

PhD post in Composite Materials and Structures at Imperial College London

About the Post

Applications are invited for PhD scholarships in composite materials and structures at Imperial College London. The students will be working on topics related to polymers and polymer based composites, cementitious composites, natural fiber/polymers composites, smart and functional nano composites, bio-inspired composites, timber, and structural applications of these materials. We are interested in understanding, characterizing and improving the performance of composite materials in harsh environments, recycling industrial wastes for a green neutral future, developing biocomposites for next generation low carbon industry, and inventing smart sensors for construction SHM and medical applications. The research will be carried out within the material section of the department, and the access to the facilities across the college will be made available when necessary.

The students will join the Composite Materials and Structures research group led by Dr. Wu in the Materials Section of the Department of Civil and Environmental Engineering, which is the largest and most highly rated civil engineering department in the UK. The students will benefit from world-class facilities in the new [Imperial Centre for Infrastructure Materials](#), created and equipped with £5.4M from EPSRC/UKCRIC. Besides, the research projects will build upon existing collaborations with leading academics in the UK and overseas.

Requirements

Applications will not be considered unless the following requirements are satisfied:

- A good Upper Second or First Class Degree (or [International equivalent](#)), in civil engineering (material or structural), material or chemical engineering, mechanics or closely-related disciplines.
- A Masters level degree qualification.
- English language requirements (e.g. IELTS 6.5 overall, minimum 6.0 in all elements).

Students who demonstrate the following desirable qualifications are encouraged to apply:

- Research experiences with high quality publications.
- Well organized and ability to work independently.
- Ability to learn new skills and build relationships with new people in an effective manner.
- Familiarity with numerical modeling, i.e. finite element, molecular dynamics, coursegrain modelling.
- Experience in coding with Fortran, Matlab, Python or other programming languages.

About the Funding

The studentship will provide funding for up to 3.5 years, including tuition fees (3 years) and a tax-free stipend at the standard UKRI London rate, currently £17,609, for 3.5 years. Full funding is available to Home students. The funding can also be used to partly support an international student

Other scholarships can be found in the university website:

<https://www.imperial.ac.uk/study/pg/fees-and-funding/scholarships/>

How to Apply

Applicants wishing to be considered for these opportunities should send the following application documents in a single PDF file to Dr Wu at c.wu@ic.ac.uk

- Cover letter, explaining their motivation and suitability by addressing the requirements.
- CV, including UG and MSc transcripts with average grades and research experience (if any).
- English testing results, i.e. IELTS or TOFEL (if any).
- Contact details of two referees (including name, affiliation, phone number and email address).

Review of applications will begin immediately and continue until the positions are filled.