

E-mobility Day 2025

27 Aug – Mingle & Reception Dinner

18:00–18:30 MINGLE

18:30–21:30 DINNER

28 Aug – Morning Session

08:00–08:30 REGISTRATION

08:30–08:50 WELCOME

08:50–09:50 **Theme 4, Environment & Society**

SABRINA BRUNNER, VTI

EVÅLUTION – The development of electrification from a haulage perspective

MUDIT CHORDIA, CHALMERS

Life Cycle Assessment of Large-Scale Lithium-Ion Battery

Production and Recycling – Part 2

ANDERS NORDELÖF, CHALMERS AND VTI

Environmental burdens in co-production of rare earth elements for EV magnets

09:50–10:20 **Coffee + Posters**

10:20–11:20 **Theme 5, Vehicle–Grid Interaction**

YUKI KOBAYASHI, CHALMERS, AND THERESE LUNDBLAD, CHALMERS

Electric Vehicle Charging Strategies and Grid Management Interaction with the Electric Grid

EMANUELLA WALLIN, POLESTAR, AND ELENA MALAKHATKA, CHALMERS

V2G Service Blueprint co-design: Case study from Sweden

11:20–12:00 **Theme 2, Electric Drives & Charging**

PÄR INGELSTRÖM, RISE

Eddy current effects in electrical steel

YUJING LIU, CHALMERS

Design and control of brushless excitation for EESMs

12:00–13:25 Lunch + Posters

QIXUAN WANG, CHALMERS

Modelling of a PMSM accounting for 'position harmonics' and control in order to establish the possibility of reducing ripple and keeping highest possible efficiency

ARAM HALL, UPPSALA UNIVERSITY

Sodium-ion batteries for Automotive Applications

GUIOMAR HERNÁNDEZ, UPPSALA UNIVERSITY

Alternative PFAS free binders and electrolytes

TORSTEN WIK, CHALMERS

ML Assisted Ageing Prediction and Adaptive Modelling

15:15-16:15 Theme 1, Intelligent Vehicles & Systems

FATEMEH HASHEMNIYA, LINKÖPING UNIVERSITY

Intelligent Diagnostics for Dynamically Reconfigurable Battery Systems

BALÁZS ADAM KULCSÁR, FILIP RYDIN, ATTILA LISCHKA, CHALMERS

Robust learning methods for electric vehicle route

ÖIVIND ANDERSSON, LUND UNIVERSITY

Air System Modeling for Efficient FCEVs

16:15–16:30 SUMMARY