

PhD studentship (Full-time)



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| Institution | Xi'an Jiaotong-Liverpool University, China |
| Department | Department of Health and Environmental Sciences |
| Supervisors | Principle supervisor: Dr Bailiang Li (XJTLU, HES) Co-supervisor: Dr James Cooper (UoL, SoES) |
| Application Deadline | Open until the position is filled |
| Funding Availability | Funded PhD project (world-wide students) |
| Project Title | Effect of atmospheric stability on aeolian transport |
| Contact | Please email bailiang.li@xjtlu.edu.cn (XJTLU principal supervisor's email address) with a subject line of the PhD project title |

Requirements:

The candidate should have a first class or upper second class honours degree, or a master's degree (or equivalent qualification), in physical geography, geology, environmental science, environmental engineering, atmospheric science, or other relevant disciplines. Evidence of good spoken and written English is essential. The candidate should have an IELTS score of 6.5 or above, if the first language is not English. This position is open to all qualified candidates irrespective of nationality.

Degree:

The student will be awarded a PhD degree from the University of Liverpool (UK) upon successful completion of the program.

Funding:

The PhD studentship is available for three years subject to satisfactory progress by the student. The award covers tuition fees for three years (currently equivalent to RMB 80,000 per annum) and provides a monthly stipend of RMB 5,000 as a contribution to living expenses. It also provides up to RMB 16,500 to allow participation at international conferences during the period of the award. It is a condition of the award that holders of XJTLU PhD scholarships carry out 300-500 hours of teaching assistance work per year. The scholarship holder is expected to carry out the major part of his or her research at XJTLU in Suzhou, China. However, he or she is eligible for a research study visit to the University of Liverpool of up to three months, if this is required by the project.

Project Description:

Atmospheric stability is the air vertical movement tendency controlled by atmospheric stratification, which can usually be measured using a series of Richardson numbers. Atmospheric stratification includes a potential-temperature-gradient induced thermal stratification and an air-sand-mixture-gradient induced sedimentological stratification. Since the variation of atmospheric stability can influence the air vertical movement, it may also significantly influence the aeolian transport. Although many studies have been conducted on atmospheric thermal stability and its effect on aeolian processes, little is known on the atmospheric sedimentological stratification effect. Considering the similarities between hydrodynamic and aeolian sediment transports and between thermal stratification and sedimentological stratification, it is feasible to adopt their approaches to study the effects of thermal and sedimentological stabilities on aeolian transport. Results from this research can be used to strengthen the understanding on the mechanism of aeolian transport and to facilitate the prediction and mitigation of aeolian hazards.

For more information about doctoral scholarship and PhD programme at Xi'an Jiaotong-Liverpool University (XJTLU): Please visit

<http://www.xjtlu.edu.cn/en/study-with-us/admissions/entry-requirements>

<http://www.xjtlu.edu.cn/en/admissions/phd/feescholarships.html>

How to Apply:

Interested applicants are advised to email bailiang.li@xjtlu.edu.cn (XJTLU principal supervisor's email address) the following documents for initial review and assessment (please put the project title in the subject line).

- CV
- Two reference letters with company/university letterhead
- Personal statement outlining your interest in the position
- Proof of English language proficiency (an IELTS score of 6.5 or above)
- Verified school transcripts in both Chinese and English (for international students, only the English version is required)
- Verified certificates of education qualifications in both Chinese and English (for international students, only the English version is required)

Informal enquiries may be addressed to Dr Bailiang Li (bailiang.li@xjtlu.edu.cn), whose personal profile is linked below,

<http://www.xjtlu.edu.cn/zh/departments/academic-departments/health-and-environmental-sciences/staff/bailiang-li>