

PhD studentship (Full-time)



Institution	Xi'an Jiaotong-Liverpool University, China
Department	Department of Civil Engineering
Supervisors	Principal supervisor: Dr. Engui Liu (XJTLU, Department of Civil Engineering) Co-supervisor: Dr. Jun Xia (XJTLU, Department of Civil Engineering) Co-supervisor: Dr. Jianli Hao (XJTLU, Department of Civil Engineering) Co-supervisor: Dr. Luigi Di Sarno (UoL, Department of Civil Engineering and Industrial Design)
Application Deadline	Open until the position is filled
Funding Availability	Funded PhD project (world-wide students)
Project Title	Re-engineered seawater and desert sand towards sustainable concrete
Contact	Please email engui.liu@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 Materials Science and Engineering, Civil Engineering, or a related field. Candidates with background in materials chemistry and materials characterization on cement-based materials are strongly encouraged to apply. 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:

We are specifically looking for a candidate with bachelor and/or master degree level trainings in Materials Science and Engineering or Civil Engineering and hands-on experience in experimental research on construction materials (preferably on cementitious materials) to be part of a collaborative doctoral research network between Xi'an Jiaotong-Liverpool University and the University of Liverpool funded by the Postgraduate Research Scholarship from Xi'an Jiaotong-Liverpool University, with the research programme entitled "Re-engineered seawater and desert sand towards sustainable concrete".

Being part of the research network will receive in-depth trainings on technological innovation and entrepreneurship, research communication and outreach, and further career development. The research programme has three main aims: 1) to train a new generation of researchers in the creative use of seawater and desert sand resources for sustainable concrete; 2) to equip researchers with new skills necessary for addressing interdisciplinary and cross-subject challenges in concrete sustainability; and 3) to support the scientific and technical advancements of new concrete technologies with re-engineered seawater and desert sand utilizations.

The major aim of this PhD project is to acquire new knowledge and technology on green chemistries of next generation cementitious and concrete materials with the re-engineered use of seawater and desert sand resources. The processing and manufactory techniques, the reaction kinetics, the mineralogy of reaction products, the microstructure of matrix phases, and the sustainability of new materials will be carefully and explicitly studied.

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/feesscholarships.html>

How to Apply:

Interested applicants are advised to email Engui Liu (Principal supervisor) at engui.liu@xjtlu.edu.cn 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. Engui Liu (engui.liu@xjtlu.edu.cn) whose personal profile is linked below:

<https://www.xjtlu.edu.cn/en/departments/academic-departments/civil-engineering/staff/engui-liu>