

## Full-time academic vacancy in the field of Optimising Wood Transformation and Processing Methods

**Start state:** 1 September 2021

### Description of the workload:

A **full-time**, indivisible position in the field of **Optimising Wood Transformation and Processing Methods**, within the Teaching Department of the Gembloux Agro-Bio Tech Faculty. This post includes teaching, research and services to the Community.

Gembloux Agro-Bio Tech (GxABT) is firmly committed to training and research in the use of living resources and their potential for food and non-food needs, the well-being and health of human populations.

GxABT is organised into a Department (Agro-Bio Tech), responsible for teaching activities, and a Research Unit (TERRA).

GxABT organises four Master's programmes in bioengineering and jointly-organises a Master's in Landscape Architecture, a Master's in Agroecology and a Master's in Food Innovation and Design Management. It is also involved at various levels in the organisation of several other Master's and university certificates.

Research at GxABT is organised around two major cross-cutting areas that aim to characterise the environment and develop bioproducts in relation to sustainable production systems in order to meet societal expectations, while generating the innovation required by society and the bio-economy.

GxABT's ambition is to develop research activities based both on scientific questioning and on the socio-economic issues articulated by society. This research must advance knowledge, lead to progress for society and human development, support the development of public policies and/or contribute to the development of socio-economic activity.

The Faculty has invested in the establishment of four "Research and Education Support Units" (CARE) called *FoodIsLife*, *EnvironmentIsLife*, *AgricultureIsLife* and *ForestIsLife* respectively.

The *ForestIsLife* CARE, established at the end of 2018, brings together 20 professors and lecturers, four assistants and 37 non-permanent scientists.

The CARE is interested in temperate and tropical forest ecosystems and landscapes and, more generally, in landscape structures that are not heavily anthropised, as well as in the development of wood and non-wood natural resources. To carry out this work, the CARE relies in particular on "observation" and "laboratory" forests, as well as equipment dedicated to the analysis of wood material characteristics. The research is structured around four priorities:

1. Characterising forest ecosystems;
2. Predicting the evolution of forests in a context of global change;
3. Managing forests for future generations;
4. Optimise the transformation of forestry products.

This fourth priority brings together four research themes, three of which are directly relevant to this field:

1. Identify molecules of interest in wood processing co-products and potential markets;
2. Improve knowledge on currently non-valued species of timber to ensure resource renewal and forest resilience;

3. Develop technically and economically efficient wood transformation processes.

#### Teaching activities:

The course load brings together courses relating to the field of wood transformation and processing organised as part of the Master's in Bioengineering in Forest and Natural Area Management. These various courses deal with the following subjects:

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

The initial course load will be 10 credits. It is likely to evolve according to the range of courses related to wood within Gembloux Agro-Bio Tech.

#### Research Activities:

The research project proposed by the candidate must focus on the development of technically and economically efficient processes for the transformation and processing of timber and its by-products. They will participate in improving the understanding of currently undervalued timber species in order to guarantee the renewal of the resource and the resilience of forests.

#### Services to the Community:

The candidate will develop the expertise of the *ForestIsLife* CARE in processing wood and its by-products. They will need to strengthen collaboration with other CAREs as well as with other institutions active in the relevant area. They will help position GxABT as an important player in the sector in contact with the private sector in both temperate and tropical regions. Ultimately, they will have to create a collaborative structure bringing together the players in the timber processing sector.

#### Qualifications required:

- A research doctorate and significant experience in the relevant field;
- demonstrate recognised scientific experience in the field and through publications at international level in the relevant field;
- demonstrate the ability to conduct high-level scientific research and to lead a team of researchers and a laboratory;
- be willing to work in a team of teachers and researchers from different disciplines and with human and material resources shared within a Department and TERRA;
- demonstrate the ability to teach in both English and French, or make a commitment to be able to do so within two years of appointment;
- be willing to develop research and development activities in partnership with stakeholders in the temperate and tropical wood sectors;
- be available for a variety of different roles relating to services to the community;
- have very good communication skills;
- adhere to the quality management and continuous improvement system set up by the Institution;
- have post-doctoral experience demonstrated by an extended study period abroad or significant experience acquired outside their home institution.

In addition, it is a good idea for the candidate to inquire about current and planned research at GxABT.

### Selection procedure:

Each candidate's application will be examined by a faculty committee in charge of selecting the candidates to be interviewed, giving reasons for its decisions with regard to this vacancy announcement and the qualifications and merits of the candidates. The Faculty Committee shall interview the candidates, in particular concerning their curriculum vitae, their teaching, research and integration plans for the Institution and their command of English. The interview will include a "public lecture", the form of which will be set by the Faculty Committee. This interview will be held between the end of March and the beginning of May 2021.

### Applications:

Applicants are requested to submit their applications electronically to the following email address: [Postesacademiques@uliege.be](mailto:Postesacademiques@uliege.be) copying in the Dean of GxABT - [decanat.gembloux@uliege.be](mailto:decanat.gembloux@uliege.be) no later than **14 March 2021**.

### Documents required:

- ✓ Applications should be accompanied by a complete [curriculum vitae](#);
- ✓ A report on past and current research activities and a research plan, including the envisaged integration within the University of Liège;
- ✓ A teaching file including a report on any prior teaching activities and a teaching plan;
- ✓ A copy of publications;
- ✓ A plan for developing services in the community.

### Recruitment conditions:

The position shall be assigned either for a fixed term of four years, which may lead to the permanent appointment of the person concerned or on a permanent basis from the outset.

In the case of a four-year appointment, an evaluation of the person concerned will be carried out at the end of the third year.

- If the evaluation is negative, the person concerned will complete the four-year term but will not be able to extend it.
- If the assessment is positive, the person concerned shall be appointed on a permanent basis.

Our institutional policy is based on diversity and equal opportunities. We select candidates on the basis of their qualities whatever their age, sexual orientation, origin, beliefs, disability or nationality.

### Further information:

For any further information, please contact Professor Frédéric Francis, Dean of the Faculty – [doyen.gembloux@uliege.be](mailto:doyen.gembloux@uliege.be)

## Salary:

Salary scales and how they are applied are available from the human resources department of the University: **Ms Ludivine Depas** – tel.: +32 4 366 52 04 – [Ludivine.Depas@uliege.be](mailto:Ludivine.Depas@uliege.be)