

Tallinn Workshop Report

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The first international one-day workshop of the PHYDADES (Phyllis Database Dissemination, Education and Standardisation) project was held in Estonia at Tallinn University of Technology (Figure 1) on 24 April 2008.

The topic of the workshop was “Tools for solid biofuel trade – European standards and international database of fuel properties”.

The targeted audience was solid biofuel traders, producers, end users and laboratories carrying out fuel analysis.



Figure 1. Workshop location in Tallinn.

The scope and objectives of the workshop were to present the CEN methods for solid biofuels and the database of biomass fuel properties. As CEN pre-standards are now being upgraded to EN standards, market actors had the opportunity to give feedback on their content, as well as to hear about the use of these standards in solid biofuel trade. The new database helps to find analysed information on different types of solid biofuels.



Figure 2. Registration.

The workshop program started at 10:00 with registration and ended at about 17.00 with discussion.

Present at the workshop were 50 participants in addition to the project team: four persons came from Latvia, one person Finland, the rest were from Estonia. Out of the 50 participants 25 came from industry, others were from research institutions. In the frame of preliminary registration 67 people were listed (66 by e-mail and one by fax).

At the registration every participant's personal data was checked against signature and the workshop materials were handed out. Duration of registration and welcome coffee/cake was one hour (10:00–11:00).

The welcome speech on behalf of local organizers was made by the Head of the Thermal Engineering Department of Tallinn University of Technology, Prof. Aadu Paist (Figure 3).

The project coordinator Mr. Jan Pels from ECN welcomed the audience on behalf of PHYDADES project group.



Figure 3. Welcome by Prof. Aadu Paist.

The first presentation was from Mrs. Eija Alakangas from VTT (Figure 4), convener of the CEN fuel specification working group: “Fuel specification and classes and quality assurance – case pellets” (11:10–12:05).

Fixed and understandable rules for classification of biomass based fuels and their properties are important to all parties involved in biofuels’ production, trade and utilisation. Classification of biofuels and determination of properties according to European standards makes biofuel supply chains clearer and more trustworthy.



Figure 4. Presentation by Mrs. Alakangas.



Figure 5. Sampling presented by Mr. Hedman.

Next, Mr. Björn Hedman, SLU presented “Sampling: important for analysis of properties – experiences” (12:05–13:00).

Classification of biofuels is based on their properties, which are determined by different physical or chemical methods and analyses. Every analysis starts from the sampling – reliability of the result depends on sample reduction into an analysis sample and the corresponding preparation chain.

There were 45 minutes for the lunch break (coffee/tea and cake were served and there was possibility have lunch at the student cafeteria).

After the lunch break, Mr. Kuido Kuntro from Kalvi Mõis Ltd shared his experiences as biofuel producer with the audience (13:45–14:15). The topic was “Process and final product control at wood pellet factory”.

Mr. Kuntro’s presentation illustrated how the CEN standards work in real life – at pellet factory production, storage and supply chain. Production of high quality is achieved by the factory’s own laboratory process control, final product control and product certification at accredited testing laboratories.



Figure 6. Real life examples of CEN solid biofuel standards by Mr. Kuido Kuntro.



Figure 7. Presentation by Mr. Fritz Bakker.

Next, the presentation “Chemical analysis of solid biofuels – most important properties for combustion” was made by Mr. Fritz Bakker, from ECN (Figure 7), convenor of the CEN chemical analysis working group (14:15–15:10).

Chemical analyses related to biofuel properties, presentation and recalculation of the results to different bases are well regulated by CEN standards. Various techniques and methods are used for these analyses.



Figure 8. The project coordinator, Mr. Jan Pels presented the principles of the new BIODAT database.

The last presentation was dedicated to the demonstration of the new database, the BIODAT database of biomass fuels.

Mr. Jan Pels presented basic principles and the structure of the database. Mr. Fritz Bakker proceeded with the demonstration of actual online use of the established database (15:10–16:00).

The new database is planned to replace the existing Phyllis database, which has not been updated for several years now (<http://www.phyllis.nl>).

Main improvements are the introduction of analysis standards, more stringent and clear filtering rules, standardized biofuels classification system.

