



Summary Minutes

Task 34 Pyrolysis meeting - Chicago, USA September 3-4, 2013



*Doug Elliott,
Task 34
Leader gives
an update on
the task
meeting held
in conjunction
with
tcbiomass2013*

Task 34 members convened in Chicago, USA, on September 3-4, 2013 in conjunction with the *tcbiomass2013* conference on the science of thermochemical conversion of biomass.

Agenda of the Task 34 Meeting

Introductions:

Participating countries were represented by their national team leaders (Douglas Elliott, US; Dietrich Meier, Germany; Bert van der Beld, Netherlands; Anja Oasmaa, Finland; Tony Bridgwater, UK) except the Swedish National Team Leader (NTL) had not been confirmed yet. Also in attendance were observers Daniel Nowakowski from UK and Alan Zacher from US.

Country Reports:

Reports were presented by representatives from Germany, the Netherlands, Finland, UK and the US.

Review of the 2013-2015 Triennium Plan:

Activities proposed for the new triennium include:

1. Review of Bio-oil Applications;
2. Bio-oil Standards Development;
3. Round Robin for Analytical Method Validation;

4. Collaborative activities with other IEA Bioenergy Tasks, including:

- ⇒ Comparative TEA development with combustion and gasification tasks;
- ⇒ Input to LCA;
- ⇒ Input to biofuels demonstration database;
- ⇒ Lignin pyrolysis biorefinery development.

Bio-oil Applications:

Discussion followed on the Bio-oil applications topic and the structure found on the website. Input to the Heat and Power topic were collected and will be formatted for use on the website. Two other topics, Biofuels and Materials and Products were determined of value and input will be gathered and formatted for the website.

Norms and Standards:

- *CEN*—This standardization process is moving forward. The Working Group meeting included a vote on the Mandate for a standards development work element. The vote was insufficient to move forward and further input will be required to be convincing.

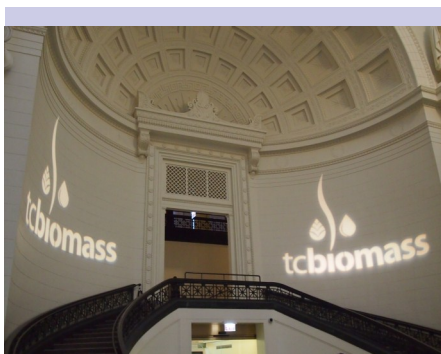
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- *REACH*—SIEF organization is proceeding with the industrial participants. The reports from the BioTox study had been provided to the group as a basis for defining properties of bio-oil. The registration process was nearly complete.

Round Robin:

The details for a round robin were discussed. The decision was made to go forward in 2014 with a round robin to examine the consistency of bio-oil production within the fast pyrolysis community. It was suggested that the US might be able to provide the feedstock in 2 or 3 standard forms. Participating labs will



The IEA Bioenergy Task 34 meeting was held alongside the tcbiomass2013 conference, where a poster was presented by the Task.

be identified in the participating countries. An invitation letter will be drafted and reviewed by the Task members before it is distributed to potential participants.

IEA Bioenergy Inter-Task Collaboration:

- *Task 32 Combustion*—Participants from the Netherlands and Finland had been attempting to establish communications with the Task 32 members to initiate a technical comparison of combustion of bio-oil relative to solid biomass combustion.
- *Task 33 Gasification*—KIT in Germany is involved in both ends of this comparison, both bio-oil gasification and solid biomass gasification, and will be able to provide a useful comparison. The topic will be further discussed at the upcoming workshop organized by Task 33.
- *Task 38 GHG*—Task 38 would be very willing to perform LCA on good technical process data provided by Task 34. US members will facilitate the needed data transfer as the material becomes available within the next year.
- *Task 39 Liquid Biofuels*—An IEA Bioenergy concerted effort will be discussed at the upcoming ExCo meeting in Korea in November. Task 34 would be willing to participate in such an effort and provide the data on pyrolysis systems.
- *Task 42 Biorefineries*—Both Germany and the Netherlands will follow up as they are interested to interact as a part of this European collaborative project.

Topics for Group Assignment:

- *Website Review*—Data related to utilization of the website were reviewed that suggested a high and broad level of interest in the task website. During group discussion, it was identified that a number of improvements and updates were needed. Input from each participant was solicited.
- *Newsletter*—Writing assignments were made for the next issue of the newsletter due out in December 2013.

Next meeting:

It was decided that it will be held May 15-16, 2014 in Birmingham, UK in conjunction with the Analytical and Applied Pyrolysis conference. Subsequent meetings are planned for Finland in October 2014 in order to visit the Fortum integrated bio-oil production facility and for Netherlands in 2015 to visit the Hengelo bio-oil production plant.

The meeting was then adjourned and the members attended the tcbiomass2013 conference. A poster was presented by the Task describing the activities over the past triennium (2010-2012) and plans for the new triennium (2013-2015). Anja Oasmaa made an oral presentation titled, "Stability of fast pyrolysis bio-oils and upgraded products."

Doug Elliott Task 34 Leader