



Science & Technology
Facilities Council

Job Title: Reflectometry Instrument scientist

Type of Post: 1 full-time, permanent role at Band D

Location: Rutherford Appleton Laboratory, Oxfordshire, UK

Department: ISIS

Salary Range: £26,609 to £29,566

Deadline for Applications: 19 March 2010

Interview Date: 5-9 April 2010

Detailed Job Description

Key Duties/Responsibilities: To provide scientific support to users of the ISIS neutron reflectometers, to ensure the continued development of the instrumentation and to develop a personal scientific research programme in the area of soft matter and/or the life sciences.

Background

ISIS is a world leading facility for condensed matter research using neutron scattering and muon spectroscopy, with a strong scientific user programme and extensive international links. ISIS operates two target stations which are constantly being developed, including the design of the second phase of instruments for the second Target Station. We are looking for world-class scientists who can make major contributions to our current and future research programmes and instrumentation development.

The Large Scale Structures Group provides neutron scattering facilities and expertise for the study of structure and interfacial phenomena across a diverse range of research areas such as polymers, colloids, biological systems and magnetic/superconducting thin films. The Group currently supports 7 neutron instruments (reflectometry and small angle neutron scattering) and is designing 2 further instruments for phase 2 of the second Target Station.

List of Duties / Work Programme / Responsibilities

A full-time vacancy exists to support our users of the neutron reflectometers and to ensure the continuous development of the instrumentation and software. For the successful candidate, the position represents an excellent opportunity to develop both

collaborative and personal scientific research programmes exploiting the capabilities of reflectometry (and complementary techniques) in the areas of soft condensed matter and/or the life sciences.

The successful candidate will interact extensively with visitors both from higher education institutions and industry. This will take the form of enabling and leading the scientific programme on the LSS instrumentation. External representation will also range from presenting their own scientific work at conferences to strategic engagement with stakeholders for example on possible future instrumentation directions.

Internally, the candidate will be expected to contribute to and lead aspects of the LSS scientific programme and actively represent the group in its interactions with other ISIS and STFC science and technology groups.

Contacts and Communication

For further information about this post please contact Prof. Sean Langridge
sean.langridge@stfc.ac.uk +44 1235 445269

Position and Person Requirements

Candidates should note that in completing the online questionnaire you should address yourself to this person specification, demonstrating by example how you meet the criteria contained within. Please also include any other information, which you feel is of relevance to your application.

1. Qualifications

Essential

PhD in experimental soft condensed matter, life sciences or a related science

2. Knowledge and Experience

Essential

Practical experience of neutron reflectometry

Post-doctoral experience in relevant science areas: soft condensed matter, life sciences, etc.

Evidence of and potential for development of a personal scientific programme

Desirable

Practical experience of X-ray reflectometry

Evidence of a publication record in relevant science areas: soft condensed matter, life sciences, etc. commensurate with experience

Experience of instrumentation control and development

Working knowledge of one or more of the standard computing languages used within the group (e.g. Fortran, C, Java, Python etc)

Working knowledge of one or more of the data analysis/visualisation packages used within the group (e.g. MatLab, MathCad, Mantid etc.)

Experience of complementary characterisation techniques

3. Personal skills/qualities

Essential

Good interpersonal communication and presentation skills, ability to interact effectively with staff and ISIS users at all levels.

Ability to work collaboratively and individually to support the user community

Flexibility to occasional requests to work out-of hours to support users

Responsible attitude to personal safety, and the safety of others

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