

Seville Workshop Report

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Introduction

One of the PHYDADES (Phyllis Database Dissemination, Education and Standardisation) project international workshops was held in Seville at the Technical University on the 21st of November 2008. The event was organized by AICIA.

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. The objectives of the workshop were to present the CEN methods for solid biofuels and to present the Biodat database containing biofuel and biofuel ash properties. An important concern of the workshop was to create a forum to collect commentaries and concerns from stakeholders in the biomass field. A very important target was to spread the concern about the reliability as a key factor for the biomass market development. In this respect the BIODAT played a central role in the workshop. A further objective of the workshop was the presentation of a more detailed schedule and agenda of the on-job training to be celebrated in Seville in the last two weeks of January.



Figure 1. Workshop location in Seville

Dissemination

The dissemination phase started early in May when the preliminary agenda of the workshop, the leaflet of the on-job training as well as key information on Phydades project were distributed between companies, laboratories and universities in Spain. The selection of the potentials attendees was elaborated by AICIA using a database of previous partners and collaborators that AICIA has had in various national and international projects related with biomass and standardisation over the last years.

In September AICIA realised a second dissemination phase where a second mailing was made, this time by attaching a file including a registration form. This dissemination was completed by making an official announcement of the even in the Spanish Biomass

platform (BIOPLAT), the greatest net constituted in Spain for the diffusion and development of activities related with biomass (<http://www.bioplat.org/news>). Finally, further postal mailing to some of the most well known biomass producers in Andalucía was made by using the leaflets, brochures and postcards that were fabricated by ETA Florence during the first year of Phydades project.

During almost two months AICIA was receiving the registration forms from industrial producers, laboratories of fuel analysis, universities and research centres. Some people from the administration such as the Agencia Andaluza de la Energía (regional authority) also applied.

Programme, registration and material distributed



The workshop program started at 10:30 with registration and ended at about 17.30 with discussion. Annex 1 contains the agenda of the workshop.

About 40 people were present at the workshop and 12 of those came from industry, the remaining participants came from research institutions and regional government. In the frame of preliminary registration 55 people were listed.

At the registration the participants signed the list of participants and were provided with the workshop material.

Figure 1: Registration

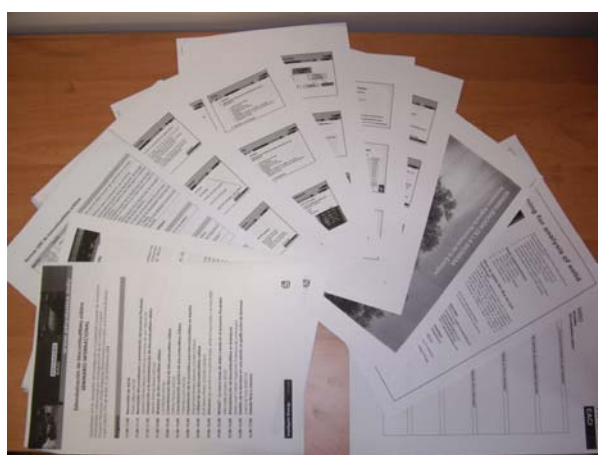


Figure 2: Workshop Material

The workshop material included the workshop program, a short summary of each presentation, a list of participants including contact information, hard copies of each presentation, on-job training flyer and a questionnaire for workshop evaluation.



Presentations

Mr. Pedro Ollero welcomed the participants on behalf of AICIA, the local organizer.

Mr. Alberto Gómez Barea from AICIA welcomed the participants on behalf of the project coordinator, Mr. Jan Pels, and introduced the PHYDADES project. A short summary of the project and its objectives were presented, as well as a preliminary program for the coming on-job training to be held in Seville in January 2009 (Figure 3).



Figure 3. Welcome by Mr. Alberto Gómez Barea.

Mr Luis Vilches performed a presentation regarding sampling and sample preparation. He presented CEN standards and explained about the importance of sampling and sample preparation.



Figure 4. Presentation by Mr. Vilches.



Figure 5. Physical and mechanical properties presented by Miss. Arroyo.

Next, Mrs. Fátima Arroyo spoke about physical and mechanical properties of solid biofuels.

The most important physical properties that affect the fuel quality were presented as well as the CEN standards for their determination.

