

Job Description: Research Assistant in Non-Thermal Plasma Water Treatment (EPSRC IAA)

Faculty:	Faculty of Science and Engineering
Department/Subject:	Chemical Engineering
Salary:	Grade 7: £34,610 to £38,784 per annum together with USS pension benefits
Hours of work:	100%
Number of positions:	1
Contract:	This is a fixed term position for 6 months duration
Location:	This position will be based at the Bay Campus

Main Duties	1. Undertake high-quality laboratory-based experimental water research on non-thermal plasma (NTP) technology and reactivation of solid materials. 2. Undertake chemical and physical characterisation of water and solid samples using standard and advanced analytical techniques (e.g. HPLC, FTIR, BET surface area, SEM). 3. Generate, analyse, interpret, and critically evaluate experimental data, maintaining accurate laboratory records and ensuring high standards of data quality. 4. Prepare technical reports, presentations, and datasets to support project deliverables, publications, intellectual property development, and REF impact activities. 5. Ensure compliance with laboratory health and safety procedures, risk assessments, and University policies. 6. Contribute to the day-to-day management of the project, including planning activities, procurement of consumables, monitoring progress against milestones, and supporting timely delivery of project outputs. 7. Manage tight project deadlines, maintaining high productivity and ensuring that critical project milestones are met in a timely manner. 8. Undertake any other research-related duties commensurate with the grade of the post as required by the Principal Investigator.
	9. Pro-actively contribute to and conduct research, including gather, prepare and analyse data, generate original ideas and present results. 10. Prepare reports, draft patents and papers describing the results of the research, both confidential and for publication. 11. Be self-motivated, apply and use their initiative, aiming to determine suitable ways to tackle challenges and seeking guidance when needed. 12. Interact positively and professionally with other collaborators and partners within the Faculty and elsewhere in the University and beyond both in industry/commerce and academia. 13. Contribute to Faculty organisational matters in order to help it run smoothly and to help raise its external research profile. 14. 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. 15. When requested act as a representative or member of committees, using the opportunity to extend their own professional experience. 16. 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. 17. Maintain and enhance links with the professional institutions and other related bodies. 18. 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	19. To promote equality and diversity in working practices and maintain positive working relationships. 20. 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.

	21. To ensure that risk management is an integral part of any decision making process, by ensuring compliance with the University's Risk Management Policy. 22. Any other duties as agreed by the Faculty / Directorate / Service Area.
Person Specification	Essential criteria: 1. Degree (or equivalent qualification/experience) in Chemistry, Chemical Engineering, Water Science, Physics, or a closely related discipline. 2. Expertise in laboratory-based experimental work, including the setup, operation, and optimisation of analytical techniques. 3. A demonstrable ability to conduct research in line with the objectives of the project. 4. Evidence of the ability to actively engage in and contribute to writing and publishing research papers, particularly for refereed journals. 5. Evidence of planning skills to contribute to the research project. 6. Ability to work independently with minimal supervision while maintaining high standards. 7. Familiarity with environmental and safety regulations in a laboratory setting. 8. A commitment to continuous professional development Desirable Criteria 9. PhD in Chemistry, Chemical Engineering or related subject 10. Experience in non-thermal plasma and/or water treatment processes and/or adsorption processes. 11. Experience of operating analytical instrumentation and characterising water quality and adsorbent materials (e.g. TOC, UV-Vis, HPLC, BET, SEM). 12. Evidence of disseminating research through scientific publications, conference presentations, or technical reports.
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. For more information about the Welsh Language Levels please refer to the Welsh Language Skills Assessment web page, which is available here.
Additional Information	Informal enquiries: Professor Chedly Tizaoui (c.tizaoui@swansea.ac.uk)