

EFCE Spotlight Talks

Working Party on
High Pressure Technology

7
November
2024

09:30-11:30
CET



High pressure technologies for a sustainable energy sector

High-pressure technologies offer special benefits in certain aspects connected to creating a sustainable energy sector. The webinar shows three examples ranging from large-scale industrial applications to emerging technologies. When talking about carbon dioxide, one of the first concerns is its role in climate change. The techniques presented in the webinar do not produce carbon dioxide, but they may use it or even create the possibility of negative emissions. Pressurized fluids are essential in utilizing heat sources and increasing energy efficiency. Carbon Capture and Storage (CCS) is a scaled process to collect and store the carbon dioxide produced during energy production or other industrial processes instead of releasing it to the atmosphere. CCS projects already in operation and close to commissioning will be presented, as well as emerging techniques to utilize carbon dioxide as a carbon source in the future.

PROGRAM

- 09:30 **Welcome and introduction**
Edit Székely, Budapest University of Technology and Economics - Hungary
Jarka Glassey, EFCE Executive Vice-President
- 09:40 **Super- and trans-critical power cycles – how to utilize heat sources for the generation of electric power by using supercritical fluids**
Attila R. Imre, Centre for Energy Research, Budapest Univ. of Tech. and Economics - Hungary
- 10:10 **CCS projects in the North Sea, from high pressure to low pressure**
Lars Erik Øi, University of Southeastern Norway, Porsgrunn - Norway
- 10:40 **Development of processes for the hydrothermal transformation of CO₂**
Maria Dolores Bermejo Roda, University of Valladolid - Spain
- 11:10 **Discussion and conclusion**
Edit Székely, Budapest University of Technology and Economics - Hungary

[REGISTRATION](#)

free of charge but mandatory

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