



The
High Temperature
Corrosion Center

HTC Conference 2024

Gothenburg August 27th - August 28th



HTC Conference 2024

27 - 28 August

Chalmerska Huset, Göteborg



HTC Conference 2024

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Programme Conference

August 27th

09.30 Coffee and Registration

10.00 – 10.15

Opening and welcome

Jan-Erik Svensson & Jesper Liske

Session: THE HYDROGEN SOCIETY AND ELECTRIFICATION

Chairperson: Lars-Gunnar Johansson, Chalmers

10.15 – 10.40

Large scale Electrification and Industrial heating; Opportunities and Challenges

Presentation by Jesper Ejenstam, Kanthal

10.40 – 11.05

Alternative heating systems in the Cement industry

Presentation by Klas Andersson, Chalmers

11.05 - 11.30

Hydrogen in the Automotive industry, Opportunities and Challenges

Presentation by Niklas Israelsson, Volvo AB

11.30 - 11.55

Funding opportunities within Impact Innovation and European programs

Presentation by Rachel Pettersson, Jernkontoret

12.00 – 13.00 Lunch

Session: THE HYDROGEN SOCIETY AND ELECTRIFICATION

Chairperson: Tommy Sand, Alleima

13.00 - 13.25

Solid Oxide Fuel Cells and Solid Oxide Electrolysis Cells - Opportunities

Presentation by Subhasish Mukerjee, Ceres Power

13.25 – 13.45

Material development for Solid Oxide Fuel Cells and Solid Oxide Electrolysis Cells

Presentation by Niklas Norrby, Alleima

13.45 – 14.05

Solid Oxide Technology Landscape: Challenges and opportunities to make impact

Presentation by Tue Johannessen, Alfa laval

14.05 - 14.10 Leg stretcher

14.10 - 14.30

Cost efficient stainless steels for SOFC's and SOEC's

Presentation by Melissa Oum, Outokumpo

14.30 - 14.55

Use of hydrogen in high temperature processes

Presentation by Andrea Olivas, Swerim

14.55 - 15.20 Coffee

Session: THE HYDROGEN SOCIETY AND ELECTRIFICATION

Chairperson: Andrea Olivas, Swerim

15.20 - 15.45

Solid Oxide Fuel Cells and Solid Oxide Electrolysis Cells - Material challenges -
Laboratory research

Presentation by Matthieu Tomas, Chalmers

15.45 – 16.05

The Dual Atmosphere Effect, Effect of Hydrogen

Presentation by Anton Chyrkin, Chalmers

16.05 - 16.20

Hematite Formation on Iron at low pO_2

Presentation by Thorbjørn Krogsgaard, Chalmers

16.20 – 16.40

Ammonia as a Hydrogen Carrier, Material Challenges

Presentation by Lars-Gunnar Johansson, Chalmers

18.00 Dinner

August 28th

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

Chairperson: *Johanna Nockert, Kanthal*

09.00 - 09.20

The new CHP Plant using Biofuels at Rya KVV

Presentation by Martin Rokka, Göteborg Energi

09.20 - 09.40

Integrated solutions for CO₂ neutral/negative industry

Presentation by Vesna Barisic, Sumitomo SHI FW

09.40 - 10.00

Chemical-Looping Combustion – Recent Developments and Course of Direction

Presentation by Magnus Rydén, Chalmers

10.00 - 10.20

Addressing Potential Corrosion Challenges in Chemical Looping Combustion for Negative CO₂ Emissions

Presentation by Hampus Lindmark, Chalmers

Coffee 10.20 - 10.40

10.40 - 11.00

High Temperature Corrosion Predictions in Complex Environments – Utilizing Kinetic Modeling

Presentation by Torbjörn Jonsson, Chalmers

11.00 - 11.20

Effect of KCl on High Temperature Corrosion of Low-alloyed Steel under Low Oxygen Partial Pressure

Presentation by Rikard Norling, RISE

11.20 - 11.40

Understanding High Temperature Corrosion Behavior of Superheater Steels: Laboratory and Field exposures

Presentation by Vincent Ssenteza, Chalmers

11.40 - 12.00

End of Conference

Tommy Sand, Jesper Liske & Jan-Erik Svensson

12.00 Lunch