



THE POST

College:	College of Engineering, Mathematics and Physical Sciences
Post:	Postdoctoral Research Fellow
Reference No:	P53668
Grade:	E/F
Reporting To:	Professor Yanqiu Zhu

The above full-time post is available from 01 September 2018 for 7 months in the College of Engineering, Mathematics and Physical Sciences.

Job Description

A Research Associate/Fellow at Exeter will be working on an EPSRC project, to replace the previous Researcher, jointly with University of Birmingham and Nottingham, to develop PCM composites for TES applications. The level to be appointed will be based on qualification, from grade E Research Associate to Grade F Research Fellow.

Main purpose of the job:

The project will conduct research on 'nano-Structured PCM Composites for Compact Space Heating: n-CoSH'. The project is funded by the EPSRC and is part of the SUPERGEN Energy Storage Materials Challenge. The post holder will work as part of a multidisciplinary research team, in collaboration with researchers from the University of Birmingham and University of Nottingham. They will carry out investigations on the screening and development of advanced nanostructured PCM composites at the University of Exeter, and will provide test composite samples to other partners for testing.

Main duties and accountabilities for Grade F Research Fellow:

1. To undertake research as appropriate to the field of study including:
 - Acting as principal investigator on research projects;
 - Developing research objectives, projects and proposals;
 - Conducting individual or collaborative research projects;
 - Identifying sources of funding and contributing to the process of securing funds;
 - Extending, transforming and applying knowledge acquired from scholarship to research and appropriate external activities;
 - Writing or contributing to publications or disseminating research findings using media appropriate to the discipline;
 - Making presentations at conferences or exhibiting work in other appropriate events;
 - Assessing, interpreting and evaluating outcomes of research;
 - Developing new concepts and ideas to extend intellectual understanding;
 - Resolving problems of meeting research objectives and deadlines;
 - Developing ideas for generating income and promoting research area;
 - Developing ideas for application of research outcomes;
 - Deciding on research programmes and methodologies, often in collaboration with colleagues and sometimes subject to the approval of the head of the research programme on fundamental issues.
2. To contribute to teaching and learning programmes in the School and to supervise postgraduate research students.

3. To act as research team leader including:
 - Mentoring colleagues with less experience and advising on their professional development;
 - Coaching and supporting colleagues in developing their research techniques;
 - Supervising the work of others, for example in research teams or projects;
 - Developing productive working relationships with other members of staff;
 - Co-ordinating the work of colleagues to ensure equitable access to resources and facilities;
 - Dealing with standard problems and help colleagues to resolve their concerns about progress in research.

4. To routinely communicate complex and conceptual ideas to those with limited knowledge as well as to peers using high level skills and a range of media and to present the results of scientific research to sponsors and at conferences.

5. To plan, co-ordinate and implement research programmes including:
 - Managing the use of research resources and ensure that effective use is made of them;
 - Managing research budgets;
 - Helping to plan and implement commercial and consultancy activities;
 - Planning and managing own consultancy assignments.

This job description summarises the main duties and accountabilities of the post and is not comprehensive: the post-holder may be required to undertake other duties of similar level and responsibility. Please visit the Human Resources website to view the Research Fellow role profiles.

Person Specification for Grade F

Competency	Essential	Desirable
Attainments/Qualifications	PhD or equivalent in a related field of study.	Be a nationally recognised authority in the subject area.
Skills and Understanding	Possess sufficient specialist knowledge in the discipline to develop research programmes and methodologies. Possess advanced nanomaterials characterisation skills	Record of research output in nationally recognised publications.
Prior Experience	Experience working with nanocomposites. Over three-years Post-doc Research experience.	Experience of carrying out multidisciplinary research. Postdoctoral research experience. Experience of managing research projects and research teams. Successful in obtaining grant funding. Experience of teaching at undergraduate level. Experience of postgraduate teaching and supervision. Experience of acting as principal investigator on research projects.
Behavioural Characteristics	Excellent written and verbal communication skills. Able to communicate complex and conceptual ideas to a range of groups. Evidence of the ability to collaborate actively within the Institution and externally to complete research projects and advance thinking.	

	<p>Able to participate in and develop external networks.</p> <p>Able to identify sources of funding, generate income, obtain consultancy projects, or build relationships for future activities.</p> <p>Able to balance the pressures of research, administrative demands and competing deadlines.</p>	
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Main duties and accountabilities for Postdoctoral Research Associate:

1. Contribute to teaching.
 - Be involved in the assessment of student knowledge and assist in the supervision of student projects.
 - Assist in the development of student research skills.
2. Research and scholarship
 - Undertake research as appropriate to the field of study.
 - Translate knowledge of advances in the subject area into research activity.
 - Write up research work for publication.
 - Continually update knowledge and understanding in field or specialism and develop skills.
 - Develop research objectives and proposals for own or joint research.
 - Make presentations at national and international conferences and similar events.
3. Communication:
 - Write up results of own research.
 - Contribute to the production of research reports and publications.
 - Present information on research progress and outcomes to bodies supervising research, eg steering groups.
 - Prepare papers for steering groups and other bodies.
 - Deal with routine communication using a range of media.
 - Communicate complex information, orally, in writing and electronically.
 - Prepare proposals and applications to external bodies, eg for funding and contractual purposes.
 - Communicate material of a specialist or highly technical nature.
4. Liaison and networking
 - Liaise with colleagues and students.
 - Build internal contacts and participate in internal networks for the exchange of information and to form relationships for future collaboration.
 - Join external networks to share information and identify potential sources of funds.
5. Managing people
 - Provide guidance as required to support staff and any students who may be assisting with the research.

Person Specification

Competency	Essential	Desirable
Attainments/Qualifications	PhD or equivalent in a related field of study.	
Skills and Understanding	<p>Possess sufficient specialist knowledge in the discipline to develop research programmes and methodologies.</p> <p>Possess advanced nanomaterials characterisation skills</p>	Record of research output in nationally recognised publications.

Prior Experience	Experience working with nanocomposites.	Experience of carrying out multidisciplinary research. Experience of managing research projects and research teams. Successful in obtaining grant funding. Experience of teaching at undergraduate level. Experience of postgraduate teaching and supervision. Experience of acting as principal investigator on research projects.
Behavioural Characteristics	Good written and verbal communication skills. Able to communicate complex and conceptual ideas to a range of groups. Evidence of the ability to collaborate actively within the Institution and externally to complete research projects and advance thinking. Able to participate in and develop external networks. Able to balance the pressures of research, administrative demands and competing deadlines.	

Informal Enquiries

Before submitting an application you may wish to discuss the post further by contacting Professor Yanqiu Zhu, telephone (01392 723620) and email y.zhu@exeter.ac.uk.

Terms & Conditions

Our Terms and Conditions of Employment can be viewed [here](#).

Further Information

Please see our [website](#) for further information on working at the University of Exeter.