

## PhD studentship (Full-time)

Institution	Xi'an Jiaotong-Liverpool University, China
School	School of Science
Supervisors	<p><i>Please list all the names in the supervisory team. It should be consistent with the information on your approved PGRS proposal.</i></p> <p>Principal supervisor: Dr. Qian Zhang (XJTLU)          Co-supervisor: Dr. Lifeng Ding (XJTLU)          Co-supervisor: Dr. W. David Hong (UoL)</p>
Application Deadline	Open until the position is filled
Funding Availability	Funded PhD project (world-wide students)
Project Title	Dehydration Reactions Under Reduced Pressure by Using a Rotary Evaporator
Contact	<p>Please email <a href="mailto:qian.zhang02@xjtlu.edu.cn">qian.zhang02@xjtlu.edu.cn</a> (XJTLU principal supervisor's email address) with a subject line of the PhD project title.</p> <p>The principal supervisor's profile is linked here:  <a href="https://scholar.xjtlu.edu.cn/en/persons/QianZhang02">https://scholar.xjtlu.edu.cn/en/persons/QianZhang02</a></p>

### **Requirements:**

The candidate should have a first class or upper second class honours degree, or a master's degree (or equivalent qualification), in chemistry or related field.

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 99,000 per annum). It also provides up to RMB 16,500 to allow participation at international conferences during the period of the award. 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 up to six months, if this is required by the project.

### **Project Description:**

Dehydration or water-losing reaction is a chemical process involving water loss from the reacting molecule. Dehydration condensation reactions are crucial in creating diverse organic compounds, including carbohydrates, polymers, lipids, and nucleic acids. The rotary evaporator (rotavap) is a widely used laboratory apparatus primarily employed in chemistry laboratories, pharmaceuticals, and biopharmaceutical industries for concentration, drying, separation, and solvent recovery. Typically operating under reduced pressure conditions with constant heating, the rotavap could efficiently remove water in thermodynamic equilibrium, favoring and accelerating the formation of dehydration products according to Le Chatelier's principle. This project aims to harness the commonly used rotavap to achieve highly efficient and rapid dehydration reactions.

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

<https://www.xjtlu.edu.cn/en/admissions/global/entry-requirements/>

<https://www.xjtlu.edu.cn/en/admissions/global/fees-and-scholarship>

### **How to Apply:**

Interested applicants are advised to email [qian.zhang02@xjtlu.edu.cn](mailto:qian.zhang02@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 formal reference letters
- Personal statement outlining your interest in the position
- Certificates of English language qualifications (IELTS or equivalent)
- Full academic 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