

## OXFORD SIGMA JOB DESCRIPTION

8<sup>th</sup> March 2024

Job title:	Nuclear Materials Engineer
Job location:	Oxford City Centre, UK
Hours:	Flexible, full-time (37.5 hours per week)
Salary:	Competitive
Dates:	May 2024
Reference:	OS-JA-NUCMATENG-01

## Company

**Our vision** is to tackle energy security and climate change by accelerating the commercialisation of fusion energy. **Our mission** is to deliver materials technology, materials solutions, and fusion design services in order to assist fusion delivery.

**About us:** We are a small, organically grown, company owned and operated by scientists and engineers, with our roots and headquarters in Oxford. We have established ourselves as a highly respected technical service supplier for the fusion energy market, within both the private and public sectors, nationally and internationally. We are equally a research and technology development company developing novel disruptive materials and design technologies to help in the required fundamental shift for the world's clean energy future.

## Role

We are expanding our technical team in technology development and strategic support. The role will require the candidate to:

- Develop strategies for materials application and engineering in fusion environments.
- Communicate technical challenges and solutions to all levels of stakeholder from executives through to junior engineers, including presentation at conferences.
- Provide materials expertise in their area of specialism.
- Simulate the effects of irradiation through neutronics, and co-ordinate irradiation campaigns.
- Provide technical leadership or project management for collaborative, internal and external projects.
- Maintain documentation on development activities, and decision points using conventional engineering management approaches.
- Build and support relationships with a network of subcontractors to enable engineering progression.

The role will require teamwork, and the ability to communicate complex challenges to a range of audiences. Materials engineering and reactor design are a grand challenge for the realisation of fusion power on the grid, you will be working on problems without obvious solutions requiring tenacity, and lateral approaches to solve. Some national and international travel will be required for the role.

## Qualifications & experience

Ideally, you will have some of these:

- A strong background in nuclear science and nuclear/materials engineering – with experience across materials design, processing and engineering.
- Be knowledgeable in materials irradiation, especially neutron damage, with the ability to analyse irradiation data.
- Neutronic simulation experience.
- A desire to find solutions using a combination of first-principles, general engineering and simulations.
- An ability to communicate technical concepts to technical non-specialists.
- Excellent verbal and written communication and presentation skills.
- Experience as a project technical lead in a multi-partner environment.

Maybe, you will have some of these:

- A PhD or professional experience specifically in nuclear and/or fusion materials.
- Technical project management experience.
- Experience managing, supporting, and developing junior engineers.
- Experience with strategic materials assessment.
- Start-up experience, a desire to build business, and strategise for the future.

## Eligibility

The candidate must have the right to work in the UK

## Our benefits

- 28 days annual leave
- Annual bonus up to 10%
- Flexible working around core hours
- Company pension scheme
- Cycle to Work scheme
- Company share options

## Additional Information

Underrepresented people are less likely to apply for engineering roles if they do not meet 100% of the job requirements. We are actively seeking these kinds of applicants and believe in hiring people not checklists. If you are interested but unsure if your experience aligns, please get in touch with Alasdair Morrison, the hiring manager, to discuss if this role or others we are developing may match you as a person.

## Apply

Submit your CV and cover letter (both PDF format) at [www.oxfordsigma.com/careers/](http://www.oxfordsigma.com/careers/)

The application deadline is **17:00 5 April 2024**.