ESS/MAX IV Summit 2023 – Luleå, 21 september

The northern part of Sweden is experiencing a major development with new or transforming industries. Many traditional industries, like forestry, mining, and steel production, change their production technology to become climate neutral and try to find new ways of using raw materials. New industries are establishing and expanding their business. All to help make the Green Deal become a reality. In what way can research infrastructure and knowledge at the universities as well as MAX IV and ESS help create more sustainable products and processes for these industries? This is what we will talk about.

The moderator of the event is Maria Borelius. The ESS/MAX IV Summit will be held in English and broadcast live.

09:00 Welcome!

Darja Isaksson, Director General, Vinnova Katarina Bjelke, Director General, Swedish Research Council

09:15 US vs. EU, who will take the lead in the green revolution?

The European Union will, through A Green Deal Industrial Plan for the Net-Zero Age, support the green industry. This plan is encouraging European companies to keep their businesses in Europe and is partly a response to the US Inflation Reduction Act (IRA). What do these two initiatives mean for the competitiveness of European companies? **Pär Jonsén**, Chief Technology Officer, LKAB Reemap

09:45 How does Sweden contribute to European self-sufficiency?

The northern part of Sweden is home to several competitive companies within the green industry: building battery factories, developing fossil-free steel, extracting critical raw materials from what used to be waste, and developing sustainable energy and transport solutions using hydrogen. What are their motivations and ambitions? And how can Swedish universities and the world-leading facilities in Lund contribute to these efforts? **Mikael Nordlander**, Director Industry Decarbonisation, Vattenfall **Jesper Hedin**, Director Skill Supply, Svemin **Glenn Bark**, Director of LUMIA, Luleå University of Technology

10:30 Coffee break

10:45 Funding and skills – an opportunity or a challenge?

Funding is necessary. For ground-breaking research, for launching an innovative project, product, or service as well as to be able to scale up a business and thereby become competitive. So how can we attract new funding for investments in green technology? What spin-offs and innovations can we expect from the green transition in northern Sweden and how can we support them? Can Sweden re-skill, up-skill, and recruit the necessary competence?

Sara Mazur, Chair of the Board at WASP – Wallenberg AI, Autonomous Systems and Software Program

Victoria van Camp, Adjunct Professor of Machine Elements, Luleå University of Technology

11:30 Beamtime! How can the industry access advanced research infrastructure?

Advanced research infrastructure is a necessity both for academia and industry. Sweden is the proud host of two world-leading research facilities, ESS and MAX IV, but also has important research infrastructures at our universities, institutes, and private companies. This is where the initial questions are posed and answered. Commercial Analytical Research Organisations (CAROs) are private companies that are often crucial in helping, especially smaller companies, formulate research questions correctly and find the right tools to answer them, as well as help with the data analysis. How can we increase the number of CAROs and broaden the research areas in which they operate? And how do we ensure the Swedish universities' research infrastructures and MAX IV and ESS are put to their best use? **Martin Karlsson**, University Relationship Manager, Northvolt **Magnus Fredriksson**, Program Manager, Alfa Laval **Pär Weihed**, Pro Vice-Chancellor, Luleå University of Technology **Selma Maric**, Head of Implementation, SPIRIT

12:30 Lunch break including workshop

 \cdot What can politics, industry, universities, and facilities do to ensure that Sweden takes better advantage of ESS and MAX IV – even without new funding?

 \cdot What is needed to secure access to competence for both the facilities, the universities, and the industry?

 \cdot If you had 50 million SEK over five years to increase and broaden the use of ESS and MAX IV, what would you do?

14:00 Workshop summary and discussion

15:00 Coffee break

15:30 ESS & MAX IV - cornerstones in a Swedish hub for life and materials science and innovation

Ebba Busch, Minister for Energy, Business, and Industry (TBC)