

Engineer in Biological Analyses by Mass Spectrometry (M/F)



Alliance Sorbonne University Biofoundry

Established in 2024 under the joint supervision of Sorbonne University, CNRS and the University of Technology of Compiègne, the Biofoundry of the Sorbonne University Alliance (BFASU) is the first academic biofoundry in France, serving as a robotic platform for synthetic biology. Its mission is to provide a range of technological services, partnerships, and high-level training in bioengineering aimed at university programs, academic laboratories, and industry stakeholders. The BFASU is committed to structuring the field of living engineering from fundamental research to technological applications. (For more information, please visit: http://www.parisbiofoundry.org).

Fixed-term contract	(1	vear. renewabl	e)
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Education: Master's degree (Bac+5) In Biochemistry / Analytical Chemistry

Desired Experience: 1 to 4 years

Salary: According to experience

Start Date: From February 1, 2025 (negotiable)

The ASU Biofoundry is seeking an engineer for its mass spectrometry service, specializing in mass spectrometry applied to metabolomics and/or proteomics.

Missions

The engineer will carry out molecular phenotyping of bacterial, yeast, and microalgal strains generated by the ASU Biofoundry by conducting quantitative and structural proteomic and metabolic analyses.

They will interact with users to define their needs and explain the possibilities and limitations of the technologies and equipment available on the platform, to determine the best strategy to adopt for conducting the studies.

They will ensure sample preparation, mass spectrometry analyses, qualitative and quantitative data exploitation, and the writing of analysis reports.

The engineer will also coordinate analytical and computational resources by ensuring the proper functioning of the equipment and by maintaining their metrological oversight (Tribrid Ascend, Vanquish Neo, and Flex), as well as the management of raw data (Ardia server, Thermo).

Job requirements

- Knowledge in biochemistry and analytical chemistry.

- Expertise in biological sample preparation methods for mass spectrometry analysis (metabolomics and/or proteomics).

- Theoretical and practical knowledge in separative analytical techniques (especially UHPLC-MS) and in processing UHPLC-MS metabolomic and/or proteomic data (targeted/untargeted) and associated software (Thermo Fisher software, MSDial, DIA-NN, MaxQuant, etc.).

- Theoretical and practical knowledge of key statistical analysis techniques (PCA, ANOVA, t-Test, etc.) and experience with R or Python environments.

- Languages: Fluent in French and English.

Contact

Please send your application (CV + cover letter + references) to: <u>christophe.marchand@sorbonne-universite.fr</u> and <u>stephane.lemaire@sorbonne-universite.fr</u>

Location : Campus Pierre et Marie Curie, Building B – 2nd floor, 4 place Jussieu, 75005 Paris