

## Academic vacancy in the field:

Process control and quality of bio-sourced products in a context of digital transition

**Starting date:** 01/09/2020

**Offer reference:** GxABT2020-1

## Course load description:

**A full-time, indivisible position in the field of process control and quality of biosourced products in a context of digital transition, attached to Gembloux Agro-Bio Tech. This position includes teaching, research and service activities for the Community.**

The proposed post will aim to teach and develop innovative integrated approaches to meet the demands of business and society at large.

### Teaching activities:

The teaching load will include, in the first year, a set of courses corresponding to about ten ECTS credits.

The teaching load is for:

- on the one hand, bioscience engineering masters courses (mainly chemistry and bio-industries and agronomic sciences) in the fields of hygiene, health safety and food industrial logistics,
- on the other hand, bachelor's degree courses in engineering sciences with a bioscience engineering orientation in the field of chemistry of equilibria, agricultural and food technology and quality management.

The course in chemistry of equilibria must be taught in French, in front of an audience of more or less 300 first year bachelor's students.

Most of the courses will be taught in collegiality with other faculty members.

The course load will gradually increase over the following years to reach a total of about 15 ECTS credits by 2023 at the latest.

The teaching load will also include supervisory activities within the master studies (group projects, supervision of master theses, internships) and original initiatives by the candidate.

### Research activities:

The person recruited will conduct research in the field of processes and quality applied to bio-based products. He or she will contribute to the development of relevant models at the scale of the control of a unit operation, a process, a production line, by integrating the control of food quality in its multiple components. Predictive models of the evolution of the characteristics of the product during its conservation can also be considered.

This person will contribute to the development of innovative integrated approaches to meet the demands of the food industry and society in general, taking into account the control of processes and the quality of food products.

The candidate will have recognised expertise in bioscience engineering and food science and technology. In addition, the candidate must be able to integrate the digital transition into self-monitoring and control of the production chain. He/she will continue to look for new technological solutions that can be transposed to the agri-food sector.

He/she will propose a personal research project enabling the deployment of its expertise within GxABT, in good adequacy with the partners of the CAREs, in particular CARE FoodIsLife (TERRA).

#### Community service activities:

The candidate will be involved in the community service activities of the Faculté Gembloux Agro-Bio Tech and the University of Liège, and beyond that in services to society, in consultation with its hierarchical authorities.

#### Qualifications required:

- Hold an initial degree in agricultural engineering (or bioscience engineering) or a university master's degree and a doctoral degree (PhD) with a thesis with experience in the field of appeal;
- Demonstrate recognised scientific experience, both in the field and through publications at international level in the field of the call (a minimum of six months' scientific stay abroad is an advantage);
- Report on an educational experience;
- Demonstrate an ability to work on interdisciplinary themes;
- Be able to work in a team and with shared human and material resources within the GxABT structures, and to manage technical staff;
- Be available for a variety of community service and extension functions;
- Fluency in English and French;
- Being available for missions abroad;
- Subscribe to the general quality objectives developed by the institution and the faculty;
- On the commitment, sign an agreement on the ownership of the research results.

#### Selection process:

Each candidate's file 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 appeal and the qualifications and merits of the candidates. The faculty commission shall interview the candidates, in particular concerning the candidate's curriculum vitae, his/her teaching, research and integration projects in the Institution and his/her command of English. The audition includes a "public lesson", the organisation of which is determined by the faculty commission.

#### Applications:

Candidates are requested to send their applications electronically to: **Postesacademiques@uliege.be** with a copy to the GxABT Dean's Office **decanat.gembloux@uliege.be** by **30/03/2020 at the latest**.

#### Required documents:

- ✓ A complete curriculum vitae;
- ✓ A cover letter developing the candidate's personal aspirations in relation to the proposed position;
- ✓ A report on past and current research activities, as well as a research project, including the envisaged integration within the University of Liège;

- ✓ A teaching file including a report on any previous teaching activities and a teaching project;
- ✓ A complete list of the candidate's publications and a copy of the five publications he/she considers most significant in relation to the area of appeal.

#### Terms and conditions of employment:

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

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 completes the four-year term without being able to extend it;
- If the assessment is positive, the person concerned shall be appointed on a permanent basis.

#### Information:

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

#### Remuneration:

The scales and their terms of application are available from the University's human resources administration: Ms Ludivine DEPAS - tel: +32 4 366 52 04 - [Ludivine.Depas@uliege.be](mailto:Ludivine.Depas@uliege.be)