

## Campagne d'emplois Enseignants Chercheurs 2025

### Université Jean Monnet SAINT-ETIENNE

<b>Identification</b>	<b>Localisation du poste : St Etienne</b>
<b>PROFESSEUR DES UNIVERSITES</b>	<b>Campus : Métare</b>
<b>CNU 64-68</b>	<b>Composante : FST</b>
<b>Numéro GESUP 0629</b>	
<b>Date de prise de poste : 01 09 2025</b>	<b>Laboratoire de Recherche : LBVPAM</b>
<b>Type de Concours : 46-1</b>	<b>UMR 5079</b>
Décret n°84-431 du 6 juin 1984 fixant les dispositions statutaires communes applicables aux enseignants-chercheurs et portant statut particulier du corps des professeurs des universités et du corps des maîtres de conférences. <a href="https://www.legifrance.gouv.fr/loda/id/JORFTEXT000000520453">https://www.legifrance.gouv.fr/loda/id/JORFTEXT000000520453</a>	

**Intitulé du profil en français:** Écologie chimique végétale

**Intitulé du profil en anglais:** Plant Chemical Ecology

Mots clef en français : -Interactions chimiques entre plantes, Évolution de la communication des composés volatils des plantes, Récepteurs olfactifs des plantes, Écologie des interactions, Réponse des plantes aux signaux chimiques

Mots clef en anglais : Plant-Plant chemical interactions, Evolution of plant volatile communication, Plant receptors for volatiles, Ecology of interactions, Plant response to chemical signals

### **1. Context**

The Jean Monnet Saint-Étienne University (UJM) offers training in the 4 areas: Arts, Letters, Languages / Human and social sciences / Law, Economy, Management / Sciences, Technologies, Health, spread over 5 campuses. Jean Monnet University also offers expertise in supporting student success and professional integration, in a rich and dynamic student life environment. The cutting-edge research and UJMs increasingly numerous international collaborations give UJM an indispensable place in the dynamics of Saint-Étienne, with a growing positioning on a national and international scale. The development of UJM is based on strong international cooperation activities and partnerships, including collaborations with industry which ensure valorisation and transfer of technologies.

The Faculty of Science and Technology has around 3,000 students, 180 teachers and university researchers, 65 administrative and technical staff and 250 external speakers. It offers a wide range of training in 7 General Bachelor degrees, 1 Professional Bachelor and 9 Master degrees (incl. 16 specializations). It has 1 common centre, 6 research laboratories attached to the CNRS and 7 educational departments including the Biology department at the Métare campus. Teaching as part of this position will be performed at this campus.

### **The laboratory of Plant Biotechnology, aromatic and medicinal plants (LBVpam)**

LBVpam's research aims to develop fundamental knowledge on the plant biology, plant biochemistry and chemical ecology of the chemical communication of aromatic plants. Over the past 20 years, the laboratory has established its expertise in the field of plant chemical interactions, and LBVpam is affiliated to CNRS Ecology and Environment UMR 5079. The laboratory has strong collaborations across France, Europe and the rest of the world, exemplified with the latest awarding of research calls like the Horizon Europe project BryoMolecule (including groups from France, Sweden, Poland, Spain and Italy) and the International ANR call, Strass (including groups from France and USA). LBVpam constitute of 12 permanent staff (2 Professors, 6 Associate Professors, 1 Research engineer, and 3 technical staff) and several post docs and PhD students.

The research of the BVpam laboratory revolves around three major themes: The biosynthesis of volatile organic terpenoids (and some other compounds), development specialised cell compartments for volatiles, and the impact on communication between plants and other organisms. The general theme is volatile terpenoids, ranging from the biosynthesis of these, including biotechnological developments, the storage and release, and finally interpretation of the chemical signal mediated by the volatile terpenoids. With experiments in controlled or natural ecosystems, we seek to elucidate the functional role of specific compounds and have for many years been focused on terpenoids.

## **2. Pedagogic activities**

LBVpam is part of The Department of Biology-Biochemistry. LBVpam contributes to teaching in two Bachelor degrees (Biology of organisms and Cellular biology and physiology) and the current main Master degree in Chemical Ecology and Environnement. Within the next two years it is planned to change the current master to one or two international masters in Plant Chemical Ecology and Plant Molecular Biology to complement research performed in the laboratory. The future Professor will have a strong involvement in setting up the international Plant Chemical Ecology program and contribute with teaching e.g. ecological understanding of plant interactions and plant interactions with other living organisms. With recent and upcoming retirement, it is also expected that the coming professor will contribute to general teaching in plant biology, botany and plant physiology and cell biology. Significant experience in teaching in the areas of plant chemical ecology, botany and plant physiology will be preferred, along with experience with development of novel innovative teaching methods.

### **Expected Educational Profile:**

We envision that the candidate holds a master degree in biology or chemistry, followed by a relevant PhD degree. The candidate should have obtained habitation or similar, and/or be in a position where the candidate can be the main supervisor of PhD students. It is expected that the candidate has a long track record in teaching in plant biology and chemical ecology, including being course responsible for several courses.

