

# PhD studentship (Full-time)

Institution	Xi'an Jiaotong-Liverpool University, China
School	School of Advanced Technology
Supervisors	Principal supervisor: Dr. Pengfei Song (XJTLU)
	Co-supervisor: Professor Eng Gee Lim (XJTLU)
	Co-supervisor: Dr. Kai Hoettges (UoL)
Application Deadline	Open until the position is filled
Funding Availability	Funded PhD project (world-wide students)
Project Title	Research on Paper-Based Microfluidic Electrochemical Sensors for Disease Diagnosis
Contact	Please email Pengfei.song@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 a research-intensive university. 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 99,000 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 six months, if this is required by the project.



# **Project Description:**

This research project centers on creating cutting-edge in-vivo wearable sensors with endoscopes. The integration of electrochemical detection and endoscopes is of great significance, particularly for early screening where visual information alone is insufficient. Electrochemical sensors can detect specific biomarkers with high sensitivity and specificity, providing crucial biochemical information that complements the visual assessment offered by endoscopes. By combining these two technologies, we can obtain a more comprehensive understanding of the internal body environment and detect diseases at an earlier stage. This integration is essential in areas with limited medical resources, as it can enhance early detection and potentially save lives. The research will break technological barriers and lead to a new wave of portable, user-friendly diagnostic devices for various health conditions.

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/global/entry-requirements/ https://www.xjtlu.edu.cn/en/admissions/global/fees-and-scholarship

#### How to Apply:

Interested applicants are advised to email Pengfei.song@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 Dr. Pengfei Song (Pengfei.song@xjtlu.edu.cn @xjtlu.edu.cn), whose personal profile is linked below, https://scholar.xjtlu.edu.cn/en/persons/PengfeiSong