

IEA Bioenergy

Task 34 - Pyrolysis



## Summary Minutes

Task 34 Pyrolysis meeting - Ottawa, Ontario, Canada  
April 17-19, 2012



*Doug Elliott,  
Task 34  
Leader reviews  
the recent  
Pyrolysis  
meeting held  
in Ottawa.*

Task 34 members convened in Ottawa, Ontario, Canada, on April 17-19, 2012. At the meeting the agenda included Country Reports and status of the state of the art journal publication as well as discussion of advances and needs for Norms and Standards.

### **Agenda of the TASK 34 Meeting**

#### *Introductions:*

Participating countries were represented by their team leads (Douglas Elliott, US; Anja Oasmaa, Finland; Dietrich Meier, Germany; Fernando Preto, Canada; Tony Bridgwater, U.K.; and Bert van der Beld, Netherlands) with additional presenters from Canada (Ed Hogan-NRCan and ExCo, Irene Coyle-IFIT, and Doug Bull-FP Innovations) and a

country observer from Canada (Stefan Mueller-Ensyn). The Netherlands is a new participating member in Task 34 for 2012.

#### *Country Reports:*

Presented by representatives from Canada, Finland, Germany, the Netherlands, UK, and US. In addition, presentations were made on their respective organizations by the representatives of NRCan, IFIT, and FP Innovations.

#### *Bio-oil Round Robin:*

The results of the bio-oil viscosity and aging round robin from the 16 participating laboratories were prepared into a manuscript, which has been submitted for journal

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# Summary Minutes...continued

publication. One laboratory has since withdrawn its participation and the revised manuscript is undergoing final review by the journal.

The results of the long term stability tests at PNNL and vTI were reviewed. These tests will be continued through the year. The results will be prepared into a journal article including the full year results from VTT and the 10-day replicates of the accelerated aging test undertaken earlier by PNNL and VTT.

## *State of the Art manuscript preparation:*

The input from the several countries was discussed. Final revisions and submissions are now needed to finalize the manuscript. These inputs are requested and agreed for delivery by the end of May.

## *Norms and Standards:*

ASTM -- reported that an expansion of the ASTM burner fuel standard, D7544, was balloted which will expand the standard to a second category of bio-oil that is higher quality (lower solids and ash). The balloting failed last December and a revised version is being circulated again for balloting in June.

CEN--There was discussion about future standards included in the draft mandate being considered by CEN. As written it includes the two grades of fuel oil described in the ASTM standard as well as internal combustion engine fuel, including turbine or diesel fuels, and bio-oil for gasification feedstock and bio-oil for petroleum refinery feedstock. This standardization process is moving forward and is expected to take 2 to 3 years to get to the approved standard.

MSDS – Further discussion was had on the several available MSDS documents and the need for their coordination. The Biotox results were reviewed and the results incorporated in journal manuscript describing Guidelines for Handling and Transportation of bio-oil. In Finland a revised MSDS is under development, which can be shared internationally when completed (and translated).

## *ExCo Developments:*

The interactions with IEA Bioenergy ExCo were reviewed including the presentation of the annual report, the proposal for prolongation, and participation in the End-of-

Triennium conference to be held in Vienna in November. The scope of work in the proposal was discussed and new inter-task collaborations were identified. The proposal will be presented by the task leader at the ExCo meeting in May in Istanbul. The Task agreed to lead a session at the conference and will bring in industrial speakers.

## *Topics for Group Assignment:*

SOTA – The paper based on the country reports remains under development. Final input is needed. This should be submitted for publication by the end of the year. Analysis and methods development -- The draft paper on the subject of bio-oil analytical methods for sulfur and nitrogen will be distributed to the participants. Analysis of sulfur, nitrogen and chlorine will be the subject of next triennium's round robin.

*Next meeting* – It was decided that it will be held on November 15-16, 2012, in Vienna, in conjunction with the IEA Bioenergy End of Triennium conference.

**Doug Elliott**  
**Task 34 Leader**

