Candidate Information

Position:	Research Fellows
School/Department:	School of Chemistry and Chemical Engineering
Reference:	25/112472
Closing Date:	Monday 14 April 2025
Salary:	£39,922 - £47,631 per annum.
Anticipated Interview Date:	Friday 25 April 2025
Duration:	12 months

JOB PURPOSE:

To be a highly productive, ambitious and collaborative member of Sewage sludge gasification research project/team assisting in the development of research proposals and the planning and delivery of the research activity specifically related to the understanding of gasification process and the presence of pollutants through the gasification.

The posts are critical and as such, successful applicants will have responsibilities in independent research, supervision, planning, day to day lab management, collaborations, and outreach.

MAJOR DUTIES:

1. Undertake research under supervision within the sewage sludge gasification research team.
2. Design, develop and refine research using a range of experimental methods for pollutant analysis.
3. Carry out analyses, critical evaluations, and interpretations of experimental data and the literature using methodologies and other techniques appropriate to area of research.
4. Produce high quality research outputs consistent with project aims and commensurate with career stage. This will include collaborating and co-authoring with PI and project team (as appropriate) on outputs.
5. In consultation with the project team, promote research milestones and outputs at national and international conferences and through social media.
6. Assist grant holder in the preparation of funding proposals and applications to external bodies.
7. Carry out occasional educational supervision, demonstrating or lecturing duties within the post holder's area of expertise and under the direct guidance of a member of academic staff.
8. Undertake supplementary duties relevant to the success of the project including administrative duties and additional training and development activities as required.

ESSENTIAL CRITERIA:

1. Normally have or be about to obtain a *relevant PhD. (*Chemical Engineering, Environmental Engineering). NB: 'About to obtain' is normally defined as within 3 months of application date).
2. Specific, relevant* research experience to include:
   - Undertaking research in the area of pyrolysis, gasification, CO2 emissions reduction.
   - Undertaking external collaborations.
   - A proven track record of using various techniques to carry out materials analyses, critical evaluations, and interpretations of experimental data.
   - Working effectively as part of a research team in the development and promotion of the research theme.
   - Understanding SEM, TEM, XRD, XPS, in-situ DRIFTs analysis.
   - Have a strong track record of publishing more than 5 high-quality journal papers (as the 1st author).
3. Ability to contribute to broader management and administrative processes.
4. Contribute to the School's outreach programme by links with industry, community groups etc.
5. Practical problem solving skills, independence of thought and initiative.
6. Ability to assess and organise resources.

7. Ability to communicate complex information in English effectively in oral and written format.
8. Ability to build relationships to develop internal and external networks.
9. Commitment to continuous professional development.

DESIRABLE CRITERIA:

1. Successfully obtain research funding.
2. Collaborating with external partners through secondments.