

## SwedNess II Call for Proposals for financing PhD-students

The Swedish Foundation for Strategic Research, SSF, has granted continuation of the ongoing National Graduate School in Neutron Scattering, SwedNess (Swedish Neutron Education for Science & Society). The grant, corresponding to MSEK 100, will finance another 20 PhD students. This call is open for applicants from Chalmers University of Technology, KTH Royal Institute of Technology, Linköping University, Lund University, Stockholm University and Uppsala University as main applicant, but co-applicants from Swedish industries and other universities and research institutes are valued.

SwedNess is aiming to meet the highest international scientific standards and the graduate students are trained to achieve a broad competence in neutron scattering-based research.

### Background

One of the biggest European research infrastructure projects is being realized in Sweden. According to plan, the European Spallation Source (ESS) will be, with the first 15 instruments, commissioned and brought in to operation in the period 2023 to 2025. This facility is a long-term investment, which will strengthen the European Research Area and will secure the world-leading position for European neutron scattering based science. Neutron scattering can be applied to a range of scientific questions, spanning the realms of physics, chemistry, geology, biology, and medicine. With the provided infra structure, the structure and dynamics of materials can be probed over a wide range of length- and time-scales.

### Scope

The aim of the neutron school SwedNess is to strengthen Sweden's long-term competence and competitiveness within the area of neutron scattering science and technology.

The graduate school is to

- create an educational structure for training a new generation of researchers and research leaders
- promote a vivid and strong research environment with added scientific value
- strengthen the recruitment basis and quality
- encourage national and international networks
- stimulate interdisciplinary research

within applied neutron science, neutron science diagnostics and corresponding fields that can make large advantages from state-of-the-art neutron scattering sources.

Examples of important research and training areas are:

- Instrumentation, and Software
- Hard and Soft Condensed Matter
- Life Sciences, and Life Science Technologies
- Chemistry and Materials for Energy
- Magnetic and Electronic Phenomena
- Engineering and Geosciences.

SwedNess is a Graduate School in close collaboration with Chalmers University of Technology, KTH Royal Institute of Technology, Linköping University, Lund University, Stockholm University and Uppsala University. Uppsala University is serving as the host and administrative organization with Professor Martin Sahlberg, as director. Each participating university is represented in a reference group.

SwedNess demonstrates connection to the international leaders of the field and include comprehensive use of existing state-of-the-art neutron scattering facilities. Each participating PhD student conducts research exchange with projects at existing state-of-the-art neutron sources around the world, including good Nordic and Baltic co-operation and interaction with industry for engineering and applications. In the mid-term evaluation of SwedNess, dated 2019-11-18, it is concluded that *“SwedNess is a unique and excellent effort for Sweden and Swedish neutron sciences. The projects and the PhD-students are generally of very high quality and will contribute to future Swedish sciences. The framework of SwedNess including good funding for courses and extended, international visits is highly appreciated, and it is strongly recommended to be continued.”*

### **Eligibility**

The main applicant must hold a faculty or tenure track position at Chalmers Institute of Technology, KTH Royal Institute of Technology, Linköping University, Lund University, Stockholm University or Uppsala University. Each researcher is allowed to submit one application as main applicant, and one as co-applicant or be part of two applications as co-applicant. The applicant and supervisors must be prepared to assume operative responsibility for the project during the entire grant period. At least one of the supervisors must have documented knowledge and experience of neutron scattering methods.

### **Application**

The application, written in English, shall include

- A project description where neutron scattering methods within the scope of SwedNess, are expected to contribute to the scientific results. (max 3 A4 pages, 11 pt Arial excluding references; additional pages will be not be considered)
- CVs, for main and co-applicants, including previous scientific achievements, international experience and network and supervision of PhD students (max 2 A4 pages per supervisor).
- An explanation of the strategic relevance of the project in relation to the scope of SwedNess and the applicant's university (max 1 A4 page)
- List of publications for the last 8 years for main and co-applicants.

### **Evaluation**

Applications will be assessed by an evaluation committee consisting of international external experts. Applications will be reviewed primarily on scientific excellence. Further criteria to be considered are geographic distribution and topical diversity and strategic relevance. It is a request that the supervisors shall be active in all parts of the project, including visits to neutron facilities and SwedNess activities. The final decision, made by the SwedNess board, will be announced in October 2020.

The application shall be sent by e-mail to [applications@swedness.se](mailto:applications@swedness.se) at the latest, May 15, 2020.

More information about SwedNess is found on <https://www.swedness.se/> and <https://strategiska.se/> .  
Contact person: Yvonne Brandt Andersson, tel: +46706598147, e-mail: [Yvonne.andersson@kemi.uu.se](mailto:Yvonne.andersson@kemi.uu.se)