

Task 34

Direct Thermochemical Liquefaction of Biomass

Task 34 Meeting May 23rd- 24th, 2022

(VTT Espoo/Finland, hybrid meeting)

Recognition of Meeting Participants

Alex Böhm	(AB)	Task Lead
Anja Oasmaa	(AO)	Senior Principal Scientist Thermochemical Conversion (Guest)
Axel Funke	(AF)	Task Lead/ NTL Germany (Minutes)
Ben Bronson	(BB)	NTL Canada (videocall)
Bert van de Beld	(BvB)	NTL The Netherlands
Christian Lindfors	(CL)	NTL Finland
Francois Collard	(FC)	representative for Kirk Torr/ NTL New Zealand (videocall)
Daniele castello	(DC)	representative for Lasse Rosendahl/ NTL Denmark
Meesala Lavanya	(ML)	representative for Pramod Kumar/ NTL India (videocall)
Mike Thorson	(MT)	NTL U.S.

Monday, May 23rd 2022

09:00-17:50h (CEST)

VTT Biorukki, Espoo/ Finland

Work package descriptions

Work package descriptions for the new triennium were discussed, approved and following comments / action items identified (discussion of WP 3.1 was moved to the afternoon):

- ML/ PK are fine with work package description 1.1
- MT will finalize update of WP 1.2
- DC will finalize timeline for 2.3 according to ITP timeline after the Kick-Off June 2nd, 2022; AF provides invitation to Kick-Off and latest version of proposal

Increasing Task 34 visibility

AF identified and explained the need to increase Task 34 visibility, primarily externally but also within IEA Bioenergy. First shortcoming discussed was the ability to design webinars/ conferences with suitable speakers. It was decided to establish a list with potential speakers (AF).

Also, visibility should be increased through Task 34 webinars. These will be planned based on country reports and/ or WP's 1.1-1.3. It was agreed that a certain degree of stakeholder management should be implemented. One first step will be the creation of an Email List that will be used to invite to Task 34 workshops/ webinars and inform of published reports. AB sends around a stakeholder list for review. Moreover, AB sends around PyNe subscribers from participating countries to NTL's for review/ update.

Lessons learnt from past triennium/ feedback session

AB presented results from a short online survey among task participants (slides are in the attachment). Most aspects like website, communication, data management and task lead were reviewed very positively. There were some useful comments for improving work package definition and management that AF/ AB will follow up.

Task meetings Triennium 2022-2024

The planned Task 34 meetings for this triennium are as follows:

Q3/4 2022 India (October/November 2022)

Fix agenda beginning of June (e.g. IH², workshop, Task 37 alignment)

Q1/2 2023 New Zealand (potentially switch with Canada depending on events/ seasons)

Q3/4 2023 Canada

Q1/2 2024 Netherlands

Q3/4 2024 U.S. (maybe switch with Netherlands depending on TCB conference)

Lab-Tour VTT

Christian Lindfors presented current activities at VTT relevant to the field of DTL. This was followed by a lab-tour of VTT Biorukki facilities (see Figures 1 and 2).



Figure 1: Task 34 at VTT Biorukki



Figure 2: Task 34 visiting VTT Biorukki laboratories

Discussion/ evaluation Round Robin continuation

There should be a focus on analyses relevant for co-processing of DTL oil in refineries; primarily oxygen (compare direct analysis and calculation by difference) and alkali metals (1-10 ppm, potentially compare extraction and wet digestion?). The samples should include HTL biocrude, upgraded FPBO and upgraded HTL biocrude (and state of the art FPBO as reference). It was also discussed that it is required to keep track on how sampling was conducted to be able to identify issues. This demands for large enough samples to allow for representative sampling.

Technical Notes

After a short discussion it was decided to write technical notes for the following two technical notes. AF will organize the writing and prepare a structure/ first draft with further contributors indicated in brackets below:

- Storage/ processing of FPBO (aging) (AF, BB, CL)
- Balancing in general (AF, LR, DC, MT, BB)

Other business

- AF pointed out some formalities regarding IEA Bioenergy publications (acknowledgment of IEA Bioenergy as funding source and authorship for contributions to joint reports)
- Article contributions for PyNe 51 were updated and briefly discussed
- The work package regarding Co-Processing of FPBO from last triennium (WP 3.1) will be finalized by writing a highlight article for the upcoming co-processing SI edited by Anja Oasmaa and Douglas Elliott (CL, AO)
- Check best practice examples on Task 44 website and provide feedback to Elina Mäki/ Task 44 lead. The plan for this triennium is to create a best practice example for DTL (BvB)



Tuesday, May 24th 2022

08:30h-14:00h (CEST)

VTT Otaniemi, Espoo/ Finland

A workshop was organized by CL that features stakeholders in Finland relevant for the field of DTL. A separate workshop report is available and attached to these minutes.