

Job details

Job title

Postdoctoral Research Associate

Job reference

P57398

Date posted

05/07/2017

Application closing date

06/08/2017

Location

Exeter

Salary

£28,452 - £32,958 depending on qualifications and experience

Package

Generous holiday allowances, flexible working, pension scheme and relocation package (if applicable).

Job category/type

Research

Job description

Living Systems Institute

The Living Systems Institute (LSI) is a major new initiative by the University of Exeter designed to promote interdisciplinary research that transcends the boundaries of mathematics, engineering and the biological, medical and physical sciences. Its mission is to analyse living cells and organisms as integrated systems, with the aim of unravelling how diseases disrupt biological processes at the molecular, cellular and organismal level.

Our vision is to build a team of researchers who will work together across disciplines to identify new ways to diagnose, treat and cure disease in plants and animals, especially humans.

The post

This three year role will work with Dr Daniel Kattinig on a project entitled "Harnessing the radical pair mechanism: Quantum physics for the amplification and optimisation of magnetic field effects" the role will involve the development of theoretical models and computational tools to predict magnetic field effects originating from radical pair reactions in proteins, such as the putative magnetic sensor cryptochrome, and in free solution. We aim to understand the intriguing mechanisms that amplify these effects and fortify their resilience to decoherence in noisy

biological surroundings. Working with experimentalists you will also assist in interpreting and modelling their experimental findings.

About you

You will be able to present information on research progress and outcomes, communicate complex information, orally, in writing and electronically and prepare proposals and applications to external bodies.

You should have a relevant PhD (or be nearing completion) in Spin Chemistry, Physical Chemistry, Biophysics, Quantum Physics or a cognate subject area or equivalent qualifications/experience in a related field of study and be able to demonstrate sufficient knowledge in the discipline and of research methods and techniques to work within established research programmes. Duties will include managing own academic research and administrative activities. This involves small-scale project management, to co-ordinate multiple aspects of research; undertaking comprehensive and systematic literature reviews; writing up the results for publication in peer-reviewed journals; presenting at conferences; co-supervising a PhD student; outreach and other activities related to the set-up of a new lab.

What we can offer you

- Freedom (and the support) to pursue your intellectual interests and to work creatively across disciplines to produce internationally exciting research;
- Support teams that understand the University wide research and teaching goals and partner with our academics accordingly
- An Innovation, Impact and Business directorate that works closely with our academics providing specialist support for external engagement and development
- A beautiful campus set in the heart of stunning Devon

We are a Russell Group university boasting a vibrant academic community with over 21,000 students. Ranked in the top 1% of universities in the world, 98% of our research is rated as being of international quality and focuses on some of the most fundamental issues facing the world today. We encourage proactive engagement with industry, business and community partners to enhance the impact of research and education and improve the employability of our students.

For further information please contact Dr Daniel Kattnig, D.R.Kattnig@ex.ac.uk or (01392) 727479.

The closing date for completed applications 31st July 2017. Interviews are expected to take place on 14th August 2017.

The University of Exeter is an equal opportunity employer. We are officially recognised as a Disability Confident employer and an Athena Swan accredited institution. Whilst all applicants will be judged on merit alone, we particularly welcome applications from groups currently underrepresented in the workforce.