

**Research engineer for 2 years (with contract extension opportunities)
Starting date: 2023, February**

The Institut de Chimie Moléculaire de l'Université de Bourgogne (ICMUB UMR CNRS 6302, Dijon) is involved in the development of innovating chemical tools for medical imaging such as nuclear imaging (PET/SPECT), optical imaging (fluorescence) or targeted radiotherapy. In particular, the team is specialized in the synthesis of new fluorophores and new chelators (i.e. DOTA-like compounds) for relevant radioisotopes in nuclear medicine (e.g. In-111, Ga-68, Zr-89, Cu-64, Lu-177), the characterization of the metal complexes, as well as their immobilization on biological vectors (peptides, antibodies, ...) through innovative bioconjugation chemistry.

Through its transfer unit "Bioconjugate", ICMUB provides bioconjugation and radiolabeling services and R&D studies to private companies or academic labs, to support them for the evaluation of new drugs candidates (i.e. biodistribution by SPECT/PET imaging) or the development of new radiopharmaceuticals for MRT (Molecular RadioTherapy). **The team needs to be reinforced and ICMUB is now looking to recruit an engineer for 2 years. The candidate will be involved in multiple industrial projects headed by our local industrial partner and will be hired by SATT SAYENS (Technology Transfer Office).**

The selected candidate will be in charge of:

- the labeling of biologics such as antibodies, antibody fragments, peptides or other biological vectors with metal chelators or near-infra red fluorescent dyes through random (lysine) or site-specific strategies (enzymatic engineering of protein glycans, modification of Glutamine, cysteine, ...) in order to produce bioconjugates,
- the purification and characterization of the resulting bioconjugates,
- interpreting the results and writing the data reports.

To be successful in this role, the candidate will need to have a passion for lab work and experimentation. He/she must be able to demonstrate hands-on experience in protein modification and purification, and good knowledge of the chemistry related to bioconjugation tools. He/she will contribute to the transfer unit's mission of delivering in time fully characterized bioconjugates to our partner.

Essential requirements:

- Master or PhD degree with Chemistry/Biochemistry background
- Hands on experience in purification and analysis of protein conjugates: HPLC/FPLC methods for SEC/IEC/RP chromatography; mass spectrometry (MALDI, ESI)
- Ability to multi-task and prioritize work
- A good team spirit and committed to working in a collaborative manner with an industrial partner
- Excellent oral and written communication skills to complete reports and technical documents (in English)

Preferred:

- knowledge in the field of molecular imaging and radiochemistry

How to apply: Applications should be sent by e-mail to franck.denat@u-bourgogne.fr, claire.bernhard@u-bourgogne.fr and benoist.pruvot@sayens.fr, including a detailed CV with at least one referee able to be contacted and a cover letter.