

## **UNIVERSITY OF SOUTHAMPTON**

### **Institute of Sound and Vibration Research**

#### **Engineering Doctorate Studentship in Advanced Turbofan Aircraft Engine Noise**

Applications are invited for a 4-year doctoral studentship working on Advanced Turbofan Aeroengine Noise. The studentship is offered in the Industrial Doctoral Training Centre (IDTC) at the University of Southampton to a well qualified candidate working towards an Engineering Doctorate (EngD) in the general area of 'transport and the environment'. The project is sponsored by Rolls-Royce plc and will be supervised within the Rolls-Royce University Technology Centre (UTC) in Gas Turbine Noise at the Institute of Sound and Vibration Research (ISVR) at the University of Southampton. The successful applicant will join a strong team of researchers at the UTC and at Rolls-Royce Derby working on turbofan noise.

Reducing the environmental impact of civil aviation is critical to the growth of air transport and to the future of the aircraft industry. Ambitious environmental goals for the industry have been set by the Advisory Council for Aeronautics Research in Europe (ACARE). These include a 10dB EPNL reduction in noise at take-off and approach for new aircraft entering service in 2020, compared to a datum 2000 level. Work undertaken in this project will focus on the achievement of such goals.

In this project, Rolls-Royce seeks to develop its ability to predict noise from novel low noise designs for turbofan engines. The project is likely to involve computational and analytical research and appraisal of Rolls-Royce noise data to validate prediction methods. Candidates should be UK nationals, or EU nationals with at least 3 years residency in the UK. A generous stipend is provided which supplements standard EPSRC doctoral rates with an additional allowance which increases as the programme proceeds. The studentship commences in October 2010 or earlier by agreement. Applications are invited now.

Further details and information are available from:

Professor R J Astley ([rja@isvr.soton.ac.uk](mailto:rja@isvr.soton.ac.uk))

Dr R H Self ([rhs@isvr.soton.ac.uk](mailto:rhs@isvr.soton.ac.uk))

Please quote reference number 4290-10-E in your application.