Introduction

Ghent University (Belgium) is internationally one of the leading institutes in resource recovery and renewable resources. It is home to the BioRefine Cluster Europe (www.biorefine.eu), a network of international research and development projects with the dedicated focus of guiding innovation towards applied market implementation.

BETA Tech. Centre, at the University of Vic – Central University of Catalonia (UVic-UCC), aims to improve and promote competitiveness and technological capacities of companies, Public Bodies and other entities, through the development of R&D&I collaborative projects. Our main fields of expertise are green technologies, ecology and biodiversity, agri-food industries and sustainability.

Ghent University and UVIC, partners of the H2020 project "Innovative nutrient recovery from secondary sources – Production of high-added value **FERTI**lisers from animal **MANURE"** (Fertimanure), are recruiting together a joint junior expert for a Ph.D degree at Ghent-UVIC University (Belgium - Spain).

Research content

More than 90 % of the manure produced in the EU is used for land fertilisation. However, this process is inefficient. FERTIMANURE will develop and demonstrate advanced nutrient management strategies to produce competitive fertilisers that contribute to good yield. The goal is to recycle valuable nutrients from manure and produce bio-based fertilisers. FERTIMANURE will be deployed in five relevant countries: Belgium, France, Germany, the Netherlands and Spain. Outcomes will help promote this circular economy model for the EU agriculture sector.

The candidate will be based in Ghent, Belgium. He will assess nitrogen (N), and phosphorus (P) dynamics of manure derived bio-based fertilisers (BBFs) and compare them to mineral fertilisers in controlled experimental conditions of laboratory assays. She/he is acquainted with nutrient recovery technologies (with a focus on ammonia stripping) to efficiently recover BBFs from animal manure and will evaluate and demonstrate the agricultural and environmental performance of novel manure derived bio-based fertilisers at relevant (uncontrolled experimental conditions; e.g. weather) open field scale as compared to mineral fertilisers from finite sources. Also, she/he will demonstrate and communicate obtained results to agricultural end-users via demonstration field sites and interactive events. She/he will also assess the efficiency of biostimulants as plant growth promoters for the nutrient uptake and tolerance against abiotic stress.

Throughout the project, the applicant will be connected with end-user stakeholders (i.e. farmers, manure processers and field contractors).

Your profile

- You are interested in and motivated by the research topic, as well as in obtaining a Ph.D. degree.
- You have mastered the English language, both in writing skills and oral presentations.
- You have the required communicative skills to interact independently with the scientific community, business community, and farming community.
- You are keen to learn about industrial lab practices.
- You have a relevant degree.
- Master level in applied biological sciences (agriculture, environmental technology, microbial engineering...).

We offer

- Full-time employment at Gent University for 42 months with the secondment of a minimum period of 6 months at BETA-UVIC in Spain
- The possibility of 6 month extension (up to 48 months), depending on the success & progress of the PhD
- Being embedded in a team of young, dynamic experts on nitrogen and phosphorus recovery from academia and industry
- Possibility of mobility across partner countries to visit innovative nutrient recovery processes at practical industrial scale
- An innovative and hot-topic research scope with precise, practical applications
- Close supervision and guidance in the conducting of the planned research
- The possibility to develop a broad network
- Stimulation to self-improvement by encouraging participation in summer schools, workshops, and conferences
- The selected candidate is expected to start as soon as possible
- Career option (to be discussed with the selected candidate based on mobility/travel interests and research opportunities)

How to apply

Send **(I)** CV, **(II)** motivation letter, **(III)** a 1-2 pager with your vision on how to address this research topic to aurore.assaker@ugent.be before April, 30th, 17h (Central European Time) (put „Fertimanure“ in the email title).
Please make sure your documents are saved as follow:
“Cover letter - Name Surname”
“CV - Name Surname”
Selected candidates will be invited for an interview in the second half of May.