Title: Flow Control using Tailored Permeable Surfaces (supported by Embraer)

Type of award  PhD Research Studentship
Department  Mechanical Engineering
Scholarship  A minimum £16,277 p.a. for 2018/19 (please check below for further scholarship details)
Funding Duration  3.5 years
Eligibility  Home/EU applicants only
Start date  24 September 2018

PhD Topic Background/Description

Applications are invited for a PhD project on the use of advanced permeable surfaces for flow control and aerodynamic performance improvement. Porous permeable surfaces are found to have some very interesting effects on turbulent boundary layer and wake flows. As part of this project, in collaboration with some world-leading academics in the UK and US, and aircraft manufactures, we aim to gain a more fundamental understanding of the physics involved in flow and porous media interaction and develop bespoke porous materials for specific aerodynamic applications, including laminar flight, low noise aerofoil, etc. As part of this project, the PhD student will carry out advanced aerodynamic and aeroacoustic experiments, using several wind tunnels, including the state-of-the-art acoustic wind tunnel facility at the University of Bristol. ([http://www.bris.ac.uk/aerodynamics-research/facilities/](http://www.bris.ac.uk/aerodynamics-research/facilities/))

The PhD student will join a strong team of experimental researchers at the University of Bristol and will have the opportunity to be involved and benefit from interaction with other PhD students and research associates working on a variety of aerodynamic and aeroacoustic problems.

The results of this project are expected to be of very high quality and be published in the field top journals. The PhD student will have funding for attending at least 4 international conferences.

Further Particulars

Candidate Requirements
We are looking for an enthusiastic student with either a first or high 2:1 honours degree in Engineering, Physics or a related subject. The candidate will have a strong understanding of aerodynamics as well as some practical experience and a keen interest for experimental work.
Scholarship Details
Scholarship covers full UK/EU (EU applicants who have been resident in the UK for 3 years prior to 1st September 2018) PhD tuition fees and a tax-free stipend at the current RCUK rate (£14,777 in 2018/19) plus £1,500 per year stipend enhancement (subject to contracts).

Informal enquiries
For informal enquiries, please email Dr Mahdi Azarpeyvand, m.azarpeyvand@bristol.ac.uk
For general enquiries, please email came-pgr@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 31 August 2018.

Apply now