PostDoc – Mass Spectrometry-Based Multi-Attribute Method (MAM) (m/f/d)

INVITE

Innovation is what drives us. As a non-profit research organization, we develop groundbreaking technologies with our interdisciplinary team that shape the future – and create added value for society.

Our **Vision** is to achieve substantial things through strong partnerships. Together with our broad network of scientific and industrial partners, we create synergies from which everyone benefits.

Technology is our passion, and we love to share it. Through research on industry-relevant scientific questions and further education, we prepare the next generation for the challenges of the future.

For a 2-years industrial collaboration project on the topic of "Mass Spectrometry-Based Multi-Attribute Method (MAM)" we are looking for you:

Your tasks and responsibilities

The main goal of the postdoc project is to develop a robust multi-attribute method (MAM) using liquid chromatography coupled with mass spectrometry (LC-MS) for the release and stability testing of protein-based pharmaceuticals during clinical development. This method will be implemented within the Analytical Development department of Bayer AG in Wuppertal, leveraging existing infrastructure such as Expressionist. Additionally, there is potential for the method to be transferred to the Bayer-site in Berkeley, USA.

Amongst others, your task will include:

- Develop and optimize LC-MS based multi-attribute methods for the analysis of protein biotherapeutics.
- Conduct experiments to assess the physicochemical properties and quality attributes of biotherapeutics.
- Develop (automated) sample preparation methods suitable for different products minimizing artificial modifications
- Implement LC-HRMS workflows on Orbitrap and QToF instruments for both library preparation and targeted monitoring as well as new peak detection (NPD)
- Profound development and automation of suitable data evaluation and visualization workflows based on existing software packages (Expressionist, LIMS, Tableau, …)
- Collaborate with cross-functional teams, including Manufacturing, Formulation Development and Analytics, to ensure comprehensive characterization of protein products.
- Lead analytical validation of complete workflow to demonstrate suitability for routine application
- Present achievements to internal and/or external audience
- Author scientific publications and contribute to grant applications.

What you bring with you

- Ph.D. in Analytical Chemistry, Biochemistry, Molecular Biology, or a related field.
- Strong background in protein chemistry or even biotherapeutics characterization.
- Extensive hands-on experience with LC-HRMS, from sample preparation to instrumental applications and data evaluation/interpretation.
- Proficiency in data analysis software and statistical methods for interpreting LC-MS data.
- Excellent problem-solving skills and the ability to work as part of a team as well as independently.
- Strong communication skills, both written and verbal, with a proven track record of publishing research findings.
- Familiarity with regulatory guidelines for biopharmaceutical development is a plus.
- Fluent English in speaking and writing (knowledge of German or willingness to learn it is advantageous, but will not constitute a discriminant factor)

What you will take with you

- The work will provide you with insight into scientifically and industrially relevant challenges in the life science and agrochemical industry.
- You gain experience in working in direct interaction with industrial partners and in an international cross-disciplinary team at INVITE.
- The work offers you the opportunity to contribute creatively to the development of new scientific topics.

INVITE GmbH strives for a gender-equitable employment structure and therefore expressly welcomes applications from women.

Contact person

Please, send your complete application documents to Ildikó Terebesi (terebesi@invite-research.com).