

## **ROLE PROFILE**

Job Title:	Research Technician- Mass Spectrometry	
School:	School of Pharmacy	
Job family and level:	TS Level 4	
Hours of Work:	Full-time, 36.25 hours per week	
Contract Status:	Fixed-term contract for a period of 24 months	
Location:	School of Pharmacy, University Park	
Reporting to:	Professor Dave Barrett and Dr Dong-Hyun Kim	

## Purpose of the Role:

• To develop and apply mass spectrometry analytical methods to support project work for the Green Chemicals Beacon of Excellence (BoE) within the Centre for Analytical Bioscience (CAB) facility, School of Pharmacy.

• To provide guidelines, information, training, advice and practical assistance to the Green Chemicals BoE researchers and visiting workers to enable them to work safely, accurately and efficiently.

	Main Responsibilities		
1.	<ul> <li>Project support</li> <li>Responsible for the technical organisation, planning, safe and efficient operation of a range of mass spectrometry and related analytical instrumentation.</li> <li>Develop original ideas and innovative solutions in new methodology and gain expertise in methods already established in the laboratory as directed by academic staff or senior experimental officer.</li> <li>Undertake project-based work including method validation and write appropriate reports, standard operating procedures and contribute to research publications. Responsible for whole or part of an analytical project.</li> <li>Utilise specialist technical knowledge and expertise to interpret the technical needs of the Green Chemicals BoE researchers.</li> <li>Provide guidance and support to research staff, visitors and/or students, as required, as a recognised source of technical and experimental expertise, acting as an internal and external consultant advising on the development and application of specialist techniques/experiments.</li> <li>Provide technical advice in the support of grant applications and in the contributions to research publications.</li> </ul>		
2.	<ul> <li>Analysis</li> <li>Conduct complex quantitative and qualitative mass spectrometry analysis, contributing to the interpretation of the results and leading to the development of new research ideas, techniques or procedures.</li> <li>Act as an internal and external consultant providing expert advice and training on specific methods thereafter and to enable collaboration directly with project partners as requested and contribute to data analysis and report writing.</li> </ul>		
3.	<ul> <li>Training</li> <li>Training and advising research assistants and post graduates in the use of analytical and related equipment. To transfer instrumental skills and ensure correct and robust procedures are carried out in obtaining data for PhD and external projects. To provide a range of technical skills and</li> </ul>		

	analytical advice to the above projects. Provide training and advice to research workers in the areas of Good Laboratory Practice and in Health and Safety.		
4.	Management of financial resources		
	<ul> <li>To source and cost specific consumables and smaller equipment with the aim of efficient use of the financial resources available. Forecast project expenses with instrument operation and maintenance costs, to enable academic and financial teams to make quotes or appropriate grant applications and establish budgets.</li> </ul>		
5.	Maintenance		
	To learn the use, maintenance and optimisation of the majority of equipment in the area, which is constantly changing and being upgraded, including costing and organising repair by outside agents. The aim is to ensure that it is maintained and correctly used to optimise its performance in a project and that, within a mobile workforce, skills are retained within the department.		
6.	Any other duties appropriate to the role and level.		

## **Person Specification:**

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Qualifications/ Education	Minimum HNC or equivalent, plus substantial work experience in a relevant role. OR Proven track record with extensive work experience in a relevant technical or scientific role.	Minimum degree or equivalent in a science subject Chemistry or analytical qualification
Skills/Training	<ul> <li>Hand-on skills in operating a range of mass spectrometry instrumentation including high resolution MS and quantitative MS.</li> <li>Recognised and proven technical skills in method development of bio-analytical separations by LC-MS</li> <li>Recognised and proven analytical and technical problem-solving skills.</li> <li>Planning and organising skills required to manage projects. Proven ability to undertake project work and write reports accurately and effectively under pressure and to make independent decisions</li> <li>Ability to prioritise internal and external projects in order to achieve deadlines.</li> <li>Budgetary management skills and an understanding of financial management procedures. Knowledge of the GLP and safety regulatory framework.</li> <li>Excellent oral and written communication skills, to enable effective interaction with research staff</li> <li>Training skills in equipment use.</li> </ul>	<ul> <li>Knowledge of mass spectrometry.</li> <li>Routine fault-finding and maintenance of HPLC systems.</li> <li>Good scientific background, covering a range of disciplines.</li> <li>Adaptability. There is the need to be constantly learning new skills and to respond quickly to the needs of others.</li> <li>General administrative skills and computer literacy.</li> </ul>
Experience	<ul> <li>Extensive relevant laboratory experience and proven track record in an analytical or research environment.</li> <li>Considerable experience in the operation and maintenance of HPLC and mass spectrometry systems.</li> </ul>	<ul> <li>Experience of using mass high resolution and tandem mass spectrometers.</li> <li>Experience in mass spectrometry-based metabolomics.</li> <li>Ability to identify and manage risks to enable effective project delivery.</li> </ul>

Due to the requirements of the UK Border and Immigration Agency, applicants who are not UK or EEA nationals and whose immigration status entitles them to work without restriction in the UK will be considered on an equal basis with UK and EEA nationals. Other non-UK or non-EEA nationals whose employment will require permission to work subject to a resident labour market test may only be considered if there are no suitable UK or EEA national candidates for the post. Please visit <a href="http://www.ukba.homeoffice.gov.uk/">http://www.ukba.homeoffice.gov.uk/</a> for more information.

Informal enquiries may be addressed to Professor Dave Barrett (<u>david.barrett@nottingham.ac.uk</u>, tel 0115 951 5062) or Dr Dong-Hyun Kim (<u>dong-hyun.kim@nottingham.ac.uk</u>, tel 0115 7484697). Please note that applications sent directly to these email addresses will not be accepted.



We pride ourselves on the collegial and supportive culture created by our staff. We are dedicated to creating an environment which enables both our staff to thrive and achieve their potential. Our commitment to Equality and Diversity has been recognised in the awarding of an <u>Athena SWAN Bronze Award</u>.