

Day 1 (Seminar room 'Tänkartanken' at ESS premises¹)

Morning slot 10:00 – 13:00		Afternoon slot 13:00-19:00	
1. Introduction (Chaired by Dmytro Orlov)	Lecture Slot I – Introduction to the large-scale facilities and access modes	3. The facilities on their capacities (Chaired by Markus Strobl)	Lecture Slot III – Neutrons based techniques for resolving challenges in Welding and Corrosion
	10:00 – 10:10 Anna Ponzio (Jernkontoret)		13:00-13:20 Jochen Fenske (HZG)
	Foreword on the platform, BIR2Gain project, and the workshop		The potential for welding and corrosion investigations on the materials engineering diffractometer BEER at ESS
	10:10– 10:30 Shane Kennedy (ESS ERIC)		13:20-13:40 Joe Kelleher (ISIS)
	Introduction to ESS and its capabilities		Engineering Diffraction and Industrial research at ISIS
10:30– 10:50 Magnus Larsson (MAX IV)	13:40-14:00 Robin Woracek (ESS)	4. Visit to ESS	Lecture Slot IV – Synchrotron (X-ray) based techniques for resolving challenges in Welding and Corrosion
Introduction of MAX IV and its capacities	Neutron Imaging & Diffraction		
10:50 - 11:00: Coffee Break	14:00-14:20 Joachim Schnadt (MAX IV / Lund University)		
Lecture Slot II – Industries on lab-scale analysis of welding and corrosion including the challenges they cannot resolve using these resources	Soft X-ray spectroscopy for resolving Corrosion-related challenges		
11:00 – 11:20 Mikael Grehk (Sandvik)	14:20-14:40 Ulrich Lienert (Perta III)		
How large-scale research facilities like ESS and MAX IV may help in understanding the microstructural and corrosion properties of welds in stainless steels?	14:40-15:00 Oliver Balmes (MAX IV)		15:00-15:10 Coffee break
11:20 – 11:40 Chris Knee (ESAB)	Opportunities for metallurgical studies at MAX IV		15:10-16:00 Round-table discussion I
Labscale studies of microstructural and residual stress effects in welds	15:00-15:10 Coffee break		Large scale facilities: access and techniques
11:40 – 12:00 Fredrik Lindberg (Swerea KIMAB)	15:10-16:00 Round-table discussion I		16:00 – 18:00 Tour I
Standard Practices for labscale corrosion studies	Large scale facilities: access and techniques		ESS construction site

12:00 - 13:00 Lunch

1) ESS HQ, Tunavägen 24, Lund

19:00 Workshop Dinner*

*See the back for details

Day II (Seminar room 'Max III' at MAX IV premises²)

Morning slot 09:00-13:00		Afternoon slot 13:00-16:00	
5. Academics on their expertise (Chaired by S. Hall)	Lecture Slot V – Academia on large-scale facilities related projects in collaborations with industry	7. Visit to MAX IV	13:00 – 13:55 Tour II
	09:00 – 09:20 Jens Birch (LU)		MAX IV synchrotron and its beamlines
	<i>In situ</i> and <i>in operando</i> high-energy X-ray characterization of hard protective tool coatings		
	09:20 – 09:40 Peter Hedström (KTH)		14:00 – 14:45 Round-table discussion II
	Phase transformations in steels studied by synchrotron X-rays and neutrons		Building a Swedish national platform facilitating the use of large-scale facilities for metallic materials
09:40 – 10:00 Magnus Colliander (Chalmers University)	14:45 – 15:00	8. Workshop wrap-up (Chaired by Dmytro Orlov)	General reflections on the workshop and Final remarks
Sample environment development for the engineering diffractometer at ESS – enabling in-situ mechanical testing at ultra-high temperatures	15:00 End of the workshop program		
10:00 – 10:20 Coffee break			
Open discussion I – “One-slide challenge” presented by an industry representative followed by open discussion driven by academic + large-scale facility experts;	15:00 – 16:00		
10:20 – 12:00	Scientists (and coffee) are available for peer-to-peer discussions		
8 challenges, contributed by registered participants			

12:00 - 13:00: Lunch

2) MAX VI, Fotongatan 2, Lund

16:00 Departure of participants