**logo-uob-resize[1]**

**Job Description**

|  |  |
| --- | --- |
| **Job title** | Research Associate |
| **Department/School** | Chemistry |
| **Job family** | Education and Research |
| **Grade** | 7 |
| **Reporting to** | Principal Investigator (PI) or Co-Investigator (CI) |
| **Responsible for** | There may be a requirement for:  day to day supervision of other staff e.g. technical staff or, co-supervision of doctoral or undergraduate students |
| **Location** | University of Bath premises |

|  |
| --- |
| **Background and context** |
| This Research Associate position twill focus on understanding fate of antibiotics during wastewater treatment with the utilisation of hyphenated chromatography and mass spectrometry techniques. This position is part of the UKWIR National Chemical Investigations Programme focussed on Antimicrobial Resistance. This project is designed to identify the key factors that the UK Water Industry needs to understand (and if necessary, manage) antimicrobial resistance (AMR) within wastewater treatment works.  Antimicrobial agents have revolutionised medical care in the twentieth century as they have contributed to a dramatic reduction in mortality from infectious disease. AMR, which is to some extent an inevitable consequence of antimicrobial use, jeopardises many of these successes. The continuous introduction of sub-inhibitory quantities of antimicrobial agents to the environment is believed to be directly linked with AMR. Unfortunately, there is little knowledge of mechanisms in the environment and influencing factors due to the multi-dimensional nature of the AMR problem.  The successful candidate will work alongside researchers at Centre for Ecology and Hydrology to perform a suite of microbiological, genetic and chemical analyses to understand the processes that control the movement and fate of AMR through the wastewater treatment process |

|  |
| --- |
| **Job purpose** |
| To undertake research on understanding fate of antibiotics during wastewater treatment with the utilisation of hyphenated chromatography and mass spectrometry techniques |

|  |  |
| --- | --- |
| **Main duties and responsibilities** | |
| Responsible to the PI for: | |
| **1** | Conduct individual and/or collaborative research projects. Contribute to the design and execution of the project e.g. timetabling and meeting project milestones; participating in regular discussions with collaborative partners. Generate, collect and analyse existing data related to the project using qualitative and/or quantitative techniques. |
| **2** | Writing up results of research and contributing to the publication of results in high-quality peer-reviewed academic literature. |
| **3** | Disseminating results of research project as appropriate to the discipline through activities such as   * overseas research visits * conference presentations * public engagement activities |
| **4** | Participate in departmental/group meetings and prepare and deliver presentations/seminars to project team, internal and external stakeholders or funders. |
| **5** | Assist with the supervision of postgraduate students and undergraduate project students and the assessment of student knowledge. |
| **6** | Continually update knowledge and understanding in field or specialism to inform research activity. |
| **7** | Identify sources of funding and provide assistance with preparing bids to funding bodies. Develop ability to secure own funding e.g. travel grants. |
| **8** | Contribute to the development of research objectives and proposals for own or joint research projects, with assistance of a mentor, if required. |
| **9** | Disseminate knowledge of research advances to inform departmental teaching. |
| You will from time to time be required to undertake other duties of a similar nature as reasonably required by your line manager. You are required to follow all University policies and procedures at all times and take account of University guidance. | |

**logo-uob-resize[1] Person Specification**

|  |  |  |
| --- | --- | --- |
| **Criteria** | **Essential** | **Desirable** |
| **Qualifications** |  |  |
| A PhD degree in subject area of direct relevance for the project, or equivalent significant relevant experience and professional qualification | √ |  |
| **Experience/Knowledge** |  |  |
| Post doctoral experience |  | √ |
| Demonstrated significant depth and breadth of specialist knowledge of subject matter to contribute to research programmes and to the development of departmental research activities | √ |  |
| Demonstrated awareness of latest developments in the field of research and in research design | √ |  |
| Demonstrated potential to publish in high quality, peer reviewed journals | √ |  |
| **Skills** |  |  |
| Ability to prepare research proposals, to conduct individual research work and to disseminate results |  | √ |
| Ability to organise and prioritise own workload to meet required deadlines | √ |  |
| Ability to write research reports and to effectively disseminate outcomes | √ |  |
| Excellent oral, interpersonal and written communication skills | √ |  |
| Proficiency in appropriate techniques (as appropriate to discipline) | √ |  |
| Proficiency in IT skills (as appropriate to discipline) | √ |  |
| **Attributes** |  |  |
| Commitment to working within professional and ethical codes of conduct | √ |  |
| Innovation and developing creative solutions | √ |  |
| Commitment to excellence in research | √ |  |
| Enthusiasm and self-motivation | √ |  |
| Tenacity – working to achieve own and team objectives and to overcome obstacles | √ |  |
| Ability to be an effective team worker | √ |  |
| Commitment to safe working practices | √ |  |