

Biogas Online Training

June 22nd – July 1st, 2021

All times indicated are GMT+1 (UK & Ireland 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 – 9.30	Current and future AD research at Abertay University <i>Prof. Joseph AKUNNA, Abertay University, Dundee, UK</i>
9.30 – 9.45	The prospects of biomethane and the way forward in Ireland <i>Noel GAVIGAN, IrBEA – Irish BioEnergy Association, Ireland</i>
9.45 – 10.45	Biogas: State of the art and economic & basic calculation data <i>Michael KÖTTNER, IBBK Fachgruppe Biogas GmbH, Kirchberg/Jagst, Germany</i>
10.45 – 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	Practical Digester Biology <ul style="list-style-type: none"> • Basics of biological degradation • Environmental conditions and parameters (pH, temperature, nutrients) • Practical, on-site process control of biogas plants <i>Fokion KALDIS, FM BioEnergy, UK</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: practical examples <p><i>Dr. Melanie HECHT, Schaumann BioEnergy GmbH, Pinneberg, Germany</i></p>
10.30 – 10.45	Break
10.45 – 12.30	<p>The challenges of N-rich feedstocks</p> <ul style="list-style-type: none"> • Causes of NH₃-inhibition – and their counter measures • H₂S and corrosion • Desulphurisation and struvite prevention • Case studies and practical examples <p><i>Dr. Melanie HECHT, Schaumann BioEnergy GmbH, Pinneberg, Germany</i></p>
12.30 – 14.00	Lunch break
14.00 – 15.30	<p>Treatment & digestion of straw and solid biomass</p> <ul style="list-style-type: none"> • TBA <p><i>Michael KÖTTNER, IBBK Fachgruppe Biogas GmbH, Kirchberg/Jagst, Germany</i></p>
15.30 – 15.45	Break
15.45 – 17.00	<p>Organic waste and fermentation technology – processes and biological stability</p> <p><i>Bernhard NATTERER, FiTec, Germany</i></p>
17.00	End of the day

Tuesday, June 29th

9.00 – 10.00	<p>Biogas desulphurization</p> <ul style="list-style-type: none"> • Reasons for sulphur content in biogas • Introduction into cleaning technologies • Critical values <p><i>Claus BOGENRIEDER, Züblin Umwelttechnik GmbH, Germany</i></p>
10.00 – 10.15	Break
10.15 – 12.00	<p>Biogas upgrading and different pathways of biogas utilisation</p> <ul style="list-style-type: none"> • Comparison of upgrading technology • Biomethane injection • Practical experiences from installing & operating biogas upgrading plants <p><i>Naveed RAZA, CNG Services Ltd., Solihull, UK</i></p>
12.00 – 14.00	Lunch break

14:00 – 15:30	<p>Global strategies and remunerations for green gas production</p> <ul style="list-style-type: none"> • Incentives for biomethane production • Synthetic gas and hydrogen in Germany and Europe <p><i>Alexey MOZGOVOY, PlanET Biogastechnik GmbH, Germany</i></p>
15.30 – 15.45	Break
15.45 – 17.00	<p>Biomethane as a transport fuel</p> <ul style="list-style-type: none"> • Overview of the status quo • Possibilities and challenges <p><i>Michael KÖTTNER, IBBK Fachgruppe Biogas GmbH, Kirchberg, Germany</i></p>
17.00	End of the day

Thursday, July 1st

9.00 – 10.30	<p>Process requirements for mono-digestion of chicken manure</p> <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 <p><i>Alfons HIMMELSTOß, AEV Energy GmbH, Germany</i></p>
10.30 – 10.45	Break
10.45 – 12.00	<p>Overview of new digestate spreading and treatment technologies</p> <ul style="list-style-type: none"> • Fertilizer management • Field application for Irish conditions • Digestate processing and upgrading • Delivering to third party <p><i>Michael KÖTTNER, IBBK Fachgruppe Biogas GmbH, Kirchberg, Germany</i></p>
12.00 – 14.00	Lunch break
14.00 – 15.00	<p>Virtual Biogas Plant Visit</p> <p><i>Michael KÖTTNER, IBBK Fachgruppe Biogas GmbH, Kirchberg, Germany</i></p>
15.00 – 17.00	<p>Q&A Session</p> <p><i>Michael KÖTTNER & Katrin KAYSER, IBBK Fachgruppe Biogas GmbH, Kirchberg, Germany</i></p>
17.00	End of the event.

Programme subject to change