

PhD post in Ecohydrology

Ecohydrological modelling for regenerative agriculture.

Applications are open for a PhD scholarship at Imperial College London to start by September 2024. The PhD is in collaboration with EPFL Lausanne, and the research group of Prof Sara Bonetti. The PhD project will focus on the implementation of regenerative agricultural practices towards a carbon net zero and a sustainable environment. This research will involve the use of state-of-the-art ecosystem models that couple the water, carbon and soil nutrient cycles across space and time scales. The goal is to understand and optimize agricultural systems to ensure healthy soils, resilient crops and sustainable and environment friendly development. The PhD candidate will be integrated in the research labs of Dr Paschalis, and Prof Bonetti, and will be actively collaborating with a group of PhD students and postdoctoral researchers in the UK and Switzerland. The successful student will be primarily hosted at Imperial College London, and project will provide support for the student to spend up to two months per year in Switzerland, hosted by EPFL.



Requirements:

- A first-class degree (or internationally equivalent) in environmental sciences, environmental or civil engineering, life sciences or similar field.
- A master's level degree qualification, preferably with a focus on hydrology and environmental sciences.
- Excellent English writing and communication skills (e.g., IELTS 6.5 overall, minimum 6.0 in all components or TOEFL 92 overall and minimum 20 in all elements).
- Programming and data analysis skills (Python, Julia, MATLAB or similar).

In addition, a competitive candidate would benefit from the following desirable (<u>non-essential</u>) qualifications:

Experience in high performance computing.

The successful candidate is expected to have the following soft skills:

- Strong analytical and critical thinking abilities.
- Organizational skills and the capacity to manage multiple tasks concurrently and independently.

Funding and Eligibility: The studentship will provide funding for 3.5 years including tuition fees and a tax-free stipend at the standard UKRI London rate. <u>Funding is only available to Home (UK) students</u>. The funding can also be used to partly support an international student.

How to apply: by sending the following documents to Dr Athanasios Paschalis (a.paschalis@imperial.ac.uk)

- CV, including average grades and research experience (if any).
- Cover letter, explaining their motivation and suitability for this PhD project as well as availability to start.
- Contact details of two academic referees.

Review of applications will begin immediately and continue until the position is filled.

For further details, informal discussions and information about the project please contact Dr Athanasios Paschalis (a.paschalis@imperial.ac.uk)