

PhD studentship (Full-time)



Institution	Xi'an Jiaotong-Liverpool University, China
Department	Department of Electrical and Electronic Engineering
Supervisors	Principal supervisor: Dr. Min Chen (XJTLU, School of Advanced Technology) Co-supervisor: Prof. Guohua Fan (JITRI, Innovation Center for Advanced Materials and Technology) Co-supervisor: Prof. Yuyuan Zhao (UoL, School of Engineering)
Application Deadline	Open until the position is filled
Funding Availability	Funded PhD project (world-wide students)
Project Title	Deformation behaviour and Microstructure Characterization of Laminated Metal Materials by in-situ synchrotron radiation and electron microscopy 基于同步辐射和电子显微分技术的层状金属材料的变形机制和微观结构研究
Contact	Please email min.chen@xjtlu.edu.cn and copy to ghfan@njtech.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 Mechanical Engineering, Material Engineering or Engineering-related major with strong interest in mechanics and material science.

Evidence of good spoken and written English is essential. The candidate should have an IELTS score of 6.5 (with a minimum of 5.5 in each component) 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

This PhD project is a collaborative research project between XJTLU (<http://www.xjtlu.edu.cn>) and JITRI (Jiangsu Industrial Technology Research Institute) Innovation Center for Advanced Materials and Technology (<http://www.jitri.org/>), both of which locate at Suzhou, China. The student will be registered as an XJTLU PhD student but is expected to carry out the major part of his or her research at the Institute. Tripartite agreement will be signed among student, XJTLU and institute.

The PhD scholarship 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 no less than 5000 RMB as a contribution to living expenses. Additional meal and travel allowance may be provided by the Institute.

Project Description

In most cases, the strength of metal materials has a reverse relationship between strength and ductility. The strategy of structural design has been proved as an effective approach to

overcome the strength-ductility trade-off of metal materials. To understand the underlying mechanism imparted by structural design, this project selects the relatively simple laminated metal materials as the model and focuses on deformation behaviour and microstructure characterization to reveal the strengthening and toughening mechanisms. Some advanced in situ characterization methods involving the micro-beam X-ray diffraction and the computed tomography imaging based on synchrotron radiation facility, EBSD and digital imaging correlation (DIC) based on electron microscopy, will be introduced to this research.

How to Apply

Informal enquiries may be addressed to Dr. Min Chen (min.chen@xjtlu.edu.cn), please find Dr. Chen`s personal profile [here](#).

Applicants are required to prepare the following documents to upload onto the [online application system](#) to submit formal application.

- [Research proposal](#)
- Full academic transcripts of university studies and grading system (both bachelor and master)
- University degree certificate or enrollment statement (both bachelor and master)
- Verification report of degree certificate (Chinese students only, both bachelor and master)
- A copy of Master dissertation (or an equivalent writing sample) and examiners reports if applicable
- Certificates of English language qualifications
- Personal statement
- Two formal reference letters
- 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:

[HOW TO APPLY](#)

[ENTRY REQUIRMENT](#)

[SCHOLARSHIPS](#)