

Domestic Biogas: Technology and Dissemination Experiences from Asia & Africa

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Biochemical Processes: N.N

**Tuesday, 26th April
Introduction and Biochemistry**

08:00 Arrival and Registration (of external guests)
08:45 Welcome (PPRE Staff Member)
09:00 Domestic Biogas – Introduction: Relevance of biogas for Development
09:45 Coffee Break
10:00 From Waste to Energy:
The Bio-Chemical Process (N.N)
10:45 Anaerobic fermentation:
Environmental factors (N.N)
11:30 Technical Aspects of Biogas:
Plant Types / Designs and Design Choice Parameters
12:30 Lunch Break

Practical Session:

13:30 Introduction to biodegradation simulation software (N.N)
14:15 Simulation exercises for Participants (N.N)
15:00 Coffee break
15:15 Simulation exercises (continued) (N.N)
16:00 Presentation of simulation results (by participants)
17:00 Question and Answer Session Day 1
17:15 Evening Break

**Wednesday, 27th April
Technical and Environmental Aspects**

08:30 Plant Dimensioning Calculations
09:45 Biogas domestic appliances, design and performance
10:30 Coffee Break
10:45 Economic Aspects of Domestic Biogas:
Financial and Economic Return Calculations, Subsidy Calculations and Justification
12:15 Lunch Break
13:15 Biogas and Global Warming: Emission Reduction Calculations, Gold Standard Methodology, Value and Marketing of ERs
14:30 Video presentation on biodigester construction
15:00 Coffee Break
15:15 Bio Slurry: Qualities, Application, Results
16:15 Question and Answer Session Day 2
16:30 Dinner Break

**Thursday, 28th April
Large Scale Dissemination, Economics**

Practical Session:

08:30 Performance testing of biogas stoves --
Group A (WB) – Group B (FtH) – Energielabor
08:30 Flow and Mixing in biodigesters
Group C (uk) – Group D (NN) – W2 1-187
09:30 Sorting break
09:45 Performance testing of biogas stoves
Group C (WB) – Group D (FtH) – Energielabor W0 0-001
09:45 Flow and Mixing in biodigesters
Group A (uk) – Group B (NN) – W2 1-187
10:45 Coffee break
11:00 Summary and results of the practical sessions
11:45 Lunch Break
13:00 Large Scale Domestic Biogas Dissemination:
Conditions, Programme set-up, SNV Model, Possible Stakeholders and Partners (FtH)
14:00 Development through the market
Biodigester dissemination structure and support activities; M&E, Quality Control Systems, D-Bases, Training Activities, Present R&D Topics
15:30 Coffee Break
15:45 Biogas & Commercialisation: Rationale, Framework, Practical Implications (FtH)
17:00 Recapitulation, Question and Answers, Evaluation
17:30 Closing

Introduction

This Workshop focus will be on small-scale digesters for **developing countries**, typically run by farmers in rural areas. Topics will range from planning, construction and operation to financing, policy implementation and local market development. Long term experiences will be presented by **specialists** from SNV of bio-digester programmes in (south-east) Asian countries. Improvements in the social, ecological and economical dimension will be discussed. Our experts work for more than 20 years in several biogas-programmes tailored to rural areas of developing countries.

The workshop will be introduced by an extensive session on biochemical process and its parameters driving the anaerobe processes.

Additionally there are practical sessions on gas cookers and gas lamps appropriate to be run by biogas.

PPRE / EUREC Study Programmes

Starting in 1987 the Postgraduate Programme Renewable Energy (PPRE) was the first full-fledged Master Programme in Renewable Energy in Germany and still is one of the very few worldwide. Since 1987 it has graduated more than 360 participants from over 70 countries in 22 years. Students study the theory and application of renewable energy systems.

The EUREC RE-Master Programme is run by a network of 8 European universities and research centres leading in renewable energy R&D. Students follow this 16 months programme at eight different locations in Europe. Oldenburg University is one out of four core providers.

Registration

Our homepage www.ppre.de is not yet updated with information on the biogas workshop 2011. If you are interested in participating in this workshop, please write to evelyn.brueder@uni-oldenburg.de.

A registration form will send be sent to your email address.

Registration fee

Registration fees amounts to

350 (50) € (reduced fees for students in brackets):

Free of charge: PPRE & EUREC students & alumni of PPRE and EUREC Core Oldenburg

The fees include the documentation of the presentations (CD), as well as coffee, tea, refreshments, and cookies during the workshop.

Venue & Information

Venue of the **Workshop**:

University of Oldenburg
Campus Wechloy
Carl-v.-Ossietzky-Str. 9-11
Oldenburg (Oldb)

Bus number **306** heading from train station to University; terminal bus stop

For more information on the workshop or PPRE, please visit: <http://www.ppre.de>. The homepage will be update January 2011

Detailed information is given then on application, programme, as also on travelling to Oldenburg

In case of any further question, please, contact us:

Contact

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Biogas Compact Workshop

*Biochemistry,
Project Planning
and
Mass Dissemination
for
Domestic Biodigesters
in
Developing Countries*

Apr. 26 – Apr.28, 2011

University of Oldenburg, Germany

Preliminary Programme 04.01.2011

Postgraduate
Programme
Renewable
Energy (PPRE)

