



## Two years post-doc position in Plant analytical chemistry

The Strigolactones and Allelochemicals Signaling (SAS) team at Institut Jean-Pierre Bourgin (<a href="https://ijpb.versailles.inrae.fr/en/research-teams/strigolactones-and-allelochemicals-signaling/presentation">https://ijpb.versailles.inrae.fr/en/research-teams/strigolactones-and-allelochemicals-signaling/presentation</a>) has a 2-years post-doc position within the frame of a project funded by the French National Agency for Research (ANR). The objectives of the MALCOM-X project are to identify novel allelochemicals from the moss *Physcomitrium patens* (Moss ALlelopathic COMpounds), and to address the role of these compounds and their associated pathways in moss development, and moss-moss interactions. The project involves 3 academic partners: **P1, Institut Jean-Pierre Bourgin** (<a href="https://iipb.versailles.inrae.fr">https://iipb.versailles.inrae.fr</a>), IJPB INRAE Versailles, including SAS team (coordinator) and IJPB-OV (Plant Observatory Chemistry/Metabolism), **P2, Institut de Chimie des Substances Naturelles** (<a href="https://icsn.cnrs.fr/">https://icsn.cnrs.fr/</a>), ICSN CNRS Gif-sur-Yvette, Chemical Biology Department, and **P3, Unité en Sciences Biologiques et Biotechnologies**, (<a href="https://us2b.univ-nantes.fr/">https://us2b.univ-nantes.fr/</a>) US2B, Rhizoplante team, CNRS, Nantes Université.

**Missions:** The post-doc will work in the SAS team, in close collaboration with the Plant Observatory Chemistry/Metabolism (<a href="https://ijpb.versailles.inrae.fr/en/research-teams/the-plant-observatory-chemistry-metabolism/presentation">https://ijpb.versailles.inrae.fr/en/research-teams/the-plant-observatory-chemistry-metabolism/presentation</a>). The post-doc will be involved in all tasks from the project, from moss exudate production, exudate fractionation and analysis, bioassays on moss, to bioactive compounds identification. The complementary expertise of all partners will allow the identification of the moss allelopathic compounds.

**Qualifications**: We are seeking a highly motivated candidate with a strong background in analytical chemistry, and good interest for plant biology. Experience in metabolomics data handling and/or mass spectra interpretation will be welcome. Knowledge about plant specialized metabolites and/or signaling compounds would be an asset, and skills in MS/MS data analysis by molecular networking would be appreciated. The candidate must hold a Ph.D. degree in analytical chemistry, metabolomics or natural compound chemistry.

**Salary:** The post-doc salary according to the INRAE scales will depend on the prior experience of the candidate and will include a part of health insurance.

Starting date: January 2023 but negotiable.

Duration: 27-29 months depending on prior experience

**Applications details:** Applicants should send their CV along with a research statement and the names and contact of 2-3 referees to Sandrine Bonhomme (sandrine.bonhomme@inrae.fr) and François Perreau (françois.perreau@inrae.fr).