

## CONFERENCE PROGRAM

<b>FIRST DAY - MARCH 8, 2017</b>			
<b>08:00 – 09:30 Registration (Foyer BIO 1)</b>			
<b>09:30 – 10:00 Welcome (B3)</b>			
Prof. Dr. Iris Lewandowski, Vice-rector University of Hohenheim Karl Greißeig, Ministerial Director, Head of the Department of Energy Sector at Ministry for the Environment, Climate Protection and the Energy Sector Baden-Württemberg Michael Köttner, Internationale Biogas und Bioenergie Kompetenzzentrum Dr. Hans Oechsner, University of Hohenheim			
<b>10:00 – 11:00 Keynote speeches (B3)</b>			
Perspectives for Biogas within the EU, <i>Harm Grobrügge, Vice President European Biogas Association</i>			
Scientific perspectives for the further development of the biogas system, <i>Largus Angenent, University of Tübingen, Germany</i>			
<b>11:00 – 11:30 Coffee break – Poster session, exhibition (Foyer BIO 1)</b>			
	<b>B 3</b>	<b>Ö 1</b>	<b>Ö 2</b>
<b>11:30 – 12:45</b>	<b>Session 1 – Biogas in practice (Chairman: Pruk AGGARANGSI)</b>	<b>Session 2 – Energy crops (Chairman: Michael KÖTTNER)</b>	<b>Session 3 – Optimal integration of biogas in the energy system (Chairwoman: Jaqueline DANIEL-GROMKE)</b>
	Holistic analysis & assessment of repowering measures for existing biogas plants, <i>Joshua GÜSEWELL, Germany</i>	High yielding tropical energy crops for bioenergy production: effects of plant components, harvest years, and locations on biomass composition and subsequent biogas production, <i>Samir Kumar KHANAL, USA</i>	Optimal biogas plant concepts supplying biogas for highly flexible power generation systems – Introduction into two large scale demonstration projects, <i>Henning HAHN, Germany</i>
	Cheap carbon sources for biogas – New innovative pretreatment technologies – Lignocellulosic feedstocks, <i>Jens Bo HOLM-NIELSEN, Denmark</i>	Aquatic macrophytes as substrates for anaerobic digestion plants, <i>Walter STINNER, Germany</i>	Demand driven biogas production in anaerobic filters, <i>Andreas LEMMER, Germany</i>
	Dry anaerobic digestion: state-of-art, scientific and technological locks, <i>Thierry RIBEIRO, France</i>	Increase of the methane production from microalgal biomass by using ruminal microorganisms for pre-treatment, <i>Germán BUITRÓN, Mexico</i>	Assessment of biogas production limits in anaerobic reactors for a flexible energy production, <i>Wendy LAPERRIERE, France</i>
<b>12:45 – 14:10 Lunch (Mensa)</b>			
<b>14:10 – 15:50</b>	<b>Session 4 – Innovative digestion technologies (Chairwoman: Stephanie LANSING)</b>	<b>Session 5 – Biogas generation from waste / bioproducts (Chairman: Mathias EFFENBERGER)</b>	<b>Session 3 – Optimal integration of biogas in the energy system (Chairman: Jens Bo HOLM-NIELSEN)</b>
	Effect of bioaugmentation with anaerobic fungi isolated from ruminants on the hydrolysis of corn silage and <i>Phragmites australis</i> , <i>Bhargavi RAVI, Canada</i>	Use of dry fermentation for co-digestion of organic fraction of municipal solid waste (OFMSW) with chicken manure (CM) (effect of trace elements), <i>Nuri AZBAR, Turkey</i>	Flexible AD Plants as Regional Balancing Option in Power Distribution Grids, <i>Jaqueline DANIEL-GROMKE, Germany</i>
	The influence of hydrolysis process pH on biogas efficiency of maize silage in two-phase anaerobic digestion, <i>Andrzej LEWICKI, Poland</i>	Anaerobic digestion of brewery spent grains: Nutrients addition requirement, <i>Claire BOUGRIER, France</i>	Simulation of demand oriented biogas production by a simplified kinetic model, <i>Sören WEINRICH, Germany</i>
	Fundamentals of process design and control of anaerobic sequencing batch gas-lift reactor, <i>Isabel Cristina PULGARIN MONSALVE, Germany</i>	Biowaste – Profitable for the Bioeconomy, <i>Lea BÖHME, Germany</i>	Feeding strategy optimization assisted by near infrared and real time process monitoring to improve methane production, <i>Cyrille CHARNIER, France</i>
	Bio-slurry management and utilization for Bangladesh, <i>Heinz-Peter MANG, China</i>	Effect of trace element supplement on bio-methane performance of coffee husk and pulp, <i>Bilhat CHALA, Germany</i>	Near-infrared spectroscopy (NIRS) for a real-time monitoring of the biogas process, <i>Andrea STOCKL, Germany</i>
<b>15:50 – 16:20 Coffee break – Poster session, exhibition (Foyer BIO 1)</b>			
<b>16:20 – 18:00</b>	<b>Session 6 – N-rich substrates (Chairman: Mark PATERSON)</b>	<b>Session 7 – Measuring biogas yields / potential (Chairman: Thierry RIBEIRO)</b>	<b>Practitioners forum (Chairwoman: Elisabeth Maria HUBA-MANG)</b>
	Monitoring report of high nitrogen biogas operation on lagoon based digester; case study Thailand egg layer farms biogas, <i>Pruk AGGARANGSI, Thailand</i>	Impact of inoculum's origin on the methane yield in biochemical methane potential (BMP) tests, <i>Konrad KOCH, Germany</i>	The dimensioning of gasgrids and gasstores, <i>Johannes FISCHER, Germany</i>
	The influence of the pre-treatment of chicken manure with auto-hydrolysis (AH) or pressure swing conditioning (PSC) on Nitrogen content and biogas production, <i>Britt SCHUMACHER, Germany</i>	Temperature effects on residual biogas potential, <i>Florian RÜSCH-PFUND, Switzerland</i>	Armatec FTS biogas components worldwide, <i>Rudi PAFLITSCHKE, Germany</i>
	Mono-fermentation of fresh poultry manure, <i>Patricio GIL SCHRECKENBERG, Argentina</i>	Biogas potential of livestock farming residues in the Belgorod region in Russia, <i>Jonas LINDNER, Germany</i>	Experiences and lessons learned in Latin America and the Caribbean with the small biodigester HoMethan, <i>Montserrat LLUCH CUEVAS, Germany</i>
	Anaerobic digestion for the biosecure disposal of poultry mortalities and renewable energy production, <i>Joshua ARIAS, Canada</i>	Novel monitoring of AD process using low cost sensing platforms, <i>Tanja RADU, UK</i>	Flexible, energy efficient pretreatment solution for contaminated organic waste in different anaerobic digestion market applications, <i>Dieter KORZ, Germany</i>
<b>18:00 – 19:00 Poster session, exhibition</b>			
<b>19:00 – 22:00 Evening reception (Mensa)</b>			