Most importantly, the existing biofuel database Phyllis needs upgrading due to the lack of reliability and background information of the data. Besides data on fuel and ash properties, the new BIODAT database will include additional information about available CEN standards, testing laboratories, normalisation institutions etc, as well as statistical and calculation tools for data processing and utilisation.

After the presentations there was open discussion and questions by the audience (Figure 10). Chairman was Mr. Jan Pels.



Figure 9. Discussion after the official program.



Figure 10. Workshop audience during discussion.

The main program was closed at 17:00. Discussions continued in small groups after the official program (Figure 9).

During the afternoon, participants also filled and returned feedback questionnaires in Estonian or in English after their choice (15 out of 50 returned). The audience expressed their appreciation of the presentations, especially Mr. Kuntro's presentation was mentioned in the feedback (Figure 11). It was found interesting and useful, clearly structured and well presented and easily understandable. It was good also because of different practical examples and the video about the pellet factory production process and quality control.

FLEX HEAT
woodpellets - natural fuel

What have the
CEN/TC 335 standards given us?

- Traceability
- Testing procedures
- Easier to trade and communicate
- Reliable quality control in production
- and confidence that customer requirements are fulfilled

Kuido Kuntro
Process and final product control at wood pellet factory

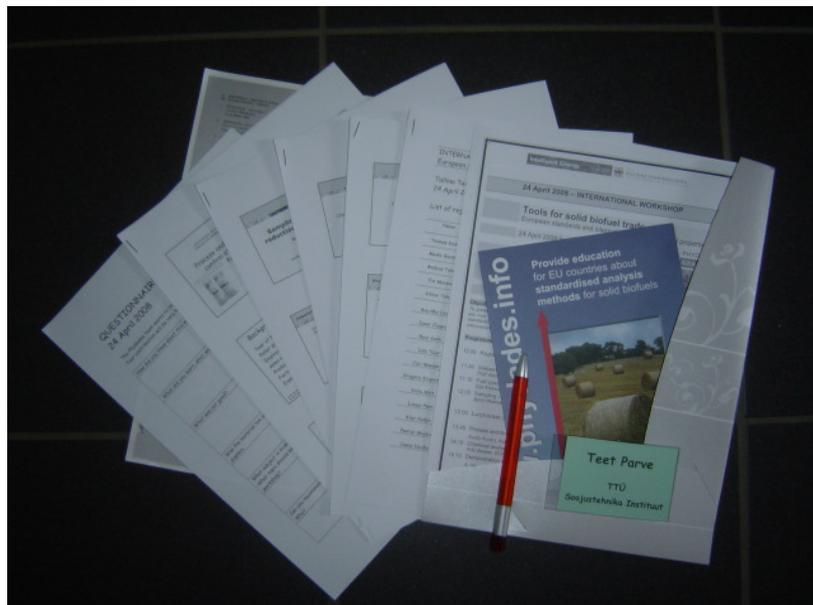
24 April 2008
Tallinn; Estonia

Figure 11. The presentation of Mr. Kuntro and Flex Heat received positive feedback.

APPENDIX 1

Workshop materials included:

- I. Flyer of workshop
- II. Flyer of on-job training
- III. Handouts of 4 PowerPoint presentations. Also available on the Phydades website.
- III. Feedback questionnaire
- IV. List of registered participants (name/company/contacts)
- V. Document holder and pen
- VI. Name plate



APPENDIX 2

Summary of the feedback questionnaire:

Totally 15 questionnaires were filled and returned, of these 7 were in English.

In most cases information about the Workshop came directly from the local organizers – TTU.

Nobody doubted about the usefulness of the Workshop, the Project itself and the related BIODAT database.

Most repliers said that English as the workshop language was OK, but in some cases presentations were too complicated and hard to follow.

Additional information requests included bio oil data, comparison of different standards (DIN, CEN, ISO), oil shale and shale oil.

Feedback answers reflected also great interest in the oncoming On-job trainings. In some cases the questionnaire answers revealed that the person is interested to participate in On-job training, but is very probably lacking experience in analyses.

Some people found that the audience of similar events could be much broader, e.g. including biofuel domestic users.

In most cases the feedback was positive.