Title: Aircraft Noise Reduction using Metamaterials

Type of award  PhD Research Studentship

Department  Mechanical Engineering

Scholarship  A minimum £14,296 p.a. for 2016/17 (£14,553 p.a. in 2017/18)

Duration  3.5 years

Eligibility  Home/EU applicants only

Deadline

The Graduate Education Team within the Faculty Of Engineering invite applications from outstanding candidates for one of their competitive PhD scholarship opportunities

PhD Topic Background/Description

Based in the world leading research team in the Aerodynamics and Aeroacoustics within the School of Engineering at the University of Bristol, this is an exciting PhD position opportunity to join a strong team developing state of the art experimental techniques to understand the behavior or meta-materials for reducing noise from aero-engines and other aircraft components. Acoustic metamaterials are artificially fabricated materials designed to control, direct, and manipulate sound fields. In this project, funded by EU Horizon 2020, you will be responsible for experimental evaluation of different types of metamaterials for improving the absorption coefficient and sound reflection behaviour of acoustic liners, used for reducing the noise from engines. The student will be using our new world-class large aeroacoustics facility at the University of Bristol. Different test rigs will be developed for studying the effect of metamaterial treatments on the noise from different aero-components in the presence of boundary layer.

This project will be in collaboration with some other partners from the University of Rome, KTH Royal Institute of Technology, Trinity College Dublin and University of Bath. The student will have the opportunity to attend European meetings and international conferences as part of this project. The results of this research are expected to be published in the field’s top journals.

Further Particulars

Candidate Requirements

We are looking for an enthusiastic student with either a first or high 2:1 honours degree in Engineering, Physics, Mathematics (or closely related discipline).
**Scholarship Details**
Scholarship covers full UK/EU PhD tuition fees and a tax-free stipend at the current RCUK rate (£14,296 in 2016/17; £14,553 in 2017/18).

**Informal enquiries**
For informal enquiries, please email Dr Mahdi Azarpeyvand, m.azarpeyvand@bristol.ac.uk

For general enquiries, please email gsen-pgrs@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]

Please ensure that in the Funding section you tick “I would like to be considered for a funding award from the Mechanical Engineering Department” and specify the title of the scholarship in the “other” box below with the name of the supervisor Dr Mahdi Azarpeyvand.

**Closing date for applications 2 May 2017.**

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