**Job Description: Research Officer - Organic Photovoltaics**

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| **Faculty:** | ***FSE*** |
| **Department/Subject:** | ***Materials Engineering*** |
| **Salary:** | *Grade 8: £38,205 to £44,263 per annum* |
| **Hours of work:** | ***35 hours per week*** |
| **Number of positions:** | ***1*** |
| **Contract:** | **This is a fixed term position until 30 June 2025** |
| **Location:** | **This position will be based at the Bay Campus** |

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| **Main Purpose of Post** | Swansea University’s vision is to transform lives and futures by providing an outstanding research environment, driving impact that is enabled by effective regional and global collaborations. With our world-class research centres and more than £500m investment into a new Bay Campus infrastructure, the Faculty of Science and Engineering at Swansea University stands out as one of the best centres of excellence in the country  ATIP is a £6M Program Grant funded by [EPSRC](https://epsrc.ukri.org/) and led by Swansea University, in close collaboration with [Imperial College London](https://www.imperial.ac.uk/) and [Oxford University](http://www.ox.ac.uk/),. The research is closely supported by 12 key industrial partners. The main objective is to deliver the underpinning science and engineering to drive the uptake of next generation organic photovoltaics and perovskite photovoltaics (PV) into integrated applications of clear technological need. |
| Duties | The technical responsibilities will include:   * The fabrication and characterization of OPV cells and modules on a laboratory scale. * The transfer of the developed recipes to the manufacturing of modules on the existing roll-to-roll machines * Optimization of modular architectures and processes for roll-to-roll manufacturing of OPV modules * Further development of existing equipment * Characterization of the roll-to-roll manufactured modules with respect to efficiency and lifetime in the laboratory and under operating conditions. * Optimization of the modules with respect to efficiency, cost and lifetime * Cooperation with other research groups * Cooperation with ATIP industrial partners   Other responsibilities:   1. Presentation of the results of this work both internally and externally, including as oral presentation and written reports and peer-reviewed publications. 2. To assist in the co-supervision of postgraduate students and other research staff. 3. Pro-actively contribute to and conduct research, including gather, prepare and analyse data and present results, exhibiting a degree of independence in terms of specifying the focus and direction of that research. 4. Prepare reports, draft patents and papers describing the results of the research, both confidential and for publication. The appointee is expected to be actively engaged in the writing and publishing of research papers, particularly those intended for publication in refereed (eg international) journals or comparable as a normal part of their role. 5. Be self-motivated, apply and use their initiative, aiming to determine suitable ways to tackle challenges and seeking guidance when needed 6. Use creativity to analyse and interpret research data and draw conclusions on the outcomes 7. Interact positively and professionally with other collaborators and partners within the College, elsewhere in the University and beyond both in industry/commerce and academia. 8. Contribute pro-actively to the development of external funding applications to support their own work, that of others and the College and the Institution in general. The appointee will be expected as a normal part of their work to be actively engaged in writing, or contributing to writing such applications. 9. Contribute to College organisational matters in order to help it run smoothly and to help raise its external research profile. 10. Keep informed of developments in the field in both technical and specific terms and the wider subject area and the implication for commercial applications and the knowledge economy or academia. 11. When requested act as a representative or member of committees, using the opportunity to extend their own professional experience. 12. Demonstrate and evidence own professional development, identifying development needs with reference to Vitae Researcher Development Framework particularly with regard to probation, performance reviews, and participation in training events. 13. Maintain and enhance links with the professional institutions and other related bodies. 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 15. To promote equality and diversity in working practices and maintain positive working relationships |
| **General Duties** | 1. To promote equality and diversity in working practices and maintain positive working relationships. 2. 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. 3. To ensure that risk management is an integral part of any decision making process, by ensuring compliance with the University’s Risk Management Policy. 4. Any other duties as agreed by the Faculty / Directorate / Service Area. |
| **Person Specification** | **Essential criteria:**   1. A PhD or equivalent in Physical Sciences or Engineering. 2. Experience in the fabrication of lab-scale (multi-cell) PV modules 3. Excellent experimental skills and solid knowledge in the field of printed photovoltaics, preferably OPV photovoltaics. 4. Experience with performing and documenting scientific experiments and processing and analyzing data 5. Evidence of successful research achievements to date, including for example the publication of high impact research papers 6. A track record in the fabrication of lab-scale next generation PV 7. A track record in opto-electrical (frequency- or time- resolved) characterisation of next generation PV   **Desirable Criteria**   1. Have Practical experience in engineering, automation and data processing. 2. Evidence of ability to work effectively as part of a team 3. Evidence of ability to organise your own research, including knowledge of relevant literature, identification of opportunities and the timely delivery of research outputs. 4. Evidence of ability to provide leadership and initiative. 5. Evidence of ability to work effectively with external academic or industrial partners.   Experience of supervising undergraduate or postgraduate student projects |
| **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](https://www.swansea.ac.uk/welsh-language-standards/compliance/recruitment/). |

  