



Temporary Postdoctoral position in Biochemistry

Institute of Analytical Sciences and Physico-Chemistry for Environment and Materials (IPREM) https://iprem.univ-pau.fr/fr/index.html Université de Pau et des Pays de l'Adour (UPPA), Pau, France https://iprem.univ-pau.fr/fr/index.html

Recently, UPPA was granted in the second Programme d'Investissements d'Avenir I-SITE (Initiatives Science Innovation, Territoires, Economie) with the project Energy Environment Solutions (E2S). To become an attractive international reference in research in these two fields, E2S UPPA has implemented different research tools, including scientific research chairs: 'Chaires d'Excellence Partenariales'. The proposed position is in the framework of one of these chairs: MANTA - Marine Materials (*https://e2s-uppa.eu/en/research/chairs-of-excellence/manta-marine-materials.html*).

MANTA combines different disciplines like **Biotechnology, Ecology, Chemistry and Material Sciences**, and, thematically, involves key areas namely marine by-product and resources valorization, marine bio-inspiration and bio-mimetic materials, littoral environment and water, public health and research & innovation. More specifically, the main objective of MANTA is to mimic remarkable phenomena and hierarchical structures observed in the aquatic environment, to design functional and environmentally sustainable (bio)materials based on marine molecules and assess their impact on human health and marine ecosystems. Public and private institutions/partners fund MANTA namely E2S UPPA, CAPB, RNA, CIDPMEM through a DLAL project, Laboratoires de Biarritz and Lees.

MANTA research team: PI (Susana Fernandes), 3 PhD students, 1 Post-doc

Host laboratory: IPREM Pau and Anglet, France

IPREM is a joint Research Unit CNRS/UPPA (UMR 5254) in France. IPREM has an extensive and highly competitive research program that comprises the development of fundamental knowledge in physicochemistry, analytical chemistry and microbiology, in relation to applications concerning the structure of the living, the management of the environment and the functional properties of different classes of materials.

Duties/Project description:

The position includes research and teaching duties (64h/year). The position will also include international travel to conferences and meetings with partners/collaborators.

From a scientific perspective, this position involves biochemical methods to address the problematic of biomolecules extraction, purification and modification. In particular, enzymatic treatments will be used to improve efficiency and selectivity of the extraction and modification of structurally complex marine molecules. These approaches will allow accessing to bioactive compounds and providing blocks for hemisynthesis of novel valuable products. We will to characterize the ensuing products using different analytical methods, optical and magnetic spectroscopies, mass spectrometry, diffraction methods, imaging and biochemical characterization.









Requirements:

- To be eligible for the research employment, the candidate must hold a PhD degree in Enzymology, Microbial and Enzymatic Engineering, Biochemistry or similar disciplines, and a large part of the applicant PhD project should have been focused on the use of enzymatic tools for polymer functionalization.

- Extensive experience in experimental research in biocatalysis, enzymology and biochemistry. Strong competences in natural polymer field is a plus.

- Extensive experience in HPLC; GC-MS; NMR, HPAEC-PAD, HPSEC, Crystallogenesis, Crystallography, proteinligand interaction analyses, uniform and specific isotopic labelling.

- The ranking will also accord weight to the candidates assessed competence in ability to interact effectively in a multi-disciplinary research environment.

- The applicant must be proficient in spoken and written English.

Additional qualifications:

Importance will also be placed on personal skills. In this case, we place particular weight on the ability to work as part of a team and a positive attitude towards mobility. The applicant will be responsible for a part of a larger project, and the ability to work independently and to take responsibility will be required.

Application:

A person with a PhD obtained not more than four years before the end of the application period is particularly eligible for the position.

The application should include:

- CV
- Copy of PhD thesis diploma
- A motivation letter describing the applicant's previous research experience and how it is related to the present position (one, or maximum two pages) is also required.
- Contact details of two references

The application can be written in English.

The application will be evaluated based on the following criteria:

Appropriate education and work/research in related fields. Candidate motivation, knowledge, scientific maturity and curiosity. Emphasis will also be placed on personal skills.

Selection process:

1. Evaluation of the candidates' application.

2. If selected, the candidate will have 15 min to present her/his CV and project. The presentation will be followed by questions/discussion.

Monthly Salary before taxes: 35 000 € (according to E2S UPPA index) Starting date: January/February 2020 or as otherwise agreed.

Type of position: Full-time temporary position ending January/February 2021.

For further information about the position, please contact Susana Fernandes: susana.fernandes@univ-pau.fr *https://iprem.univ-pau.fr/fr/_plugins/mypage/mypage/content/sfernande004.html*









Please submit your application by 29th November 2019



