



Associate Professor – Tenure track CNRS - GLYCOCHEM ICOA – ORLEANS - FRANCE

The Institute of Organic and Analytical Chemistry - ICOA (<https://www.icoa.fr/en/home/>), Orléans, France) is seeking candidates working in the field of glycochemistry, for a CNRS Associate Professor Tenure Track position.

Job description:

CNRS Junior Associate Professor Tenure Track positions are a new way of recruiting for civil servant positions as CNRS senior researchers. The person recruited will be awarded €200,000 in funding for their project and will have access to all of the state-of-the-art resources and equipment from the ICOA laboratory.

The scientific expertise sought by ICOA will concern, for example:

- New approaches for the synthesis of polysaccharides or glycoconjugates, whether simple or complex, rational design and improvement of glycosylation reactions taking into account the role of protecting groups, counterions and concentration during synthesis.
- New synthetic methods (e.g. electrosynthesis), applied to the synthesis of complex carbohydrates and glycans, to solve the persistent and delicate problems of stereoselective and regioselective synthesis using simple, high-yielding reactions.

The project could be applied to life science issues such as chemical biology, therapeutics, imaging, cosmetics and the environment. Without being exhaustive, the project could include and concern the design of: molecular tools for the study of protein/glycan interactions, analogues of glycoconjugates of therapeutic interest...

After a pre-tenure period of 5 years, and following an evaluation by the CNRS, the chosen candidate (he/she) will be eligible for tenure as a CNRS Senior Researcher following the decision of a tenure commission. For the duration of the Chair, the candidate's salary will be financed by the CNRS.

Candidate profile:

This position is aimed at candidates who do not currently hold a statutory academic position in France, with at least 10 years' post-doctoral research experience and significant international experience in academic and/or industrial research. He/she will have to propose a project to facilitate his/her integration and demonstrate his/her ability to finance his/her research, develop academic and industrial partnerships and international networks, based on the adequacy of his/her profile and the high quality of his/her previous work within the objectives of the ICOA laboratory and the integrated team.

During the first few years, the candidate will be expected to develop a high-quality, innovative research program to meet the criteria of the main national and international calls for projects, such as Horizon Europe (ERC, etc.) and funding from the French National Research Agency (ANR), and to strengthen relations with the socio-economic world.

Presentation of ICOA (<https://www.icoa.fr/en/home/>):

The Institute of Organic and Analytical Chemistry – ICOA, is a joint University of Orléans and CNRS (UMR 7311) research laboratory, located on the University campus and housed in a 4000 m² building. The



Laboratory's mission is to identify new bioactive molecules with potential applications in therapeutics and cosmetics.

Research at the Institute of Organic and Analytical Chemistry focuses on the design, synthesis and analysis of molecules with potential applications in the life sciences. The design of new chemical structures draws on the laboratory's in-house expertise in molecular modeling, the synthesis of new organic molecules (heterocyclic compounds, sugar derivatives and nucleoside analogues, enzymology) and the extraction of plants using state-of-the-art separative techniques and mass spectrometry analysis.

ICOA is located in three buildings on the University of Orléans campus and has developed a number of service technology platforms in the chemistry of living molecules, notably the Synthesis and Analysis for Health, Agronomy and Wellbeing (SALSA) platform, which was awarded the IBISA label in 2023, and which draws on strong expertise in the structural characterization of compounds by mass spectrometry or NMR.

ICOA is strongly integrated into the Centre-Val de Loire region and participates in or coordinates numerous private partnerships in collaboration with national competitive clusters. The laboratory is also a CEA Corresponding Research Laboratory (LRC M09) and (co)holder of the "Physics and Chemistry of Life" Research and Animation Federation with the CBM laboratory. ICOA has numerous industrial collaborations as well as national and international academic collaborations, which the candidate will strengthen and expand.

Glycoscience research activities at ICOA:

For many years, ICOA has developed research themes in glycochemistry. The GlycoBio & Chimie team, constituted of 8 permanent staff, is part of this continuity, and they develop research projects in glycoscience with a central focus on chemical and enzymatic synthesis. These research projects are fully in line with the Institute's strategic priorities, combining molecular diversity and therapeutic applications. These research themes include methodologies for the synthesis of glycomimetics (iminosugars, glycosinolates), multivalent ligands and enzymatic activity probes by metallocatalytic or biocatalytic (enzyme) reactions, as well as the synthesis of oligosaccharides, glycosides and glycosylated proteins by microbial cell factories. The team also develops new glycoconjugates as molecular tools for chemical biology applications (receptor probes, CAZyme inhibitors or substrates, etc.).

Contacts :

For all applications, please contact (by sending CV and cover letter) the people in charge of recruitment before end of April:

ICOA management : S. Routier and P. Lafite (directeur.icoa@univ-orleans.fr)

GlycoBio&Chimie team leader: Pr A. Tatibouet (arnaud.tatibouet@univ-orleans.fr)

Candidates should then submit their applications on the [CNRS Employment portal](#) (when it will be opened).