College of Medical, Veterinary and Life Sciences
Institute of Neuroscience and Psychology

Research Associate – RF Coil Development
Vacancy Ref: 038131
Salary: £35,845 - £40,322 per annum

We are seeking to appoint a talented and highly motivated postdoctoral researcher to design and develop radiofrequency (RF) coil and be part of a multi-disciplinary group of engineers, physicists and clinicians at the Imaging Centre of Excellence (ICE), University of Glasgow. The project offers an exciting opportunity to be involved in an EU funded project engaging six EU partners from five countries (France, Germany, Netherlands, Switzerland and United Kingdom) covering both academic and industrial partners.

This project aims to develop magnetic resonance imaging of the brain with mesoscopic resolution at an unprecedented 11.7 Tesla magnet being commissioned at Neurospin, CEA Paris-Saclay. You will have a central role in developing the head coil for this exciting research programme. The role involves design and engineering of a multi-channel head coil and working with consortium partners to integrate field sensors and validation of the RF safety of the coil setup.

You will be responsible for the complete development cycle of the coil, starting from design optimization using EM simulations, engineering / construction of the RF coil and safety validation. In addition, you will also have the opportunity to be involved in our multi-disciplinary team developing solutions for 7T clinical research.

The ICE building is located within the Queen Elizabeth University Hospital, Glasgow and it houses a state-of-the-art 7T Terra scanner, which is fully integrated in a clinical setting. An RF coil development lab equipped with measurement equipments and EM simulation infrastructure has been setup within ICE. We also have access to fine-mechanic workshop and design houses offering industrial design of the coil housing, and a track record of developing custom-built coils for ultra-high field research use.

You must hold a PhD in MRI physics, electrical/electronic engineering or a related subject. Expertise in Matlab programming is essential. You must be hands-on, eager to conduct test and measurements in an electronics lab. Soldering skills are desirable. You will also have excellent time management skills and the ability to work effectively both in a team and independently.

The position is available from January 2021, with initial funding in place for 24 months.

For informal enquiries, please contact Dr. G. Shajan, at shajan.gunamony@glasgow.ac.uk.

For more information and to apply online please follow the link: https://my.corehr.com/pls/uogrecruit/erq_jobspec_version_4.jobspec?p_id=038131

Closing date: 28 September 2020

It is the University of Glasgow’s mission to foster an inclusive climate, which ensures equality in our working, learning, research and teaching environment.

We strongly endorse the principles of Athena SWAN, including a supportive and flexible working environment, with commitment from all levels of the organisation in promoting gender equity.

The University of Glasgow, charity number SC004401.