Fully funded PhD studentship in microfluidics at the Faculty of Engineering & Environment University of Southampton, and the National Oceanography Centre, UK.

“Microfluidic-based chemical sensors for rapid measurement on autonomous ocean profiling vehicles”

This project will develop field-deployable droplet microfluidic analysers for ocean-going robot vehicles. The devices will be designed to accurately measure ocean chemistry at high speed and will constitute the first-ever use of droplet microfluidics in field-deployable environmental analysers.

FUNDING: The studentship is offered through the NEXUSS (Next Generation Unmanned System Science) centre of doctoral training in the use of Smart and Autonomous Observation Systems (SAOS) for the environmental sciences, funded jointly by NERC and EPSRC. The studentship is open to UK and EU nationals, will be fully funded for 3 years and 8 months, and will follow standard Research Council UK conditions.

TRAINING: Students will experience a programme of approximately 16 weeks of highly experiential training in the development and application of state-of-the-art SAOS technologies and approaches in the environmental sciences, alongside comprehensive personal and professional development. There will be extensive opportunities for students to expand their multi-disciplinary outlook through interactions with a wide network of academic, research and industrial / government / policy partners.

REQUIREMENTS: Applicants should have, or expect to obtain, a first class or upper second-class honours degree in Engineering, Chemistry, Physics or an equivalent qualification. For more details please contact Dr. Xize Niu (x.niu@soton.ac.uk).