## SECOND DAY – MARCH 9, 2017

	B 3	Ö 1	Ö 2	Foyer BIO 1
08:30 – 10:30	<b>Session 8 – Low-tech biogas plants (Chairman: Renjie DONG)</b>	<b>Oral-Poster Session (Chairman: Hans OECHSNER)</b>	<b>Session 9 - Pretreatment technologies (Chairman: Nuri AZBAR)</b>	
	Assessing a novel low-tech, high efficiency biogas digester for small cattle farms in tropical regions, <i>Joaquin VIQUEZ, Costa Rica</i>	5 minutes pro each Speaker, after 3 Speakers 5 minutes discussion	Co-ensiling of straw with sugar beet leaves increases the methane yield from straw, <i>Søren Ugilt LARSEN, Denmark</i>	
	Waste treatment, energy production and agricultural fertilization from sanitation digesters in Haiti, <i>Stephanie LANSING, USA</i>		Adapting the wet storage to wilted corn stover: process performance evaluation and operation strategy, <i>Qian ZHAO, China</i>	
	Evaluation of prefabricated biogas digesters in Bangladesh and Lesotho, <i>Shikun CHENG, China</i>		Sustainable enhancement of anaerobic digestion and increase in biogas production by ultrasound technology – examples from praxis, <i>Klaus NICKEL, Germany</i>	
	Different directions on deployment of manure based biogas production in three regional contexts of South America, <i>Luis FERREIRA, Portugal</i>		Anaerobic co-digestion of category 2 animal byproducts; influence of ultrasonic pretreatment, <i>Jesús María MARTÍN MARROQUÍN, Spain</i>	
Integrated biosystems for sewage treatment in Rio de Janeiro's slums: Case study of Vale Encantado community, <i>Leonardo ADLER, Brazil</i>	Exploitation of the biomethane potential from cattle manure solids by specific pretreatment, <i>Urs BAIER, Switzerland</i>			
<b>10:30 – 11:00 Coffee break – Poster session, exhibition (Foyer BIO 1)</b>				
11:00 – 12:40	<b>Session 10 – Additive / prevention of process inhibition (Chairman: Samir KHANAL)</b>	<b>Session 11 – General optimization of biogas processes (Chairman: Joachim MÜLLER)</b>	<b>Session 9 - Pretreatment technologies (Chairman: Heinz-Peter MANG)</b>	<b>Exhibition and poster session</b>
	Innovative additives for chemical desulphurisation in biogas processes: A comparative study on iron compound products, <i>Hans-Joachim NÄGELE, Germany</i>	Recovery of valuable fertilizing products and soil improver from digestate, <i>Jennifer BILBAO, Inga-Mareike BACH, Germany</i>	Steam explosion pretreatment of Alpine hay: Effects on the biomethane yields and on the biodegradation kinetics of structural compounds, <i>Javier LIZASOAIN, Austria</i>	
	The fate and effect of lasalocid during anaerobic digestion of dairy manure, <i>Osman ARIKAN, Turkey</i>	Valorisation of organic platform chemicals in the biogas process chain, <i>Hans OECHSNER, Germany</i>	Thermal pre-treatment of food waste to enhance thermophilic anaerobic digestion: process performances and heat balance, <i>Camilla BRAGUGLIA, Italy</i>	
	Inhibition of biowaste treatment plants – How to handle with and how to solve?, <i>Sebastian MEIER, Germany</i>	Unraveling of microbial dark matter dynamics related to ensilage and reactor performance in the biogas process chain, <i>Anja GROHMANN, Germany</i>	Monitoring of full-scale hydrodynamic cavitation pretreatment in agricultural biogas plant, <i>Mirco GARUTI, Italy</i>	
The roles of ZnO Nanoparticles on methane production in the Cannibal process, <i>Passkorn KHANTHONGTHIP, Thailand</i>	Life Cycle Assessment of the biogas process including lactic acid from silage and nutrient recovery from digestate, <i>Klaus MEISSNER, Germany</i>	Pre-treatment of organic residues like animal by-products and biowaste for optimized biogas production, <i>Rolf JUNG, Germany</i>		
