Academic vacancy in the field of:
Data monitoring and management of agri-environmental systems

Start date: 01/09/2020
Vacancy Reference: GxABT2020-2

Description of the course load:
A full-time, indivisible position in the field of data monitoring and management of agri-environmental systems, within Gembloux Agro-Bio Tech. This includes teaching, research and service to the Community.

Teaching activities:
The teaching load will include, in the first year, a set of courses corresponding to about ten credits in the fields of environmental metrology, decision-making support, multivariate analysis and data visualisation, smart farming, geomatics and remote sensing.
The post mainly concerns bioengineering Master’s courses (environmental sciences and technologies, forest and natural area management, agronomic sciences), mostly given collegially with other faculty members.
The course load will gradually increase in the coming years, reaching a total of around 15 credits by 2023 at the latest.
The teaching load will also include supervision activities within the Master’s programme (group projects, supervision of final dissertation, internships) and original initiatives taken by the candidate.

Research Activities:
The sustainable management of agro-ecosystems and natural environments is currently a priority. Various disciplines have become essential, such as agro-ecology and continuous cover forestry, in order to encourage ecological processes that guarantee greater resilience. In these agro-ecosystems, variability and heterogeneity are no longer perceived as a constraint but as an opportunity and a guarantee of adaptability. They also aim to sustain the provision of diversified goods and services in a context of global change. The paradigm shift required for the implementation of these new land use strategies by humans must be accompanied by the development of new knowledge.

To meet these objectives, the successful applicant will propose a research strategy that will address the monitoring of different systems that can cover a gradient of land use intensity, from agricultural plots of land to natural forests, through a technological approach based on a wide range of sensors and digital information. In the specific field of environmental monitoring, the scientific community has embraced spatialisation tools to develop innovative applications in agriculture, animal husbandry, forestry and ecological monitoring of areas with little human activity. The successful applicant will develop research activities around the diversity within agroecosystems and natural environments, with a particular focus on agricultural (plant and animal production), forestry and ecological monitoring of natural environments. Within GxABT, the successful applicant will be expected to join experimental infrastructures, in particular the
ForestIsLife, EnvironmentIsLife and AgricultureIsLife CARES, and provide technical expertise in very high resolution remote sensing and proxy sensing for ecosystem studies.

This person will ultimately have to be able to implement and manage measurement and data collection systems and integrate them into diagnostic procedures that take into account uncertainties related to space-time variability, sensor accuracy and post-processing precision. They will continue to explore new applications in these fields and will propose methodological solutions aimed at operationalising their integration in agriculture, forestry or environmental monitoring. More specifically, the candidate will propose a personal research project allowing the deployment of their expertise both within intensive systems (agricultural and forestry production systems) and within environments that have been little impacted by humans (semi-natural to natural environments).

Community-related activities:
The candidate will be involved in services to the community provided by the Gembloux Agro-Bio Tech Faculty and the University of Liège and, beyond that, in services to society, in partnership with management.

Qualifications required:

- Must hold a first degree in agronomic engineering (or bioengineering) or a Master’s degree and a doctoral research degree with experience in the relevant field.
- Must demonstrate recognised scientific experience, both in the field and through international publications in the relevant field (a minimum of six months’ scientific residence abroad is an advantage)
- Must provide evidence of teaching experience
- Must demonstrate the 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 different roles relating to services to the community and public education.
- Be proficient in English and French (or at least agree to becoming proficient in French within three years of the appointment)
- Be available for missions abroad
- Subscribe to the general quality objectives developed by the institution and the faculty
- Upon appointment, must sign an agreement on the ownership of the research results

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 shall include a “public lesson”, which shall be organised by the Faculty committee.

Applications:

Candidates are requested to send their applications electronically to the following address: Postesacademiques@uliege.be with copy to GxABT Decanat decanat.gembloux@uliege.be by 30/03/2020 at the latest.
Required documents:

✓ a complete curriculum vitae;
✓ A cover letter setting out the candidate’s personal aspirations with regard to the proposed position;
✓ A report on past and current research activities and a research plan, including the envisaged integration within the University of Liège;
✓ A teaching dossier including a report on any previous teaching activities and a teaching plan;
✓ A complete list of the candidate’s publications and a copy of the five publications they consider to be most significant in relation to the area in question.

Conditions of recruitment:

The position shall be assigned either from the outset 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 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.

Information:

Further information can be obtained from Professor Frédéric Francis, Dean of the Faculty (doyen.gembloux@uliege.be)

Remuneration:

Salary scales and application procedures are available from the human resources department of the University: Ms Ludivine Depas - tel: +32 4 366 52 04 – Ludivine.Depas@uliege.be