

JOB DESCRIPTION

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| POST | Analytical Chemist |
| CONTRACT | Fixed term |
| REFERENCE NO | 111-19 |
| REPORTS TO | Dr. Svetlana Ryazanskaya |
| ROLE PURPOSE/SUMMARY | To develop and evaluate analytical surface chemistry techniques such as Imaging MALDI-ToF for quantitative analysis of insecticides from a given surface. Demonstrate comparison with conventional analytical techniques. |
| SCOPE/BACKGROUND | <p>IVCC is a not-for-profit public-private partnership that was established as a charity in 2005. Our mission is to save lives, protect health and increase prosperity in areas where disease transmitted by insects is endemic.</p> <p>We bring together the best minds to create new solutions to prevent disease transmission. By focusing resources and targeting practical scientific solutions we accelerate the process from innovation to impact. With main funding from Bill and Melinda Gates foundation, we are developing and evaluating analytical surface chemistry techniques for quantitative analysis of insecticides from a given surface in collaboration with the University of Liverpool.</p> <p>The work will mostly be undertaken at the Department of Chemistry of University of Liverpool under supervision of Prof. Peter Myers.</p> |

ROLE SPECIFIC RESPONSIBILITIES

| | KEY RESPONSIBILITIES | KEY ACTIONS These set out how the Key Responsibilities will be achieved |
|----------|---|--|
| 1 | Apply analytical chemistry expertise to support IVCC's project portfolio | Imaging MALDI-ToF methods development for various insecticides on long lasting insecticidal nets |
| | | Devise appropriate assays for new chemistries with novel modes of action |
| | | Preparation of reports for stakeholders and international bodies and manuscripts for publication |
| | | Design and perform experiments to explore surface chemistries and their interactions |
| | | Explore synergies between chemistries on a given surface |
| 2 | Data management | Develop and write up SOPs |
| | | Generate and analyse the data on analytical surface chemistry datasets |
| | | Preparation of results for manuscripts / publishable formats |
| | | First point of contact with responsibilities for data management |
| 3 | Provide support to IVCC technical staff and project partners | Assist in the design of internal projects |
| | | Provide training in surface chemistry techniques to others in IVCC and project partners |

FURTHER RESPONSIBILITIES

| | KEY RESPONSIBILITIES | KEY ACTIONS These set out how the Key Responsibilities will be achieved |
|----------|-----------------------------|--|
| 1 | General | First point of contact with responsibilities for setting up equipment and protocols, for maintaining research outputs and troubleshooting as required. |
| | | Assist with the development and implementation of data/sample management tools for the project |
| | | Promote equality of opportunity and inclusive practice in all aspects of work undertaken |
| | | Act in a manner that safeguards children and/or vulnerable adults as applicable to the role |
| | | Any other duties commensurate with the grade and nature of the role |

PERSON SPECIFICATION

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|---|---------------------------------|-----------------------------|
| POST | Analytical Chemist | |
| COMPETENCY CRITERIA | ESSENTIAL/ DESIRABLE | ASSESSMENT |
| Qualifications, Training & Knowledge | | |
| PhD in Analytical Chemistry, Chemistry or Material Science | Essential | Application & CV |
| Expertise in data analysis and interpretation | Essential | Application, CV & interview |
| Knowledge of insecticidal chemistries | Desirable | Application, CV & interview |
| Experience | | |
| Well-developed research skills: proven ability to define research aims, devise methods and complete investigations. | Essential | Interview |
| Publication record in peer reviewed journals | Essential | Application |
| Design and execute experimental plans to agreed timelines | Essential | Application, CV & interview |
| Document and report key insights, developments and observations | Essential | Application, CV & interview |
| Experience in working with insecticides | Desirable | Application, CV & interview |
| Proven record presenting research findings in oral and written format | Desirable | Application, CV & interview |
| Experience in imaging MALDI-ToF method development | Desirable | Application, CV & interview |
| Skills & Behaviours | | |
| Knowledge and behaviours that support equality, diversity and inclusive practice | Essential | Interview |
| Knowledge and behaviours that support safeguarding as applicable to the role | Essential | Interview |
| Ability to synthesise and critically appraise large volumes of scientific literature | Essential | Interview |
| Good problem-solving skills and ability to take initiative | Essential | Interview |
| Excellent organisational ability and attention to detail | Essential | Interview |
| Circumstances | | |
| Fixed Term position (12 months) | | |
| Based in Liverpool and must be available to work at UoL or IVCC | | |