Job Description and Person Specification

JOB DESCRIPTION

Post title:	**Research Fellow in Energy Analytics**		
Standard Occupation Code: (UKVI SOC CODE)	2119		
School/Department:	Engineering/Civil, Maritime and Environmental Engineering/Energy and Climate Change Group/Sustainability Implementation Group (SIG)		
Faculty:	Engineering and Physical Sciences		
Career Pathway:	Education, Research and Enterprise (ERE)	Level:	4
*ERE category:	Research pathway		
Posts responsible to:	Prof A S Bahaj Chair of SIG and Head of Energy and Climate Change Group		
Posts responsible for:	N/A		
Post base:	Office-based or Non Office-based (see job hazard analysis)		

Job purpose
To undertake research and analyses in accordance with the specified research and institutional projects under the supervision of the award holders. Supporting the team in organising engagements and meetings with internal and external stakeholders. Provide a professional interface between academics, researchers, and our sustainability strategy around the University and elsewhere. To undertake leadership, management and engagement activities as required.

Key accountabilities/primary responsibilities	% Time
1. Research and analyses including the following: • To carry out research and analyses in the areas of the group's projects and produce appropriate outputs. • Undertake coordination of research including field work and projects' outcomes with internal/external stakeholders. • Prepare progress reports including the publication of research outputs through ECCD/university websites and academic depositories/databases. • Undertake the organisation and management of events, engagement activities.	70 %
2. Regularly disseminate findings by taking the lead in preparing publication materials for engagement events, conferences, workshops, referred journals, and presenting results and exhibiting work at other appropriate events.	10%
3. Contribute to the writing of bids for research funding.	5%

4. Carry out administrative tasks associated with specified research funding, for example risk assessment of research activities, organisation of project meetings and documentation. Implementation of procedures required to ensure accurate and timely formal reporting.	5%
Key accountabilities/primary responsibilities	**% Time**
5. Carry out occasional undergraduate/MSc supervision, demonstrating within own area of expertise, under the direct guidance of a member of the group academic staff.	5%
6. Any other duties as allocated by the line manager following consultation with the post holder.	5%

Internal and external relationships
• Direct responsibility to holders of awards or academic supervisors. • May have additional reporting and liaison responsibilities to external bodies or sponsors. • Collaborators/colleagues in other work areas and institutions.

Special Requirements
• To be available to participate in fieldwork as required by the specified research projects. • To attend national and international conferences for the purpose of disseminating research results.

PERSON SPECIFICATION

Criteria	Essential	Desirable	How to be assessed
Qualifications, knowledge and experience	PhD or equivalent professional qualifications, renewable energy, carbon emissions, energy systems, or a demonstrably relevant subject. Experience in areas related to energy, energy efficiency, emissions and sustainability. Experience of cleaning, linking and analysing high spatial and temporal resolution energy supply and demand data. Strong data analysis skills including: • Experience of creating reproducible analytic processes/pipelines using R/Python or similar programmes. • Statistical analyses and use of GIS software. • Working with large datasets/linking data • Understanding of value of quantitative / qualitative - mixed methods approaches. • Experience of running/implementing field trials.	• PhD in areas related to energy and the built environment. • Experience of using R/ArcGIS or similar for spatial analysis. • Demonstrable expertise in the use of code versioning tools such as (GitHub/GitLab). • Familiarity/experience in spatial data analysis (specifically spatial microsimulation techniques) • Experience working with industry partners. • Experience of interaction with local authorities and industry. • Contribution to teaching and assessments of students' work. • Accreditation from ONS to access data in the Secure Research Service (SRS). • Driving license.	Qualifications, quality of application, CV, record of outputs, track record, interview, and references.

Planning and organising	Able to organise own research activities to deadline and quality standards. Able to manage simultaneous research projects to timely delivery.		Application, CV, interview, references.
Problem solving and initiative	Able to develop understanding of complex problems and apply in-depth knowledge to address them. Able to develop original techniques/methods and use initiative. Able to use data to inform decisions and produce concise reports and summaries for project investigators.		Application, past evidence, interview, references.
Management and teamwork	Able to supervise and assist the work of junior research staff, delegating effectively. Contribute to Division administrative processes. Work effectively in a team, understanding the strengths and weaknesses of others to help teamwork development.		CV, interview, references
Communicating and influencing	Communicate new and complex information effectively, both verbally and in writing, engaging the interest and enthusiasm of the target audience. Able to write up research results for publication in leading peer-viewed journals. Able to present research results at group meetings, workshops and conferences. Work proactively with colleagues in other work areas/institutions, contributing specialist knowledge to achieve outcomes.		Application, CV, track record, interview, references.
Other skills and behaviours	Understanding of relevant Health & Safety issues. Positive attitude to colleagues and students.		Interview.
Special requirements	Able to attend national and international conferences and meetings to present research results. Able to contribute to field work.		Past record, interview.

Is this an office-based post?

☒ Yes	If this post is an office-based job with routine office hazards (eg: use of VDU), no further information needs to be supplied. Do not complete the section below.
☐ No	If this post is not office-based or has some hazards other than routine office (eg: more than use of VDU) please complete the analysis below. Hiring managers are asked to complete this section as accurately as possible to ensure the safety of the post-holder.

- HR will send a full PEHQ to all applicants for this position. Please note, if full health clearance is required for a role, this will apply to all individuals, including existing members of staff.

ENVIRONMENTAL EXPOSURES	**Occasionally** (<30% of time)	**Frequently** (30-60% of time)	**Constantly** (> 60% of time)
Outside work			
Extremes of temperature (eg: fridge/ furnace)			
## Potential for exposure to body fluids			
## Noise (greater than 80 dba - 8 hrs twa)			
## Exposure to hazardous substances (eg: solvents, liquids, dust, fumes, biohazards). Specify below:			
Frequent hand washing			
Ionising radiation			
EQUIPMENT/TOOLS/MACHINES USED			
## Food handling			
## Driving university vehicles(eg: car/van/LGV/PCV)			
## Use of latex gloves (prohibited unless specific clinical necessity)			
## Vibrating tools (eg: strimmers, hammer drill, lawnmowers)			
PHYSICAL ABILITIES			
Load manual handling			
Repetitive crouching/kneeling/stooping			
Repetitive pulling/pushing			
Repetitive lifting			
Standing for prolonged periods			
Repetitive climbing (ie: steps, stools, ladders, stairs)			
Fine motor grips (eg: pipetting)			
Gross motor grips			
Repetitive reaching below shoulder height			
Repetitive reaching at shoulder height			
Repetitive reaching above shoulder height			

PSYCHOSOCIAL ISSUES			
Face to face contact with public	Yes		
Lone working	Yes		
## Shift work/night work/on call duties			