

Employer informationEmployer: *Heriot Watt University*Website: *www.hw.ac.uk*Working place: *Edinburgh*Nearest intl. airport: *Edinburgh*Nearest public transport: *Edinburgh*

Business or products:

Research and Education

Number of employees:

Working hours per week: *37.5*Daily working hours: *7.5***Student required**Faculty: *Chemistry*

Language required for training:

Specialisation: *Materials- Inorganic
Chemistry- Physical Chemistry**English (Excellent)*Study level: *End (7 and more semesters)*

Other requirements

Previous training required: *No***Work offered**

Kind of work

"New Materials for Thermoelectric Power Generation: The use of "waste" heat, produced in many industrial processes or in vehicle engines, as an energy source is an attractive and environmentally clean way to generate electrical power. Thermoelectric materials allow electricity to be generated from heat and also heat to be pumped from one place to another using electricity. Therefore these materials could be used to generate electricity from "waste" heat or in solid-state refrigerators, which have no moving parts and require no environmentally harmful CFCs. The major constraint on the wider use of thermoelectrics is the relatively low efficiency of the current generation of materials. In this training placement, you will synthesise new thermoelectric materials by solid-state synthesis and you will carry out the structural characterisation by powder X-ray diffraction. Finally, you will carry out measurements of the thermoelectric properties of these materials."

Categories:

Research and development *Yes*Professional: *No*Working environment: *No*

Number of weeks offered:

*min: 8**max: 12*Within the dates: *May 07, 2012 - Aug 15, 2012*Gross pay: *220 GBP / week*Deductions to be expected: *11***Accommodation**

Lodging will be arranged by:

Estimated costs of lodging:

*0 GBP / month*Canteen available at work: *Yes*

Estimated costs of living incl. lodging:

200 GBP / week

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Date: *10 February 2012*

PLEASE SEND NOMINATIONS BY EMAIL.

Deadline for nomination:

31 March 2012

On behalf of sending country

Wendy Waring