**![logo-uob-resize[1]]()Job Description**

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

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| **Background and context** |
| This Post-doctoral Research Associate  post in Prof Tim Mays' research group in the Department of Chemical Engineering, University of Bath, UK, is for a 13-month, full-time research project funded by the EPSRC will develop computer simulations of hydrogen storage in porous media and to correlate outputs of these with experimental data and theoretical models.  The application of interest is gas storage for sustainable energy systems such as fuel-cell vehicles.  The appointee will have a PhD in Chemical Engineering, Chemistry, Materials Science or a closely related discipline and recent research experience of hydrogen storage in porous media.  This includes relevant and up-to-date knowledge and understanding of computer simulation methods of adsorption plus practical experience of hydrogen adsorption measurements and theory including non-linear data analysis and fitting. |

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| **Job purpose** |
| To provide subject-specific research expertise and undertake specific research work to a Principal Investigator (PI) and their research team for a specified grant/project.  |

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| **Main duties and responsibilities**  |
|  | Responsible to the PI for (as appropriate to discipline):  |
| **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
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| **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**

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| **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 | ✓ |  |