<b>12:40 – 14:00 Lunch (Mensa)</b>				
14:00 – 15:40	<b>Session 12 – Power to gas (Chairman: Mohammad TAHERZADEH)</b>	<b>Session 13 – Nutrient utilization (Chairman: Stev AUSTINAT)</b>	<b>Practitioners forum (Chairman: Hans-Joachim NÄGELE)</b>	
	Biological hydrogen methanation – a review, <i>Bernhard LECKER, Germany</i>	Production of solid ammonium salts from residues of monodigestion of nitrogen-rich materials, <i>Günter BUSCH, Germany</i>	Analysing biogas to control and optimise the process biogas, <i>Rachel WOODBRIDGE-STOCKS, UK</i>	
	Long term and demand-oriented bio-catalytic synthesis of high concentrated methane in a trickle bed reactor and scale up, <i>Marko BURKHARDT, Germany</i>	The influence of digestate treatment and composition on N <sub>2</sub> O and CO <sub>2</sub> and emissions after the application on a fallow land, <i>Ioana PETROVA, Germany</i>	The production and cross-border trade of biomethane from organic waste and residues – A case example, <i>Zoltan ELEK, Germany</i>	
	Use of biological methanation for PtG-Concepts: Fermentative high-pressure methanation of hydrogen, <i>Timo ULLRICH, Germany</i>	Influence of the major feedstock on digestate composition, soil nitrogen availability and organic matter stability, <i>Franziska HÄFNER, Germany</i>	Experience in Wave-Box ultrasound pretreatment in manure based AD plants, <i>Gerald VOLLMER-HEUER, Germany</i>	
Effects of high-pressure anaerobic digestion up to 30 bar on pH-value, solubility of CO <sub>2</sub> and specific methane yield, <i>Wolfgang MERKLE, Germany</i>	Improving the overall biogas efficiency by digestate disintegration, <i>Matthijs H. SOMERS, Belgium</i>	Online sampling system of anaerobic digestion to monitor the process stability based on VFATIC, <i>Camilo WILCHES, Germany</i>		
<b>15:40 – 16:10 Coffee break – Poster session, exhibition (Foyer BIO 1)</b>				
16:10 – 17:50	<b>Session 12 – Power to gas (Chairman: Andreas LEMMER)</b>	<b>Session 13 – Nutrient utilization (Chairman: Luis FERREIRA)</b>	<b>Practitioners forum (Chairman: Michael KÖTTNER)</b>	
	Microbial methanation of H <sub>2</sub> /CO <sub>2</sub> in anaerobic trickle bed reactors – a study of microbial biocenoses and nutrient supply strategies under thermophilic conditions, <i>Dietmar STRÜBING, Germany</i>	Scenario based nutrient balance of digestate and manure for excess modelling in Bavaria, <i>Markus HEBERLEIN, Germany</i>	Improvement of anaerobic digestion – energy efficiency, <i>Christian EICHHORST, Germany</i>	
	Effects of temperature on biomethanation utilizing CO <sub>2</sub> and H <sub>2</sub> through hydrogenotrophic methanogenesis, <i>Nanshi DONG, China</i>	Study of the utilization of biogas digestate as substrate for functional materials, <i>Yvonne RINGELSPACHER, Germany</i>	Biogas from dry chicken dung by psychrophilic monofermentation, <i>Alfons HIMMELSTOSS, Germany</i>	
	Biogas quality upgrade by adsorption and regeneration of in-situ regenerative activated carbon in a packed bed column, <i>Muhammad FAROOQ, UK</i>	No agro waste, <i>Katrin KAYSER, Germany</i>	Evaluation and modelling the energy efficiency of commercial scale biogas plants, <i>René CASARETTO, Germany</i>	
A new approach for the integration of biogas in Power-to-Gas concepts – Simulation, optimization and comparison, <i>Florian KIRCHBACHER, Austria</i>		Overview on 40 years of biogas commitment, starting with IPAT at TU Berlin in 1975, <i>Wolfgang TENTSCHE, Germany</i>		
<b>17:50 – 18:15 Closing session (B3) / Chairman: Hans OECHSNER</b>				
<b>18:15 End of the conference</b>				

