

The  
High Temperature  
Corrosion Center

# HTC Conference 2024

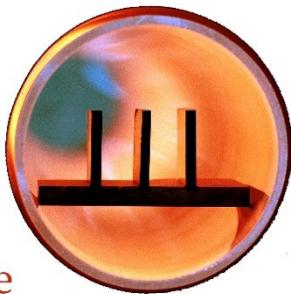
Gothenburg August 27<sup>th</sup> - August 28<sup>th</sup>



HTC Conference 2024

27 - 28 August

Chalmerska Huset, Göteborg



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# HTC Conference 2024

Gothenburg August 27<sup>th</sup> - 28<sup>th</sup>

## Programme Conference

**August 27<sup>th</sup>**

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 Melisssa 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  $p\text{O}_2$ *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 28<sup>th</sup>

### Session: CO<sub>2</sub> 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 CO<sub>2</sub> 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 CO<sub>2</sub> 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