

# **HyFlexFuel Summer School:** *Hydrothermal liquefaction of biomass*

## **Date and Location**

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Date: from **October 14<sup>th</sup>, 2019, 09:00**  
to **October 16<sup>th</sup>, 2019, 17:00**

Location: **Aarhus University and Aalborg University**  
**Langelandsgade 140**  
**8000 Aarhus**  
**Denmark**

Hydrothermal liquefaction offers the opportunity to convert a broad range of biomass feedstocks into liquid transportation fuels. This three-day summer school provides an introduction to the entire process chain associated with hydrothermal liquefaction (HTL) of biomass. You will gain knowledge of the availability of different biomass feedstocks, their composition, and the analytical methods to characterize the products. The hydrothermal liquefaction process will be explained in detail with emphasis on the process variables that determine the bio-crude yields and product compositions. Tours of two pilot scale continuous reactors are included in the program.

You will obtain a thorough understanding of the composition of the complex product fractions along with knowledge of the different analytical techniques. The downstream processing, especially of the bio-crude and the aqueous phase, is important for the economy of hydrothermal liquefaction. You will learn about the potential fate of the aqueous phase, which may involve anaerobic digestion, catalytic hydrothermal gasification, and recovery of phosphate. The upgrading of bio-crude into renewable fuels will be covered in detail along with a visit to a state of the art continuous upgrading facility. You will gain knowledge of life cycle assessment and techno-economical assessment for scaling up biofuel technologies to commercial size. There will also be lectures by industrial partners engaged in the field of HTL.

Venue: The lectures 14th-15th October take place at Aarhus University (Department of Chemistry, Langelandsgade 140, Aarhus). On Wednesday 16th October participants will go on a bus tour to facilities at Department of Engineering (Foulum) and Aalborg University, Department of Mechanical Engineering, Aalborg (return to Aarhus in the late afternoon).

The HyFlexFuel project will cover lunches and coffee/tea during the meeting.  
All travel costs (except bus tour to Foulum and Aalborg) and other meals should be covered individually.

Please register for the event by clicking on the link below:  
<https://cmt.eurtd.com/events/event/view/236207/hyflexfuel-summer-school-hydrothermal-liquefaction-of-biomass>

Local organizers:

Patrick Biller, Konstantinos Anastasakis and Marianne Glasius, Aarhus University

Daniele Castello and Lasse Rosendahl, Aalborg University

The HyFlexFuel project [www.hyflexfuel.eu](http://www.hyflexfuel.eu)