Applications are invited for a research studentship in the field of Tribology, leading to the award of a PhD degree. The post is supported by a bursary and fees (at the UK/EU student rate) provided by a CASE award, which is co-funded by EPSRC and Shell. You will be an UK or EU candidate meeting the Research Council criterion of having been resident in the UK for the previous 3 years.

Please check your suitability at the following web site: [http://www.epsrc.ac.uk/skills/students/help/Pages/eligibility.aspx](http://www.epsrc.ac.uk/skills/students/help/Pages/eligibility.aspx)

Tribology is the science of friction, lubrication and wear of rubbing surfaces, which plays an essential role in the operation of many machine elements particularly transmission systems such as bearings and gears. The project will investigate the lubricating properties of novel Polyurea greases which are used in rolling bearings to reduce friction and hence lower energy losses. Shell are currently developing new grease formulations with improved friction, operating life and environmental properties and the research will contribute to this. The work will involve experimental measurement of grease lubrication properties and chemical/physical analysis of lubricant films. The project is laboratory-based and will require the successful applicant to acquire expertise in the Group’s tribology test and analytical methods.

You will be part of the Tribology Group and will work closely with Shell, who is the industrial sponsor of the project. You will be an enthusiastic and self-motivated person who meets the academic requirements for enrolment for the PhD degree at Imperial College London. You will have a first degree in Mechanical, Chemical or Aeronautical Engineering; Physics, Material Science, or a related field. You have an enquiring and rigorous approach to research, together with a strong intellect and disciplined work habits. You should have a strong interest in experimental work. Training will be given in tribology and various investigative techniques. Good team-working, observational and communication skills are essential.

To find out more about research at Imperial College London in this area, go to: [http://www3.imperial.ac.uk/mechanicalengineering](http://www3.imperial.ac.uk/mechanicalengineering)

For information on how to apply, go to: [http://www.imperial.ac.uk/mechanical-engineering/study/phd/how-to-apply/](http://www.imperial.ac.uk/mechanical-engineering/study/phd/how-to-apply/)

For further details of the post contact Dr Philippa Cann (p.cann@imperial.ac.uk) or Dr Marc Masen (m.masen@imperial.ac.uk). Interested applicants should send an up-to-date curriculum vitae to Dr Cann. Suitable candidates will be required to complete an electronic application form at Imperial College London in order for their qualifications to be addressed by College Registry.

**Closing date:** Until post filled

*Imperial Managers lead by example.*

*Committed to equality and valuing diversity. We are also an Athena SWAN Silver Award winner, a Stonewall Diversity Champion, a Two Ticks Employer, and are working in partnership with GIRES to promote respect for trans people*