## PROGRAMME

**22 August, 2016**
**Monday**

### KEYNOTE LECTURE

*Congress Hall*

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>09:00</td>
<td><strong>Syntrophic acetate oxidising bacteria - who, where and when</strong></td>
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<td>09:00</td>
<td><strong>Anna Schnürer</strong></td>
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### MICROBIOLOGY SESSION

*Congress Hall*

<table>
<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>09:40</td>
<td><strong>Reorganisation of a mesophilic biogas microbiome as a response to a stepwise increase of ammonium nitrogen induced by pultry manure supply</strong></td>
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<td>09:40</td>
<td><strong>Khulud Alsouleman</strong></td>
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<tr>
<td>10:00</td>
<td><strong>In-depth metaproteomics of a biogas plant operating at high ammonia nitrogen concentrations</strong></td>
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<td>10:00</td>
<td><strong>Dirk Benndorf</strong></td>
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<td>10:20</td>
<td><strong>Detection and identification of novel anaerobic fungi in biogas reactors and in non-rumen habitats</strong></td>
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<td>10:20</td>
<td><strong>Tony Callaghan</strong></td>
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<td>10:40</td>
<td><strong>Coffee break</strong></td>
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<tr>
<td>11:00</td>
<td><strong>A novel archaeal species belonging to Methanoculleus genus identified via de-novo assembly and metagenomic binning process in biogas reactors</strong></td>
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<tr>
<td>11:00</td>
<td><strong>Panagiotis G. Kougias</strong></td>
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<td>11:20</td>
<td><strong>Influence of nitrogen-rich substrate on biogas production and the methanogenic community under mesophilic and thermophilic conditions</strong></td>
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<td>11:20</td>
<td><strong>Bernhard Munk</strong></td>
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<td>11:40</td>
<td><strong>Microbiological aspects of inoculation, bioaugmentation and start-up of biogas processes</strong></td>
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<td>11:40</td>
<td><strong>Marcell Nikolausz</strong></td>
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<td>12:00</td>
<td><strong>The effects of bioaugmentation by cellulolytic enrichment cultures from sheep rumen on methane production from wheat straw</strong></td>
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<td>12:00</td>
<td><strong>Emine Gözde Özbayram</strong></td>
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<td>12:20</td>
<td><strong>Lunch break</strong></td>
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<tr>
<td>Time</td>
<td>Session</td>
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<td>13:20 – 14:00</td>
<td><strong>KEYNOTE LECTURE</strong>&lt;br&gt;&lt;i&gt;Congress Hall&lt;/i&gt;</td>
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<td><strong>Challenges of biogas development</strong>&lt;br&gt;Arthur Wellinger</td>
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<td>14:00 – 14:20</td>
<td><strong>Metagenomic rearrangement of the biogas producing community during hydrogen assisted in-situ biogas upgrading</strong>&lt;br&gt;Norbert Ács</td>
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<td>14:20 – 14:40</td>
<td><strong>Metagenomes of cattle rumen and biogas reactors evaluated by next generation sequencing</strong>&lt;br&gt;Roland Wirth</td>
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<tr>
<td>14:40 – 15:00</td>
<td><strong>Analysis of microbial community in liquid phase of UASB reactor during the transition from mesophilic to thermophilic operation</strong>&lt;br&gt;Xinyu Zhu</td>
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<td>15:00 – 15:20</td>
<td><strong>Anaerobic digestion of biodegradable plastics and agricultural residues by enriched hydrolytic microorganisms and novel enzymes</strong>&lt;br&gt;Stefan Weiss</td>
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<td>15:20 – 15:40</td>
<td><strong>Coffee break</strong></td>
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<td></td>
<td><strong>COMPANY SESSION</strong>&lt;br&gt;&lt;i&gt;Congress Hall&lt;/i&gt;</td>
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<tr>
<td>15:40 – 16:00</td>
<td><strong>Experiences from Hungary’s first biomethane feed-in project – Upgrading and cross border trade of biogas from organic waste and residues</strong>&lt;br&gt;Zoltán Elekes – &lt;i&gt;Landwärme GmbH&lt;/i&gt;</td>
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<td>16:00 – 16:20</td>
<td><strong>Alberto Benavides Cantú –&lt;i&gt; Bioprocess Control Sweden AB</strong></td>
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<td>16:20 – 16:40</td>
<td><strong>Fast Measurement of Biochemical Methane Potential (BMP) of Substrates by Near Infra-Red (NIR) Spectroscopy</strong>&lt;br&gt;Bojan Stefanovic – &lt;i&gt;Metrohm Inula GmbH&lt;/i&gt;</td>
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23 August, 2016
T U E S D A Y

**KEYNOTE LECTURE**

*Congress Hall*

<table>
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<th>Time</th>
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| 09:00 – 09:40 | Pretreatment technologies for AD  
Günther Bochmann |

**SUBSTRATES FOR AD SESSION**

*Lecture room I*

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<th>Time</th>
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| 09:50 – 10:10 | TiO₂ assisted photo-oxidative retreatment of wheat straw for biogas production  
Merlin Alvarado-Morales |
| 10:10 – 10:30 | Commissioning of a two stage pilot scale reactor for the mesophilic co-digestion of Ulva lactuca, grass silage and dairy slurry  
Enrique Abraham Chan Gutierrez |
| 10:30 – 10:50 | Co-digestion of kraft mill fibre sludge and activated sludge – improving the methane potential by high-rate processes and low activated sludge age  
Eva-Maria Ekstrand |

