

## **Toughness of spider and other silks : SHARD**

The Dept. of Zoology at Oxford University and the Levehulme Trust are inviting applications for a **3-year PhD studentship** (fully funded for UK/EU passport holders) to commence in the **autumn of 2010**.

This Dphil project is part of a new **collaboration between Engineering and Zoology** and aims to better understand the **model bio-polymer: silk**. The project will focus on the ability of silks to withstand and resist strains and stresses at high rates. The ability of spider silk to absorb energy under impact far exceeds that of any man-made polymer as it has been under selection for toughness for millions of years. The project will draw on the biodiversity of silk to enable comparisons between the response of different silks to high rate deformation as well as using **novel and current state-of-the-art techniques** including as mechanical testing and spectro/microscopic analysis.

The successful applicant will be based at the Dept. of Zoology at Oxford University but will have the opportunity to also use all facilities provided by the Dept. of Engineering at Oxford University.

**Full training in all techniques will be provided.** Due to its interdisciplinary nature this project would suit perfectly a graduate with a good degree in biology, although we also encourage applications from students with engineering or materials science backgrounds who have a keen interest in biology.

To apply please access the online application system at: [www.ox.ac.uk/graduate/](http://www.ox.ac.uk/graduate/). Please remember to quote the studentship reference code **DTG21**. Any queries please contact [graduate.office@zoo.ox.ac.uk](mailto:graduate.office@zoo.ox.ac.uk). The closing date is Tuesday, 6 May 2010.

To find out more about the project, informal inquiries may be addressed to Dr. Chris Holland or Professor Fritz Vollrath (see [www.oxfordsilkgroup.com](http://www.oxfordsilkgroup.com)).

**Application Deadline 06 May 2010**