# PhD studentship (Full-time)



Institution	Xi'an Jiaotong-Liverpool University, China
Department	Department of Mathematical Sciences
Supervisors	Principal supervisor: Professor/Dr. Xinyao Yang (XJTLU, Department) Co-supervisor: Professor/Dr. Andrew Lin (XJTLU, Department)
	Co-supervisor: Professor/Dr. Gayane Piliposyan (UoL, Department)
Application Deadline	Open until the position is filled
Funding Availability	Funded PhD project (world-wide students)
Project Title	Stability of Multi-dimensional Traveling Wave Solutions in Reaction-Diffusion Systems and Pattern Forming Mechanism of Other Wave-like Phenomena
Contact	Please email Xinyao.Yang@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 Applied Mathematics. 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 5,000 RMB 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:

Stability theory of the steady states and traveling wave solutions for reaction diffusion equations is an important area in contemporary applied mathematics. In this project, we will study the stability of the traveling wave solution together with its steady states for a class of reaction diffusion systems arising in combustion theory and chemical models and further investigate additional models such as modeling of exothermic and endothermic chemical reactions for practical applications of these results.

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/feesscholarships.html

# How to Apply:

Interested applicants are advised to email Xinyao.Yang@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)
- PDF copy of Master Degree dissertation (or an equivalent writing sample) and examiners reports available

**Informal enquiries** may be addressed to Professor/Dr. Xinyao Yang (xinyao.yang@xjtlu.edu.cn), whose personal profile is linked below, http://www.xjtlu.edu.cn/en/faculty/xinyao-yang