The Department of Mechanical Engineering and Mathematical Sciences at Oxford Brookes University is pleased to offer an unprecedented opportunity to work with global market leader 3M United Kingdom Plc, the project’s Adhesive Technology Sponsor, over a three year full-time PhD Scholarship commencing in September 2015.

The successful applicant will receive an annual bursary of £16k for three years (with no inflation increase) and the fees will be waived by the University. S/he will work with the Sustainable Engineering and Innovation team under the supervision of Dr James Broughton.

Topic of research: **Evaluating the joining requirements for bonding light-weight next generation engineering materials for sustainable mass production.** The research will consider an evaluation of next generation light-weight polymer materials and substrates based on recyclable materials bonded to themselves and also to other materials such as coated aluminium, thin gauge steel sections and carbon fibre composites. There is also increasing demand for shorter cycle times and faster curing adhesive products combined with the development of faster application processes. The successful candidate will work on an evaluation to identify future trends in material usage, identify likely means of assembly, and demonstrate possible bonded joining solutions. The work will involve acquiring expert knowledge in adhesive bonding, material surface properties, and the durability of potential systems.

For further information about the Department and further information on the project, consult [http://mems.brookes.ac.uk/research/sei/index.html](http://mems.brookes.ac.uk/research/sei/index.html). Additional information on similar Research can be found on the Joining Technology Research Centre’s web page: [http://mems.brookes.ac.uk/industry/jtrc/index.html](http://mems.brookes.ac.uk/industry/jtrc/index.html).

**Eligibility:** Applications are invited from Home/EU/International students and must have a first class honours degree in engineering or materials science (or a 2:1 with demonstrable relevant skills or experience). S/he will be enthusiastic about materials technology and future trends, have a very high standard of literacy, be highly self motivated and have balanced interpersonal skills. Previous experience of mechanical testing and a hands-on aptitude will be desirable.

**Deadline:** The closing date for applications is 17:00 25th March 2015

**Interview date:** Interviews will be held in the following weeks

**Start date:** September 2015

**How to apply:** If you would like to apply you should request an application pack from Ms Zane Kalnina, tdestudentships@brookes.ac.uk, quoting ‘Composite bonding PhD scholarship’.

For further information, please consult our website: [http://www.brookes.ac.uk/students/research-degrees-team/prospective-students/research-students/research-funding-opportunities/](http://www.brookes.ac.uk/students/research-degrees-team/prospective-students/research-students/research-funding-opportunities/).