

## **Job Description**

<b>Position:</b>	Post Doctoral Research Fellow
<b>School:</b>	School of Engineering (Institute for Materials Research and Innovation)
<b>Reference:</b>	ENG-107/P
<b>Grade:</b>	AC1 / Grade 6 : F27 – F32
<b>Status:</b>	Full-time, fixed term for 14 months
<b>Hours:</b>	37
<b>Responsible to:</b>	Professor Baljinder Kandola
<b>Responsible for:</b>	The design and implementation of the collaborative research projects with industry related to the development of fire safe materials

### **Main Function of the Post:**

- The PDRA will work on collaborative research projects with industrial partners from transport and construction industries on developing fire safe materials.
- The PDRA will be responsible for developing new scientific understanding and test protocols in support of industry growth strategies
- The PDRA will be responsible for developing small scale experiments at Bolton for indicative testing for industry, which can then be calibrated with the large scale equipment at commercial test houses
- The PDRA will assist in providing a base for and offer skills enhancement courses to industrial personnel
- The PDRA will assist in developing longer term research and development projects aligned with industry growth goals via partnerships and funders across both the UK, EU and the rest of the world

### **Principal Duties and Responsibilities:**

1. To join the research project team to act as one of the key players of the project.
2. To plan and deliver industrial projects.
3. To maintain confidentiality of all research undertaken in Bolton and with industrial partners.
4. To generate research outcomes from own and team's research efforts and to present reports at project meetings as required.
5. To comply with the requirements of Health and Safety, COSHH and other relevant legislation.
6. To enhance the international reputation and publication record of the School of Engineering (IMRI) in order to enhance REF ratings.

7. To join supervisory teams responsible for supervision of associated research students.
8. To attend regular progress meetings, to prepare progress reports in time and present reports when necessary.
9. To prepare and present papers at seminars and conferences when required.
10. To support other areas of relevant research effort.
11. To advise and support academic colleagues having limited research supervisory experience.
12. To seek opportunities to fund future research projects.
13. To undertake research administrative duties as required.
14. The post holder will at all times follow the University of Bolton policies including equal opportunities, race equality etc.
15. The post holder will carry out other duties within the scope of the School of Engineering as requested by the Principal Investigator.

**Note:**

This is a description of the role requirements as it is presently constituted. It is the University's practice to periodically review job descriptions to ensure that they accurately reflect the role requirements to be performed and if necessary update to incorporate changes were appropriate. The review process will be conducted by the relevant manager in consultation with the role-holder.

Please note that this appointment is subject to Disclosure and Barring Clearance

## Person Specification

<b>Post:</b> Post-Doctoral Research Fellow		<b>Reference:</b> ENG-107/P	
<b>Department:</b> IMRI		<b>Priority (1/2/3)</b>	<b>Method of Assessment</b>
<b>Criteria</b>			
<b>1</b>	<b>Qualifications</b>		
1a)	First degree at honours level of 2(ii) or higher in Chemistry, Chemical Sciences, Polymer Science, Materials Science or a related discipline	1	Documentation
1b)	PhD in Chemistry, Chemical Sciences, Polymer Science, Materials Science or a closely related subject, or awaiting results of submission of thesis	1	Documentation
<b>2</b>	<b>Skills / Knowledge</b>		
2a)	Knowledge of polymer/material science and/or technology	1	Application Form/Interview
2b)	Able to plan and initiate research programme	1	Application Form/Interview
2c)	Ability to work with a range of people from diverse backgrounds in the academic and manufacturing sector	1	Application Form/Interview
2d)	Effective written communication skills e.g. ability to write scientific reports and papers, letters, publications, prepare teaching sessions	1	Application Form/Interview
2e)	Effective oral communication skills e.g. able to do presentations, deliver teaching sessions, communicate with external peer group, contribute to meetings	1	Application Form/Interview
2f)	Ability to work independently	1	Application Form/Interview
2g)	Demonstrate effective analytical and problem solving skills	1	Interview
2h)	Ability to write project proposals for external funding	2	Application Form/Interview
2i)	Proven ability and commitment to undertake appropriate subject specific research and/or enterprise activity and ensure it informs teaching.	1	Application Form/Interview
<b>3</b>	<b>Experience</b>		
3a)	Research record during higher degree experience which demonstrates self-motivation and clarity of purpose	1	Application Form/Interview
3b)	A good working knowledge of materials and analytical techniques	1	Application Form/Interview
3c)	Experience in materials fire testing	2	Application Form/Interview
3d)	Experience of working with external organisations and particularly companies	2	Application Form/Interview
3e)	Evidence of producing high quality reports and publications	1	Application Form/Interview
3f)	Experience of training and/or supervising research students to use scientific equipment	2	Application Form/Interview

<b>4</b>	<b>Personal Qualities</b>		
4a)	Ability to work within a team	1	Interview
4b)	Ability to generate new ideas and concepts	1	Interview
4c)	Ability to work with people at all levels in an organisation	1	Interview
4e)	Ability to assess risk and make decisions which have some defined risk content when designing/implementing project	1	Interview
4f)	Can show personal initiative when unforeseen challenges arise within a project	1	Interview
4g)	Awareness of the requirements associated with operating within a customer service environment	1	Interview
4h)	Commitment to continuous improvement and creative ways of working	1	Interview
<b>5</b>	<b>Other</b>		
5a)	Willing to undertake staff development, which may take place outside the University	1	Interview
5b)	Awareness of the principles of the Data Protection Act, Health and Safety, Prevent, Freedom of Information Act and Bribery Act	1	Interview
5c)	Commitment to the University's policy on equal opportunities and diversity	1	Interview
5d)	Available to work flexible and travel as appropriate in order to meet the needs of the services	1	Interview

*Note:*

1. **Priority 1** indicates **vital** criteria - a candidate would be unsuccessful if unable to satisfy a Priority 1 criteria.
2. **Priority 2** indicates **desirable** criteria - candidates failing to satisfy a number of these are unlikely to be successful.
3. It is the responsibility of the employee to ensure any professional accreditation/membership remains current.
4. Please note that it is normally expected that appointee will commence at the bottom of the grade.