

PhD studentship (Full-time)

Institution	Xi'an Jiaotong-Liverpool University, China
School	School of Science
Supervisors	Principal supervisor: Professor Xiuchen Wu (XJTLU) Co-supervisor: Dr. Yaoqi Li (XJTLU) Co-supervisor: Dr. Frederick Draper (UoL)
Application Deadline	Open until the position is filled
Funding Availability	Funded PhD project (world-wide students)
Project Title	Effects of neighborhood species and functional trait diversity on tree growth
Contact	Please email xiuchen.wu@xjtlu.edu.cn (XJTLU principal supervisor's email address) with a subject line of the PhD project title. The principal supervisor's profile is linked here: https://www.researchgate.net/profile/Xiuchen-Wu-3?ev=prf_overview

Requirements:

A Master's degree/BSc in ecology, forestry, physical geography, environmental science, mathematics, computer science or related disciplines.

A Master's degree with Merit and a Bachelor's degree with first-class or upper second-class honors are required for PhD admissions. Exceptional candidates holding only a Bachelor's degree may be considered on an individual basis in certain disciplines.

Evidence of good spoken and written English is essential. The candidate should have an IELTS (or equivalent) score of 6.5 or above, if the first language is not English. This position is open to all qualified candidates irrespective of nationality.

Demonstrated interests in global change ecology and land-atmosphere interactions.

Strong experience with statistical programming (R/Python/Matlab)

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 99,000 per annum). It also provides up to RMB 16,500 to allow participation at international conferences during the period of the award. The scholarship holders are expected to conduct the majority of their research at XJTLU in Suzhou, China. However, they may apply for a short-term research visit to the University of Liverpool if the project requires it.

Project Description:

Tree growth responses to climate change profoundly affect the carbon budget of forest ecosystems and their climate feedback effects. While extensive research has been conducted on how climate change impacts tree growth, previous studies have predominantly focused on growth dynamics at the plot scale and the effects of climatic factors, largely overlooking the regulatory role of neighborhood species and functional trait diversity on individual tree growth. This knowledge gap arises from two main limitations: (1) a lack of mechanistic understanding of how species and functional trait diversity regulate individual tree growth, and (2) insufficient detailed multi-source data to accurately assess these regulatory effects and the resulting inter- and intraspecific growth differentiation.

This study aims to: 1) Characterize the spatial patterns of neighborhood species and functional trait diversity along the great climatic gradient in the eastern section of China's sub-humid to semi-arid region, through large-scale surveys of forest community structure and species diversity, combined with measurements of functional traits across multiple tree species and multi-species tree-ring analysis; and 2) Reveal the regulatory mechanisms of neighborhood species and functional trait diversity on individual tree growth.

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

<https://www.xjtlu.edu.cn/en/admissions/doctoral/entry-requirement-phd>

<https://www.xjtlu.edu.cn/en/admissions/doctoral/postgraduate-research-scholarships>

How to Apply:

Interested applicants are advised to email xiuchen.wu@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 formal reference letters
- Personal statement outlining your interest in the position
- Certificates of English language qualifications (IELTS or equivalent)
- Full academic 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)
- PDF copy of Master Degree dissertation (or an equivalent writing sample) and examiners reports available