Accelerator engineer/physicist

The University of Huelva (Huelva, Spain) is searching for candidates to fill TWO positions of Engineer/Physicist related to the design and construction of future superconducting heavy ion linacs. The successful candidates should have experience in one (or more) of the following areas:

1. Mechanical design, thermo-mechanical and/or electromechanical calculations
2. Beam Dynamics and beam transport calculations
3. ECR ion sources (design/construction)
4. RFQ accelerator (design/construction)
5. Superconducting acceleration cavities (design/construction)
6. Radio Frequency systems and low-level RF control
7. Accelerator control system and data acquisition
8. Safety and radioprotection

Candidates will participate in the following activities:
- Definition of accelerator system specification.
- Design study of a superconducting heavy-ion linac system.
- Design, fabrication and assembly of complex accelerator and experimental equipment and systems.
- Solving technical design problems.
- System integration, installation and commissioning.
- Management/generation of relevant technical information.
- Coordination with international collaborators and industry.

Qualifications:
- Degree in Physics or Engineering.
- Fluent Speaking and Writing English.

Additional skills that will be considered:
- Master or PhD will be an advantage.
- Previous experience in accelerator related fields.
- Good knowledge on fundamental subjects related to accelerator physics: classical electromagnetism, electronics, cryogenics or superconductivity, applied mechanics, mechanical, materials, etc
- Knowledge on industrial R&D, machine fabrication and related processes
- Knowledge on modelling and simulation of physical parameters (temperatures, tensors, vibrations, etc) and /or electromechanical structures (Matlab, HFSS / CST Microwave Studio, ANSYS, finite element calculations software, etc)
- Experience on quality standards ISO9001, production of high standard technical documentation
- Knowledge of Autocad/catia or equivalent.
- Knowledge of equipment design under standard safety regulations, applied mechanics international regulations, etc
- Good working team capabilities
- Flexibility and capacity for adapting to professional challenges

Conditions:

- Contract duration will be minimum for one year, with the possibility of three years total.
- Net salary range between 2200 – 3200 Euro/month depending on experience.

For more information about the posts, please contact I. Martel (imartel@uhu.es).

Applications:

To proceed with the application process, interested candidates should send a detailed CV and contact for assistance our staff (Rafael Carrasco, rafaelcd@uhu.es). You might also follow directly the instructions at the university website (in Spanish):
http://www.uhu.es/otri/contratos/convocatoria.php **(convocatorias 15 Octubre de 2012, Proyecto ACELTEC). Deadline: November 12, 2012.**

About University of Huelva:

The University of Huelva is a young University founded in 1992 at the South Atlantic coast of Spain. It has been growing rapidly and today accounts for about 13.000 students. One of the future projects is the construction of the Linac Research Facility, a multidisciplinary heavy ion linac dedicated to basic and applied nuclear physics (www.uhu.es/gem/LRF/), which is coordinated by the GEM research group (www.uhu.es/gem/). Huelva city is one of the most modern industrial areas in the south of Spain, with a friendly Andalussian tradition, abundant cultural events and attractions that makes the region an ideal location to live, work and play.