

Candidate Information

Position: Lecturer in Net Zero Engineering **School/Department:** Chemistry and Chemical Engineering

Reference: 22/110075

Closing Date: Monday 22 August 2022
Salary: £37,467 - £51,799 per annum.
Anticipated Interview Date: Friday 9 September 2022

Duration: 2 years

JOB PURPOSE:

To enhance our research capacity and deliver world-class education to undergraduate and postgraduate students in modules such as net zero engineering, sustainable energy, e.g. renewables and hydrogen, or closely related subjects. The post holder will play a pivotal role in complementing the ongoing world class research, focused in the transition to a Net Zero economy. You will be involved in pioneering research, working with research leaders such as Prof. David Rooney and Prof. Peter Robertson on initiatives which have real life impact and represents a true academic and industry collaboration.

MAJOR DUTIES:

Teaching:

- 1. Utilise and develop a range of teaching methods in the design and delivery of teaching and assessment activities which enhance student employability and reflect industry skill requirements.
- 2. As module leader, co-ordinate with others (such as support staff or academic colleagues) to ensure student needs and expectations are met.
- Contribute to the development of innovative teaching programmes to enhance education within the subject, school and/or faculty.
- 4. Advocate for, and champion, research led teaching, reflecting emerging practices and techniques and equipping students for the future.
- 5. Manage all resources required to deliver a quality educational student experience and contribute the University's international reputation.

Research:

- 1. Conduct and develop research in areas of sustainability and net zero engineering, complementing ongoing research within the School.
- 2. Sustain a personal research plan by managing and undertaking activities leading to REF return in Chemical and Energy Engineering subjects.
- 3. Sustain a high-quality publication record by publishing in refereed journals and presenting at conferences to enhance the School's research profile.
- 4. Develop research proposals and funding bids in collaboration with others as appropriate.
- 5. Direct, coach and develop research staff, where appropriate.
- 6. Ensure that research projects are completed on time and within budget.
- 7. Contribute to the School's outreach strategy by developing networks of research excellence both nationally and internationally.

Administration/Contribution to the Community:

- 1. Be proactive in developing links with relevant industries and external bodies to encourage technology transfer opportunities and create opportunities for future research projects.
- 2. Provide pastoral care for students within own area to ensure, as far as practicable, that all relevant issues are dealt with in a timely, sympathetic, and effective manner.
- 3. Carry out designated School functions, including, for example, participation in committee work, assisting in the process of admissions, preparation of submission for teaching quality assessment or the REF.

4. Mentor colleagues and students to support their personal development.

ESSENTIAL CRITERIA:

- 1. Honours Degree or Equivalent in Chemical Engineering, Energy Engineering, or closely related Engineering or Science subject.
- 2. Relevant degree with a PhD completed in a relevant subject.
- 3. Demonstrate a minimum of 3 years postdoctoral research experience in relevant area.
- 4. Research interests relevant to the fields of chemical engineering, energy engineering, sustainable energy, net zero engineering, or related.
- 5. Research interests that are sustainable and which complement or enhance existing activities within the School.
- 6. Record of high quality, relevant, research publications commensurate with stage of career.
- 7. Evidence of potential to deliver high quality teaching in relevant engineering subjects at UG/PGT level.
- 8. Possesses sufficient breadth and depth of specialist knowledge to deliver UG/PGT teaching in the fields of chemical engineering, energy engineering, sustainable energy, net zero engineering, or related at undergraduate and or/postgraduate levels.
- 9. Contribution to a wider range of administrative tasks.
- 10. Contribution to a wider range of community/outreach activities.
- 11. Ability to negotiate contracts independently or as a leader of a section in major projects.
- 12. Ability to communicate complex information effectively.
- 13. Ability to manage resources and staff.

DESIRABLE CRITERIA:

- 1. Completed a Postgraduate Certificate in Higher Education Teaching (or equivalent) qualification.
- 2. Evidence of scholarly activity eg conference papers, external funding, book reviews.
- 3. Sustained teaching experience at University level having ability to design modules and assessment methods.
- 4. Evidence of good teaching evaluations.