

Task 34

Direct Thermochemical Liquefaction of Biomass

Task 34 Meeting July 27th, 2023 (videoconference) 6:00-7:00h (CEST)

Recognition of Meeting Participants

| Alex Böhm | (AB) | Task Assistant |
|------------------|-------|----------------------------------|
| Axel Funke | (AF) | Task Lead/ NTL Germany (Minutes) |
| Bert van de Beld | (BvB) | NTL The Netherlands |
| Bhanu Prasad | (BP) | Alternate NTL India |
| Daniele Castello | (DC) | Alternate NTL Denmark |
| Devandra Singh | (DS) | WP 1.1 representative from HPCL |
| Francois Collard | (FC) | NTL New Zealand |
| Mike Thorson | (MT) | NTL U.S. |
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BP introduced himself and gave notification that the previous alternate NTL for India Lavanya Meesala has left HPCL and that he will now act as alternate NTL instead.

Update work packages

WP 1.1: (Pathways to) Transportation fuels from HTL and FPO (PK)

DS presented the current status of the report, currently the section about the fundamentals of FP and HTL technologies is being written. The section around reaction principles is already finalized.

Focus of the report will be on drop-in fuels transportation fuels. It will be important to align current publications in terms of fundamentals of FP and HTL; this relates to WP 1.1 and WP 1.2, but also to previous reports and the Task 34 website.

WP 1.2: Production of chemicals and materials from HTL and FP oil (MT)

MT sent around a first joined draft report. It was noted that some figures should be included; AF will review by end of July.

WP 1.3: DTL Oils for gasification (BvB)

A new, almost finalized version was created and uploaded. BvB will set up a poll to find schedule a meeting to discuss quality parameters of FPBO for gasification with KIT.

WP 2.2: DTL as BECCS/ BECCU technology (AF)

AF presented results from process simulations to evaluate fate of carbon in an FP process and the influence of char recovery on heat integration/ external supply. The results were briefly discussed and found that capture technologies are important to discuss alongside these results. The fundamental model assumptions will be optimized for a final version. DC will provide some information to include BECCS options for HTL in the final report.

WP 2.3: Hydrogen use for DTL product upgrading (LR/ DC)

No update; work will start after summer break.

WP 3.1: Round Robin (BB)

FC will not be able to provide catalytic fast pyrolysis oil due to limited availability.

WP 3.4: TEE of DTL biorefinery (AF)

No update.

WP 4.1: Website management (AB)

DC is almost done with the webpage about HTL reactors.

Other Business Next task meeting

MT will prepare a list of tentative speakers for Task 34 NTL's to review/ comment. AF and AB will prepare a draft agenda.

It was decided that the lab tour at REL will be organized together with the workshop participants.

There is one hotel within walking distance of the venue that might be suitable for booking the stay:

https://www.marriott.com/en-us/hotels/denwe-denver-marriott-west/overview/