

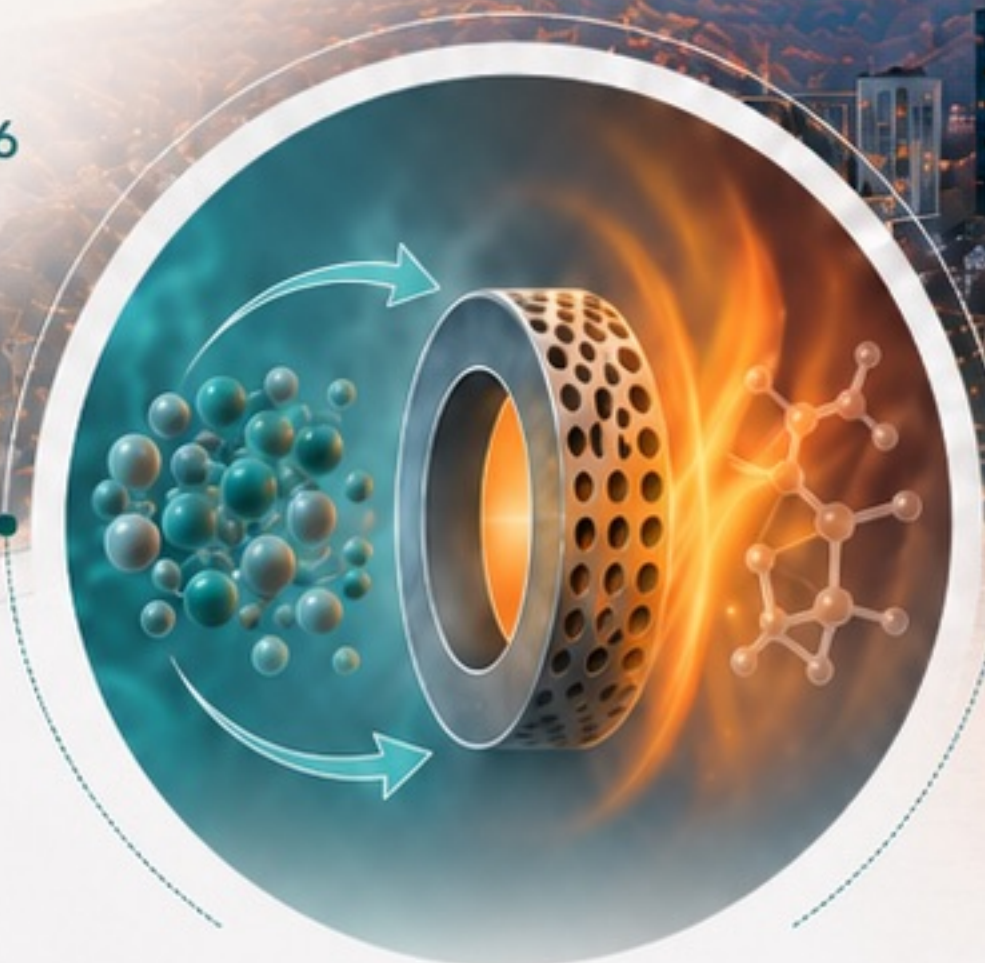
ACLOUD

Advancing chemical-looping
combustion of domestic fuels

Seminar



In connection with
HTC Conference 2026



KARLATORNET
GÖTEBORG

SAVE THE DATE

26 AUGUST 2026

13:00–17:00

GOTHENBURG, SWEDEN



Also available via Teams

The ACLOUD seminar brings together researchers, engineers and industry experts to discuss chemical-looping combustion, CO₂ capture, difficult fuels, corrosion-related challenges and opportunities to improve energy efficiency.

TOPICS WILL INCLUDE:



Chemical-looping
combustion



CO₂ capture
and CCUS



Difficult fuels, ash
and corrosion



Efficiency and
industrial
implementation

ACLOUD COORDINATOR & PARTNERS



CHALMERS
UNIVERSITY OF TECHNOLOGY



Åbo Akademi



Alleima

CheMin



Sumitomo
SHI/FW



SKÖVDE ENERGI



stockholm
exergi



TECHNISCHE
UNIVERSITÄT
DARMSTADT

ACLOUD Seminar

Programme

Advancing chemical-looping
combustion of domestic fuels



Date: 26 August 2026



Time: 13:00–17:00



Venue: Karlatornet, Göteborg



Format: On-site + Teams



The seminar can also be followed online via Teams.
Access details will be shared with registered participants.

13:00–13:15

Welcome and introduction
Speaker: Prof. Tobias Mattisson, Chalmers University of Technology

13:15–13:40

Chemical-Looping Combustion for cogeneration of heat, power and negative CO₂ emissions
Speaker: Prof. Magnus Rydén, Chalmers University of Technology

13:40–14:05

High temperature corrosion and related challenges in Chemical-Looping Combustion
Speaker: Hooman Karimi Abadeh, Chalmers University of Technology

14:05–14:30

Low- and medium-temperature corrosion caused by KOH in the Chemical-Looping air reactor
Speaker: Dr. Emil Vainio, Åbo Akademi University



14:30–14:50

Coffee break

14:50–15:15

Chemical-Looping Combustion as a pathway to higher electrical efficiency in Combined Heat and Power plants
Speaker: Emil Hed, RISE

15:15–15:40

Chemical-Looping Combustion pilot operation and online alkali measurements
Speaker: Dr. Xiaoyun Li, Chalmers University of Technology

15:40–16:05

Improved methods for analysis of chemical interactions between ash species and oxygen-carrying bed materials
Speaker: Tamar Manuel, Chalmers University of Technology

16:05–16:45

Panel discussion

16:45–17:00

Closing remarks
Speaker: Prof. Tobias Mattisson and Assoc. Prof. Jesper Liske, Chalmers University of Technology



About ACLOUD

ACLOUD is a CET Partnership project focused on advancing chemical-looping combustion as a route to cost-efficient CO₂ capture, improved performance with difficult fuels, and reduced corrosion-related challenges in energy systems.



Register here:

<https://www.htc.chalmers.se/acloud-seminar-2026-08-26/>

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