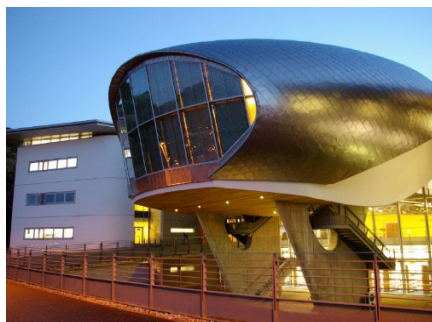




Research Assistant in Thermal Energy Materials



Role Description

GRADE

Grade 4

LOCATION

Merchiston, Edinburgh

LINE MANAGER

Dr Carolina Costa Pereira

Role Summary

The School of Computing, Engineering & the Built Environment at Edinburgh Napier University seeks a highly motivated Research Assistant to join an international collaborative project funded by the UK. The project aims to transform first—and second-generation byproducts into high-value, shape-stabilised Phase Change Materials (PCMs) for Sustainable Growth and Energy Efficiency.

The post holder will develop innovative composite materials and participate in their testing and integration in different applications. The main tasks are preparing and characterising shape-stabilised composite phase change materials using sustainable materials and tailoring their properties for the intended applications.

Line Management Responsibility for:

This role does not have any line management responsibilities currently.

Main Duties and Responsibilities

Research and Scholarship

- Undertake research related with the projects of the research group, for example by preparing, setting up, conducting and recording the outcome of experiments and field work, the development of questionnaires and conducting surveys.
- Undertake a research placement of at least three months in a European Country.
- Support the development of undergraduate project proposals
- Conduct literature and database searches.
- Write up results as project report
- Continue to update knowledge and develop skills.

Communication

- Write up results of own research as part of a guided process
- Contribute to the production of research reports and publications.
- Present information on research progress and outcomes to bodies supervising research, e.g. steering groups.
- Prepare papers for steering groups and other bodies.
- Attend international conferences.

Liaison and networking

- Liaise with research colleagues and support staff on routine matters.
- Make internal and external contacts to develop knowledge and understanding and form relationships for future collaboration.

Managing people

- Provide guidance as required to support staff and any students who may be assisting with the research.

Teamwork

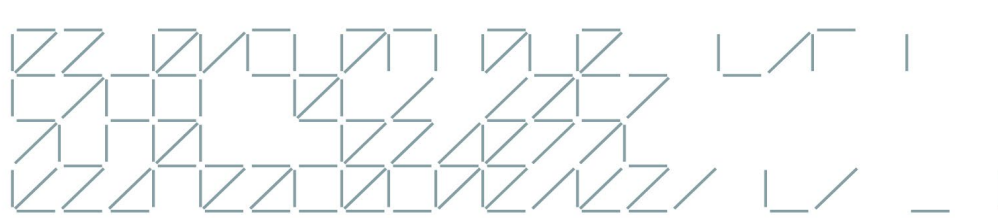
- Actively participate as a member of a research team.
- Attend and contribute to relevant meetings.

Pastoral care

- Show consideration to others.

Initiative, problem-solving and decision-making

- Make use of standard research techniques and methods.



- Deal with problems which may affect the achievement of research objectives and deadlines
- Contribute to decisions affecting the work of the team.
- Analyse and interpret the results of own research and generate original ideas based on outcomes.

Planning and managing resources

- Plan own day-to-day research activity within the framework of the agreed project.
- Co-ordinate own work with that of others to avoid conflict or duplication of effort.
- Contribute to the planning of research projects.

Sensory, physical and emotional demands

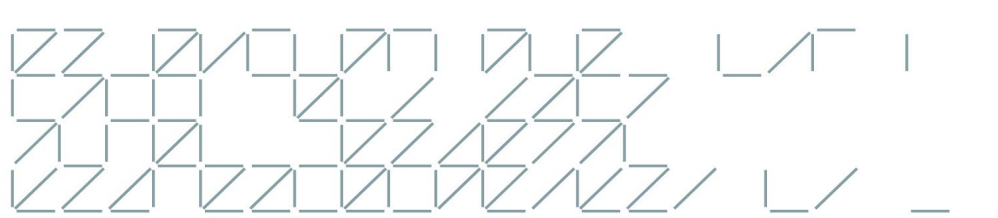
- Sensory and physical demands will vary from relatively light to a high level depending on the discipline and the type of work
- Carry out tasks that require the learning of certain skills.

Work environment

- Is required to be aware of the risks in the work environment.

Expertise

- Possess sufficient breadth or depth of specialist knowledge in the discipline (for example with an undergraduate or Master's degree) and be developing further skills in and knowledge of research methods and techniques.
- Role model the University's values & behaviours.
- Be responsible for ensuring that the information and records processed (received, created, used, stored, destroyed) on behalf of the University are managed in compliance with all applicable legislation, codes and policies e.g. [Data Protection](#), [Information Security](#) and [Records Management](#).



PERSON SPECIFICATION

	ESSENTIAL	DESIRABLE
Education / Qualifications		
• Masters degree or professional qualification in a relevant subject area	✓	
• PhD or close to completion PhD with demonstrated laboratory experience in materials.		✓
• A bachelor's degree in a relevant science or engineering discipline (e.g., Materials Science, Chemical Engineering, Energy Engineering, Process Engineering).		✓
Skills / Experience		
• Experimental research with expertise in material characterisation techniques such as DSC, TGA, SEM, FTIR, XRD, etc.	✓	
• Expertise in designing new experimental bench-scale set-ups	✓	
• Demonstrated track record of peer-reviewed academic publications	✓	
• Proven ability to work independently and collaboratively in a research environment	✓	
• Strong communication skills and ability to work in a diverse, international and interdisciplinary research and development environment	✓	
• High-level analytical capability and problem-solving skills	✓	
• Willingness to undertake a placement in a European country	✓	