



The
High Temperature
Corrosion Center

HTC Conference 2025

Gothenburg August 26th - August 27th



HTC Conference 2025
26 - 27 August

World of Volvo, Göteborg



HTC Conference 2025

Gothenburg August 26th - 27th

Programme Conference

August 26th

09.30 Coffee and Registration

10.00 – 10.15

Opening and welcome

Jan-Erik Svensson & Jesper Liske

Session: CO₂ NEGATIVE AND NEUTRAL EMISSIONS - MORE EFFICIENT GENERATION OF HEAT AND POWER

Chairperson: Martin Rokka, Göteborg Energi

10.15 – 10.45

Transition to our future energy system – technologies and policies

Presentation by Filip Johnsson, Chalmers

10.45 – 11.15

Corrosion challenges in biofuel production

Presentation by Mikko Uusitalo, Valmet

11.15 – 11.35

The CHP- and waste plants of Vattenfall – Current challenges

Presentation by Tomas Leffler, Vattenfall

11.35 – 11.55

BECCS – Current experiences and future outlook

Presentation by Hans Larsson, Stockholm Exergi

Lunch 12.00-13.00

Session: CO₂ NEGATIVE AND NEUTRAL EMISSIONS - MORE EFFICIENT GENERATION OF HEAT AND POWER

Chairperson: *Johanna Nockert, Kanthal*

13.00 – 13.20

What are the waste fuels of tomorrow, and how will it affect boiler performance?

Presentation by Mikael Israelsson, EON

13.20 – 13.40

A novel approach to predict material lifetime: integrating oxide microstructure, boiler conditions and kinetic simulation.

Presentation by Hampus Lindmark, Chalmers

13.40 – 14.00

Corrosion field study of FeCrAl overlay welds on evaporator tube shields

Presentation by Alice Moya Núñez, RISE

14.00 - 14.10 Leg stretcher

14.10 – 14.35

Chemical-looping: unmixed combustion which enables efficient carbon capture and lower emissions and corrosion using waste fuels

Presentation by Tobias Mattison, Chalmers

14.35 – 14.55

Long-term laboratory corrosion studies for improved electrical output in a biomass/waste-fired CLC plant

Presentation by Hooman Karimi Abadeh, Chalmers

14.55 - 15.15

AI-driven corrosion analysis: enhancing microstructural characterisation of corrosion products.

Presentation by Jesper Liske, Chalmers

Coffee 15.15 - 15.45

Session: THE HYDROGEN SOCIETY AND ELECTRIFICATION

Chairperson: Lars-Gunnar Johansson, Chalmers

15.45 – 16.05

Comparison Study of Inconel 625 Corrosion in LiF and NaF under Oxidizing Conditions

Presentation by Aida Nikbaht, Chalmers

16.05 -16.25

Oxidation of Ferritic Stainless Steels: Lessons learnt from Ar-H₂/H₂O Exposures

Presentation by Thorbjørn Krogsgaard, Chalmers

16.30 Round tour of the World of Volvo

19.00 Dinner at the World of Volvo

Programme Conference

August 27th

Session: THE HYDROGEN SOCIETY AND ELECTRIFICATION

Chairperson: Niklas Norrby, Alleima

9.00 – 9.20

Volvo Energy transition

Presentation by Staffan Lundgren, Volvo Group

9.20 - 9.40

The Effect of Substrate Steel on Oxidation Behavior of Ce/Co-Coated SOFC Interconnects after Long-Term Furnace Exposures

Presentation by Shunyi Li, Alleima

9.40 - 10.00

Advanced materials in solid oxide stacks: Pathways to improved efficiency and lower production costs

Presentation by Jouni Puranen, Elcogen

10.00-10.20

Material challenges in H₂ applications

Presentation by Andrea Olivas, Swerim

10.20 – 10.40 Coffee

Session: THE HYDROGEN SOCIETY AND ELECTRIFICATION

Chairperson: Jan Froitzheim

10.40 – 11.00

Electrification, material challenges and lifetime predictions

Presentation by Thomas Helander, Kanthal

11.00 – 11.20

Overview and recent developments of Outokumpu's high temperature material portfolio – Materials, challenges and applications of interest.

Presentation by Paul Janiak, Outokumpu

11.20 – 11.40

Corrosion by nitridation at high temperatures in N₂/H₂- and NH₃- containing gases

Lars-Gunnar Johansson, Chalmers

11.40 End of Conference

Maria Dolores Paz Olausson, Jesper Liske & Jan-Erik Svensson

12.00 Lunch