### **Specific skills:**

- Experience with teaching chemical ecology, preferably plant chemical ecology is required.
- Experience with online teaching is preferred
- Experience with designing master and bachelor programmes

<b><u>Primary attachment</u></b>	<b><u>LBVPam</u></b>
<b><u>Place</u></b>	<b><u>Saint-Etienne</u></b>
<b><u>Campus</u></b>	<b><u>Campus Métare</u></b>
<b><u>Faculty director</u></b>	<b><u>Tel : 04 77 48 15 91</u></b>
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<b><u>Faculty homepage</u></b>	<b><u><a href="https://fac-sciences.univ-st-etienne.fr/fr/index.html">https://fac-sciences.univ-st-etienne.fr/fr/index.html</a></u></b>

### 3. **Recherche**

LBVpam is seeking a candidate with an internationally outstanding research profile in plant chemical ecology with a broad interest in ecological interactions mediated through olfactory signals, within and among species, starting with a focus from the plant. The candidate should preferably wish to build a research group with a special focus on plant-plant interaction, how volatile/semi-volatile terpenoids are released, perceived, and processed in plants (inter + intra-species). Interactions with other species groups than plants are also be of interest, where the focus is how plants communicate with to the surrounding environment. The research should focus on the transport, accumulation, and function of plant volatiles, studies of the mechanisms, the strategies and compromises by the plant, and the “costs” required when plant emit and receive volatiles. This should preferably include the characterization chemical signals and responses in the plant, including biochemical characterization of plant volatile receptors and cell signalling cascades. Holistic systems biology-based approaches (transcriptome, proteome, metabolome) of aromatic plants are key technologies for LBVpam. Furthermore, research covering the plant-insect interactions and possibly other volatile interactions complements the local research interests. The active integration into and interaction with local key research areas, such a terpenoid biochemistry in plants, including Lavender, Roses, Pelargonium and many more is expected. Furthermore, a close cooperation with the local research partners in the region Auvergne Rhone-Alpes is expected.

#### **Funding Research profile:**

The selected candidate should have documented international research experience and have participated in international research projects. The candidate should have obtained funding like larger national grants, and should have a documented track record to obtain EU and/or other international grants. Experience with industrial collaboration is beneficial.

#### **Specific research skills :**

- Experience with designing research experiments in Plant Chemical Ecology
- Experience with designing experiments including contemporary gene editing

<b><u>Name of the laboratory</u></b>	<b><u>The laboratory of Plant Biotechnology, aromatic and medicinal plants (LBVpam)</u></b>
<b><u>Place</u></b>	<b><u>Saint-Etienne</u></b>
<b><u>Director of the laboratory</u></b>	<b><u>Tel : +33 (0) 6 1001 7934</u></b>
<b><u>Henrik Simonsen</u></b>	<b><u>Mel : <a href="mailto:henrik.toft.simonsen@univ-st-etienne.fr">henrik.toft.simonsen@univ-st-etienne.fr</a></u></b>
<b><u>URL Laboratoire</u></b>	<b><u><a href="https://lbvpam.univ-st-etienne.fr/fr/index.html">https://lbvpam.univ-st-etienne.fr/fr/index.html</a></u></b>

#### **4. Collective responsibilities and transversal skills expected in training/research**

- Ability to work in a team
- Master digital tools for higher education and research
- Know how to self-train and demonstrate innovation, in particular to develop teaching and other pedagogical approaches,
- It is NOT a requirement to speak French, but the candidate is required to be able to teach and communicate in scientific English, as this is the day-to-day language at the laboratory and for our future international master program. It is expected that the candidate will learn French to at least B1 level within the first two years.
- Organizational and adaptive skills, responsiveness and strong involvement in the operation and management of training and research.
- Be willing to take on educational responsibilities like study program leader and course responsibility.

#### **5. Application procedure**

Applications will be received exclusively electronically, via the ODYSEE application from March 3, 2025 (10 a.m., Paris time) to April 4, 2025 (4 p.m., Paris time).

The list of mandatory documents to be provided, depending on the situation of the candidates, is defined by the decree of February 6, 2023 relating to the general procedures for transfer, secondment and recruitment by competition of lecturers, university professors and junior professor chairs

It is available on the ODYSSEE staff portal: to be completed by DRH ENS

The position is subjected to a "restricted regime zone" within the meaning of Article R 413-5-1 of the Penal Code. If so, the appointment and/or assignment of the candidate selected by the authorities may only take place after access authorization has been issued by the head of the establishment, in accordance with the provisions of Article 20-4 of Decree No. 84-431 of June 6, 1984.

### **ANNEXE au Profil de poste**

**Proposition de recourir à une mise en situation lors de l'audition des candidats : Non**

Saint-Etienne, le 25/11 2024

Signature Direction de Composante

Marylin BEAUCHAUD

Signature Direction de Laboratoire

Henrik Toft SIMONSEN

