

Candidate Information

Position:	Research Fellow
School/Department:	School of Biological Sciences
Reference:	22/110359
Closing Date:	Monday 5 December 2022
Salary:	£35,333 per annum
Anticipated Interview Date:	Thursday 15 December 2022
Duration:	Available until 31 October 2024

JOB PURPOSE:

To be an active member of the research team assisting in the planning and delivery of the research related to spectroscopy based detection of fraud and contamination in the food supply chain.

MAJOR DUTIES:

1. Undertake, plan and deliver spectroscopic based research activities that may include laboratory experiments, sample analysis, method development, critical evaluation and interpretation of results, building databases, chemometric modelling, computer-based data analysis and evaluation or library research in consultation with the research supervisor.
2. Present regular progress reports on research to members of the research group or to external audiences to disseminate and publicise research findings.
3. Write up results of own work and contribute to the production of research reports, publications and proposals.
4. Assist in the preparation of funding proposals and applications to external bodies.
5. Carry out routine administrative duties as requested, e.g. arranging research group meetings, maintaining research group website.
6. Read academic papers, journals and textbooks to keep abreast of developments in the spectroscopy field.
7. Carry out any other duties designated by a line manager and which fall within the general ambit of the post.
8. Carry out occasional undergraduate supervision or lecturing duties under the direct guidance of a member of academic staff.
9. Carry out routine administrative tasks associated with the research project to ensure that the project is completed on time and within budget.

ESSENTIAL CRITERIA:

1. Have or be about to obtain a relevant PhD related to bio-analytical chemistry.
2. At least 3 years' experience working in an academic and/or industrial environment including:
 - Synthesis of SERS substrates.
 - Development of SERS based assays to detect contamination in foods.
3. Experience in laboratory screening methods such as spectroscopic techniques.
4. At least 1 years' experience in the use of chemometric software and model generation.
5. Practical experience in the validation of analytical methods.
6. Sufficient breadth and depth of specialist knowledge in the discipline and of research methods and techniques to work within established and new research programmes.
7. Ability to interact with research colleagues and support staff.
8. Ability to interview, analyse and communicate effectively.
9. Sufficient breadth and depth of specialist knowledge in the discipline and of research methods and techniques to work within established research programmes.
10. Ability to communicate complex information clearly.
11. Ability to build contacts and participate in internal and external networks.
12. Demonstrable intellectual ability.
13. Ability to assess and organise resources.

14. Willingness to attend meetings and conferences nationally and internationally as requested.
15. Must be prepared to work as part of a team.

DESIRABLE CRITERIA:

1. PhD related in SERS based research.
2. Experience in multiple spectroscopic based techniques.
3. Application of IT tools in data analysis.
4. A publication record in peer reviewed journals and presentations at international conferences commensurate with career stage and experience.
5. Evidence of managing research projects.
6. Involvement in successful interdisciplinary research teams.
7. An understanding of the agri-food industry.