Miss. Yolanda Luna presented chemical testing of solid biofuels. A summary of the different methods for chemical characterization of solid biofuels was made, as well as a description of each method and the corresponding CEN standards.



Figure 6. Chemical testing of solid biofuels by Miss Yolanda Luna.



Figure 7. Presentation by Mr. Fernández Llorente.

Next, Mr. Miguel Fernández Llorente from CEDER-CIEMAT spoke about the implementation of the CEN standards in Spain.

The importance of standards for the emerging biofuel market was pointed out and the on going process of standardization of solid biofuels was explained and the participants were provided with a future vision of biomass standardization on both European and national level.

Mrs. Ruth Barrero Piñeiro from CEDER-CIEMAT made a presentation about biofuel quality, explaining the importance of standardized quality parameters for the emerging biofuel market. Mrs. Barrero also explained biofuel classification and fuel quality assurance.



Mr. Alex Adell Arnuelos from ECN presented BIODAT, the new biofuel database.

The importance and benefits of the new database were explained.

Demonstrations of both Phyllis database, and the new BIODAT database were made, pointing out the improvements of the new database compared to the Phyllis database.



Mrs. Maria José Collinet from the Andalusian Energy Agency explained the actions carried out in the field of biomass standardization in Andalusia.

Mr. Juan Luis Cruz from INERCO Engineering (new development division) presented INERCO's biomass gasification plant and shared his working experience regarding biofuel supplies and the procedures adopted for quality assurance.

Discussion

The audience participated actively during the workshop, after each presentation, the participants asked lot of questions to the speakers and deep discussions took place. Even on the lunch discussion between participants went on.

Several key points were discussed during the presentation. Some of them are the following:

- How to guarantee the quality of the biomass and the impact of this on the final biomass cost
- Prices of equipments for various of the key analysis such as the heating value and moisture
- Shortcut methods for controlling by analysis some key parameters during the biomass reception in industrial installations
- The problem of the transportation of the biomass and the change of quality during the delivery
- The differences between the planned and actual deathline for the upgrading of TS to EN standard for solid biofuels
- The certification of laboratories with the new solid biofuels standards
- A variety of technical details of some of the standards, specially those related with physical, chemical properties and also on sampling preparation
- How to include the ash properties in the database (for instance, what if the ash comes from a boiler and there is not sufficient information about the boiler design, type and operation)

Feedback and questionnaires

At the end of the workshop the questionnaires with feedback from the participants were collected. The total number of questionnaires was 20 (the final discussion was longer than planned and some people left the conference room without filling the questionnaire). The feedback was generally good, all the participants considered the contents and level of the presentations to be very adequate and they considered a biomass database to be a very useful tool. Some participants suggested other topics that were not included in the scope of the Workshop such as solid recovered fuels, boiler specifications and analysis equipment costs and where to buy them. The suggestions



given for the BIODAT database were for example: to include prices and biofuel suppliers, to include data on wastes and residues.

ANNEX 1:
WORKSHOP, 21st November 2008
AICIA

ETSI, Avda descubrimientos s.n., Isla de la Cartuja, Sevilla, Spain

11:00-11:05 Welcome by AICIA

Pedro Ollero (AICIA)

11:05-11:15 Welcome of PHYDADES project coordinator and introduction to Phydades Action

Alberto Góme-Barea (AICIA) on behalf of Jan Pels (project coordinator)

11:15-11:30 Introduction to Standards

Alberto Góme-Barea (AICIA)

11:30-12:00 Sampling

Luis Vilches (AICIA)

12:00-12:30 Physical characterization

Fátima Arroyo (AICIA)

12:30-13:00 Chemical characterization

Yolanda Luna (AICIA)

13:00-13:30 Implantation of standards in Spain

Miguel Fernández Llorente (CEDER-CIEMAT)

13:30-14:00 Quality of solid biofuels

Ruth Barro Piñeiro (CEDER-CIEMAT)

14:00-15:00 Lunch (Free buffet given by AICIA)

15:00-15:30 PHYDADES and the new Database “BioDat”

Alex Adell Arnuelos (ECN)

15:30-16:00 Standardization of solid biofuels in Andalusia

Maria José Collinet (Agencia Andaluza de La Energía)

16:00-16:30 Use and management of biomass in a semi-commercial fluidised bed biomass gasification plant

Juam Luís Cruz (Inerco)

16:30-17:00 Discussion and closing the workshop