

Candidate Information

Position: Research Fellow
School/Department: School of Mechanical and Aerospace Engineering
Reference: 19/107113
Closing Date: Tuesday 5 February 2019
Salary: £33,199 per annum
Duration: Until 31 December 2019

JOB PURPOSE:

To be an active member of the sustainable packaging research project/team assisting in the development of research proposals and the planning and delivery of the research activity within a specified area so that the overall research objectives of the project/school are met.

MAJOR DUTIES:

1. Develop and plan an area of personal research and expertise, and/or undertake research under supervision within a specific research project or as a member of a research team.
2. Design, develop and refine experimental apparatus, field research or experiments in order to obtain reliable data.
3. Carry out analyses, critical evaluations, and interpretations using methodologies and other techniques appropriate to area of research.
4. Present regular progress reports on research to members of the research group or to external audiences to disseminate and publicise research findings.
5. Prepare, often in consultation with supervisor, material for publication in national and international journals and presentations at international conferences.
6. Assist grant holder in the preparation of funding proposals and applications to external bodies
7. Carry out routine administrative tasks associated with the research project/s to ensure that project/s are completed on time and within budget. These might include organisation of project meetings and documentation, financial control, risk assessment of research activities.
8. Carry out occasional undergraduate supervision, demonstrating or lecturing duties within the post holder's area of expertise and under the direct guidance of a member of academic staff.
9. Read academic papers, journals and textbooks to keep abreast of developments in own specialism and related disciplines.

Planning and Organising:

1. Plan for specific aspects of research programmes. Timescales range from 1-6 months in advance and contribute to research group planning.
2. Plan for the use of research resources, laboratories and workshops where appropriate.
3. Plan own day-to-day activity within framework of the agreed research programme.
4. Plan up to a year in advance to meet deadlines for journal publications and to prepare presentations and papers for conferences.
5. Coordinate and liaise with other members of the research group over work progress.

Resource Management Responsibilities:

1. Ensure research resources are used in an effective and efficient manner.
2. Provide guidance as required to support staff and any students who may be assisting with research.

Internal and External Relationships:

1. Liaise on a regular basis with colleagues and students.

2. Build internal contacts and participate in internal networks for the exchange of information and to form relationships for future collaboration.
3. Join external networks to share information and ideas.
4. Contribute to the School's outreach programme by establishing links with local community groups, industries etc.

ESSENTIAL CRITERIA:

1. Hold (or about to obtain) a PhD in a relevant area (Mechanical, civil, or agricultural engineering)
2. Three years relevant research experience in one of the following areas: data analysis, economic analysis, cost modelling
3. familiarity and sound knowledge of computer modelling, including life cycle analysis (LCA) and/or geographic information systems (GIS)
4. Publication or research record for stage of career including publications eligible for the UK Research Excellence Framework at higher quality levels.
5. Ability to contribute to broader management and administrative processes.
6. Contribute to general culture of the laboratory, particularly passing on skills to new members.
7. Sufficient breadth and depth of specialist knowledge in the discipline and of research methods and techniques to work within established research programmes.
8. Ability to communicate complex information clearly.
9. Ability to build contacts and participate in internal and external networks.
10. Demonstrable intellectual ability.
11. Ability to assess and organise resources.

DESIRABLE CRITERIA:

1. Experience with life cycle analysis (LCA), including energy balance, economic analysis and assessment of environmental impacts
2. Experience with geographic information systems (GIS) and its use for resource mapping
3. Knowledge of the agricultural sector, in particular waste production and management practices
4. Knowledge of polymer production manufacturing processes and materials use
5. Ability to work with industrial partners and other academic institutions as part of the project consortium