

Job Title: Physicist  
Location: Cambridge, UK  
Closing Date: Thursday, December 31<sup>st</sup> 2009  
Salary: £30,000

Required Skills:

PhD Experimental Physics (or equivalent subject area)

A solid background in magnetism and magnetic materials is required. The ideal candidate should have experience of magnetic materials fabrication (e.g. vapour deposition, RF) and be very familiar with a range of magnetic material characterisation techniques (magnetisation measurement techniques essential).

Experimental modelling skills are crucial.

Experience of experimental cooling technologies and techniques would be advantageous (ideally experience of magnetic cooling using adiabatic demagnetisation techniques).

Strong report writing skills would also be advantageous.

Knowledge of one or more of the following software packages would be useful: Alibre, Comsol Multiphysics, Matlab, Python or Mathematica.

Job Description:

The role sits inside the Cambridge design team and will be focused on building and testing of a high efficiency magnetic cooling engine for use in domestic appliances. Activities will include design and testing of the magnetic cooling engine, in particular modelling and optimisation of cooling components that incorporate refrigerant materials. The goal is performance optimisation of the magnetic cooling engine when embedded in cooling appliances.

The candidate must be willing to travel from time-to-time to customer locations (primarily in Europe).