



Job title	Business Science Research Assistant – Mass Spectrometry	Job family and level	Research & Teaching Level 4A
School/ Department	Faculty of Science	Location	University Park Campus/Jubilee Campus

Purpose of role

Working as part of the School of Chemistry's Business Partnership Unit, and based within the Oldham laboratories, reporting to Dr. Harry Taylor (Business Partnership Unit) and Prof. Neil Oldham (Professor of Biomolecular Mass Spectrometry), this role contributes towards the research and development of industrially focused projects. The primary focus of the role will focus on the development of a specific project on photochemical protein footprinting techniques that allows mapping of interaction sites between proteins, and performing other advanced analysis techniques, which are relevant to business.

The role holder will undertake projects focused on the rapid detection and characterisation of molecules binding to targets (e.g. proteins) and the study of protein-protein interactions which have potential applications within industry. Moreover, the role holder will perform other advanced analysis techniques on industry client samples. The role holder will liaise with companies and academics, undertake laboratory work underpinning industry related projects. The role holder will, in collaboration with the Business Partnership Unit, also complete market analysis and business development activities to elucidate new partners who might leverage the technology.

The role will also contribute to the wider activities of the Business Partnership Unit, progressing commercially and industrially relevant projects within the School of Chemistry. The role provides an opportunity to develop business skills, for which training would be given.

	Main responsibilities (Primary accountabilities and responsibilities expected to fulfil the role)	% time per year
1	Plan and execute industrially focussed research and development projects including the development of a photochemical protein footprinting technique with potential industrial applications. This will involve handling protein samples, performing photochemical labelling, performing both manual and automated digestion of the proteins with a range of proteases, using liquid chromatography-mass spectrometry to analyse the samples, and interpreting the data to determine differences in labelling between experimental treatments. In addition, this will include the development and testing of novel automated systems for sample preparation. The role holder will also perform other advanced analytical services for industrial clients The role holder will:	70%

	<ul style="list-style-type: none"> (i) liaise with academic and industrial stakeholders as appropriate, including preparing reports of findings; (ii) keep accurate records of the research; (iii) take responsibility for the safe running of the research laboratory; (iv) contribute to the publication of the research where appropriate by drafting scientific articles. 	
2	Liaise with academic, technical and other staff to identify commercial potential. Prepare business cases to further develop these opportunities as projects. Progress projects to fruition through liaising with external partners, as appropriate, in collaboration with the Business Partnership Unit.	10%
3	Respond to enquiries from external companies matching their needs with capability of the technology and co-ordinate resulting projects, ensuring that projects are handled professionally and comply with all legal and University requirements.	10%
5	Any other duties appropriate to the role and level	10%

Person specification

	Essential	Desirable
Skills	<p>Experience in sample analysis by liquid chromatography-mass spectrometry.</p> <p>Excellent problem-solving skills and an ability to apply technical knowledge in new contexts to solve unusual scientific challenges posed by industry.</p> <p>Excellent interpersonal skills.</p> <p>Excellent oral, written and presentation skills including the ability to produce effective project/progress reports.</p> <p>Self-motivation and workload management skills.</p> <p>Efficient at administration / record keeping.</p> <p>Can demonstrate a methodical and highly organised approach</p>	<p>Project management skills.</p>
Knowledge and experience	<p>Experience of designing experiments to meet needs and objectives. Knowledge of current research in protein science or analysis of biomolecules</p> <p>Excellent practical laboratory skills developed in a chemical/analytical laboratory environment.</p>	<p>Experience of analytical chromatography.</p> <p>Experience of using chemistry techniques to meet commercial objectives.</p> <p>Experience of troubleshooting scientific equipment issues/failures.</p> <p>Experience of working on industry related projects.</p> <p>Experience of managing multiple deadlines and competing priorities.</p> <p>Experience of working on commercially focussed projects</p> <p>Business engagement and/or development experience.</p>

		Experience of supervising/mentoring or working with others in a laboratory setting.
Qualifications, certification and training (relevant to role)	Have a masters degree, or equivalent, in Chemistry or related discipline.	



