

Seminar on neutron research centre in the Øresund region (European Spallation Source)

Friday the 29th of November 2002, BARSEBÄCKSOFFENSIV, THE ECOLOGICAL COUNCIL, FOLKKAMPANJEN MOT KÄRNVAPEN/KÄRNKRAFT and THE SWEDISH GREEN PARTY have organized a seminar on the plans for establishing a neutron research centre in Lund – the biggest in the world – also known as the European Spallation Source (ESS). The seminar takes place in **Islands Brygges Kulturhus**, Havneparken, Islands Brygge 18, 2300 København S between **10.00 and 16.00 hours**.

Programme

10.00 - Welcome

10.05 – A presentation of ESS SCANDINAVIA and the ESS research centre in Lund by Patrik Carlsson, ESS SCANDINAVIA.

10.40 – Safety issues related to the ESS research centre in Lund by Bo Wennergren from The Working Group against ESS in Lund.

11.15 – A presentation of the ESS project. Which research opportunities does ESS represent in a European and global perspective ? by Kurt Clausen. Kurt Clausen is an internationally recognized scientist from Risø National Laboratory in Denmark and responsible for the technical dimension of the ESS project at the European level.

12.00 - Lunch.

12.40 - ESS and its connection with reprocessing of spent nuclear fuel. How much is fundamental research and how much is purposive research in exploitation of nuclear power ? by Xavier Coeytaux, Research Associate from WISE-Paris.

13.20 – Research in partitioning and transmutation (P&T) of nuclear waste in Sweden by Prof. Waclaw Gudowski. Prof. Gudowski is an internationally recognized scientist from the Royal Institute of Technology in Stockholm and is considered one of the leaders in the Scandinavian transmutation research community.

14.15 - ESS, P&T and EU. What is the impact of ESS and P&T on EU's energy policy ? On EU-financed research ? by Yves Marignac, Assistant Director of WISE-Paris.

14.50 – EURATOM, reprocessing of spent nuclear fuel and EU's energy research policy by Inger Schörling, member of the European Parliament for the Swedish Green Party.

15.15-16.00 - Plenum discussion. An international panel consisting of scientists, politicians and representatives of the green NGOs will have the opportunity to discuss the topics in question. Questions from the audience.

The seminar language will be **English**. There will public admission to the seminar. The organizers of the seminar reserve their position on possible changes in the programme. There will be **FREE ADMISSION** for anybody who does not want lunch. If lunch is required 125 DKK will have to be paid to THE ECOLOGICAL COUNCIL, Landgreven 7, DK 1031 København K, tlf. + 45 33 15 09 77, fax + 45 33 15 09 71, E-MAIL info@ecocouncil.dk, no later than Tuesday the 26th of November. Payment: Giro no. 897-5051.

The background of the seminar

ESS SCANDINAVIA has applied ESS COUNCIL for hosting the world's largest neutron accelerator, *European Spallation Source (ESS)*. If the application is successful the accelerator will be situated in the Municipality of Lund in Skåne. ESS is the biggest research centre in the history of Scandinavia. The neutron accelerator is expected to be 30 times larger than any existing accelerator. At least 4500 scientists will be involved in the project. It will cost almost 2 billion EUR

administered by *The European Spallation Centre* and is expected to be partly financed by the EU, THE JOINT RESEARCH CENTRE and possibly by EURATOM.

The Danish Neutron Scattering Society, The University of Copenhagen, The Technical University of Denmark and The Royal Veterinary and Agricultural High School of Denmark are among the initiators of this project that has been marketed in Sweden and Denmark as only focusing on fundamental research.

The critics of the project claim that one of the main objectives of the ESS project could be research and development of accelerator transmutation of nuclear waste (ATW), thereby stopping or prolonging the global phasing out of nuclear power. Transmutation is changing long-lived nuclides into other nuclides through irradiation with neutrons. Partitioning is another word for reprocessing of spent nuclear fuel. ATW is a technological approach to a possible reduction in some of the hazards of permanent spent nuclear fuel disposal. It utilizes three "building blocks," (1) a linear accelerator capable of delivering a proton beam with megawatts of beam power, (2) a sub-critical nuclear assembly where the proton beam is converted by spallation reactions into an intense neutron flux, with which fissile isotopes and long-lived fission products are transmuted into short-lived radioisotopes or stable nuclei, and (3) a chemical process for treating nuclear waste to isolate long-lived radioisotopes and transuranics for initial or recycle irradiation. The reprocessing of spent nuclear fuel is the most polluting part of the exploitation of nuclear power – the nuclear reprocessing plants at Cap de la Hague in France and Sellafield in Great Britain give evidence to that. As before research in nuclear power will also in the future cover the main part of the economic resources that the EU invests in the research and development of energy sources. If the research centre is built in Lund, the Oerestad region could be the next global centre for nuclear research. In addition to this, the neutron accelerator has a risk level equalling a nuclear power plant in case of a worst case scenario (fire, terror attack, etc.). The target stations contain 30 t. of radioactive mercury that will have to be stored in a nuclear waste deposit for 3,000 years after the decommissioning of the research centre.

What is BARSEBÄCKSOFFENSIV, THE ECOLOGICAL COUNCIL, FOLKKAMPANJEN MOT KÄRNVAPEN/KÄRNKRAFT and THE SWEDISH GREEN PARTY ?

BARSEBÄCKSOFFENSIV was founded 1998 as a network connecting the German, Danish and Swedish anti-nuclear movement. The network has organised international demonstrations against the nuclear power plants in Barsebäck, Krümmel, Stade, Brockdorf and Brunsbüttel. For further information on BARSEBÄCKSOFFENSIV, see www.barseback.org

THE ECOLOGICAL COUNCIL is a Danish NGO which, partly supported by the Green Fund under the Danish Ministry of Environment and Energy, promotes global sustainable development. For further information on THE ECOLOGICAL COUNCIL, see www.ecocouncil.dk

FOLKKAMPANJEN MOT KÄRNVAPEN/KÄRNKRAFT (FMKK) is a politically independent association that wants to stop nuclear power production in favour of energy conservation and use of renewable energy sources; stop nuclear weapons production; stop the entire nuclear fuel chain from uranium exploration and mining to conversion, enrichment, fuel fabrication, use in reactors and finally reprocessing; as well as to stop the additional steps involved in military use of nuclear materials and bring human civilisation into harmony with the ecological system on which all life depends. For further information on FMKK, see www.folkkampanjen.se

THE SWEDISH GREEN PARTY deals with green issues. The political platform of the party is based on the following four pillars: Solidarity with animals, nature and the eco-system, solidarity with future generations, solidarity with all the people in the world and solidarity with the people in Sweden. The party has more than 7000 members, 16 national parliament members and 2 members of the European Parliament. For further information on THE SWEDISH GREEN PARTY, see www.mp.se