

PhD studentship (Full-time)



Institution	Xi'an Jiaotong-Liverpool University, China
Department	Department of Communications and Networking
Supervisors	Principal supervisor: Dr. Jingchen Wang..... (XJTLU, CAN) Co-supervisor: Professor Eng Gee Lim.....(XJTLU, CAN) Co-supervisor: Dr. Mark Leach.....(XJTLU, CAN) Co-supervisor: Professor Yi Huang.....(UoL, EEE)
Application Deadline	Open until the position is filled
Funding Availability	Funded PhD project (world-wide students)
Project Title	Wireless power transmission with magnetic resonance coupling method for implantable applications 基于磁耦合谐振方法的植入式无线能量传输
Contact	Please email Jingchen.wang@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 Telecommunications Engineering /Microelectronics/ Electronics and Information Engineering.

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:

With the continuous progress in science and technology, a myriad of implantable medical devices (IMDs) have been invented aimed at improving public health and wellbeing. One of the main problems with these devices is their limited battery lifetime. This results in otherwise unnecessary surgeries to replace depleted batteries leading to excessive medical expenses. Wireless power transfer (WPT), as a promising technology, could be used to remedy this. Wireless power technologies, through the transfer of transmitted radio frequency (RF) power or harvesting RF energy from the ambient environment and then converting it to usable electrical energy, are emerging as important features for the future of electronic devices in general and have attracted an upsurge in research interest. This proposal aims to overcome some of challenges, developing an efficient WPT system for IMDs.

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/feescholarships.html>

How to Apply:

Interested applicants are advised to email jingchen.wang@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. Jingchen Wang (jingchen.wang@xjtlu.edu.cn), whose personal profile is linked below,

<https://www.xjtlu.edu.cn/en/departments/academic-departments/communications-and-networking/staff/jingchen-wang>