

PhD studentship (Full-time)

Institution	Xi'an Jiaotong-Liverpool University, China
School	School of Science
Supervisors	Principal supervisor: Professor Li Yang (XJTLU) Co-supervisor: Professor Liangsheng Liao(JITRI) Co-supervisor: Dr. Xiaobo Shi(JITRI)
Application Deadline	Open until the position is filled
Funding Availability	Funded PhD project
Project Title	Large area OLED with high stability
Contact	Please email Li.Yang@xjtlu.edu.cn or lsiao@suda.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 organic synthesis, materials chemistry, or boron chemistry. 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.

Please note that the joint PhD project is industry-based and the candidate is expected to undertake part of the research at the partner organization in China.

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>) in Suzhou and JITRI (Jiangsu Industrial Technology Research Institute) JITRI Institute of Organic Optoelectronics. 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 in XJTLU and JITRI Institute of Organic Optoelectronics. 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). In addition, during the period of undertaking main research at institute in Suzhou, the PhD candidate will be provided with living allowance at a standard 50,000 per year by JITRI Institute of Organic Optoelectronics.

Project Description:

OLED lighting is a new lighting technology. Compared with LED lighting, OLED has the characteristics of thinness and surface emitting, which makes it have unique advantages in artistic design and lighting effects. However, OLED lighting still has many disadvantages, such as poor stability, weak environmental tolerance, and low efficiency. The luminance attenuation and short-circuit failure are the main factors affecting the stability of OLED lighting, which will directly affect the application field of OLED lighting. This research topic will focus on the stability of OLED lighting, trying to improve the luminance attenuation and short-circuit problems of OLED lighting.

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/feescholarships.html>

Supervisor Profile:

Principal Supervisor:

The primary supervisor of this scholarship is Professor Li Yang, who is currently serving as the Associate Dean of Research and Impact, School of Science, XJTLU. She has authored and co-authored over 100 journal papers and 5 book chapters, and delivered numerous international presentations. Prof. Yang has supervised 4 Ph.Ds. and 7 M.Sc.s. students to completion. Li has made a major contribution to international leadership in physics, appointed as the Chartered Physicist of Institute of Physics (IOP, UK) in 2013. She was also the winners of 2023 XJTLU All-Around Academic Excellent Award, 2023 Suzhou Industrial Park University-Industrial Visiting Engineer, 2021 Suzhou SEID Excellent Scientific and Education Talent, 2018 Jiangsu "333 Project", 2016-2018 SIP Shortage Talent, 2014 Jiangsu Six-Peak Talent. Prof. Yang was the principal investigator of 2017 NSFC grant, 2016 Suzhou Science and Technology grant, 2015 NSFC grant, 2014 Jiangsu Science and Technology grant, 2 Key Program Special Fund (KSF) in XJTLU, 2 XJTLU research and development fund (RDF) grants, 3 full XJTLU postgraduate research scholarships. Prior to XJTLU, she was a higher research scientist at NPL, UK and worked large multiple research programs from 2007-2013. She received her PhD from the University of Bristol (UK) with the funding from a prestigious Oversea Research Student Award Scheme (ORSAS) from Higher Education Funding Council for England (HEFCE). Her work creating three-dimensional

hierarchical structures using pulsed-laser induced interface reaction was featured as hot spot scientific news at the University of Bristol web site in March 2008 and she was awarded the Bristol Alumni Foundation and the Society of Chemistry Industry Messel travel grant in 2006.

<https://www.xjtlu.edu.cn/en/study/departments/school-of-science/chemistry/department-staff/academic-staff/staff/li-yang>

JITRI co-supervisor:

Professor Liangsheng Liao received his PhD in Physics from Nanjing University in 1996. 1982.1-1993.9 Served as assistant professor, lecturer, and associate Professor of the Department of Physics, Nanchang University (during which he studied and visited California State University, Northridge, USA from 1989.6-1990.9); 1996.3-2000.12 Postdoctoral research in the Department of Physics, Fudan University, and then retained as Associate professor (during 1998.12-2000.6, invited Research fellow in the Research Center of Ultra-Diamond and Advanced Thin Films, City University of Hong Kong); 2000.12-2009.3 Research Fellow in R&D Department of Kodak Company, USA; 2009.3 Joined the Institute of Functional Nano and Soft Matter of Soochow University and was employed as professor and doctoral supervisor, and served as Associate Dean of the Institute. Currently, he is also the executive director of Organic Photoelectric Technology Research Institute of Jiangsu Industrial Technology Research Institute. He has published more than 500 academic papers and cited more than 20,000 papers (H-index = 80). Since 2014, he has been listed in the "List of Highly Cited Scholars in China" published by Elsevier Publishing House. He has been granted 262 patents (including 42 U.S. invention patents, 121 Chinese invention patents, and 99 Chinese utility model patents). And undertake the national key research and development program, the national "863" program and other scientific research projects as a total of 12.

<http://www.funsom.com/>

How to Apply:

Interested applicants are advised to email Li.Yang@xjtlu.edu.cn or lsiao@suda.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