



**Poster session I (Tuesday, the 28<sup>th</sup> of October during coffee break 11:00 – 11:40 in the courtyard and corridor)**

## **Topic 1 substrates for AD**

1. Co-digestion of food waste with cattle slurry: an investigation of different loading rates and sulphate concentration (Jethro Adam)
2. Substrates required to fuel the gaseous biofuel industry (Eoin Allen)
3. Identification and characterization of organic waste in Morocco, an important step towards the valorization of waste (Mohammed Belmakki)
4. Improvement of methane generation from waste activated sludge using co-digestion (Germán Buitrón)
5. The possibility of biogas production from the substrate after mushrooms cultivation (Wojciech Czekala)
6. Recovery of methane from supermarket wastes (Burak Demirel)
7. Specific methane yields and reaction kinetics of co-digestion of stored pig manure and food waste (Conor Dennehy)
8. Adding more value to biowaste disposal (Gilbert Dreschke)
9. Inhibition of mesophilic and thermophilic fermentation by high concentration of free ammonia (Milota Fáberová)
10. Co-digestion of microalgae and primary sludge as by-products from algal-based wastewater treatment systems (Ivet Ferrer)
11. Optimising biogas production from microalgae grown in wastewater: effect of several pretreatments (Ivet Ferrer)
12. Corn stover for biogas production (Monika Fleschhut)
13. Potential analysis of biogenic residues as renewable energy source for the municipality Lech am Arlberg (Susanne Frühauf)
14. Biogas production from organic waste in the European Food and Beverage Industry (Wolfgang Gabauer)
15. Biochemical methane potential (BMP) from organic by-products and residues from agro-food industry and alternative culture in mediterranean area (Mirco Garuti)
16. Combined production of Biogas and Tannin-based foams under a sustainable perspective (Sara Gonzaliz Garcia)
17. Anaerobic Co-digestion of Sewage Sludge and bagasse for biogas recovery (Raouf Mohamed Ahmed Hassan)
18. Improvement Anaerobic Digestion performance of Sewage Sludge by Co-digestion with Cattle Manure (Raouf Mohamed Ahmed Hassan)
19. Peculiarities of bioenergy resources use as alternative fuels (Aleksandr Kartoshkin)
20. Potential usage of solid organic household waste, mycelium and lysine as a substrate for biogas production in mesophilic anaerobic digestion (Sabina Kolbl)
21. Feasibility of converting wastes in biogas for an isolated cheese factory in the Alps (R.König)
22. Study on opportunities and constraints of co-digestion technology application in China (Zifu Li)
23. Effect of poultry litter on biogas production from swine slurry (Nanh Lovanh)
24. Increasing methane production from deproteinized cheese whey by codigestion with pig slurry (Rosa Marchetti)
25. Co-digestion of acidified slurry for improved methane yield: two-stage vs. one-stage (Verónica Moset Hernández)



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26. Anaerobic digestion of salty cheese whey and permeate in a two stage system (Valorlact project) (Mikel Orive)
27. Receptions of the Opportunity of Bioenergy from City Firm Household Waste (Sindor Pardaev)
28. The biogas market in Poland-the current status and the potential for production of renewable energy from organic waste (Anna Pazera)
29. Methane fermentation as a way of managing waste from the grain coffee production (Pablo César Rodríguez Carmona)
30. Biogas and compost production from wastewater treatment plant effluents (Graciela M.L.Ruiz-Aguilar)
31. Use of anaerobic digester effluent as biofertilizer on Pennisetum clandestinum grass growth (Graciela M.L. Ruiz-Aguilar)
32. Theoretic methane potential from livestock effluents in Brazil (Magdalena Teufner)
33. Steam exploded wheat straw for biogas production – Investigation of degradation kinetics (Franz Theuretzbacher)
34. Investigation on manure, kitchen waste and corn stover as substrates for anaerobic digestion in small size biogas plants in Serbian rural areas (Miodrag Visković)
35. The Effect of Different Combination of Tropical Organic Wastes and Inoculum Composition on the Biogas Production (I Nyoman Suprpta Winaya)
36. Determination of biogas production efficiency of confectionery waste (Kamil Witaszek)

## **Topic 2 gas technology**

37. The relationship between hydrogen metabolism and biogas production, regulation mechanisms (Zoltán Bagi)
38. Compare and thorough review of methods and characteristics of the four types of vegetable oil methyl ester as biodiesel (Erfan Khosravani Moghadam)
39. Autogenerative High Pressure Digestion: Fundamentals (Ralph Lindeboom)
40. Optimization of continuous stirred tank reactor (CSTR) for biohydrogen production (Nima Nasirian)
41. Simulation and optimisation of single stage biogas upgrading and bottling system using Aspen Plus (Hoa Nguyen)
42. Precise control practice for high quality biogas generation (Hipólito Ortiz-Laurel)

## **Topic 6 data preparation**

43. Relative effectiveness of biogas production using poultry droppings and swine dung (Kamoru Adenrian)
44. Critical Success Factors of Nepal's Household Biogas Program: Lesson to other developing countries for Sustainable Development (Nawraj Bhattarai)
45. Control and optimization of the local energy production/consumption in the system biogas plant - agricultural enterprises (Karel Kuthan)
46. Modeling the effect of heat fluxes on ammonia and nitrous oxide emissions from an anaerobic swine waste treatment lagoon using artificial neural network (Nanh Lovanh)
47. Detailed assessment of three lab-scale biogas measuring systems for continuous anaerobic digestion assays (Magdalena Nussbaumer)
48. Correlation between density, temperature and composition of digestate (Nico Schneider)
49. Model-based evaluation and optimization of agricultural biogas plants for flexible biogas production (Sören Weinrich)



