



UNIVERSITY OF LEEDS

## CANDIDATE BRIEF

**Research Fellow in Thermal Comfort and Energy Systems,  
Faculty of Engineering and Physical Sciences**



**Salary: Grade 7 (£39,105 – £46,485 p.a. pro rata)**

**Reference: EPSCV1158**

**Location: Leeds main campus (with scope for hybrid working)**

**Closing date: Sunday 02 March 2025**

**Fixed-term until 31 March 2026**

**Part-time (0.5 FTE), either one part-time Research Fellow for 2.5 days a week or two part-time Research Fellows for 1 and 1.5 days a week**

**We are open to discussing flexible working arrangements**

## **Research Fellow in Thermal Comfort and Energy Systems, Architecture Institute, School of Civil Engineering.**

**Are you an early career researcher looking for your first challenge? Do you have a background in Architecture or Engineering with a PhD related to thermal comfort, thermoelectric devices and/or Phase Change Materials? Are you enthusiastic about developing new technologies and enhancing people's life through increasing their comfort and reducing their energy bills? Do you want to further your career in one of the UK's leading research-intensive universities?**

We are seeking an experienced and dynamic part-time Research Fellow(s) to join our interdisciplinary research team on the "Cool me, Warm me (CW)" project. The project focuses on developing innovative Personal Comfort Systems using Phase Change Materials (PCM) and thermoelectric devices to provide individualised heating and cooling. The successful candidate will bring a strong background in thermal comfort and energy systems to this groundbreaking research, contributing to the development of technology that enhances user comfort while reducing energy consumption.

As a Research Fellow, you will work closely with our academic and industrial collaborators to develop, prototype, and evaluate this new technology, as a solution to provide personal thermal comfort. You will focus on exploring how PCM and thermoelectric devices can be optimised for different environments and user needs. This position will require both theoretical and practical research, with tasks ranging from prototype development, numerical simulations, lab-based experimental validation, co-design workshops, and field test studies. You will be involved in organising co-production workshops to develop the ideas, writing funding bids and dissemination. Your research will be instrumental in advancing the project's goals of creating energy-efficient and user-friendly thermal comfort systems for various settings.

We are seeking either a part-time Research Fellow for 2.5 days a week or two part-time Research Fellows (1 and 1.5 days a week). In case of the latter, the responsibilities will be agreed and shared by the research team between the two part-time Research Fellows.



## What does the role entail?

As a Research Fellow, your main duties will include:

- Organising co-design workshops from ideas development to the final stages of the project with the industrial partner (Homeglow), end user, stakeholders, and the research team;
- Contributing to the development, testing (laboratory and Computational Fluid Dynamics), optimisation, and prototype development of thermoelectric devices for personalised heating and cooling, ensuring they are effectively integrated with PCM;
- Documenting research progress in the form of technical reports, contributing to academic publications and conference papers, and supporting writing funding bids;
- Generating and pursuing independent and original research ideas in the appropriate subject area;
- Developing research objectives and proposals and contributing to setting the direction of the research project and team including preparing proposals for funding in collaboration with colleagues;
- Evaluating methods and techniques used and results obtained by other researchers and to relate such evaluations appropriately to your own research;
- Making a significant contribution to the dissemination of research results by publication in leading peer-reviewed journals and by presentation at national and international meetings;
- Working independently and as part of a larger team of researchers, both internally and externally, to develop new research links and collaborations and engage in knowledge transfer activities where appropriate;
- Maintaining your own continuing professional development and acting as a mentor to less experienced colleagues as appropriate;
- Contributing to the training of both undergraduate and postgraduate students, including assisting with the supervision of projects in areas relevant to the project.

These duties provide a framework for the role and should not be regarded as a definitive list. Other reasonable duties may be required consistent with the grade of the post.