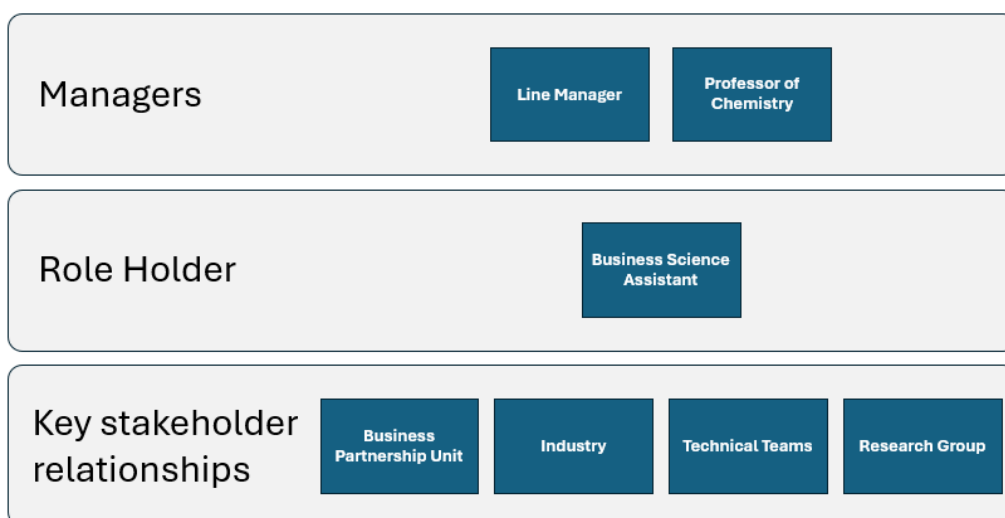
The University of Nottingham is focused on embedding equality, diversity and inclusion in all that we do. As part of this, we welcome a diverse population to join our work force and therefore encourage applicants from all communities, particularly those with protected characteristics under the Equality Act 2010.

Expectations and behaviours

The University has developed a clear set of core expectations and behaviours that our people should be demonstrating in their work, and as ambassadors of the University's strategy, vision and values. The following are essential to the role:

- Valuing people** Is always equitable and fair and works with integrity. Proactively looks for ways to develop the team and is comfortable providing clarity by explaining the rationale behind decisions.
- Taking ownership** Is highly self-aware, looking for ways to improve, both taking on board and offering constructive feedback. Inspires others to take accountability for their own areas.
- Forward thinking** Driven to question the status quo and explore new ideas, supporting the team to “lead the way” in terms of know-how and learning.
- Professional pride** Sets the bar high with quality systems and control measures in place. Demands high standards of others identifying and addressing any gaps to enhance the overall performance.
- Always inclusive** Ensures accessibility to the wider community, actively encouraging inclusion and seeking to involve others. Ensures others always consider the wider context when sharing information making full use of networks and connections.

Key relationships with others



Job title	Business Science Research Associate/ Fellow – Mass Spectrometry	Job family and level	Research and Teaching Level 4 (Appointment will be Level 4 Career training grade where an appointment is made before PhD has been completed)
School/ Department	Faculty of Science	Location	University Park Campus/Jubilee Campus

Purpose of role

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5	Any other duties appropriate to the role and level	10%

Person specification

	Essential	Desirable
Skills	<p>Experience in handling and analysing proteins/small molecules or in sample analysis by liquid chromatography-mass spectrometry.</p> <p>Excellent problem-solving skills and an ability to apply technical knowledge in new contexts to solve unusual scientific challenges posed by industry.</p> <p>Excellent practical laboratory skills developed in a chemical/analytical laboratory environment.</p> <p>Excellent interpersonal skills.</p> <p>Excellent oral, written and presentation skills including the ability to produce effective project/progress reports.</p> <p>Self-motivation and workload management skills.</p> <p>Efficient at administration / record keeping.</p> <p>Can demonstrate a methodical and highly organised approach</p>	<p>Experience in handling and analysing proteins and in sample analysis by liquid chromatography-mass spectrometry.</p> <p>Project management skills.</p>
Knowledge and experience	<p>Experience of designing experiments to meet needs and objectives.</p> <p>Knowledge of current research in protein science or analysis of biomolecules</p>	<p>Experience of analytical chromatography.</p> <p>Experience of using chemistry techniques to meet commercial objectives.</p> <p>Experience of troubleshooting scientific equipment issues/failures.</p> <p>Experience of working on industry related projects.</p> <p>Experience of managing multiple deadlines and competing priorities.</p> <p>Experience of working on commercially focussed projects</p>

		<p>Business engagement and/or development experience.</p> <p>Experience of supervising/mentoring or working with others in a laboratory setting.</p>
<p>Qualifications, certification and training (relevant to role)</p>	<p>Obtained or about to obtain a PhD, or equivalent, in Chemistry or Biochemistry or a related discipline.</p>	



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Key relationships with others

