

Neutron Delivery Systems Engineer for ESS beamlines

Embark on a groundbreaking journey with the European Spallation Source, a visionary project at the forefront of science and technology in Europe! Witness the marvels of the most powerful linear proton accelerator being built today, alongside a cutting-edge five-tonne, helium-cooled tungsten target wheel. Explore the future of scientific discovery with 15 state-of-the-art neutron beamlines, also known as "Neutron instruments". Join us in shaping the future of innovation and exploration at the European Spallation Source!

The Neutron Scattering Systems division (NSS), in collaboration with its European partners, is at the forefront of delivering cutting-edge neutron beamlines and pioneering key technologies to facilitate the scientific utilization of neutrons at our facility. With 15 neutron beamlines currently under construction at ESS and a total of 22 beamlines planned to complete our state-of-the-art instrument suite, we are dedicated to pushing the boundaries of engineering exploration.

The Technical Projects Group (TPG), a vital component of the NSS division, provides the engineering expertise that drive the construction of neutron beamlines at ESS and contribute to the design and development of specialized instrumentation components. From radiological shielding systems to neutron polarization capabilities, TPG plays a pivotal role in ensuring the integration of the most advanced neutron delivery technologies to our entire instrument suite.

About the role:

We are looking for an engineer with a passion for designing and constructing cutting-edge scientific instrumentation to join our dynamic international team of multidisciplinary engineers. As part of our team, your primary focus will be on supporting the design, construction, and integration of a diverse range of beamline components, including neutron guides, high-performance positioning systems, and large vacuum vessels.

Key responsibilities and tasks will encompass:

- Lead, on behalf of the TPG, the coordination of design and construction activities, at ESS, of Neutron Delivery Systems components.
- Participate to technical reviews as mechanical expert, supporting and advising instrument teams how to fulfil the technical and scientific requirements of the instruments.
- Provide design support to the beamline construction projects.
- Support the integration and installation effort of in house and in-kind projects in a leading or supporting role.
- Drafting and editing technical documentation such as technical specifications, design descriptions, installation and maintenance documentation.
- Management of procurement contract, coordinating external contractors and internal resources to facilitate and expedite systems integration.

The position is a full-time, 3-year fixed term position based in Lund, Sweden.

About you:

We attach great importance to personality and attitude, so we're looking for a real team player: Someone who is sociable, has excellent communication skills, who likes to collaborate with different people and who is committed to helping this amazing project to realise its full potential. We need a hands-on self-starter who can work in a structured, organized, responsible, and above all, safe manner.

Key requirements for this role include:

- Engineering master's degree in mechanics, mechatronics, or similar qualification.
- More than 5 years of proven experience in design and construction of complex mechanical systems or scientific instrumentation. Ideally for X-rays or neutron beamlines.
- Experience within one or more of the following technologies: Vacuum vessels, motorized high precision positioners and alignment devices for optical systems, is considered an asset.
- Demonstrated experience in mechanical design, in particular with Catia V6 or similar 3D Cad software, as well as familiarity with planning tools.
- Familiarity with drafting and reviewing mechanical drawings and technical documentation, possibly using ISO GPS standard.

As a person you have excellent problem-solving and analytical skills and are curious and open to new challenges. Fluency in written and spoken English is a requirement, as it is the working language at ESS. Knowledge of Swedish language is advantageous.

What can we offer?

Aside from the chance to work at a truly unique big science project, you can also expect:

- An opportunity to contribute to the future discoveries within neutron science.
- A stunning, brand new workplace filled with innovative minds and brilliant people from across the globe.
- A challenging, innovative and stimulating work environment.
- Market competitive compensation that is individual and differentiated according to role, responsibilities, individual skills, abilities and achievements.

- 30 days of annual leave, as well as more than 10 days of public holiday and company days off or days with limited working hours.
- Monthly pension contributions on top of your salary.
- Flexible working arrangements and a real work-life balance.

If you see yourself in what we're looking for, please provide your CV and motivation letter in English by clicking on "apply" and following the instructions. Please be aware that we can only accept direct applications made via the ESS website. The last day for receiving application is **June 26, 2024**.

Certain roles at ESS require health and safety checks and/or security clearance procedures, which will be performed as part of the recruitment process.

For more information regarding the ESS recruitment process, please contact Sara Tenggren – HR Generalist – at sara.tenggren@ess.eu. For further information regarding the position, please contact Giuseppe Aprigliano – Group leader for NSS Technical Projects – via giuseppe.aprigliano@ess.eu

For trade union information, please contact Unionen representative Mikael Johansson on Mikael.Johansson@ess.eu or SACO/Swedish Association of Graduate Engineers representative Marc Kickulies at marc.kickulies@ess.eu

We look forward to receiving your application soon!