



**February 14<sup>th</sup> – March 09<sup>th</sup>, 2023**

**Tuesday, February 14<sup>th</sup>**

<b>Module 1 – Overview and Predictions for the Biogas Industry for 2030</b>	
10:00	<b>Introduction and collecting initial questions</b> <i>Michael KÖTTNER, IBBK Fachgruppe Biogas GmbH</i>
11:00	<b>Overview of the national and int. biogas industry and its future development</b> <i>Michael KÖTTNER, IBBK Fachgruppe Biogas GmbH</i>
13:00	Discussion – end of the module

<b>Module 2 – Decision Criteria and Feasibility Calculations</b>	
15:00	<b>Decision Criteria for Biogas Plants</b> <i>Katrin KAYSER, IBBK Fachgruppe Biogas GmbH</i>
16:30	<b>Feasibility Calculations</b> <i>Michael KÖTTNER, IBBK Fachgruppe Biogas GmbH</i>
18:00	Discussion – end of the module

**Thursday, February 16<sup>th</sup>**

### Module 3 – Technical Plant Design & Equipment Selection

10:00	<b>Introduction to plant technology – digester design &amp; crucial equipment</b> <i>Katrin KAYSER, IBBK Fachgruppe Biogas GmbH</i>
11:30	<b>Planning and designing of stirring and mixing technology for digesters, mixing pits and storages</b> <i>Sebastian WINKLER, Repowering Technik Ost GmbH</i>
13:00	Discussion – end of the module

### Module 4 – Substrate Selection & Waste Treatment Technology

15:00	<b>Crucial substrate parameters and their impact on plant performance</b> <i>Gunter PESTA, atres Group</i>
16:30	<b>Organic waste and fermentation technology – processes and biological stability</b> <i>Bernhard NATTERER, Finsterwalder Umwelttechnik GmbH</i>
18:00	Discussion – end of the module

**Thursday, February 23<sup>rd</sup>**

### Module 5 – Pre-Treatment of Biogas Substrates & Pump Technology

10:00	<b>Pre-treatment and storage of biogas substrates</b> <i>Michael KÖTTNER, IBBK Fachgruppe Biogas GmbH</i>
11:30	<b>Pumps and pump technology</b> <i>Raam BADDE-MORGENTHALER, Pumpenfabrik Wangen GmbH</i>
13:00	Discussion – end of the module

## Module 6 – Theory & Practice of Digester Biology in AD

15:00	<b>Introduction to Digester Biology</b> <i>Dr. Johannes KRÜMPEL, University of Hohenheim</i>
16:30	<b>Proper usage of digestate as organic fertilizer in agriculture</b> <i>Michael KÖTTNER, IBBK Fachgruppe Biogas GmbH</i>
18:00	Discussion – end of the module

**Tuesday, February 28<sup>th</sup>**

## Module 7 – Digestate Treatment, Upgrading & Marketing

10:00	<b>Biogas plant start-up – Practical Digester Biology</b> <i>Birgit PFEIFER, Schaumann BioEnergy Consult GmbH</i>
11:30	<b>Virtual tour through a state of the art biogas &amp; digestate upgrading plant</b> <i>Michael KÖTTNER, IBBK Fachgruppe Biogas GmbH</i>
13:00	Discussion – end of the module

## Module 8 – Process Control of Biogas Plants

15:00	<b>Practical Presentation – necessary on site tests and interpretation of operating modes on a biogas plant</b> <i>Birgit PFEIFER, Schaumann BioEnergy Consult GmbH, Pinneberg, Germany</i>
16:30	<b>Process control and process optimization</b> <i>Melanie HECHT, Schaumann BioEnergy Consult GmbH, Pinneberg, Germany</i>
18:00	Discussion – end of the module

**Thursday, March 02<sup>nd</sup>**

<b>Module 9 – Building Materials for Biogas Plants</b>	
10:00	<b>Biogas specific building materials for sustainable plant operation</b> <i>Erwin KÖBERLE, Biogaskontor Köberle GmbH</i>
11:30	<b>Process and external heat and gas engineering</b> <i>Erwin KÖBERLE, Biogaskontor Köberle GmbH</i>
13:00	Discussion – end of the module

<b>Module 10 – Safety Features &amp; Monitoring</b>	
15:00	<b>Safety Features of Biogas Plants: Theory &amp; Practice</b> <i>Michael KOETTNER, IBBK Fachgruppe Biogas GmbH</i>
16:30	<b>Measurement and data recording for optimization, stabilization and enhancement of the biogas process</b> <i>Philipp RÖHRER, Awite Bioenergie GmbH</i>
18:00	Discussion – end of the module

**Tuesday, March 07<sup>th</sup>**

<b>Module 11 – Biogas Upgrading, Utilisation &amp; Biomethane Infrastructure</b>	
10:00	<b>Biogas in Germany: current technological status of biogas upgrading</b> <i>Michael BEIL, Fraunhofer IEE</i>
11:30	<b>Gas infrastructure and biogas utilisation to heat and power</b> <i>Andre BANKEN, 2G Energietechnik GmbH</i>
13:00	Discussion – end of the module

## Module 12 – Green Gas, Bio-LNG & Biomethane Mobility

15:00	<b>Green Gas and Bio-LNG</b> <i>Carsten STEENTJES, PlanET Biogastechnik GmbH</i>
16:30	<b>Biomethane as a transport fuel</b> <i>Michael KÖTTNER, IBBK Fachgruppe Biogas GmbH</i>
18:00	Discussion – end of the module

**Thursday, March 09<sup>th</sup>**

## Module 13 – Biogas Upgrading Units – Measuring Techn. & Maintenance

10:00	<b>Measuring technology on biogas upgrading plants – best practices and latest advancements</b> <i>Torsten HAUG, Union Instruments GmbH</i>
11:30	<b>Maintenance of biogas upgrading units for sustainable plant operation</b> <i>Ulf RICHTER, Richter ECOS GmbH</i>
13:00	Discussion – end of the module

## Module 14 – Q&A-Session

15:00	<b>Q&amp;A-Session with IBBK's Biogas Experts</b> <i>Michael KÖTTNER &amp; Katrin KAYSER, IBBK Fachgruppe Biogas GmbH</i>
18:00	Discussion – end of the event

*Program subject to change*