Full time position in the field of Wood processing optimisation and valorisation in Gembloux Agro-Bio Tech

CALL FOR APPLICATIONS

A full-time position is open in the field of "Wood processing optimisation and valorisation" at the Faculty of Gembloux Agro-Bio Tech - University of Liège (GxABT-ULiège) from 15th October 2019, for a period of 2 years at the end from which a definitive appointment could be proposed.

You will find below some information about research and teaching activities, community services, the profile and the application procedure.

GENERAL CONTEXT

Gembloux Agro-Bio Tech (GxABT) is firmly committed to training and research in the fields of mobilization of living resources and their potential for food and non-food needs, well-being and health of human populations. GxABT is organized into one teaching department and organizes 4 masters in bio-engineering including one in “Management of forest and natural environments”. GxABT also co-organizes a master’s degree in landscape architecture, a master’s degree in agroecology and a master’s degree in management of innovation and food design. The faculty is involved at various levels in the organization of several other masters and university certificates.

Research within GxABT is organized around two major cross-cutting areas that aim to characterize the environment and develop bioproducts related to sustainable production systems in order to meet societal expectations while generating innovation required by the knowledge society and the bio-economy. TERRA research center includes four CARE (Support Center for Research and Education) including ForestIsLife which manages the provision of human resources (technicians), facilities and materials to perform experiments.

CARE ForestIsLife

ForestIsLife was established in 2018 and brings together 20 Professors and Lecturers, 4 Assistants and 37 non-permanent scientists. This CARE is interested in forest ecosystems and landscapes, both in temperate and tropical regions, and, more generally, in low anthropized landscape structures as well as the development of woody and non-woody natural resources. To carry out this work, ForestIsLife relies in particular on "observatory" and "laboratory" forests, as well as a series of equipments dedicated to the analysis of the characteristics of wood material. The research is structured around 4 priorities:

1. Characterizing forest ecosystems;
2. Predicting the evolution of forests in a context of global change;
3. Managing forests for future generations;
4. Optimizing the value of forest products.

This fourth priority brings together 4 research themes, 3 of which relate directly to the field of this call:
1. Identifying molecules of interest in wood processing co-products and potential markets;
2. Improving knowledge on currently non-valued woody species to ensure resource renewal and forest resilience;
3. Developing technically and economically efficient wood processes.

**TEACHING ACTIVITIES**

Some teaching related to the expertise on the field of wood processing and valorization, could be included as part of the Master’s degree in Bioengineering in Management of forest and natural environments. These different courses cover the following topics:

- Physical and mechanical characteristics of the wood;
- Harvesting and industrial processing of wood and derivatives;
- Properties of wood-based products and improvement of their performance;
- Industrial valorization of by-products from the wood sector.

**RESEARCH**

The research project proposed by the applicant must focus on the development of technically and economically efficient wood processing and by-product recovery processes. It will contribute to improving knowledge of wood from currently undervalued wood species in order to ensure the renewal of the resource and the resilience of forests.

**SERVICES TO THE COMMUNITY**

The applicant will ensure the development of the ForestIsLife’s CARE expertise in the valorization of wood and by-products. She/he should strengthen collaboration with other CAREs as well as with other institutions active in the field of call. She/He will contribute to positioning GxABT as an important player in contact with the private sector active in both temperate and tropical regions. In the long term, she/he will have to create a collaborative structure bringing together the actors in the field of wood valorization.

**PROFILE**

Candidates must:

- hold a doctoral degree with a thesis and have significant experience in the field of the call;
- demonstrate scientific experience recognised by international publications in the field of the call;
- demonstrate the ability to perform high-level scientific research, lead a team of researchers and develop a laboratory;
- be willing to work as a team of professors and researchers from different disciplines and with shared human and material resources within the Department and TERRA;
• be willing to develop research and development activities in contact with stakeholders in the temperate and tropical wood sectors;
• be available for different functions related to community services;
• have very good communication skills, be a positive and solution-oriented person;
• adhere to the quality management and continuous improvement system set up by the Institution;
• have postdoctoral experience attested by an extended study period abroad or significant experience acquired outside their home institution.

**INFORMATION**

Further information can be obtained from:
Prof. Frédéric FRANCIS, Dean of the Faculty ([doyen.gembloux@uliege.be](mailto:doyen.gembloux@uliege.be))

**SUBMISSION OF APPLICATIONS**

Applicants are requested to submit their applications, with the reference "Optimization_wood_GxABT", by registered mail to Prof. Frédéric FRANCIS, Dean of the Faculty, Passage des Déportés 2, 5030 Gembloux before 4th of October 2019. A copy of the complete application file will also have to be sent at [doyen.gembloux@uliege.be](mailto:doyen.gembloux@uliege.be).

The complete file will be composed of:

- ✓ application letter and complete CV;
- ✓ a complete curriculum vitae mentioning all publications;
- ✓ a summary of their teaching and research project related to the field of study described in this job offer (maximum four pages).
- ✓ an educational and research project, related to the theme of the call (maximum four pages);
- ✓ a project to develop community services (max. 1 page).