PhD position in the MSCA Doctoral Network "MobiliTraIN"

ONIRIS, LABERCA, France, offers a PhD position in the framework of the MSCA Doctoral Network MobiliTraIN (Ion Mobility Mass Spectrometry Training Network). The project aims to bring a new fundamental understanding of ion mobility-high resolution mass spectrometry (IM-HRMS), provide reference materials and guidelines for standardisation, develop state-of-the-art methods for the application of IM-HRMS in biopharmaceutical development, biological omics studies and non-target screening of contaminants, and lay the foundations for the adoption of IM-HRMS in industry by training 13 doctoral candidates.

The PhD project offered aims to integrate Ion Mobility (IM) into NTS workflows to answer current needs in understanding consumer's chemical exposure.

Secondments: This project is carried out in strong collaboration with the following groups, and visits to their laboratories are expected during the project. A willingness to travel and spend time abroad is therefore essential.
- U Antwerpen (Belgium), 3 months, Validation of CCS database using alternative analytical platform (DTIMS) in an academic environment.
- AFIN-TS (Germany); 2 months; Comprehensive evaluation of new LC-IM-HRMS methods with established LC-HRMS in a commercial NTS laboratory.
- Waters (UK), 1 month; Implementation of high-resolution cyclic ion mobility to study complex arrival time distributions.

Skills/Qualifications
Educational Qualifications:
• A master's degree (or equivalent) in a relevant field such as Chemistry, Biochemistry, Biophysics, or a related discipline.
Analytical Chemistry:
• Strong background in analytical chemistry and expertise in analytical techniques - mass spectrometry in particular- would be a plus
Data Processing and Analysis:
• Skills in data analysis, including interpretation of mass spectrometry data and statistical analysis.
• An interest and skills in computer programming, for example in Python or R, would be an asset for the development of customised data acquisition and analysis strategies.
Interdisciplinary Research:
• Ability to work in an interdisciplinary research environment, bridging the fields of chemistry and informatics.
Communication Skills:
• Excellent written and verbal communication skills, with the ability to present research findings effectively.
Collaboration and Teamwork:
• Ability to collaborate with research groups both within Oniris and during secondments to external institutions.
Adaptability:
• Willingness to adapt to new methodologies and techniques, especially during secondments to industry and academic partners.
Motivation and Initiative:
• Intrinsic motivation to contribute to the objectives of the MobiliTraIN project and the ability to take initiative in research activities.
Specific Requirements
• Mass Spectrometry Skills.
• Proficiency in operating and troubleshooting mass spectrometry instruments.
• Programming and Bioinformatics: Familiarity with relevant programming languages (e.g., Python, R) and bioinformatics tools for data analysis would be a plus.

Candidates must also fulfil the MSCA Doctoral Networks Eligibility Criteria stated below.
• PhD rule: Applicants must be doctoral candidates, i.e., must not already be in possession of a doctoral degree at the date of recruitment.
• Mobility rule: Researchers must not have resided or carried out their main activity (e.g., work, study) in the country of the host organisation for more than 12 months in the 3 years immediately before the recruitment date (i.e., start of employment).

To apply, please send your CV, covering letter, classification and recommendations in a **single pdf document** to the main supervisor gaud.dervilly@oniris-nantes.fr

We will adopt the principles of the European Charter for Researchers and Code of Conduct for the Recruitment of Researchers, promoting open, merit-based and transparent recruitment and attractive working and employment conditions. The main supervisor will make a pre-selection of eligible candidates for the open position. Ineligible and incomplete applications will not be considered. The pre-selected candidates will be invited to an online interview with at least one additional member of the personal supervisory team. A reserve list of candidates may be kept for up to 6 Months