

PhD studentship (Full-time)



Institution	Xi'an Jiaotong-Liverpool University, China
Department	Department of Electrical and Electronics Engineering
Supervisors	Principle supervisor: Dr Chun Zhao (XJTLU, EEE) Co-supervisor: Professor Ce Zhou Zhao (XJTLU, EEE) Co-supervisor: Dr Li Yang (XJTLU, CHE) Co-supervisor: Dr Ivona Mitrovic (UoL, EEE)
Application Deadline	Open until the position is filled
Funding Availability	Funded PhD project (world-wide students)
Project Title	Nanoparticle Size Dependent Threshold Voltage Shifts In Non-Volatile Memory (基于柔性基底存储器纳米颗粒的研究及应用)
Contact	Please email chun.zhao@xjtlu.edu.cn (XJTLU principal supervisor's email address) and copy doctoralstudies@xjtlu.edu.cn 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 EE, Material Science, Chemistry or other related fields. 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 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:

With high annual growth rate of wearable electronics in the last five years, the demand of wearable electronic component like data storage increases dramatically in the application for portable use, such as large-area wearable sensor arrays and e-paper. Being an essential segment of data storage, non-volatile memory is widely interested in both academic and industry. Currently, several types of non-volatile memories in wearable electronics includes resistive memory, ferroelectric devices, and floating gate transistors. Due to the unique structure and stable electrical property, floating gate transistors is a promising candidate, which is able to operate under low voltage and it could obtain a long stability of information storage up to ten years. The project is to develop the floating gate transistors with Au/Si nano-particles as charge trapping layer for the wearable electronic's application.

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/entry-requirements.html>

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

How to Apply:

Interested applicants are advised to email chun.zhao@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. Chun Zhao (chun.zhao@xjtlu.edu.cn), whose personal profile is linked below,
<http://www.xjtlu.edu.cn/en/departments/academic-departments/electrical-and-electronic-engineering/staff/chun-zhao>