KTP Associate Positions (x2) with Pelamis Wave Power, Edinburgh and the Concrete Technology Unit, University of Dundee.

**SALARY:**

- Associate 1 (3 year post, £27k pa)
- Associate 2 (2 year post, £24k pa)

**JOB DESCRIPTIONS:**

Pelamis Wave Power (PWP) is recognised as the world’s most advanced wave power developer and is the inventor, designer, manufacturer and operator of the Pelamis Wave Energy Converter (WEC). The company wish to develop concrete as the primary construction material for their WEC and, in collaboration with the Concrete Technology Unit (CTU), University of Dundee, are undertaking a Knowledge Transfer Partnership (KTP) project to investigate design, construction and manufacturing processes associated with this.

Two Associate positions have arisen and will be based jointly within PWP and the CTU.

**KTP Associate 1** will, in conjunction with the academic partner and company design and develop appropriate concrete mixes for the marine offshore wave power applications and develop and implement scale testing regimes for the development of the components of the machine. The candidate will develop models of performance of the different components and identify and support implementation of solutions for joints and end-caps. S/he will embed knowledge in the company on concrete mix design through the transfer of knowledge on concrete performance factor design and testing. This associate will liaise closely with KTP Associate 2 regarding the manufacturing proposals developed.

**KTP Associate 2** will be involved in the practical implementation of concrete as a primary structural material for use in the Pelamis Wave Energy Converter (WEC). The candidate will be expected to assist in providing designs of effective concrete-concrete and concrete-steel connections, transferring knowledge on concrete reinforcement, tensioning and pre-stressing. Through working with KTP Associate 1, the academic team at CTU and the design team at PWP, the candidate will advance designs of these critical interfaces for durability and manufacturability and evaluate section design and manufacturing methods for volume production of optimised large-scale concrete components.

**Skills required of the successful candidates:**

- KTP Associate 1 should ideally be qualified at a post-doctoral level with a PhD in concrete materials/structures and a preferred track record in marine concrete, structural engineering materials/grouts, laboratory physical modelling and experimental design.

- KTP Associate 2 should be qualified with a good (1st Class / 2.1) MEng level degree in civil/structural engineering with preferred experience in design and analysis of concrete reinforced/post tensioned structures. Experience of finite element analysis software is also preferred.

Both candidates must:

- be self-motivated and manage work effectively with a degree of autonomy.
- have the flexibility to apply knowledge and experience to develop and innovate.
- have a flexible approach to working within a small highly motivated team.
- demonstrate a capability to undertake the tasks detailed in the job description.

The roles are initially a 36 month (Associate 1) / 24 month (Associate 2) contract. A substantial training budget is provided and employment prospects within the industry beyond the initial contract period are very strong and exciting for the right candidate.

Closing Date: 21 August 2013

For further information, and to apply for either of the posts (Ref: ASE0208 or Ref: ASE0209), please visit: [http://www.jobs.dundee.ac.uk/fe/tpl_uod01.asp](http://www.jobs.dundee.ac.uk/fe/tpl_uod01.asp)