

## Senior Nuclear Engineer (Fuel Handling)

### Position summary

The Senior Nuclear Engineer (Fuel Handling) will report to the Head of Engineering and work with a growing engineering team. The role will involve close collaboration with the Head of Safety Case and other discipline leads to develop a fully substantiated engineering design for the molten salt reactor (MSR) technologies MoltexFLEX is developing in the UK.

**Position:** Senior Nuclear Engineering

**Status:** Permanent, full time

**Location:** Birchwood, Warrington, UK

**Reports to:** Head of Engineering

**Apply:** Please submit a resume and cover letter to [careers@moltexenergy.com](mailto:careers@moltexenergy.com) and indicate the job title in the subject line.

This is an exciting opportunity to join an agile and multi-disciplined team, focused on developing technologies that can make a significant contribution to reducing global CO<sub>2</sub> emissions.

### Responsibilities

The Senior Nuclear Engineer (Fuel Handling) will contribute towards the engineering design and substantiation of the reactor systems, with particular focus on fuelling and re-fuelling processes for a first-of-a-kind MSR intended to be deployed by the end of the decade. The successful candidate will work with other technical leads to develop an optimum fuelling and re-fuelling process, and identify and undertake the engineering substantiation to facilitate progression through a staged design process. MoltexFLEX's novel approach of containing molten fuel salt in fuel pins will present new challenges for the candidate.

As the role develops, there will be scope to engage in other nuclear engineering tasks, such as detailed design of key core components. While the focus of this role is on mechanical and nuclear engineering, it will also require a good understanding of and contribution to other engineering and scientific disciplines.

The role will include:

- Developing fuelling, de-fuelling, re-fuelling and end-of-life processes
- Developing concept designs for fuelling systems
- Developing mechanical aspects of fuel pins
- Optioneering and selecting engineering solutions
- Selecting and implementing engineering design modelling and substantiation approaches
- Developing detailed designs
- Managing third-party engineering suppliers
- Presenting and substantiating the design to a variety of stakeholders, including regulatory bodies

### Qualifications & experience

- Higher degree in mechanical or nuclear engineering and relevant supporting industry experience
- A solid foundation in neutronics and reactor design
- Knowledge of fission reactor fuelling design and fuel handling
- Knowledge of safety case development and nuclear fuel cycle
- Chartered engineer status would be an asset



- Proficiency in the use of engineering design and modelling tools including CAD an asset

## Skills & personality

- A problem-solver who is driven to find simple solutions and not to over-complicate design and development work
- Excellent verbal and written communication and presentation skills
- Ability to collaborate with team members and reach consensus on a way forward

## What Moltex offers

Moltex offers the opportunity to provide nuclear engineering expertise within a diverse and growing team of engineering, safety case, and scientific professionals collectively working towards the delivery of a first-of-a-kind MSR. For those on board, it is going to be a challenging but rewarding journey.

Other benefits include:

- Learning and development resources
- Excellent growth opportunities
- 25 days annual leave
- 8 statutory holidays
- Company pension scheme with options
- Free, secure onsite parking
- Close to travel networks and within walking distance of Birchwood station

**Moltex is an equal opportunity employer.** Moltex prides itself in having a team that promotes diversity, inclusion, leadership, mindfulness, high initiative, energy, and passion.