

Imperial College London

PhD post in geology and geomorphology at Imperial College London, UK

Project Title: Geological and geomorphological characterisation of West Cumbria

General Description: One PhD scholarship funded by The Engineering and Physical Sciences Research Council (EPSRC) and the Nuclear Decommissioning Authority (NDA) is open for applications at Imperial College London. The focus is on the development of the regional stratigraphy, mapping and interpreting surface features with respect to glacial processes in West Cumbria. The PhD will be based in the Geotechnics Section, Department of Civil and Environmental Engineering, offering a wide range of training and development opportunities in a highly stimulating environment, as well as access to world-leading academics, facilities and networks.

Project details: It is known that the western Cumbria region was affected by different glacial phases in the Quaternary. During the last British and Irish Ice Sheet (BIIS) the area was drained by numerous ice streams, it was affected by the passage of the fast-flowing Irish Sea Ice Stream (ISIS) and possibly by localised ice advances from the Lake District. Despite recent efforts to better depict the last BIIS phases of advance/retreat, its glacial stratigraphy and geomorphological signature, there is still debate on the glacial evolution of western Cumbria and the understanding of the geology of this coastal region.

The aim of this PhD is to expand the work so far undertaken along the in west Cumbrian and to integrate this geological and geomorphological understanding with the correct knowledge of process-sediment/form relationships, understanding of former climate and environmental change history, and glacial dynamics into a regional Quaternary geological model to collectively support nuclear licensed sites in this area.

Requirements: A competitive candidate for this role should demonstrate the following:

Academic requirements:

- A good Upper Second or First Class Degree (or International equivalent), in the geosciences or cognate discipline.
- A Masters level degree qualification and/or relevant experience.

Experience and skills:

- Solid background in geomorphology, geology and physical geography.
- Fieldwork and mapping skills.
- Familiarity with GIS (geographical information systems).
- Be prepared and physically capable to undertake several seasons of fieldwork in Cumbria, UK.

A lack of experience in the above experience and skills could be compensated by evidence of research potential. Appropriate training will be provided.

Funding and eligibility: The studentship will provide funding for 4 years including tuition fees and a tax-free stipend, at £19,284 for the 2020/21 academic year, this is £2,000 per annum more than the standard UKRI London rate. In addition, a generous allowance is provided for research consumables, fieldwork, conference attendance and specialist training.

Full funding is available to Home and EU students. The funding can also be used to partly support an international student.

How to apply: Applicants wishing to be considered for these opportunities should send the following application documents to the project supervisor Dr James Lawrence (j.lawrence@imperial.ac.uk)

- Current CV including details of their academic record.
- Covering letter explaining their motivation and suitability.
- Contact details of two referees, one should be academic.

Application via the Imperial College Registry is not necessary at this stage.

The closing date for applications is the 30th June 2020. However, applications will continue to be accepted until the position is filled.

For further details, informal discussions about the project and to submit an application please contact the project supervisor Dr James Lawrence (j.lawrence@imperial.ac.uk)