

PhD studentship (Full-time)



Institution	Xi'an Jiaotong-Liverpool University, China
Department	Department of Civil Engineering
Supervisors	Principle supervisor: Dr. Krevaikas Theofanis (Xi'an Jiaotong-Liverpool University) Co-supervisor: Dr. Ryan Judge (University of Liverpool, UK);
Application Deadline	Open until the position is filled
Funding Availability	Funded PhD project (world-wide students)
Project Title	Experimental and analytical investigation on the behavior of masonry strengthened with the use of Textile Reinforced Mortars (TRM's) subjected to elevated temperatures.
Contact	Please email: Theofanis.Krevaikas@xjtlu.edu.cn (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 Civil & Structural Engineering. Evidence of good spoken and written English is essential. The candidate should have an IELTS score of 6.5 or above, or an equivalent qualification, 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:

The use of Textile Reinforced Mortars (TRM's) in strengthening of masonry structures is a new and very promising technique which provides sustainable and energy saving solutions in structural repair or upgrading. In that context, this project proposes to study TRM-wrapped masonry specimens subjected to uniaxial compression tests at ambient and high temperatures. The parameters under consideration will be the different cross-section aspect ratios, the amount of reinforcement and the different types of fibers. The project aims to examine the performance of the TRM jackets and develop an analytical model to predict the compressive strength and the ultimate strain of the TRM-confined masonry columns at various temperatures. Moreover, the TRM composites will be subjected to uniaxial tensile tests in three different temperature levels (200 °C, 400 °C and 600 °C), Scanning Electron Microscopy (SEM) and Mercury Intrusion Porosimetry (MIP) to identify the mechanical properties and changes in the microstructure of the composite material during and after exposure to elevated temperatures.

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 Theofanis.Krevaikas@xjtlu.edu.cn (principal supervisor's email address) the following documents and copy doctoralstudies@xjtlu.edu.cn (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 above 6.5 or equivalent is required)
- 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. Krevaikas Fanis (Theofanis.Krevaikas@xjtlu.edu.cn), whose personal profile is linked below,

<http://www.xjtlu.edu.cn/en/departments/academic-departments/civil-engineering/staff/theofanis-krevaikas>

Dr.Charles Loo (Charles.Loo@xjtlu.edu.cn), whose personal profile is linked below,
<http://www.xjtlu.edu.cn/en/departments/academic-departments/civil-engineering/staff/charles-k-s-loo-chin-moy>