POST-DOCTORAL RESEARCH FELLOW HIGH-POWER FIBRE LASERS

Optoelectronics Research Centre
University of Southampton
United Kingdom

Starting salary (annual) £27,428 to £33,734
Application closing date Dec 2 2011
Duration 3 years
Location Highfield, Southampton
Reference 061911EH

FLITES: Fibre-Laser Imaging of gas Turbine Exhaust Species

FLITES is a £2.7 million project that will establish a world-leading capability in chemical species tomography of aero engine exhaust plumes. It brings together the unique skills of groups at the Universities of Southampton (fibre lasers), Manchester (process tomography), and Strathclyde (diode laser instrumentation). Several industry-leading blue-chip company partners are also participating, and the project is funded by EPSRC.

University of Southampton is now seeking a highly motivated post-doctoral researcher of outstanding calibre to research, build, and validate the lasers to be used in FLITES. These include high-power fibre sources at 1 and 2 μm as well as fibres and OPOs in the mid-infrared with the power levels, line width, stability, and reliability required for chemical species tomography of aero engine exhaust plumes.

You will work in ORC's renowned high-power fibre laser group (www.orc.soton.ac.uk/hpfl.html), in top-class laboratories and with unsurpassed access to tailor-made fibres from ORC's fabrication facilities. You will be integrated fully into the group, and conduct research both independently and in collaboration with other group members and the FLITES team. You will also spend some time in locations such as Manchester and Bristol, to integrate and validate the lasers in the aero engine test-bed. Beyond the immediate research project, you will have excellent opportunities to participate in many exciting activities in ORC's open and rich research environment and assist in the supervision of PhD students.

You must have a strong background in lasers/optics with excellent experimental skills and research experience at the PhD student or postdoctoral level. A hands-on approach is necessary along with a keen interest in developing new physical ideas from proof-of-principle to novel and practical, application-optimised lasers in collaboration with academic and industrial project partners working in other fields.

For informal enquires please contact the principal investigator, Prof Johan Nilsson (jn@orc.soton.ac.uk, +44 (0) 23 8059 3101).

The closing date for this post is 2 December 2011. Please apply online through www.jobs.soton.ac.uk or alternatively telephone 023 8059 2750 for an application form. Please quote vacancy reference number 061911EH on all correspondence.