

Biogas Online Training

June 22nd – July 1st, 2021

All times indicated are GMT+1 (UK time)

Tuesday, June 22 nd	
9.00 – 9.15	Welcome to the seminar – lecturers & attendees introduce themselves <i>Michael KÖTTNER, IBBK Fachgruppe Biogas GmbH, Kirchberg/Jagst, Germany</i>
9.15 – 10.30	Biogas: State of the art & economic & basic calculation data <i>Michael KÖTTNER, IBBK Fachgruppe Biogas GmbH, Kirchberg/Jagst, Germany</i>
10.30 – 11.00	Break
11.00 – 13.00	Introduction into design, planning and process engineering <ul style="list-style-type: none"> • Digester types • Pumping and mixing • Choosing the right equipment for your project <i>Michael KÖTTNER, IBBK Fachgruppe Biogas GmbH, Kirchberg/Jagst, Germany</i>
13.00 – 15.00	Lunch
15.00 – 16.30	Crucial substrate parameters and their impact on plant performance <ul style="list-style-type: none"> • Sampling and analysis methods for agricultural and industrial substrates • Definition of the substrate quality – right and wrong way of analyzing • Impact on planning, design, and practical operation • Forecast possibilities on plant process disturbances <i>Gunther PESTA, atres, Munich, Germany</i>
16.30 – 16.45	Break
16.45 – 18.00	Introduction to digester biology <ul style="list-style-type: none"> • Basics of biological degradation • Environmental conditions (pH, temperature, nutrients) • Engineering parameters (dry matter, organic loading rate, retention time, degradation rate) <i>Birgit PFEIFER, Schaumann BioEnergy GmbH, Pinneberg, Germany</i>
18.00	End of the day

Thursday, June 24 th	
9.00 – 10.30	Process control and process optimisation <ul style="list-style-type: none"> • Inhibitors in anaerobic processes • Additives (Trace elements, enzymes, sulphur binder, buffer) • Process control measures <i>Dr. Melanie HECHT, Schaumann BioEnergy GmbH, Pinneberg, Germany</i>

10.30 – 10.45	Break
10.45 – 12.30	Meet the challenge: How to digest fibrous and N-rich feedstocks <ul style="list-style-type: none"> Characteristics of the substrates Causes of an NH₃-inhibition (feedstocks, NH₃-formation, pH, temperature) Counter measures Case studies and practical examples <i>Dr. Melanie HECHT, Schaumann BioEnergy GmbH, Pinneberg, Germany</i>
12.30 – 14.00	Lunch break
14.00 – 15.30	Treatment & digestion of straw and solid biomass <ul style="list-style-type: none"> TBA <i>Michael KÖTTNER, IBBK Fachgruppe Biogas GmbH, Kirchberg/Jagst, Germany</i>
15.30 – 15.45	Break
15.45 – 17.00	Organic waste and fermentation technology – processes and biological stability <i>Bernhard NATTERER, FiTec, Germany</i>
17.00	End of the day

Tuesday, June 29 th	
9.00 – 10.00	Biogas desulphurization <ul style="list-style-type: none"> Reasons for sulphur content in biogas Introduction into cleaning technologies Critical values <i>Claus BOGENRIEDER, Züblin Umwelttechnik GmbH, Germany</i>
10.00 – 10.15	Break
10.15 – 12.00	Biogas upgrading and different pathways of biogas utilisation <ul style="list-style-type: none"> Comparison of upgrading technology Biomethane injection Practical experiences from installing & operating biogas upgrading plants <i>Naveed RAZA, CNG Services Ltd., Solihull, UK</i>
12.00 – 14.00	Lunch break
14:00 – 15:30	Global strategies and remunerations for green gas production <ul style="list-style-type: none"> Incentives for biomethane production Synthetic gas and hydrogen in Germany and Europe <i>Alexey MOZGOVOY, PlanET Biogastechnik GmbH, Germany</i>

15.30 – 15.45	Break
15.45 – 17.00	Biomethane as a transport fuel <ul style="list-style-type: none"> Overview of the status quo Possibilities and challenges <i>Michael KÖTTNER, IBBK Fachgruppe Biogas GmbH, Kirchberg, Germany</i>
17.00	End of the day

Thursday, July 1 st	
9.00 – 10.30	Process requirements for mono-digestion of chicken manure <ul style="list-style-type: none"> Quality and consistency of substrate Specific selection of basic parameters Possibilities of equipment and self testing for the operator Influence of pretreatment of substrate for the improvement of biogas yield and avoidance of process inhibitions Equipment selection <i>Alfons HIMMELSTOß, Germany</i>
10.30 – 10.45	Break
10.45 – 12.00	Overview of new digestate spreading and treatment technologies <ul style="list-style-type: none"> Fertilizer management Field application for Irish conditions Digestate processing and upgrading Delivering to third party <i>Michael KÖTTNER, IBBK Fachgruppe Biogas GmbH, Kirchberg, Germany</i>
12.00 – 14.00	Lunch break
14.00 – 15.00	Virtual Biogas Plant Visit <i>Michael KÖTTNER, IBBK Fachgruppe Biogas GmbH, Kirchberg, Germany</i>
15.00 – 17.00	Q&A Session <i>Michael KÖTTNER & Katrin KAYSER, IBBK Fachgruppe Biogas GmbH, Kirchberg, Germany</i>
17.00	End of the event.

Programme subject to change