Swansea University
Prifysgol Abertawe

**Job Description: Research Assistant Algal Research**

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| **Faculty:** | **Faculty of Science and Engineering** |
| **Department/Subject:** | **Biological Sciences** |
| **Salary:** | **Grade 7: £34,610-£38,784 pro rata per annum together with USS pension benefits** |
| **Hours of work:** | **Full time** |
| **Number of positions:** | **1** |
| **Contract:** | **This is a fixed term position from 01/10/26-31/01/2027** |
| **Location:** | **This position will be based at the Singleton Campus** |

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| **Main Duties** | 1. Undertake research activities associated with the project "Accelerating Commercialisation Readiness of Phycobiliprotein Production in *Arthrospira platensis* Using High-Intensity LED Pigment Enhancement Set Up".<br>2. Cultivate, maintain, and monitor microalgal and cyanobacterial cultures under laboratory and pilot, industrial scale conditions.<br>3. Operate and maintain photobioreactor systems and associated laboratory equipment.<br>4. Conduct harvesting, extraction, purification, and analysis of phycobiliproteins and other high-value compounds. |
| | 5. Pro-actively contribute to and conduct research, including gather, prepare and analyse data, generate original ideas and present results.<br>6. Prepare reports, draft patents and papers describing the results of the research, both confidential and for publication.<br>7. Be self-motivated, apply and use their initiative, aiming to determine suitable ways to tackle challenges and seeking guidance when needed.<br>8. Interact positively and professionally with other collaborators and partners within the Faculty and elsewhere in the University and beyond as appropriate such as in industry/commerce, public organisations, hospitals and academia.<br>9. Contribute to Faculty organisational matters in order to help it run smoothly and to help raise its external research profile.<br>10. Keep informed of developments in the field in technical, specific and general terms and their wider implication for the discipline area, commercial applications and the knowledge economy.<br>11. When requested act as a representative or member of committees, using the opportunity to extend their own professional experience.<br>12. Demonstrate and evidence own professional development, identifying development needs with reference to the Vitae Researcher Development Framework, particularly with regard to probation, PDR and participation in training events.<br>13. Maintain and enhance links with the professional institutions and other related bodies.<br>14. Observe best-practice protocols in maintenance and retention of research records as indicated by HEI and Research Councils records management guidance. This includes ensuring project log-book records are deposited with the University/Principal Investigator on completion of the work. |
| **General Duties** | 15. To promote equality and diversity in working practices and maintain positive working relationships.<br>16. To conduct the job role and all activities in accordance with safety, health and sustainability policies and management systems, in order to reduce risks and impacts arising from the work activity.<br>17. To ensure that risk management is an integral part of any decision making process, by ensuring compliance with the University's Risk Management Policy.<br>18. Any other duties as agreed by the Faculty / Directorate / Service Area. |

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| **Person Specification** | **Essential criteria:**<br><br>1. A degree (BSc or MSc) in Biotechnology, Biological Sciences, Microbiology, Biochemistry, Chemistry, Biochemical engineering, or a closely related subject, or equivalent relevant experience.<br>2. Evidence of the ability to actively engage in and contribute to writing and publishing research papers, particularly for refereed journals.<br>3. A demonstrable ability to conduct research in line with the objectives of the project.<br>4. Evidence of planning skills to contribute to the research project.<br>5. Experience in cultivation and maintenance of microalgae, cyanobacteria, or other microbial cultures.<br>6. Experience in operating laboratory-scale or pilot-scale bioreactors and photobioreactors.<br>7. Knowledge of algal biomass harvesting, concentration, extraction, and purification techniques.<br>8. Experience with analytical methods for biomass characterisation, pigment quantification, protein analysis, or related biochemical assays.<br>9. Ability to collect, analyse, and interpret experimental data and present findings in technical reports.<br>10. Experience working in a multidisciplinary research environment and collaborating with external partners.<br>11. A commitment to continuous professional development<br><br>**Desirable Criteria**<br><br>12. A PhD (completed or near completion) in Algal Biotechnology, Biotechnology, Microbiology, Biochemistry, Biological Sciences, Bioprocess Engineering, or a closely related discipline.<br>13. Additional specialist training in algal cultivation, downstream bioprocessing, analytical chemistry, or industrial biotechnology would be advantageous.<br>14. Evidence of scientific publications, conference presentations, or industry-focused research outputs related to biotechnology or algal research is desirable. |
| **Welsh Language Level** | Level 1 – 'a little' - pronounce Welsh words. Able to answer the phone in Welsh (good morning / afternoon). Able to use very basic every-day words and phrases (thank you, please etc.). Level 1 can be reached by completing a one-hour training course.<br><br>For more information about the Welsh Language Levels please refer to the Welsh Language Skills Assessment web page, which is available here. |