

Candidate Information

Position:	Facilities Manager - Nuclear Magnetic Resonance Facility
School/Department:	Chemistry and Chemical Engineering
Reference:	23/110773
Closing Date:	Monday 17 April 2023
Salary:	£36,333 - £43,155 per annum
Anticipated Interview Date:	Wednesday 3 May 2023
Duration:	5 years

JOB PURPOSE:

To effectively manage and promote the Nuclear Magnetic Resonance (NMR) Facility, with emphasis on the newly awarded solid state NMR instrument, ensuring the delivery and development of a professional service that fully meets with the needs of Academic and Research staff in the School and across the University. As we aim for around a third of annual NMR Facility usage to be generated from outside the School, there is a great amount of external contact and a requirement to assist in the development and expansion of links and service provision with other academic institutions, external commercial users and regional business throughout the United Kingdom, and Europe.

MAJOR DUTIES:

- Provide and apply specialist expertise to deliver a highly technical and professional service to STEM-based Schools in Queen's University Belfast (QUB) advising, exploring and adapting the NMR facilities to solve complex research problems and meet the School teaching objectives.
- 2. Participate constructively in multi-disciplinary research activities, contribute to grant applications involving solid-state and solution NMR as Principal or Co-investigator, and to publication of research outputs as main author or co-author.
- 3. Deliver training to a range of instrument users, to promote knowledge transfer in the use and adaptation of the NMR instrument, supervising usage to ensure compliance with H&S requirements.
- 4. Apply specialist knowledge and expertise providing input and advice on existing and emerging research and teaching. This will involve collaborating internally and externally at all organisational levels and career stage.
- 5. Oversee the scheduled use of the NMR instrument to ensure that projects are completed in a cost efficient and timely manner, promoting best practice use to a multiple stakeholder audience. This includes scheduling periodic servicing, diagnosing and repairing faults as reported, to enable the NMR Facility to operate with minimum operational downtime. Liaising with service engineers and the School's technical team as required.
- 6. Expand outreach initiatives that serve the community and raise the research profile of the University, through participation in visits to similar external research facilities and to commercial users to promote knowledge transfer and research collaborations.
- 7. Responsible for commissioning and implementing new systems to ensure smooth transitional change for University-wide users.
- 8. Advise on suitability, effective use and costs involved in determining pricing for research grant applications, from principal investigators across the University, when applying for staff and equipment time to use the facilities.
- 9. Negotiate external service contracts to maximise value for money. Provide in-house technical backup, to ensure a seamless overall maintenance package suitable for services that run 24/7. Contribute to maintaining professional quality service standards of the highest order within the area.
- 10. Carry out any other duties which are relevant and appropriate to the post as and when required. Including deputizing for the Academic lead as required in respect of maintaining the NMR availability.

ESSENTIAL CRITERIA:

- 1. A PhD in Life Sciences or Physical Sciences, with emphasis on solid state NMR.
- 2. A minimum of 3 years practical experience (which may include training) on NMR techniques (solution and solid state) and relevant data analysis.

- 3. Experience of working as part of a team, as well as independently, with proven ability to multi-task, organise and prioritise own work with minimal supervision.
- 4. Experience working on multiple (or satellite) projects and being part of collaborations.
- 5. Proven track record of networking across a range of stakeholders.
- 6. Excellent written and oral communication with experience of delivering advice and guidance on complex / technical topics.
- 7. Good interpersonal skills with proven track record in knowledge sharing and problem solving.
- 8. Proven ability to manage budgets of the order of £50-£100k, as well as similar logistic activities to those required for this post.

DESIRABLE CRITERIA:

- 1. Three-year post-doctoral research experience in applications of solid-state NMR.
- 2. Experience in additional characterisation techniques such as mass spectrometry, scanning electron microscopy and X-Ray diffraction.
- 3. Experience in NMR user support.
- 4. Previous experience of managing service agreements and negotiating with service providers.
- 5. Previous experience managing a multi-user facility or instrument, maintenance and service contract negotiations.