**PROCESS TECHNOLOGY AND LIFE CYCLE ANALYSIS SESSION**

*Lecture room II*

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| 09:50 – 10:10 | Investigation of co-digestion process by semi-continuous anaerobic CSTR reactor  
Xiaofeng Bai |
| 10:10 – 10:30 | Electrooptical monitoring of the microbial activity as new tool for the biogas process  
Jörn Beheim-Schwarzbach |
| 10:30 – 10:50 | Effects of controlled hydrodynamic cavitation on anaerobic digestion of straw-rich agriculture feedstocks  
Mirco Garuti |

**Coffee break**

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| 11:10 – 11:30 | Sugar beet silage as multi-functional substrate for co-digestion and for on-demand biogas production  
Marian Kazda |
| 11:30 – 11:50 | Impact of headspace volume and overhead pressure measurement frequency on specific methane yields during in vitro anaerobic digestion using micro-BMP method  
Himanshu Himanshu |

**Lunch break**

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| 11:50 – 12:10 | Effect of trace elements addition on the stability of food waste anaerobic digestion  
Ronghou Liu |
| 12:10 – 12:30 | Temperature effect on trace metal (Se/W) requirements for biogas production  
Luka Šafarić |

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| 12:10 – 12:30 | Anaerobic processing of baby maize stover for bioenergy production under thermophilic and mesophilic conditions  
Chihiro Masusawa |
| 12:30 – 13:30 | Fermentation Characteristics of Pig Manure under Recycled Utilization of Liquid Digestate: A Stable Isotope Assessment  
Shubiao Wu |

*Lunch break*
### KEYNOTE LECTURE

**Congress Hall**

**13:30 – 14:10** Flexibilisation of biogas plants and impact on the grid operation
Jan Liebetrau

### SUBSTRATES FOR AD SESSION

*Lecture room I*

**14:20 – 14:40** Biogas production of biorefinery-lignins
Daniel Girma Mulat

**14:40 – 15:00** Recirculating digestate liquor in the digestion of food waste and grass silage
Richard O’Shea

**15:00 – 15:20** Biogas production from lignocellulose-rich waste fractions
Ilona Sárvári Horváth

### PROCESS TECHNOLOGY AND LIFE CYCLE ANALYSIS SESSION

*Lecture room II*

**14:20**
- Implementation of non-adsorbent granules in gas-sparged anaerobic membrane bioreactor for fouling mitigation
  Pakpong Sriprasert
- Biogas production of biorefinery-lignins
  Daniel Girma Mulat
- Recirculating digestate liquor in the digestion of food waste and grass silage
  Richard O’Shea
- Biogas production from lignocellulose-rich waste fractions
  Ilona Sárvári Horváth

**15:00**
- Greenhouse gas balance of biogas production and different utilization pathways
  Omar Hijazi
- Implementation of non-adsorbent granules in gas-sparged anaerobic membrane bioreactor for fouling mitigation
  Pakpong Sriprasert

### POSTER SESSION

**Coffee break**

**16:20 – 16:40**
- Acclimation of continuous biomethanation process to extremely high ammonia levels
  Hailin Tian
- AlgaeBioGas: algal-bacterial digestate treatment and biomass production
  Borut Lazar

**16:40 – 17:00**
- Investigation of the inhibitory effect of salts in the anaerobic digestion of sugar beet distillery wastewater through electrodialysis and bench scale experiments
  Rita Tozy
- Study on the multiple substrates anaerobic digestion: a pilot-scale biogas project and the prospects of its application in China
  Xuemei Wang

**17:00 – 17:20**
- Experiences in co-digestion of vinasse
  Annamária Tukacs-Hájos
- Cristina Rodriguez
KEYNOTE LECTURE

*Congress Hall*

09:00 – 09:40  **EBA – potential and targets for renewable methane in Europe**  
Jan Stambasky

GAS TECHNOLOGY SESSION

*Congress Hall*

09:40 – 10:00  **Progress of developing metrological infrastructure for measuring key impurities in biogas**  
Jianrong Li

10:00 – 10:20  **Bio-methane from an-aerobic digestion using in-situ regenerative activated carbon**  
Muhammad Farooq

10:20 – 10:40  **A novel biotechnological route for the power to gas concept**  
Márk Szuhaj

10:40 – 11:00  **Coffee break**

11:00 – 11:20  **Experiences from the full-scale implementation of microaerobic digestion for biogas desulfurization**  
Pavel Jenicek

11:20 – 11:40  **In-situ biogas upgrading via hydrogen utilization and biogas recirculation**  
Nikoletta Giantsiou

11:40 – 12:00  **Upgrading of biogas with in-situ methane enrichment and wood ash filter – laboratory, pilot and demonstration studies**  
Åke Nordberg

12:00 – 12:20  **Optimisation of continuous gas fermentation by immobilisation of acetate-producing Clostridia**  
Franziska Steger

12:20 – 12:40  **Novel routes for biogas use**  
Elham Moghaddam

12:40 – 12:50  **Closing remarks**

12:50 – 14:00  **Lunch**