University of Salford MANCHESTER

ENERGY HOUSE LABS

Job Description

Role Title:	RAMMIC Research Fellow
School / Dept:	Faculty of Science, Engineering and Environment
Directorate:	Energy House Labs
Reference:	GRP76
Grade:	Grade 7
Full or Part time:	Full time
Hours:	1.0 FTE / 36.25
Reports to:	Professor Richard Fitton
Responsible for:	No direct reports

Overview

The University of Salford has a rich history stretching back to 1896 and today is a leading provider of Higher Education based over a Main Campus, one and a half miles from Manchester. Currently undergoing a transformational change affecting every area of university life, Salford is positioning itself at the leading edge of higher education institutions in this country.

Energy House Laboratories is a large research and innovation unit within the University of Salford's Faculty of Science, Engineering and Environment. The group focuses on the delivery of net zero and low energy buildings and products, and on a wide range of digital energy services and applications for the domestic sector. It has a complex multi-project portfolio that covers both research and innovation activities, many with commercial partners. The group is made up of five labs: Energy House 1, Energy House 2.0, the Modelling Laboratory, the Smart Meters>Smart Homes Lab (SMSH Lab), and the Thermal Measurement Lab.

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The post holder will work on the UK Research and Innovation (UKRI) Local Innovation Partnerships Fund (LIPF) project, Retrofit Advanced Materials and Manufacturing Innovation Centre (RAMMIC) [grant number UKRI5673], ensuring all contractual, legal, and financial processes are effectively handled with internal support. They will work closely with the Energy House 2.0 Technical Director and Research Fellow – Energy House Labs to develop research questions and deliver high-quality research, analysis, and reporting. Additionally, the role includes contributing to the wider commercial and research activities of Energy House Labs, managing relationships with stakeholders, writing publications, and disseminating research findings.

Role Purpose

The post is to support and work directly as part of the UK Research and Innovation (UKRI) Local Innovation Partnerships Fund (LIPF) project, Retrofit Advanced Materials and Manufacturing Innovation Centre (RAMMIC) [grant number UKRI5673]. The role will incorporate a mixture of academic and commercial activities, such as data modelling and analysis, experimental building performance, paper and report writing, and the undertaking of research and consultancy. The post holder will be required to develop a research profile and promote and support the activity of the project.

Principal Duties & Responsibilities

With supervision, the RAMMIC Research Fellow is expected to:

- **Project Management**
  - Ensure that all contractual, legal and financial processes are effectively managed with support of internal support services.
  - Work with the RAMMIC project team to develop research questions, design, and delivery to meet the needs of the industrial partners.
  - Undertake high-quality research, analysis, and reporting in support of project delivery
  - Contribute to the wider commercial and research activities of Energy House Labs.
  - Work with the existing facilities and staff to identify opportunities to support businesses in terms of designing and delivering research services.
  - Proactively contribute to develop and improve project management capability, standards, methods, processes that will improve performance and efficiency of the unit.

- **Relationship Management**
  - Provide informed feedback regarding project delivery to all relevant stakeholders.
  - Facilitate open communication and discussion between stakeholders, acting as subject matter expert developing, maintaining and working to stakeholder engagement plans and strategies.
  - Disseminate research and business information to external stakeholders and the wider RAMMIC project team.

- Identify the communication requirements of the internal and external stakeholders and development of communication plans to ensure the RAMMIC project is managed successfully.
- Capture and disseminate technical and business information to external stakeholders and the wider Energy House Labs team.

- **Research**
  - Lead research, under the supervision of the Technical Director and other co-Investigators.
  - Collaboratively develop research working closing with the PIs, Co-I and other members of the Energy House Labs team.
  - Write or contribute to publications in peer-reviewed journals and conferences and to external organisations such as industry, public sector, charity and local community groups.
  - Participate in ongoing research activities in collaboration with the PI, Co-Is and other members of the Energy House Labs team.
  - Undertake individual or collaborative research projects of relevance to the Faculty/University.

- **People Management**
  - Management of research support staff within Energy House Labs as required.
  - Effectively resource multiple projects and pipelines with the Energy House 2.0 Technical Director
  - Deal with problems and issues, managing resolutions, corrective actions, lessons learned and the collection and dissemination of relevant information
  - Mentor team members, fostering a collaborative and innovative environment

Generic Duties

- Proactively participate in furthering your professional development, maintaining growth in professional skills and knowledge deemed essential to the role.
- Perform other duties required by the RAMMIC project team from time to time.
- Comply with the personal health and safety responsibilities specified in the University Health and Safety policy.
- To engage with the University's commitment to put our students first and deliver services which are customer orientated, represent value for money and contribute to the financial and environmental sustainability of the University when undertaking all duties and aspects of the role.
- Advance equality, support our work towards eliminating unlawful discrimination, foster an inclusive study and work environment for students, staff and visitors in accordance with our public sector equality duties and university policy.

This role detail is a guide to the work you will initially be required to undertake. It may be changed from time to time to meet changing circumstances. It does not form part of your Contract of Employment.

Person specification follows on next page.

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Person Specification

The successful candidate should demonstrate the following, which are ‘Essential’ (E) or ‘Desirable’ (D)

Qualifications

1. Hold a relevant postgraduate qualification in physics, mechanical engineering, data analytics or computer science.
   (E)
2. Hold a postgraduate certificate of Academic Practice or equivalent higher education teaching qualification or Fellowship of HEA.
   (D)
3. Relevant industry/sector experience.
   (E)
4. Evidence of recent and on-going professional development
   (E)

Background and Experience

5. Experience in managing and conducting all aspects of research projects relating to building physics
   (E)
6. Experience of experimental measurement and preparing of data sets in building physics or related field
   (E)
7. Experience of working with industry or other external stakeholders
   (E)
8. Experience of publishing research in peer-reviewed journals
   (E)
9. Experience of people management with a proven track record in engaging with and leading a team effectively
   (D)

Knowledge

10. Strong knowledge in building physics and building performance
    (E)
11. Measurement and modelling of different aspects of building physics and building performance
    (E)
12. Knowledge of tools such as MATLAB, Python, APIs, HTML
    (D)

13. Good Practice and the ability to drive excellence and quality in all areas of responsibility
    (E)

Skills and Competencies

14. Excellent and proactive communication, presentation skills, negotiating influencing and relationship building skills
    (E)
15. Team leadership skills with the ability to drive, manage change, motivate and develop a team
    (E)
16. Good project management skills
    (E)
17. A commitment to learning new skills/techniques/technologies and to developing knowledge to keep abreast of industry standards
    (E)
18. A proven track record of problem solving with the ability to think quickly and innovatively, and to react to changing demands/requirements
    (E)

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