



# International Biogas Operating and Engineering Course

Stuttgart, Germany – September 12 – 16, 2016



## Course Information

This 5-day intensive biogas training is designed to provide plant operators, decision makers and investors with profound specific operating and engineering knowledge. The course will be conducted in **English**.



The focus of this training course is to combine practical experience with theoretical and scientific knowledge. IBBK Fachgruppe Biogas and the University of Hohenheim are the organisers and conductors of this in depth training course. This ensures, that participants have the full benefit of substantial and long term practical and theoretical experiences, which senior experts within the German Biogas Industry are providing.

## General program topics (Program is subject to change)

- Current situation and prospects in Germany and Europe
- Choosing the right substrates
- Pretreatment and prestorage technology
- Experiences with bio-/food waste plants
- Start up phase and practical measures
- Process control and optimisation
- How to digest high fibrous and N-rich feedstocks
- Process requirements for the mono-digestion of chicken manure
- Measurement and data recording for the enhancement of the biogas process
- Safety features of biogas plants and equipment
- Ecological manure management
- Interactive group and laboratory session
- Decision criteria for a biogas plant
- Introduction into plant technology
- Cogeneration to heat and power
- Introduction into design, planning and process engineering
- Field trip to an agricultural biogas plant with practical exercises

## Conditions of participation

After receiving your signed registration, we will send you the confirmation and bill by e-mail. Registration is legally binding. **Written cancellations are possible until August 26<sup>th</sup>, 2016** for an administration charge of 250 € (plus 19% VAT). After **August 26<sup>th</sup>, 2016** cancellations are billed in full. In case of cancellations we gladly accept a substitute participant. Participants will be debited with incurred bank charges. If not enough participants register the organizer reserves the right to cancel the training course. If the organizer cancels the training course the full participation fee will be refunded, but no other costs which may have occurred can be claimed. The participants look after their own insurance requirements. The organizer is not liable to personal injuries, lost property or any other personal damage, which might have occurred in connection with any of our events.

## Course fee per person

The price for the operating and engineering course is **1390 Euro** (plus 19 % VAT).

### Included are

- Seminar CD
- Beverages during the course
- Lunch with one beverage per day
- Excursion and entrance fees

### Not included are

- Travel to and from Stuttgart
- Accommodation
- Further meals and beverages

*The Operating and Engineering Course can be booked together with the International Biogas Study Tour, which takes place in the following week from September 19-22 2016. Special rate for booking both events: 2290 Euro (plus 19 % VAT)*

## Registration form-please provide billing address

Biogas Operating and Engineering Course, September 12-16, 2016

Family name

First name

Company/ Institution

ZIP-code

City

Country

Street/No

Fon

Fax

E-mail

www

Date

Signature\*

\* With my signature I agree: 1) that my email address will be published in the participants list (only available for participants, speakers and visited plant operators) and 2) that the photos, videos and audio recordings made during the course can be used to advertise upcoming events.

## Please send your registration

by Fax to:

**+49 - (0)7954-926204**

or E-mail to:

**t.gruzkos@biogas-zentrum.de**

IBBK Fachgruppe Biogas GmbH \* Am Feuersee 6 \* 74592 Kirchberg \* Germany

# International Biogas Study Tour on various substrates and AD-plant concepts

September 19-22, 2016



## Tour information

IBBK Fachgruppe Biogas offers a 4-day study tour starting in Stuttgart and ending in Stuttgart. The tour will lead you to several plant operators and biogas companies in Germany. The participants of the tour will get in contact with planners of biogas plants, components manufacturers and biogas plant operators as well as biogas plants with new or ground-breaking concepts or technology in Germany.



## The tour will cover the following topics: (program is subject to change)

- Visit of a 700 kW BIOGAS plant with an upgrading unit, cleaning and purifying the raw BIOGAS into CNG-quality natural gas which is sold at the gas station on site.
- Visit of a BIOGAS plant with gas upgrading and injection. Of the production of around 1,200 m<sup>3</sup>/h, around 650 m<sup>3</sup>/h are injected into the local gas grid.
- Visit of a German based gas engine manufacturer
- Visit of a BIOGAS plant which is digesting all collected biowaste of the Lake Constance region; Production of 4 Mio kWh/a electricity
- Visit of a biogas plant digesting 18,000 t/a of biowaste in its vertical fermenter, providing 1,800 households with electricity. This plant was built by OWS Dranco
- Visit of a sewage treatment plant with a co-fermentation unit processing sewage liquids of 40,000 inhabitants. BIOGAS production of 5,500 m<sup>3</sup>/d, ~4 engines with 500 kW total.
- Visit of the Central Agricultural Fair in Munich, parallel to Oktoberfest
- Visit of a 540 kW garage type plant with a yearly input of 17,100 t. Dry/liquid separation, 6,000 t/a of solid digestate is used as fertilizer.
- Visit of a 900 kW plant digesting 16,000 t/a of food waste, supermarket waste and expired food. This plant was built by FARMATIC.

The Biogas Study Tour will be conducted in English//German and includes sightseeing and cultural aspects.

## Terms and conditions

After receiving your written registration, we will send you the confirmation and bill by e-mail. Registration is legally binding. **Written cancellations are possible until April 1<sup>st</sup>, 2016** for an administration charge of 250 € (plus 19 % VAT). After **September 2<sup>nd</sup>, 2016** cancellations are billed in full. In case of cancellations we gladly accept a substitute participant. Participants will be debited with incurred bank charges. The number of participants is limited, therefore a timely registration is recommended. If not enough participants register the organiser reserves the right to cancel the study tour. If the organiser cancels the tour the full participation fee will be refunded, but no other costs which may have occurred can be claimed. The participants look after their own insurance requirements. The organizer is not liable to personal injuries, lost property or any other personal damage, which might have occurred in connection with any of our events.

## Study Tour fee per person

The complete package price for the study tour is **1340 Euro** (plus 19 % VAT).

### Included are

- Tour documentation
- Travel by coach
- 3 standard accommodation (double rooms)
- Breakfast and one meal with one beverage per day
- Excursion and entrance fees

### Not included are

- Travel to/from Germany
- Further meals and beverages

**The Study Tour can be booked together with the International AD course which will be held on September 12-16, 2016. Special rate for booking both events: 2290 Euro (plus 19 % VAT)**

## Registration form – please provide billing address

Biogas Study Tour, September 19-22, 2016

please check:  double room →  female  single room  
→  male (extra charge: 120€ + 19 %VAT)

.....  
Family name First name  
.....  
Company/ Institution  
.....  
VAT Reg.-No. (only required for European companies to issue invoices without VAT)  
.....  
ZIP-code City Country  
.....  
Street/No  
.....  
Fon Fax  
.....  
E-mail www  
.....  
Date Signature\*

\* With my signature I agree: 1) that my email address will be published in the participants list (only available for participants and visited plant operators) and 2) that the photos, videos and audio recordings made during the study tour can be used to advertise upcoming events.

## Please send your registration by

fax to: **+49 - (0)7954-926204**

email to: **t.gruszkos@biogas-zentrum.de**