



International AD Operating and Engineering Course



Stuttgart, Germany – April 13-17, 2015

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 language.



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 organizers 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 AD Industry are providing.

General program topics

(Programme subject to change)

- current situation and prospects of frame conditions for biogas in Germany and Europe
- decision criteria for a biogas plant
- design and planning
- plant technology
- process engineering
- calculation and feasibility studies
- choosing the right substrates
- biological process control
- measurement and data record
- process monitoring and trouble shooting
- in situ process control
- heat and gas engineering
- building materials
- stirring and mixing technology
- safety features
- ecological manure treatment
- cogeneration- gas utilisation
- biogas upgrading and utilisation
- field trip to an agricultural biogas plant with practical excercises
- visit to the laboratories of the University of Hohenheim

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 April 2nd 2015** for an administration charge of 150 € (plus 19% VAT). After April 2nd 2015 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 organiser reserves the right to cancel the training course. If the organiser 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 and Biogas Handbook
- 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 subsequent week from April 20-23, 2015. **Special rate for booking both events: 2290 Euro (plus 19% VAT)***

Registration form (please provide billing address)

Biogas Operating and Engineering Course, April 13-17, 2015

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Family name First name

.....

Company/ Institution

.....

ZIP-code City Country

.....

Street/No

.....

Fon Fax

.....

E-mail www

.....

Date Signature*

.....

* With my signature I agree that my email address will be published in the participants list (only available for participants, speakers and visited plant operators).

Please send your registration

by Fax to:

+49 - (0)7954 - 926132

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

or E-mail to:

s.volk@biogas-zentrum.de

International Biogas Operating and Engineering Course

April 13 - 17, 2015

Venue: *SIMT, Stuttgart Institute of Management and Technology, Filderhauptstraße 142, 70599 Stuttgart (at the campus of University of Hohenheim)*

Programme

Monday, 13 April

- 08:30 Registration and welcome to the seminar
- 09:30 **Report on the current situation and prospects of frame conditions for biogas technology in Germany and Europe.**
- 10:30 Coffee break
- 10:45 **Decision criteria for a biogas plant**
- 12:15 Lunch
- 13:30 **Introduction into design, planning and process engineering**
- 15:00 Coffee break
- 15:15 **Introduction into plant technology**
- 16:45 Discussion
- 17:00 End of the day

Optional: Meet & greet at a typical swabian restaurant in Stuttgart downtown

Tuesday, 14 April

- 09:00 **Introduction into calculation and feasibility studies**
- 10:30 Coffee break
- 10:45 **Substrat-Input, Gas yield according to the substrates - Choosing the right Substrate**
- 12:15 Lunch
- 13:30 **Fundamentals of biological process control**
- 15:00 Coffee break
- 15:15 **Measurement and data record for process optimisation**
- 16:45 Discussion
- 17:00 End of the day

Wednesday, 15 April

- 09:00 **Process monitoring and trouble shooting**

- 10:30 Coffee break

- 10:45 **In Situ Process Control**

- 12:15 Lunch

- 13:30 **1/2-day field trip with practical excercises** to day-to-day maintenance at an agricultural biogas p

- 18:15 Arrival in Hohenheim and end of the day

Thursday, 16 April

- 09:00 **Process and external heat and gas engineering**

- 10:30 Coffee break

- 10:45 **Biogas specific building materials**

- 12:15 Lunch

- 13:30 **Planning and designing of stirring and mixing technology for digesters, mixing pits and sto**

- 15:00 Coffee break

- 15:15 **Safety features of biogas plants and equipment**

- 16:45 Discussion

- 17:00 End of the day

Friday, 17 April

- 09:00 **Ecological manure management**

- 10:30 Coffee break

- 10:45 **Cogeneration to heat and power – Gas utilisation**

- 12:15 Lunch

- 13:30 **Prospects of biogas utilisation**

- 14:30 Coffee break

- 14:45 **Closing with a visit at the laboratories of the University**

- 15:45 Discussion

- 16:00 End of the seminar

Programme is subject to change