

Korea-EU Horizon Europe Researchers Networking Forum on Energy & Advanced Mobility

Martin Karlsson

**Executive Director
Research Center for
Advanced Battery
Technology**

**Luleå university of
technology**

Battery production



1. Short Introduction of your Organization

FOR ALL PRESENTERS

Luleå university of Technology QS rank 397th 2025

Research from battery raw materials to battery in vehicles and electric grids

Investment from the Swedish government 2025-2028 – Building up a faculty in battery production, with focus on battery cell manufacturing



2. Expertise

FOR ALL PRESENTERS

IT/OT integration of large scale production facilities – arrowhead.eu

Technical language processing of production facilities

Automatic process control

Sensor technology (laser, x-ray, photonic, neuromorphic, ultrasonic)



3. Your Project Idea

FOR ALL PRESENTERS

Development of sustainable and design-to-cost batteries with (energy-)efficient manufacturing processes and based on advanced and safer materials

Main objectives:

- Dry or aqueous processing technologies
- Advanced electrode drying processes
- Improved cell formation processes
- Improved energy efficiency in dry rooms



4. Profile You are Seeking and Why

Looking for:

- Coating machine supplier
- Battery material or battery cell manufacturer with interest in LFMP or HLM



5. Contact Details

Martin.Karlsson@ltu.se

+46706945230