

## PhD studentship (Full-time)



Institution	Xi'an Jiaotong-Liverpool University, China
Department	Department of Mathematical Sciences
Supervisors	Principle supervisor: Changcheng Zheng (Xi'an Jiaotong-Liverpool University) Co-supervisor: Tim Veal (University of Liverpool, UK);
Application Deadline	Open until the position is filled
Funding Availability	Funded PhD project (world-wide students)
Project Title	Optical Spectroscopy Investigation of Lattice-matched AlInN/GaN Heterostructures 晶格匹配 AlInN/GaN 异质结的光谱学研究
Contact	Please email <a href="mailto:changcheng.zheng@xjtlu.edu.cn">changcheng.zheng@xjtlu.edu.cn</a> (principle supervisor's email address) and copy <a href="mailto:doctoralstudies@xjtlu.edu.cn">doctoralstudies@xjtlu.edu.cn</a> 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 physics, material science, electronic engineering or related discipline. Evidence of good spoken and written English is essential. The candidate should have an IELTS score of 6.5 or above, or an equivalent qualification, 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 3500 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:**

Recently, AlInN/GaN heterojunction attracts lots of interest because its potential application in fabrication of high electron mobility transistors with high power threshold. This project will focus on studying some fundamental physics processes in AlInN/GaN through investigating its optical properties. A deeper understanding of basic physics of AlInN/GaN and similar structures, will be helpful for improving device performances based on these materials, and maybe inspire some new design of devices

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

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

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

**How to Apply:**

Interested applicants are advised to email [changcheng.zheng@xjtlu.edu.cn](mailto:changcheng.zheng@xjtlu.edu.cn) (principle supervisor's email address) the following documents and copy [doctoralstudies@xjtlu.edu.cn](mailto:doctoralstudies@xjtlu.edu.cn) (please put the project title in the subject line).

- CV
- Two reference letters
- Personal statement outlining your interest in the position
- Proof of English language proficiency (an IELTS score of above 6.5 or equivalent is required)
- 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. Changcheng Zheng ([changcheng.zheng@xjtlu.edu.cn](mailto:changcheng.zheng@xjtlu.edu.cn)), whose personal profile is linked below, <http://www.xjtlu.edu.cn/en/staff?id=138812987XMS>