## University of Bath KTP Programme

**Seamap (U.K.) Ltd**

**KTP Associate - Project engineer (marine sensor design)**

## The Company

Established in 1987, Seamap (U.K.) Ltd, a wholly owned subsidiary of [Mitcham Industries, Inc.](http://www.mitchamindustries.com/), designs, manufactures and sells a broad range of proprietary products for the seismic, hydrographic and offshore industry. With engineering, manufacturing, sales and support bases located in Texas, Singapore and the United Kingdom, Seamap is able to respond to customer’s needs anywhere in the world 24-hours a day.

<http://www.seamap.com/>

The role is full-time and will be based at Seamap Ltd premises in Shepton Mallet, Somerset.

**What is a KTP?**

Knowledge Transfer Partnership (KTP), a government funded scheme, brings together universities and businesses to work jointly on a development project that is strategically important to the future of an organisation.

**Partnership rationale**

Throughout the project, the KTP Associate will play a key role in managing and implementing strategic development in the business and transferring knowledge between the University and the business.

**Partnership objectives**

The harshness of the marine environment makes accurate seismic mapping of the ocean floor particularly challenging. This project will deliver the next generation of Seamap's seismic sensor devices, resulting in improved data acquisition and accuracy while reducing costs and increasing revenue. This 19-month KTP will bring together leading experts in underwater acoustic measurements and remote electronic devices, with whom the Associate will enable the development of new seismic sensors. These sensors will be designed to be easily fitted to existing seismic gun rigging and will provide exact positioning of the acoustic guns irrespective of the harshness of mapping conditions.

## Partnership management

The KTP Project is delivered by an Associate and is managed through the Local Management Committee (LMC). This is chaired by the senior company executive and comprises the Company and Academic leaders/supervisors and a KTP Advisor (Innovate UK representative). The LMC meets every four months and is responsible for programme direction, ensuring that all parties gain maximum benefit and for authorising expenditure. Associates are expected to prepare an executive summary, to report on progress for the LMC meeting and to circulate documents in advance to LMC members. They are also expected to make a formal presentation on some aspects of their work at each meeting.

The academic knowledge will be provided by Professor Peter Wilson, Dept. of Electronic and Electrical Engineering, University of Bath whose current research interests include behavioural modelling and simulation, power electronics system modelling and analysis, autonomous systems and robotics, intelligent systems, neuromorphic computing, renewable energy

system design and analysis. Prof. Wilson's expertise will help understand and develop specialised acoustic sensors within the harshness of a marine environment.

Further academic knowledge will also be provided by Dr Philippe Blondel from the University of Bath’s Department of Physics. He is Deputy Director of the Centre for Space, Atmospheric and Oceanic Science at the University of Bath and is an expert in acoustic measurements and their applications in the marine environment. His expertise in understanding underwater acoustics will be invaluable to helping redesign the Gunlink and sensor configuration.

A monthly progress meeting is held with the Company and Academic Supervisors. The Associate is expected to arrange and document these meetings. The Associate is required to maintain a log of the tangible benefits of the project and to provide internal seminars for other members of University and Company staff, based on knowledge acquired through attendance at courses and conferences.

**The ideal candidate will:**

* Have a Master’s qualification (or equivalent) in electronic engineering or related field.
* Possess a strong software background with previous industrial or research project experience in sensor design.
* Have the ability and desire to lead and undertake commercial technical development within the company.
* Show a proven experience of programming skills.
* Hardware design experience in electronics and sensors
* Have experience or demonstrate willingness to learn the fundamentals of marine acoustics required for this project.

**In addition:**

* Demonstrate they have, or could rapidly acquire the ability to design, organise and undertake field trial studies and demonstrations.
* Demonstrate they have or could rapidly acquire the data interpretation skills to validate the complex models and their verifications for ideal test cases.
* Have good interpersonal and communication skills and a professional, creative attitude.
* Ability to or demonstration to work as part of an interdisciplinary team.
* Be ready to travel and work in international setting, including on ships for activities related to the project.
* The Associate is expected to play a major role in coordinating the stakeholders involved in this project, so must have good communication and organisation skills.

***KTP Associate – The benefits***

* Accelerate your career
* Gain valuable experience and marketable, highly transferable skills
* Take early responsibility for a high profile project
* Receive mentoring from the company and an experienced academic team
* Opportunity to gain a professional qualification
* Receive practical and formal management training and development
* Enjoy an excellent chance of a permanent post with the company

It is essential that you understand how KTP works with business and the University, and the vital role you will play if you successfully secure a KTP Associate position. Further information about KTPs and the advantages of being a KTP Associate can be found at <http://ktp.innovateuk.org/>

## Associate’s expectation

The Associate will have the opportunity to pursue another higher degree as a member of staff of the University. Bath provides an MPhil in Knowledge Transfer specifically for KTP Associates. The Associate will be encouraged to gain membership of a relevant professional body to enable them to work towards Chartered status. They may undertake several selected course activities as well as general courses at the University as a member of staff.

Within the limits of commercial confidentiality, the Associate will have the opportunity to deliver papers at conferences and will be expected to co-author articles.

On successful completion of the project, it is likely that the Associate will be offered a permanent position with the Company. However, if due to unforeseen circumstances this is not possible, the Associate will still have acquired invaluable commercial experience through close involvement with the senior management of the Company. Experience of project management will be gained, as well as knowledge of the daily running of a successful business.

**Salary and conditions of employment**

The post is fixed term for the duration of 19 months.

The salary is £31,000 to £35,000 p/a depending on qualifications and experience and the reward package includes a pension contribution and separate £2,698 personal training and development budget.

The Associate will be appointed by the University as a member of staff with the Department of Electronic and Electrical Engineering, responsible to the appointed academic supervisor. The contract of employment is for 19 months. There is a probationary period of six months, during which time the contract may be terminated by either side with one month’s notice. Thereafter, the required notice period to be given by either side is three months. The University requires a mid-probationary report after three months and a full probationary report at six months.

In other respects, the Associate will be treated as a Company employee and work full-time at the Company’s premises in Shepton Mallet, Somerset.

The project may require some periods of time to be spent at the University and could involve overseas travel. The conditions of work, including work hours and holiday entitlement, will be those applying to Company employees. An annual appraisal is carried out with the Academic and Company Supervisors. This is used to identify the Associate’s training requirements in relation to programme tasks and their personal development plan.

Whilst there is no commitment on the Company to retain the Associate at the end of the programme, it is expected that the Associate will be made aware of future prospects at their annual appraisal. KTP appointments cannot normally be extended beyond the end of the project.

***It should be noted that this KTP Associate post entails the development and application of knowledge for commercial outcome and that the Associate will be embedded in the company for the KTP duration. It is technology transfer focussed and not suitable for candidates primarily seeking an academic research or teaching career within the University.***