## ORAL-POSTER ( Ö1)

Methane production from low-cost unheated field-scale anaerobic digesters treating dairy manure, <i>Osman ARIKAN, Turkey</i>
Anaerobic biohydrogen production with concurrent wastewater treatment: influence of substrate concentration, hydraulic retention time and type of substrate, <i>Ahmed Hassan SALEM, Germany</i>
Fermentative conversion of vegetable waste into organic acids and methane in two stage biogas-systems, <i>Padma Priya RAVI, Germany</i>
Development of a method to produce standardized inocula for biomethane potential tests, <i>Jörn HEERENKLAGE, Germany</i>
CO <sub>2</sub> partial pressure as a key parameter in anaerobic digestion and methane formation, <i>Marian KAZDA, Germany</i>
The energy value and the cost of production for pellets produced on the basis of digestate from agricultural biogas plant, <i>Wojciech CZEKALA, Poland</i>
Flow velocity in CSTR biogas digesters: a full-scale study, <i>Philipp KRESS, Germany</i>
Investigation of fluid dynamics in a scale-down-laboratory digester, <i>Fosca CONTI, Germany</i>
Biogas fermentation of wheat straw as mono input under defined conditions, <i>Paul SCHERER, Germany</i>
Developing anaerobic digester with external zeolite column for enhancing methane production from swine manure – A feasibility study, <i>Thushari N. WIJESINGHE, Australia</i>
Biological pretreatment of chicken feathers for biogas production, <i>Regina PATINVOH, Sweden</i>
Lignocellulosic waste valorization strategy for enzymes and biogas production, <i>Valentina WYMAN, Chile</i>
Hydrogen and methane fermentation of marine biomass – Self-sufficiency of energy production in fishing port, <i>Kana KURODA, Japan</i>
Biogas generation and product utilisation: a South African business case perspective, <i>Usisipho GOGELA, South Africa</i>
An alternative process for CO <sub>2</sub> separation by IL based chemical absorption, <i>Markus ROSCHITZ, Germany</i>
Novel small scale cryogenic biogas upgrading process for producing dry ice and liquefied biomethane, <i>Sebastian BAUM, Germany</i>
Liquefied bio gas as a matter of a storage and system integration of renewable energy sources, <i>Alexey MOZGOVOY, Germany</i>

