



Master or Postdoctoral Researcher Position in Hydrogen-Deuterium Exchange Mass Spectrometry

Institution: CEA

Department: Department of Medicines and Healthcare Technologies

City: Gif-sur-Yvette, France

The Laboratory of Innovations in Mass Spectrometry for Health (LI-MS) is offering a Master's/Postdoctoral Researcher position as part of an EU-funded project, focused on the characterization of countermeasures against biotoxins using Hydrogen-Deuterium Exchange mass spectrometry.

Protein biotoxins produced by bacteria or plants can lead to severe diseases, such as the fatal foodborne botulism caused by food contaminated with botulinum neurotoxins. Effective treatment requires antitoxins capable of rapidly neutralizing or limiting the effects of these toxins. In this role, the Postdoctoral Researcher will develop and apply Hydrogen-Deuterium Exchange Mass Spectrometry (HDX-MS) techniques to identify epitopes of anti-biotoxin drugs. The researcher will address the unique challenges posed by protein sequence variations and post-translational modifications of biotoxins.

Required Qualifications:

- Prior experience in **Hydrogen-Deuterium Exchange Mass Spectrometry** is essential.
- Strong communication skills for scientific collaborations.
- Contribution to writing scientific articles and reports is expected.

This position is available for 24 months, with an expected start date of **1st November 2025**.

Application Instructions:

Interested candidates should submit their applications in either **English or French** and include the following documents:

- A motivation letter outlining research interests.
- An updated CV.
- Recommendation letter.

These files should be sent by email to:

francois.becher@cea.fr