

Agriculture and Greenhouse Gas Emissions

Theme Day, April 11, 2024

There is a considerable potential in the agricultural sector to act as a part of the solution to the climate change challenge instead of merely being a part of the problem. Fulfilling this goal necessitates a common platform in the form of a network, where the multiple interactions between biological processes and production systems and a changing climate can be integrated using an interdisciplinary approach.

This day is an internal networking day at AU to launch an AU network, the ***Agriculture and greenhouse gas research network (GHG)***. Be involved in creating overview and solutions by attending at AU Viborg, April 11 and contribute with posters on new equipment, technologies, experimental set up, facilities and results from your GHG work.

Registration is necessary. Please use the link [HERE](#). Deadline April 4, 9 am.

Program

9.00-09.30: Arrival, coffee etc.

- 09:30** *Welcome!* Head of Department **Jørgen E. Olesen**, Department of Agroecology
- 09:35** *National inventories, farm measurements and technologies* by **Jørgen E. Olesen**, Department of Agroecology
- 09:50** *GHG emissions from the Danish agricultural sector across time* by **Mette Hjorth Mikkelsen**, Department of Environmental Science - Atmospheric Emissions
- 10:10** *Co-creation to reach a climate efficient agri-food chain* by **Lisbeth Henricksen**, Director of Innovation at SEGES
- 10:40-11:00** Plenum discussion moderated by **Tavs Nyord**, Senior Advisor at CONCITO
- 11.00-11.15 Break
- 11.15-12.30** Flash talks on new research, projects and methods addressing emissions in national inventories, calculation of farm emissions and technologies.
- 11:15** *Emissions from animal production* by **Peter Lund**, Department of Animal and Veterinary Sciences – Ruminant Nutrition
- 11:30** *Emissions from livestock systems & manure management* by **Anders Feilberg**, Department of Biological and Chemical Engineering – Environmental Engineering
- 11:45** *Emissions from fields; nitrous oxide* by **Anne Winding**, Department of Environmental Science – Environmental Microbiology
- **Søren O Petersen**: N₂O emissions from agricultural soils in Denmark: What we know about emissions and mitigation measures

- **Mansonia P. Moncada:** Soil compaction and nitrous oxide transport
 - **Klaus Butterbach-Bahl:** The SmartField initiative with a focus on nitrous oxide
- 12:00** *Emissions from fields; carbon* by **Lars Munkholm & Johannes Lund Jensen**,
Department of Agroecology – Soil Fertility
- 12:15** *Emissions from peatlands* by **Poul Erik Lærke**, Department of Agroecology – Climate
and Water
- 12:30** Lunch, standing buffet, in the hall area – with free time to visit booth stands and
posters on new equipment, technologies, experimental set-up, facilities.
- 14.00-14.10 Go to break-out rooms.
- 14:10-15:30** Networking on research and development of topics to accelerate the transition of
sustainable agriculture
- *Incentives and barriers* by **Helle Ørsted Nielsen**, Department of Environmental
Science – Environmental social science and geography
 - *How soil organisms can assist and accelerate transition to sustainable agriculture* by
Anne Winding
 - *Methods of measurements* by **Anders Feilberg**
 - *Modelling, spatio-temporal scaling and scenarios* by **Klaus Butterbach-Bahl**,
Department of Agroecology – Center for Landscape Research in Sustainable
Agricultural Futures
- 15:30** *Recap on future perspectives and initiatives* by **Jørgen E. Olesen**
- 15:40** Safe trip home!