



## **Third Meeting of the COST LivAGE Project**

**Prague, March 1-2, 2018**

### **PRELIMINARY PROGRAM**

**Meeting venue:** Institute of Thermomechanics AS CR, v.v.i.

Dolejškova 1402/5 Prague 18200 Czech Republic

<http://livage.it.cas.cz/im/im/>

### **Thursday, March 1, 2018**

*8.00 – 9.00 REGISTRATION*

**09.00 – 12.30 MC meeting**

Meeting agenda:

- Information from cost association.
- Status of the action (web, WGs, STSM, ITC conference, disseminations);
- Topics for discussion:
  - o STSM process and further action in 1<sup>st</sup> GP (till April 30, 2018);
  - o ITC conference grant – any needs/relocation;
  - o TS (training schools) in GP 1 & future;
  - o Our strategy & goals for GP1 and GP2. WG's goal and estimated outcomes (WG's leader working proposal and expected outcomes)
  - o Dissemination strategy.

*10:30 – 10:50 COFFEE BREAK*

- Practical issues:
  - o Decide the dates (possible program) for the next networking events – (in GP1 & GP2) timeline for finalizing the date, locations; invitations issue in e-cost... all have to response in due time!
  - o A general rule on timing on invitation response
  - o Budget & networking strategy
  - o New members/partners
- OB

*12.30- 13.30 LUNCH*

**13.30 – 15.30 Working groups meetings (in parallel)**

*15.30-15.45 COFFEE BREAK*

**15.45 – 17.45 Working groups meetings (in parallel)**

*19.00 - ... DINNER (please register in Doodle if you plan to join)*



**Friday, March 2, 2018**

**Open Conference**

**“2nd Conference on Ammonia and Greenhouse Gases Emissions from Animal Production  
Buildings”**

08.00 - 08.30 *REGISTRATION*

**08.30 – 10:00**                    **KEYNOTE PRESENTATION** *moderator, Guoqiang Zhang*

08:30 – 08:55                Measurement of ammonia and greenhouse gas emissions from animal buildings, by Dr Ji-Qin Ni, PU, USA

09:00 – 09:25                Toward a quantitative understanding of ammonia volatilization from animal slurry, by Dr Sasha D. Hafner, AU, Denmark

09:30 – 10:00                Challenges of Inventory Preparation: Activity Data, Emission Factors and Models by Dr Barbara Amon, ATB, Germany

10:00 – 10:30                *COFFEE BREAK*

**10:30 – 11:45**    **General session 1, Monitoring gaseous emissions from farming animal buildings**  
*Moderator Mélynda Hassouna*

10:30 – 10:50                Test protocol of Vera (Verification of Environmental Technologies for Agricultural Production) by Dr Nico Ogink, WUR, The Netherlands

10:50 – 11:05                Application of the dual tracer ratio method to quantify emissions from naturally ventilated dairy housings, by Schrade et al.,

11:05 – 11:20                Measurement and reporting of emission rates from intensive animal production units in Ireland and Australia, by Fogarty et al.

11:20 – 11:35                Reduction of ammonia emissions from livestock housing by biotechnological agents, by Češpiva and Zabloudivá, Research Institute of Agricultural Engineering, Czech Republic

11:35 – 11:45                Questions & Discussion

**11:45 – 14:10**    **General session 2, Reduction technologies of farming animal building emission**  
*Moderator: Kamila Kočí*

11:45 - 12:00                Agricultural emissions and their environmental impacts: going beyond the animal-building scale using life cycle assessment, by Michael Corson, France

12:00 – 12:15                Feeding strategies aimed to reduce environmental impact in dairy ewes and cattle, by Marcello Mele, Italy

12:15 – 12:30                Farm scale strategies for reducing the environmental footprint in intensive livestock production, Thomas Bartzanas, CERTH, Greece



12:30 – 13:30

LUNCH BREAK

13:30 – 13:45

Danish regulations on ammonia emission from animal housing and options to meet the requirements” by Bjarne Bjerg, University of Copenhagen, Denmark

13:45 – 14:00

Integrated ventilation techniques and exhaust air purification for effective reduction of emission from farm animal houses, By Guoqiang Zhang, Aarhus University, Denmark

14:00 – 14:10

Questions & Discussion

**14:10 – 16:00 General Session 3, Modelling ammonia and GHG emissions from animal buildings**

*Moderator: **André Aarnink**, WUR, The Netherlands*

14:10 – 14:25

Development of ventilation based strategies to reduce ammonia emissions from pig fattening houses: an integrated approach, by Peter Demeyer, ILVO, Belgium (as continues of Session II)

14:25 – 14:40

Modelling the transport of gases to improve emission measurements, by David Janke, ATB, Potsdam, Germany

14:40 – 14:55

Modelling the effects of nutritional measures on ammonia emission from houses for growing pigs, by André Aarnink, Wageningen University and Research, the Netherlands

14:55 – 15:25 *COFFEE BREAK*

15:25 – 15:40

Development of VR simulator to educate environmental distribution of swine house such as gas, temperature, humidity, and dusts. By R.W. Kim and In-Bok Lee, SNU, Korea

15:40 - 15:55

CFD methods to model emissions from livestock housing, by Bjerne Bjerg, University of Copenhagen, Denmark

15:55 – 16:10

CFD modeling of livestock odor dispersion on complex topography, by In-Bok Lee and R.W. Kim, SNU, Korea

16:10 – 16:20

Questions & discussion

**16:20 – 16:50 General DISCUSSIONS**