August, 30th – September, 1st | 2011
Vienna | Austria

I|C|P|S 11
International Conference on Polygeneration Strategies

PROGRAM

www.icps-conference.eu

TOPICS

- Gasification
- Gas Treatment
- Syngas Application
- Modeling and Simulation

CHARGES

Regular:	€ 450,--
Students:	€ 350,--

SCIENTIFIC COMMITTEE

Hermann Hofbauer, *Vienna University of Technology*
Martin Kaltschmitt, *Hamburg University of Technology*
Johan Einar Hustad, *Norwegian University of Science and Technology*
Pier Ugo Foscolo, *University of L'Aquila*
Ausilio Bauen, *Imperial College London*
André Faaij, *Utrecht University*
Miroslav Miller, *Wroclaw University of Technology*
David Serrano, *IMDEA Energia Institute*
Mehri Sanati, *Lund University*

AIM OF THE CONFERENCE

Biomass gasification is a key technology for a high efficient biomass utilisation in the future. All different types of energy currently used within our energy system can be provided by the conversion of solid biomass into syngas: heat, electricity and biofuels. Therefore such polygeneration systems have become more and more important within energy policy and industry in recent years. This is the reason why this topic has been discussed on several conferences. But slowly it is realised that for economic and environmental reasons as well as due to limited biomass resources such polygeneration systems could be much more promising if they are part of integrated biorefineries. Such biorefineries are characterised by a wide range of different biomass feedstock as well as a broad variety of different products to be used as a raw material as well as an energy carrier.

Against this background the main aim of the conference is it to present the current state-of-the-art of syngas production from different biomass feedstock and in various capacities, the syngas cleaning and syngas utilisation for the provision of e.g. biofuels and bulk chemicals. Additionally ideas and concepts of such integrated biorefinieries are presented, discussed and assessed. Furthermore a platform for the exchange of information, results and experiences is offered. Therefore researchers as well as industrial representatives are invited to participate within this conference.

ADDRESS

Vienna University of Technology
Karlsplatz 13
1040 Wien

MAP

CONFERENCE VENUE

SOCIAL EVENT

Mount Kahlenberg, 1190 Wien, Am Kahlenberg 2-3

Fuhrgassl-Huber, 1090 Wien, Neustift am Walde 69

08:00	**Registration**	Organization committee	
09:00	**Initial welcome and Introduction**		
10:00	**Coffee break**		
	GASIFICATION		
10:30	**gasification session**	introduction by the chairman	
10:40	**the influence of space time on the performance of a 100kw dual fluidised bed gasifier in steam gasification of woody biomass**	Saw W., Gilmour I.	University of Canterbury
11:00	**the agnion heatpipe-reformer – operating experiences and evaluation of fuel conversion and syngas composition**	Gallmetzer G., Ackermann P.	Highterm Research GmbH
11:20	**a new dual fluidized bed gasifier design for improved in situ conversion of hydrocarbons**	Schmid J., Pfeifer C.	Vienna University of Technology, Institute of Chemical Engineering - Future Energy Technology
11:40	**fluidized bed membrane gasifier for renewable hydrogen production**	Pugsley T., Gerspacher R.	University of Saskatchewan
12:00	**experimental results on hydrogen production from biomass applying the adsorption enhanced reforming (aer) process i a 200kwth dual fluidized bed**	Poboss N.	University of Stuttgart
12:20	**gasification of plastic residues in a dual fluidized bed gasifier**	Wilk V. Hofbauer H.	Bioenergy2020 GmbH Vienna University of Technology
12:40	**Lunch**		
14:00	**gasification session**	introduction by the chairman	
14:10	**effect of iron supported olivine on the distribution of tar compounds derived by steam gasification of biomass**	Wolfesberger U.	Vienna University of Technology, Institute of Chemical Engineering - Future Energy Technology
14:30	**steam/o2 biomass gasification and in-bed contaminants removal**	Freda C., Barisano D.	Enea
14:50	**attrition of wood pellets and chips during fluidized bed gasification**	Scala F., Ammendola P.	Istituto di Ricerche sulla Combustione – CNR
15:10	**Coffee break**		
15:40	**investigation of flow behaviour in biomass gasifier using electrical capacitance tomography and pressure sensors**	Thapa R. K., Rautenbach C.	Telemark University College
16:00	**carbon conversion predictor for fluidized bed gasification of biomass fuels - from tga measurements to char gasification particle model**	Konttinen J., Moilanen A. Moilanen A.	University of Jyväskylä VTT Processes
	SYNGAS APPLICATION		
16:20	**approaches to syngas co-firing in an industrial boiler**	Yang W., Dongjin Y.	Korea Institute of Industrial Technology
	SOCIAL EVENT		
19:30	**reception by the mayor of the city of vienna at heurigen restaurant „fuhrgassl-huber" – 19., neustift am walde 69**	Organization committee	

