PhD studentship (Full-time)



Institution	Xi'an Jiaotong-Liverpool University, China
Department	Department of Civil Engineering
Supervisors	Principal supervisor: Dr Bowen Xu (XJTLU, Department of Civil Engineering) Co-supervisor: Dr Jun Xia (XJTLU, Department of Civil Engineering) Co-supervisor: Dr Lei Fan (XJTLU, Department of Civil Engineering) Co-supervisor: Dr Luigi Di Sarno (UoL, Department of Civil Engineering)
Application Deadline	Open until the position is filled
Funding Availability	Funded PhD project (world-wide students)
Project Title	Micro-structural, thermal and mechanical properties of concrete incorporating recycled tyre rubber materials
Contact	Please email Bowen.Xu@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 Civil/Structural/Material Engineering or relevant area.

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:

Recycling of solid wastes, such as tyre rubber, to produce concrete composites with both environmental-friendly and structural performance merits, have attracted research interests in recent years. This project focuses on the study of the comprehensive properties of concrete composites incorporating recycled tyre rubber materials, aiming at providing design guidance for the application of such innovative materials. The influence of rubber on the impact and multi-axial behaviour of rubberised concrete, in conjunction with the confinement effects will be investigated. Meanwhile, the microstructural and thermo-gravimetric analyses will also be performed, providing detailed understanding in the constitutive integrity of rubberised concrete, which has been lacking to date. The experimental results, combined with numerical and analytical analyses, will provide detailed insights in the optimal mix design of rubberised concrete as well as the design guidance for practical applications.

How to Apply:

Interested applicants are advised to email Dr. Bowen Xu (<u>Bowen.Xu@xjtlu.edu.cn</u>). Please find Dr. Xu's personal profile <u>here</u>. The following documents for initial review and assessment (please put the project title in the subject line).

- Research proposal (not exceeding 2 A4 pages)
- CV
- Personal statement outlining your interest in the position
- Transcripts of university studies and grading system (both bachelor and master)
- University degree certificate or enrolment statement (both bachelor and master)
- A copy of Master dissertation and examiners reports if applicable
- Certificate of English language qualifications
- Two reference letters with company/university letterhead
- A copy of your passport (for international students only)

For more information about the application of doctoral scholarship and PhD programme at Xi'an Jiaotong-Liverpool University (XJTLU), please visit:

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