Title: Aerodynamic Noise Reduction using Micro-surface treatments

Type of award PhD Research Studentship
Department Mechanical Engineering
Scholarship A minimum £15,000 p.a. for 2017/18 (please check below the stipend details)
Funding Duration To 30 November 2021 (maximum 4 years depending on start date)
Eligibility Home/EU applicants only
Latest start date 5 January 2018 or soon after

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 explore the possibility of micro surface treatments for improving the aerodynamic and aeroacoustic performance of airfoils and high-lift-devices. Artificial surfaces inspired from shark skin have been widely studied in aerodynamics and hydrodynamics for drag reduction purposes. In this project funded by the EU Horizon H2020 programme, we intend to use such artificial surfaces to study the effects on the turbulence structures within the boundary layer and reduce the aerodynamic noise produced by airfoils. The successful candidate will be responsible for experimental evaluation of different types of surface treatments on airfoils in our state-of-the-art aeroacoustic wind tunnel facility and collaborate with our industrial and academic partners. This project will be in collaboration with some major aviation companies and academic institutions. 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 (EU applicants who have been resident in Europe for 3 years prior to application) PhD tuition fees and a tax-free stipend in the first year (£15,000 in 2017/18) plus yearly increments thereafter. Funding is for a maximum of 48 months to 30 November 2021. The successful applicant’s PhD registration will last for 4 years, the final year being for writing up.
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 10 Dec 2017.

Apply now