## What will you bring to the role?

As a Research Fellow you will have:

- A PhD (or have submitted your thesis before taking up the role) in Thermal Comfort, Engineering, Building Physics, or a closely allied discipline;
- Expertise in Phase Change Materials, thermoelectric devices, and/or personal comfort systems, with a focus on their integration into thermal management solutions;
- Experience with laboratory-based experiments, thermal measurements, field test studies, and relevant simulation tools (e.g., CFD);
- Strong problem-solving skills and attention to detail, particularly in experimental design and prototype testing;
- Good time management and planning skills, with the ability to meet tight deadlines and manage competing demands effectively without close support;
- A developing track record of peer-reviewed publications in international journals;
- Excellent communication skills both written and verbal, and the ability to communicate your research at national and international conferences;
- A proven ability to work well both independently and in a team;
- A strong commitment to your own continuous professional development.

You may also have:

- Experience of pursuing external funding to support research projects;
- Familiarity with user-centred design approaches, particularly in the context of thermal comfort systems;
- Hands-on experience with prototyping and field-testing of thermoelectric devices or similar systems;
- Knowledge of energy simulation tools, such as EnergyPlus or TRNSYS, and their application in assessing building performance;
- Experience in:
  - interdisciplinary projects involving industry partnerships and prototype development;
  - working with industrial partners to deliver research outputs with practical applications.



## How to apply

You can apply for this role online; more guidance can be found on our [How to Apply](#) information page. Applications should be submitted by **23:59** (UK time) on the advertised [closing date](#).

## Contact information

To explore the post further or for any queries you may have, please contact:

[Dr Sally Shahzad](#), Associate Professor of Architecture

Email: [S.Shahzad@leeds.ac.uk](mailto:S.Shahzad@leeds.ac.uk)

## Additional information

### Faculty and School Information

Further information is available on the research and teaching activities of the [Faculty of Engineering & Physical Sciences](#), and the [School of Civil Engineering](#).

### Working at Leeds

We are a campus-based community and regular interaction with campus is an expectation of all roles in line with academic and service needs and the requirements of the role. We are also open to discussing flexible working arrangements. To find out more about the benefits of working at the University and what it is like to live and work in the Leeds area visit our [Working at Leeds](#) information page.

### A diverse workforce

As an international research-intensive university, we welcome students and staff from all walks of life and from across the world. We foster an inclusive environment where all can flourish and prosper, and we are proud of our strong commitment to student education. Within the Faculty of Engineering and Physical Sciences we are dedicated to diversifying our community and we welcome the unique contributions that individuals can bring, and particularly encourage applications from, but not limited to Black, Asian and ethnically diverse people; people who identify as LGBT+; and people with disabilities. Candidates will always be selected based on merit and ability.



The Faculty of Engineering and Physical Sciences are proud to have been awarded the Athena SWAN [Silver](#) Award from the Equality Challenge Unit, the national body that promotes equality in the higher education sector. Our [equality and inclusion webpage](#) provides more information.

### **Information for disabled candidates**

Information for disabled candidates, impairments or health conditions, including requesting alternative formats, can be found under the 'Accessibility' heading on our [How to Apply](#) information page or by getting in touch by emailing HR via [hr@leeds.ac.uk](mailto:hr@leeds.ac.uk).

### **Criminal Record Information Rehabilitation of Offenders Act 1974**

A criminal record check is not required for this position. However, all applicants will be required to declare if they have any 'unspent' criminal offences, including those pending.

Any offer of appointment will be in accordance with our Criminal Records policy. You can find out more about required checks and declarations in our [Criminal Records](#) information page.

### **Salary Requirements of the Skilled Worker Visa Route**

Please note that this post may be suitable for sponsorship under the Skilled Worker visa route but first-time applicants might need to qualify for salary concessions. For more information, please visit [the Government's Skilled Worker visa page](#).

For research and academic posts, we will consider eligibility under the Global Talent visa. For more information, please visit [the Government's page, Apply for the Global Talent visa](#).

