JOB OFFER – PHD STUDENT

4 YEARS (i.e. 1 YEAR + 3 YEARS AFTER POSITIVE EVALUATION)

Assessing C-dynamics in floodplain environments
BELSPO-project: RECARBON

Partnership between: ULiège, KULeuven, the Institute for Nature and Forest Research and the Royal Institute for Cultural Heritage

Project

Enhancing the natural carbon sink is an integral part of climate mitigation. Amongst terrestrial ecosystems, fluvial systems are important carbon stocks, and floodplain soils are – especially in a Belgian context – hotspots for carbon storage at millennial timescales. However, due to climate change and changing land use practices (including drainage, vegetation changes and urbanization, both local and in the catchment), these carbon stocks are under pressure and floodplains might change to net carbon sources, in particular because alluvial peatlands, often buried under mineral sediment, tend to degrade. Within the RECARBON project it is aimed to evaluate the potential of land use management practices within floodplains in general, and in Belgium in particular, as a climate mitigation tool through the capture and storage of carbon. This project combines a detailed insight in the present-day characteristics of carbon storage in floodplains with the dynamic nature of C in floodplain environments at different timescales.

Within the framework of this particular PhD project, the overall stability of C stored in floodplains by assessed by studying the (i) biological, (ii) physical and (iii) thermal stability of SOC, each reflecting processes determining C-turnover at a particular temporal scale, i.e. from years over decades to centuries, respectively. This will include a wide range of lab and field experiments, such as assessing soil C fractionations, quantifying GHG-emissions by using portable trace-gas analyzer and applying differential scanning calorimetry method.

Profile

Required qualifications:

● To have a Master degree in Bioengineering, Ecology, Earth - or Environmental Science, Geography, or related disciplines;
● To have experience in soil science, including conducting field and lab work.
● To have demonstrated verbal and written communication skills in English;
● To have interest in working in a multidisciplinary team environment
Offer

- Ideal start time is December 1st 2022, but later starting dates can be negotiated.
- The PhD scholarship position is initially for one year but can be extended after positive evaluation up to a total duration of four years.
- Research is carried out at Uliège and partly at KU Leuven. A joint Phd degree between Uliège and KU Leuven is envisaged.
- The candidate is expected to take up a limited amount (approx. 10% of the time) of teaching activities at Uliège.
- The remuneration is generous and is in line with the standard Uliège PhD scholarship rates. It consists of a net monthly salary of about 2000 Euro (in case of dependent children or spouse, the amount can be somewhat higher).

Interested?

You can apply for this job no later than Monday 3 October 2022 by sending an e-mail to jeroen.meersmans@uliege.be.
Please include:

a) an academic CV and a PDF of your diplomas and transcript of course work and grades.
b) a statement of research interests and career goals, indicating why you are interested in this position.
c) a list of at least two references: names, phone numbers, and email addresses.

Interviews take place Monday 17 October in Belgium (at Uliège or KULeuven) or Online. Shortlisted candidates will be notified on Friday 7 October.

For more information please contact Prof. dr. Jeroen Meersmans, tel.: +32 81.62.21.89, email: jeroen.meersmans@uliege.be.