08:00	**Registration**	Organization committee	
	GAS TREATMENT		
09:00	**gas treatment session**	introduction by the chairman	
09:10	**tar reduction mechanisms on non-catalytic hot gas filters in biomass gasification plants**	Prantauer M., Hofmann A.	MCI - University of Applied Sciences
09:30	**biomass gasification and gas cleaning system for biomass to liquid(btl)**	Uendo L., Youngdoo K.	Korea Institute of Industrial Technology
09:50	**iron based catalysts for tar removal - downstream tests in real producer gas**	Mayerhofer M. di Ninno F.	Technische Universität München, Universita di Bologna
10:10	**gasification of miscanthus - influence of ash on tar content and gas quality**	Hein D., Wiedenmann F.	University of Siegen, Department of Energy and Environmental Process Engineering
10:30	**Coffee break**		
11:05	**producer gas cleaning in a dual fluidized bed reformer**	Seemann M.	Chalmers University of Technology
11:25	**benzene and ethylene in bio-sng production: nuisance, fuel or valuable products?**	Rabou L., van der Drift B.	ECN
11:55	**Poster session**		
12:35	**Lunch**		
	SYNGAS APPLICATION		
13:45	**syngas application session**	introduction by the chairman	
13:55	**Aactor© !GT© for Polygeneration: Biochar, Power, Vacuum and Heat from Waste Biomass with the Pyreg® Biochar Process**	Schmid M. Gutzwiller S.	Centre of AppropriateTechnology & Social Ecology Pyreg Schweiz GmbH
14:15	**production of liquid oxygenates from synthesis gas - test plants for catalytic processes and upscaling of catalyst preparation**	Schulzke T., Girod K.	Fraunhofer Institute for Environmental, Safety and Energy
14:35	**parameters variation of fischer-tropsch synthesis optimization**	Sauciuc A. Abosteif Z.	Transilvania University of Brasov Karlsruhe Institute of Technology
14:55	**investigations on hydrotreating of fischer tropsch biowaxes for generation of bioproducts from lignocellulosic biomass**	Schablitzky H., Lichtscheidl J.	OMV Refining & Marketing
15:15	**Coffee break**		
	MODELING AND SIMULATION		
15:40	**modeling and simulation session**		
15:50	**the potential of small scale sng production from biomass gasification**	Fendt S., Tremel A.	Technische Universität München
16:10	**hydrogen from biomass for industry – hydrogen produced from gasification syngas for integration in refineries**	Müller S., Rauch R.	Vienna University of Technology, Institute of Chemical Engineering - Future Energy Technology
16:30	**techno-economic analysis of large-scale biomass-to-liquids (btl) processes based on gasification**	Dimitriou I., Bridgwater T.	Aston University
16:50	**economic potential of feedstock flexible integrated gasification cogeneration facilities**	Meerman J.C., Ramirez A.	Utrecht University, Copernicus Institute
17:10	**compendium of the international conference on polygeneration strategies11**		
	SOCIAL EVENT		
19:00	**gala dinner on mount kahlenberg**	Organization committee	

EXCURSION (TWO ALTERNATIVE TOURS ARE OFFERED)

FULL DAY EXCURSION (TOUR 1)

8:00 - 18:00
Excursion to the
CHP OBERWART and the CHP GÜSSING (TECHNIKUM, BIOFT, BIOSNG)

Timetable

08:00 - 12:00	Visitation of the CHP Oberwart
12:00 - 13:00	Lunch
13:00 - 18:00	Visitation of the CHP Güssing (Technikum, BioFT, BioSNG)

HALF DAY EXCURSION (TOUR 2)

9:00 - 12:00
Excursion to the
VIENNA BIOMASS PLANT

Timetable

09:00 - 12:00	Visitation of Vienna Biomass Plant
12:00 - 13:00	Lunch
13:00 - 14:00	Transfer back to Vienna via Vienna International Airport

EXCURSION

Thursday, 1st September 2011

IMPRESSIONS

Oberwart

Güssing

Vienna Biomass Plant

CHARGES

Regular:	€ 450,--
Students:	€ 350,--

INFORMATION

Vienna University of Technology
Institute of Chemical Engineering
Department of Chemical Process Engineering and Fluidization
ICPS 11 Organization Committee
Getreidemarkt 9/166
1060 Vienna
+43 1 588 01-166 309
www.icps-conference.eu

Find more Information at **www.icps-conference.eu**

Veranstalter:

TU WIEN TECHNISCHE UNIVERSITÄT WIEN Vienna University of Technology

bioenergy2020+

ENERGIE AG Kraftwerke

ORTNER

VIENNA REGION Economy. Technology. Life.

StaDt Wien Wien ist anders.