

PhD Studentship

London Centre for Nanotechnology
University College London

PhD STUDENTSHIP IN “Electronic devices based on 2D materials and their heterostructures”

UCL EPSRC DTP award

Applications are invited for a fully funded EPSRC DTP PhD Studentship to work with Dr Antonio Lombardo (Electronic and Electrical Engineering and London Centre for Nanotechnology) in the broad area of electronic devices based on 2D materials and their heterostructures.

The studentship will cover Home tuition fees and an annual stipend of no less than £17,609 increasing annually with inflation. The studentship is funded for 4 years on a full-time basis, or up to 8 years on a part-time basis. Part-time stipend figures are pro-rata.

The successful applicant is expected to start in October 2021, however earlier starting dates can be considered.

Studentship Details

The project will be focussed on design, simulation and testing of novel electronics devices based on 2D/layered materials (such as graphene and transition metal dichalcogenides) and their heterostructures. It will involve design, (micro)fabrication and electrical testing of the devices. The experimental work will be complemented by finite-element simulations and machine-learning driven data analysis. The project will target applications in either neuromorphic computing, energy-efficient (low-power) electronics or nanoscale biosensing. We welcome applications from student having a first-class degree in electronic engineering, physics, biomedical engineering, nanotechnology, computer science or closely related disciplines. Good knowledge of semiconductor device physics is essential. Preference will be given to candidates having a proven research track record in at least one of the areas relevant for the project.

Eligibility

Suitable candidates for this post will have a first class honours undergraduate degree and/or a post-graduate masters qualification in any of the following disciplines: electronic engineering, physics, biomedical engineering, nanotechnology, computer science or closely related disciplines.

Applicants must be meet the EPSRC eligibility conditions to be eligible for the award – in summary this typically means that applicants must have no restrictions on their right to live in the UK permanently and have 3 years residency in the UK/EEA/Gibraltar/Switzerland immediately before the start of their course. There is limited flexibility to offer awards to those who don't meet the EPSRC eligibly criteria, however note that the award covers Home tuition fees only. Please see [EPSRC's](#) and [UKRI](#) websites for further details.

Apply

Interested candidates should submit a supporting statement, a full CV (including contact details for at least two academic referees) and a copy of transcripts to-date via the [PhD Portal](#).

The supporting statement should clearly state the name of the project you are applying for at the top, and outline your interest in and suitability for, researching the suggested topic. On the application form, you do not need to complete the “Layman Summary” question, please just indicate the name of the project in this section instead. Referees will be contracted separately, so you do not need to supply references at the point of application. You will need to tick the box on the PhD Portal application form indicating this.

Successful candidates will be invited to submit a formal application to UCL.

The deadline for application is 30 June 2021. Application will be reviewed on a rolling basis and the award may therefore be made prior to the application deadline. Early applications are strongly recommended. All the interviews will be conducted remotely by video conference.