



Position available: Clinical hyperpolarised Helium-3 MRI

Post: PhD Studentship funded by EU Marie Curie Studentship.

Duration: 3 years.

Salary: 31,710 Euros p.a. plus relocation allowance

Job description: The position requires a strong theoretical and experimental background as well as knowledge of programming in languages such as C++ and MATLAB. The work will involve implementation of novel imaging techniques on 3T and 1.5T whole body MRI systems for Helium-3 MRI, as well as development of advanced postprocessing techniques.

Candidate profile: Master degree (or equivalent) in Physics or Biomedical Engineering. The candidate will ideally have already some training/experience in magnetic resonance techniques. An open minded personality with a strong interest in multidisciplinary cooperation is optimal for this position.

Place of work: The work will be performed as part of an interdisciplinary research group (medical physics, physiology, radiology, anesthesiology ...) at Mainz University, Germany. Mainz was one of the first labs undergoing hyperpolarised Helium-3 imaging in 1995. Since then, MRI of the lung, in particular using exogenous contrast gases like hyperpolarised Helium-3 and fluorinated gases, has been one of our key research interests. A variety of MRI techniques to assess and measure lung function and lung microstructure have been developed in our lab since then. The Department of Radiology is equipped with five whole body MRI systems; upgrade to latest MRI technology (3T, 1,5T) will be performed in the first half of 2007.

The project is funded as part of the EU Framework Program 6 Polarised Helium Lung Imaging Network (PHELINET) and the student will be encouraged to participate in ongoing collaborations with other researchers across Europe with multiple opportunities to visit leading international academic and industrial laboratories and to attend taught summer schools. Information on PHELINET as well as on earlier EU funded research on hyperpolarised Helium-3 lung MRI (PHIL) can be found at (<http://www.phil.ens.fr/>).

In the interest of equal opportunities, female candidates are strongly encouraged to apply.

Closing date: 1 May 2007

For more information on the project, please contact:

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