

Research Lab

at:metabolon

on Organic-waste Exploitation

26 - 28 October 2016 :metabolon

Leppe Waste Disposal Centre Lindlar-Remshagen, Germany



Take this opportunity to work at pilot plant installations and gain valuable hands-on experiences with key technologies.

Within the project "BioEnergyTrain" :metabolon now offers the first Pilot Plant Course – Research Lab on Organic-waste exploitation in October 2016. The course is directed at students with an engineering background from all over Europe.

The Pilot Plant Course aims to gain hands-on experiences in the operation of real-world installations. Special focus is given on experimental lab work, group work and discussions.

The pilot-scale plants on site are:

- Biogas pilot plant;
- Leachate and Process Water pilot plant;
- Pellet and wood chip furnace.

The experiments at the installations will be carried out in small groups under the supervision of academic instructors.



Research concept of :metabolon

The research at :metabolon focuses on the use or reuse of residues from different industrial sectors for the production of valuable end products. Different methods of pretreatment are tested and evaluated in combination with the following utilization processes, such as combustion, gasification or hydrothermal carbonization.

The valuable end products vary depending on the previous processes and range from electricity and heat over coke products to secondary raw materials.

Course Content

There will be various experiments at three pilot-scale plants as well as laboratory analysis and evaluation.

<u>Biogas pilot plant:</u> introduction to standard measurements, analysing digester and substrate samples for different parameters, evaluating the results and identifying the link between parameters and the substrate feeding.

<u>Leachate water treatment:</u> familiarizing with the data aquisition system, working on the processing, visualization and storage of data.

<u>Combustion plant:</u> testing fuels using mixed pellets of different composition and find alternatives for the use of conventional wood pellets and wood chips.

Academic recognition: 3 ECTS, please contact the examination office at your University.

Expenses for the Course

Board and lodging in Lindlar (arrival 26th October, departure 28th October) will be organised for the participants and will cost approx. 150 EUR.

Costs and organisation of arrival and departure is in the responsibility of the participants.

Course material will be provided on site.

Special prices for students who not require lodging are available.

Application procedure

Fill in and submit your online application on eseia ETP website. Register now!

Application Deadline: 28 September 2016

For more information:

<u>www.eseia.eu</u> / <u>www.etp.eseia.eu</u> www.metabolon.de/metabolon

The European Sustainable Energy Innovation Alliance c/o TU Graz Mandellstraße 11/II 8010 Graz, Austria office@eseia.eu



