

**KTH, 31<sup>st</sup> August 2016**

# **Roadmap to ESS**

**Swedish Neutron Instrument Initiative**

On August 31<sup>st</sup>, 2016, a meeting was held at KTH concerning Swedish involvement in the neutron instrument developments at the upcoming European Spallation Source (ESS) in Lund. There were several aims of this meeting where we wanted to strongly encourage involvement from both KTH and other Swedish universities in the developments at the ESS:

1. Create new Swedish initiatives and collaborations for future instrument projects as well as VR applications.
2. Make specific action plans for a couple of selected initiatives (diffraction & engineering / BEER as well as surfaces & interfaces / GRAZE)
3. Make a survey and a report on which instruments involvements are currently present as well as intended by Swedish institutions

The program (see also next page) consisted of an introductory session by ESS and VR concerning the procedures and funding possibilities for neutron instrument involvement. This is followed by two directed sessions concerning two instrument developments that already have generated some initial activities from Swedish universities:

- The Diffraction & Engineering instrument BEER that is already under construction in Lund.
- The Grazing incidence Small-Angle Neutron Scattering (GiSANS) instrument GRAZE for science concerning surfaces & interfaces that recently has emerged as a broad Swedish initiative.

Finally a fourth session is planned where additional Swedish neutron instrument projects are presented. The three last sessions all have the same goals i.e. to inform about the initiatives, to acquire a broader support and to form a strong Swedish collaboration as well as concrete action plan for realisation.

The meeting met a large interest from a wide Swedish community and in total it collected close to 50 participants. A complete list of participants can be found below.

*A longer report from this meeting is currently being prepared and will be published on the webpage of the KTH Materials Platform within a near future. More detailed information and complete program can be found at the meeting's webpage: <http://www.snss.se/Swess/>*

## Roadmap to ESS

# Swedish Neutron Instrument Initiatives

KTH Royal Institute of Technology, Stockholm, Sweden – 31 August, 2016

## Final Schedule

Time	Topic	Speaker
<i>INTRO</i>		
09:30 – 09:45	<b>Welcome from SNSS &amp; KTH</b>	<b>Asst. Prof. Martin Månsson</b> SNSS Board / KTH neutron scattering
09:45 – 10:15	<b>ESS</b> Current Status and Instrumentation	<b>Prof. Andreas Schreyer</b> Director for Science European Spallation Source (ESS)
10:15 – 10:40	<b>VR Call for Instrumentation Development</b>	<b>Johan Holmberg &amp; Dr. Leif Eriksson</b> Swedish Research Council (VR)
10:40 – 11:00	<i>Coffee Break</i>	
<i>BEER</i>		
11:00 – 11:20	<b>Introduction to the BEER Instrument:</b> <i>Diffraction &amp; Engineering</i>	<b>Dr. Jochen Fenske</b> Project Leader BEER and Group Head of New Instrumentation for Neutron Scattering Helmholtz-Zentrum Geesthacht
11:20 – 11:40	<b>Sample Environment Initiative:</b> High-temperature furnace for the BEER deformation rig	<b>Assoc. Prof. Magnus Hörnqvist</b> Chalmers
11:40 – 12:00	<b>Sample Environment Initiative:</b> <i>In situ</i> mechanical testing environments	<b>Assoc. Prof. Fredrik Lundell</b> KTH Royal Institute of Technology Odqvist Lab. for Experimental Mechanics
12:00 – 12:30	<b>Roadmap to BEER: Open Discussion</b>	<i>et al.</i>
12:30 – 14:00	<i>Lunch @ Syster-O-Bror</i>	
<i>3 Neutron Instrument Initiatives/Projects with Swedish Interests</i>		
14:00 – 14:25	<b>ESPRESSO:</b> High-pressure diffraction	<b>Dr. Malcolm Guthrie</b> European Spallation Source (ESS)
14:25 – 14:50	<b>DREAM:</b> A Versatile Powder Diffractometer	<b>As. Prof. Germán Salazar-Alvarez</b> Stockholm University
14:50 – 15:15	<b>BIFROST:</b> A Prismatic Approach to Neutron Spectroscopy	<b>Dr. Rasmus Toft-Petersen</b> Technical University of Denmark (DTU) + ESS
15:15 – 15:40	<i>Coffee Break</i>	
<i>GRAZE</i>		
15:40 – 16:00	<b>Introduction to the GiSANS Technique:</b> <i>Surface and Interfaces</i>	<b>Dr. Hanna Wacklin</b> European Spallation Source (ESS)
16:00 – 16:25	<b>The GRAZE Initiative</b>	<b>Assoc. Prof. Daniel Söderberg</b> KTH Royal Institute of Technology
16:25 – 16:50	<b>The GRAZE VR Application</b>	<b>Prof. Adrian Rennie</b> Uppsala University
16:50 – 17:30	<b>Roadmap to GRAZE: Open Discussion</b>	<i>et al.</i>
17:30	<i>End of Meeting</i>	

**Venue:** KTH Royal Institute of Technology  
Lecture Room F3  
Lindstedtsvägen 26  
Stockholm, Sweden

**More Info:** <http://www.snss.se/Swess/>

Our Partners:



Swedish Neutron Scattering Society  
[www.snss.se](http://www.snss.se)

*List of Participants*

## **Swedish Neutron Instrument Initiative**

*KTH Royal Institute of Technology, Stockholm, Sweden – 31 August, 2016*

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