



Short Course:



GASIFICATION PROCESSES

21st and 22nd September 2015

Course description:

The short course “Gasification processes” is designed to provide a general overview of main gasification technologies and their related issues. Within two days a broad as well as detailed survey of gasification processes will be given. Starting with some fundamentals on gasification and relevant feedstock, the following detailed part includes different gasification technologies with their principal characteristics, advantages and disadvantages of different reactor types and process selection criteria regarding e.g. syngas application, feedstock quality or operational flexibility.

Target group:

The course is intended for engineering and technical personnel, who want to update and expand their knowledge about gasification processes and technologies.

Training location:

Institute of Energy Process Engineering and Chemical Engineering
Fuchsmuehlenweg 9, Haus 1, 09596 Freiberg

Accommodation:

A number of single rooms (86 EUR per room per day incl. breakfast) are reserved at

Hotel Alekto

Am Bahnhof 3, 09599 Freiberg

+49 (0) 3731 7940; info@alekto.de

Please book a room by yourself referring to the keyword "Gasification Course" until
20th August 2015.

Shuttle Service:

A daily shuttle service from Hotel Alekto to the training location and back will be
arranged.

Registration fee:

2.000 €

Including all sessions, course documents, lunch and evening event

Excluding VAT on catering and social program fee

Registration:

Via email: Sindy Bauersfeld (Sindy.Bauersfeld@iec.tu-freiberg.de)

Cancellation policy:

Cancellations have to be sent to the IEC in text format. If you cancel your registration 15 days prior to the start date of the event, the full amount will be reimbursed (less a handling charge of 100 €). After this deadline, no refunds will be given. If needed, the event registration can be changed to a substitute attendee. In this case, no cancellation fees or extra costs occur.

Course schedule

TIME AND SPEAKER	TOPIC
Monday, 21st September 2015	
08:00 – 08:15	Welcome
08:15 – 10:00 A. Laugwitz	Overview on industrial gasification technologies - Introduction of selected gasification processes including main operational parameters - Comments on proposed concepts and technology trends
10:30 – 12:00 Prof. B. Meyer	HTW Gasification Technology - Classification and characterisation of fluidized bed gasifiers - Detailed discussion of the HTW gasifier, including technology principles, historical development and performance data; insight in several plant equipment, e.g. coal feeding system, nozzles, hot gas filter
12:00 – 13:00	Lunch
13:00 – 14:30 W. Vogel <i>Shell</i>	Shell Gasification Technology - Different Shell Gasification Processes - Possible lay-outs of the Shell Coal Gasification Process (SCGP) - Features of the Shell Coal Gasification Process (SCGP)
15:00 – 16:30 B. van der Drift <i>ECN</i>	Biomass and waste gasification - Technology options with pros and cons - Systems and products - Gas cleaning and upgrading - Status and some examples
17:00 – 18:30 Ch. Higman	Chinese Gasification Technologies - Main Chinese processes (ECUST OMB, TPRI Two-stage, ICC Fluid-bed, HT-L) - Acid gas removal - Component manufacture
20:00 – 22:00	Evening Event

TIME AND SPEAKER	TOPIC
Tuesday, 22nd September 2015	
08:00 – 9:30 Ch. Higman	GE Gasification Technology - Description and process flowsheet, with discussion of different syngas cooling options - Advantages and limitations - Typical reference plants and applications - Current research and development areas
10:00 – 12:00 H. Hirschfelder <i>Envirotherm</i> O. Schulze	BGL Gasification Technology and Its Application Tour to BGL test plant - Introduction into BGL gasification technology - Design Features of the process and comparison with other technologies - Process application for BGL - Historical and future development of the BGL gasifier - Current BGL activities - Field trip to BGL plant at IEC
12:00 – 13:00	Lunch
13:00 – 14:30 F. Mehlhose <i>Siemens FGT</i>	Siemens Fuel Gasification Technology - Description of Siemens Gasification Technology - Plant design, scope & applications - Information about main equipment - Test center Freiberg and main R&D activities - Referent plants and current activities
15:00 – 17:00 Dr. P. Seifert	HP POX Technology; Tour to HP POX test plant and gasoline synthesis test plant (STF) - Catalytic and non-catalytic reforming of gaseous and liquid hydrocarbons - Basic concept parameters - HP POX project and test plant (introduction, modelling, results) - New technology for production of high-octane gasoline from synthesis gas - STF project and test plant - Field trip
17:00 – 17:15	Closing Ceremony