## POSTER

Energetic optimization of dairy plant by recycling of milking waste in methane fermentation, <i>Jacek DACH, Poland</i>
Biogas generation from anaerobic biodigestion of wastewater treatment plant sludge and swine manure combined in different proportions related to carbon removal, <i>Odorico KONRAD, Brazil</i>
Biogas from biowaste and municipal waste – a review, <i>Jude OKOLIE, Nigeria</i>
Phosphate recovery and functional carbon material production through hydrothermal carbonization of digestate, <i>Xueli ZHAO, Germany</i>
Optimizing digestate processing technologies to obtain marketable nitrogen fertilizer, <i>Florian SIEMEISTER, Germany</i>
Gardeners' perception of Biogas digestate based soil amendments, <i>Johannes DAHLIN, Germany</i>
Discrete choice experiment on biogas digestate-based fertilizer attributes, <i>Johannes DAHLIN, Germany</i>
General optimization of biogas processes, <i>Klaus MEISSNER, Germany</i>
Comparing a global and a local modeling approach for the prediction of the biogas yield of energy crops, <i>Vasilis DANDIKAS, Germany</i>
Standardized software for biogas research, <i>Johanna PEDERSEN, Denmark</i>
Competitive analysis of specific methane yields from continuous and batch processes for anaerobic digestion of bio-based products, <i>Hans OECHSNER, Germany</i>
Time characteristics for on-demand biogas and methane production based on the input of sugar beet silage, <i>Sharif AHMED, Germany</i>
Implementation of artificial neural networks in prediction of biogas efficiency of the biowaste from greenhouse production, <i>Piotr BONIECKI, Poland</i>
Optimization of the mixing system in biodigesters with computational fluid dynamics (CFD), <i>Leonhard WIEDEMANN, Germany</i>
Optimisation of inter-stage thermophilic aerobic digestion for organic matter removal and methane production from waste water sludge, <i>Johanna PEDERSEN, Denmark</i>
A new indicator bacterium for sanitation and thermophilic digestion: Long term research on a full scale biogas plant for cattle manure, <i>Sandra OFF, Germany</i>
Enhanced biogas production from maize: Screening an inoculum, <i>Brigitte KEMPTER-REGEL, Germany</i>
Concept for the development and implementation of a biogas technology using rice straw as energy source, <i>Celia HAHN, Germany</i>
Two-phase anaerobic digestion of sugar beet for biomethane production, <i>Elzbieta KUMANOWSKA, Germany</i>
The energetic and economic efficiency of biogas plant exploitation connected with vegetable processing plant, <i>Damian JANCZAK, Poland</i>
Cost analysis of energy production from anaerobic digestion in an intensive swine farm, <i>Antonio MOREIRA, Portugal</i>
Modelling a solar-assisted thermophilic biodigester and the treatment of its effluents; a heuristic tool for research and teaching, <i>José Alberto MIRANDA CHAVARRÍA, Costa Rica</i>
Combined H <sub>2</sub> S and CO <sub>2</sub> removal process for upgrading biogas, <i>Keren Jenifer RAJAVELU, Germany</i>
Techno-economic assessment of partially upgraded biogas and the decentralized utilization for mobility in agriculture, <i>Abdessamad SAIDI, Germany</i>
Upgrading biogas composition via a hydrogenotrophic bioprocess, <i>Germán BUITRÓN, Mexico</i>
Hydrogen sulfide reduction, <i>Monika VITEZOVA, Czech Republic</i>
Decentralized biomethane production using a combination of chemical scrubbing and low-pressure membrane technologies, <i>Jesús María MARTÍN MARROQUÍN, Spain</i>
Innovative biogas plant concepts for an optimal integration of biogas plants into the energy system – A techno-economic analysis, <i>Henning HAHN, Germany</i>
Gas distribution standard for biogas in Bangladesh, <i>Heinz-Peter MANG, China</i>
Biogas plant 4.0 - Opportunities and requirements for existing facilities, <i>Laura WEITZE, Germany</i>
How to use revised IPCC carbon calculating method in the carbon emission calculating of sludge treatment and disposal process, <i>Qia GUO, China</i>
Flexible CHP from biogas on waste biomass, <i>Kurt HJORT-GREGERSEN, Denmark</i>
Anaerobic digestion for urban organic solid and water wastes for energy and nutrient reclamation, <i>Oscar MONROY HERMOSILLO, Mexico</i>

(Program may be subject to change)  
Stand of 1st of March 2017