

Ref: **EPS-05550**

**THE UNIVERSITY OF MANCHESTER**  
**PARTICULARS OF APPOINTMENT**  
**FACULTY OF ENGINEERING AND PHYSICAL SCIENCES**  
**SCHOOL OF MATERIALS**

**Research Fellow**

- 1 The University invites applications for the above post which is available from 1<sup>st</sup> February 2015 for a period of 12 months.
- 2 Starting salary will be £38,511 to £47,328 per annum according to relevant experience.
- 3 Informal inquiries may be made to Professor Teresa Alonso Rasgado. Email: [teresea.rasgado@manchester.ac.uk](mailto:teresea.rasgado@manchester.ac.uk)
- 4 Applications should be made on line. If you are unable to apply on line please request an application form by emailing [hrservices@manchester.ac.uk](mailto:hrservices@manchester.ac.uk) quoting the reference number or by calling 0161 275 4499.
- 5 The School of Materials is committed to promoting equality and diversity, including the Athena SWAN charter for promoting women's careers in STEMM subjects (science, technology, engineering, mathematics and medicine) in higher education. The School received a Bronze Award in 2013 for their commitment to the representation of women in the workplace and we particularly welcome applications from women for this post. Appointment will always be made on merit. For further information, please visit: <http://www.materials.manchester.ac.uk/about-us/athena-swan/>

**Job title:** Research Fellow in Bioengineering  
**Starting salary:** £38,511 to £47,328 per annum  
**Probation:** 9 months  
**Based at:** The University of Manchester  
**Responsible to:** Professor Teresa Alonso Rasgado

## **JOB DESCRIPTION**

### **Overall purpose:**

This work is in the field of bioengineering and will suit a researcher mainly with expertise in biomechanics, bioinstrumentation and cell engineering. You will be working as part of a vibrant and rapidly expanding bioengineering group. Duties will include undertaking research as directed in the field, working with existing PhD students in the group, writing research papers, contributing to research proposals and liaising with medical partners.

### **Main responsibilities**

The key roles and responsibilities will be as follows:

- Establish a strong international research record in bioengineering preferably in orthopaedic biomechanics with significant publications in high quality international peer-reviewed journals.
- Develop a strong record of attracting research income through applications to major funding bodies, government and industry.
- Demonstrate a commitment to a generation of collaborative proposals.
- Engage in the normal academic tasks of teaching and examining.
- Promote graduate studies by recruiting and supervising postgraduate students, and in due course make a contribution to administrative duties within the Bioengineering group.

## **PERSON SPECIFICATION**

You will have a proven track record of performance and publication in experimental biomechanics. You will be self-motivated with the demonstrated expertise and experience to make a leading contribution to the development and sustainability of the group and to the teaching and research efforts.

### **Essential**

- A PhD in mechanical engineering, biomedical engineering, bioengineering, biomechanics or the biomedical field, or equivalent experience.
- Strong knowledge of using the ABAQUS simulation software package within the area of bioengineering/biomedical engineering.
- Ability to develop necessary computational tools for the simulation of physiological models.
- Desirable to have a basic understanding of DICOM medical image format and transfer.
- Demonstrated ability to publish in good quality scientific journals.
- Providing advice and guidance to PhD students in the group.

- Contributing to writing research proposals for funding
- Creating and updating user documentation of equipment as required
- Keeping accurate and complete records of all findings
- Attending relevant workshops and conferences for research dissemination
- Experience of working both independently and as part of a multidisciplinary team.
- Self-motivation and an ability to exercise initiative and judgement in carrying out research tasks
- Excellent interpersonal and communication skills, both written and spoken.
- Willingness to work flexibly and travel to collaborating institutes and companies.

**Desirable**

- Experience of working in biomechanics, including experimentation.
- Experience of working within medical device arena.
- Experience of computational fluid modelling software.
- Willingness to learn and operate with good software engineering practices, research practices and ethics policies.