## Poster session II (Wednesday, the 29<sup>th</sup> of October during coffee break 11:00 – 11:40 in the courtyard and corridor)

### Topic 3 process technology

50. A biogas production Unit for use in rural areas (Leo Ayodeji Sunday Agbetoye)
51. Rapid methods for the analysis of nutrients in digestates (Paolo Berzaghi)
52. Effects of air stripping on the biogas production (Johannes Bousek)
53. Separation of soluble substances from organic solid municipal waste for biogas production (Rosalinda Campuzano)
54. Long term recirculation of co-digested solid fraction in continuously fed biogas plants (Elio Dinuccio)
55. The dynamic relationship between pH and plant macronutrient composition in digestate when bio-oxidation is performed (Ryosuke Endo)
56. Influence of experimental setup on biogas production at BMP tests (Mandy Gerber)
57. TherChem – optimisation of the pre-treatment of brewer spent grains to improve biogas yields (Sije Gorter)
58. Biogas from thermo-chemically treated brewers' spent grains; up-scaling from lab scale to pilot scale (Sije Gorter)
59. What residual energy potential do the digestates have and how to use it? (Luděk Kamarád)
60. The influence of separated hydrolysis on biogas efficiency of maize silage (Andrzej Lewicki)
61. Ammonia inhibition of biogas process during the anaerobic co-digestion of chicken manure and maize silage assessed by molecular and stable isotope tools (Lv Zuopeng)
62. Evaluating separation technologies for thin stillage digestate (Katharina Meixner)
63. Development of a laboratory-scale method for measuring viscosity changes during anaerobic digestion (Lucy Montgomery)
64. Development of a digestate treatment's scheme for nutrients recovery and re-use to apply on alpine small/medium size agricultural plants (Francesca Nardin)
65. Process of implementing biogas digester in one of the rural schools situated in gogogo village of South Africa (Vhutshilo Nekhubvi)
66. The chosen properties of dehydrated digestate from BGS (Josef Pecen)
67. Bio-refinery of food waste – production of liquid and gaseous biofuels (Ullrich Stein)
68. Effect of food waste autoclaving on digestate usability (Elina Tampio)
69. Effect of co-digestion of dead neem leaves (*Azadirachta indica*) on the cost of a unit of biogas production (Joel Tize Koda)
70. Effect of thermochemical treatment on anaerobic digestion of a mixed microalgal culture grown in a technical-scale open raceway (Khanh Tran)
71. Effects of inoculum pre-treatment on the biochemical methane potential (BMP) tests (Bing Wang)

### Topic 4 microbiology

72. Lactic Acid Formation in Biogas Plants (Jelena Bohn)
73. Effect of Cd on microbial activity during dairy waste methanisation in relation with metal disponibility. (Isabelle Bourven)
74. Biogas production: hydrolytic and methanogenic activity of rumen inocula (Antonella Chiariotti)
75. Isolation of acetic acid, propionic acid and butyric acid producing bacteria from biogas plants (Katharina Cibis)



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76. Biogenic methane production in unconventional gas reservoirs: from organic matter to methane. (Fabrizio Colosimo)
77. Ecologically engineering anaerobic digesters to cope with high-solids waste from pit latrines (Robert Dillon)
78. Fast quantification of viable EHEC/EPEC involving qPCR methodology (Bianca Fröschle)
79. Storage of a biogas start culture - effect on biogas potential and microbial community structure (Live Haldal Hagen)
80. Estimation of the Total Methanogenic Cell Power (TMPC): A novel microscopic method to estimate the vitality of living cells in a biogas plant (Yong Sung Kim)
81. Specific development of the microbial communities according to the chemical composition of maize and sugar beet silage and its influence on the reactor performance (Johanna Klang)
82. Hydrogen bioproduction with low glucose and sucrose concentrations by Firmicutes phyla (Sandra Maintinguer)
83. Neocallimastigomycota in anaerobic digestion of cattle manure and their contribution to degradation (Sabine Podmirseg)
84. Bioaugmentation potential of alkaliphilic mixed cultures to improve biogas production from alkaline pre-treated wheat straw (Katharina Porsch)
85. Screening of fungal species for their ability to colonize different anaerobic digestates (Guglielmo Santi)
86. Analyzing the metatranscriptome of an anaerobic digestion plant during start-up (Lucy Stark)
87. Testing the effect of different enzyme blends on increasing the biogas yield of straw and digested manure fibers (Hinrich Uellendahl)
88. Methanogenic Archaea community structure in full-scale anaerobic processes (Yilmaz Vedat)
89. Bacteriophages as indicators of metabolic activity in anaerobic digesters (Hongyun Zhu)

## **Topic 5 life cycle assessment**

90. Manure Amendments and their Impact to Biogas Production and Emissions following Digestion (Rebecca Larson)
91. The Life Cycle approach for the assessment of pig slurry management (L. Lijó)
92. Development of a Gas Disclosure System to improve marketing possibilities of biomethan (Mathias Reinert)
93. Life Cycle Management for Biogas Plants (Andreas Schaller)