

Funded PhD position.
Registered in Trinity College Dublin, Ireland.
Full EU or Non-EU fees paid.
Tax-Free Stipend of €16,000 per annum for 4 years.
Will involve collaboration with University of Notre Dame, USA.

Project Description

The Dark-MetaLiner project proposes a disruptive subwavelength sound absorbing material to reduce the environmental impact of aircraft on communities located in the vicinity of airports. The research will significantly advance the scientific state-of-the-art in liner modelling, design, aeroacoustics and in metamaterial development. The project will pair the aeroacoustics, metamaterial liner and advanced additive manufacturing expertise and facilities of TCD with the world leading aeronautics excellence of Notre Dame and will validate the technology on the large-scale ANCF rig recently donated to Notre Dame by NASA Glenn. In addition to aeronautics, the material will have noise reduction applications in a broad range of industrial sectors.

Starting Date: September 2018.

This position is supported by Trinity College Dublin's Provosts PhD Project Awards. Trinity College Dublin has launched 40 fully funded PhD positions across a wide variety of disciplines. The 40 Provost's PhD Project Awards are open to EU and Non-EU candidates and include an annual stipend of €16,000 for four years. These doctoral awards are generously funded through alumni donations and Trinity's Commercial Revenue Unit.

Qualifications

First Class Honours Bachelors or Masters Level degree in Mechanical Engineering, Acoustics, Aeronautics or another cognately related discipline.

Knowledge & Experience (Essential & Desirable)

Knowledge and Experience in Duct acoustics, aeroengine noise, noise radiation modelling, 3D Printing/Additive Manufacturing, Solid Modelling, acoustic liner design are all highly desirable.

Skills & Competencies

Skill and Competency with an Acoustics/Solid Mechanics numerical modelling software such as COMSOL, an impedance tube/grazing flow impedance rig as well as practical experience with acoustics experiments are all desirable.

To Apply:

Applicants should submit a cover letter outlining their suitability to the post, a detailed CV, and the contact details of two referees. All of this should be contained in ONE .pdf file. The application pack should be emailed to Dr Gareth J. Bennett at gareth.bennett@tcd.ie with the subject heading 'Dark-Metaliner'. Deadline for applications is 30th June 2018. Informal enquiries can be directed to gareth.bennett@tcd.ie.

Trinity College Dublin, the University of Dublin is an equal opportunities employer.