

## Universitat de Lleida

Departament de Medi Ambient i Ciències del Sòl

Edifici CREA c/ Pere de Cabrera s/n 25001 Lleida (Spain)

## Two Ph. D. positions in solar pv – thermal at the University of Lleida

Two Ph D. positions in the field of Solar Energy are open for application. The positions are funded by the Spanish Ministerio de Educación y Ciencia (<a href="www.mec.es">www.mec.es</a>). FPI Program for a period of up to four years and PROFIT project for a period up to two years. The successful candidate may begin studies on or after January 2008. The University of Lleida will contract from October 2007 two persons to prepare their official applications.

Applicants should have a solid background in physics or engineering including special topics on solar energy. Fluency in English is required as well as a willingness to learn Spanish or Catalan.

The application should include an extended curriculum vitae, listing of courses and grades. The names of two people who are familiar with your academic work and are willing to submit a letter of support if requested. A brief narrative describing your interests and experience in solar energy will be appreciated. Internet interviews will be done to the pre-selected candidates.

## Ph D. topics

-High efficient pv-thermal concentrating generation

The first Ph D project is focused in a new technology on pv-thermal solar generators under concentrating conditions. The final goal is to develop a high efficient solar power plant using liquid cooled concentrating cells. The prototype plant shall be investigated theoretically and experimentally. The project is developed in collaboration with international companies.

## - Building integrated PV-Thermal systems

The second PhD project is focused in the development of new and standardized PV-Thermal systems able to be integrated in building facades. These systems are formed by a PV laminate and an air gap in their backside. An experimental stage, with the construction of a prototype will be the first task to be executed. Definition of the heat transfer equations and implementation within the TRNSYS engine will be also undertaken. This project will be executed in collaboration with the BEE-Group of CIMNE (<a href="www.cimne.com/beegroup">www.cimne.com/beegroup</a>), the Spanish PV manufacturer ISOFOTON (<a href="www.cimne.com/beegroup">www.cimne.com/beegroup</a>).

The application should be received by the latest 1 September at: Manuel Ibáñez Plana m.ibanez@macs.udl.es

People interested in further details do not hesitate to contact.