

Title: Compression Failure in Fibre Reinforced Composites

Type of award **PhD Research Studentship**

Department **Aerospace, Bristol Composites Institute**

Duration **3 years plus 1 year to write up**

Eligibility **Home/EU & overseas**

Start Date **Available now**

PhD Topic Background/Description

We are seeking talented researchers in materials and composites to join the highly creative and interdisciplinary NextCOMP programme team which is fundamentally redesigning high performance composite materials.

A collaboration between Imperial College London and the University of Bristol, the £6m NextCOMP programme focusses on the challenge of improving the absolute performance of composites in compression, both to address practical limitations of current materials, and as a demonstration of the value of quantitative hierarchical materials design. The work will develop and embed structure at every lengthscale from the molecules of the matrix to the lay-up of final components, using new constituents and new architectures, designed within a new analytical framework.

The successful candidate would be joining an established team of academics, working alongside 6 PDRAs across both institutions with access to state-of-the-art equipment. It offers opportunities for engagement with the National Composites Centre, and with our extensive group of industrial partners as well as leading international advisors and collaborators. We expect the candidate to be working on collaborative projects with Imperial College London which we will disseminate nationally and internationally.

The successful candidate (s) will be based at [Bristol Composites Institute](#) a world-leading research centre at the heart of the UK Government Composites Strategy. The institute has over 150 researchers and works closely with the £60M National Composites Centre, which is engaged with industry to fully exploit and develop composites technology for now and for the future.

For more details of the programme please see [NextCOMP website](#)

Candidate Requirements

Applicants must hold/achieve a minimum of a master's degree (or international equivalent) in a mathematics, or engineering discipline. Applicants without a master's qualification may be considered on an exceptional basis, provided they hold a first-class undergraduate degree. Please note, acceptance will also depend on evidence of readiness to pursue a research degree.

If English is not your first language, you need to meet this profile level:

Profile E

Further information about [English language requirements and profile levels](#).

Basic skills and knowledge required

We are seeking to appoint self-funded PhD students with a genuine passion for research to join this dynamic team. The ideal candidate (s) will be a highly creative materials scientist/engineer, with a good understanding of solid mechanics and fibre reinforced composite materials. They will be able to contribute to idea generation, and new ways of looking at composite materials to design the components of the future.

Informal enquiries

For informal enquiries on the studentship, please email Professor Richard Trask; r.s.trask@bristol.ac.uk and Jo Gildersleve; jo.gildersleve@bristol.ac.uk

For general enquiries, please email came-pgr-admissions@bristol.ac.uk

Application Details

To apply for this studentship, submit a PhD application using our [online application system](#) [www.bristol.ac.uk/pg-howtoapply]

Applications are invited from self-funded students (including PhD students). The [Bristol Doctoral College](#) can provide information on funding opportunities.

Interested candidates should apply as soon as possible. Applications will remain open until the position is filled.

We welcome applications from all members of our community and are particularly encouraging those from diverse groups, such as members of the LGBT+ and BAME communities, to join us.