

PhD studentship (Full-time)



Institution	Xi'an Jiaotong-Liverpool University, China
Department	Department of Electrical and Electronic Engineering
Supervisors	Principal supervisor: Dr Jingchen Wang (XJTLU, EEE Department) Co-supervisor: Professor Eng Gee Lim(XJTLU, EEE Department) Co-supervisor: Dr. Mark Leach(XJTLU, EEE Department) Co-supervisor: Professor Yi Huang(UoL, EEE Department)
Application Deadline	Open until the position is filled
Funding Availability	Funded PhD project (world-wide students)
Project Title	Energy Harvesting for 5G and beyond 6G Application
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 Electronics and Information Engineering /Microelectronics/Telecommunications 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:

Energy harvesting for 5G has become a popular topic due to the rapid development of 5G techniques. One of the main objectives of the project is to develop a novel and self-sustainable rectenna harvester by improving overall conversion efficiency and thus can supply low-power devices continuously to construct future smart cities. However, there are some challenges to design an optimal rectenna operating at high frequencies, for example, the non-linearity of the rectifying circuit and the broadband requirements will challenge the impedance matching circuit. The purpose of this research project is to have a comprehensive study into broadband rectennas working at 5G frequencies, aiming at overcoming the most challenging research problems of this topic.

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/zh/departments/academic-departments/electrical-and-electronic-engineering/staff/jingchen-wang>

