

Reactor Physicist

Position summary

The Reactor Physicist will develop and maintain the nuclear physics models and simulations to design and substantiate the safe operation of the suite of stable salt reactors. The ideal candidate will report to the Lead Physicist and collaborate effectively with internal and external teams, including molten salt chemistry, engineering, materials science, and manufacturing.

Position: Reactor Physicist

Status: Permanent, full-time

Location: Birchwood, Warrington, UK

Reports to: Lead Physicist, UK

Apply: Please submit a resume and cover letter to careers@moltexenergy.com and indicate the job title in the subject line.

Responsibilities

- Develop and validate models and simulations, inclusive of steady state, transient, and design-based accident conditions
- Work with others to couple nuclear physics simulations to CFD simulations, to accurately model core performance
- Work with and building relationships with industry and academic experts to maximise input of existing knowledge and expertise into the nuclear physics models and simulation, and other R&D activities
- Present and substantiate nuclear physics to regulatory bodies and other stakeholders

Skills, qualifications & experience

- Higher degree in physics, including nuclear; PhD and/or industry experience an asset
- Knowledge of and experience in reactor physics modelling and simulation an asset
- Broad science and engineering appreciation, with the demonstrable ability to understand other disciplines and apply this to their design and development work
- Knowledge of neutron transport and Monte Carlo solvers an asset
- Knowledge of WIMS, PANTHER, MONK or SERPENT an asset
- A problem solver who is driven to find simple solutions and not over-complicate development and design work
- Ability to thrive in a rapidly changing environment
- Excellent team worker and effective communicator

What Moltex offers...

Located in Birchwood, Warrington, Moltex offers the opportunity for daily interaction with a diverse team of scientific and engineering professionals working in an agile project delivery environment. For those on board, it is going to be a challenging and 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.