

Candidate Information

Position:	Research Fellow - Sustainable Polymers
School/Department:	School of Mechanical and Aerospace Engineering
Reference:	22/110479
Closing Date:	Monday 16 January 2023
Salary:	£35,333 - £37,474 per annum
Anticipated Interview Date:	Monday 30 January 2022
Duration:	15 months

JOB PURPOSE:

To be a motivated, creative and productive researcher on the Project "Recyclable Elastomers from Renewable Source", assisting in the planning and delivery of the research activity for the project and the development of research proposals.

The post is a critical role, and as such, successful applicants will have responsibilities in independent research, supervision of junior researchers, planning, day-to-day lab management, and industrial engagement.

MAJOR DUTIES:

- 1. Undertake research under supervision within the research project and work as a member of PI's research team.
- 2. Design, synthesise and characterise a series of novel biobased elastomers.
- 3. Manufacture biobased elastomer products and evaluate their performance.
- 4. Carry out analyses, critical evaluations, and interpretations of experimental data and the literature using methodologies and techniques appropriate to the area of research.
- 5. Engage with industrial funder to help deliver research impact.
- 6. Produce IP documentation and high quality research publications, consistent with project aims.
- 7. Assist PI in the supervision of junior researchers in the research team including PhD, MSc and undergraduate students.
- 8. Assist PI in the day-to-day management of the laboratories.
- 9. Assist PI in the preparation of funding proposals and applications to external bodies.
- 10. Undertake supplementary duties relevant to the success of the project including administrative duties and additional training and development activities as required.
- 11. Undertake other duties as appropriate to the post.

ESSENTIAL CRITERIA:

- 1. Have or be about to obtain a PhD in Materials Science, Chemistry, or a relevant Engineering discipline.
- 2. At least 3 years' research experience in polymer science and engineering.
- 3. Laboratory experience of polymer synthesis and engineering applications.
- 4. Strong publication record in polymer science and engineering, commensurate with stage of career.
- 5. Knowledge of polymer science and engineering.
- 6. Laboratory skills of polymer synthesis, structural characterisation, and mechanical testing.
- 7. Excellent problem-solving and analytical skills.
- 8. Effective communication skills in oral and written format.
- 9. Ability to work under minimal supervision.
- 10. Willingness to learn new knowledge, research methods and skills as required.
- 11. Willingness to engage with industrial funder.
- 12. Willingness to work as part of a team.
- 13. Willingness to travel in line with project requirements

DESIRABLE CRITERIA:

- 1. Experience of polymer processing
- 2. Experience of working with elastomers