

Enzyme to improve the Biogas yield – DEMETER a BBI JU funded project as best practise

10 th December 2019	Nurnberg (Germany)	Biogas Convention and Trade Fair
10.00-13.00	Room München 2	Organized by: CiaoTech (PNO Group)

The transition from an economy based on fossil resources to a bio-based economy is a must and should be realized sooner than anticipated at the moment. A drastic reduction in greenhouse gas emission is urgently needed as the goals set to limit global climate change are not being met. The conversion of biomass into energy sources (biofuels, biogas) and chemicals plays an essential role in this transition.

To efficiently convert biomass and agricultural, industrial and municipal waste into fermentable sugars, chemical building blocks or bio-based materials, enzymes play an indispensable role. However, currently available enzymes have not specifically been developed for biogas production and are evaluated by “trial and error”. Thus far, the use of enzymes has not lived up to the expectations as little or no effects could be observed. Hence, efficient enzyme-enabled biomass conversion requires the availability of enzymes that have proven to be effective in practice and can be produced at an industrial scale. The DEMETER project partners will give an insight on how this can be possible.

Chairman

Stefania Baldassarre

Programme

10.00 Introduction by the Chair

PRESENTATIONS BY PROJECT PARTNERS

10.10-10.25 (10 min + 5 min Q&A)– *DEMETER project- General Presentation*

Sandra Hinz - GENENCOR INTERNATIONAL BV (DUPONT INDUSTRIAL BIOSCIENCES GROUP)

10.25 – 10.40 (10 min + 5 min Q&A)- *Scale-up of enzyme production by fungal fermentation and purification*

Jeroen Boterdaele - BIO BASE EUROPE PILOT PLANT

10.40 – 11.00 (15 min + 5 min Q&A) - *Procedures for the evaluation of enzyme effects on the biogas process*

Liane Müller - DBFZ DEUTSCHES BIOMASSEFORSCHUNGSZENTRUM GEMEINNUETZIGE GMBH

11.00 – 11.20 Coffee Break

11.20-11.40 (15 min + 5 min Q&A) - *Results from practice – How enzymes influence anaerobic digestion?*

Lies Debeer - ORGANIC WASTE SYSTEMS NV



11.40 – 12.00 (15 min + 5 min Q&A) – *Results of enzyme application in several agricultural full-scale tests*
Lorena Knobel - [MIAVIT GMBH](#)

12.00-12.20 (15 min + 5 min Q&A) - *Biogas market: Key players and future perspectives*
Stefania Baldassarre – [CIAOTECH \(PNO Group\)](#)

PRESENTATION BY EXTERNAL STAKEHOLDER

12.20 – 12.40 (15 min + 5 min Q&A)– *Enzyme trials in full-scale Anaerobic Digestion plants: case study in three sites in The UK*

Denise Cysneiros - [FUTUREBIOGAS](#)

INTERACTIVE SURVEY

12.40 – 13.00 – *Interactive survey organised by [CIAOTECH \(PNO Group\)](#)*

13.00 – Closure



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