EMBL, IRAM, EMFL*). The dynamic ecosystem, grounded on a close interaction between research, education and companies, has earned Grenoble to be ranked as the 5th most innovative city in the world. Surrounded by mountains, the campus benefits from a natural environment and a high quality of life and work environment. With 7000 foreign students and the annual visit of more than 8000 researchers from all over the world, Univ. Grenoble Alps is an internationally engaged university.

A personalized Welcome Center for international students, PhDs and researchers facilitates your arrival and installation.

In 2016, Univ. Grenoble Alpes was labeled «Initiative of Excellence ». This label aims at the emergence of around ten French world class research universities. By joining Univ. Grenoble Alpes, you have the opportunity to conduct world-class research, and to contribute to the social and economic challenges of the 21st century ("sustainable planet and society", "health, well-being and technology", "understanding and supporting innovation: culture, technology, organizations" "Digital technology").

* ESRF (European Synchrotron Radiation Facility), ILL (Institut Laue-Langevin), IRAM (International Institute for Radio Astronomy), EMBL (European Molecular Biology Laboratory), EMFL (European Magnetic Field Laboratory)

Key figures:

- + 50,000 students including 7,000 international students
- 3,700 PhD students, 45% international
- 5,500 faculty members
- 180 different nationalities
- 1st city in France where it feels good to study and 5th city where it feels good to work
- ISSO: International Students & Scholars Office affiliated to EURAXESS
SUBJECT DESCRIPTION:

Non-invasive medical imaging is an extremely important domain in recent years for the diagnosis of cardiac diseases and cancer. This project targets the conception of new families of lanthanide complexes that incorporate a redox active ligand which can potentially give a response in CEST imagery and luminescence upon changes in its oxidation state. The family of ligands which will be synthesized are based on DOTA derivatives, a polycyclic macrocycle with pro radical pendant arms coordinated to LnIII. The synthesis and characterization of proradical ligands and their resulting complexes will be undertaken, and analysed by EPR, luminescence and relaxivity.

ELIGIBILITY CRITERIA

Applicants must hold a Master’s degree (or be about to earn one) or have a university degree equivalent to a European Master’s (5-year duration).

Applicants will have to send an application letter in English and attach:
- Their last diploma
- Their CV
- A short presentation of their scientific project (2 to 3 pages max)
- Letters of recommendation are welcome.

Address to send their application: jennifer.molloy-univ-grenoble-alpes.fr and fabrice.thomas@univ-grenoble-alpes.fr

SELECTION PROCESS

Application deadline: June 25, 2018 at 17:00 (CET)

Applications will be evaluated through a three-step process:

1. Eligibility check of applications in July 2018
2. 1st round of selection: The applications will be evaluated by a Review Board at the beginning of July 2018. Results will be given in July 2018.
3. 2nd round of selection: shortlisted candidates will be invited for an interview session in Grenoble mid July 2018 (if necessary).

TYPE of CONTRACT: temporary-3 years of doctoral contract

JOB STATUS: Full time
HOURS PER WEEK: 35
OFFER STARTING DATE: 1st of October, 2018
APPLICATION DEADLINE: 25 Juin 2018
Salary: between 1768.55 € and 2100 € brut per month (depending on complementary activity or not)