



European Spallation Source will be a multi-disciplinary research centre, the global leader in its field. ESS will open new windows in a large array of scientific disciplines.

The ambition of ESS Scandinavia is that the ESS be built in Lund.

European Spallation Source (ESS) will, if realized, be the premier neutron source in the world and provide scientists with unique and powerful neutron scattering tools for studying the properties of materials and molecules – knowledge which is essential for growth in strategic areas such as nanotechnology, hardware for information technology, energy technology and life science and biotechnology. The scientific and technical case of the ESS has since 1993 been developed by the ESS-Council, an organization formed by 18 large laboratories in 11 European countries.



The CEA is the French Atomic Energy Commission (Commissariat à l'énergie atomique). It is a public body established in October 1945 by General de Gaulle. A leader in research, development and innovation, the CEA mission statement has two main objectives : To become the leading technological research organization in Europe and to ensure that the nuclear deterrent remains effective in the future. The CEA is active in three main fields : Energy, information and health technologies, and defense and national security. In each of these fields, the CEA maintains a cross-disciplinary culture of engineers and researchers, building on the synergies between fundamental and technological research.



LUND

UNIVERSITY Lund University, founded in 1666, is the biggest university in Scandinavia with education and research within technology, natural science, law, social science, economics, medicine, humanities, theology, art, music and performing arts. More than 39 000 students studies at the University that have approximately 5.500 employees, mainly in Lund, Malmö and Helsingborg.

The University is one of 12 universities within the “Öresund University” and cooperates with several hundreds of Universities around the world.

As a part of the ongoing cooperation between ESS Scandinavia, CEA and Lund University are we seeking qualified persons to the following positions:

Research fellow/engineer in proton front end studies for the ESS

Ref. No: PA 2009/857

Description:

This activity falls within the framework of studies on high-intensity linear accelerators at CEA. It specifically concerns the design of high-current proton front end. The work will involve theoretical studies, simulations using beam transport code.

The successful candidate will have a background in plasma physics. He or she will be required to become familiar with the design and operation of linear accelerators.

The work will form part of the preparatory activities for the realisation of the European Spallation Source.

Qualifications:

Engineering degree, or higher, physicist in plasmas. Previous experience on the use of simulation tools would be an advantage.

Research fellow/engineer in ECR ion source system studies for HPPA Ref. No: PA 2009/858

Description:

This activity falls within the framework of studies on high-intensity linear accelerators at CEA. It specifically concerns the design of high-current proton source used in the front end of such machine. The work will involve theoretical studies, simulations using beam transport code, magnet and extraction system design. A participation in the construction and testing of the prototype equipment is expected after the industry follow-up of the component realisation.

The successful candidate will have a background in plasma physics. He or she will be required to become familiar with the design and operation of linear accelerators.

The work will form part of the preparatory activities for the realisation of the European Spallation Source.

Qualifications:

Engineering degree, or higher, physicist in plasmas. Previous experience on the use of simulation tools would be an advantage.

The following applies to both positions:

Excellent oral and written English is essential; knowledge of French would be an advantage. Experience of working in a multi-cultural and multi-lingual environment in the framework of international collaborations is essential.

Selected candidates may be required to travel to locations other than Saclay and to carry out research assignments of varying duration in these locations.

All positions will be subject to a two-year contract, which may be extended.

The employer is the University of Lund.

During the first two years, the selected candidates will spend approximately 90% of their time at CEA and 10% in Lund, not including attendance at conferences, etc.

For further information please contact Mats Lindroos (mats.lindroos@esss.se) or Romuald Duperrier (romuald.duperrier@cea.fr).

Regarding practical issues around the employment please contact Jörgen Wiksten (jorgen.wiksten@esss.se)

The interviews will take place in Lund sometime between the 6th and 8th of April.

Information regarding ESS Scandinavia is available at our website: <http://www.esss.se>

Salaries are individual. You are welcome to state your salary demands in your application.

Gender balance is a strong issue at Lund University and we encourage both men and women to apply for this position.

Union representatives: SACO Anneli Carlsson, phone: +46 46 222 93 64, ST Rita Nilsson, phone: +46 46 222 93 62

Applications are to be addressed to Lund University, Box 117, 221 00 Lund, Sweden or by Email to: registrator@lu.se

The closing date for applications is March 27th 2009.

Please state the vacancy reference number (PA 2009/857 or PA 2009/858) on your application.